

*Blyth Battery, Blyth Links, Blyth*  
Northumberland

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*Building Recording (December 2008-March 2009)*

for

Northumberland County Council



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# Blyth Battery, Blyth Links, Blyth Northumberland

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Building recording

(project AA. 1641)

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Illustrations by Kenneth Macfadyen and Amanda Gow

## **Contents**

1. *Introduction*
  - i. *General*
  - ii. *Setting*
  
2. *Blyth Battery historical assessment (summary)*
  - i. *Defenses at Blyth*
  - ii. *The construction of Blyth Battery*
  - iii. *The decommissioning of Blyth Battery*
  
3. *Blyth Battery building assessment*
  - i. *Southern building group*
  - ii. *Northern building group*

- Appendix A*    *2008-9 Addyman Archaeology survey drawings*  
*Appendix B*    *Original construction drawings*  
*Appendix C*    *Photographic register*  
*Appendix D*    *Photographic contact sheets*

## **Illustrations**

### **Figures**

- 1     Site location map
- 2     Site location map
- 3     Aerial photograph showing current extent of Blyth Battery
- 4     Map showing the extent of the Scheduled Monument
- 5     1898 OS map detail
- 6     1924 OS map detail
- 7     1950 OS map detail
- 8     WWI BOP with concealment roof
- 9     Southern building group block site plan
- 10    Undated photograph of the Shelter prior to conversion to public toilets
- 11    Northern building group block site plan

### **Plates**

- 1     WWI BOP, view from E
- 2     WWI BOP interior ground floor, W elevation
- 3     WWI BOP ground floor, earlier paint schemes and skirting doors visible
- 4     WWI BOP interior ground floor W elevation, window with pins for original shutters
- 5     Rotating turret in WWI BOP
- 6     Detail of operating wheel in roof of WWI BOP rotating turret
- 7     Panorama of WWI BOP rotating drum interior
- 8     WWII BOP E (seaward) elevation
- 9     WWII BOP S and W elevations, view from SW
- 10    WWII BOP ground floor room 1, reused door in N wall
- 11    WWII BOP ground floor room 1, blocked doorway in S wall
- 12    WWII BOP upper floor

- 13 WWIIBOP upper floor, concrete plinth for telescope
- 14 WWII BOP telescope plinth, stenciling on S face
- 15 WWII BOP telescope plinth, stenciling on W face
- 16 Blockhouse exterior, view from S
- 17 Interior of blockhouse
- 18 Bench outline visible beneath blocked gun loops
- 19 Blockhouse interior; gun loop widened to form window
- 20 Blockhouse interior; blocked gun loop with hinges and hooks
- 21 View of rear of gun emplacements, from SW
- 22 View of S gun emplacement, from NE
- 23 View of N gun emplacement, from SE
- 24 View along passageway between gun emplacements
- 25 Lockers in retaining wall at S end of passageway
- 26 War Shelter, N room looking N to blocked doorway in N elevation
- 27 War Shelter, S room looking S to doorway and external access steps
- 28 Ammunition Handling Lobby interior
- 29 Lockers in E wall of Ammo Lobby
- 30 View of the Royal Artillery Store, from SE
- 31 Interior of the Royal Artillery Store, looking S
- 32 View of Magazine building, from SW
- 33 Opening up of doorway to blast chamber in Magazine building
- 34 Inside blast chamber at Magazine building
- 35 'Air space' in Magazine building revealed
- 36 Detail of 'air space' construction
- 37 Magazine building interior, showing truncated central partition wall and shell bench and wall scar on ceiling.
- 38 Magazine building interior, scar of removed central partition wall on floor
- 39 Lamp room, S elevation
- 40 Interior of Lamp room, with shelving brackets
- 41 Shelter, frontage (S) elevation
- 42 Interior of gents toilets in the Shelter, during removal of later partitions and fittings
- 43 Interior of gents toilets in the Shelter, during removal of later partitions and fittings
- 44 Interior of ladies toilets in the Shelter, during removal of later partitions and fittings
- 45 Interior of ladies toilets in the Shelter, during removal of later partitions and fittings
- 46 view of the twin searchlight buildings from the W
- 47 S searchlight building, view from the N
- 48 N searchlight building, view from the S
- 49 N searchlight building, E interior elevation, blocked loophole and possible stove vent
- 50 S searchlight building, N elevation, flue for stove
- 51 N searchlight building interior
- 52 S searchlight building interior, with wallpaper visible in searchlight area
- 53 Wheel mechanism for searchlight shutters in N searchlight building
- 54 N searchlight building, reduced doorway in S elevation with original metal framing
- 55 Engine House, W elevation, view from NW
- 56 Magazine building, generator room following removal of later toilet cubicles and fittings
- 57 Plate 52: Blocked window in W elevation, originally lighting the Workshop
- 58 Blocked doorway in W elevation, originally providing access to Accumulator room
- 59 Magazine building, following removal of later toilet cubicles and fittings, view from S to N
- 60 Cooling tank store to the N of the engine house building
- 61 Storage area to E of the engine house

# Blyth Battery, Blyth Links, Blyth Northumberland

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*Building recording (December 2008-March 2009)*

*(project AA. 1641)*

## **1. Introduction**

### *i. General*

Northumberland County Council is embarking on a major regeneration programme for the town of Blyth. Part of this programme involves the regeneration and enhancement of the public open space at Blyth Links, the sand dunes located to the south of the town of Blyth. It is upon these dunes that a number of WWI and WWII coastal defence structures are situated, these collectively known as Blyth Battery.

The proposed regeneration program of Blyth Links includes the repair of, and alterations to, the battery buildings. Addyman Archaeology were contracted by Northumberland County Council (formerly Blyth Valley Borough Council) to undertake archaeological monitoring and recording works at Blyth Battery, in response to proposed works at the site. The aim of the archaeological works was to create a record of the structures as existing, prior to any alterations being carried out. The work also involved the monitoring of any significant alterations to the buildings' fabric.

The archaeological response to the proposed works constituted a number of elements. These were developed into a detailed Written Scheme of Investigation in consultation with the County Archaeologists (contact Chris Burgess and Karen Derham) and English Heritage (contact Kate Wilson). In general the archaeological response to the works involved the Level 3 recording of the standing structures (as detailed in English Heritage Recording Guidelines, 2006). However, it was felt that this level of recording may not be necessary at the structures where there was to be little or no physical impact.

The archaeological recording of the structures included carrying out a comprehensive photographic survey of all the structures on the site, using both digital photography and black and white prints: suitable for archival purposes. It also included an up-grading of the survey drawings created by Simpson & Brown Architects; these were checked for accuracy and amended where necessary and were also annotated with analytical details. These drawings were themselves based on a set of existing drawings, these undated, but which appear to be original WWI construction plans (see Appendix B). The initial survey work was undertaken by Kenneth Macfadyen and Amanda Gow in December 2008. Further site inspections were carried out by Kenneth Macfadyen in January and March 2009, in order to assess the ongoing works and investigate a number of features of potential significance which were revealed during the site works.

A targeted assessment of historic paint finishes<sup>i</sup> was undertaken by Colin Mitchell-Rose<sup>i</sup>. Additional historic paint schemes were identified during the stripping-out phase of the works and these were recorded by photographic survey.

The history and significance of the battery has previously been covered in detail in a Conservation Plan prepared by North East Civic Trust in 2004. A Condition Assessment of Blyth Battery has also

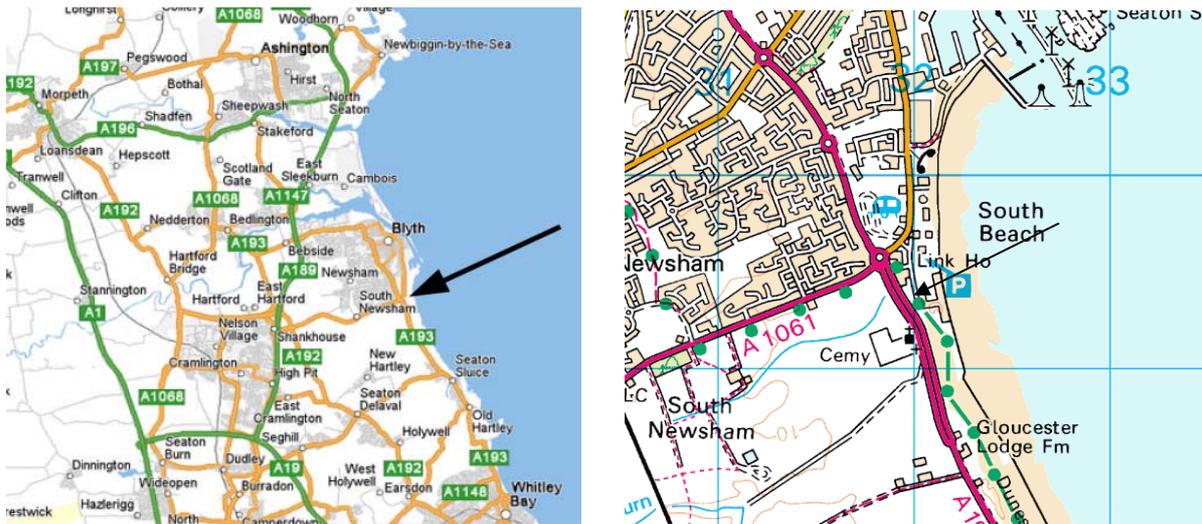
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<sup>i</sup> Colin Mitchell-Rose 2008, commission by Simpson & Brown Architects on behalf of Blyth Valley Borough Council

been undertaken by Simpson & Brown Architects in November 2007; this also describes the history and condition of the battery complex. The purpose of this report is therefore not to repeat work which has already been undertaken, except in summary form to provide a context to the current works and report.

ii. *Setting*

Blyth Battery is located on Blyth Links, sand dunes to the south of the town of Blyth in Northumberland. The battery is composed of two groups of structures; a twin coast defence gun emplacement located at the southern end of the links (centred upon NGR NZ 320 793) and a twin searchlight emplacement at the northern end of the links (centred upon NGR NZ 320 796) - each of these groups has other buildings associated with them.



Figures 1 and 2: site location maps, Multimap and Streetmap.



Figure 3: Aerial photograph showing current extent of Blyth Battery. Google Earth

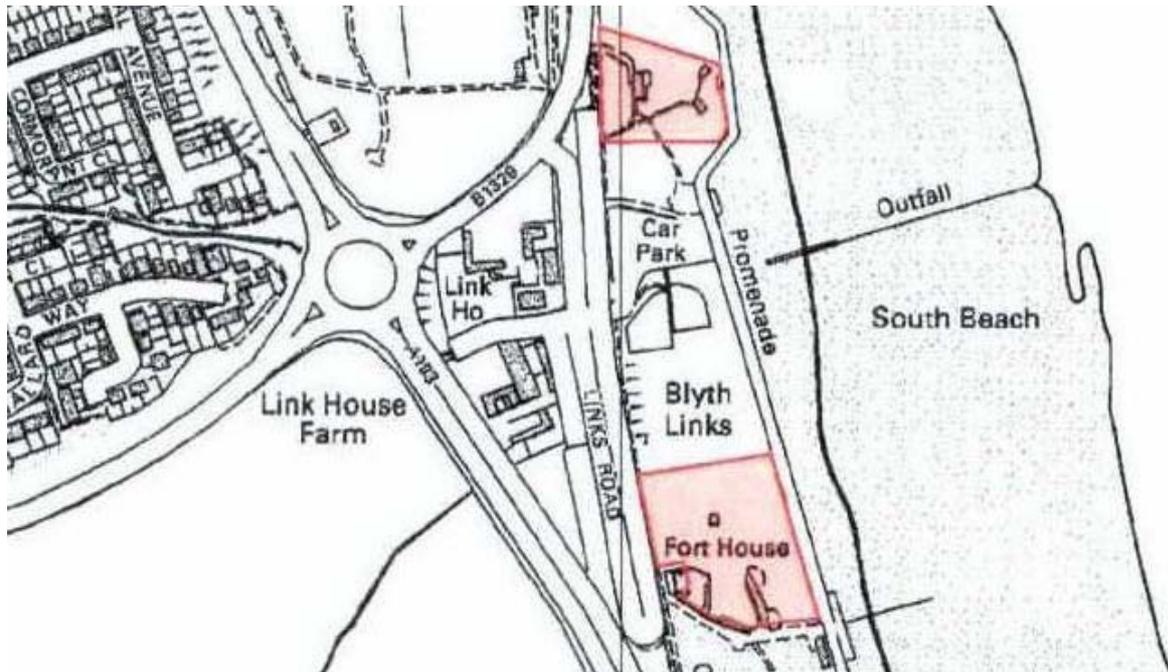


Figure 4: Map showing the extent of the Scheduled Monument (Pink). English Heritage

Blyth Battery was one of several coast defence batteries constructed along the north east and Yorkshire coasts. The buildings were constructed by the Durham Fortress Engineers to provide defence for the submarine base in Blyth Harbour. Most of the buildings were built in 1916, the major exception being the WWII Battery Observation Post (BOP) which was completed in August 1940 (this is located in the southern group of buildings). There were also some alterations to the gun emplacements, both during WWII and following it.

The battery buildings were handed over to the local authority in 1925 and at this time some were given over to public use. In 2006 Blyth Battery was included on the Schedule of Ancient Monuments (site number 32802) and the extent of the scheduled area can be seen in *figure 4*.

All of the main buildings in the battery survive. Most of these buildings are vacant although the magazine building and the WWII BOP have been given over to alternative uses – the magazine building has been used for storage by a kayak club and the WWII BOP has been used as a lifeguard station.

## 2. *Blyth Battery historical assessment (summary)*

The history of the Blyth coastal defences has already been described in detail in the North East Civic Trust Conservation Plan (2004). It is not the aim of this report to re-write this assessment; what is presented here is a summary of the information presented in that report, with additional relevant information in order to provide context.

### *i. Defences at Blyth*

The port on the River Blyth became a prominent trading post in the early 19<sup>th</sup> century and as such required protection. At this time a battery of powder guns was constructed. Throughout the 19<sup>th</sup> century the importance of Blyth as a trading port for coal continued to grow as did its susceptibility to attack. The need for defence was recognised and recommendations for a new battery were issued in the middle of the 19<sup>th</sup> century, but it appears that these were never carried out (see *figure 5*).

The need for defence increased into the early 20<sup>th</sup> century because of the growing strategic importance of the area's trade and industry. The east coast's importance was also increased as Germany, rather than France, began to be seen as the potential enemy. In 1913 the importance of Blyth was underlined when a committee proposed constructing a battery to protect the harbour and, in particular, to prevent a landing by enemy troops. However, the construction of peacetime defence was thought to set an expensive precedent and so the proposals were not pursued.<sup>ii</sup>



*Figure 5: 1898 OS map – the site of the battery is undeveloped*

*ii. The construction of Blyth Battery*

*a. World War I*

Although Blyth provided a Company of Volunteer Gunners for the defences of Tynemouth, the port of Blyth itself entered the First World War undefended by modern coastal artillery. The importance of the coal trade and the later establishment of a submarine base at Blyth only added to the need for defence. Consequently, in July 1916 it was proposed that a new battery should be constructed.

Developments in coastal defences since the early 19<sup>th</sup> century had resulted in a 'standard' design for coastal batteries. This design comprised two 6-inch Mk VII QF BL guns, a rangefinder tower and two searchlights, all connected by telephone.

The site chosen for the construction of the battery at Blyth was virgin ground to the south of the town near Link House Farm. However, probably because it was on sand dunes, a non-standard position for the magazine was adopted – landward side and physically separate from the gun emplacements.<sup>iii</sup> They also experienced some difficulties with shifting sand which prevented sound foundations and they therefore introduced coarse grass to the dunes in an attempt to solve the problem.<sup>iv</sup> The construction of the battery was completed in February 1918.

The two main battery building groups were located in compounds surrounded by a fence. The troops who manned the battery lived in an encampment of huts on adjoining land, but these buildings have since been lost.

Blyth Battery's guns were never fired in anger, the only WWI enemy engagement on the northeast and Yorkshire coast being the Hartlepool attack of 1914.

<sup>ii</sup> North East Civic Trust Conservation Plan 2004 p16-17

<sup>iii</sup> North East Civic Trust Conservation Plan 2004 p18

<sup>iv</sup> Simpson & Brown Condition Assessment 2007 p2

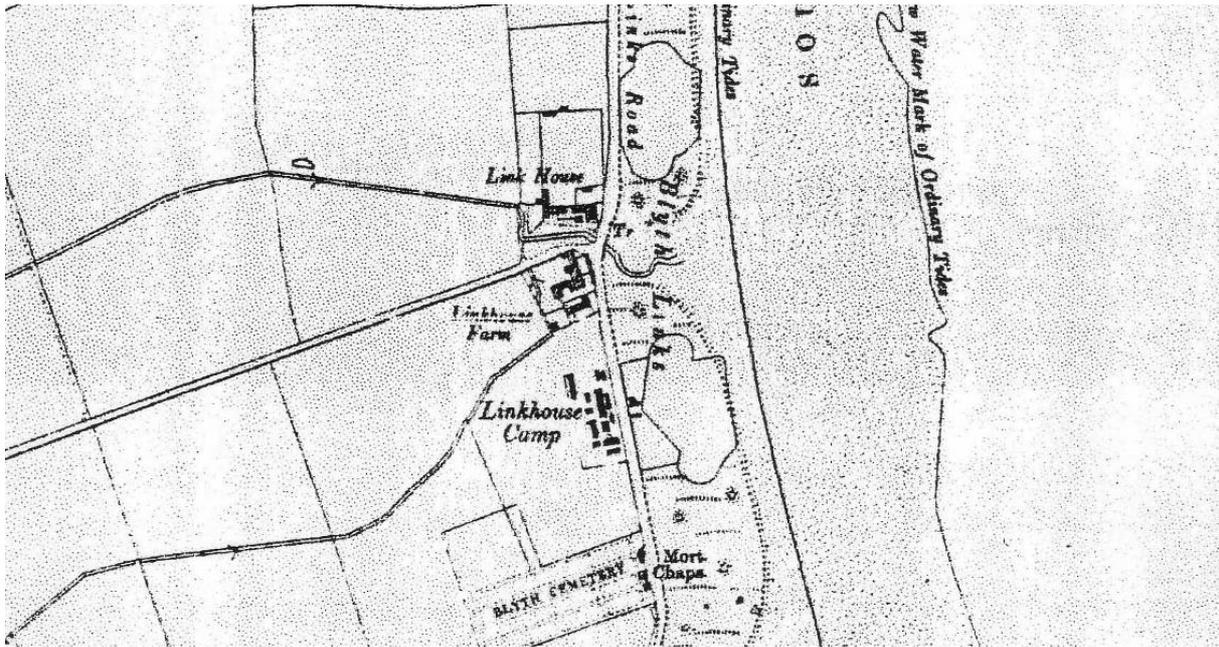


Figure 6: 1924 OS map; the interior of the two fenced compounds are omitted from the map, this was common practice for military sites.

b. *Inter-war use*

After the end of the First World War Blyth Battery was given over to Blyth Corporation and during the inter-war period the battery buildings were adapted for beach amenity use. At this time many of the overtly military fittings (such as the steel door and window shutters) were removed. However, much of the original woodwork and ironmongery was left in place. At this time the Shelter (in the southern building group) and the Engine House (in the northern building group) were altered to be used as public toilets.

c. *World War II*

At the start of the Second World War the possibility of enemy landings in northeast England was recognised at an early stage. A large number of emergency batteries had already been placed along the northeast and Yorkshire coasts to supplement the existing First World War ones. Blyth's emergency battery was emplaced in September 1939 but, as with many others, its life was limited as the original First World War emplacement was dug out and permanent guns re-mounted in it. It was briefly called Seaton Battery at this time.<sup>v</sup>

The development of new range-finding technology in the inter-war period by Professors Barr and Stroud of Glasgow University necessitated the construction of a second Battery Observation Point (BOP) at Blyth Battery. The WWI defences included a Mk V depression rangefinder (DRF) in the turret of the BOP, but by WWII the fortress plotting system had been developed, which required batteries to have their own plotting room and signaller's station. Consequently, the re-commissioning of Blyth Battery required the construction of a new BOP with the required rooms. One was completed in 1940, which included a Barr & Stroud No.10A rangefinder in the roof (the WWII BOP building in the southern building group).<sup>vi</sup>

<sup>v</sup> North East Civic Trust Conservation Plan 2004 p18

<sup>vi</sup> North East Civic Trust Conservation Plan 2004 p18

In 1942 Blyth Battery was selected to become a CD/AA (coastal defence anti-aircraft) battery, which would have seen three 5.25 inch dual purpose guns emplaced immediately to the south of the Battery. However, these plans were never realised and Blyth Battery continued its defensive role with Home Guard personnel. It was spared closure in 1943 due to its port protection role.<sup>vii</sup>

### iii. *The decommissioning of Blyth Battery*

Blyth Battery was put into care and maintenance in October 1944. In April 1949 the guns were removed, the holding bolts sealed and the site was again handed back to Blyth Corporation.

A second upgrade was planned in 1951 but this was never implemented. After the cessation of all British coastal defences in 1956, many other batteries saw substantial demolition and clearance of dilapidated hutment camps. However, even though the hutment camps at Blyth were removed, the Battery buildings were retained and given over to public use. These uses were primarily associated with the recreational activities popular with holiday makers at Links in the 1950s and 1960s.<sup>viii</sup>

Over the years, the WWI and WWII BOPs, Magazine building, Blockhouse and Searchlight Emplacements were used for a variety of storage, service and shelter uses, whilst the Shelter and Engine House continued their new role as public conveniences. The Gun Emplacements were once again adapted for use as amenity shelters. In the summer of 1962 the WWII BOP was taken over by the Blyth Volunteer Lifeguards, a change in use which has lasted up until the current phase of works.

During the 1970s and 1980s the use of the Links area changed as holidaymakers began to venture further a field. A decline in demand for beach services was followed by the gradual abandonment of the buildings. Vandalism and financial constraints increased and the maintenance of the buildings declined.

In 1987, the 'Battle of Blyth Battery' began. The conflict was fought between the Council Recreation & Amenities (Outdoor Recreation) Sub-Committee (R&A(OR)SC) who wanted the Battery demolished and a group of opponents, lead by English Heritage.<sup>ix</sup>

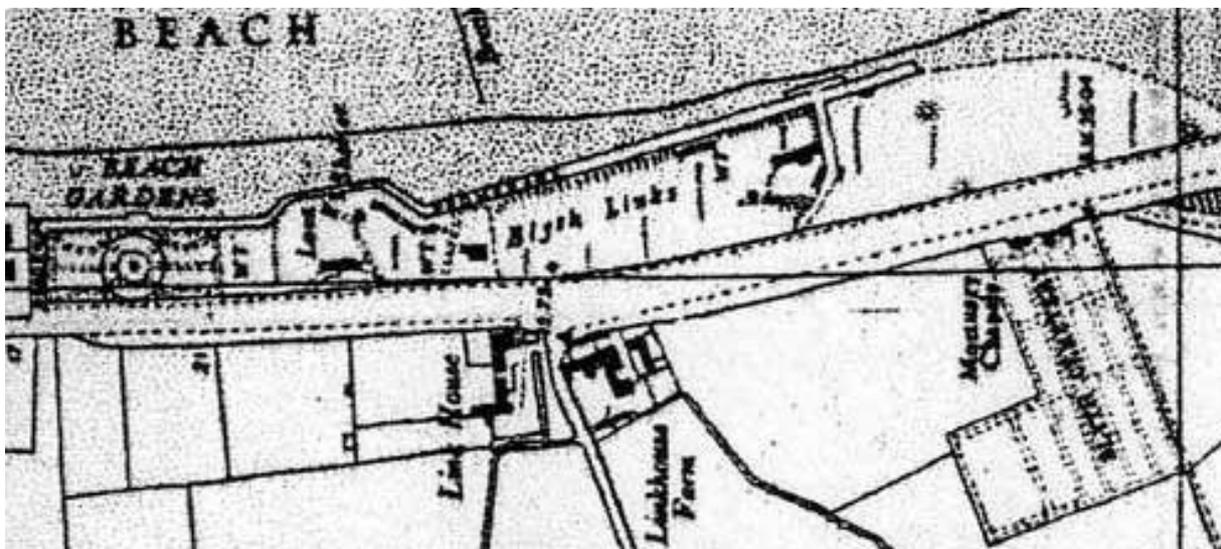


Figure 7: 1950 OS map; most of the battery buildings are depicted, along with other leisure buildings on the Links.

<sup>vii</sup> North East Civic Trust Conservation Plan 2004 p19

<sup>viii</sup> North East Civic Trust Conservation Plan 2004 p19

<sup>ix</sup> North East Civic Trust Conservation Plan 2004 p19

### 3. *Blyth Battery building assessment*

The buildings that comprise Blyth Battery were constructed quickly and although they were designed to be robust structures in the short term, they were probably not considered to be long-term buildings. They are built of reinforced, shuttered, concrete and steel which could be relied upon to provide protection against shelling and explosions. Some of the buildings are partially sunken, or built into the surrounding sand dunes, in order to conceal and protect them, and some were partially concealed by false roofs and structures. The buildings would have been painted in everyday colours, rather than camouflage paint.

The two main battery building groups were located in compounds surrounded by a fence. The troops who manned the battery lived in an encampment of huts on adjoining land, but these buildings have since been lost.

The battery buildings had concealment structures built as a superstructure over them, in order to camouflage them from view and make them appear from a distance as a small beach side settlement or fishing village. The northern gun emplacement appears to have been concealed by a pitched roof with two dormers, with possibly a different design on the southern emplacement. The WWI and WWII Battery Observation Points (BOPs) were also covered by roof structures (see *figure 8*), with the latter structure having an additional gabled extension on the seaward side; the outline of this now-demolished structure is still visible.

#### *i. Southern building group*

The southern group of buildings is composed of a Block House, a WWI BOP, a WWII BOP, a Magazine building, a Royal Artillery Store, a twin Gun Emplacement (with later a Ammunition Handling Lobby and two War Shelters) and a Shelter (see *figure 9* and Appendix B *Drawings 1-3*).

#### *a. WWI BOP*

The First World War BOP is located at the northern end of the southern battery building group. It is a 6-sided structure of two floors and was originally buried into the dunes to first floor level on the seaward side. Projecting from the roof is a circular rotating turret which housed the range finding equipment. The circular rotating turret was originally covered by a low pyramidal roof in an attempt to disguise the building as utilitarian building in a fishing village; a vertical concrete post extending from the NW corner of the roof was apparently intended to imitate a chimney (see *figure 8*).



*Figure 8: WWI BOP with low pitched pyramidal roof covering the rotating range turret  
– undated photograph, from an internal file (labelled 'Forts'),  
in Northumberland County Council offices*

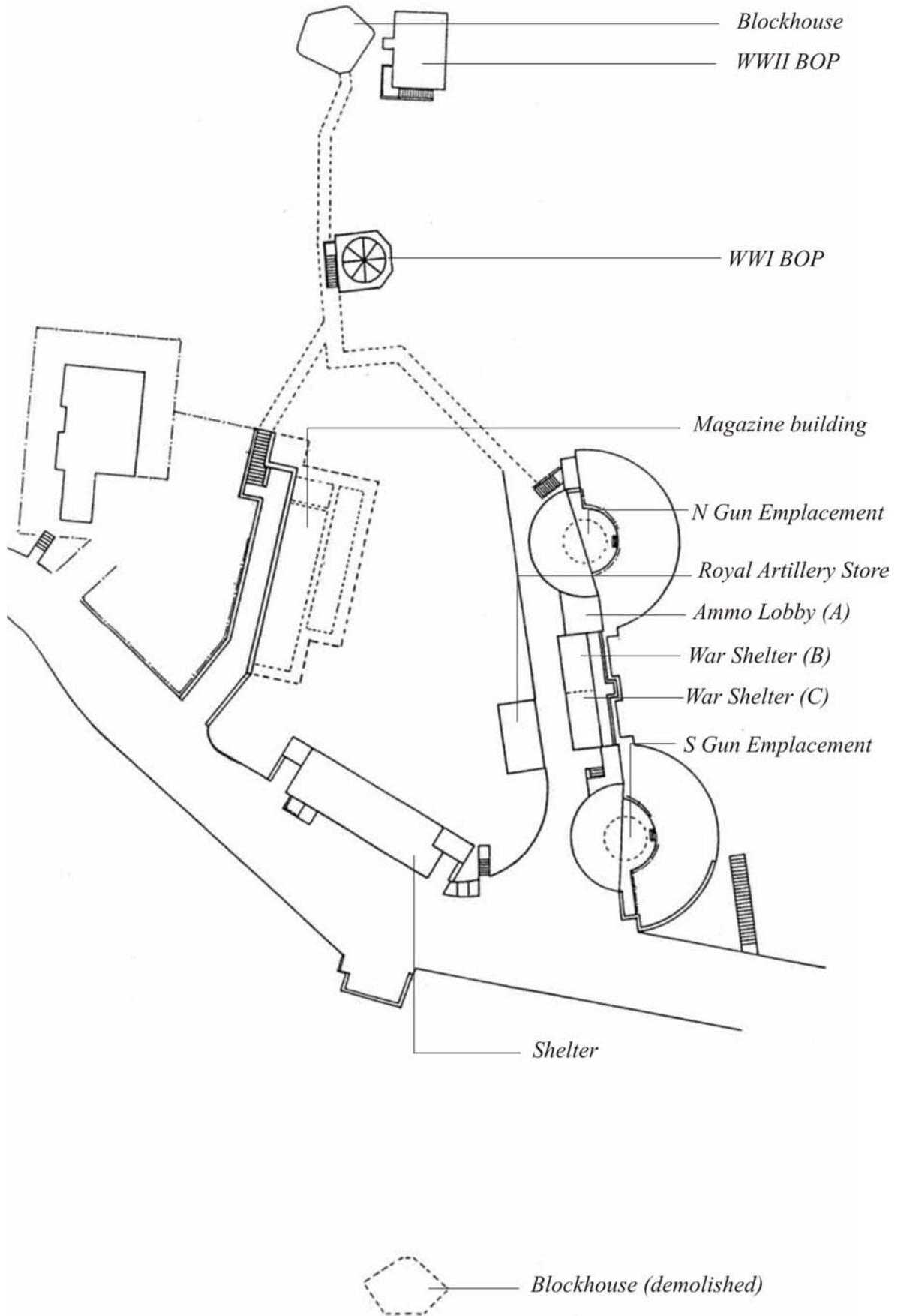


Figure 9: Southern building group block site plan

This building was the operations centre of the battery in WWI and housed the battery commander's post, the range finding equipment, the searchlight directing station and the signallers' equipment. The range finding equipment was housed on the upper floor; this was composed of an instrument mounted in the circular revolving armoured turret. The rangefinder operator worked from a raised concrete platform in the centre of the battery commander's post; this raised platform appears on the original construction plans but has since been removed, probably during the inter-war period when the building was given over to recreational use.

