JOHN MOORE **HERITAGE SERVICES**

A

BUILDING INVESTIGATION AND PHOTOGRAPHIC RECORD

OF THE AIR RAID PRECAUTIONS SHELTER

AT

ST CHRISTOPHER'S FIRST SCHOOL,

TEMPLE COWLEY,

OXFORD

NGR SP5442 0445

ON BEHALF OF

W S ATKINS CONSULTANTS LTD

JUNE 2004

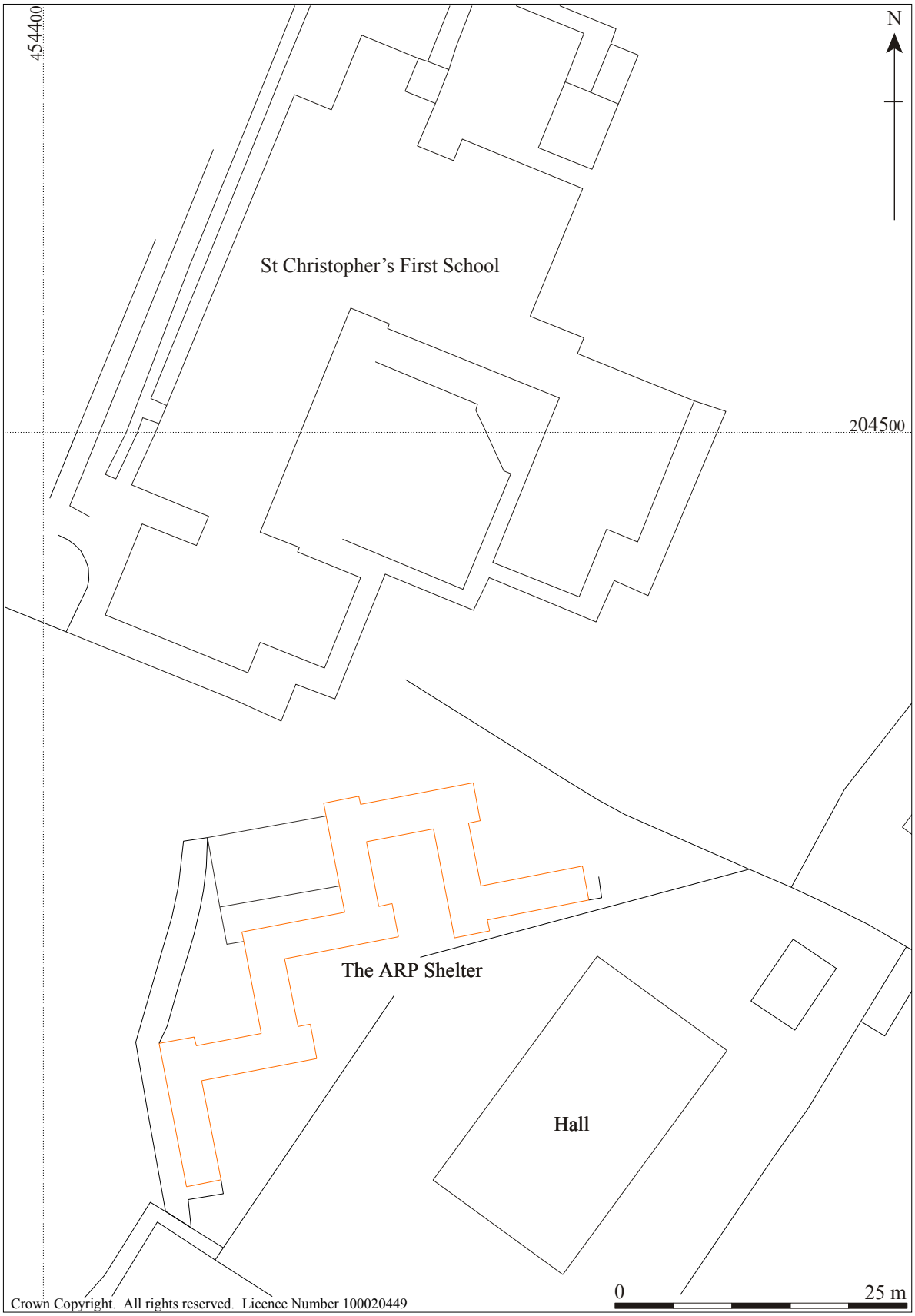

Figure 1: Site Location

1 INTRODUCTION

1.1 PLANNING BACKGROUND

Oxfordshire County Council has granted planning permission for the extension and improvement of St Christopher's First School as part of the Oxford Schools reorganisation works. As part of these works, a disused air raid shelter in the school grounds will be demolished.

