



Yorke Island 2018

With special thanks to:

BC Parks

85Vics

Heritageworks

15th Field Artillery Regiment, RCA

15th Field Artillery Regiment Museum & Archives

15th Field Artillery Regimental Society



Vancouver Artillery Association Yorke Island Project

Thank you for viewing the details of the Yorke Island Project. Additional material can be viewed online at Vancouver Artillery Association's website <https://www.vancouvergunners.ca/yorke-island.html>

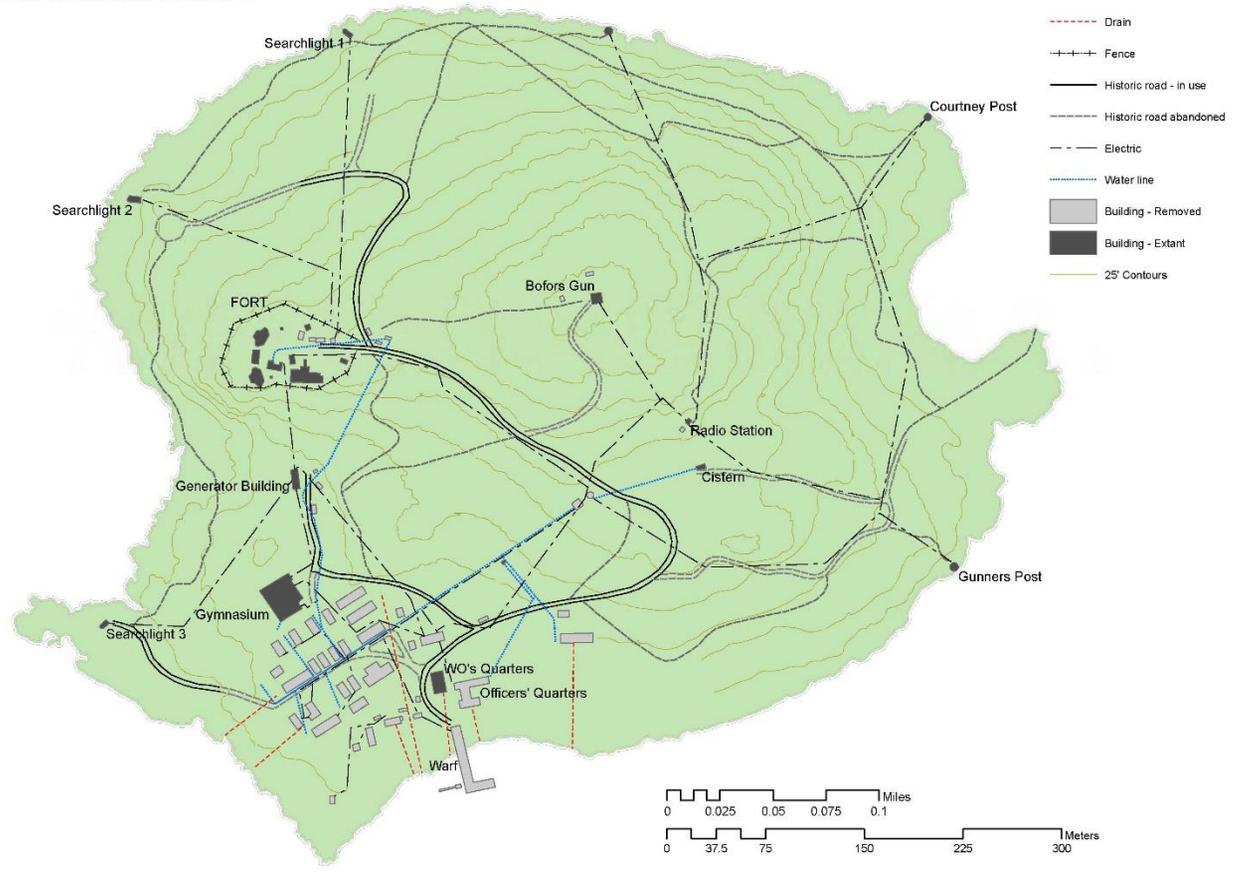
The Vancouver Artillery Association is looking for partners to assist in maintaining the historic material on Yorke. Please contact the Association President, Leon Jensen, if you would like to assist with our financial goals or wish to join the team.

Vancouver Artillery Association
The Vancouver Gunners
President.vcrgunners@gmail.com



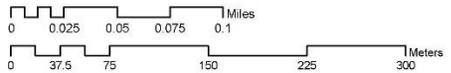
Yorke Island Battery - Site Plan

After:
 Department of National Defence, D.W.C Army Fortifications
 Directorate of Works and Construction, Jan 1945



Legend

- <all other values>
- Trail
- Drain
- + + + Fence
- Historic road - in use
- Historic road abandoned
- Electric
- Water line
- Building - Removed
- Building - Extant
- 25' Contours



HERITAGEWORKS

Revision Notes:
 JAN 8, 2018

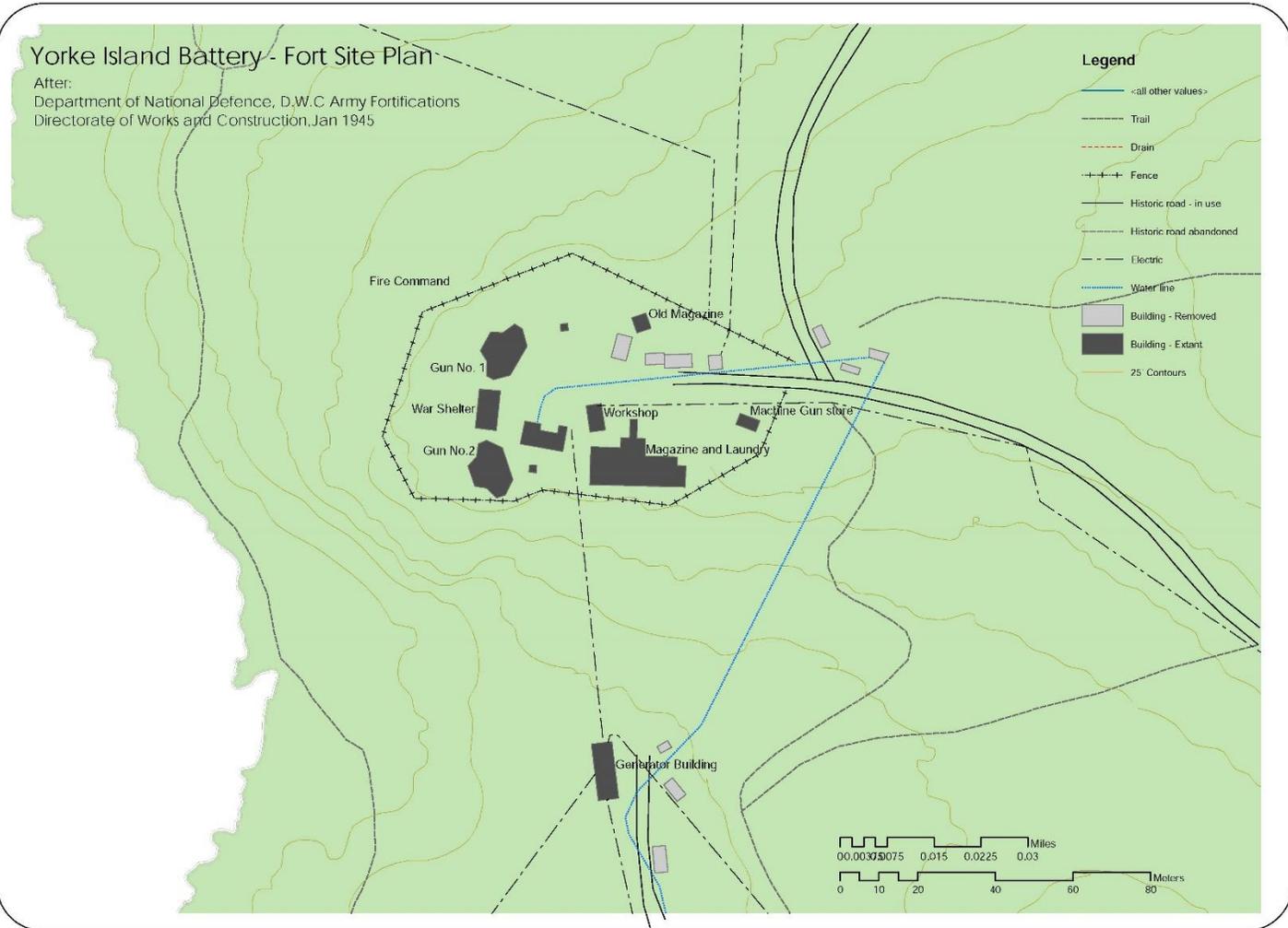
YORKE ISLAND
 CONSERVANCY

YORKE ISLAND
 BATTERY

CP 0.1

Yorke Island Battery - Fort Site Plan

After:
Department of National Defence, D.W.C Army Fortifications
Directorate of Works and Construction, Jan 1945



HERITAGEWORKS

Revision Notes:
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

YORKE ISLAND
BATTERY

CP01



HERITAGEWORKS

Revision Notes:
 JAN 8, 2018

YORKE ISLAND
 CONSERVANCY

THE FORT -
 SITE PLAN WITH
 LASER SCAN

CP0.3

A
 A.02 THE FORT - SITE PLAN WITH LASER SCAN
 SCALE: 1:75



Vancouver Artillery Association Yorke Island Project

Yorke Island

Yorke Island is a small island located north of Hardwicke Island in the south end of Johnstone Strait. It sits in a choke point at the split of Johnstone Strait and Sunderland Channel. Any vessel traveling south to Vancouver has to pass the Island.