See Appendix A, Drawings 1-7.

### *Exterior*

The exterior of the building is currently whitewashed but it appears that it may have originally been painted a dark pink colour. The rear (W) face of the building has four openings, each detailed with chamfered surrounds – a door and window on ground and first floor levels. The upper floor is accessed from an external metal staircase on the rear (W) side of the building which leads up to a concrete cantilevered balcony (*Drawing 1*).

The seaward (east) facing elevation (*Drawing 2*) is of three faces; the central face has an opening at ground floor level whilst the outer faces have openings at first floor level (*plate 1*). However, this does not appear to have been the original arrangement of openings. The original construction plans (see Appendix B *Drawing 4*) indicate that there were no openings in the seaward faces at ground floor level. These plans also indicate that each of the three seaward faces had openings at first floor level; large full width openings on the outer faces and two smaller openings on the central face. This design is consistent with the assumption that the structure was buried up to first floor level on the seaward side. The two small openings on the central face have been blocked, but four fixing points indicate the position of the framework for the small openings which were originally in this location (*plate 1*). Above the window on the SE elevation is a bracket which may have been for a shutter.

On the north and south elevations the central cast iron down pipes have been removed but the fixings are still visible (*Drawings 1 and 2*).

### *Interior*

On the interior the ground floor has a relatively low ceiling with cross beams running east-west and north-south (*Drawing 3*). The original paint scheme appears to have been a deep ochre colour or dark green. Latterly, the interior paint scheme appears to have been cream, before the present scheme of white paint above the red line and blue below. Fixing points and a skirting-level paint line are visible on the E elevations, suggesting the room was formerly fitted out with skirtings (*plate 3*).

The window in the E wall facing towards the sea is metal-framed, with sixteen panes. This frame presumably relates to the insertion of this opening during the inter-war period, when the use of the building was changed. The window in the W wall originally had metal shutters, as seen from the four hinge-pins positioned either side of the opening (*plate 4*). The framing for this window has been lost but the remains of a 1930s-style sash window is lying on the floor in front of this, having fallen out of the opening following the decay of its frame. The current wooden door is clearly a replacement and the metal framing for the original door is still present. The original door appears to have been a double leaf door as there are hinges on both sides of the framing (*plate 2*).

The metal door at first floor level (W elevation) is a later insertion. The framing for the original door is still present and hinges on either side of the doorway indicate that the original door within this opening was two-leafed. The window to the S of the doorway has a 1930s-style sash window, presumably inserted into the opening when the building was given over to public use in the inter-war period. The opening originally had metal blast shutters, as seen from the four hinge-pins positioned either side of the window.

The window openings on the upper floor (in the NE and SE walls) appear to have been altered from their original size (*Drawing 4*). It appears that originally the openings were long and narrow and positioned near the wall-head (above the existing 1930s style windows). These were likely protected by metal plates. The pulley mechanism which is centrally positioned at the top of each of the later windows may relate to the original protective metal coverings. It appears that, when the building was given over to public use in the inter-war period, the window openings on the first floor were extended to their current size. These openings retain 1930s style framing.

The rotating circular turret from which the range finding instrument operated is still in place, a rare survival (*Drawings 5-7, plate 5*). The drum is constructed from eight curving metal panels that are lapped and riveted. Positioned in front of each pair is a wheel that locks onto a ring beam (*plate 7*). The roof of the drum is supported by crossed iron beams that run from side walls of the drum. There are two circular apertures in the roof which contain brass operating wheels (*plate 6*). The range finder was originally operated from a raised concrete platform located in the centre of the floor; this has been removed but can be seen on the original construction plans (see Appendix B *Drawing 4*).

Near the NW corner are a set of original coat-hooks. There was originally a stove against the S wall, near the W corner; this has been removed.



*Plate 1: WWI BOP, view from the E*

*Plate 2: WWI BOP interior ground floor W elevation, doorway with original framing*



*Plate 3: WWI BOP ground floor, earlier paint schemes and skirting doors visible.*

*Plate 4: WWI BOP interior ground floor W elevation, window with pins for original shutters*



*Plate 5: Rotating turret in WWI BOP*

*Plate 6: Detail of operating wheel in roof of WWI BOP rotating turret*



*Plate 7: Panorama of WWI BOP rotating drum interior.*

#### *b. WWII BOP*

The WWI BOP was superseded by a new central command point when the battery was re-commissioned for use in WWII. The second BOP was constructed to the N of the original one and was completed in August 1940. This building housed the Battery Commander's post, the range finding equipment (both within the building and mounted on the roof), the regimental plotting room and the battery's signallers.

This is a two story building of reinforced concrete with an external steel staircase on the S side. This leads to a cantilevered concrete landing which wraps around the S and W sides of the building, providing access to a first floor doorway on the W elevation. This building displays the remnants of the concealment scheme used to disguise the battery from the sea - a roofline scar on the S elevation indicates that a smaller building was originally positioned in front of it to alter its appearance.

The building is currently whitewashed, but there is evidence for an early paint scheme in pink, similar to that on the other structures.

The WWII BOP has been used by the Blyth Volunteer Lifeguards since 1962.

See Appendix A, Drawings 8-10.

#### *Exterior*

The seaward facing E elevation (Drawing 8) has a narrow, full width observation opening at the wall head; this sits immediately below the overhanging flat roof which is itself supported by a long iron beam. Presumably this was originally open, but it now contains timber framed windows which are boarded over on the exterior (see *plate 8*). At ground floor level are two windows with metal surrounds covered with replacement metal shutters.

Approximately half way up the E elevation is a gabled roofline; the associated building has since been removed. This roofline represents the remains of one of the temporary structures built to disguise the battery buildings, making them appear as a small fishing village when viewed from the sea (see *plate 8*). There are two metal hooks at window level, in the centre and to the N side of the elevation; the exact function of these is unclear but they may relate to the concealment structure – perhaps used as fixings to connect it to the principal structure.

It appears that the ground level was originally higher on this elevation; the lower section of the elevation is of a rougher appearance and was likely originally covered by sand. This can also be seen on the N and W elevations.

The wall head opening continues round onto the S elevation (*Drawing 8*), where it extends to approximately one-third of the elevation width; this opening is boarded up. To the W of the opening is a small round opening, possibly a vent for an internal stove which has since been removed. There is a door and window on the ground floor, both of which have iron or steel surrounds, although these do not appear to be the originals. The window ground floor window is also covered by a secondary metal shutter. A replacement metal staircase leads up to a cantilevered balcony with metal railings at first floor level. A secondary gate has been fitted here for security reasons (see *plate 9*).

The cantilevered balcony continues round to the W elevation (*Drawing 9*), where it provides access to a doorway at first floor level. A metal ladder provides access to the roof from this point (see *plate 9*). There are three windows at ground floor level, each with replacement metal shutters. There is a metal hook to either side of the central window and one to the north of the southern window; these were presumably for the original double blast shutters. There are narrow vents above each window.

Projecting out from the centre of the W elevation wall head is a concrete projection; this appears to have been for an access stair to the roof, which has since been removed.

The N elevation (*Drawing 9*) has an off-centre doorway at ground floor level, with two steps leading up to it. As on the S elevation, the wall head opening from the E elevation continues round onto this elevation. This is boarded up.



*Plate 8: WWII E (seaward) elevation, with boarded up viewing window and gabled roofline of concealment scheme*

*Plate 9: WWII BOP S and W elevations, view from SW.*

### Interior

The ground floor interior is divided into two rooms by a brick dividing wall. These are accessed from the doors in the N (room 1) and S (room 2) elevations (*Drawing 10*). These rooms are currently independent but a lintel is visible in the brick partition wall, suggesting that there was originally a connecting doorway. The larger N room probably served as the Regimental Plotting Room whilst the smaller S room was probably for the Signallers.

The larger N room (room 1) has two openings in the W wall which have been boarded up. The door in the N elevation appears to be a reused four-panelled door with an additional metal plate attached to the exterior side (*plate 10*). An internal pier is situated in the centre of the N wall. There appears to have formerly been a partition in this room, dividing off the E side of the room. It is unclear which phase of the buildings use this dates to. The blocked connecting doorway is visible in the S wall (*plate 11*).

As with the N room, the external door in the S room also appears to be a reused four panelled Victorian door with a reinforcing metal plate on the exterior side. The blocked connecting doorway is visible in the N wall. The section of brick walling to the E of this has been rebuilt, as seen by the difference in brick type from the remainder of the partition wall.



*Plate 10: WWII BOP ground floor room 1, internal pier and reused door in N wall*

*Plate 11: WWII BOP ground floor room 1, blocked doorway in S wall*

The upper floor of the BOP housed the range finding equipment. This was more modern than that which was housed in the WWI BOP and comprised a Depression Range Finder Mk V plus a roof-mounted Barr & Stroud No 10A (a further range-finder).

The upper floor is divided into two compartments by a central ceiling beam running N-S. The E compartment was the viewing room whose viewing window runs the full length of the E wall. This would have originally been open but has since been in-filled with timber framed windows, these themselves partially boarded up at present. These were inserted after the end of the war, when the building was given over to use as a lifeguard station.

A brick viewing platform with concrete surface is located against the E wall; this extends from the N wall to approximately half way along the E elevation (*Drawing 10*). Located immediately S of this is the concrete pillar for the telescope (see *plate 12*). This has been painted over but the paint has been chipped away in places and beneath these sections, stencilled lettering are visible. These numbers appear to be distance indicators (see *plates 13-15*).

The ceiling in the E section of the room is currently supported by acrow props.

Evidence for an earlier paint scheme is visible in this room – originally the walls appear to have been sky blue, and were latterly painted green and then ochre, whilst the ceiling appears to have originally been a pink/cream colour.



Plate 12: WWII BOP upper floor, E section as viewed from NW, with brick viewing platform and concrete plinth for telescope.

Plate 13: WWII BOP upper floor, concrete plinth for telescope, S faces with remains of stencilling.



Plate 14: WWII BOP telescope plinth, stencilling on S face

Plate 15: WWII BOP telescope plinth, stencilling on W face

### c. Blockhouse

The Blockhouse (*plate 16*) is located to the immediate W of the WWII BOP, at the northern end of the southern battery building group. A second Blockhouse was intended on the opposite site of the compound to the S but this was never completed and was later demolished; no remains of this survive.

The function of the Blockhouses was to defend the Battery from landward attack from the W.

The surviving blockhouse is a flat roofed irregular six-sided concrete structure with curved corners. The building is currently whitewashed but evidence of the earlier paint scheme was visible; the building may have originally been a dark pink, similar to the WWI BOP.

During the Second World War, the Blockhouse was used as the artificer's workshop and store.

See Appendix A, Drawing 11.

#### *Exterior*

There is a doorway with chamfered surround in the narrow S elevation but the original door has been removed. Originally, there was a long narrow horizontal opening that served as a gun loop in each of the five long elevations (Appendix B *Drawing 5*). These gun loops have all been modified, likely during the inter-war period when the buildings were given over to public use. The openings on the NW and NE elevations were enlarged to form windows; these are now boarded up (*plate 19*). The remaining three gun loops were also blocked, likely when the other openings were enlarged to form windows (*plate 16*).

There were also originally additional narrow splayed gun loops in the curved E and W angles; these are now blocked. These gun loops allowed machine guns a wide shooting arc for providing protective cover from attack from the ditches to either side. There were two additional loop holes in the SW and SE elevations, these small loopholes possibly held lamps to illuminate the area at night; these have since been blocked up.

#### *Interior*

The reinforced concrete roof is supported by beams radiating out from a central reinforced concrete column. The original door has been removed but the hinge pins are still present.

Above each of the five original long gun loops are the remains of the hinges and hooks for the protective metal shutters. There are also original metal sills beneath each of the three openings which have been blocked (*plates 17 and 20*). The outlines of benches are visible on the floor and lower part of the wall below of each of the gun loops (*plate 18*); presumably these were for the riflers to stand on.



*Plate 16: Blockhouse exterior, view from S; the outline of blocked gun loops are visible to either side of the doorway*



*Plate 17: Interior of blockhouse, SW wall with blocked gun loop and additional blocked loop hole; this possibly accommodated a lamp*



*Plate 18: Bench outline visible on the floor and lower part of the wall beneath blocked gun loops*



*Plate 19: Blockhouse interior; gun loop widened to form window*  
*Plate 20: Blockhouse interior; blocked gun loop with hinges and hooks above*

*d. Gun Emplacements*

The gun emplacements were originally constructed for the WWI phase of use. The principal original elements were two gun emplacements for 6-inch guns, designated A1 (S emplacement) and A2 (N emplacement). These were situated 19m apart and were linked by a concrete retaining wall with brick parapet (*Drawing 12* and Appendix B *Drawing 6*). To the W of this wall was a low concrete building which served as a War Shelter. This building was divided into two spaces internally, with each side serving the corresponding gun emplacement. A narrow passageway was thus formed running between the two gun emplacements, screened by the retaining wall to the E and the War Shelter to the W. Steps originally led up to the gun emplacements at either end of the passageway.

The gun emplacements were in-filled internally after the end of WWI.

The recommissioning of the Battery buildings for use in WWII involved some alterations to the gun emplacements. Two six-inch guns were delivered to the battery in September 1939. However, as there were no suitable emplacements ready these were housed on Withers platforms (re-usable gun platforms) in the dunes to the S of the WWI battery buildings. The WWI gun emplacements were not excavated until the February-March of the following year, at which time the two six-inch guns were moved from the temporary platforms to these emplacements. The overhead protection covers were also added to the gun emplacements at this time, to protect the emplacements from air attack.<sup>x</sup> An Ammunition Handling Lobby (Area A, see Appendix A *Drawing 22*) was also added at this time, at the N end of the War Shelter building; this addition necessitated some alterations to the War Shelter and gun emplacements.

Following the end of WWII the emplacements were adapted into amenity shelters for users of the Links. The sunken central area of each emplacement was backfilled to the current floor level and seating (now gone), and railings (now damaged and partially missing) were added.

See Appendix A, Drawings 12 and 13.

*N and S gun emplacements*

Each gun emplacement originally consisted of a sunken circular concrete base designed to support one gun. The gun bases measured 9m diameter, with steel tracks to support a concrete cylinder on to which the gun boss was bolted. Surrounding each emplacement is a low wall to the front (E) and higher shielding wall to the rear (W). Metal rings are fitted into the low wall to the E, to which the guns were chained. A concrete apron surrounds each gun emplacement (*plates 22 and 23*).

In the W side of the retaining wall, in the passageway running between the two emplacements, are metal lockers which were used to house ammunition for immediate use (*plates 24 and 25*). Those at the N end of the corridor are now housed in the WWII addition Ammunition Handling Lobby (*plate 27*).

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<sup>x</sup> North East Civic Trust Conservation Plan 2004 p20-23



*Plate 21: View of rear of gun emplacements, from SW*



*Plate 22: View of S gun emplacement, from NE*



*Plate 23: View of N gun emplacement, from SE*



*Plate 24: View along passageway between gun emplacements, looking N to WWII Ammo Lobby*  
*Plate 25: Lockers in retaining wall at S end of passageway*

### War Shelter

To the W of the retaining wall is a single storey concrete building, divided into two rooms internally by a brick partition wall. These rooms were the War Shelters, which served to accommodate the gun crews when on a state of high alert. A small flight of steps led down from each of the gun emplacements to the War Shelter, which was accessed through doorways in the N and S elevations (i.e. personnel from the N gun emplacement used the N room of the War Shelter, entering through the N doorway). Each room had beds and a stove (Appendix B *Drawing 6*).

The N War Shelter room (Area B on *Drawing 12*) originally had a doorway in the N elevation, accessed by a flight of steps leading down from the N gun emplacement. There were two windows in the W elevation and a stove in the SW corner of the room; the windows are now blocked (*Drawing 13*).

The construction of the adjoining Ammunition Handling Lobby (Area A on *Drawing 12*) to the N of Area B during the WWII phase of use necessitated the infilling of the access stairs, in order to provide a floor level for the lobby. At this time the doorway in the N wall of Area B was blocked (the outline is still visible) and a new doorway was broken through in the W elevation, between the two existing windows (*plate 26*). A coat rack is still present on the W wall beside the door, presumably relating to the WWII phase of use.

The S War Shelter room (Area C on *Drawing 12*) is still accessed from the original steps leading down from the S gun emplacement to a doorway in the S elevation (*plate 27*). There were two windows in the W elevation; these are now blocked. There was originally a stove in the NW corner of the room; the flue for this is still present (*Drawing 13*). A line of fixings were revealed along the E wall towards the S end of the wall; it is unclear what the original function of these was. The outline of skirting is visible along the two long elevations, along with some of the original paint scheme, thus giving an indication of the former appearance of the room.

### Ammunition Handling Lobby

The Ammo Lobby was constructed to the N of the War Shelter during the WWII phase of use. This was created by infilling the access stairs to the N War Shelter and constructing a wall across the N end of the passageway running between the two gun emplacements (*plate 28*). The lockers at the N end of the retaining wall were thus now housed in the Ammo Lobby (*plate 29*).



*Plate 26: War Shelter, N room looking N to blocked doorway in N elevation*

*Plate 27: War Shelter, S room looking S to doorway and external access steps*



*Plate 28: Ammunition Handling Lobby interior, looking S;  
roofline of lower War Shelter building is visible to the right of the door*

*Plate 29: Lockers in E wall of Ammo Lobby, originally in passageway between gun emplacements*

*e. Royal Artillery Store*

The Royal Artillery (RA) Store served as a store (for gun and instrument parts) and workshop for the artificer of the gun emplacement. During WWII this building provided an additional war shelter for gun crews and the redundant WWI BOP was used as the RA store.

This small rectangular single storey building is built into the slope of the dunes to the immediate W of the gun emplacements. There are collapsing rubble retaining walls to either side of the building. The building is constructed from reinforced concrete.

See Appendix A, Drawing 14.

*Exterior*

Only the E elevation is wholly visible as the structure is built into the slope of the dunes (*plate 30*). The door is located towards the N end of the E elevation and the outlines of two windows (now blocked) are also visible in this in this elevation.

The roof appears to have been formerly covered with felt, which has since rotted away.

*Interior*

There is a flue positioned in the centre of the E wall – this served a stove which was originally positioned here (*plate 31*). Benches and selves were originally positioned along the W wall but these have also been removed (*Appendix B Drawing 6*). On the N and W elevations are the remnants of iron brackets for shelving; the brackets have been sawn off and only the stumps remain.



*Plate 30: View of the Royal Artillery Store, from SE*  
*Plate 31: Interior of the Royal Artillery Store, looking S*

*f. Magazine Building*

The single storey magazine building is built into the sand dunes on its E, N and S sides and thus only the W elevation is fully visible (*Drawing 19, plate 32*). However, the now exposed western elevation was originally concealed from view by an artificial hill. This building housed the Shell Store and Magazine, with a separate Lamp Room to the NW. A flight of exterior steps leads up the W side of the Lamp Store to the top of the Magazine building (*Drawing 15*).

The magazine building is constructed from concrete, with a ‘blast chamber’ surrounding each of the buried elevations and the roof (*plates 33 and 34*). This is marked as a ‘high air passage’ on the original construction plans (see Appendix B *Drawing 7*). This design helped to ensure a well ventilated stable environment for the storage of the shells, but it was also designed to provide insulation against impact. The upper roof slab was designed to dissipate the force of impact, whilst the lower roof slab was reinforced with steel struts on the interior, to withstand impact.<sup>xi</sup> Also marked on the original plans is an additional ‘air space’ which runs around the N, E and S walls of the building, just behind the interior elevations (see Appendix B *Drawing 7*). This presumably provided extra ventilation and further protection. The construction of this was revealed during the on-site works, showing it to be formed from a cavity in the walls in-filled with timber (*plates 35 and 36*).

See Appendix A, Drawings 15-19.



*Plate 32: View of Magazine building, from SW*

<sup>xi</sup> North East Civic Trust Conservation Plan 2004 p9



*Plate 33: Opening up of doorway to blast chamber in Magazine building  
Plate 34: Inside blast chamber at Magazine building*



*Plate 35: 'Air space' in Magazine building revealed.  
Plate 36: detail of 'air space' construction*

### *Exterior*

The roof was designed to be covered by sand and grass and this is still largely the case. There is a 1m high steel safety fence on top of the exposed western elevation, this is a possibly a later addition (*Drawing 19*).

The W elevation has two doorways and two windows at ground floor level. There was an additional low opening at the S end of the elevation, allowing access to the blast chamber surrounding the building. This was latterly blocked with brick but was reopened during this phase of works (*plate 33*). Nearer the wallhead are three vents associated with the blast chamber above the roof. There are also two flues on this face, allowing any fumes on the interior to dissipate through the vents in the ceiling and through the blast cavity (*plate 32*).

### *Interior*

Originally, the interior space was divided into three distinct areas – the Shell Store in the W section, the Magazine in the E section and lobby to the N of the Shell Store (Appendix B *Drawing 7*; for recording and description purposes these have further sub-divided into five areas – *Drawing 15*). The cartridges were stored in the Magazine and these were passed through the Issue Door at the SW end of the Magazine into the Shell Store as and when required. The shells were stored in a long shell bench against the E wall in the Shell Store in a smaller one against the S wall (*Drawings 15 and 16*) – the upper surface of this has been removed but the brick outer plinths remain in situ. The ceiling is formed large corrugated sheets overlapping and bolted together. Vents in the ceiling lead to the blast chamber above.

The Lobby at the NW corner of the building allowed access to the rear Magazine area from the Shell Store (*Drawings 15 and 16*). This contained a barrier with a ‘dirty’ side and a ‘clean’ side, the former to store outdoor clothes and boots – potentially carrying grit which could cause sparks – and the latter storing special clothes into which personnel would change before entering the Magazine. The door to the Shifting Lobby and the issue hatch were made of timber and covered in copper sheet – no ferrous metals were allowed in the Magazine area.<sup>xii</sup> Glass covered lamp holes in the dividing wall allowed lamps to be placed on the Shell Store side, which could illuminate the Magazine area. Only two survive but five are depicted on the original plans (*Drawings 16 and 17*, Appendix B *Drawing 7*).

The interior has been subject to much alteration since the building was given over to public use. A partition wall originally ran the full length of the building, dividing the Magazine from the Shell Store, with the Issue Door at the S end. A shell bench ran along the W side of this wall, in the Shell Store. This terminated in line with the S doorway. The S end of the partition wall has since been removed, along with the S section of the shell bench and a short brick wall to the S of the shell bench. However, the outline scars of the walls are visible on the ceiling, floor and end walls (*Drawings 15 and 16*, *plates 37 and 38*).

A number of secondary partitions had been inserted, dividing up the interior space. These have been removed as part of the current phase of works. A partition had been inserted at the truncated S end of the Shell Bench, extending back to the E wall and this dividing the Magazine area. Another had been inserted at the S end of the Shell Store (*Drawing 15*).

The doors possibly date to the 1940s. The outer faces are covered with sheets of metal and there are exterior iron gates in a frame but these are probably not original.

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<sup>xii</sup> North East Civic Trust Conservation Plan 2004 p10



Plate 37: Magazine building interior, showing truncated central partition wall and shell bench and wall scar on ceiling.

Plate 38: Magazine building interior, scar of removed central partition wall on floor.

### Lamp room

The Lamp Room is built into the sand dunes to the NW of the Magazine building (*Drawing 15*). This was where the lamps, fuses and tubes were stored.

This room has a doorway and window (now blocked) on the ground floor (S elevation) and a vent for the blast chamber nearer the wall head (*plate 39*). There were shelves and benches for storage against the interior elevations – the shelf brackets which remain may be original (*plate 40*).



Plate 39: Lamp room, S elevation

Plate 40: Interior of Lamp room, with shelving brackets

g. *Shelter*

The Shelter and Latrines (now demolished) were intended for the use of the officers and men when at a high state of readiness (excluding the gun crews who used the War Shelters associated with the Gun Emplacements).

The Shelter is a rectangular single-storey concrete building surrounded by dunes on all but the frontage (S) elevation (*plate 41*). The dunes originally extended up to the W elevation but these were partially dug away after the conversion of the building to public toilets during the interwar period. The digging away of the dunes allowed an access area to be created at the W end, with a brick retaining wall; this area allowed access to a later insertion doorway in the W elevation.

As seen on the original construction plans (see Appendix B *Drawing 8*) the Shelter building was divided into three principal areas - the Men's Shelter at the W end, the Officers Shelter in the central section and an area for the sergeant major towards the E end. The building also housed the officer's latrine, whilst that for the men was across the path (Appendix B *Drawing 9*); this has now been demolished. All that survives of the general Latrine building is part of the rear (S) and side walls which are surrounded by the dunes. These show possible evidence of drainage and stall subdivisions.

An undated photograph (*figure 10*) shows the Shelter building prior to its conversion to public toilets during the interwar period. This shows the building with a 'Café' sign, which was possibly part of the concealment scheme at the Battery; an attempt to disguise the buildings to look like a small fishing village.

See Appendix A, Drawing 20.



*Figure 10: undated photograph of the Shelter prior to conversion to public toilets. The partially visible café sign is possibly part of the concealment scheme<sup>xiii</sup>.*

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<sup>xiii</sup> This picture was located in the office in the Caretakers bungalow at Blyth Battery



Plate 41: Shelter frontage (S) elevation, view from SE

### *Exterior*

The current arrangement of openings in the principal (S) elevation is not the original arrangement; the new arrangement was likely established when the building was converted to public toilets during the inter-war period. The original plans show this elevation to have doors at the W and E ends of the elevation with three windows evenly spaced in between (Appendix B *Drawing 8*); the current arrangement is one door at the W end with five windows spaced along the elevation (*Drawing 20*). The original E doorway was partially blocked to form a window and an additional window was added in the centre of the elevation, this was originally wider than at present, having been latterly partially filled to make it the same width as the other windows. The W doorway has a chamfered surround and is accessed by a secondary concrete access ramp with railing and covered with a secondary metal gate. The windows have all been replaced and some of the glazing is missing. All of the windows are covered with mesh guards, some of which have rusted.

There are side areas to the E and W of the main block, each with an outer retaining wall. That to the W end was a later creation, constructed to serve a later insertion doorway in the W wall. This access area is now redundant as the secondary opening is now blocked. That to the E end originally provided access to the sergeant major's quarters, now the gents' toilets.

### *Interior (Drawing 20)*

At present the interior space is divided into a ladies and gents toilet, with a small storage area to the S. However, the original arrangement was slightly different. The original space was divided into the Men's Shelter at the W end, the Officers Shelter in the central section and an area for the sergeant major towards the E end, each divided by a structural wall (*Drawing 20* and Appendix B *Drawing 8*).

The Men's Shelter (now the ladies toilets) was entered through the current doorway at the W end of the S wall. There were also two windows in this wall. Shelves were positioned around the S, W and N walls and there was a stove against the centre of the N wall – the flue for this is still in place (*plate 44*). The Officer's Shelter (now part of the gents toilet) was entered through the doorway at the E end of the S elevation (this has been partially infilled to form a window). There was a window to the W of this. There were shelves and clothes pegs arranged around the walls and a stove against the N wall. The sergeant major's area was entered through a doorway in the E elevation. There was a window to the N of this doorway. This room had a stove in the SW corner and a shelf in the NW. The latrine was located in a small room to the N of this, accessed through a doorway in the E elevation.

The alteration of use of the Shelter building during the interwar period resulted in a number of modifications to the layout of the interior space. A new N-S wall was inserted in the approximate centre of the building, in order to form ladies (to the W) and gents' toilets (to the E) (*Drawing 20*).

In the newly formed gents toilets, the wall which originally divided the Men's Shelter and Officers Shelter was broken through in the centre, creating a wide doorway. In addition, the wall which originally divided the sergeant major's area from the officers' shelter was removed. The doorway into the officer's shelter was also altered to form a window and the window into the former sergeant majors room was blocked up. A number of brick and concrete block partitions were installed, in order to create cubicles. Sinks were installed against the S wall at the W end and a new window opening was inserted above these. The joinery in the gents' toilets is consistent with a 1930s-1950s appearance. Concrete beams are also visible along the ceiling.

In the area to the E, the former Officers latrine, a brick wall was constructed across the formerly open area, creating an enclosed space. There is a doorway in the wall with a window beside, now blocked up. The doorway to the latrine is still in its original position and this room is still in use as a toilet.

In the W half of the building, the creation of a ladies toilet resulted in several changes to the layout of the interior. Three windows and a doorway were inserted in the W elevation (the doorway was at the N end of the elevation). It appears that the original doorway in the S elevation was blocked up at this point as two cubicles were created on the interior in the SW corner of the space. Three small cubicles (Areas 9-11 *Drawing 20*) and a larger disabled cubicle (Area 12 *Drawing 20*) were created against the N wall by the installation of brick partitions.

Further modifications were later carried out – the secondary doorway in the W was partially infilled to form a window and an additional two cubicles were created by the insertion of a partition to the W of those previously inserted against the N wall (Areas 7 and 8 *Drawing 20*). At this point the original door in the S wall appears to have been reopened and the two cubicles in the SW corner of the room were removed. However, the N wall of the cubicles was left in place and an angled section was added to the end. It was possibly at this time that the later insertion windows in the W and S elevations were reduced in size.

All the later insertion partitions and toilet fittings were removed as part of the current scheme of works (*plates 42-45*). The removal of these partitions allowed original paint schemes to be examined beneath; it appears that the walls may have originally been painted brown below a black dado and white above. The original flue for the stove in the Men's Shelter was also fully exposed (*plate 44*).