As the shelter is to be demolished, a Level 3 building survey has been requested under PPG 15/PPG 16 requiring for the implementation of a scheme of building investigation and photographic survey.

John Moore Heritage Services (JMHS, 2004) in accordance with a *Written Scheme of Investigation* (WSI) in agreement with the County Archaeological Service carried out such a survey.

1.2 LOCATION AND DESCRIPTION:

The school is situated off Temple Road, Cowley, Oxford (NGR SP5442 0445). The WWII shelter is south of the main school building at approximately 70 m OD and the underlying geology is the junction of Oxford Clay and Kellaway Beds.

1.3 CURRENT/ RECENT FUNCTION

The last known function of the Air Raid shelter was as storage space and meeting house for a Sub-Aqua Club. Prior to this it appears to have been used for janitorial purposes.

2 AIMS OF THE INVESTIGATION

The aims of the investigation as set out in the WSI were as follows:

- To record by photographic record the main features of the structure and where appropriate, its setting.
- To supplement the visual record with an examination of any available documentation for the preparation of a written description detailing the significant and principal features of the structure.
- To make public the results of the investigation.

3 STRATEGY

3.1 PHOTOGRAPHIC RECORD

A Level 3 (RCHME 1991) photographic record, subject to accessibility, of the external and internal elevations and layout of the building was carried out, paying particular attention to:

- The building in its context
- Construction details
- Architectural detail
- Fixtures and fittings, particularly those relating to the primary use of the structure.
- Any additional internal detail such as graffiti and original wall finishes.

For the purposes of this report the blocks have been numbered B1 through to B8, as shown on Figures 2 - 4.

3.2 ACCESS

The last two blocks at the eastern end of the shelter (B7 and 8) were inaccessible: the original doorway was no longer in situ and a wire mesh had been fixed across the opening. There was also no possible access into these two blocks from the interior. This was due to breeze block infill at the junction of blocks B6 and 7 (Figure 3). Flash photography was carried out through the mesh fixed to the external elevation and a picture of the interior obtained (Plate 4).

3.3 DRAWN RECORD

A sketch plan of the structure was prepared, accurately dimensioned and showing the locations of the photographs.

3.4 RESEARCH

Research was undertaken into the history of the building. The Centre for Oxfordshire Studies and the Oxfordshire Records Office were consulted for plans and documents relating to the site. School Log Books, held at the Records Office could not be examined due to a privacy clause prohibiting access for 100 years after the date of deposition. No documents or plans specific to the site were held at the school itself.

4 REPORT AND ARCHIVE

The site archive (all original written, drawn and photographic records along with a copy of the final report) will be deposited with the Oxfordshire County Museum Service.

Figure 2: Location of Features and Blocked Access

5 HISTORIC BACKGROUND

The Air Raid Precautions (ARP) act was introduced in 1937. The act placed local government under obligation to provide shelter and anti-gas precautions. Public shelter provisions had moved away from the underground facilities of the First World War to the cheaper trench or single storey surface shelters. The shelter at St Christopher's First School is of the trench variety and was laid out in a zigzag formation in order to reduce the effects of blast.

The school opened in 1908 as Temple Cowley Church Girls School. The school was re-named in 1929 as Oxford Cowley Church of England School and changed again to Temple Cowley Church of England Junior School in January of 1933. By late July of the same year the school became St Christopher's Church of England Junior School. The school minute book notes that Local Education Authority (LEA) permission was granted for ARP work to be carried out (The Cowley Church of England Schools, 1929-42). A further entry later that year (Dec 1939) mentions that the LEA be asked to provide ARP shelter with power independent of the school supply and suggests electric batteries. No further mention of the shelter is recorded until 1960 when the managers of the school request permission to demolish the shelter amid concerns of its dangerous condition (City of Oxford Education Committee, 1960).

The size of the shelter indicates that it could have held a minimum of 200 individuals, (Lowry 2002:69). The school minute books covering the period from 1929 to 1942 were from the managers meetings held for St Christopher and St James School and it appears that the shelter was intended to accommodate the staff and pupils from both these schools.

