St Silas' C of E Primary School, Clematis Street, Blackburn

Lancashire

Building Survey Report

Oxford Archaeology North

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Capita Symonds

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SUMMARY

A proposal to redevelop St Silas' Primary School, Clematis Street, Blackburn, Lancashire (NGR SD 6684 2853), will entail the demolition of the existing late nineteenth century school buildings and the construction of a new replacement school building. OA North (2010) undertook a desk-based assessment of the school, which highlighted the architectural importance of the building, and, in the light of that, Lancashire County Archaeology Service (LCAS) requested that an English Heritage Level 3 building investigation be undertaken of the building prior to its demolition; the present report outlines the results of the building investigation survey which was undertaken in November 2010.

The survey entailed the production of plans of the lower ground, upper ground and first floors, which entailed the enhancement of existing drawings provided by the client. The principal north-west and south-east external elevations of the main school building were surveyed by rectified photography and were, subsequently, combined and corrected using photoplan software. A cross-section was produced extending through the main school hall showing ornate hammer beam truss construction. A descriptive and detailed photographic archive was compiled.

The construction of the current St Silas' School, along with many others in the country, can be traced back to the Education Act of 1870, when school attendance started to become compulsory and, subsequently, was free for all children between the ages of five and twelve years of age (OA North 2010). The school was opened in 1885, apparently as a single-storey structure, subsequently a first floor was added to the main school building, and in 1896 a new wing was added.

The school now consists of various wings and extensions of various dates and styles, with the central block on the ground floor forming the core of the original building. At some date, probably shortly after its original construction, an additional storey was added to the school. It is probable that the rear and gable elevations were rebuilt at the same time as the upper storey was added, as the entirety of these walls are of the same brick construction.

The historic description of the new wing which was added in 1896 closely matches with the observed main hall at the southern end of the building; this, along with two new class rooms (Rooms **1** and **2**), formed a whole and essentially independent wing, as the access was kept separate from the rest of the school. A plan dated to 1904 shows the layout of the school in its ultimate form and illustrates the internal layout of all the floors, which also matches the footprint of the building as illustrated on the 1911 Ordnance Survey Plan.

Rooms **13**, **14**, **15** and **16** were probably added in the 1950s during alteration works when the children were relocated; a new wing was added to Room **11** in 2006 and two new classrooms (Rooms **21** and **22**) were added in 2008.

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The building recording was undertaken by Karl Taylor, Graham Motteshead and Jamie Quartermaine. The report was written by Karl Taylor and the drawings were produced by Anne Stewardson. The project was managed by Jamie Quartermaine, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 A proposal to redevelop St Silas' Primary School, Clematis Street, Blackburn, Lancashire (NGR SD 6684 2853), will entail the demolition of the existing late nineteenth century school buildings and the construction of a new replacement school building. A condition of the planning consent for the development was that a desk-based assessment be undertaken to assess the archaeological importance of the building and that a programme of mitigation recording be undertaken. Consequently, Oxford Archaeology North (OA North) was contracted by Capita Symonds, in July 2010, to carry out such an assessment (OA North 2010).

1.1.2 Following the results of the assessment, Lancashire County Archaeology Service (LCAS) requested that an English Heritage Level 3 building investigation (English Heritage 2006) be undertaken prior to the proposed development as part of the existing archaeological condition to the planning consent. OA North was commissioned by Capita Symonds to carry out the building investigation survey in November 2010.

1.2 LOCATION AND GEOLOGY

1.2.1 The school is located on the north-west side of Clematis Street (Plates 1-3), which itself is located to the south of Revidge Road, a residential area in north-west Blackburn and is approximately 1.5km from the town centre (NGR SD 6684 2853). Blackburn is positioned on the very western edge of the Pennine Hills, 8km east of Preston.