*Plate 42: Interior of gents' toilets in the Shelter, during removal of later partitions and fittings, view looking E*

*Plate 43: Interior of gents' toilets in the Shelter, during removal of later partitions and fittings, view looking W*



Plate 44: Interior of ladies toilets in the Shelter, after removal of later partitions and fittings, view looking E

Plate 45: Interior of ladies toilets in the Shelter, after removal of later partitions and fittings, view looking W

iii. Northern building group

There are three buildings at the northern end of the Links – an engine house and two searchlight emplacements (figure 11, Appendix B Drawing 10).

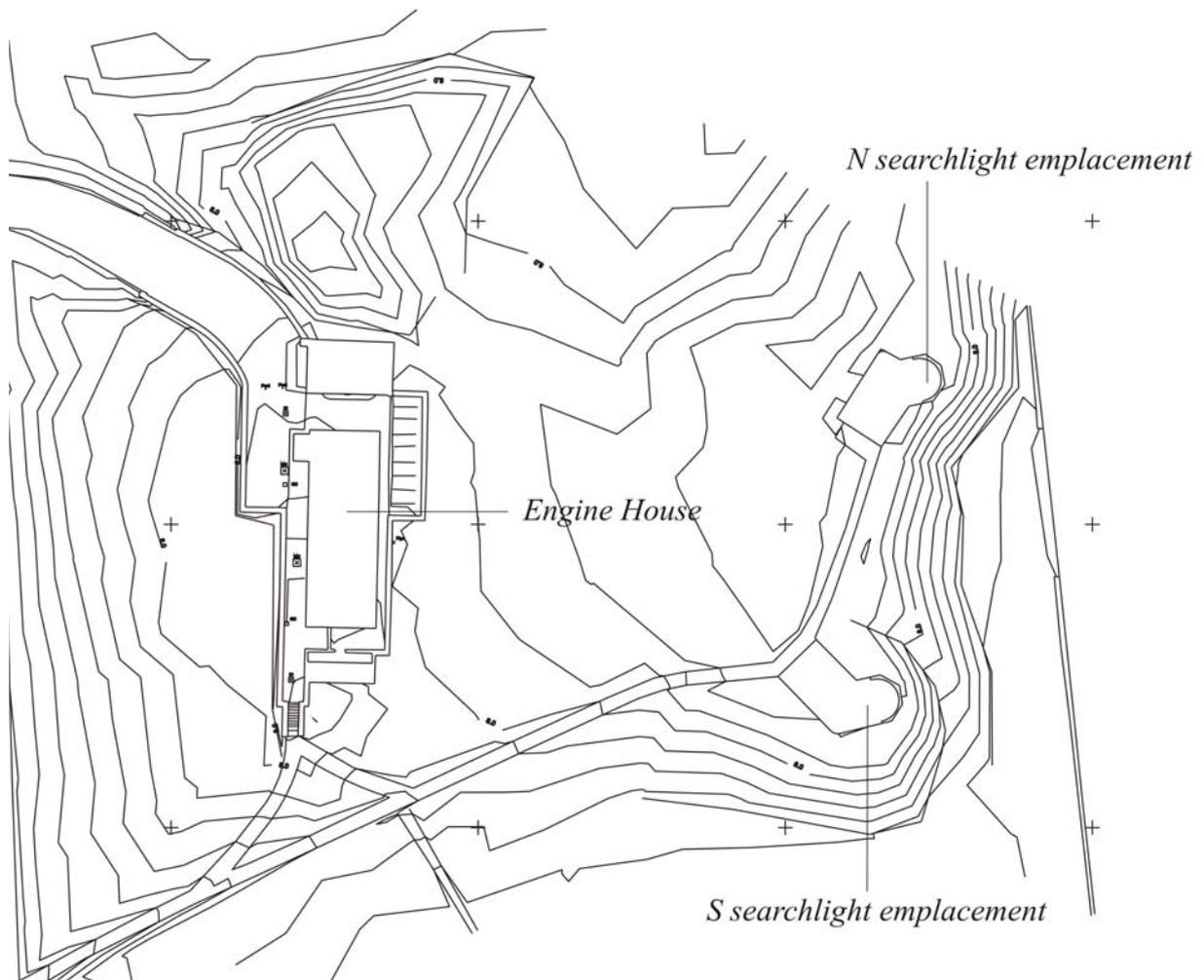


Figure 11: Northern building group block site plan

a. *Search light emplacements*

The searchlight emplacement comprises two single storey buildings located approximately 20m apart and set at slightly different orientations (*plate 46*). Each building was composed of two sections; the seaward facing part contained a 90cm carbon arch projector, or searchlight, which shone horizontally across the sea (Appendix B *Drawings 11 and 12*). It was protected by sliding steel shutters which were drawn back to expose the light. A wooden partition divided the searchlight station from the accommodation which was used when the troops were in a “high state of readiness”. The searchlight buildings were intended to resist attack from the landward side in the same way that the blockhouse was and these buildings contained loopholes for rifles and machineguns.<sup>xiv</sup>

During WWII only one of the buildings was in use as a searchlight emplacement, as a new searchlight emplacement had been installed to south of the Battery.

At one time the interior of the S searchlight building was fitted out with panelling and was used as a chalet.

See Appendix A, Drawing 21.



*Plate 46: view of the twin searchlight buildings from the W*

*Exterior*

Each searchlight building has a similar plan, although the plan is mirrored. Each searchlight building had a main rounded section on the seaward side with an adjoining rectangular section for accommodation (*plates 47 and 48*). There was a large opening in the rounded section which was originally covered with metal shutters; these could be closed over to cover the searchlight. These shutters have been removed and the openings bricked up and rendered over, but the metal ring beams along which the shutters would have slid are still in place.

In each of the long elevations were a number of loopholes for machine guns and rifles. On each of the shorter entrance elevations was a wide doorway with window beside it (*plates 46 and 47*). Each of the doorways has been partially in-filled with brick to create a narrower doorway and the windows have been bricked up. The original doorways and windows had chamfered margins.

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<sup>xiv</sup> Simpson & Brown Condition Assessment 2007 p43



Plate 47: S searchlight building, view from the N



Plate 48: N searchlight building, view from the S

#### *Interior (plates 51 and 52)*

The doorway into the accommodation area has been reduced in size in both of the search light buildings, but the original metal frames are still in place. The original doors were two leaf blast doors, as there are hinges on both sides of the frame (*plate 54*). The original construction plans (Appendix B *Drawings 11 and 12*) indicate that these doors originally had loopholes in them. The windows were also protected by steel shutters; these have been removed by the metal rings and shutter clasps are still in place.

The loopholes around the walls have generally been blocked up and the steel shutters lost but the metal frames are still in place. The rifle loopholes were set higher in the walls than the machine gun loop holes and they thus had wooden platforms in front of them for the riflers to stand on (*Drawing 21* and Appendix B *Drawing 11*). These have all been removed and no traces were visible during the site inspection.

It appears that the internal arrangement in the N building was slightly different than that which was originally intended. The original construction plans (Appendix B *Drawing 11 and 12*) show a single central loophole with platform in the E elevation, with a telephone box to the N and a stove to the S. However, it appears that two loopholes were installed when the building was constructed and a stove positioned between the two of these. The stove has since been removed but a round vent next to the S loophole may have been a vent for the stove, although this is unclear (*plate 49*).

In each of the searchlight buildings, a wooden partition divided the rounded searchlight section from rectangular accommodation section (*Drawing 21*).

The opening for the searchlights were originally covered by steel shutters fitted onto a circular beam; these shutters could therefore be rolled back. The searchlight shutters also contained loop holes. The

shutter mechanism is better preserved in the N searchlight building than in the S building (*plate 53*). In the N building two of the original shutters survive, although these are heavily rusted. Above the shutters are sliding wheels set within a channel which extends around the whole searchlight opening. This channel survives at the ends of the curves but has rusted away in the centre. There are outlines on the floor in the circular areas indicating the position of the searchlights (*Drawing 21*).

At some stage, the interior of the S searchlight building has been lined out with timber strapping and possibly plasterboard and the circular area around the searchlight has been wallpapered. This was presumably in order for it to be used as holiday accommodation.



*Plate 49: N searchlight building, E interior elevation, blocked loophole and possible stove vent*  
*Plate 50: S searchlight building, N elevation, flue for stove*



*Plate 51: N searchlight building interior, looking N*  
*Plate 52: S searchlight building interior, with wallpaper visible in searchlight area, looking E*



*Plate 53: Wheel mechanism for searchlight shutters in N searchlight building*

*Plate 54: N searchlight building, reduced doorway in S elevation with original metal framing*

#### *b. Engine house*

The Engine House is located approximately 50m W of the Searchlight buildings and this housed the generator equipment used to power the searchlights; this consisted of two generators and two engines. This single storey building is constructed from brick with concrete sills and lintels at the openings. The building sits in a partially sunken compound surrounded by brick retaining walls with concrete cope stones. Also associated with the Engine House was a cooling tank store to the N, a workshop, other stores for petrol, oil and coolant to the E, and latrines to the S; these are now partially in-filled (Appendix B *Drawings 13-15*).

The interior of the building was originally divided into three areas – the N room which house the generators, the central Accumulator Room and the Workshop and Spare Part Store to the S (Appendix B *Drawing 13*). The Engine House was converted to public toilets during the inter-war period and served as such until recent years – the building has been closed for the past few years and some recent vandalism had taken place. This conversion resulted in a change in the layout and appearance of the building.

See Appendix A, Drawings 22 and 23.

#### *Exterior*

The principal (W elevation) has a small advanced porch at the N end. To the S of this are two original window openings; these were latterly partially blocked up to create smaller window openings, and the smaller openings have now been boarded over. The door to the S of these is a later insertion, presumably added when the building was converted to public toilets. Beside (S of) this is an original doorway which was latterly blocked to form a window (*Drawing 23*). This doorway has the same concrete sill as the original windows. This window was subsequently partially infilled to form a smaller window opening, which is now boarded over (*plate 55*). There was originally a window to the S of this door; this has been completely blocked and a smaller opening inserted near the wallhead. The original doorway to the S of this has been blocked and the window at the southernmost end of the elevation has again been partially blocked to form a smaller opening, now covered with metal mesh (*plates 57 and 58*).

The doorway and small windows in the S elevation are later insertions, likely associated with the conversion of the building to public toilets. Three small window openings have been inserted into the E elevation and a row of windows has been inserted in the N elevation near the wallhead, all likely to be associated with the conversion of the building.



*Plate 55: Engine House, W elevation, view from NW*

### *Interior*

The interior layout was altered somewhat when the building was converted to use for public toilets during the interwar period. After the removal of machinery and associated fixtures and fittings from generator room to the N, a number of partitions were inserted dividing up the interior space. A partition was inserted in the SW corner of the room, creating a separate disabled toilet which was accessed through the doorway inserted into the W elevation (*plate 56, Drawing 22*). The main area in this room was used to house the ladies toilets and cubicle partitions were inserted along the N and E walls. Small windows were also inserted into the rear (E) elevation. A row of small windows were also inserted near the wall head in the N elevation. The windows in the W elevation were partially blocked in, but this may have been after the initial phase of alterations. The principal doorway in the advanced porch was also made narrower by the insertion of brick columns. The flues and vents in the walls and ceilings were retained during this conversion and are still visible.

The central and S rooms were also altered at this time (*Drawing 22*). The dividing wall between the Accumulator Room and the Workshop/Spare Part store was knocked through and a wide opening created, interconnecting the two rooms – these were converted to form gents' toilets. A new doorway was created in the S elevation and small windows were inserted near the wall head in the E elevation. The original doorways in the W elevation were also blocked; the southernmost was completely blocked whilst that to the former Accumulator room was only partially blocked, forming a window

similar in size to those at the N end of the elevation. This window was latterly reduced in size, likely after the initial conversion phase and at the same time as the windows to the N, lighting the ladies toilets, were reduced. Partitions were inserted on the interior, dividing up the space. A large partition was inserted crossing almost the full width of the room towards the N end. Small cubicle partitions were installed along the S elevation

All the later insertion partitions were removed as part the current phase of works (*plates 56 and 59*). A large opening was also created through the original dividing wall between the generator room and the Accumulator room (*plate 59*), that which latterly formed the division between the ladies and gents toilets.



*Plate 56: Magazine building, generator room, following removal of later toilet cubicles and fittings. The later slapping doorway is visible in the W (right) elevation – this provided access to the disabled toilets.*



*Plate 57: Blocked window in W elevation, gents toilets, originally lighting the Workshop  
Plate 58: Blocked doorway and window in W elevation, gents toilets, originally located in Accumulator Room*



*Plate 59: Magazine building following removal of later cubicle partitions and fittings, view from S. Later insertion windows also visible in N elevation*

#### *Cooling tank store*

The store to the N is also brick built with a narrow concrete cornice (Appendix B *Drawing 13*). This is built against the retaining wall, with this forming the N and E elevations of the building. The S elevation was originally open, but this was latterly infilled with brick, leaving two window openings. These were subsequently filled with brick. It was possibly at this time that the wide doorway was slapped through the W elevation.

There is a further storage area to the E of the engine house building. This was used for storing petrol and oil tanks and is formed from a low concrete platform with raised beams dividing it into sections.



*Plate 60: Cooling tank store to the N of the engine house building  
Plate 61: Storage area to E of the engine house*

## ***References***

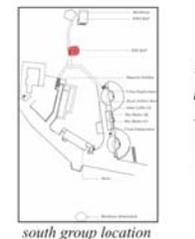
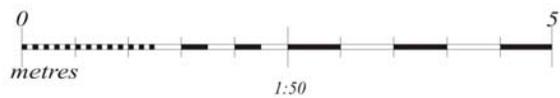
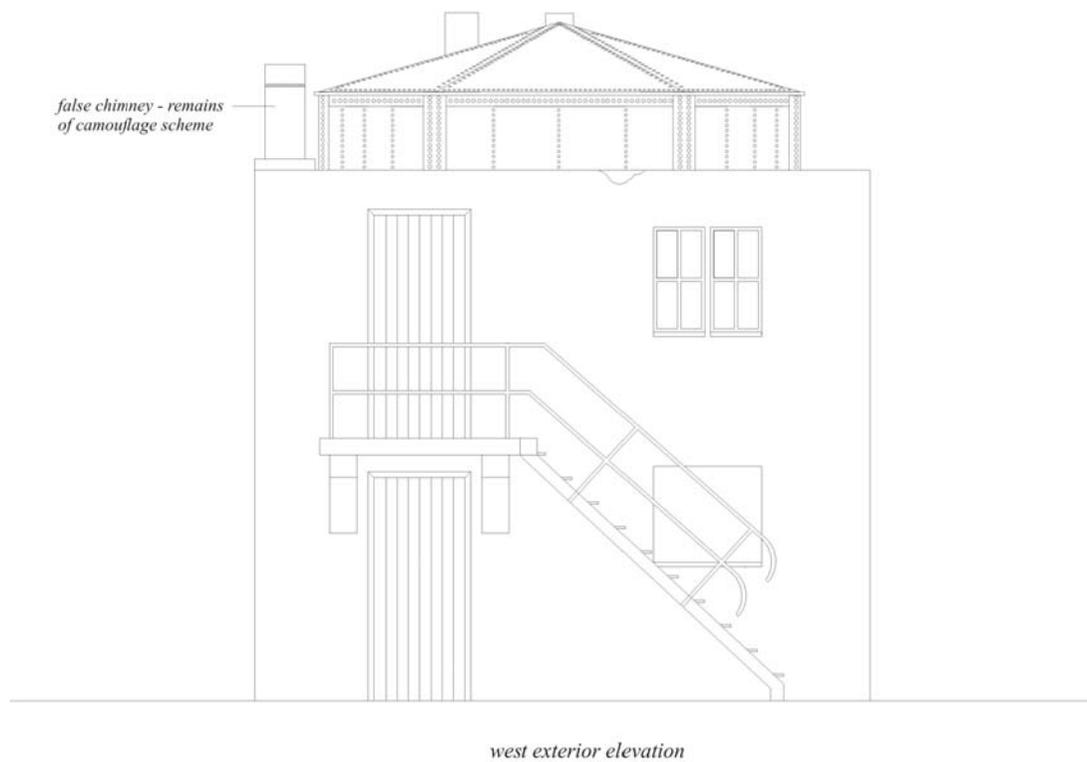
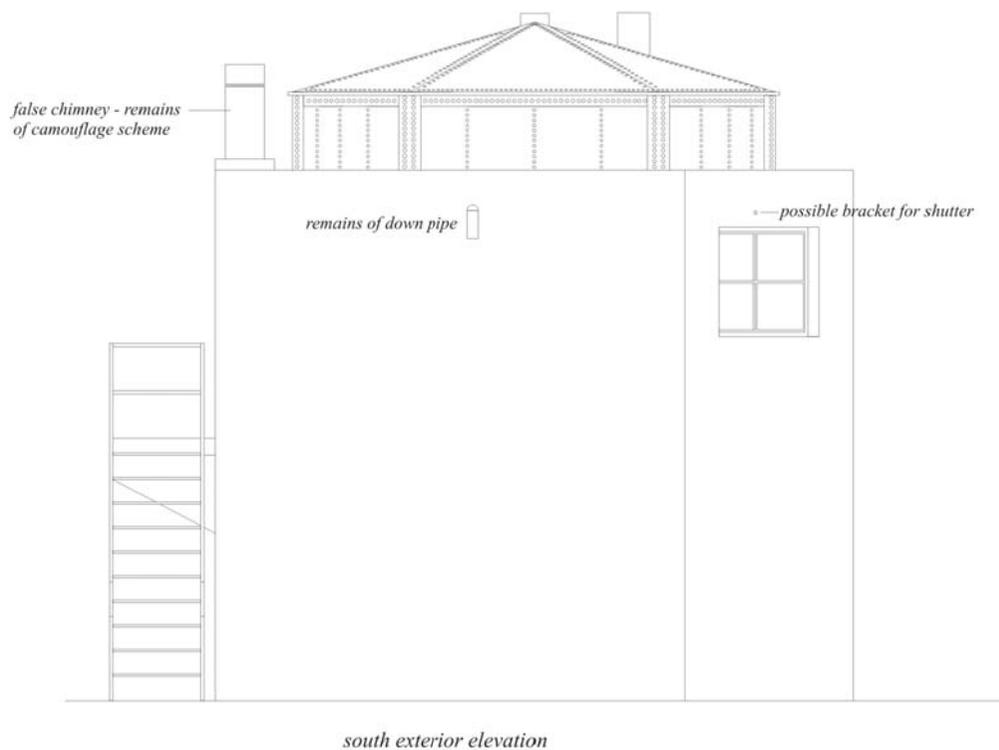
English Heritage 2006 *Understanding Historic Buildings: A guide to good recording practice*

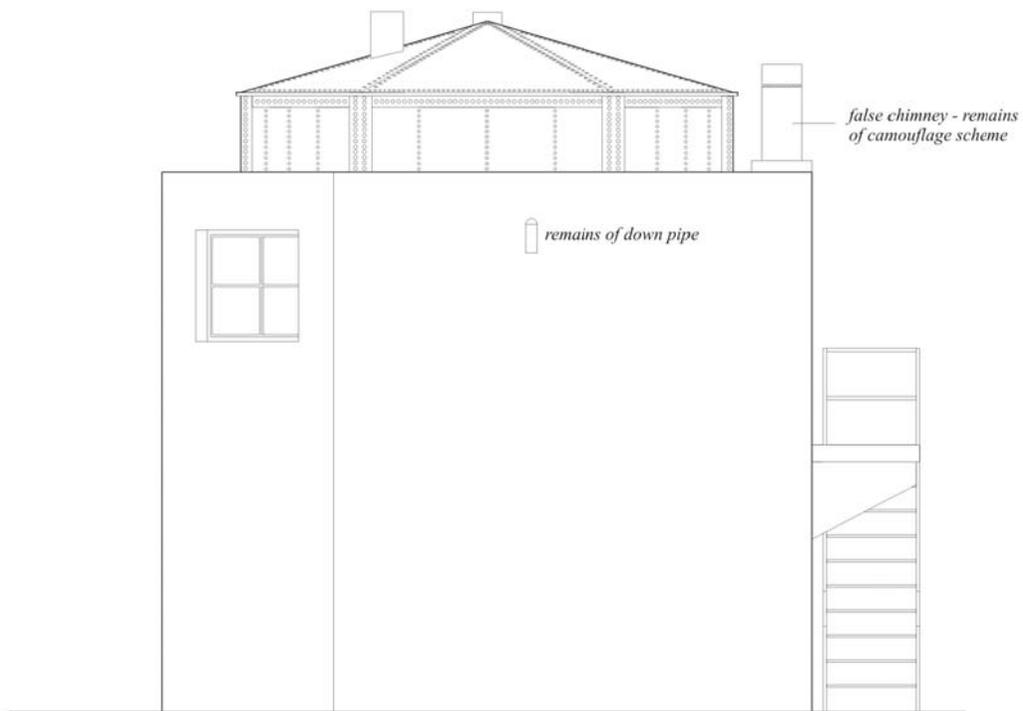
Mitchell-Rose, C. 2008 *Investigation into the paint colours used on the 1<sup>st</sup> and 2<sup>nd</sup> world war artillery structures at Blyth Beach, Northumberland*, Commissioned by Simpson & Brown Architects for Blyth Valley Borough Council

North East Civic Trust 2004 *Blyth Battery, Blyth: Conservation Plan*.

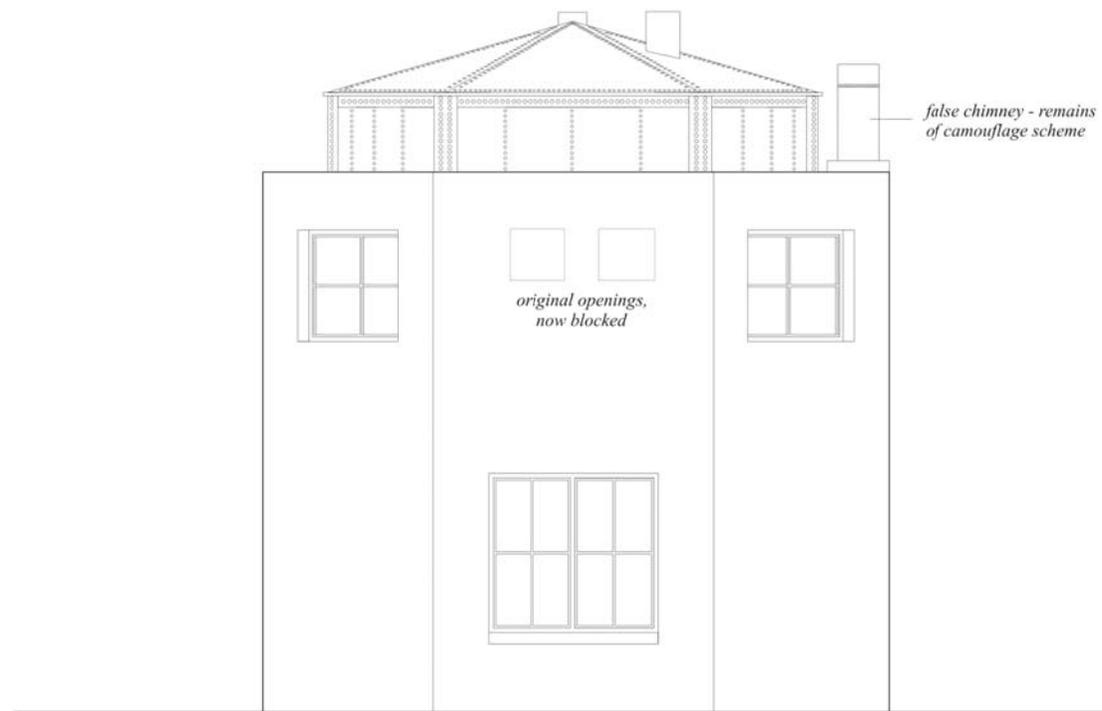
Simpson & Brown Architects 2007 *Blyth Battery, Blyth: Condition Assessment*

Appendix A: 2009 Addyman Archaeology survey drawings

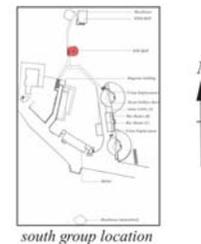
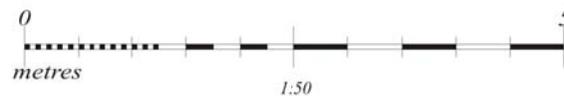




north exterior elevation

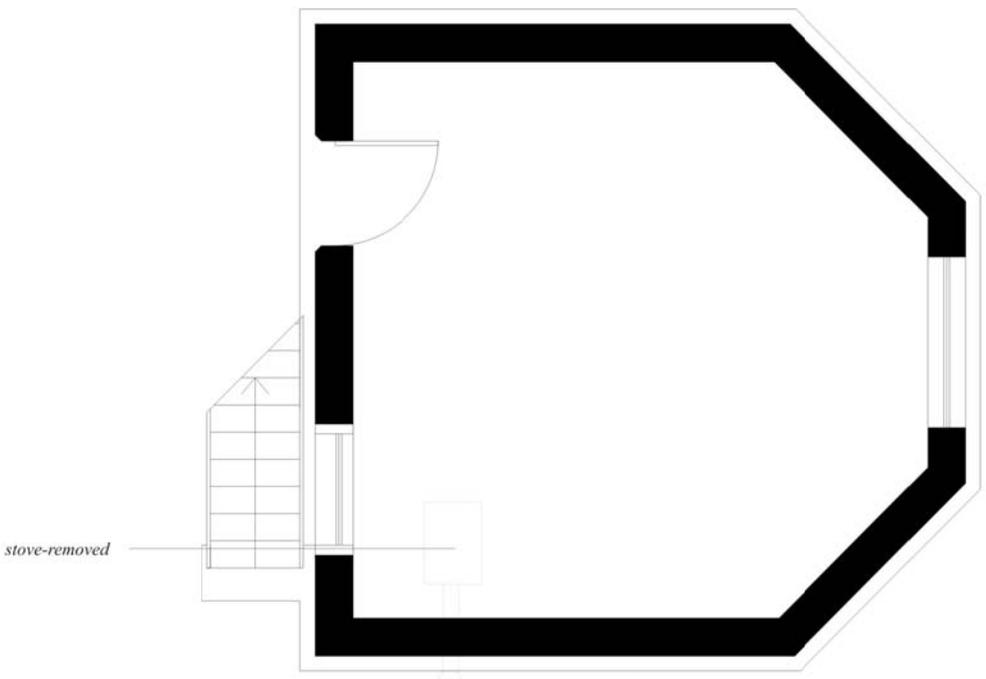


east exterior elevation

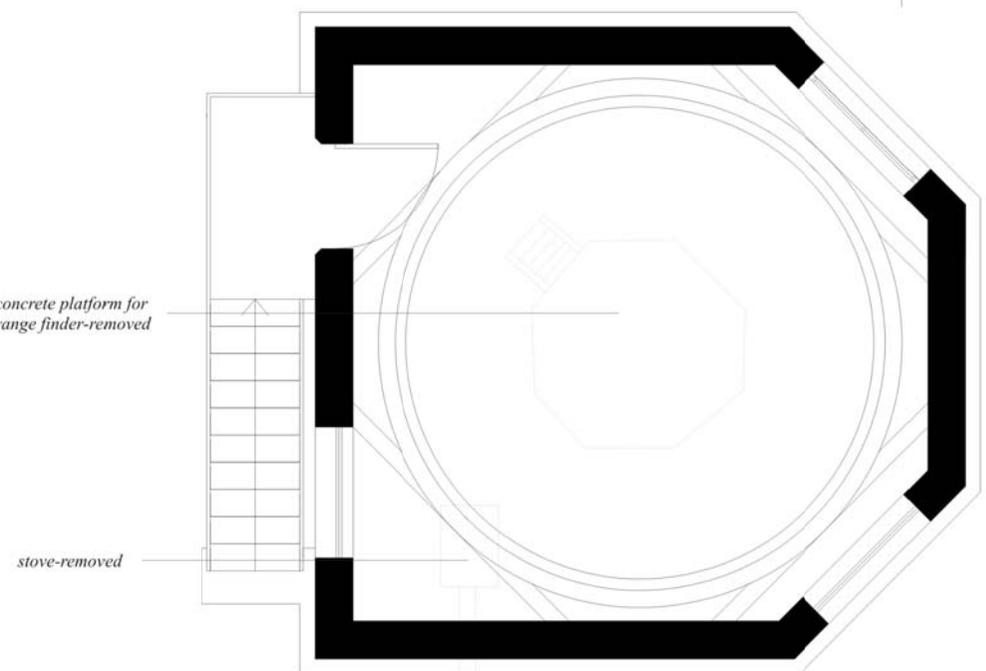


south group location

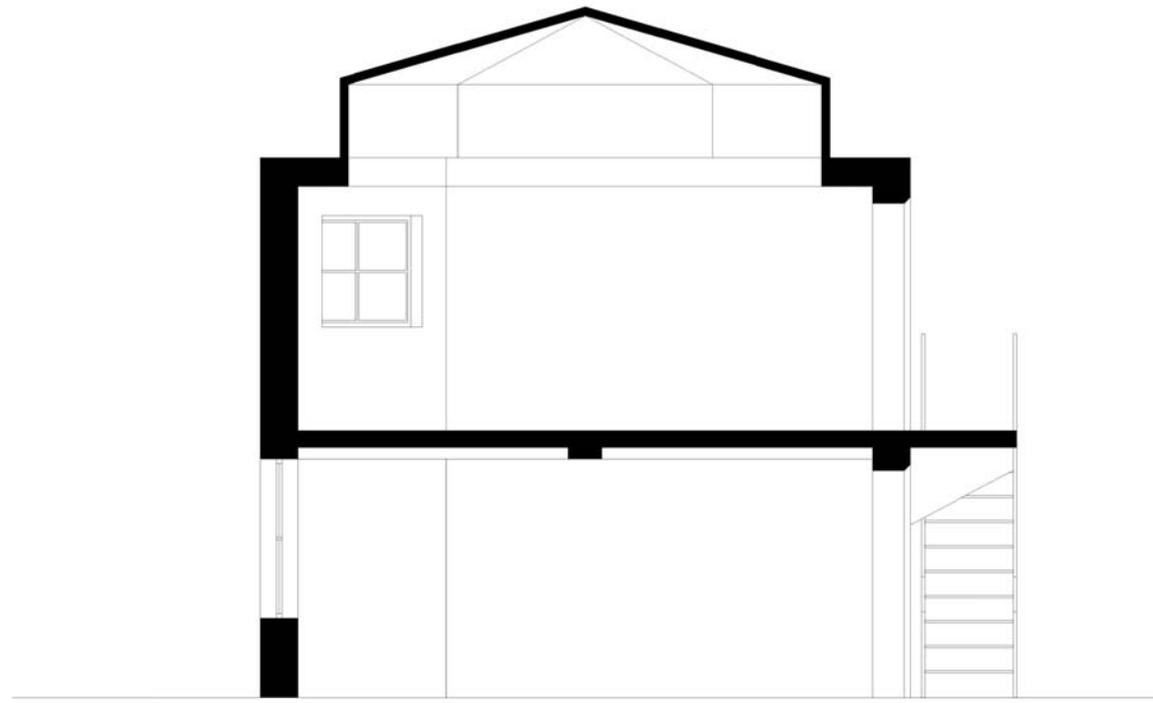
Blyth Battery, Drawing 2:  
WW1 B.O.P., exterior elevations