6 DESIGN FEATURES (Figure 2)

6.1 THE EXTERNAL LAYOUT

As mentioned above, the shelter was of the zigzag trench type, comprising eight blocks in English Bond with cement mortar, arranged at right angles to each other (Figures 2-4). The shelter had a slightly cambered reinforced concrete roof with an overhang of 0.08 m above the walls. The edges of the roof had been tar-papered. The walls reached a maximum height of 2.0 m, but visible heights varied depending on the topography.

Plate 1: Detail of construction materials

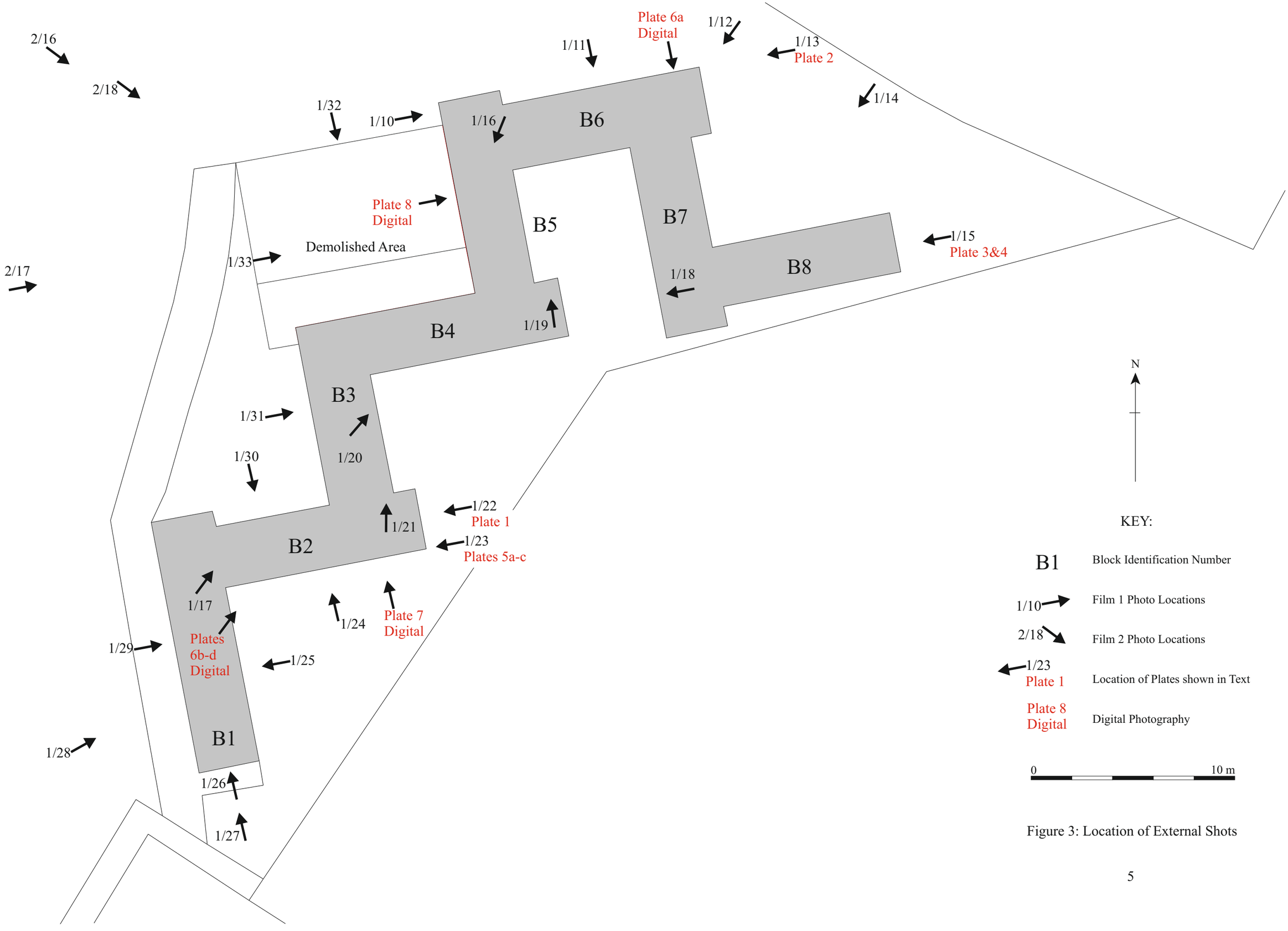

Figure 3: Location of External Shots

Figure 4: Location of Internal Shots

The topography within which the shelter was situated sloped naturally from east to west and less steeply from north to south. The eastern side of the shelter was within a cutting set into the natural slope, and the ground level at the south entrance was 1.10 m higher abutting the east side of the building. The northern blocks were also within a cutting, but in this area a bank is clearly visible extending along the full length of the northern most block B6). Slight traces of remains of the bank can be seen extending towards the east were the ground is generally higher. The remains may be a result of general landscaping as the ground surface in this location was more level and uniform: no trace of a cutting was visible on the north eastern blocks and at the east end of the building, the ground is much higher: the building only visible to 1.23 m in height. No trace of a cutting is visible here, but the ground surface is obscured by debris and vegetation making observations difficult.