1.2.2 Blackburn originally lay on the northern bank of the River Blackewater, and then expanded across and along the river valley. As the town grew it spread across a relatively flat valley bottom to the base of the surrounding hills. The town ranges in height from 90-95m aOD around the Blackewater to 220m aOD along Revidge at the northern area of Corporation park (Egerton Lea Consultancy and LCC 2005, 8). The present landscape has an intensely urban character (Countryside Commission 1998, 101). The surrounding fieldscape is often fragmented, comprising scattered industrial and residential developments (*ibid*). Small reservoirs, abandoned industrial workings and new industrial parks are all features of the urban fringe (Egerton Lea Consultancy and LCC 2005, 9).

1.2.3 The underlying solid geology of the area consists of rocks of the Silesian Upper Carboniferous series with Lower Westphalian coal measures (www.bgs.ac.uk), which contributed to the early industrial exploitation of the area. The hills surrounding the town area are generally formed of Carboniferous sandstones. The Carboniferous sandstones usually occur as gritstones and include Revidge Grit and rocks of the Holcomb Brook series. These local deposits were used for roofing and paving (Egerton Lea Consultancy and LCC 2005, 8).

1.2.4 The drift cover consists primarily glacially-derived head and till deposits, mainly of the Rimmington Association (www.bgs.ac.uk). Along the valley bottom are fluvio-glacial deposits of the Newport Association (*ibid*). The resultant soils are fertile.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 OA North produced a project design (*Appendix 1*) for an English Heritage Level 3 building investigation of St Silas School in accordance with a verbal brief by LCAS. The project design provided for a detailed fabric survey and a watching brief during demolition to record those elements that were obscured at the time of the survey. In the event it became apparent that the proposed demolition programme would not allow for safe access to enable the recording of internal fabric and, instead, a variation was implemented to enable the recording of the roof space, which was not initially accessible. In all other respects the project design was adhered to in full. The building survey methodology was consistent with English Heritage Guidelines (English Heritage 2006), as well as Policy HE12 of *Planning Policy Statement 5: Archaeology and Planning* (DCMS 2010). The work was also consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA 1999), and generally accepted best practice.

2.2 DESK-BASED ASSESSMENT

2.1.1 A desk-based assessment (DBA) was carried out by OA North, in July 2010 (OA North 2010). This report should be read in conjunction with the DBA as it provides the historical context to the results of the building investigation, as well as outlining all statutory and non-statutory sites within a 250m radius of the development site. A brief summary of the relevant results, however, is presented below (*Section 3*).

2.3 BUILDING INVESTIGATION

2.3.1 ***Descriptive Record***: written records to English Heritage Level 3 (2006), using OA North *pro forma* record sheets, were made of all principal building elements, both internal and external, as well as any features of historical or architectural significance. Particular attention was paid to the relationship between those areas of the building where its development, and any alterations, could be observed. These records are essentially descriptive, although interpretation is carried out on site as required.

2.3.2 ***Site drawings:*** the drawings produced were, for the most part, based upon existing architects survey data supplied by the client. The following drawings were produced:

- Plans of the ground floor, first floor and upper floor of the main school building, showing the form and location of any structural features of historic significance. Produced for output at 1:100 scale;
- Principal north-west and south-east external elevations of the main school building. Produced for output at 1:50 scale.
- One cross-section was produced through the main hall building to show the exposed roof structure Produced for output at 1:50 scale.

2.3.3 ***Plans and Elevations:*** architects plans of these buildings were enhanced and annotated to show the form and location of all structural features of historic significance. The additional detail was created by means of manual survey and the annotation of paper copies. The corrected drawings were digitised into an industry standard CAD package (Autocad 2004) for the production of the final drawings.

2.3.4 The elevations were compiled by rectified photography using a 13 megapixel digital SLR camera. The multiple photographs were rectified, corrected and merged together using Photoplan software. This provided accurate imagery depicting all decorative and significant brickwork and masonry, such as quoins, tracery, window and door surrounds.

2.3.5 ***Cross-Section:*** the cross-section was created by the annotation of existing drawings, and with the addition of data from a reflectorless total station. The data from the instrument was combined with the earlier survey base within a CAD system and output as a series of plots to enable further enhancement of the drawing by manual survey.