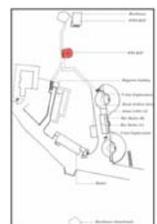
ground floor plan



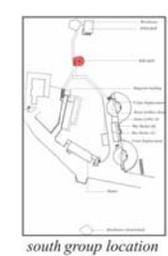
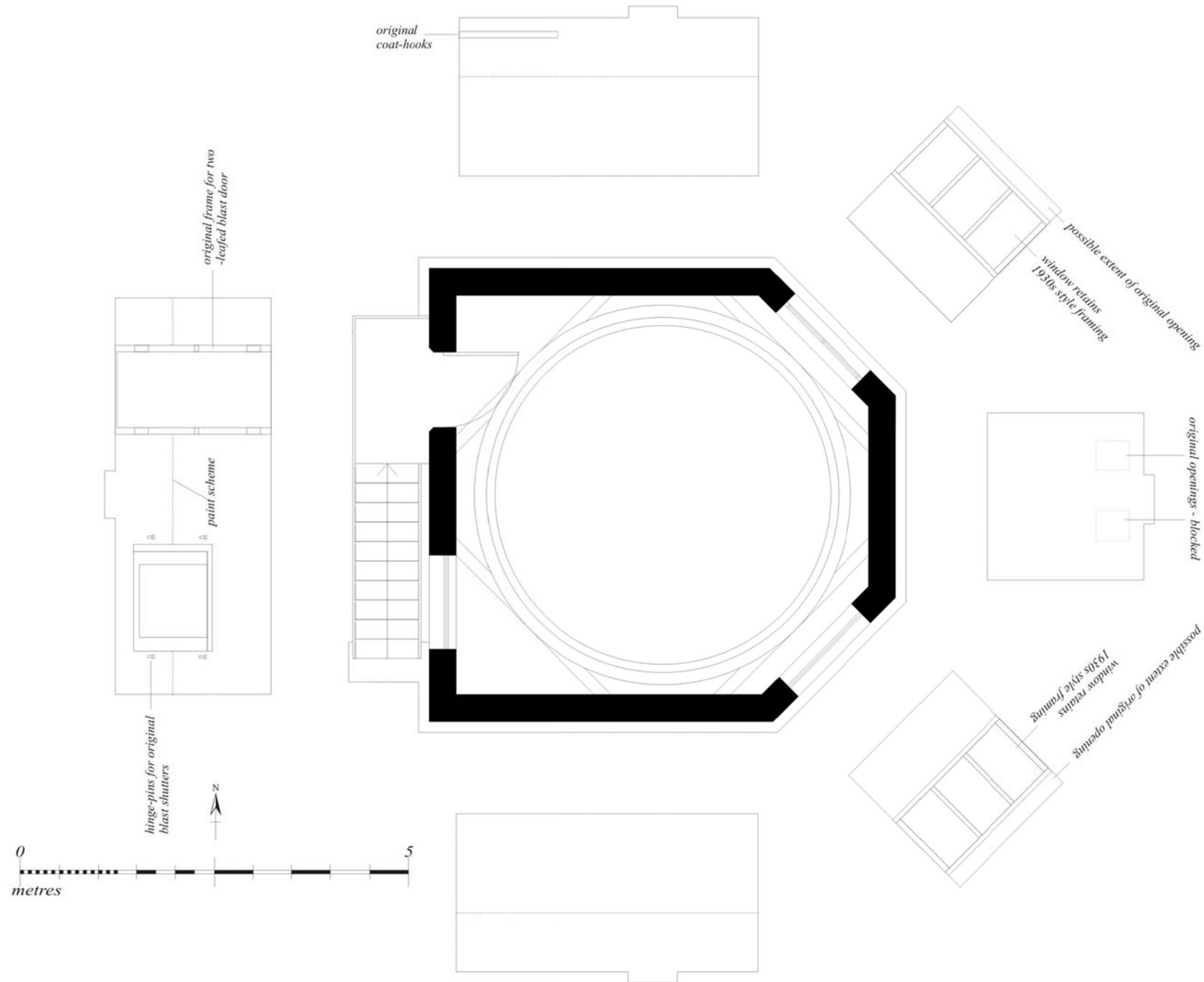
first floor plan with roof structure overlain



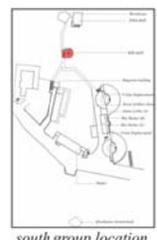
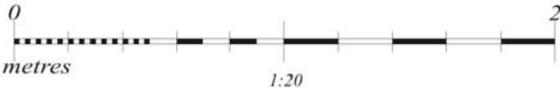
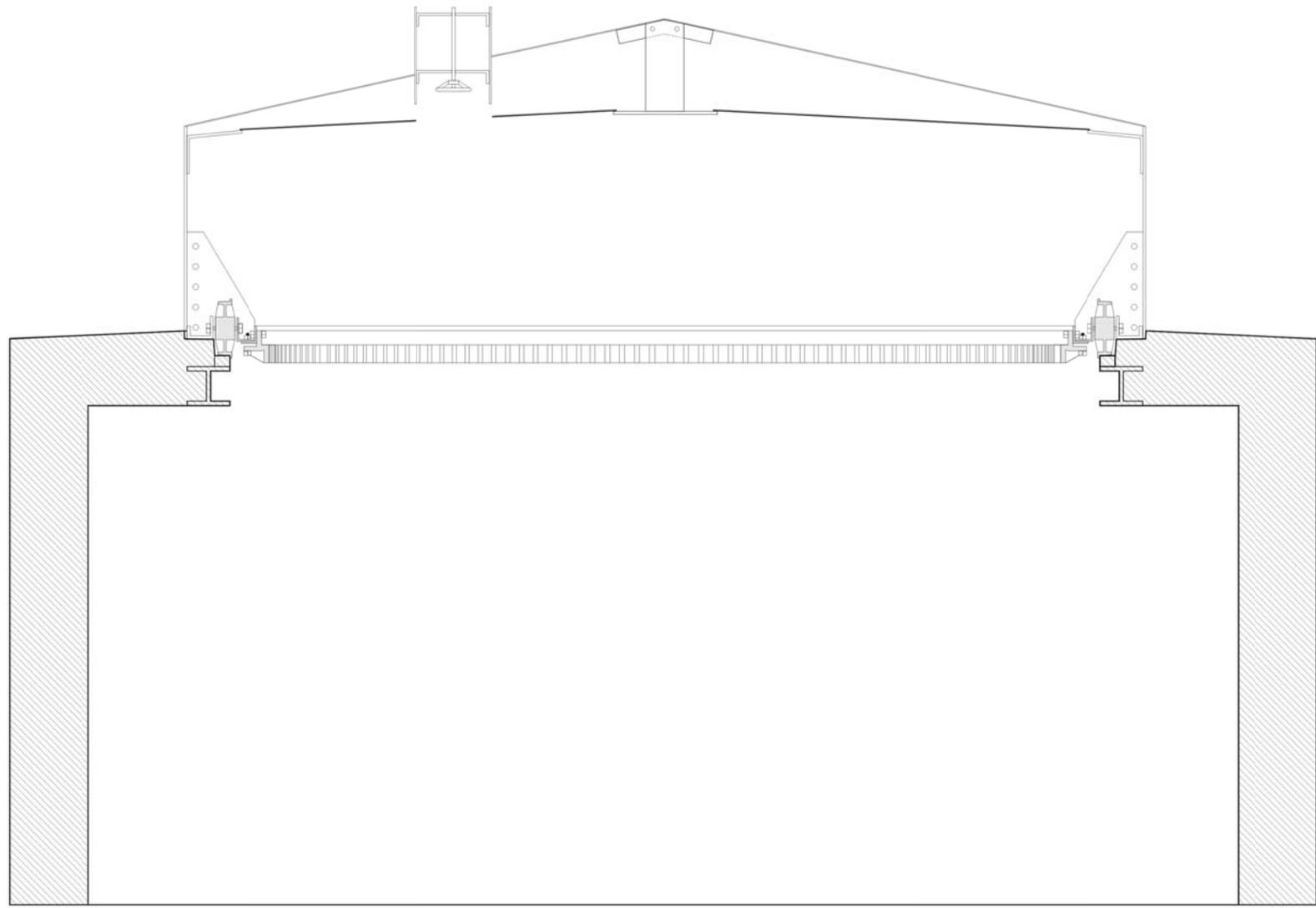
south interior elevation



south group location

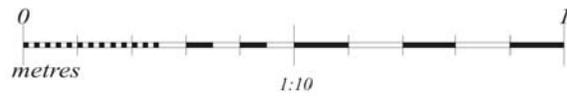
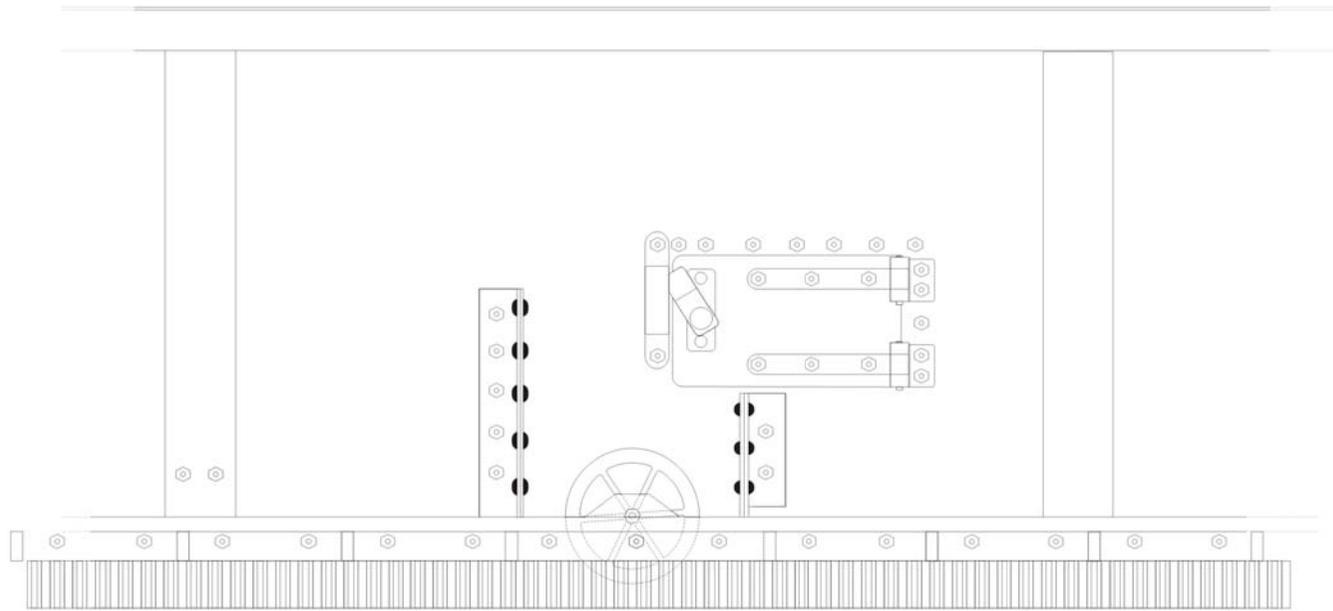


Blyth Battery, Drawing 4:  
WWI B.O.P., first floor elevations

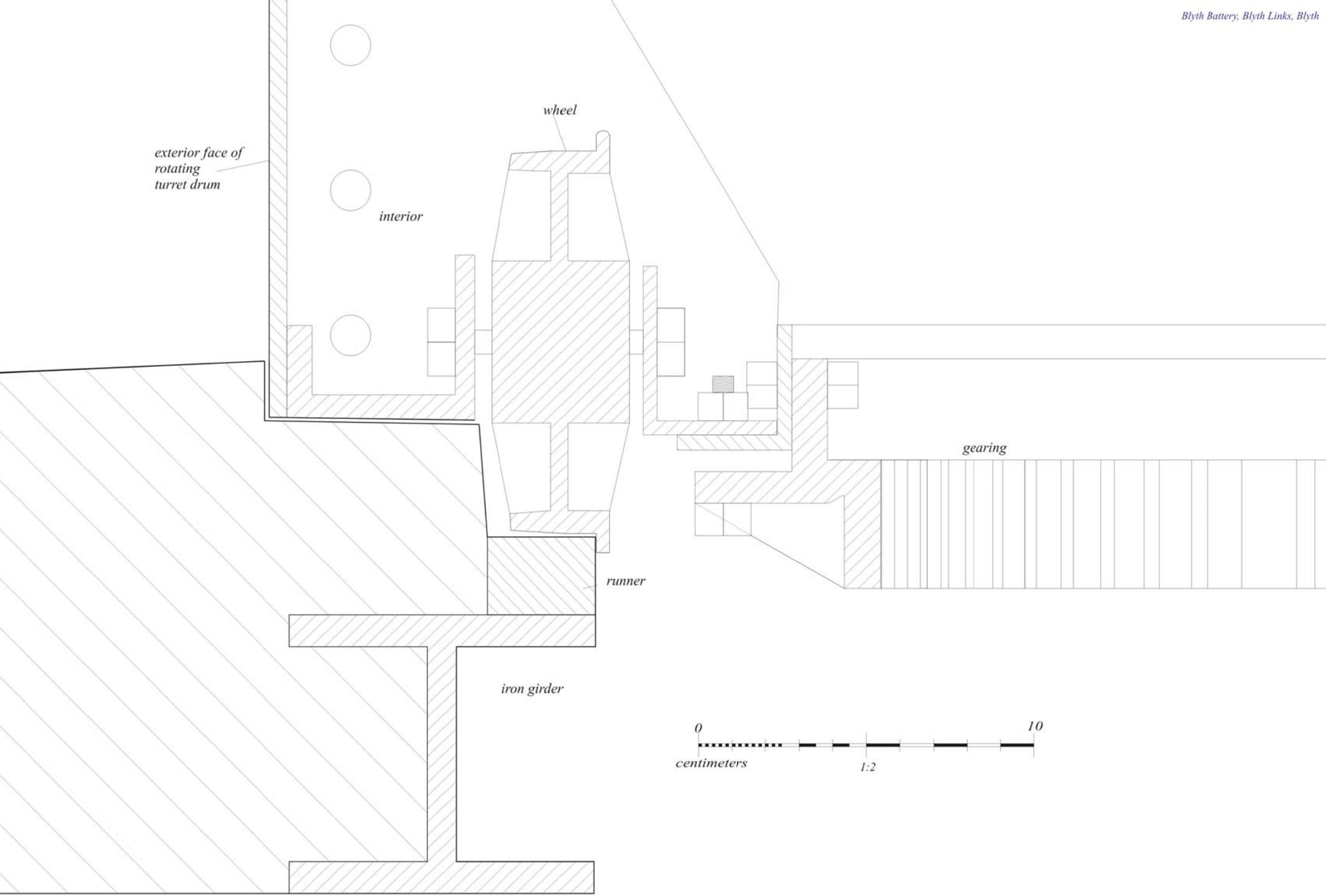


south group location

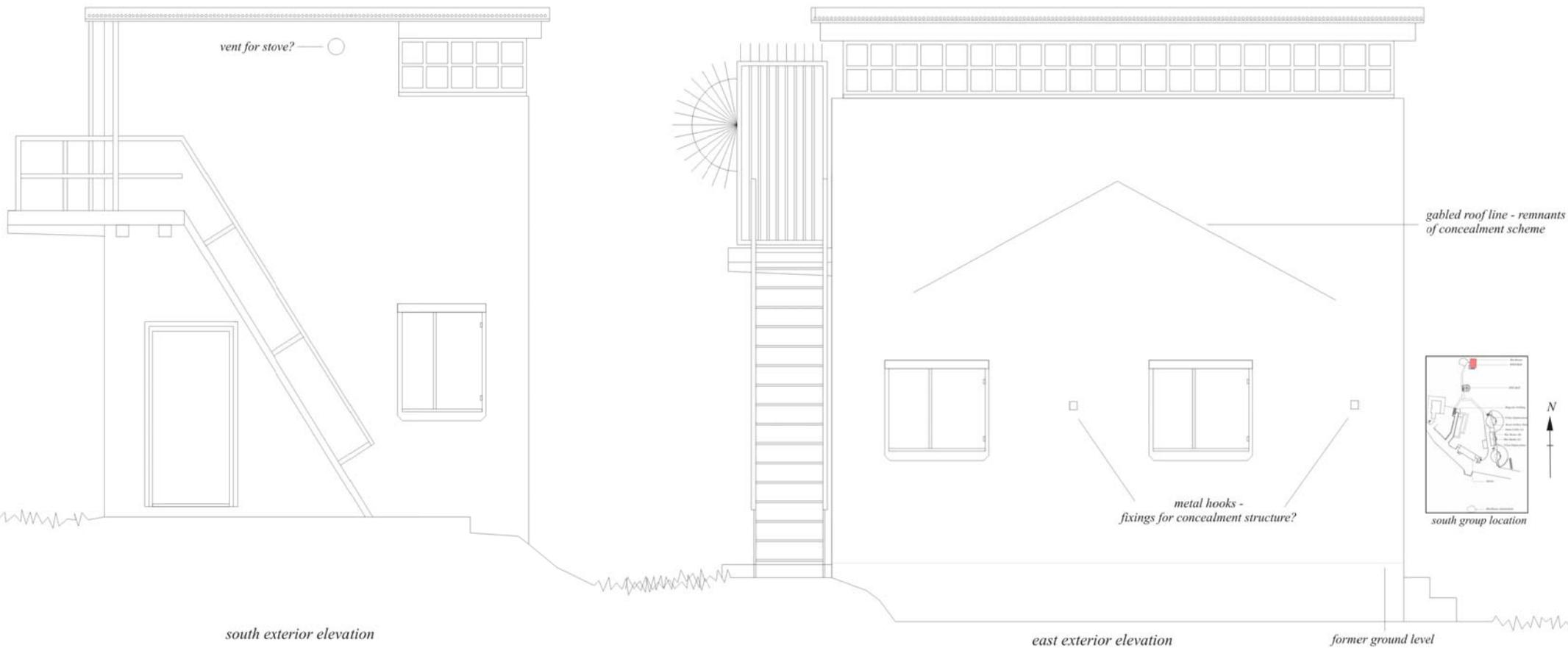
Blyth Battery, Drawing 5:  
WWI B.O.P., section through roof structure



Blyth Battery, Drawing 6:  
WWI B.O.P., detail of mechanism in rotating roof



Blyth Battery, Drawing 7:  
WWI B.O.P., detail of gearing in rotating roof



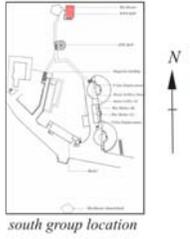
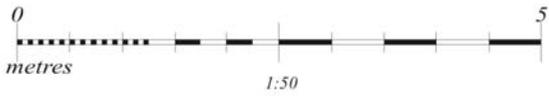
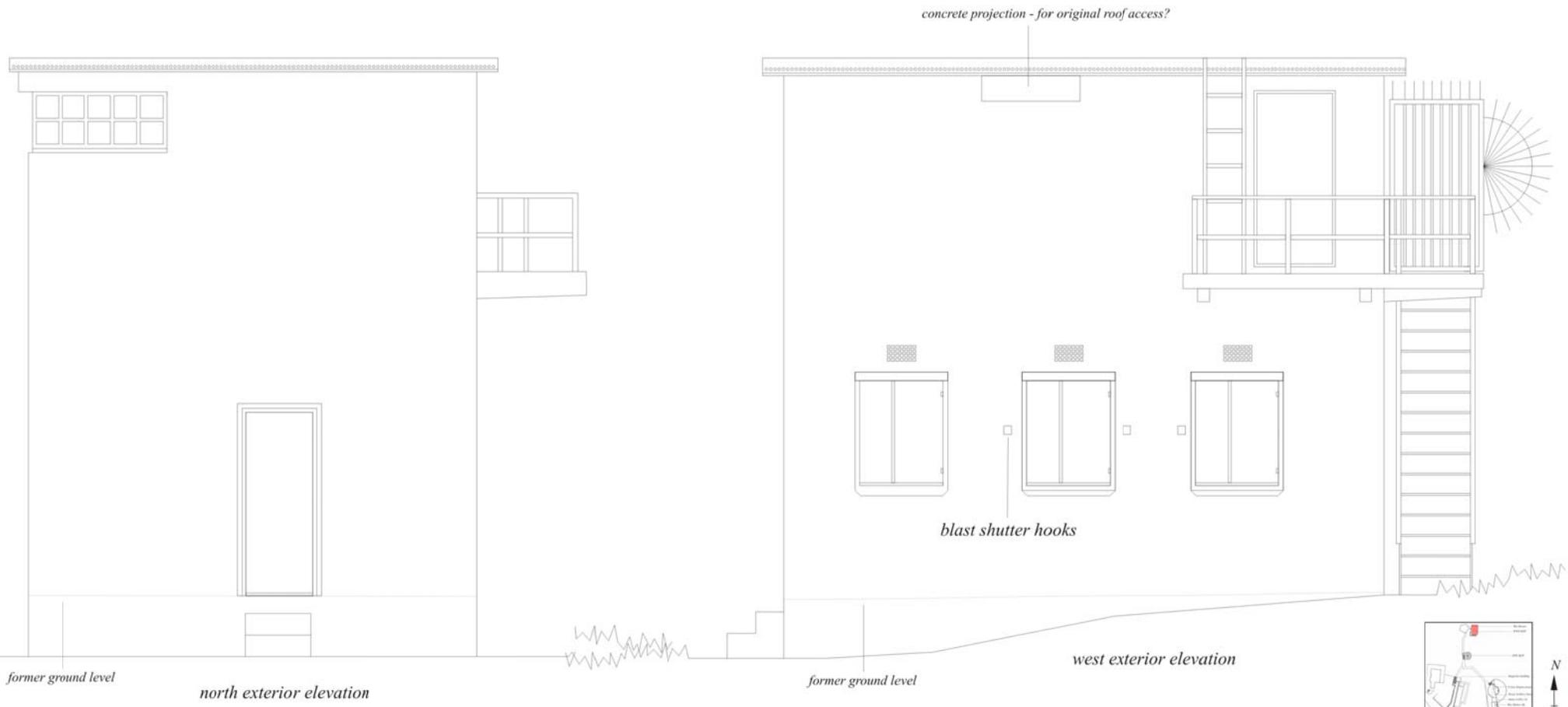
south exterior elevation

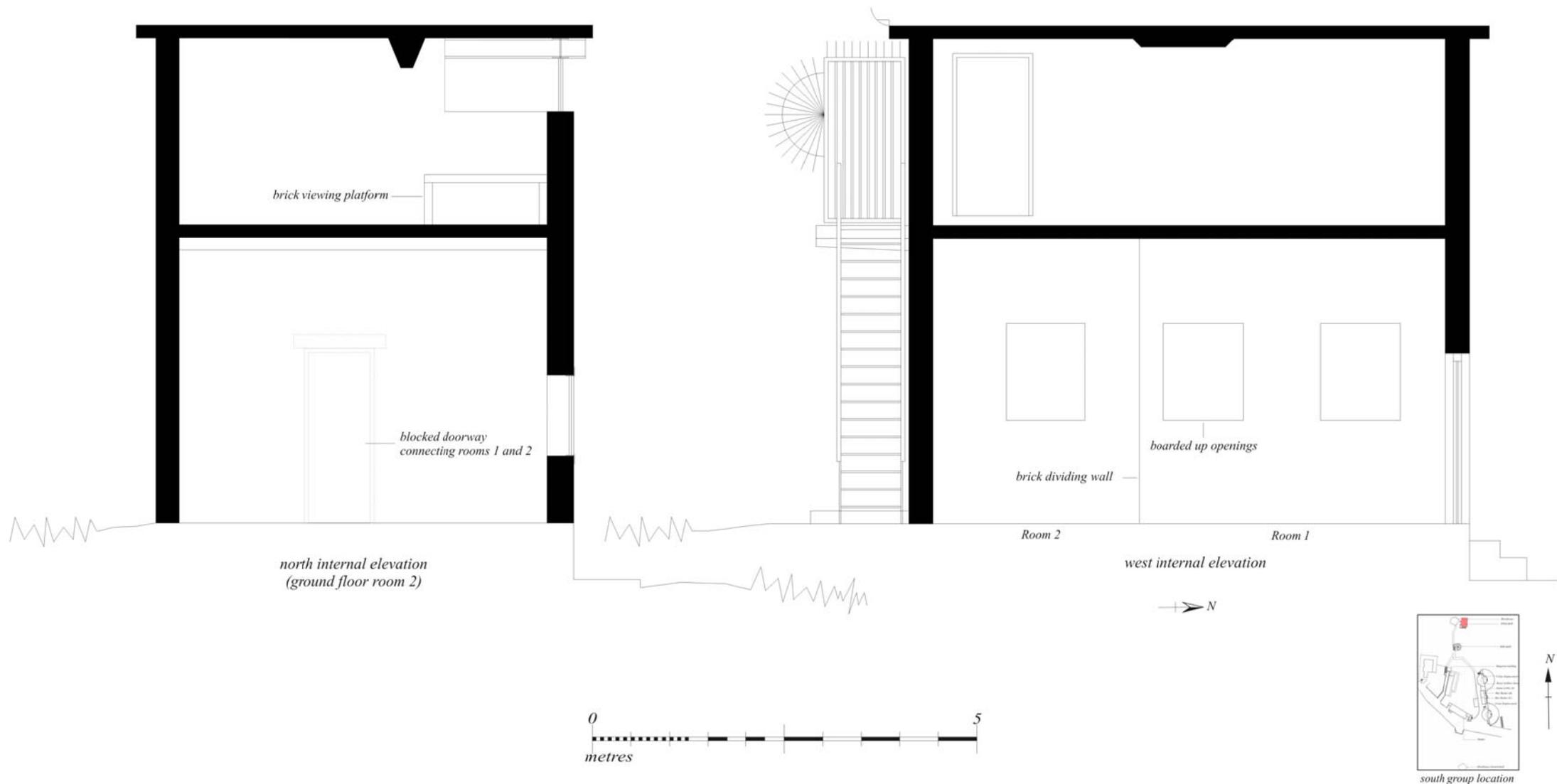
east exterior elevation

former ground level

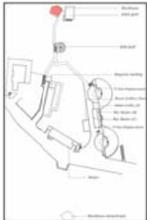


Blyth Battery, Drawing 8:  
WW II B.O.P., exterior elevations

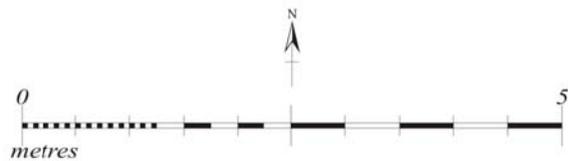
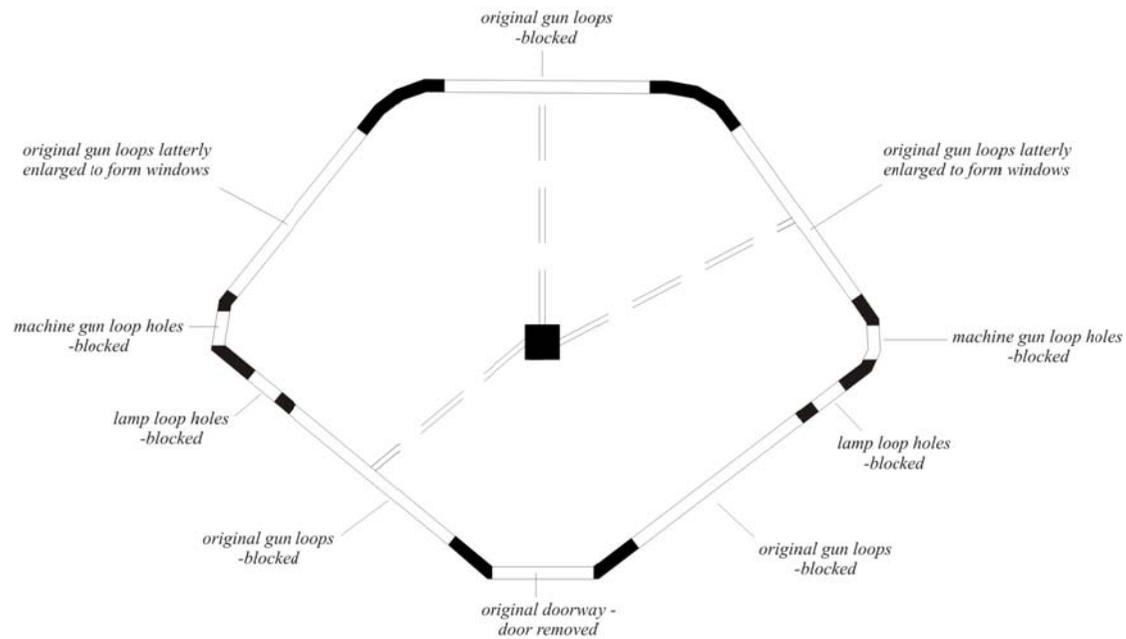