The island is 39 hectares (96 acres) and was designated the Hənłəmdʒi Məkola/Yorke Island Conservancy on 22 May 2007. It is in the asserted traditional territories of the K'ómoks, We Wai Kai, Wei Wai Kum and Xwemalhkwa First Nations.

This conservancy protects a significant historic site as Yorke Island has been designated and protected for its role in protecting the northern maritime approaches to Vancouver prior to, and during World War II. It was manned by soldiers of the 85th Heavy Battery, 15th (Vancouver) Coast Brigade, RCA from 29 September 1939 until 17 October 1945.

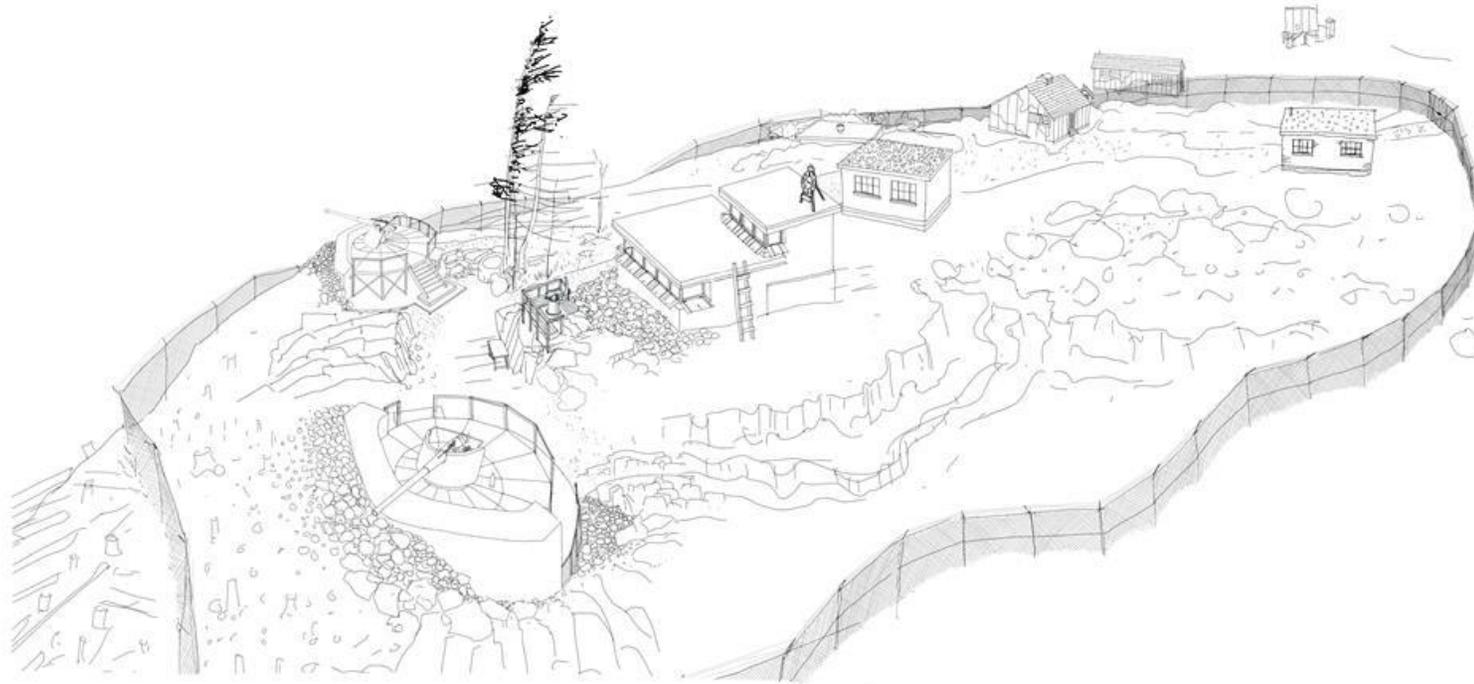
The Vancouver Artillery Association has entered into a Volunteer Partnership agreement with BC Parks for the ongoing volunteer support of the management and maintenance of World War II structures, landscape features and connecting trails on the island.





Vancouver Artillery Association Yorke Island Project

Yorke Battery – Fort Site Plan



1938 Fort Layout, Sketch by R. Linzey.

Two 4.7-inch Quick Firing (QF) Mark IV guns on Mk III Garrison Carriages were installed in 1937.

Brought in from Halifax, NS – last calibrated April 1914.

Did not have automatic extractor – Cartridge case had protruding primer to assist in removal.

Elevation -10° to $+20^{\circ}$ Traverse 360° ; Maximum Range – 10,790 meters; automatic sights to 3,200 meters.

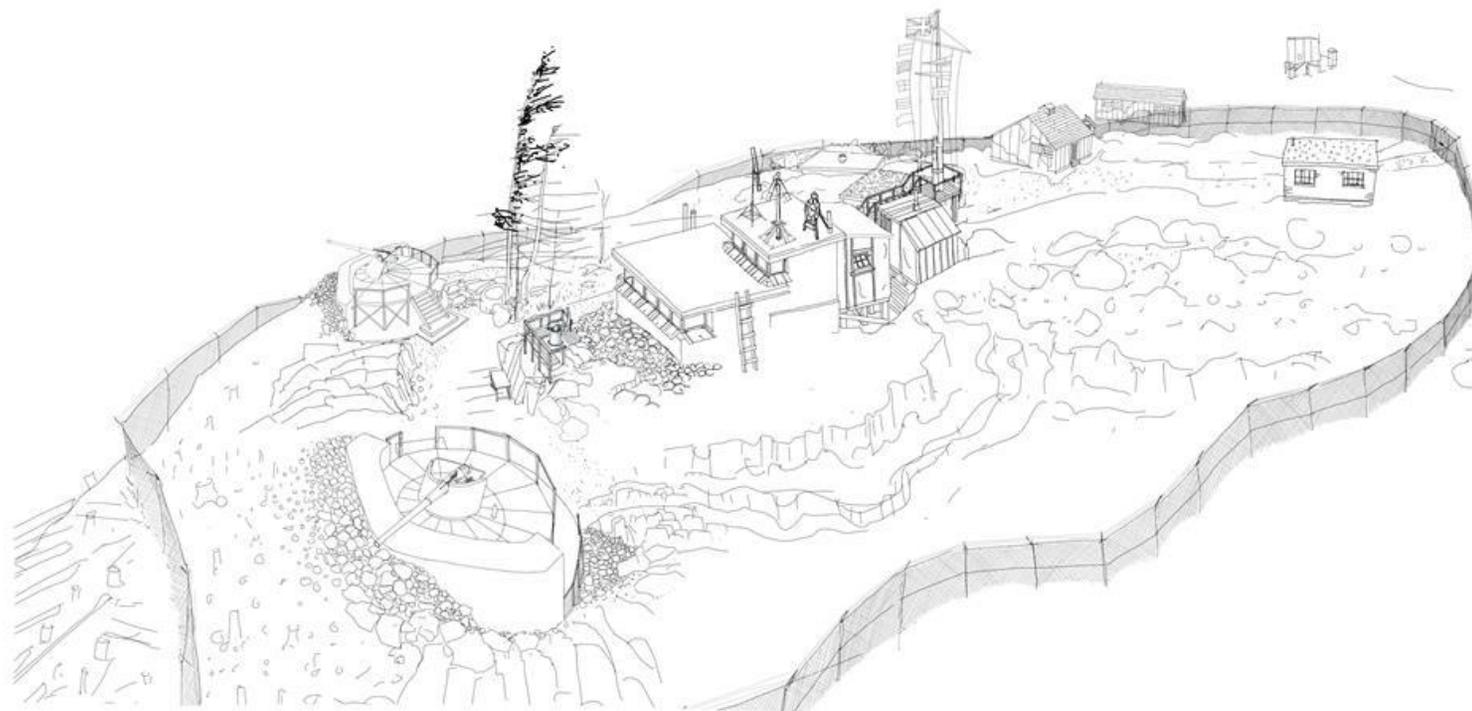
Two Level Battery Observation Post. Range clock on roof.





Vancouver Artillery Association Yorke Island Project

Yorke Battery – Fort Site Plan



1939 Fort Layout, Sketch by R. Linzey

Semaphore and antennas mounted on roof of Battery Observation Post (BOP).