Plate 2: View of the northern block (B6) and adjacent bank (taken from the east) showing remains of a bank formed by excavation of a trench into the naturally sloping ground.

6.2 ACCESS

Access to the interior of the shelter was originally from the two end blocks: at the east and the south. The entrances were set back into a porch type structure. The entrance porch in the eastern end of the building had been fenced of with wire mesh, prohibiting access. The door within the porch to the interior of the shelter had been broken through and any stairs or other means of access to the interior was obscured by quantities of building rubble and general debris.

The southern block (B1) included an L-shaped enclosing wall 1.2 m from the end of the block. The L-shaped enclosure may have been a blast wall (Lowry, 2002). The remains of a similar layout were visible at the eastern entrance, although only remnants of the blast wall could be seen emerging from the southern corner of the block (B8). At the southern end of the shelter, the floor was level with the path and general ground surface on the western side of the building (B1). Concrete steps were set further back to the south beyond the blast wall, giving access to the higher ground level. It is not known if the steps were contemporary with the shelter or added at a later date to provide access to the adjacent swimming pool from the school playground.

Plate 3: External view of the inaccessible eastern end of the shelter (B8).

Plate 4: View into the inaccessible eastern end of the shelter (B8). The interior as far as could be determined, been stripped of any original features and a large quantity of debris and refuse littered the floor.

6.3 THE INTERNAL LAYOUT

The block directly behind the modern extension (B5) had been fitted with plywood panels along the eastern wall; linoleum tiles were fitted to the floor and polystyrene tile to the ceiling. This block was the only one to have been fitted out with wall, floor and ceiling finishes. The remainder of the blocks had whitewashed walls with occasional areas in colour, shuttered concrete ceilings and floors. The height in the interior of the building was 2.0 m from floor to ceiling. The blocks were each 2.16 m wide, lengths varied between a minimum of 8.2 m and a maximum of 12.4 m.

6.4 FITTINGS AND FIXTURES

External

A ladder that had originally provided access to the roof was the remains of an original feature observed on the exterior of the building (location shown on Figure 2). The remains were in poor condition, but the substantial bolts used to fix the vertical and horizontal members together had survived in good condition (Plates 5b and c). The ladder comprised timbers 0.10 m by 0.09 m in section. The maximum width of the timbers was 0.46 m and height was 0.88 m. There were originally three rungs, but the central timber was missing. The rungs were set 0.30 m apart and were fixed to the vertical members with iron bolts. The bolts were very substantial: 0.20 m in length, 0.04 m diameter head and 1.5 cm diameter shaft. Iron ties were fitted behind the rungs to strengthen the ladder. The ties were fixed with 1.5 cm square headed bolts at either side and the tie itself was 0.73 m in length. The base of the ladder had been set in concrete

Plate 5a: Ladder *in situ*

Plate 5b: Detail of bolt from front

Plate 5c: Detail of bolt from side

Further original features of the structure where the ventilation bricks (0.24 m wide x 0.15 height). On the external face, where visible, they had been broken through and only fragments remained (plate 6a). Most vents on the exterior had been fitted at a later date with modern metal louvers (Plate 6b).

Plate 6a: Remains of broken - through ventilation brick

Plate 6b: Metal louver over vent and grille covering two blocked openings

Two metal grilles were also visible bolted to the external face of the southern east-west orientated block (Plates 6b-d). The grilles measured c. 0.98 m in length by 0.47 m deep and were fixed directly adjacent to each other. The purpose of the grilles was to cover two rectangular openings 0.50 m by 0.38 m let into the fabric of the building. The openings had been filled in on the internal face; no trace was detectable from the interior of the block. The infill was concrete on the eastern opening, to half the depth of the wall thickness. On the western of the two openings, the infill was brick and cement mortar.