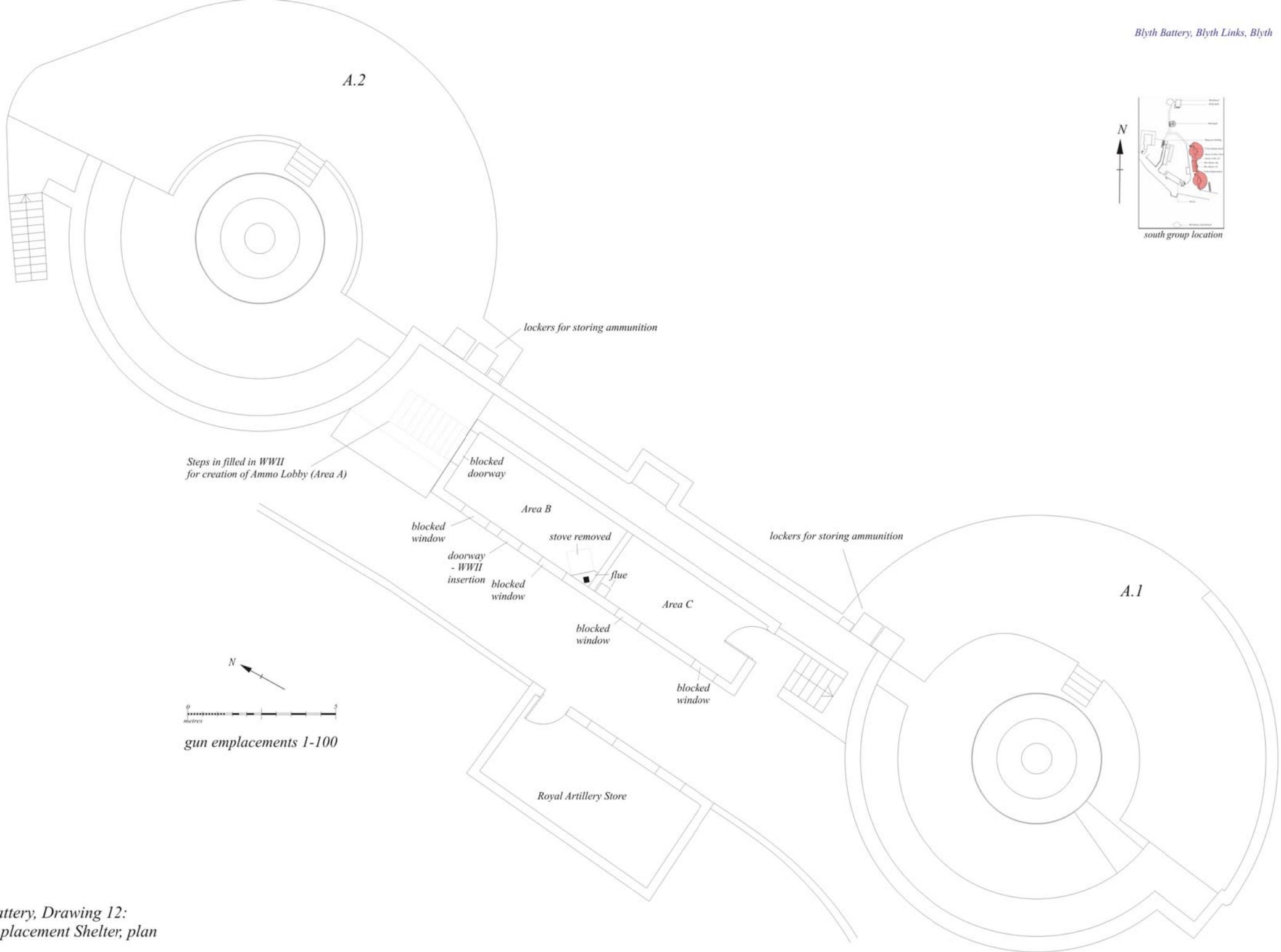


Blyth Battery, Drawing 10:  
WWII B.O.P., internal elevations



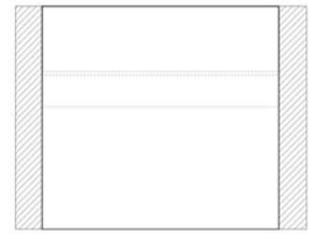
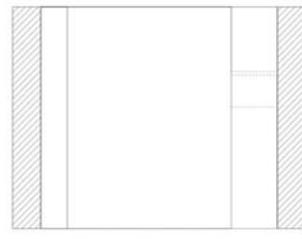
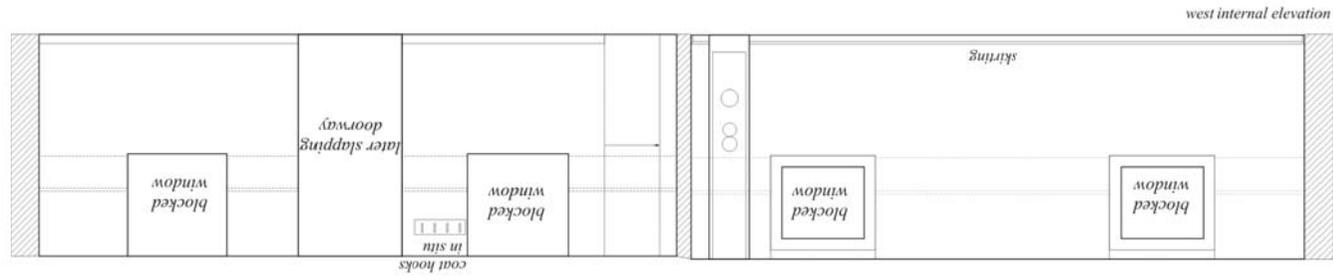
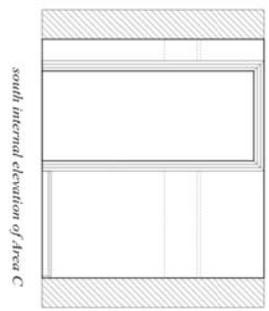
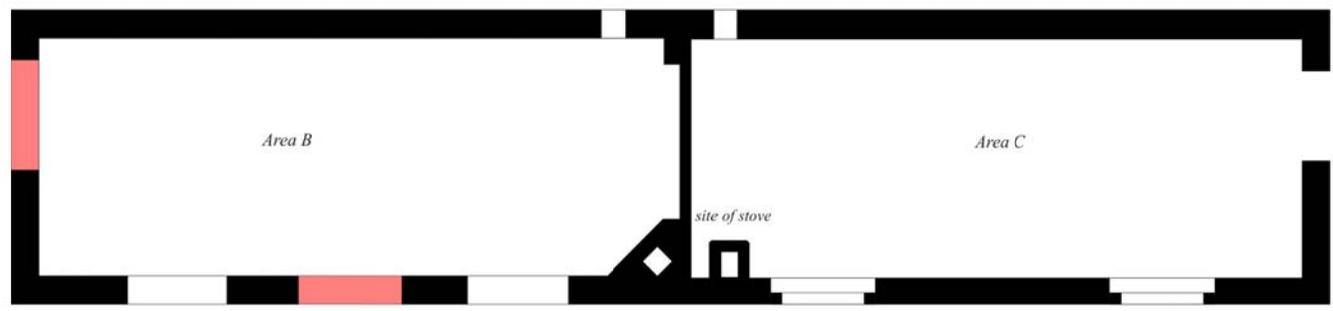
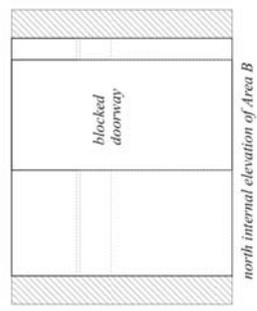
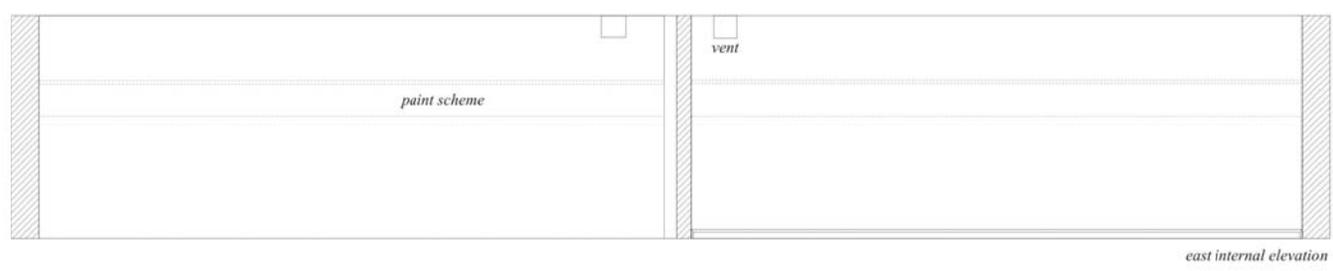
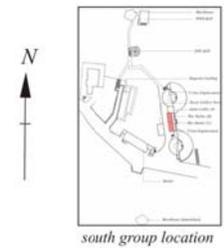
south group location





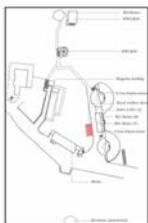
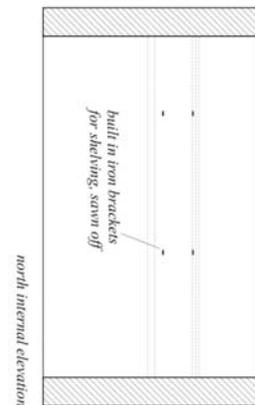
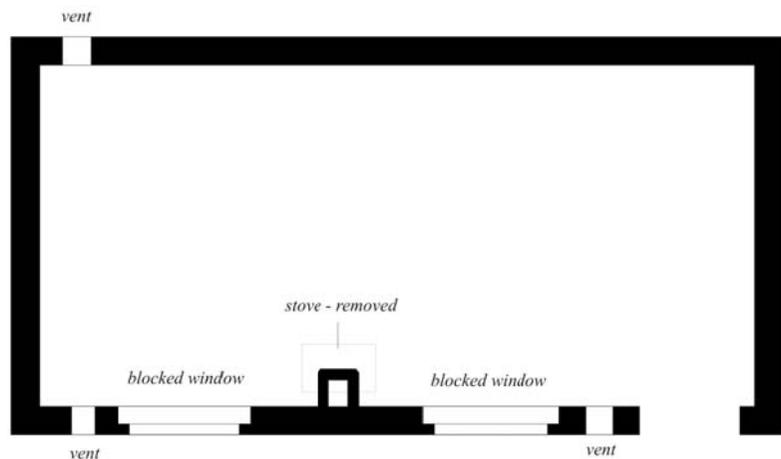
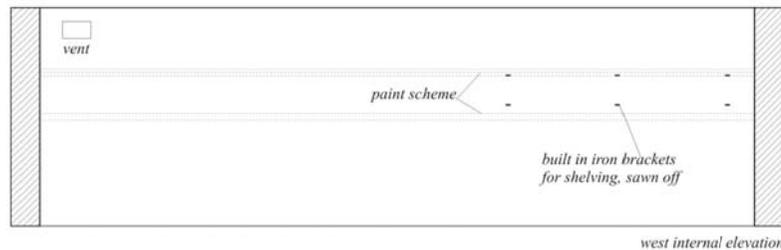
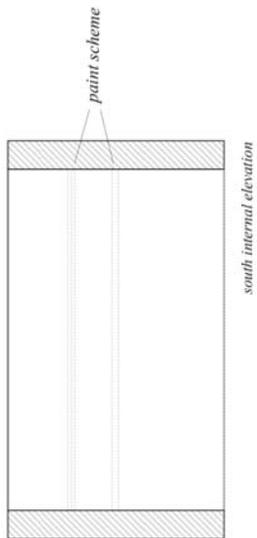
gun emplacements 1-100

Blyth Battery, Drawing 12:  
Gun Emplacement Shelter, plan

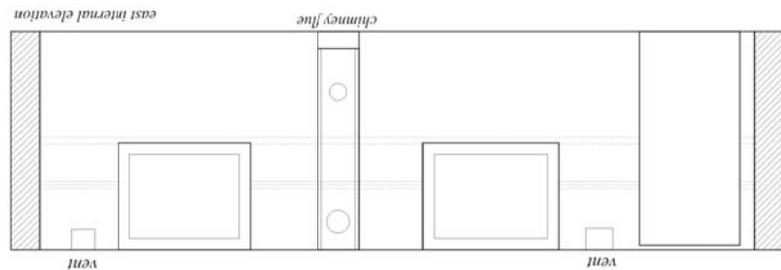


■ original fabric  
 ■ secondary modification

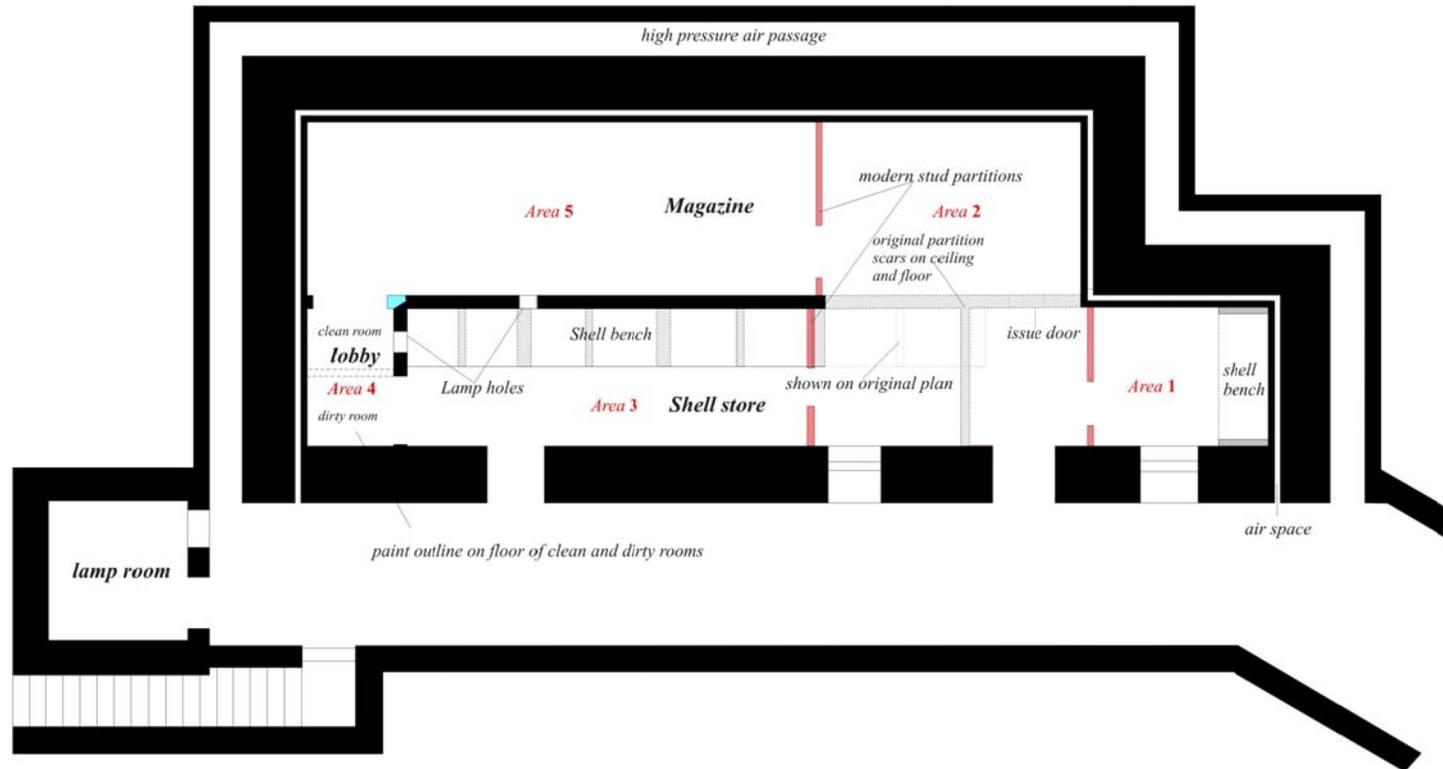
Blyth Battery, Drawing 13:  
 Gun Emplacement Shelter, interior elevations



south group location



Blyth Battery, Drawing 14:  
Royal Artillery Store, plan and interior elevations

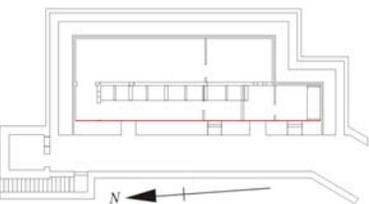
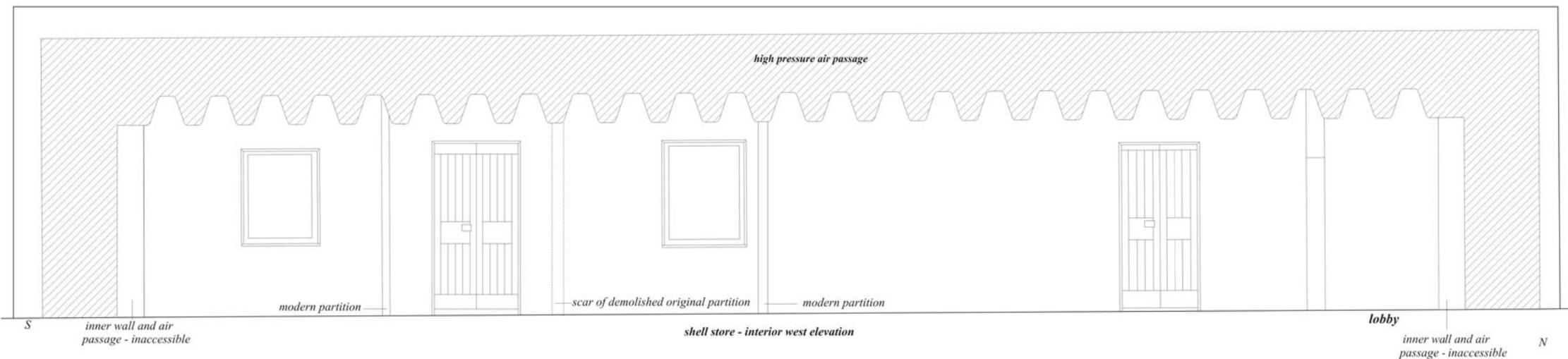
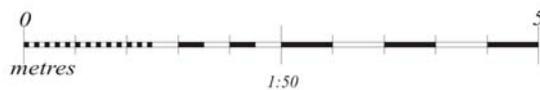
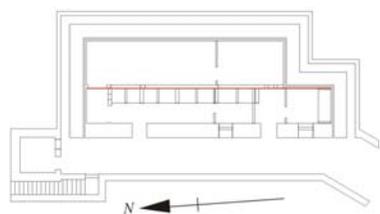
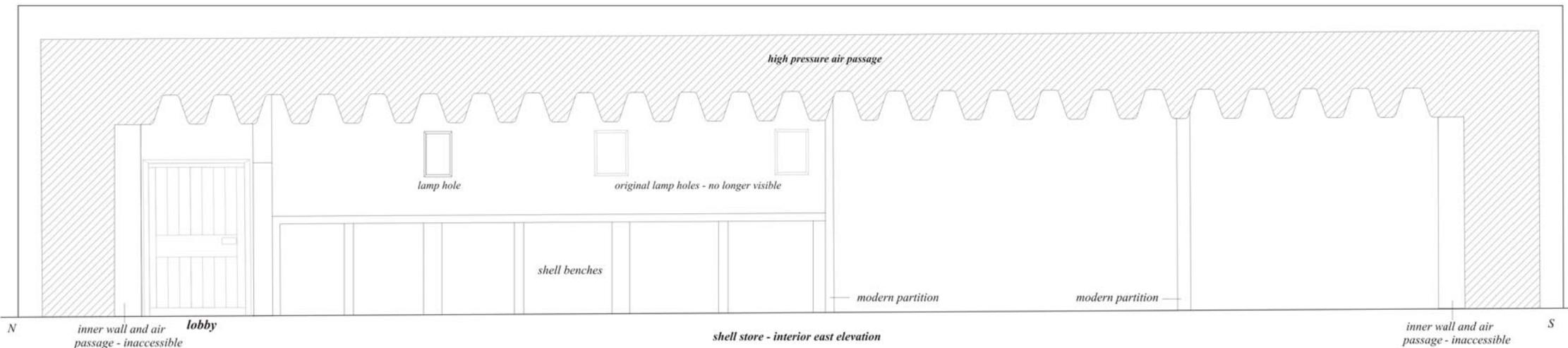


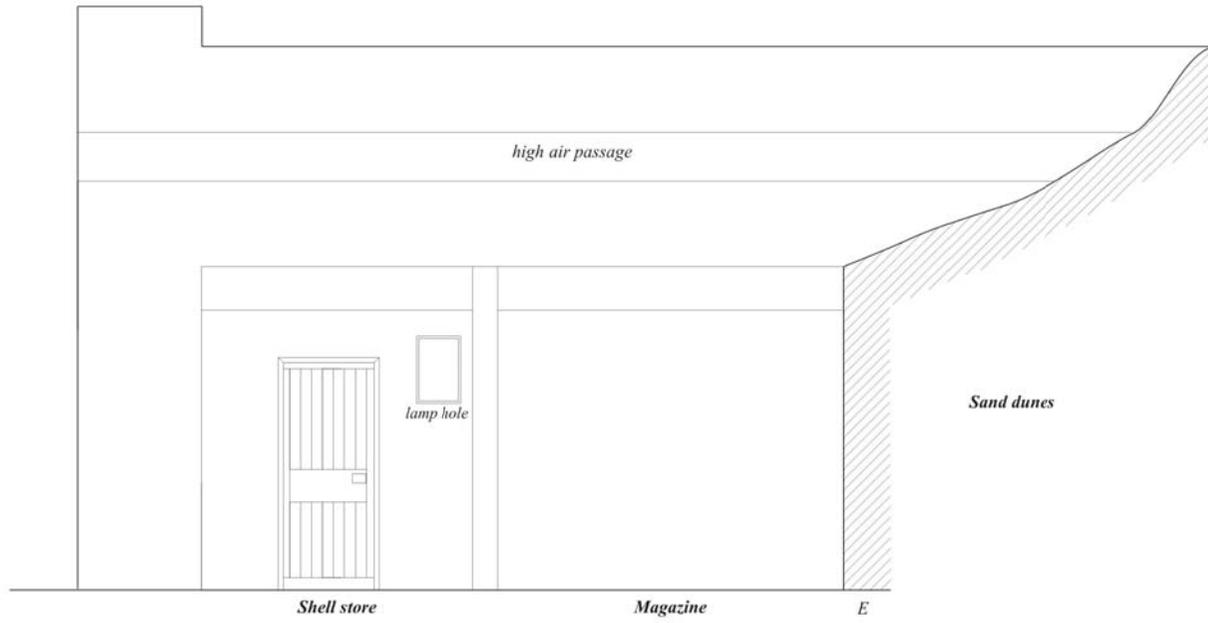
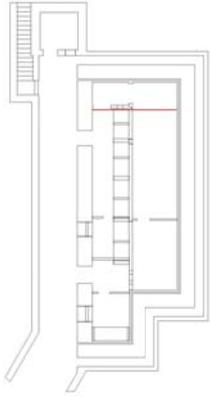
- original fabric
- secondary modification
- modern partitioning



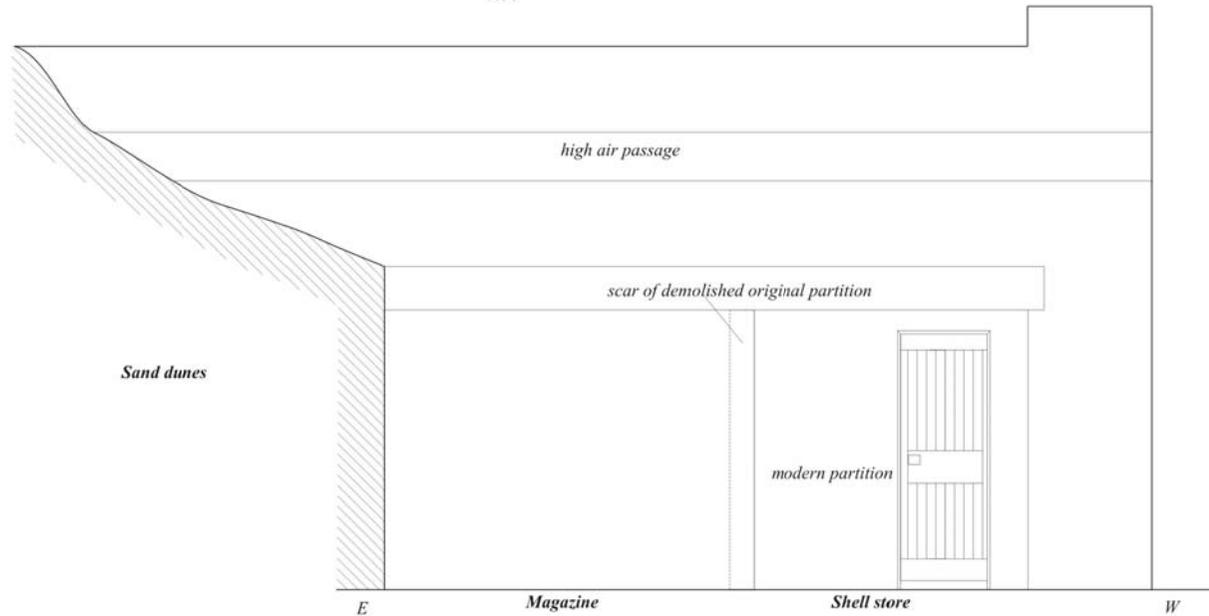
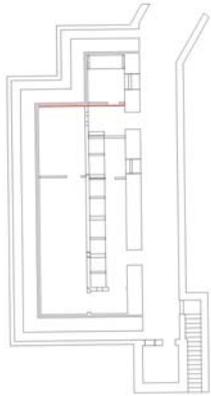
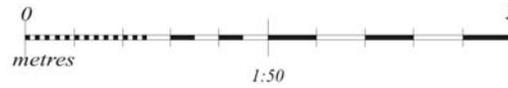
south group location

### Blyth Battery, Drawing 15: Magazine Building plan



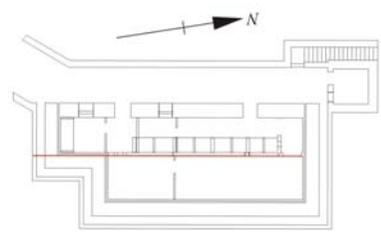
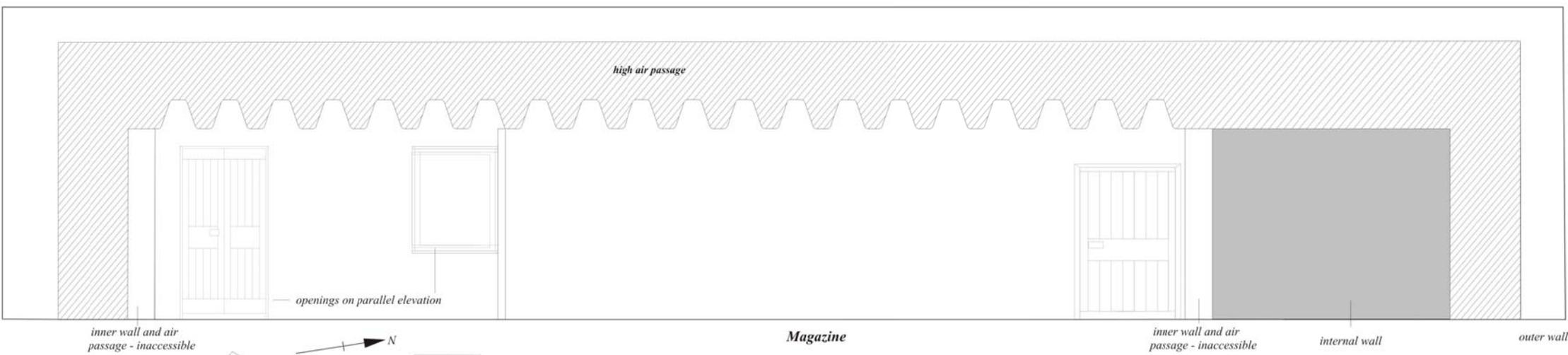
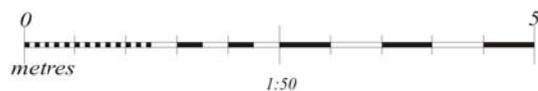
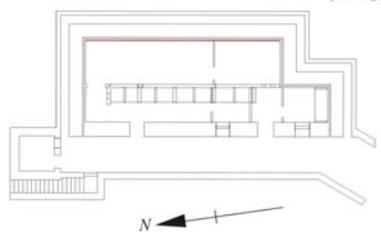
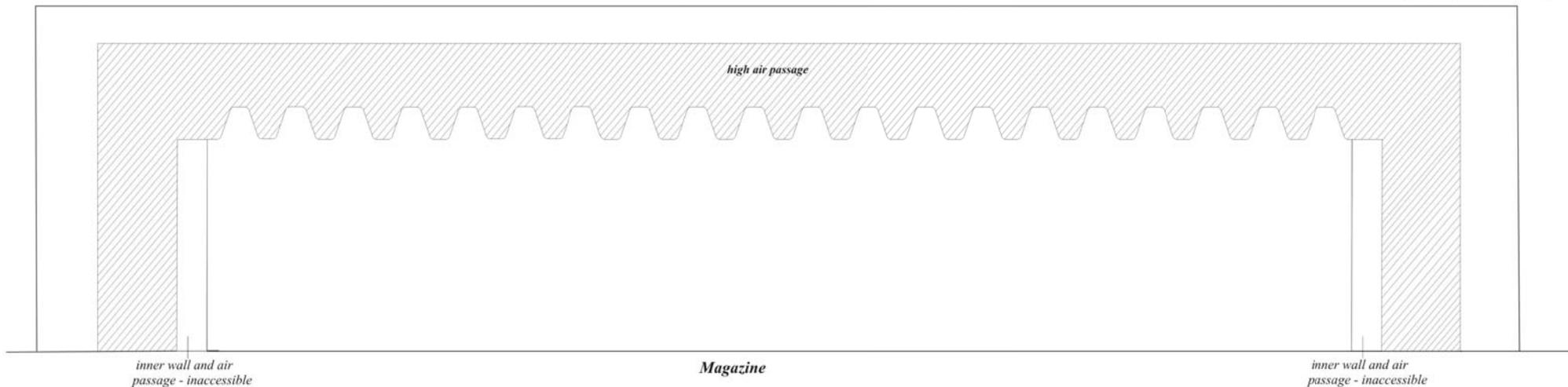