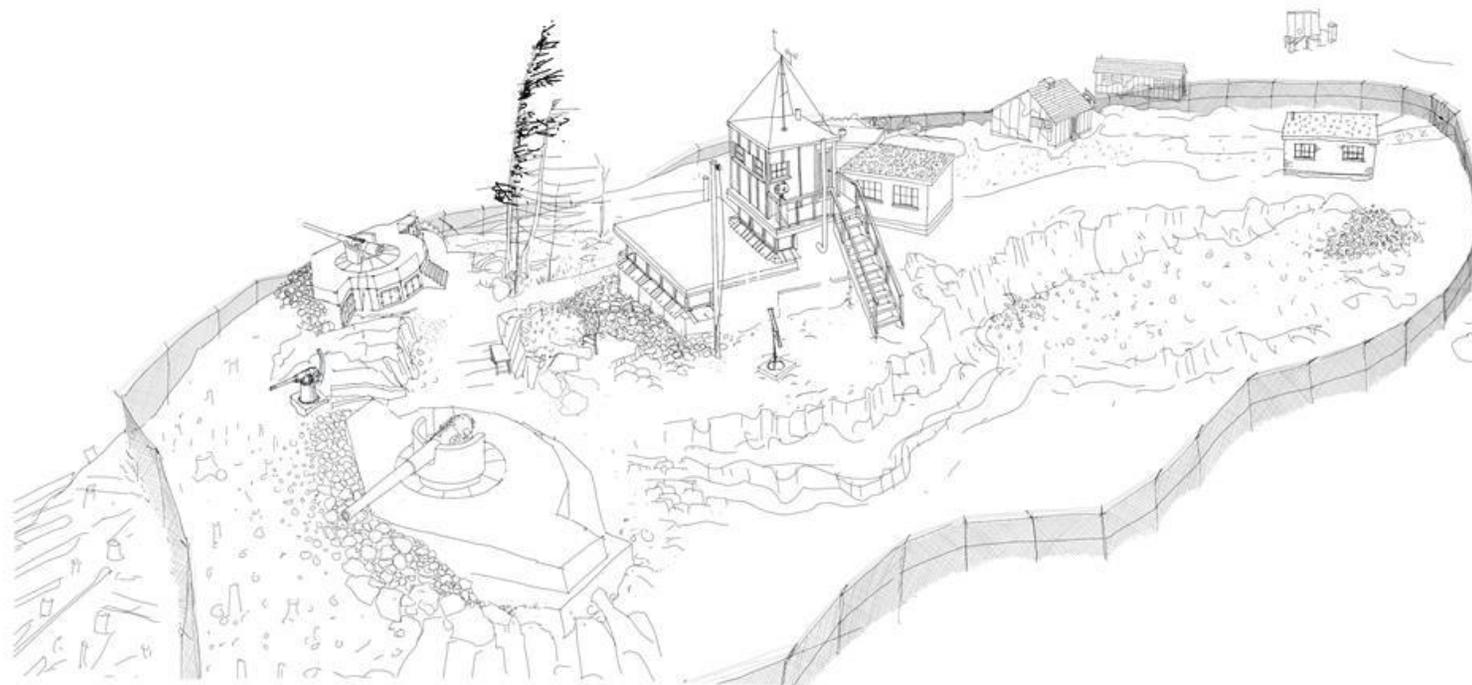
Naval signalmen's quarters and naval signal tower installed to rear of BOP.





Vancouver Artillery Association Yorke Island Project

Yorke Battery – Fort Site Plan



1943A Fort Layout, Sketch by R. Linzey

Two 6-inch Breech loading Mark VII guns on Mark II (L) CP Garrison Mounting
Guns traded from Stanley Park Fort – originally installed at the Citadel in Quebec City.

Weight of gun and mounting – 56,560 lb (25,656 kg).

Elevation -10° to $+16^{\circ}$ Traverse 360° ; Maximum Range – 10,970 meters.

6 pounder stopping gun installed.

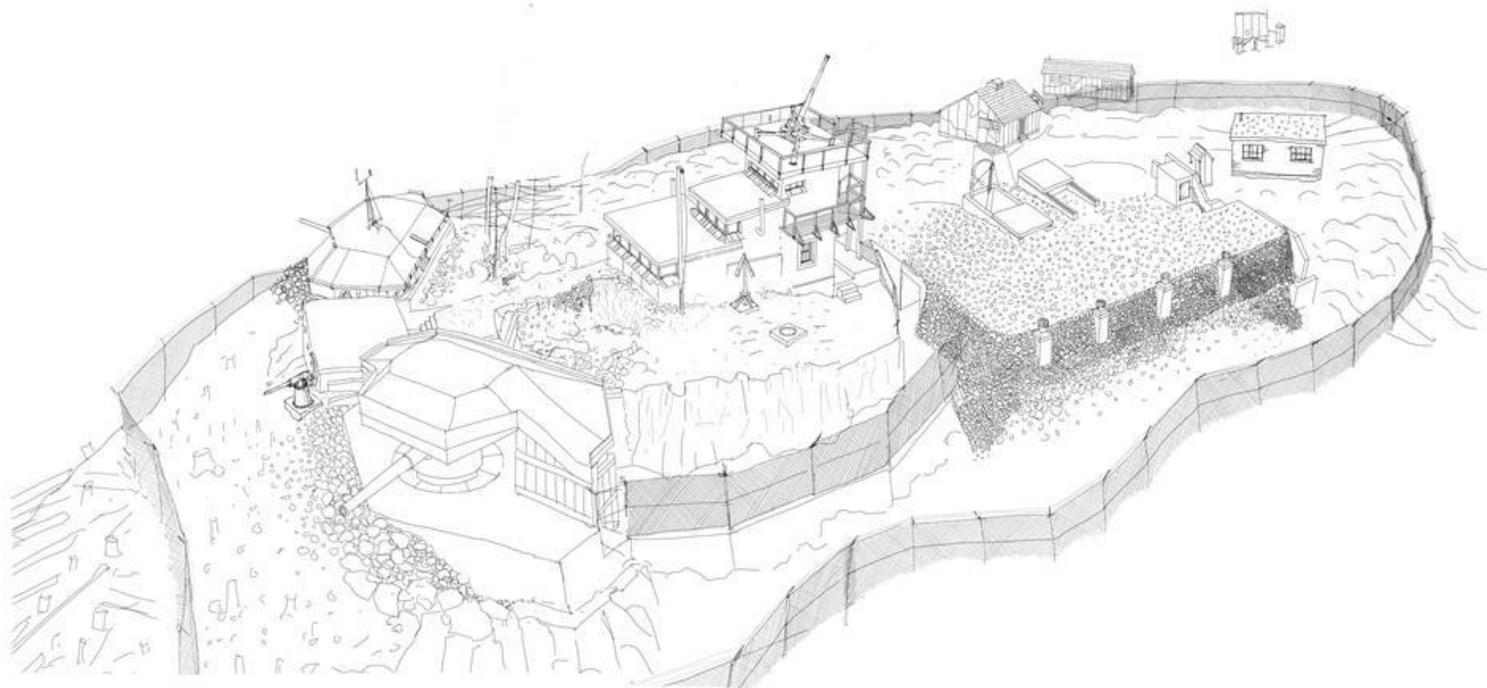
Third level added to Battery Observation Post (BOP). Weather station on roof. Naval signal tower moved to front of BOP.





Vancouver Artillery Association Yorke Island Project

Yorke Battery – Fort Site Plan



1943B Fort Layout, Sketch by R. Linzey

Overhead plastic armour cover on both guns installed.

War shelter between guns installed.

New Magazine constructed with walkway to guns.

Fort area fenced in.





FIRE COMMAND POST - SOUTH ELEVATION
SCALE: 1/8" = 1'

HERITAGEWORKS

Site: York Island
JAN 8, 2018

YORK ISLAND
CONSERVANCY

FIRE COMMAND
POST SOUTH
ELEVATION

BOPI.0



HERITAGEWORKS

Terrence Heine
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

FIRE COMMAND
POST - SECTION

BOPL3



Vancouver Artillery Association Yorke Island Project

Fire Command Post (also referred to as the Searchlight Directing and Battery Observation Post) (BOP)

The BOP is an assemblage of utilitarian spaces, each with its own highly-specialized use. These are arranged in a hierarchal configuration that is typical of coastal artillery defenses of the period. The BOP consists of the Port War Signal Station, the Searchlight Directing Station, the Battery Observation Post, a small Generator Room, and the Naval Signals Station (this being located on the top floor of the building). The building is surrounded on the south and east by a concrete apron, and to the west there is loose rock armor/camouflage. There are holdfasts on the concrete apron, but the specific nature of the equipment/weapon is unclear.

The older parts of the building are made from bricks while later additions were made in concrete. A wooden staircase (now missing) once provided access to a wrap-around exterior wooden deck and the roof. The absence of these features makes access to the Naval Signal Station difficult except by walking on top of the Searchlight Directing Station's roof.

All of the interior spaces were once lined with laths and interior paneling. Most of this is now missing, but a small section of interior hardboard lining remains in the Port War Signal Station including an example of the original, 3-color paint scheme. Some of the lining is also in place within the Searchlight Directing Station above. All door and window sashes are missing, but the jambs remain in most places.