2.3.6 ***Photographs:*** photographs were taken in both monochrome print and high-resolution digital. The photographic equipment comprised medium format film cameras both with fixed lenses and with rising fronts, and 35mm SLR and 35mm high resolution DSLR cameras respectively. The digital images were produced in both JPEG and RAW formats (in .CR2 format). The photographic archive consists of general images of the building both internal and external, and detailed internal and external scaled coverage of architectural and decorative features and/or structural detail.

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with current IfA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited with the Lancashire Record Office on completion of the project, and a paper copy will be sent to the Lancashire Historic Environment Record, Preston.

3. ST SILAS' SCHOOL HISTORICAL BACKGROUND

3.1 ST SILAS' SCHOOL DEVELOPMENT

3.1.1 The following historical background is based upon the desk-based assessment undertaken by OA North (2010), and is intended to provide a general historical context for understanding the building survey results:.

3.1.2 St Silas' School began as Billinge Sunday school, Preston New Road, Blackburn in 1834 accommodating 150 boys and 150 girls. In *c* 1876, the school was extended with the addition of a classroom to provide an infants section. The census return for 1875 lists the accommodation of the school as 261. Following the Education Act of 1870, when school attendance became compulsory, Billinge Sunday school became a day school. Due to overcrowding a new school was required, and in *c* 1883 a building committee was appointed and the Board of Education was notified that a new school was to be built financed by subscription and was to accommodate 750 pupils. Mr Bentley of Kendal was the architect and Kenyon and Moulding was the contractor (Whalley and Whalley nd). The Building Regulation Register 1884-88 (CBBN/3/1/4 Acc 9835) lists the application for construction of the new school on Clematis Street by a Mr Joseph Bintley, of the Committee of St Silas' School. Unfortunately, the associated plan (No 3008) could not be found. By an Indenture, dated 1884, made between TA Aspden and the Billinge School Trustees, it was agreed that the Voluntary School would be built on a plot of land supplied by Mr Aspden and bounded by new streets that were intended to be named Clematis Street, New Bank Road and St Silas' Road (Anonymous 1934).

3.1.3 The new school on Clematis Street was constructed in red brick and opened in 1885, with Mr Mark Russell as Headmaster, and Billinge School was closed. St Silas' was quickly oversubscribed and Billinge Sunday School was re-opened as an Infants section in 1886. St Silas' was originally one-storey, and was subsequently raised with the addition of a second story; however, it is not documented when this occurred. In 1895, a day school enlargement fund was set up and in 1896 a new wing was opened (*op cit*).

3.1.4 Trade and street directories for the area reflect the progress of construction. *Barretts' Directory* for 1881 lists a mixed school on Preston New Road (Billinge Sunday school). In 1884 it was listed as St Silas (Billinge), with a Miss A Moulding as headteacher. A school logbook entry for the week ending February 4th 1881 confirms the appointment three years earlier stating that '*A Moulding entered on duty as Head Mistress*'.

3.1.5 School log books (1881-1954), maintained by the headteachers, were consulted for this assessment. They recorded the day-to-day life of St Silas' School, and included school attendance, absence, repairs, annual reports and disciplinary procedures. A log book dated February 1886, included a transcription of an annual 'Report' stating that '*since last year the School has been re-organised as a Mixed School under a Master and has been taught in new, well-built and well-furnished premise[s]. The attendance has, however, so increased that it has become necessary for the Managers to contemplate the*

transfer of the Infant's class as a separate Department to the old premises'. A 'Grand Bazaar' was organised in Exchange Hall, Blackburn, in order to raise funds for paying off the debt on St Silas's 'new schools, Clematis Street' and the event was reported in the Blackburn Standard, Saturday May 15th 1886 (Issue 2632, 3). The amount of money required to 'wipe off the debt' was £1,800.