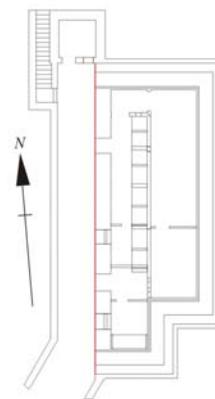
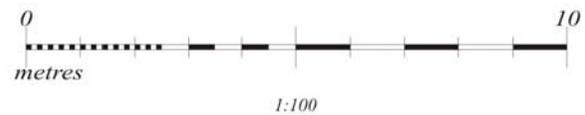
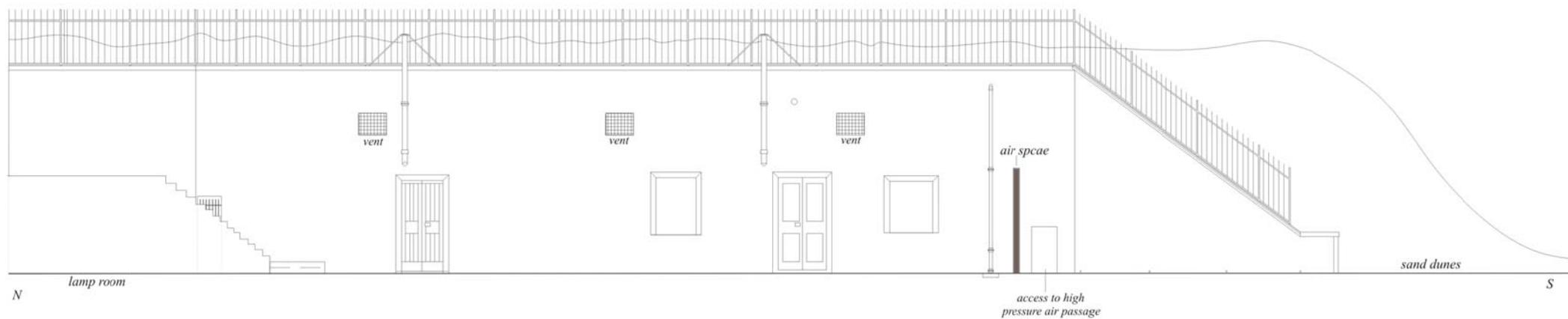
*interior north elevation*



*interior south elevation*

*Blyth Battery, Drawing 17:  
Magazine Building, interior elevations*

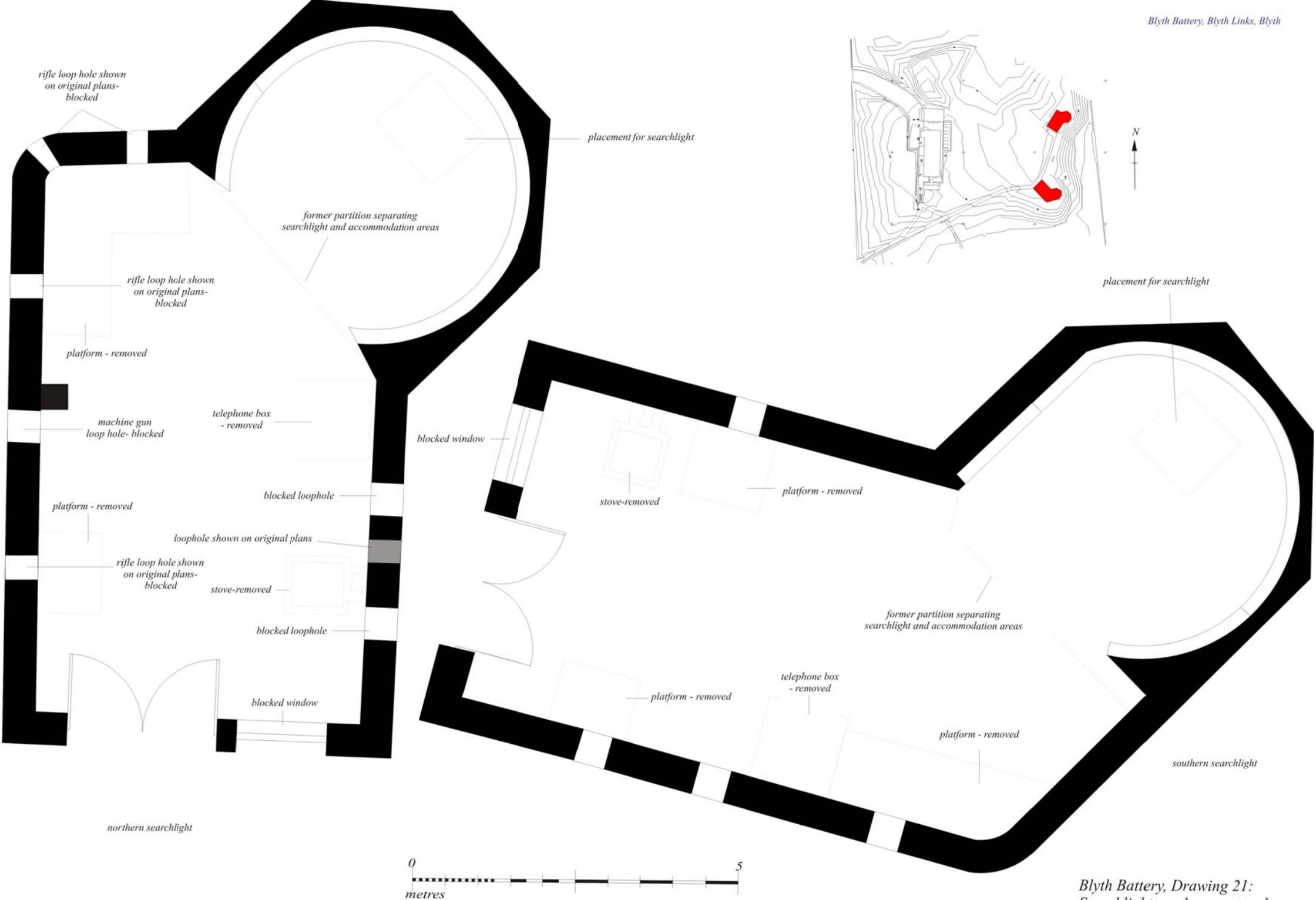




*Blyth Battery, Drawing 19:  
Magazine Building, exterior elevations*



Blyth Battery, Drawing 20:  
Shelter, phase plan and interior elevations



rifle loop hole shown on original plans - blocked

placement for searchlight

former partition separating searchlight and accommodation areas

rifle loop hole shown on original plans - blocked

platform - removed

machine gun loop hole - blocked

telephone box - removed

blocked window

blocked loophole

stove-removed

platform - removed

placement for searchlight

platform - removed

loophole shown on original plans

former partition separating searchlight and accommodation areas

rifle loop hole shown on original plans - blocked

stove-removed

blocked loophole

platform - removed

telephone box - removed

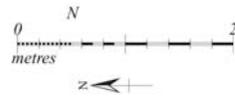
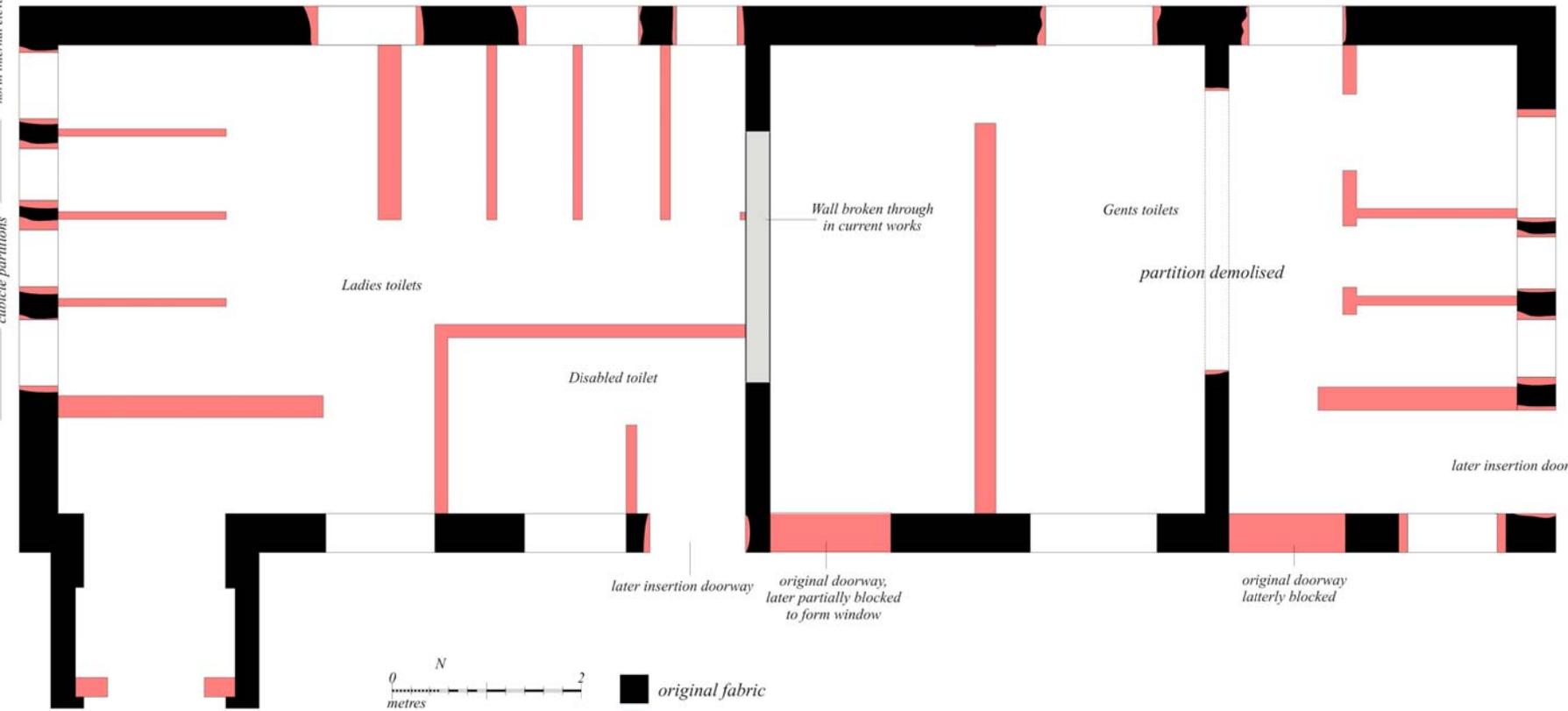
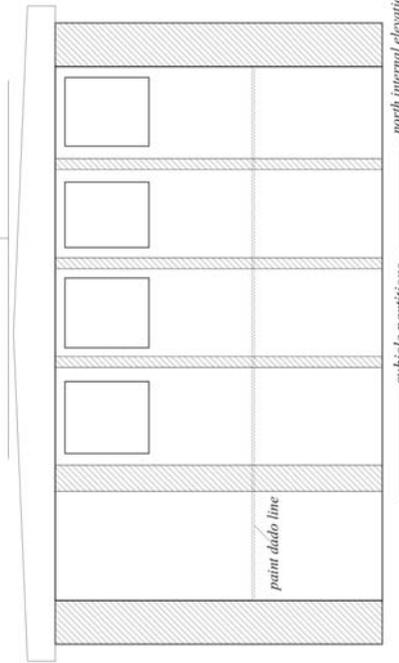
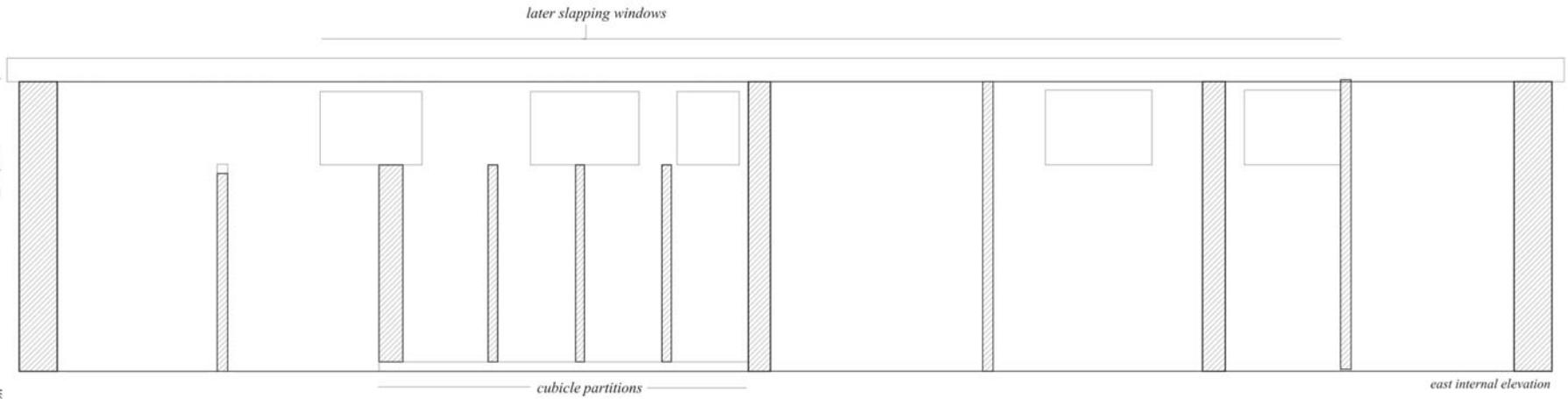
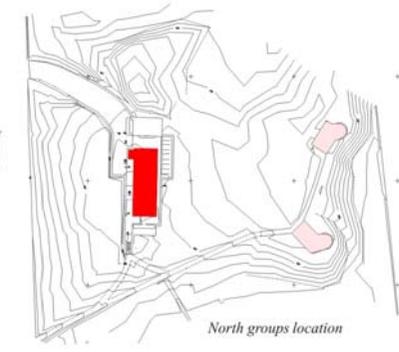
platform - removed

southern searchlight

northern searchlight



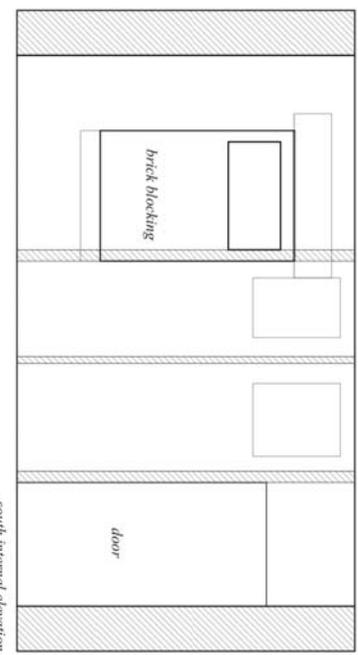
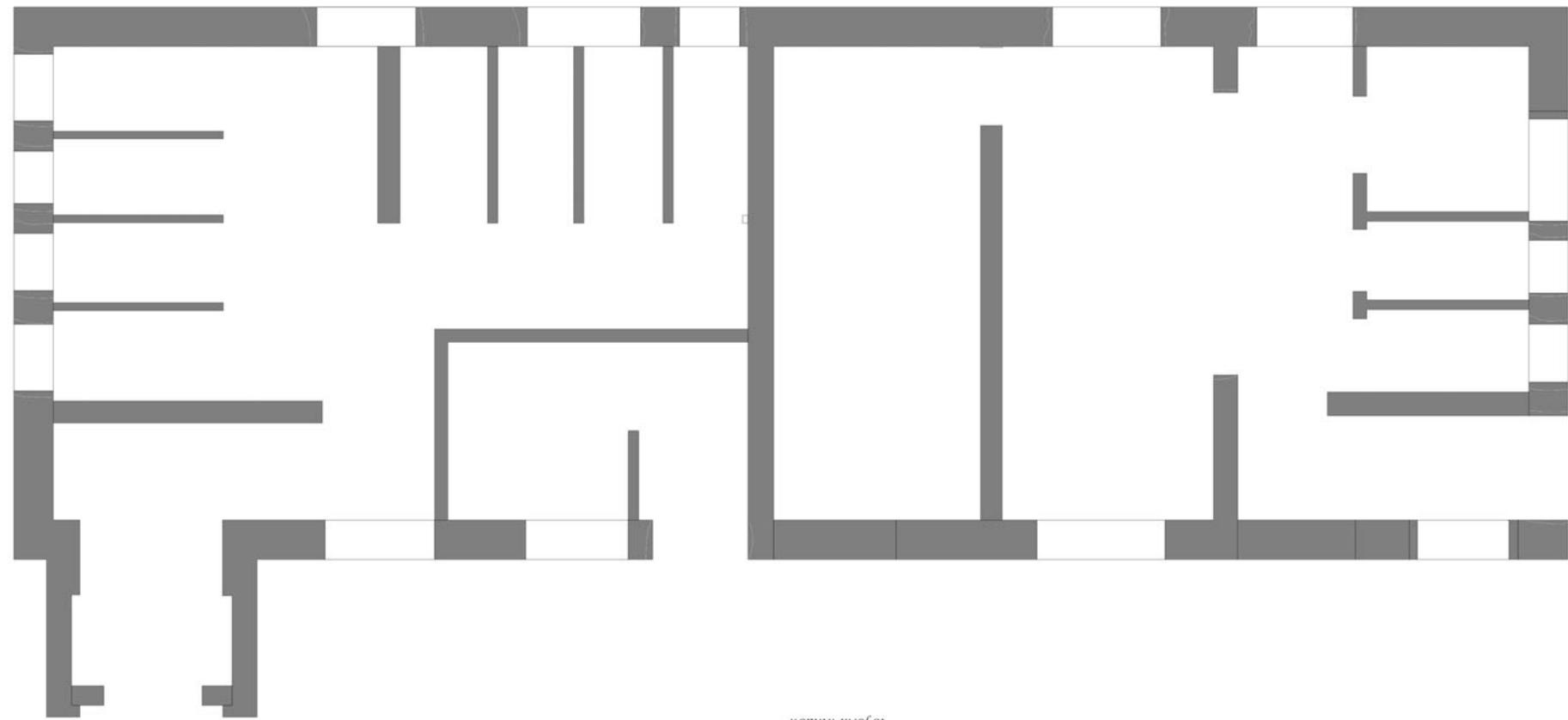
Blyth Battery, Drawing 21: Searchlight emplacements, plans



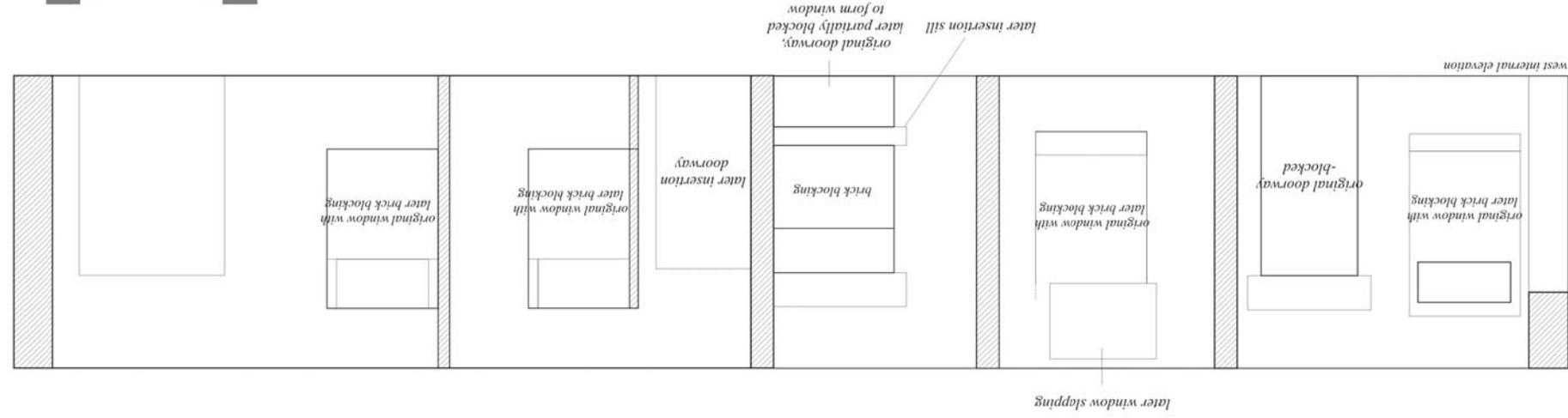
original fabric

secondary fabric

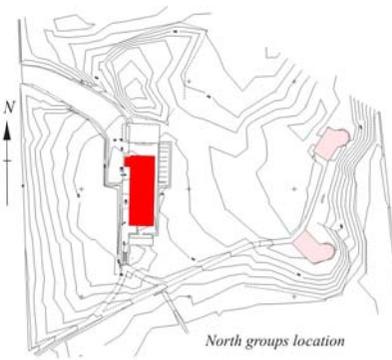
Blyth Battery, Drawing 22  
Engine House, interior elevations



south internal elevation



west internal elevation

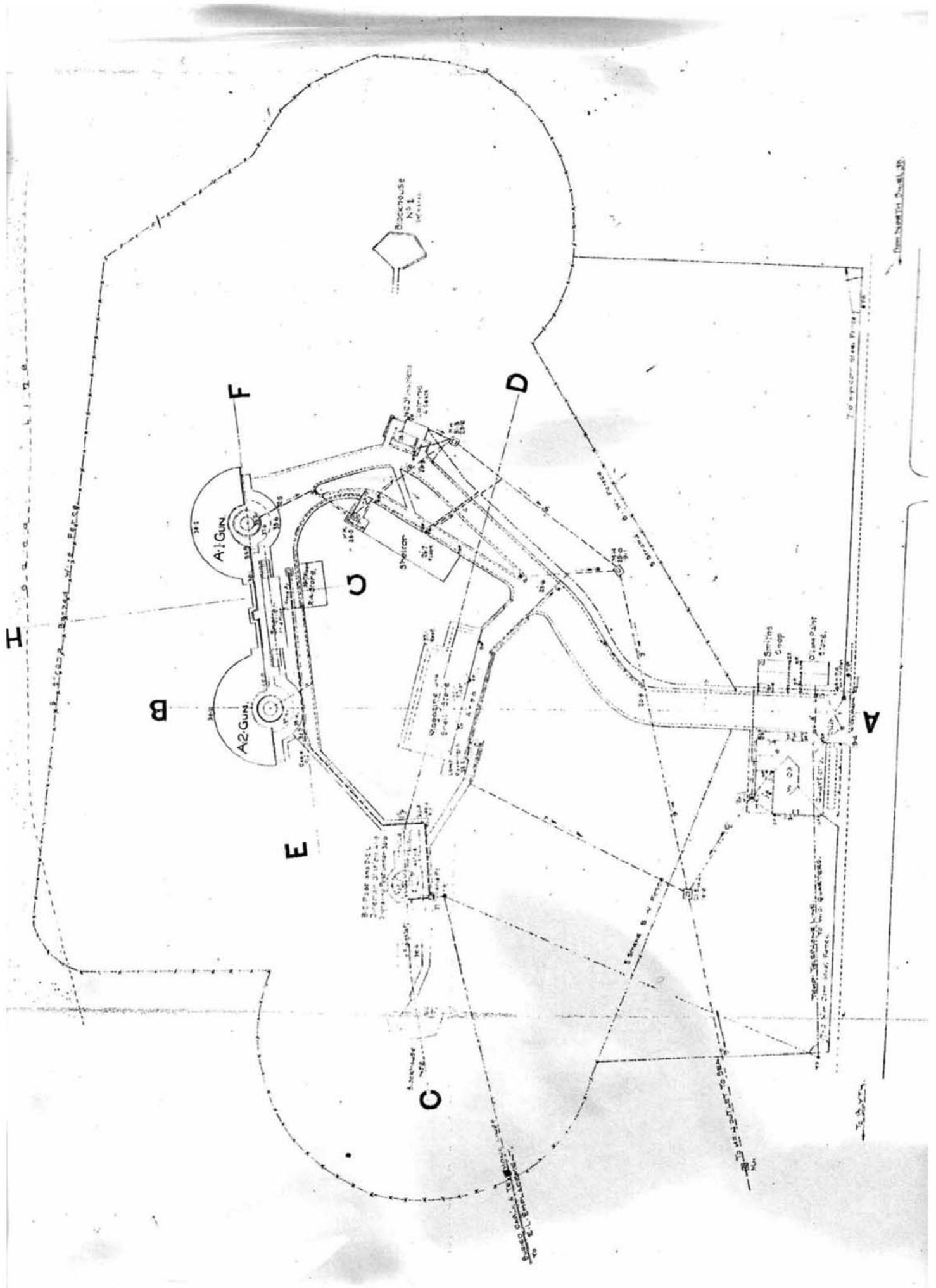


North groups location

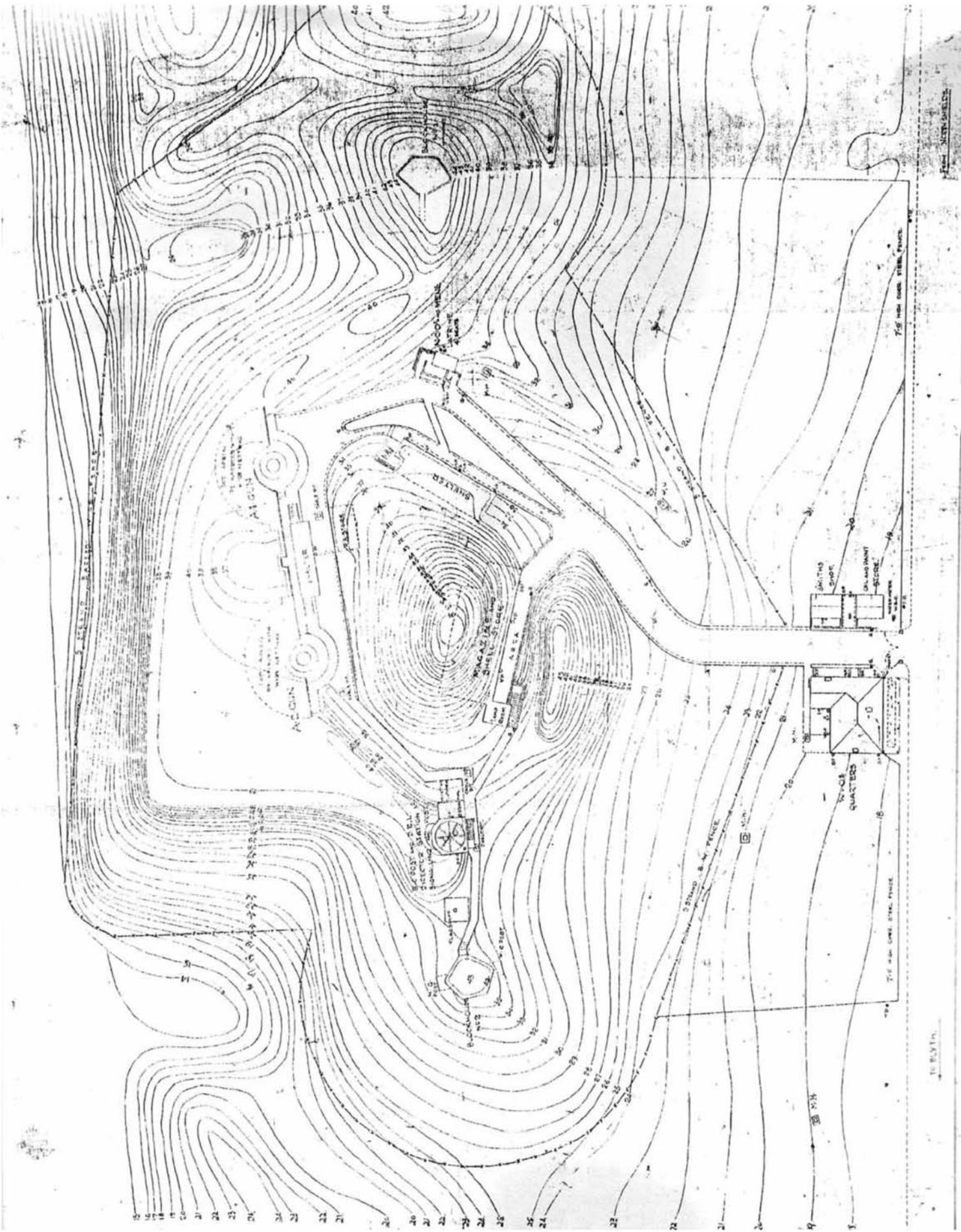
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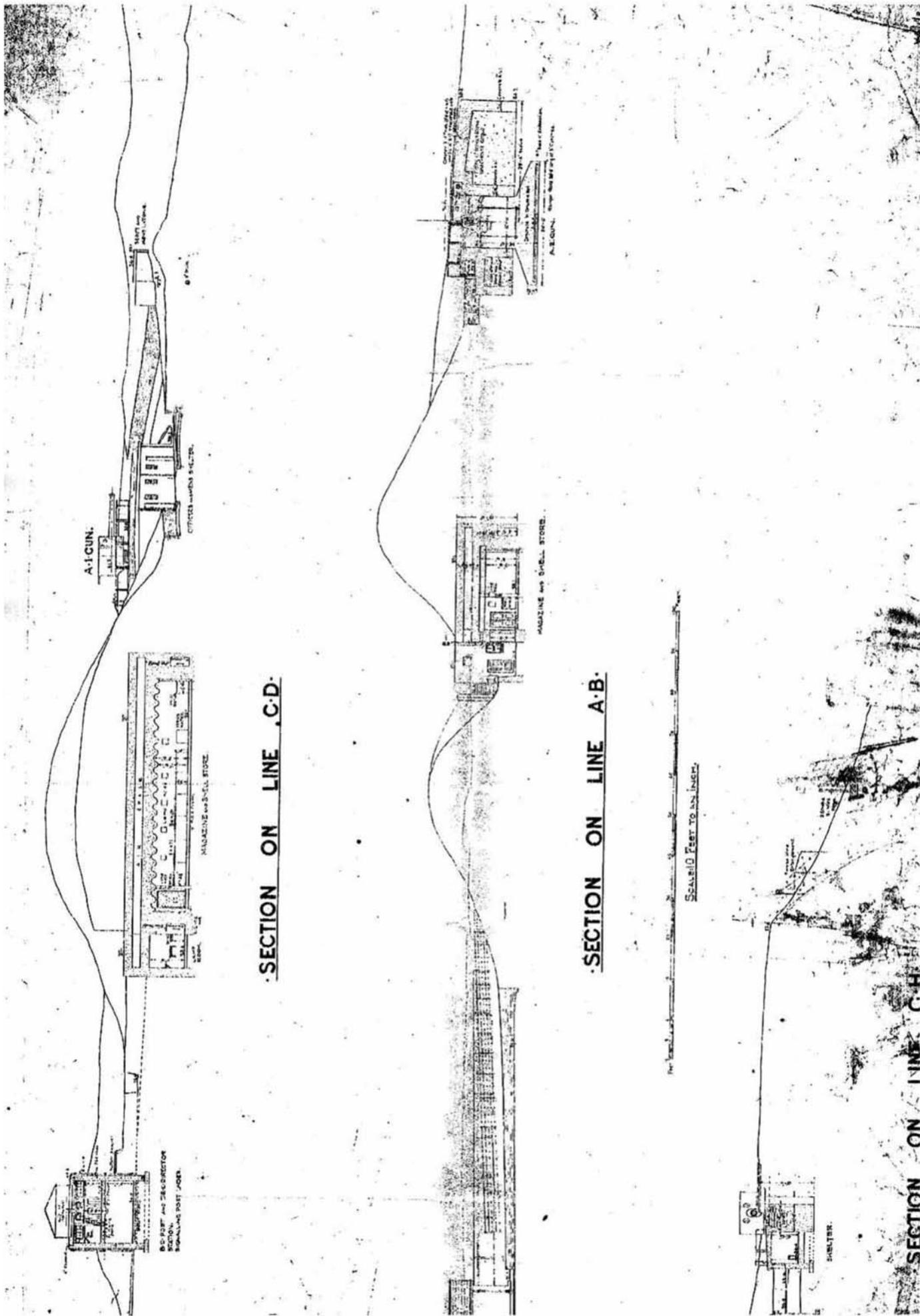
Blyth Battery, Drawing 23:  
Engine House, interior elevations