The building is roofed with tar and gravel. There are holdfasts on the uppermost roof for an anti-aircraft gun.

The Fire Command Post is the very heart of the Battery Complex, and like other buildings within the fort, the relationships that exist between individual buildings to one another and to their surrounding landscape contributes to the overall heritage character of Yorke Island. Views forward of the post (looking down-range, or northwest along Johnstone Strait) are of special importance to the interpretation of this building because it was from here that all operations were directed; maintaining visual connectivity to the waters that the Yorke Island Battery defended. Significant features include the instrument mounts, remains of hand-painted bearings along the valance of the Battery Observation Post, and the painted remains of the interior finishes.





Vancouver Artillery Association Yorke Island Project

Fire Command Post (also referred to as the Searchlight Directing and Battery Observation Post) (BOP)

Current Condition

The core structure of the Fire Command Post is in excellent condition. The roofs are in fair condition, but these have been damaged by visitors trying to access the Naval Signals Station and its rooftop.

Steel shutters enclose the Battery Observation Post and Searchlight Directing Station. These are in poor to moderate condition and some have been disconnected/disassociated from their original locations.

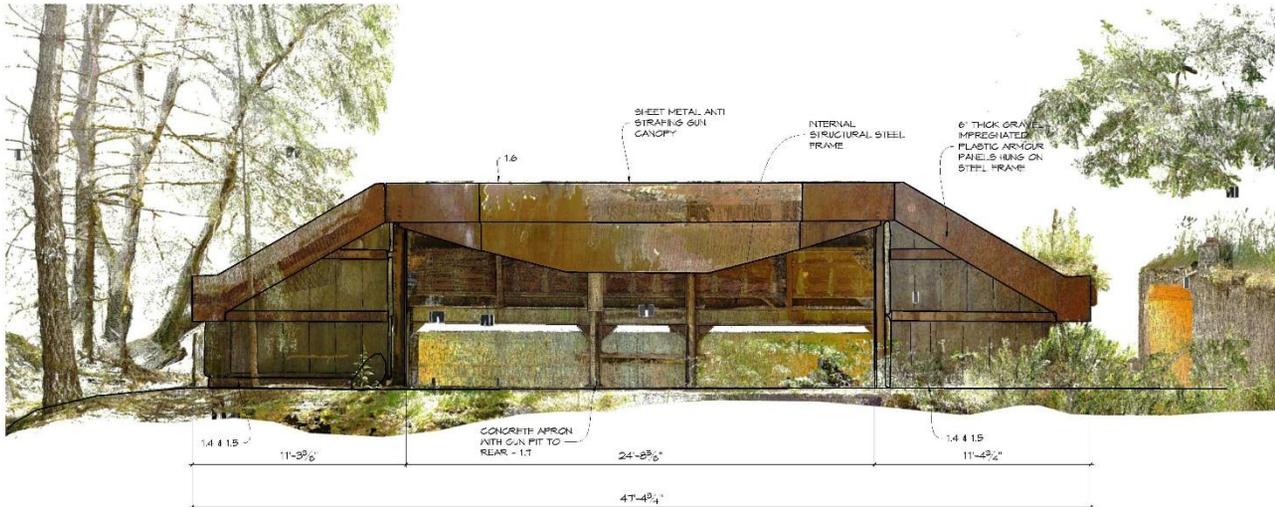
The exterior of the building is camouflage painted, and some of this remains in legible condition, though it has been vandalized recently with paintballs on the east elevation. Some of the exterior walls have also been marked with modern graffiti. The original camouflage paint is highly susceptible to damage.

Guardrails along the concrete apron to the south and east are missing.

The roofs are somewhat accessible, and visitor impacts include damage to the vegetation cover revealing the underlying bitumen, and thus increasing UV damage. In hot summer conditions the roofs warm up and the bitumen become pliable; making it easily damaged by people walking on it. In winter conditions the membranes are brittle.

Proposed scope of work: Reconstruct exterior stairs and balconies to provide safe access to the Naval Signals Post and its roof; Reinstall the metal shutters at the Battery Observation Post and Searchlight Directing Station; Reinstall historic barriers at south and east of apron using the existing, cast-in-place receivers; Consolidate the instrument desk in the Searchlight Directing Station; Strip existing roof and install new bitumen roofing to make all parts of the Fire Command Post watertight.





GUN NO. 1 - WEST ELEVATION
SCALE: 3/8" = 1'

HERITAGEWORKS

Revision: 00001
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

GUN NO. 1-
WEST
ELEVATION

A1.0



GUN NO. 1 - CROSS SECTION
SCALE: 3/16" = 1'

HERITAGEWORKS

Revised: 10/18/18
JAN 8, 2018

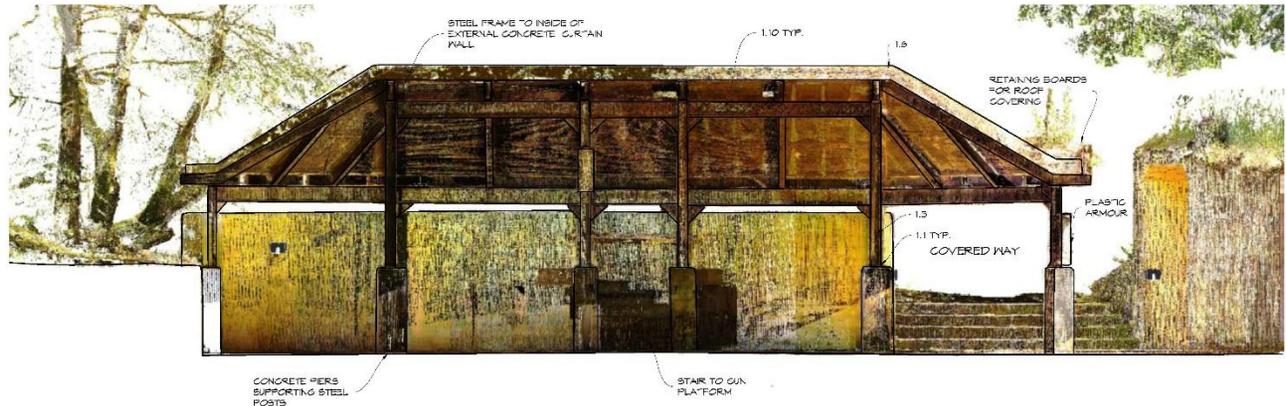
YORKE ISLAND
CONSERVANCY

GUN NO. 1-
CROSS
SECTION

A1.2



GUN NO. 1 - EAST ELEVATION
SCALE: 3/8" = 1'



GUN NO. 1 - LONGITUDINAL SECTION
SCALE: 3/8" = 1'