Plate 6c: Grille in situ taken from roof of adjacent western block

Plate 6d: Detail of eastern grille with cement blocking

A modern modification to the structure was the creation of a wider entrance to allow equipment to be stored with ease. A double sliding door was fitted on the south face of block B2 (location on Figure 2). This door was a later addition, the edges were the bricks had been broken through to create the access had been finished with a cement render (Plate 7). The door measured 1.97 m wide by 1.89 m in height, and was situated 1.35 m from the east end of the block. In addition to this, a further modern feature had been added to the building in the form of an extension abutting the west side of B5, demolished prior to the survey. This extension appears to have provided a toilet block and a bar facility: for the latter, a portion of the original shelter wall had been reduced to half its original height.

Plate 7: Double sliding door

Plate 8: Modifications to create bar and access

Internal

Two blocked doorways were visible from the interior of the building. At the western end of B4 a doorway had been blocked up using modern breeze block, then whitewashed over in keeping with the majority of the interior finish. This doorway may have been blocked at the time the extension was built, as access to the storage was no longer required from the facilities provided in the modern extension.

The majority of the internal fittings were recent in origin, the result of alterations to turn the shelter into a storage facility suitable for holding sub-aqua and boating equipment. Straps were fixed to the walls and storage shelves fitted. The early internal features comprised electrical apparatus. Light switches, a heater, fuse box and the remains of a makeshift extractor were still *in situ*. In addition the vents visible from the exterior had been fitted in the interior with hinged iron covers over the square holes in the brickwork. The covers could be opened to varying degrees or closed as required. The vents were situated in the locations marked on Figure 2 and were part of the original construction.

Plate 9: Closed vent in interior

The fuse box *in situ* on the western wall of the southern block (B1) had been re-wired in line with modern standards.

Plate 10a: External view of fuse box

Plate 10b: Internal View

The light switches and cables shown in Plate 11 were remains from an earlier phase in the use of the building. The switches were not original, the lighting may have come from hurricane lamps in the first instance, although mention of a battery operated power supply was made in the school managers minute books. The whole building was re-wired at a later date and sockets set into the ceilings to provide anchors for cable.

Plate 11: Detail of switches, junction box and cable

The wall mounted fan heater (Plate 12) is again early, but probably not original to the shelter. The much later panelling in the eastern wall of block B5 had been cut to accommodate the *in situ* heater.

Plate 12: Wall mounted fan heater

The improvised extractor shown in Plate 13 was constructed using a vacuum cleaner head. The model of vacuum cleaner is not known but closely resembles other models in use in the years prior to the Second World War. The feature may be original and *in situ* but no information could be obtained for similar items in other shelters for the same period.

Plate 13: Extractor made from vacuum cleaner head

7 DISCUSSION AND CONCLUSIONS

The topography within which the shelter is situated has been modified. The original structure appears to have been recessed into the natural slope rising from west to east: the eastern side of the shelter situated within a steep cut on average 1.10 m deep (East side of B1). A bank was visible along the northern side of B6 and further remains of this were visible in the ground surface extending towards the east. The faint traces of the bank indicate landscaping in this location (east of B7 and north of B8). The western side of the shelter is on a more level surface, B1 is directly adjacent to a pathway that rises slightly towards the north. On the western side of the path the

ground once again drops away. It is not known if the shelter had a bank on this side, or if in fact it was cut into a trench rather than recessed into the slope on the eastern side only. Landscaping to create school recreation areas has eradicated the remains of a trench or bank on the western side.

The form of the shelter remains largely unchanged. The only substantial alteration to the building fabric was the addition of the extension which resulted in a new doorway and large opening for the bar facility and the creation of the large double sliding door. The internal space was modified in that two entrances were blocked up: the access in block B4 through to the area occupied by the modern extension, and the access between blocks B6 and B7, effectively sealing off the last two blocks B7 and 8 from the rest of the shelter. Further internal alterations were made by the addition of modern shelving and storage facilities for recent use, in addition to the tiles and panelling in the bar area (B5).

In its original state, this type of air-raid shelter would have had basic internal features such as benches along the walls and chemical toilet provision. The toilet facilities may have been located at the ends of the block where they jut out and where some of the vents are situated, a curtain would have provided privacy. No other permanent facilities were usually provided.

Vents in the other locations along the walls of the blocks, would have been for general air circulation and to break up the effects of blast. The vent covers in each of the blocks are *in situ* originals, but the few early features shown in plates 10 to 13, may have been modifications made during the years the shelter served as storage facilities rather than part of the original fittings.

8 BIBLIOGRAPHY

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