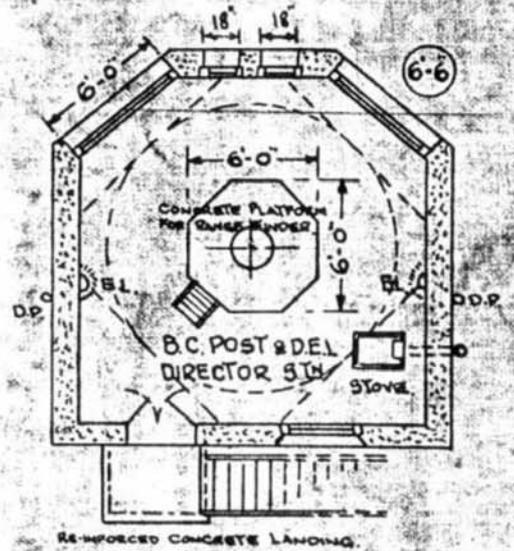
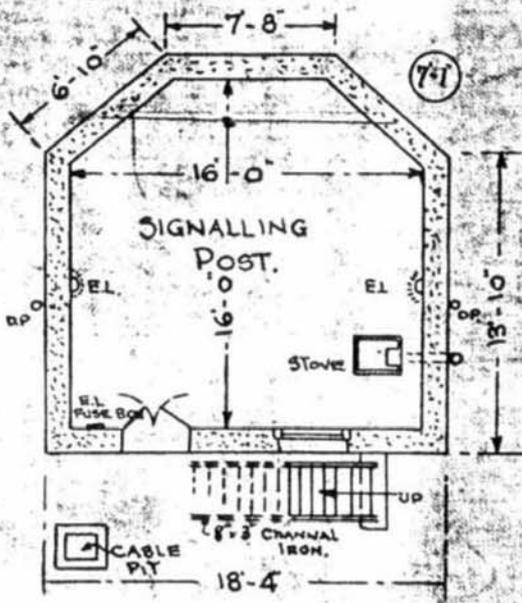


Southern Building Group, Plan - Drawing 1

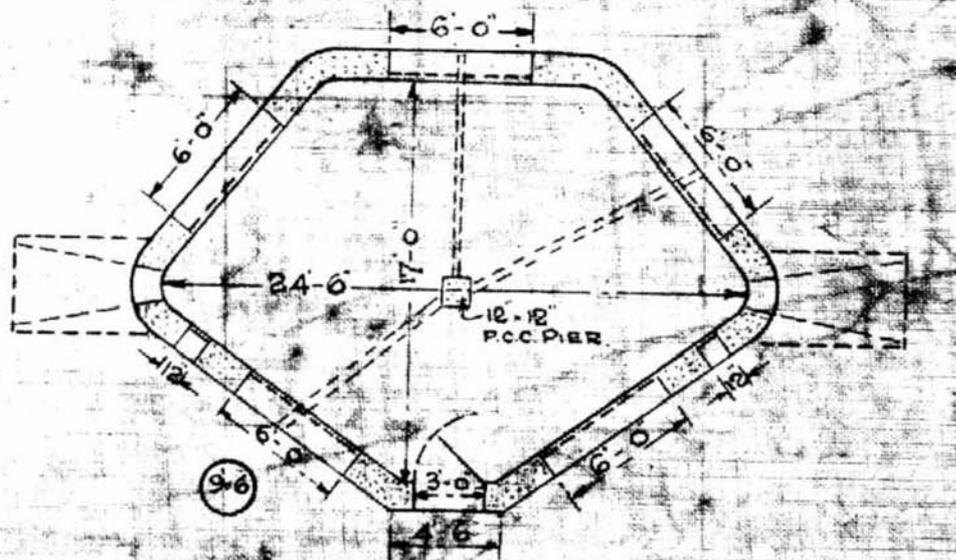


Southern Building Group, Topographic Survey - Drawing 2





WWI BOP - Drawing 4

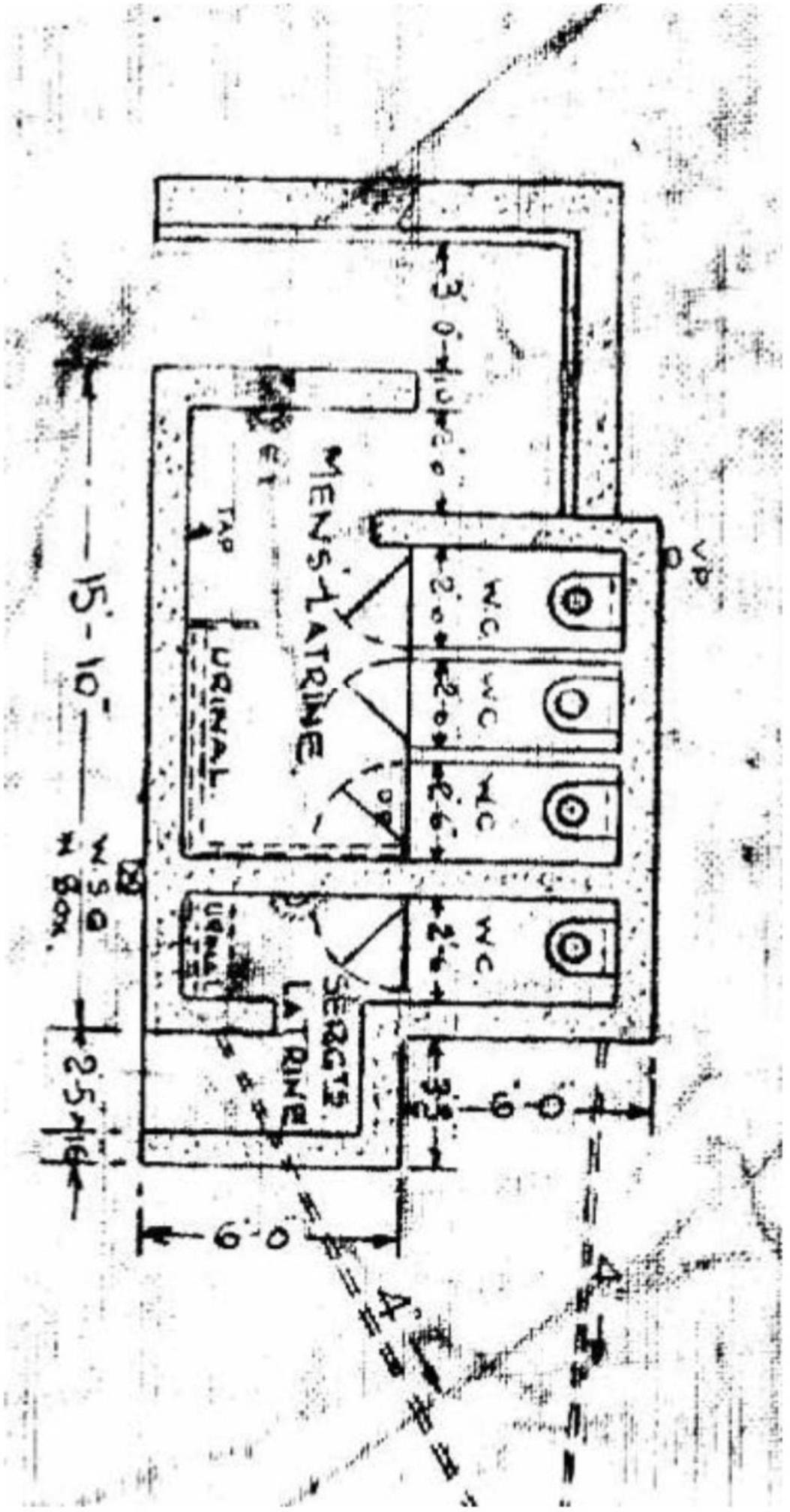


BLOCKHOUSE No. 2.

Blockhouse - Drawing 5







*Latrines - Drawing 9*

# E. L. EMPLACEMENT BLOCK PLAN

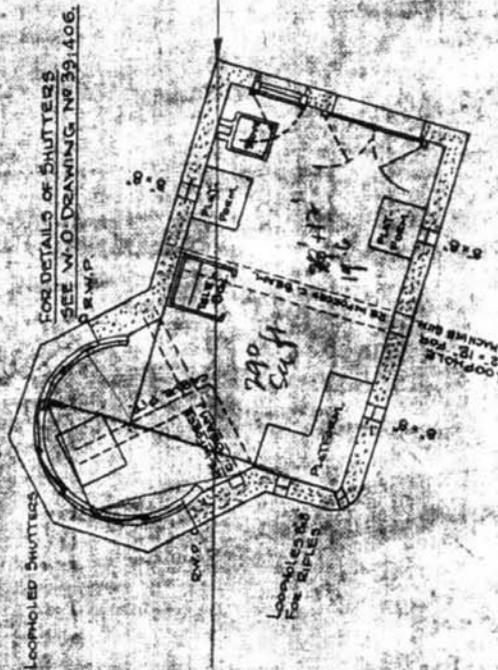
SCALE 30 FEET TO AN INCH



REFERENCE	
DEPTH OF EXISTING HOUSING	.....
SOIL MOISTURE	.....
DRAINS	.....
WATER SUPPLY	.....
LEVELS (1917)	.....
COALS L. (1917)	.....
TELEPHONE LINES (1917)	.....
STREET LIGHTS CAPACITY	.....
WATER	.....
BURN WATER DOWN	.....
RAILS (TOP)	.....
MAN HOLES	.....
REMARKS: THIS PLAN SHOWS THE LOCATION OF THE PROPOSED EMPLACEMENT AND THE EXISTING HOUSING.	



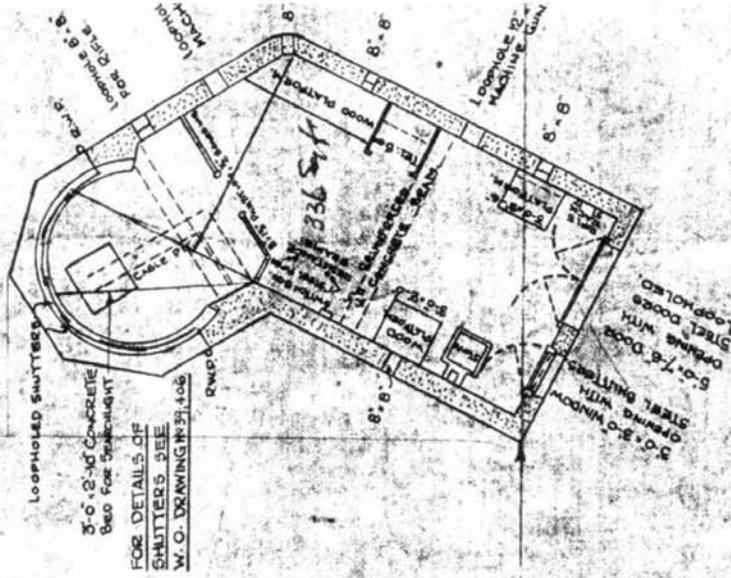
SECTION ON A.B.



NO 2 · E · L

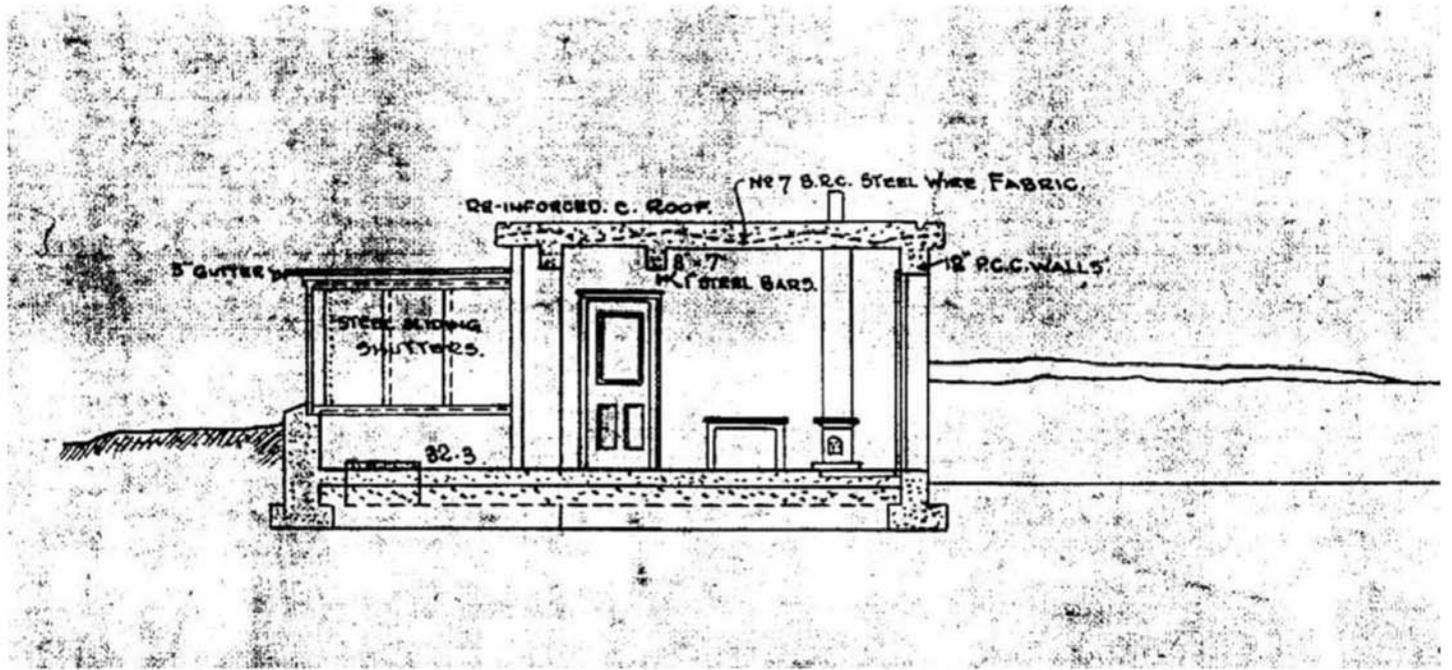
EMPLACEMENT.

55'-0"  
POSITION AS EXISTING.

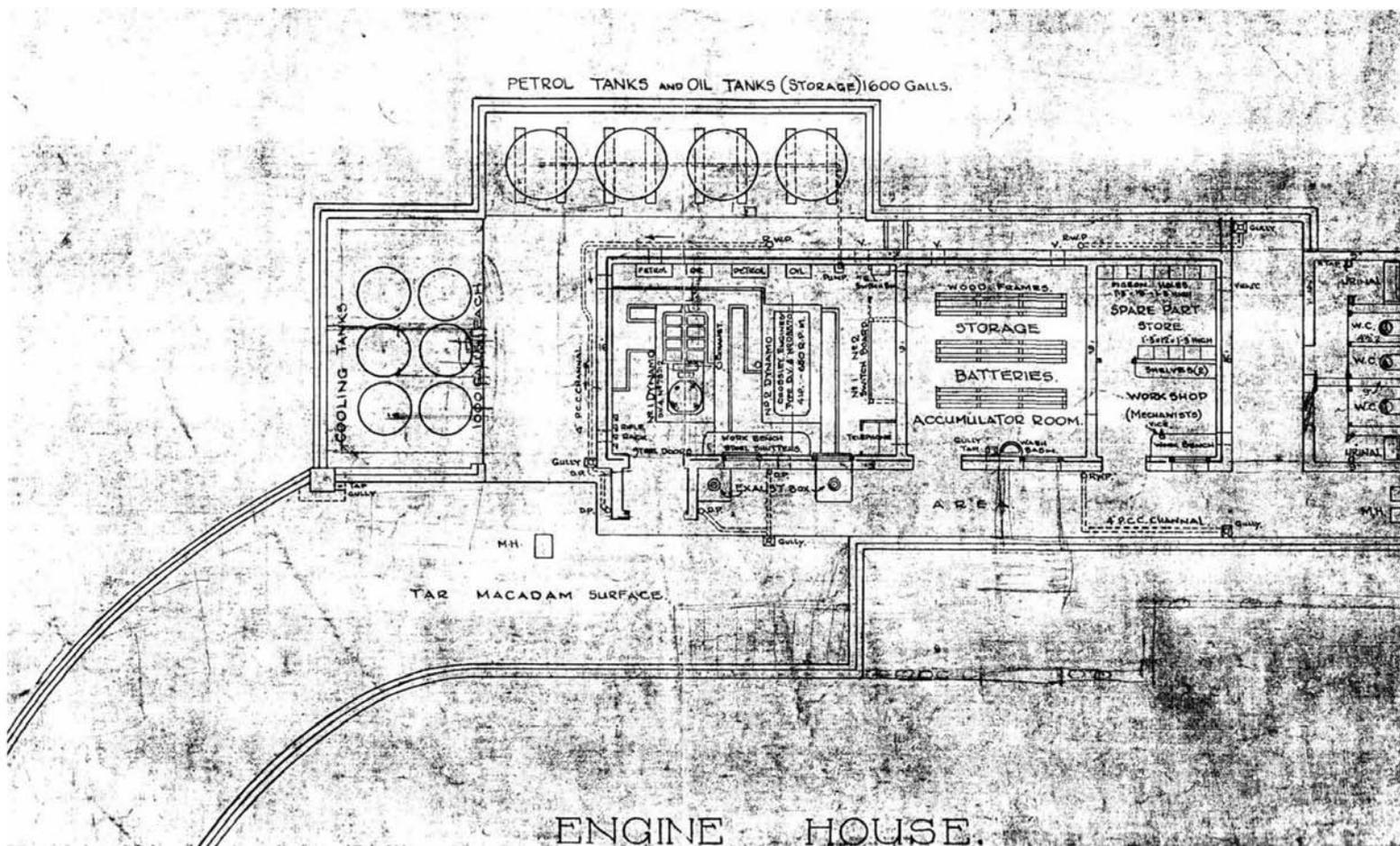


NO 1 · E · L

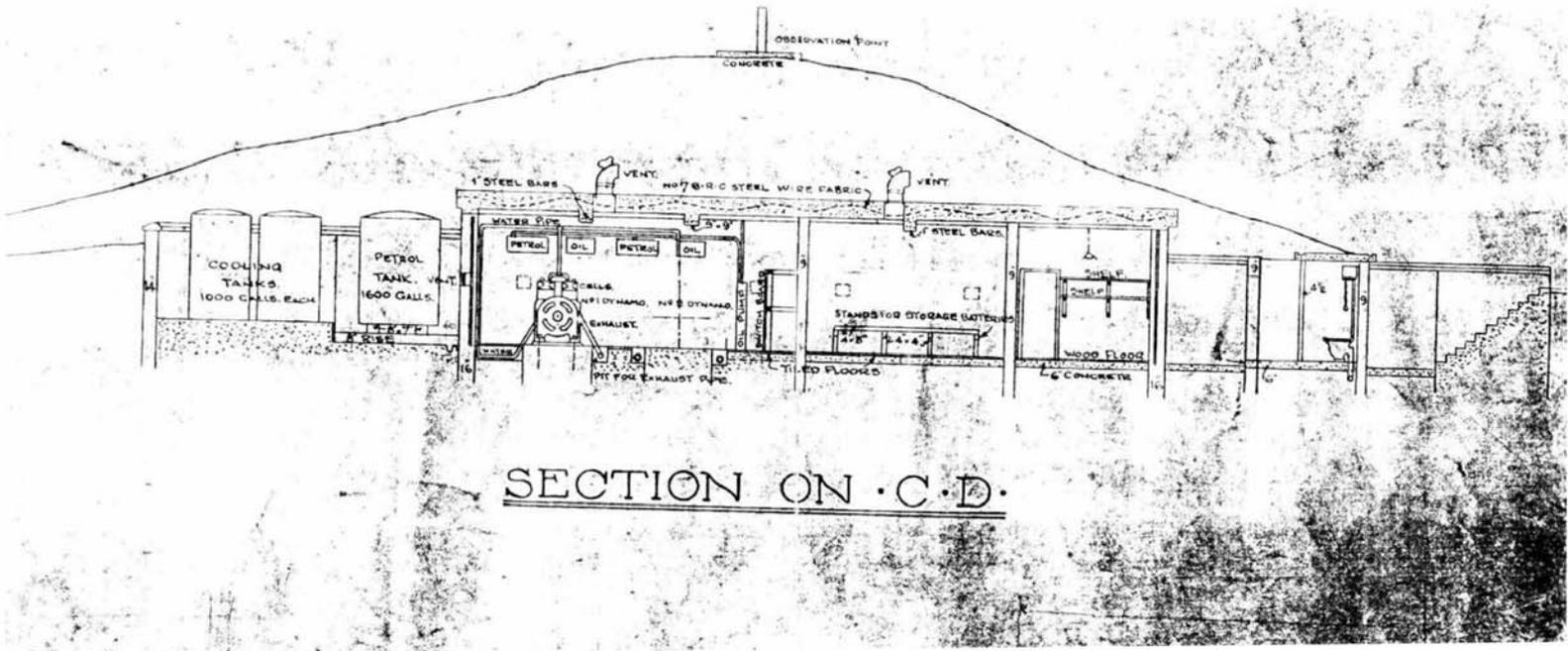
EMPLACEMENT.



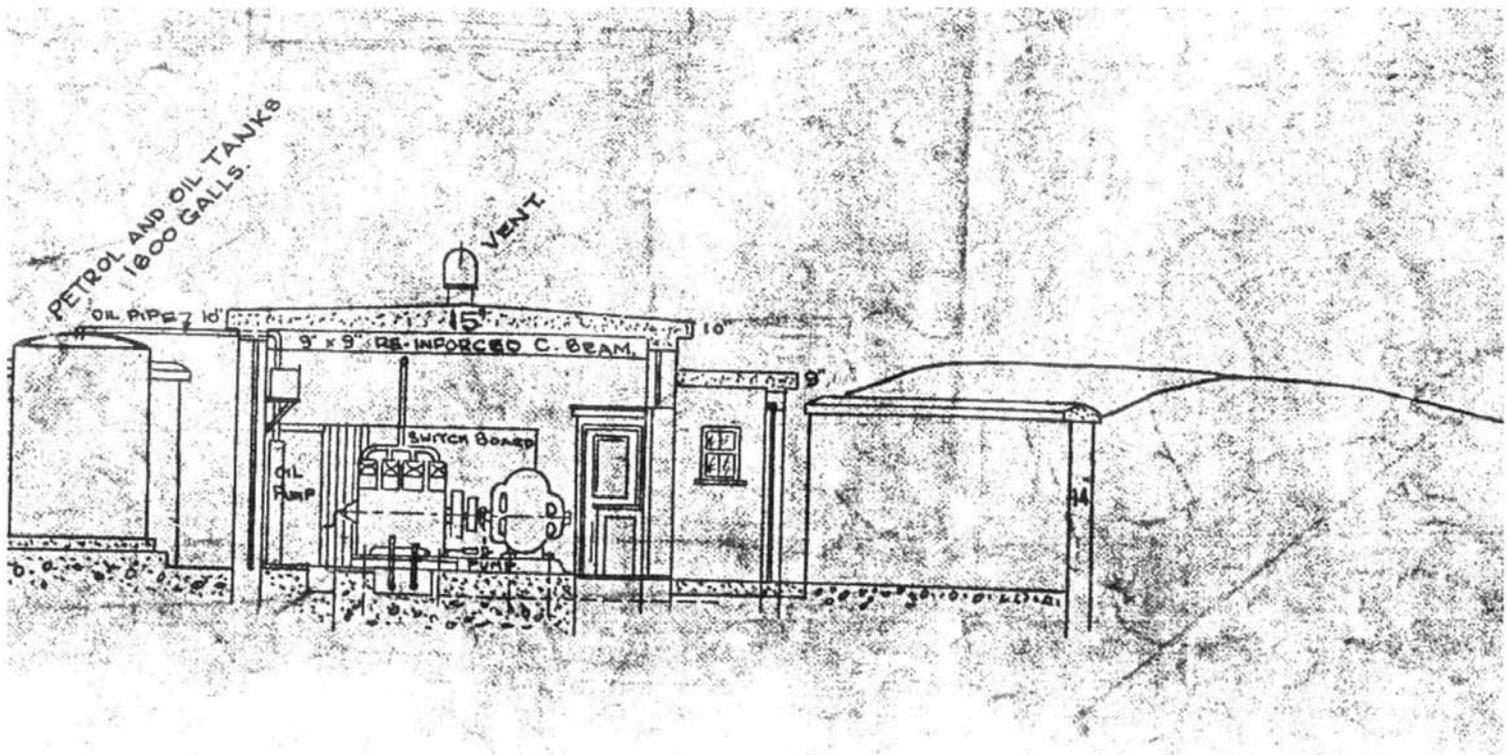
*Searchlight Emplacement, section drawing - Drawing 12*



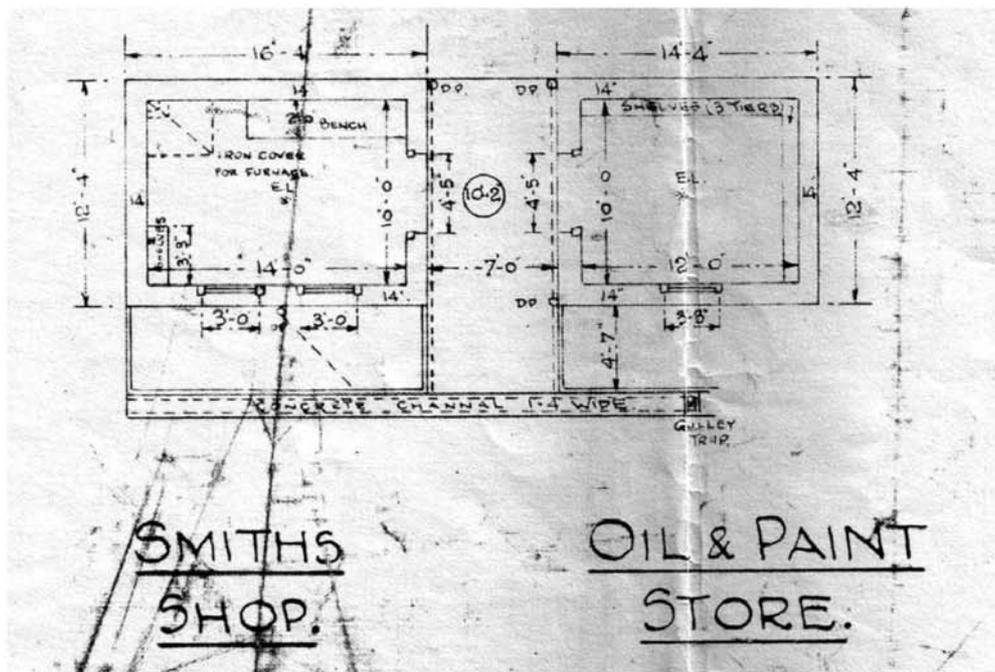
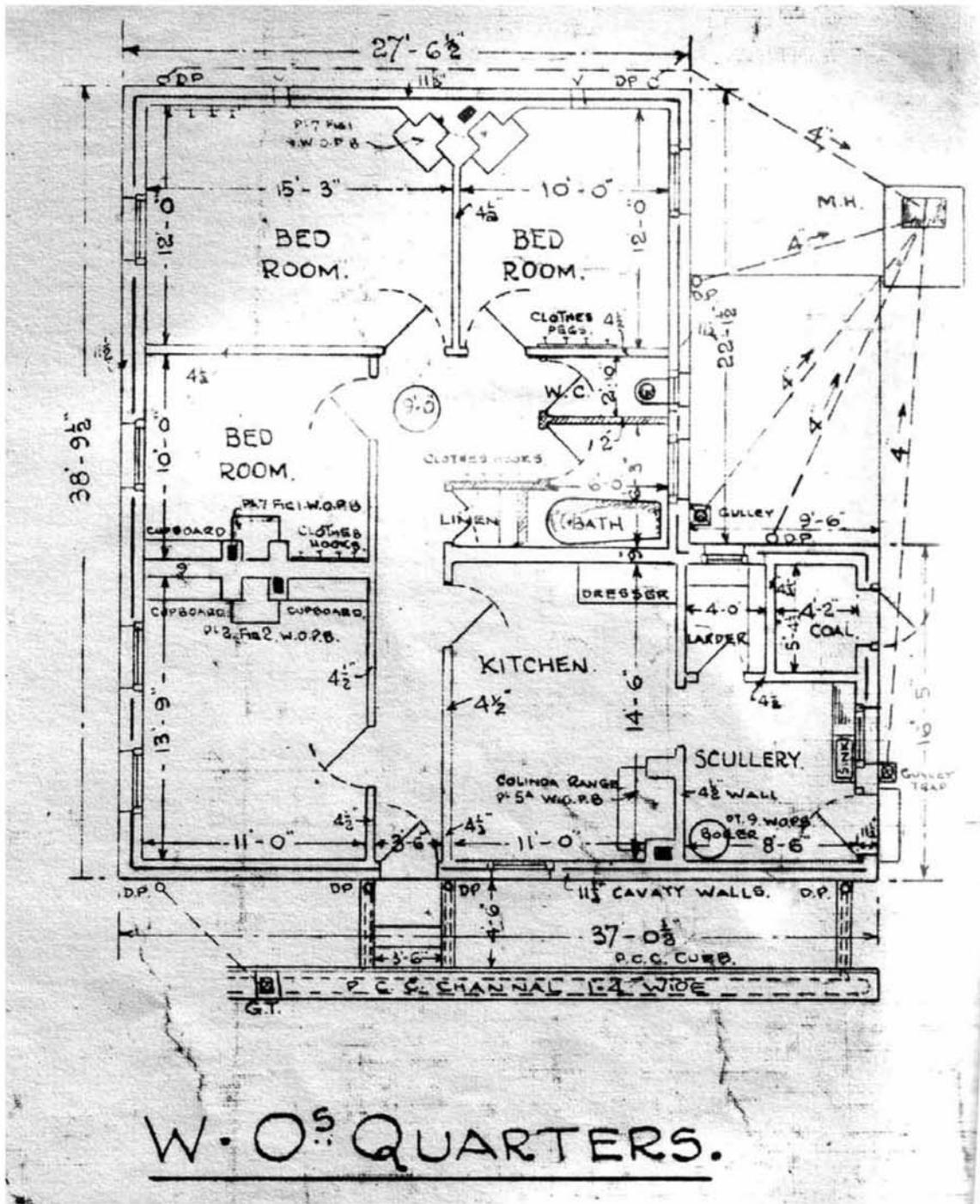
*Engine House - Drawing 13*