HERITAGEWORKS

Prepared for:
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

GUN NO. 1 - EAST
ELEVATION &
SECTION

A14



Vancouver Artillery Association Yorke Island Project

Gun Emplacement No. 1

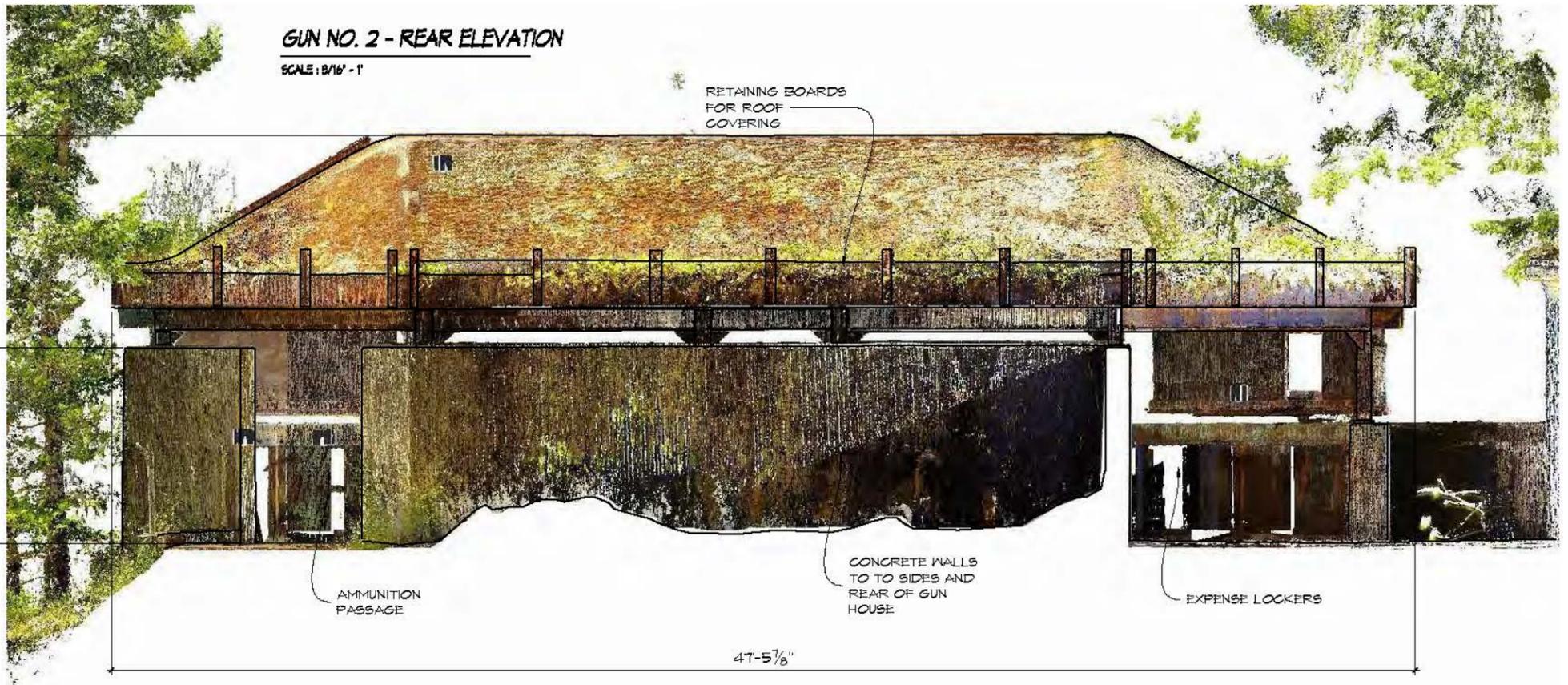
Gun Emplacement No. 1 is a utilitarian engineering work that was built to a standard design for breech-loading coastal artillery guns of the period. No. 1 Gun consists of the Gun Pit, the sloped concrete Apron forward of the gun, the elevated Gun Platform to the rear of the gun (including the expense lockers that it covers), and the Gun Shelter. The Gun Platform is connected to the level of the expense lockers by a short flight of concrete stairs that are integral with the structure. The pre-fabricated steel structure of the Gun Shelter stands immediately inside the concrete revetments that shield the rear of the gun and this frame is supported in some places on raised concrete piers. This shelter consists of modular panels of Plastic Armor composed of precast bitumen and aggregate slabs (plates) and retained by metal flanges that are bolted to the steel frame. The ceiling panels are affixed to steel backing plates to give them extra support, and the whole roof is covered with tar and gravel. A vertical metal shield hangs from the eave of the roof immediately forward of the gun, and this is assumed to be armored plate.

Current Condition

The concrete is in excellent condition, and despite some modest vandalism to exposed surfaces, the plastic armor is as well. The chief weakness of the building is its tar and gravel roof membrane. Seedling trees (wildings) have rooted in the accumulated leaf litter, disturbing the roofs. The roof is somewhat accessible, and visitor impacts include damage to the vegetation cover revealing the underlying bitumen, and thus increasing UV damage. In hot summer conditions the roofs warm up and the bitumen become pliable; making it easily damaged by people walking on it. In winter conditions the membranes are brittle. All the primary seams along the hipped roof are broken, allowing water to run under the roof armor and along structural members, contributing to the corrosion of steel members and their connections.

Proposed scope of work: Make repairs to the corroded steel columns and column base connections of gun shelters; Clear all drains and ensure that they are operating effectively; Make seismic upgrade to gun shelter by securing column heads to concrete wall; Repair lost and badly deteriorated retaining bolts and reinstate retaining flanges of plastic armor; Treat remaining retaining bolts and flanges to inhibit corrosion; Strip existing roof and install new bitumen roofing to make gun shelter watertight. Reinststate historic barriers at some of the unguarded edges around gun pit using the existing, cast-in-place receivers; Install nuts and oversized washers on holdfast studs in gun pit; Treat loose armor panel (originally from roof above gun pit) in-situ and support to minimize corrosion.





GUN NO. 2 - REAR ELEVATION

SCALE: 3/16" = 1'

T-8 5/8"

T-1 1/4"

AMMUNITION
PASSAGE

CONCRETE WALLS
TO TO SIDES AND
REAR OF GUN
HOUSE

EXPENSE LOCKERS

47-5/8"



GUN NO. 2 - LONGITUDINAL SECTION

SCALE: 3/16" = 1'

RETAINING BOARDS
FOR ROOF
COVERING

PLASTIC
ARMOUR

COVERED WAY

23 & 2.12 TYP.

CONCRETE PIERS
SUPPORTING STEEL
POSTS

STAIR TO GUN
PLATFORM

STEEL FRAME TO
INSIDE OF
EXTERNAL
CONCRETE
CURTAIN WALL

AMMUNITION
PASSAGE

Revision Notes:

JAN 8, 2018

YORKE ISLAND
CONSERVANCY

GUN NO. 2 -
REAR ELEVATION
AND LONGITUDINAL
SECTION



HERITAGEWORKS

Prepared by: Heritage
 JAN 8, 2018

YORK ISLAND
 CONSERVANCY

GUN NO. 2 -
 SOUTH ELEVATION

B1.2



Vancouver Artillery Association Yorke Island Project

Gun Emplacement No. 2

Gun Emplacement No. 2 is a utilitarian engineering work that was built to a standard design for breech-loading coastal artillery guns of the period. No. 2 Gun consists of the Gun Pit, the sloped concrete Apron forward of the gun, the elevated Gun Platform to the rear of the gun (including the expense lockers that it covers), and the Gun Shelter. The Gun Platform is connected to the level of the expense lockers by a short flight of concrete stairs that are integral with the structure. The pre-fabricated steel structure of the Gun Shelter stands immediately inside the concrete revetments that shield the rear of the gun and this frame is supported in some places on raised concrete piers. This shelter consists of modular panels of Plastic Armor composed of precast bitumen and aggregate slabs (plates) and retained by metal flanges that are bolted to the steel frame. The ceiling panels are affixed to steel backing plates to give them extra support, and the whole roof is covered with tar and gravel. A vertical metal shield hangs from the eave of the roof immediately forward of the gun, and this is assumed to be armored plate.

Current Condition

The concrete is in excellent condition, and despite some modest vandalism to exposed surfaces, the plastic armor is as well. The chief weakness of the building is its tar and gravel roof membrane. Seedling trees (wildings) have rooted in the accumulated leaf litter, disturbing the roofs. The roof is somewhat accessible, and visitor impacts include damage to the vegetation cover revealing the underlying bitumen, and thus increasing UV damage. In hot summer conditions the roofs warm up and the bitumen become pliable; making it easily damaged by people walking on it. In winter conditions the membranes are brittle. All the primary seams along the hipped roof are broken, allowing water to run under the roof armor and along structural members, contributing to the corrosion of steel members and their connections.

Proposed scope of work: Make repairs to the corroded steel columns and column base connections of gun shelters; Clear all drains and ensure that they are operating effectively; Make seismic upgrade to gun shelter by securing column heads to concrete wall; Repair lost and badly deteriorated retaining bolts and reinstate retaining flanges of plastic armor; Treat remaining retaining bolts and flanges to inhibit corrosion; Strip existing roof and install new bitumen roofing to make gun shelter watertight. Reinststate historic barriers at some of the unguarded edges around gun pit using the existing, cast-in-place receivers; Install nuts and oversized washers on holdfast studs in gun pit; Treat loose armor panel (originally from roof above gun pit) in-situ and support to minimize corrosion.





WAR SHELTER - WEST ELEVATION
SCALE: 3/8" = 1'



WAR SHELTER LONGITUDINAL SECTION
SCALE: 3/8" = 1'

HERITAGEWORKS

30715100_300001

JAN 8, 2008

YORKU ISLAND
CONSERVANCY

WAR SHELTER - WEST
ELEVATION AND
LONGITUDINAL
SECTION

C1.2



Vancouver Artillery Association Yorke Island Project

War Shelter

The War Shelter (aka Crew Shelter) is a simple and functional building made from concrete. It consists of a single large room and is separated from the covered Ammunition Passage by a concrete partition wall. The building is situated equidistant to the guns. There are 3x loopholes along the northwest wall, and these are shuttered at the inside with sliding steel panels. Earth and rock armor are banked up against the northwest elevation. To the southwest of the War Shelter a paved pathway that leads to the Stopping Gun, where there is a small concrete gun platform with holdfasts for a Hotchkiss 6-pounder.

The interior of the War Shelter is lined with simple shiplap wood paneling. The door and window jambs and trims remain in place, and one of the simple plank door sashes remains (unhinged) inside the building interior. The doors and windows provide good evidence of the original paint colours.

The building is roofed with tar and gravel. There is a flue at the northwest corner of the roof but the ventilator is missing (it is currently capped temporarily with one of the shutters from the BOP).

Current Condition

The roof is in poor condition, and visitor impacts include damage to the vegetation cover revealing the underlying bitumen, and thus increasing UV damage. In some places the roofing membrane is missing entirely. In hot summer conditions the roofs warm up and the bitumen become pliable; making it easily damaged by people walking on it. In winter conditions the membrane is brittle.

There is extensive modern graffiti along both interior walls of the Ammunition Passage. The exterior of the building was camouflage painted, but it is no longer legible.

The stone retaining wall that borders the path to the Stopping Gun is in poor condition and the stones are loose. Similarly, the rock armor/camouflage forward of the Stopping Gun platform is separating from the concrete.