*Engine House, longitudinal section - Drawing 14*



*Engine House, cross section - Drawing 15*



**Appendix C: Photographic register**

Frame	Building/room no.	Aspect	Date	Taken by	Description
1	Shelter	W	9/12/08	Kmacf	General view
2	Shelter	N	9/12/08	Kmacf	E and S elevation
3	Shelter	N	9/12/08	Kmacf	S elevation
4	Shelter (room 5)	W	9/12/08	Kmacf	View through door into gents toilets
5	Shelter (room 6)	W	9/12/08	Kmacf	W elevation
6	Shelter (room 6)	SW	9/12/08	Kmacf	S elevation
7	Shelter (room 6)	S	9/12/08	Kmacf	S elevation – sink detail
8	Shelter (room 5)	NW	9/12/08	Kmacf	NW corner – door into room 1
9	Shelter (room 5)	N	9/12/08	Kmacf	NW corner – door into room 1 detail
10	Shelter (room 1)	W	9/12/08	Kmacf	W wall – toilet and sink
11	Shelter (room 1)	E	9/12/08	Kmacf	E wall – graffiti
12	Shelter (room 5)	E	9/12/08	Kmacf	Doors to rooms 2 and 3
13	Shelter (room 5)	E	9/12/08	Kmacf	Doors to rooms 2 and 3
14	Shelter (room 5)	N	9/12/08	Kmacf	N wall – urinals
15	Shelter (room 2)	N	9/12/08	Kmacf	N wall - toilet
16	Shelter (room 2)	W	9/12/08	Kmacf	Door lock detail
17	Shelter (room 3)	E	9/12/08	Kmacf	E wall - toilet
18	Shelter (room 3)	S	9/12/08	Kmacf	Door lock and toilet roll holder detail
19	Shelter (room 4)	NE	9/12/08	Kmacf	E wall – toilet
20	Shelter (room 4)	W	9/12/08	Kmacf	W wall - graffiti
21	Shelter (room 5)	E	9/12/08	Kmacf	E wall – doorway and doorway to room 4
22	Shelter (room 5)	S	9/12/08	Kmacf	S wall window
23	Shelter (room 13)	E	9/12/08	Kmacf	General view to E wall
24	Shelter (room 13)	S	9/12/08	Kmacf	S wall - sinks
25	Shelter (room 13)	N	9/12/08	Kmacf	Doors to rooms 11 and 12
26	Shelter (room 12)	E	9/12/08	Kmacf	E wall – toilet and sink
27	Shelter (room 9)	NW	9/12/08	Kmacf	general
28	Shelter (room 3)	N	9/12/08	Kmacf	N wall - toilet
29	Shelter (room 10)	S	9/12/08	Kmacf	Door detail (interior)
30	Shelter (room 13)	W	9/12/08	Kmacf	General view to W
31	Shelter (room 13)	W	9/12/08	Kmacf	W wall N window detail
32	Shelter (room 13)	W	9/12/08	Kmacf	W wall S windows detail
33	Shelter (room 13)	N	9/12/08	Kmacf	Doors to rooms 9 and 10 detail
34	Shelter	N	9/12/08	Kmacf	Path at W end of building
35	Magazine	NE	9/12/08	AG	General exterior view
36	Magazine	NE	9/12/08	AG	W elevation
37	Magazine	E	9/12/08	AG	W elevation – door detail
38	Magazine	E	9/12/08	AG	W elevation
39	Magazine (room 2)	W	9/12/08	AG	W wall – door detail
40	Magazine (room 1)	S	9/12/08	AG	S wall and roof
41	Magazine (room 1)	N	9/12/08	AG	N wall (partition)
42	Magazine (room 2)	W	9/12/08	AG	W wall window detail
43	Magazine (room 2)	NW	9/12/08	AG	View to NW corner
44	Magazine (room 2)	W	9/12/08	AG	W wall and roof
45	Magazine (room 2)	W	9/12/08	AG	Vent in roof
46	Magazine (room 2)	NE	9/12/08	AG	General view to NE of room
47	Magazine (room 2)	W	9/12/08	AG	Partition scars on ceiling
48	Magazine (room 3)	S	9/12/08	AG	General view down room
49	Magazine (room 3)	N	9/12/08	AG	General view down room
50	Magazine (room 3)	N	9/12/08	AG	Detail of fixtures on ceiling
51	Magazine (room 3)	NE	9/12/08	AG	Bench door detail
52	Magazine (room 4)	N	9/12/08	AG	N wall – showing former shelving outline
53	Magazine (room 5)	S	9/12/08	AG	General view down room
54	Magazine (room 5)	SW	9/12/08	AG	W wall – window and shelving scar
55	Magazine (room 5)	E	9/12/08	AG	E wall – vent detail
56	Magazine (room 5)	E	9/12/08	AG	Ceiling – vent and light detail

57	Magazine (room 3)	W	9/12/08	AG	W wall - door
58	Magazine (room 3)	NE	9/12/08	AG	E wall – shelving in bench
59	Magazine (room 2)	S	9/12/08	AG	S wall – colour scheme behind wall unit
60	Magazine (room 6)	N	9/12/08	AG	S wall exterior
61	Magazine	E	9/12/08	AG	W elevation – detail of vent pipe and shuttered window
62	Magazine	E	9/12/08	AG	Rear of retaining wall and electricity box
63	Magazine	E	9/12/08	AG	W elevation – door and pulley detail
64	Magazine (room 6)	S	9/12/08	AG	S wall – blocked window and paint scheme
65	Magazine (room 6)	N	9/12/08	AG	N wall – shelve brackets and paint scheme
66	Magazine (room 6)	W	9/12/08	AG	W wall - shelve brackets and paint scheme
67	Magazine	S	9/12/08	AG	Retaining wall from above
68	Shelter	SE	9/12/08	AG	Roof
69	Artillery Store	S	9/12/08	Kmacf	Interior view to S wall
70	Artillery Store	N	9/12/08	Kmacf	Interior view to N wall
71	Artillery Store	E	9/12/08	Kmacf	E wall interior – blocked window (N)
72	Artillery Store	SE	9/12/08	Kmacf	E wall interior – blocked window (S)
73	Artillery Store	NW	9/12/08	Kmacf	E elevation exterior
74	Artillery Store	S	9/12/08	Kmacf	E and N elevations exterior
75	Gun emplacements	N	9/12/08	Kmacf	General view of W elevations – towards N emplacement
76	Gun emplacements	S	9/12/08	Kmacf	General view of W elevations – towards S emplacement
77	Gun emplacements	N	9/12/08	Kmacf	General view of emplacements
78	Gun emplacements	N	9/12/08	Kmacf	Moulded concrete at base of S emplacement, s wall
79	Gun emplacements	S	9/12/08	Kmacf	S emplacement interior
80	Gun emplacements	E	9/12/08	Kmacf	S emplacement interior – view out to sea
81	Gun emplacements	SW	9/12/08	Kmacf	S emplacement
82	Gun emplacements	NW	9/12/08	Kmacf	N emplacement
83	WWI BOP	NW	9/12/08	Kmacf	General exterior view
84	WWII BOP and Block house	N	9/12/08	Kmacf	General exterior view
85	WWI BOP	N	9/12/08	Kmacf	S elevation
86	WWI BOP	N	9/12/08	Kmacf	Metal range finder detail
87	Gun emplacements	SW	9/12/08	Kmacf	General view of rear
88	WWI BOP	E	9/12/08	Kmacf	W elevation
89	WWII BOP	NE	9/12/08	Kmacf	S and w elevations
90	WWII BOP	W	9/12/08	Kmacf	E elevation
91	WWI BOP	W	9/12/08	Kmacf	E elevation
92	WWII BOP and Block house	S	9/12/08	Kmacf	N elevations
93	Block house	N	9/12/08	Kmacf	S elevations
94	Block house	NE	9/12/08	Kmacf	S and W elevations
95	WWI BOP (1 <sup>st</sup> floor)	W	10/12/08	AG	W wall door
96	WWI BOP (1 <sup>st</sup> floor)	W	10/12/08	AG	W wall
97	WWI BOP (1 <sup>st</sup> floor)	NE	10/12/08	AG	E and N walls
98	WWI BOP (1 <sup>st</sup> floor)	SE	10/12/08	AG	Interior of metal range finder
99	WWI BOP (1 <sup>st</sup> floor)	S	10/12/08	AG	Metal range finder - wheels and viewer detail (flash)
100	WWI BOP (1 <sup>st</sup> floor)	S	10/12/08	AG	Metal range finder - wheels and viewer detail (no flash)
101	WWI BOP (1 <sup>st</sup> floor)	NE	10/12/08	AG	N wall - Window detail
102	WWI BOP (ground floor)	W	10/12/08	AG	W wall – window detail
103	WWI BOP (ground floor)	NE	10/12/08	AG	General view of room
104	WWI BOP (ground floor)	E	10/12/08	AG	E wall - Window detail
105	WWI BOP (ground floor)	W	10/12/08	AG	W wall – door frame detail
106	WWI BOP (ground floor)	W	10/12/08	AG	W wall - general
107	WWI BOP (ground floor)	W	10/12/08	AG	W wall - window
108	WWI BOP (ground floor)	SW	10/12/08	AG	Ceiling
109	Block house	N	10/12/08	AG	General interior view

110	Block house	N	10/12/08	AG	N wall and window
111	Block house	N	10/12/08	AG	N wall window detail
112	Block house	NE	10/12/08	AG	NE wall – construction detail
113	Block house	E	10/12/08	AG	E wall
114	Block house	S	10/12/08	AG	S wall doorway
115	Block house	E	10/12/08	AG	E wall
116	Block house	W	10/12/08	AG	Hinge above windows detail
117	Block house	N	10/12/08	AG	Hinge above windows detail
118	Block house	SW	10/12/08	AG	SW wall
119	Shelter (room 14)	E	10/12/08	AG	General view to E wall
120	Shelter (room 14)	W	10/12/08	AG	General view to W wall
121	Shelter (room 14)	N	10/12/08	AG	N wall
122	Shelter (room 15)	NW	10/12/08	AG	Toilet
123	Shelter (room 14)	SE	10/12/08	AG	Window in S wall
124	Gun emplacements	N	10/12/08	AG	Passageway between gun emplacements
125	Gun emplacements	SE	10/12/08	AG	Hatches in E wall of passageway between gun emplacements
126	Gun emplacements	S	10/12/08	AG	Passageway between gun emplacements
127	Gun emplacements (War Shelter –S room)	N	10/12/08	AG	General view of room
128	Gun emplacements (War Shelter –S room)	NW	10/12/08	AG	W elevation – blocked window
129	Gun emplacements (War Shelter –S room)	E	10/12/08	AG	E wall – paint scheme detail
130	Gun emplacements (War Shelter –S room)	W	10/12/08	AG	W wall – window (mostly obscured)
131	Gun emplacements (War Shelter –S room)	S	10/12/08	AG	S wall - doorway
132	Gun emplacements (Ammunition Handling Lobby)	E	10/12/08	AG	E wall – blast doors
133	Gun emplacements (Ammunition Handling Lobby)	E	10/12/08	AG	E wall – blast doors - detail
134	Gun emplacements (1 <sup>st</sup> floor – room A)	S	10/12/08	AG	S wall
135	Gun emplacements (Ammunition Handling Lobby)	NW	10/12/08	AG	View to NW corner
136	WWII BOP (room 2)	E	10/12/08	AG	General view
137	WWII BOP (room 2)	W	10/12/08	AG	General view
138	WWII BOP (room 2)	NE	10/12/08	AG	NE corner
139	WWII BOP (room 2)	N	10/12/08	AG	Possible blocking on N elevation
140	WWII BOP (room 2)	NE	10/12/08	AG	Possible blocking on N elevation and lintel
141	WWII BOP (room 3)	N	10/12/08	AG	N elevation
142	WWII BOP (room 3)	E	10/12/08	AG	E elevation
143	WWII BOP (room 3)	NE	10/12/08	AG	Central partition
144	WWII BOP (room 3)	N	10/12/08	AG	Pier at central E side of room
145	WWII BOP (room 3)	N	10/12/08	AG	Pier at central E side of room
146	WWII BOP (room 3)	SE	10/12/08	AG	Window and rivet details at SE corner of room
147	WWII BOP (room 3)	N	10/12/08	AG	Pier at central E side of room – detail of stenciling on S face
148	WWII BOP (room 3)	N	10/12/08	AG	Pier at central E side of room – detail of stenciling on S face
149	WWII BOP (room 3)	E	10/12/08	AG	Pier at central E side of room – detail of stenciling on W face
150	WWII BOP (room 3)	E	10/12/08	AG	Pier at central E side of room – detail of stenciling on W face
151	WWII BOP (room 3)	NE	10/12/08	AG	Pier at central E side of room – detail of stenciling on W face
152	WWII BOP (room 1)	S	10/12/08	AG	S wall – rear of blocked door from room 2
153	WWII BOP (room 1)	N	10/12/08	AG	N wall view
154	WWII BOP (room 1)	W	10/12/08	AG	W wall
155	WWII BOP (room 1)	S	10/12/08	AG	S wall
156	WWII BOP (room 1)	E	10/12/08	AG	E wall
157	Gun emplacement (War Shelter –N room)	N	10/12/08	AG	View to N wall
158	Gun emplacement (War Shelter –N room)	S	10/12/08	AG	View to S wall

159	Gun emplacement (War Shelter –N room)	SW	10/12/08	AG	W elevation
160	Gun emplacement (War Shelter –N room)	NW	10/12/08	AG	W elevation
161	Gun emplacement (War Shelter –N room)	W	10/12/08	AG	Floor detail at S end of room – imprint removed shelving?
162	Gun emplacement (War Shelter –N room)	N	10/12/08	AG	Detail of fishy wallpaper
163	Gun emplacement (War Shelter –N room)	E	10/12/08	AG	Paint scheme detail – E wall
164	Gun emplacement (War Shelter –N room)	E	10/12/08	AG	Paint scheme detail – E wall
165	Gun emplacement (War Shelter –N room)	V	10/12/08	AG	Roof vent
166		S	10/12/08	AG	Moulded concrete to S of shelter
167	Shelter (rooms 10, 11 & 12)	N	10/12/08	AG	Removal of partitions between stalls
168	Shelter (rooms 10)	N	10/12/08	AG	Paint scheme revealed behind partition
169	Shelter (rooms 7, 8 & 9)	NW	10/12/08	AG	Partition materials revealed by strip out
170	Shelter (room 12)	NE	10/12/08	AG	Partition materials revealed by strip out
171	Shelter (room 7)	S	10/12/08	AG	Sink removal
172	Shelter	N	10/12/08	AG	Paint scheme behind toilets
173	Shelter	W	10/12/08	AG	General view during strip out
174	Magazine	W	10/12/08	AG	W elevation – render prior to removal
175	Magazine	W	10/12/08	AG	W elevation – render prior to removal
176	Engine house	SE	10/12/08	AG	general
177	Engine house	SE	10/12/08	Kmacf	W elevation
178	Engine house	E	10/12/08	Kmacf	W elevation porch
179	Engine house (room 1)	N	10/12/08	Kmacf	N wall cubicles
180	Engine house (room 1)	NW	10/12/08	Kmacf	Cubicle door detail
181	Engine house (room 1)	N	10/12/08	Kmacf	Cubicle detail
182	Engine house (room 1)	E	10/12/08	Kmacf	Paint scheme behind toilet (W wall)
183	Engine house (room 1)	E	10/12/08	Kmacf	Window detail – E wall
184	Engine house (room 1)	-	10/12/08	Kmacf	Ceiling vent
185	Engine house (room 1)	SW	10/12/08	Kmacf	Blocked doorway to disabled toilet
186	Engine house (room 1)	SE	10/12/08	Kmacf	Toilet cubicles against E wall
187	Engine house (room 1)	W	10/12/08	Kmacf	View
188	Engine house (room 2)	N	10/12/08	Kmacf	General view
189	Engine house (room 2)	E	10/12/08	Kmacf	General view and paint scheme
190	Engine house (room 3)	N	10/12/08	Kmacf	General view of entrance
191	Engine house (room 3)	S	10/12/08	Kmacf	Cubicles at S wall
192	Engine house (room 3)	W	10/12/08	Kmacf	W wall
193	Engine house (room 3)	SW	10/12/08	Kmacf	General view
194	Engine house (room 3)	S	10/12/08	Kmacf	S wall windows
195	Engine house (room 3)	N	10/12/08	Kmacf	Removed urinals on W wall
196	Engine house (room 3)	W	10/12/08	Kmacf	W wall
197	Engine house (room 3)	W	10/12/08	Kmacf	W wall blocked doorway
198	Engine house (room 3)	N	10/12/08	Kmacf	W wall blocked window and doorway
199	Engine house	N	10/12/08	Kmacf	W elevation
200	Engine house	NE	10/12/08	Kmacf	N block – S and W elevations
201	Engine house	S	10/12/08	Kmacf	Concrete bays to W of building
202	Engine house	S	10/12/08	Kmacf	View down alley to W of building
203	Engine house	N	10/12/08	Kmacf	Dog on S wall of s block
204	Search light buildings	E	10/12/08	Kmacf	General view of both buildings
205	N searchlight building	N	10/12/08	Kmacf	S elevation
206	N searchlight building	N	10/12/08	Kmacf	General view interior
207	N searchlight building	NE	10/12/08	Kmacf	Blocked opening in light emplacement
208	N searchlight building	W	10/12/08	Kmacf	Opening in W wall
209	N searchlight building	NE	10/12/08	Kmacf	E wall
210	N searchlight building	S	10/12/08	Kmacf	S wall
211	N searchlight building	N	10/12/08	Kmacf	Roller for shutter in light emplacement

212	N searchlight building	E	10/12/08	Kmacf	Gun loop in E wall
213	N searchlight building	E	10/12/08	Kmacf	Gun loop in E wall
214	N searchlight building	S	10/12/08	Kmacf	S wall – blocked window
215	N searchlight building	S	10/12/08	Kmacf	S wall door detail – blast shutter frame
216	S Searchlight building	S	10/12/08	Kmacf	N elevation
217	S Searchlight building	E	10/12/08	Kmacf	General interior view
218	S Searchlight building	N	10/12/08	Kmacf	Blocked opening in light emplacement
219	S Searchlight building	SW	10/12/08	Kmacf	S wall
220	S Searchlight building	W	10/12/08	Kmacf	W wall
221	S Searchlight building	N	10/12/08	Kmacf	Flue in NW corner
222	S Searchlight building	S	10/12/08	Kmacf	Opening in S wall
223	S Searchlight building	W	10/12/08	Kmacf	E elevation
224	N Searchlight building	NW	10/12/08	Kmacf	E elevation
225	Magazine	E	10/12/08	Kmacf	Removal of bricked over opening
226	Magazine	E	10/12/08	Kmacf	Interior of concealed void after removal of bricks
227	Magazine	E	10/12/08	Kmacf	Interior of concealed void after removal of bricks
228	Shelter (rooms 1-5)	E	12/1/09	Kmacf	General view to E wall
229	Shelter (rooms 1-5)	E	12/1/09	Kmacf	General view to E wall
230	Shelter (rooms 1-5)	N	12/1/09	Kmacf	N wall – after removal of partitions
231	Shelter (rooms 1-5)	W	12/1/09	Kmacf	W wall – after removal of partitions
232	Shelter (rooms 1-5)	SE	12/1/09	Kmacf	S wall – after removal of sinks and partitions
233	Shelter (rooms 7-13)	W	12/1/09	Kmacf	W wall – with partitions removed
234	Shelter (rooms 7-13)	NE	12/1/09	Kmacf	View to NE corner with removed partitions
235	Magazine (rooms 1 & 2)	E	12/1/09	Kmacf	General view after clear out
236	Magazine (room 5)	W	12/1/09	Kmacf	General view after removal clear out
237	Magazine (room 2, 3 & 5)	SW	12/1/09	Kmacf	General view after clear out
238	Magazine (room 3)	W	12/1/09	Kmacf	General view – after clear out
239	Magazine (room 2)	NE	12/1/09	Kmacf	Partition scars across floor
240	WWI BOP (ground floor)	SE	12/1/09	Kmacf	SE and s walls - Skirting dooks and paint scars
241	WWI BOP (ground floor)	W	12/1/09	Kmacf	W wall – window and paint scheme
242	Block House	S	12/1/09	Kmacf	S wall
243	Block House	NE	12/1/09	Kmacf	NE wall – blocked hatch
244	Block House	S	12/1/09	Kmacf	Dooks in floor in front of S wall
245	Block House	S	12/1/09	Kmacf	N elevation – blocked hatch
246	WWII BOP (room 1)	S	12/1/09	Kmacf	S wall – blocked door
247	WWII BOP (room 3)	N	12/1/09	Kmacf	Ranging pier – S side
248	WWII BOP (room 3)	N	12/1/09	Kmacf	Ranging pier – S side lettering detail
249	WWII BOP (room 3)	E	12/1/09	Kmacf	Ranging pier – W side lettering detail
250	WWII BOP (room 3)	N	12/1/09	Kmacf	General view to N
251	WWII BOP (room 3)	SE	12/1/09	Kmacf	General view to SE
252	S Searchlight Building	N	12/1/09	Kmacf	Blocked light opening
253	S Searchlight Building	N	12/1/09	Kmacf	Detail of shutter mechanism
254	S Searchlight Building	W	12/1/09	Kmacf	General view to W wall with doorway and blocked window
255	N Searchlight Building	N	12/1/09	Kmacf	Blocked window opening
256	N Searchlight Building	E	12/1/09	Kmacf	E wall – gun loop
257	N Searchlight Building	N	12/1/09	Kmacf	Floor detail
258	Engine House (rooms 1 & 2)	S	12/1/09	Kmacf	General view after removal of partitions
259	Engine House (room 1)	S	12/1/09	Kmacf	General view after removal of partitions
260	Engine House (room 1)	N	12/1/09	Kmacf	General view after removal of partitions
261	Engine House (room 1)	NE	12/1/09	Kmacf	General view after removal of partitions
262	Engine House (room 1)	N	12/1/09	Kmacf	Paint scheme on n wall
263	Engine house (room 3)	N	12/1/09	Kmacf	General view after removal of partitions
264	Engine house (room 3)	SE	12/1/09	Kmacf	General view after removal of partitions
265	Engine house (room 3)	S	12/1/09	Kmacf	General view of S wall after removal of partitions
266	Engine house (room 3)	W	12/1/09	Kmacf	Blocked door and window at S end of W wall
267	Engine house (room 3)	W	12/1/09	Kmacf	Blocked openings at n end of W wall

268	Engine House – (toilets to S)	SE	12/1/09	Kmacf	General view
269	Engine House – (toilets to S)	SW	12/1/09	Kmacf	General view
270	Artillery Store	S	13/1/09	Kmacf	General view to S wall
271	Artillery Store	N	13/1/09	Kmacf	General view to N wall
272	Artillery Store	NW	13/1/09	Kmacf	W wall
273	Artillery Store	SE	13/1/09	Kmacf	E wall
274	War Shelter (N section)	N	13/1/09	Kmacf	General view to N wall
275	War Shelter (N section)	S	13/1/09	Kmacf	General view to S wall
276	War Shelter (N section)	S	13/1/09	Kmacf	Coat hook detail on W wall
277	War Shelter (N section)	SW	13/1/09	Kmacf	Fire place at SW corner
278	War Shelter (N section)	NW	13/1/09	Kmacf	W wall – N section
279	War Shelter (S section)	N	13/1/09	Kmacf	General view to N wall
280	War Shelter (S section)	S	13/1/09	Kmacf	General view to S wall
281	War Shelter (S section)	NW	13/1/09	Kmacf	W wall – blocked windows
282	War Shelter (S section)	NE	13/1/09	Kmacf	E wall – paint scheme
283	WWI BOP	E	13/1/09	Kmacf	Rotating roof mechanism detail
284	WWI BOP	-	13/1/09	Kmacf	Rotating roof detail
285	WWI BOP	E	13/1/09	Kmacf	Rotating roof mechanism detail
286	WWI BOP	E	13/1/09	Kmacf	Rotating roof mechanism detail
287	WWI BOP	E	13/1/09	Kmacf	Rotating roof mechanism detail
288	WWI BOP	-	13/1/09	Kmacf	Rotating roof mechanism detail
289	WWI BOP	-	13/1/09	Kmacf	Rotating roof mechanism detail
290	WWI BOP	-	13/1/09	Kmacf	Rotating roof mechanism detail
291	WWI BOP	-	13/1/09	Kmacf	Rotating roof mechanism detail
292	WWI BOP	-	13/1/09	Kmacf	Rotating roof mechanism detail
293	Magazine	E	13/1/09	Kmacf	'Air space' in walls
294	Magazine	E	13/1/09	Kmacf	'Air space' in walls
295	Engine house	S	6/3/09	Kmacf	Engine house interior, following removal of later partitions
296	Engine house	S	6/3/09	Kmacf	Engine house interior, following removal of later partitions
297	Engine house	S	6/3/09	Kmacf	Engine house interior, following removal of later partitions
298	Engine house	W	6/3/09	Kmacf	Removed brick partition
299	Engine house	-	6/3/9	Kmacf	Derail of wall ties removed from within brick masonry
300	Engine house	S	6/3/09	Kmacf	Brickwork on S elevation
301	Engine house	W	6/3/09	Kmacf	Brickwork on W elevation
302	WW1 BOP	-	6/3/09	Kmacf	Earlier paint scheme
303	WW1 BOP	-	6/3/09	Kmacf	Earlier paint scheme
304	WW1 BOP	-	6/3/09	Kmacf	Earlier paint scheme
305	-	-	6/3/09	Kmacf	-
306	N gun emplacement		6/3/09	Kmacf	Earlier paint scheme
307	N gun emplacement		6/3/09	Kmacf	Earlier paint scheme
308	N gun emplacement	NW	6/3/09	Kmacf	Detail of iron beam end exposed within masonry
309	N gun emplacement	NW	6/3/09	Kmacf	Detail of iron beam end exposed within masonry
310	S gun emplacement	W	6/3/09	Kmacf	Earlier paint schemes
311	S gun emplacement	W	6/3/09	Kmacf	Earlier paint schemes
312	S gun emplacement	W	6/3/09	Kmacf	Earlier paint schemes
313	S Gun emplacement	NW	6/3/09	Kmacf	New paint scheme on steel beam
314	S Gun emplacement	S	6/3/09	Kmacf	New paint scheme on steel beam
315	S Gun emplacement	E	6/3/09	Kmacf	Earlier paint scheme on west exterior
316	S Gun emplacement	E	6/3/09	Kmacf	Earlier paint scheme on west exterior
317	S Gun emplacement	E	6/3/09	Kmacf	Earlier paint scheme on west exterior
318	Magazine Building	W	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
319	Magazine Building	W	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
320	Magazine Building	W	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
321	Magazine Building	N	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
322	Magazine Building	N	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
323	Magazine Building	N	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
324	Magazine Building	E	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
325	Magazine Building	SE	6/3/09	Kmacf	Surviving south remnant of partition between clean and dirty rooms

326	Magazine Building		6/3/09	Kmacf	Evidence for north half of partition between clean and dirty rooms
327	Magazine Building	w	6/3/09	Kmacf	Paint out line on floor, clean to dirty room
328	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
329	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
330	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
331	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
332	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
333	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
334	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
335	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
336	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
337	Magazine building	E	6/3/09	Kmacf	Blast chamber around building
338	Magazine building	S	6/3/09	Kmacf	Blast chamber around building
339	WWI BOP	-	6/3/09	Kmacf	Rotating turret – operating handle detail
340	WWI BOP	-	6/3/09	Kmacf	Rotating turret detail
341	WWI BOP	-	6/3/09	Kmacf	Rotating turret – operating handle detail
342	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
343	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
344	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
345	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
346	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
347	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
348	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
349	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
350	-	-	6/3/09	Kmacf	-
351	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
352	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
353	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
354	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
355	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
356	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
357	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
358	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
359	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
360	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
361	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
362	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
363	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
364	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
365	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
366	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
367	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
368	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
369	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail
370	WWI BOP	-	6/3/09	Kmacf	Rotating turret – detail

*Appendix D: Photographic Contact sheets*



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