Proposed scope of work: Reinstate the door on hardware to match original configuration; Make and install a new cap flashing for the flu; Repair the modern damage to interior walls of Ammunition Shelter with multiple coats of lime wash to match historic colors; Repair the stone retaining wall that borders the path to the Stopping Gun platform.





NEW MAGAZINE- WEST ELEVATION
SCALE: 1/8" = 1'

HERITAGEWORKS

Revised: Revised
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

NEW MAGAZINE -
WEST ELEVATION

NM1.1



Vancouver Artillery Association Yorke Island Project

New Magazine

The New Magazine is a substantial engineering work that was constructed from concrete in 1943 when the guns were updated. It has a functional, defensive design that is typical of coastal artillery batteries. The New Magazine consists of 2x Ammunition Wells (with modern safety covers), 3x Access Stairs, Passage and Access Shaft (leading to the roof), Laundry, Boiler Room plus 2x partially subterranean Shell Stores. The New Magazine is connected to the guns by the Ammunition Passage, a level concrete path leading from the Shell Stores to the No. 2 Gun.

Some of the original heavy steel doors are in-situ and still operable.

The shell stores contain some of the timber columns that formed the original structure of the shelving and racking system.

The roof of the New Magazine is tar and gravel. In places this is covered by rock armor/camouflage. The entire west elevation and the majority of the north elevation are covered in rock armor/camouflage as well. The rockwork is battered but it is assumed that the walls of the underlying concrete structure are plumb. This means that the armor/camouflage is much thicker along its base. The joints are bound with hard cementitious mortar, and there is a heavy tarpaper membrane between the stone and the concrete.

There are few surviving examples of rock armor/camouflage of this type (it is identical to that of Fort Rodd Hill National Historic Site near Victoria). This makes the stone façade a rare and highly-significant example of Second World War coastal defenses.

The New Magazine is an integral part of the Battery Complex, and like other buildings within the fort, the relationships that exist between individual buildings to one another and to their surrounding landscape contributes to the overall heritage character of Yorke Island.





Vancouver Artillery Association Yorke Island Project

New Magazine

Current Condition

Like the Guns and the War Shelter, the high-quality of materials and workmanship in the New Magazine is character-defining. The thoughtful design and careful construction are also the main reasons that the building survives in such good condition. The concrete is in excellent condition throughout, with just one area of modest calcification at the Passage near the south entrance.

The chief weakness of the building is its tar and gravel roof. Seedling trees (wildings) have rooted in the accumulated leaf litter, disturbing the roofs. The roof is easily accessible, and visitor impacts include disruption of the rock armor/camouflage and damage to the vegetation cover revealing the underlying bitumen, and thus increasing UV damage. In hot summer conditions the roofs warm up and the bitumen become pliable; making it easily damaged by people walking on it. In winter conditions the membranes are brittle.

The rock armor/camouflage is delaminating from the structure at many locations and is in poor condition. Additionally, the stiff mortar joints have failed and large cracks have opened up in the rockwork allowing water to run freely between the rock and the concrete walls. Seasonal frost-jacking will soon cause this rockwork to fail.

The floor on one of the Shell Stores has been damaged by fire, presumably lit by vandals.

The metal ventilators are missing from all of the flues. The damaged original ventilators are lying down-slope on the forest below the New Magazine. One of the flues above the Laundry/Boiler is brick-made, and in poor condition with an open top.

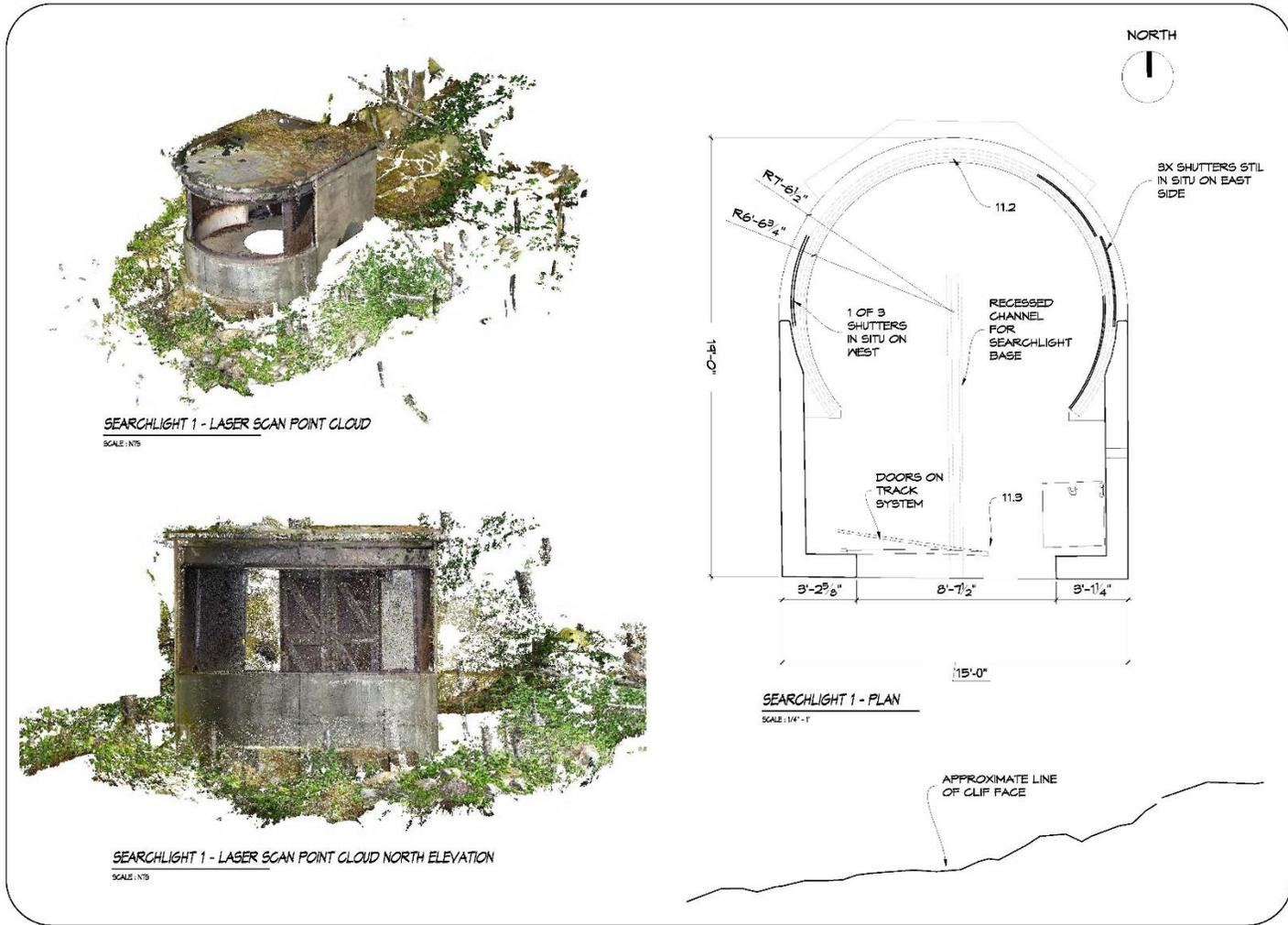
The original metal covers to the Ammunition Wells are lying on the roof and partially buried beneath vegetation. They are in poor condition and the tracks that they originally ran on are badly decayed.

Proposed scope of work: Make repairs to rock armor; Repair and reinstate the tracks and covers for the Ammunition Wells; Make and install a new cap flashing for the flu above Laundry / Boiler; Reinststate original ventilators on flues above Shell Stores; Windsafe surrounding forest including removal of over-mature alder; 6.6 Treat metal doors and frames and make all hardware operable.





Vancouver Artillery Association Yorke Island Project



HERITAGEWORKS

REVISION HISTORY:
JAN 8, 2018
YORKE ISLAND CONSERVANCY
SEARCHLIGHT 1
PLAN AND VIEWS

S 1.1



Vancouver Artillery Association Yorke Island Project

Searchlight 1

The No. 1 Searchlight is a utilitarian engineering work of military design. It is the southernmost of the three lights on Yorke Island. The design is thoughtfully detailed and the concrete construction is robust and well made. The curved concrete work is carefully fit to the irregular bedrock. 3x folding and sliding doors provide a large single entrance at the rear of the light. A curved, cantilevered, flat roof extends seaward and provides the guide track for the telescopic metal shutters that enclose the light. The massive General Electric light has been removed, but the service conduit and holdfasts remain in the concrete floor. The single room is vented through one wall and through the roof. The roof is tar and gravel.

The building is a highly significant (and evocative) remainder of battery complex. Like other buildings around the perimeter of the island, the light was connected via a perimeter trail. Near the light, modest fortifications and stone walls are evidence of close defenses.

Current Condition

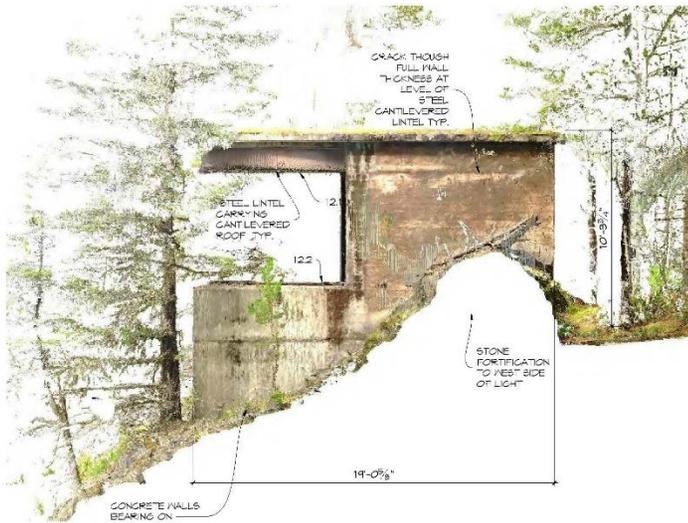
The structure is in very good condition despite its harsh marine environment. The curved-section steel beam that supports the cantilevered roof slab is very important to the structural integrity of the building. This beam is currently in good condition but it is essential that this is maintained in order to ensure the buildings longevity.

The metal tracks (cast in place) that support the steel shutters are badly corroded and continuing to decay. These are in extremely poor condition. Six of the 6 original steel shutters are still in place. Three of the 3 original wood and steel doors are still in place and 2 of them are still mounted. The tracks are in poor condition and badly corroded.

The exterior of the building was originally painted in a camouflage pattern and this is still legible in some places. The roof is in fair condition.

Proposed scope of work: Descale exposed metal surfaces of cantilevered beam above shutters with needle gun; Stabilize the tracks for shutters; Repair the doors and make operable; Restore historic sightlines to ocean by selectively pruning/clearing shoreline trees.





SEARCHLIGHT 2 - SOUTH ELEVATION
SCALE: 3/8" = 1'



SEARCHLIGHT 2 - WEST ELEVATION
SCALE: 3/8" = 1'

HERITAGEWORKS

HeritageWorks

JAN 8, 2018

YORKE ISLAND
CONSERVANCY

SEARCHLIGHT 2
SOUTH AND WEST
ELEVATION

S2.2



Vancouver Artillery Association Yorke Island Project

Searchlight 2

The No. 2 Searchlight is a utilitarian engineering work of military design. It is the southernmost of the three lights on Yorke Island. The design is thoughtfully detailed and the concrete construction is robust and well made. The curved concrete work is carefully fit to the irregular bedrock. 3x folding and sliding doors provide a large single entrance at the rear of the light. A curved, cantilevered, flat roof extends seaward and provides the guide track for the telescopic metal shutters that enclose the light. The massive General Electric light has been removed, but the service conduit and holdfasts remain in the concrete floor. The single room is vented through one wall and through the roof. The roof is tar and gravel.

The building is a highly significant (and evocative) remainder of battery complex. Like other buildings around the perimeter of the island, the light was connected via a perimeter trail. Near the light, modest fortifications and stone walls are evidence of close defenses.

Current Condition

The structure is in very good condition despite its harsh marine environment. The curved-section steel beam that supports the cantilevered roof slab is very important to the structural integrity of the building. This beam is currently in good condition but it is essential that this is maintained in order to ensure the buildings longevity.

The metal tracks (cast in place) that support the steel shutters are badly corroded and continuing to decay. These are in extremely poor condition. None of the 6 original steel shutters are still in place. Three of the 3 original wood and steel doors are still in place. This is the best surviving example of the doors. The tracks are in poor condition and corroded. The exterior of the building was originally painted in a camouflage pattern and this is still legible in some places. The roof is in fair condition.

Proposed scope of work: Descale exposed metal surfaces of cantilevered beam above shutters with needle gun; Stabilize the tracks for shutters; Repair the doors and make operable; Restore historic sightlines to ocean by selectively pruning/clearing shoreline trees.





SEARCHLIGHT 3 - WEST ELEVATION
SCALE: 3/8" = 1'



SEARCHLIGHT 2 - LONGITUDINAL SECTION
SCALE: 3/8" = 1'

HERITAGEWORKS

Revision Dates:
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

SEARCHLIGHT 3
WEST ELEVATION
EAST ELEVATION

S3.4



Vancouver Artillery Association Yorke Island Project

Searchlight 3

The No. 3 Searchlight is a utilitarian engineering work of military design. It is the southernmost of the three lights on Yorke Island. The design is thoughtfully detailed and the concrete construction is robust and well made. The curved concrete work is carefully fit to the irregular bedrock. 3x folding and sliding doors provide a large single entrance at the rear of the light. A curved, cantilevered, flat roof extends seaward and provides the guide track for the telescopic metal shutters that enclose the light. The massive General Electric light has been removed, but the service conduit and holdfasts remain in the concrete floor. The single room is vented through one wall and through the roof. The roof is tar and gravel.

The building is a highly significant (and evocative) remainder of battery complex. Like other buildings around the perimeter of the island, the light was connected via a perimeter trail. Near the light, modest fortifications and stone walls are evidence of close defenses.

Current Condition

The structure is in very good condition despite its harsh marine environment. The curved-section steel beam that supports the cantilevered roof slab is very important to the structural integrity of the building. This beam is currently in good condition but it is essential that this is maintained in order to ensure the buildings longevity.

The metal tracks (cast in place) that support the steel shutters are badly corroded and continuing to decay. These are in extremely poor condition. None of the 6 original steel shutters are still in place. Two of the 3 original wood and steel doors are still inside the building and partially attached while the third panel is lying in the environs nearby. The tracks are in poor condition and badly corroded.

The exterior of the building was originally painted in a camouflage pattern and this is still legible in some places. The roof is in fair condition.

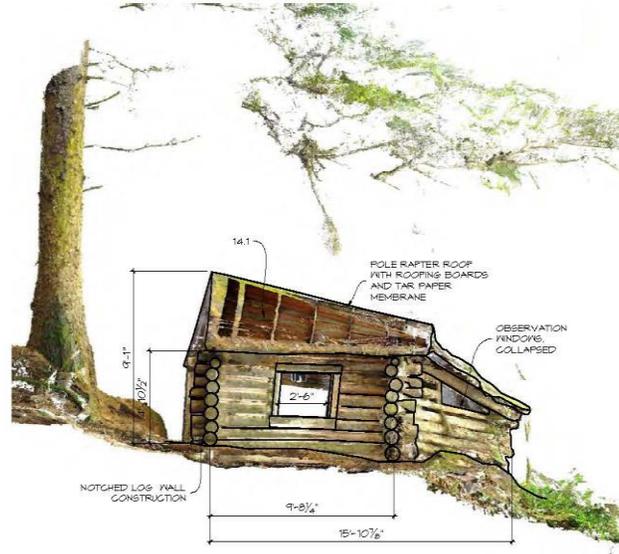
Proposed scope of work: Descal exposed metal surfaces of cantilevered beam above shutters with needle gun; Stabilize the tracks for shutters; Repair the doors and fix in open position.





SUNDERLAND POST - NORTH ELEVATION

SCALE: 3/16" = 1'



SUNDERLAND POST - EAST ELEVATION

SCALE: 3/16" = 1'

HERITAGEWORKS

Revision Notes:
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

SUNDERLAND POST
NORTH AND EAST
ELEVATION

SP1.1



Vancouver Artillery Association Yorke Island Project

Sunderland Post

Sunderland Post is one of three listening posts located around the perimeter of the island, and the best surviving example. It is a small two room log-built structure very different from other buildings on the island. It has an irregular plan consisting of a small rectangular main room with windows on side walls and a door on the landward gable end, and the triangular front room facing the water. The landward room had a stove and furniture for basic operations, while the seaward room appears to have been used for monitoring and observation. The Post is located several meters from the shore line on ground above the beach head. It is built using standard round log construction with simple dovetail connections between at the corners. The logs have been crudely chinked with moss and these horizontal gaps have been closed with saplings at the interior. The roof is made from round pole rafters with square edged roofing boards on top. The rafter tails project to create generous eaves. This is finished with tar paper as the protective membrane. The gables are planked with horizontal shiplap. The floor is simply constructed of planks on a raft of sleeper joists with a pad stone foundation. Windows and doors are simply built from similar square edge plank materials as used on the roof and partition wall between rooms with the main door. Some of the rustic wood door and window hardware remains. Markings and labelling chalked on the boards suggest that the building was prefabricated elsewhere and then moved to its current location in several loads.

Current Condition

The building was partially-collapsed and hazardous. Some remedial work has now been completed.





HERITAGEWORKS

Revision Dates:
JAN 8, 2018

YORKE ISLAND
CONSERVANCY

GENERATOR
BUILDING EAST
ELEVATION

G1.1



Vancouver Artillery Association Yorke Island Project

Generator Shed and Power Plant

The Generator Shed & Power Plant forms the functional hub of the site, originally providing power to the fort, the camp and all of the sites around the perimeter of the island. The building was built in two phases of concrete construction, resulting in a large (1,200 ft. sq.) double-roomed structure with a flat concrete slab roof, and 12-in thick concrete walls. These exteriors of these walls are painted with camouflage.

The complex is located on the slopes to the south of the fort and is connected by a steep climb up the south side of the magazine where a staircase gives access to the path between the two sites. A road with prominent drainage ditches leads from the Generator Shed & Power Plant to the Camp and there are several secondary structures/installations located around the perimeter of the main building. The larger of the two rooms (and the first to be constructed) housed four generators plus turbines on large rectangular concrete foundation pads with service channels cast into the concrete slab floor. The space was ventilated by louvered windows along the west wall and painted with high gloss paint internally. Various fixtures and furnishings relating to operation of the turbines remain intact but the generators, cabling and machinery have all been removed. The east wall has large steel double doors hung on lintels set into concrete walls. A single window with large steel shutters is in the same wall just north of the doors, and 2x windows to the same pattern are arranged symmetrically in the north wall. Steel louvers are positioned at upper level in the wall around the building.

The southern and smaller of the two rooms (constructed during a later phase) is constructed in a similar way to the main generator room with slightly thinner perimeter walls. Internally, the walls were lined with painted particle board (Buffalo Board) applied on lath along each wall and there is a single remaining internal partition. The floor and ceiling are concrete slabs. As per the main generator room, there are four smaller concrete bases for machinery, but no machinery remaining. The west wall has two lower louvered ventilator windows at chest height and two steel ventilators at upper level in the wall. The south and east walls have pairs of sash windows in each wall. At the center of the east wall a large steel double door provides access to the space.





Vancouver Artillery Association Yorke Island Project

Generator Shed and Power Plant (cont)

Externally the building is painted with yellow and brown camouflage, applied directly to concrete wall surfaces. The west wall is partially protected by an earth embankment and there are ditches around the north, south and east sides. To the south elevation a large concrete base with holdfasts stands directly outside the wall while a smaller base inside a wooden cover shed is located slightly beyond.

The concrete slab roof is at different elevations over the two parts of the building but constructed similarly over both parts with a 4-in thick projecting slab covered with a bitumen and gravel membrane. The roof projects approximately 18-in from the face of the wall and a fascia board was originally applied to the whole perimeter with iron bolts set into the concrete slab. Very thick vegetation covers and obscures both roofs.

There are substantial service corridors leading away from the Generator Shed & Power Plant. These should be regarded as highly significant and related features.

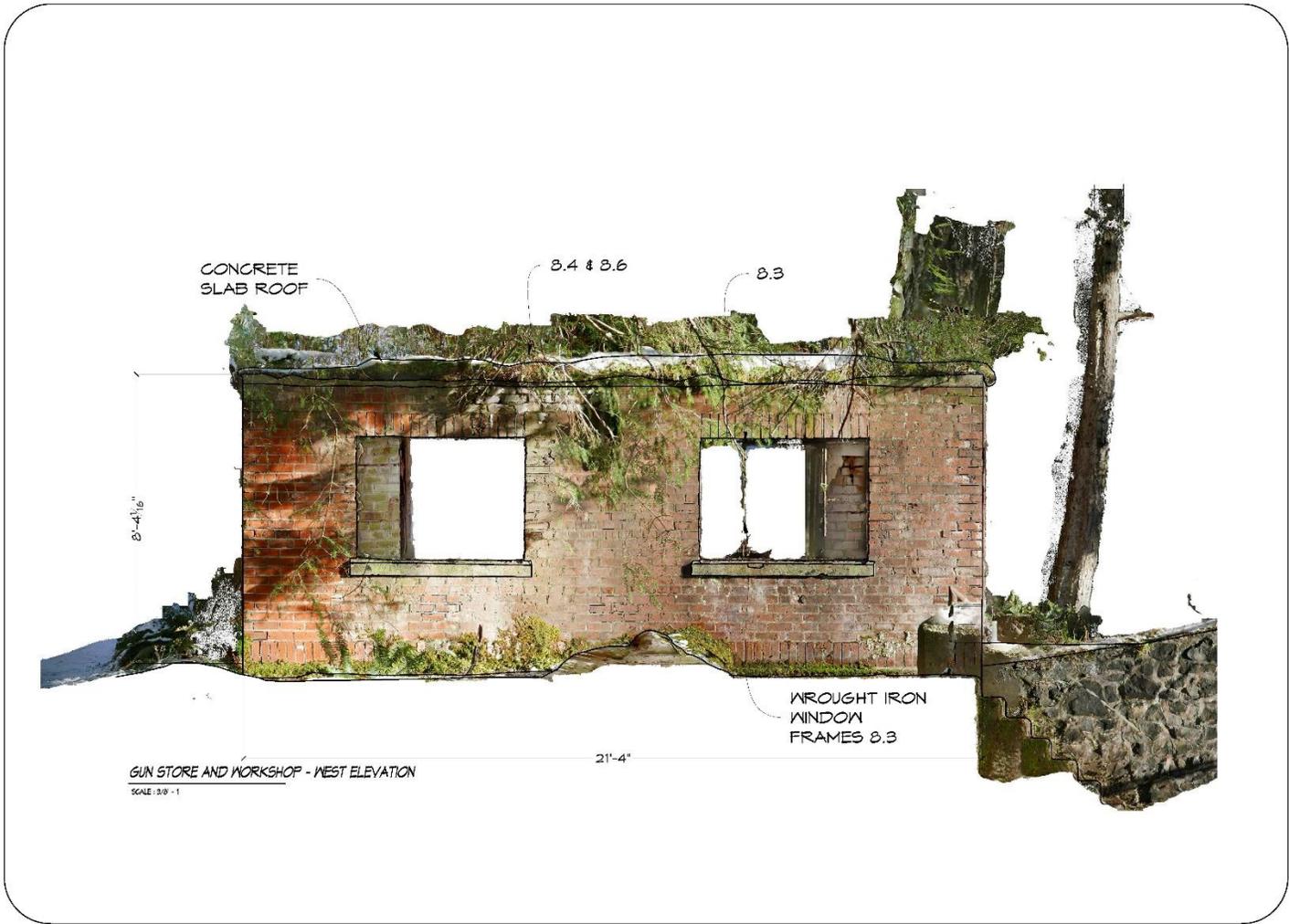
Current Condition

The structure is generally in very good condition though several trees have fallen against it. The large steel doors are still in place (or nearby) and they are in fair/good condition. The interior of the southern space has been damaged by vandals, and there is a lot of debris on the floor in this area.

The camouflage paint is in fair condition on the west elevation, but remains vulnerable to damage. Soils and forest debris have accumulated along the east elevation to the extent that groundwater can now enter the generator hall. A distinct smell of oil hangs over the entire building and immediate surrounding environs suggesting the that adjacent soils are probably contaminated.

Proposed scope of work: Explore ways to protect the historic camouflage; Remove deadfall; Repair the doors and fix in open position; Alter/lower grades along east elevation to encourage drainage away from building; Windsafe surrounding forest including removal of over-mature alder.





HERITAGEWORKS

Series: 8001
 JAN 8, 2018

YORKE ISLAND
 CONSERVANCY

GUNNES STORE AND
 WORKSHOP - WEST
 ELEVATION

W1.0



Vancouver Artillery Association Yorke Island Project

Gunner's Stores and Workshop

The Gunner's Store & Workshop dates from the earliest phase of the battery. It is a simple brick-made building consisting of 2x rooms with a cast concrete floor. The rooms are well lit with 2x windows each and separate doors to the outside. The windows have metal frames and sashes (still in situ), while the doors are made from wood (only the jambs remain).

Parts of the building interior were lined, paneled and trimmed out as per the Battery Observation Post, but a plaster render was applied directly to the internal brick partition wall. The floor of the building was painted, and the paint scheme combined with indentations in the concrete provide witness to the original layout of the workbenches where the removeable parts of the guns were stored when the guns were not active. Historic photos suggest that each room was used to store the parts from only one of each gun. The roof is tar and gravel with vertical 8-in boards around the eaves. Like other buildings remaining in the fort complex, the Gunner's Store & Workshop was electrified, with service conduit running behind the interior lining boards and chased into the brickwork where necessary.

Current Condition

There is a large Douglas-fir tree growing at (and probably under) the southeast corner of the building that is causing some minor deformation of the structure, but the brickwork is otherwise in good condition. Because of its location the building is subject to a lot of leaf litter from the surrounding forest, and the roof has a correspondingly large amount of vegetation including some seedling trees growing on it. Soils have accumulated along the east elevation to such an extent that groundwater now flows into the building during wet conditions and the bottoms of the door jambs are partially buried.

Evidence in the form of charred timbers suggests that the building had a fire at one time, and was then re-finished to conceal the damage.

Proposed scope of work: Alter/lower grades along east elevation to encourage drainage away from building; Remove Douglas-fir tree from southeast corner; Consolidate and re-associate loose parts of window sashes; Treat corrosion of metal parts and secure in place; Remove all trees from roof; Windsafe surrounding forest including removal of over-mature alder.