3.1.6 Barrett, P, & Co's 1891 *Directory* lists Clematis Street for the first time, as comprising ten houses and St Silas' School; the 1894 *Directory* lists Clematis Street comprising 11 houses and one school. The occupations of the inhabitants include a clerk, caretaker, bricklayer, carter, shoemaker and a guard. Mr Russell is listed as head master and Miss R B Roylance as headmistress of the Infants' section (Barrett, P, & Co 1894, 212). A new school wing was opened at St Silas' in 1896 as reported in the *Blackburn Standard* 31st October 1896 (page 3, col 4). The new wing was '*an admirable addition to the school buildings there being accommodation…for some 500 pupils'*. It included *'a large schoolroom 54ft by 22ft'* which had '*excellent fittings of varnished pitchpine. The cloakroom in connection with this room*' was '*most complete, there being adequate appliances for the drying of the children's coats &c.* The lavatory was also '*of the latest design'* and there were two '*very large classrooms*'. A later entry in a school log book, on November 15th 1901, records the departure or retirement of the head, Mark Russell '*I, Mark Russell, finish as Head Master of this St Silas's C E School to-day having held the position since August 10th 1885'*.

3.1.7 A report on the sanitary conditions of Elementary Schools in Blackburn was produced on behalf of Blackburn County Borough in 1904 (Greenwood 1904), and included St Silas's. The report contained a plan of the layout of the school (Plate 4) and details of each of the 16 rooms within. There were two playgrounds, one for girls and one for boys completely separated from each other, and the boundary wall partially survives (Plate 11). There was an entrance on Clematis Street, now blocked (Plates 9-10), and another on the New Bank Road side, which is still in use (Plate 8). The report also, however, states that Rooms 7, 8 and 11 on the ground floor accommodated the 'Infants Department'. There '*is a passage the entire length of the rooms, and each class room is entered by a door opening in this passage*'. In total, two recommendations were made as a conclusion to the report, firstly for '*suitable dry refuse*' to be provided and secondly '*to insert permanent inlet ventilation openings in Rooms 1, 2 and 4, on the ground floor*' (Greenwood 1904, 105). A log book entry, recording the conclusions of an annual report 1906-7, refers to a new part of the school having been in use for several years requiring cleaning and painting.

3.1.8 During the Second World War the school was closed and was taken over by Medical Services as a First Aid Station; the children were accommodated at Leamington Road Baptist School, as a temporary measure (St Silas' School Log Book 1930-1941). On the 15th July 1941, the head attended a meeting to discuss the prospect of returning to the Clematis Street building and an entry dated 30th April 1943 stated that the '*school furniture was removed to Clematis St. Four men with van made six journeys. Finished at 6 p.m.'*. The following day '*Books etc. placed in cupboards. Desks arranged and classrooms prepared by class teachers*'. The school was re-opened on Monday

3rd May 1943. However, there was no staff room and there were '*five air raid shelters in the playgrounds*' all of which were '*filthy*'.

3.1.9 Further work was undertaken in 1953-4; according to the logbook records there were some alterations, including the demolition of a chimney and the cloakroom facilities. The pupils were again removed to Leamington Road whilst general repairs and work on the upper storey was completed, re-opening in Clematis Street in October 1954. A new building was added to the front of the school in 2006. The school remains in use and has been little altered externally since the end of the nineteenth century.

4. BUILDING RECORDING RESULTS

4.1 INTRODUCTION

4.1.1 The current St Silas' school on Clematis Street, Blackburn was opened in 1885, in response to the overcrowding of an existing school building known as Billinge Day School (*ibid*). It was, apparently, originally a single storey building (OA North 2010; Anonymous 1934), but there was immediately an excessive demand for places and a corresponding pressure to expand. In the following years a new wing was added in 1896, and at some date an upper storey was added.

4.1.2 The school buildings and associated playgrounds occupy a rectangular site bounded by St Silas' Road to the north-west, New Bank Road to the north-east and Clematis Street to the south-east (Fig 1). The footprint of the main school building is a reversed 'L-shape' and lies on a north-east/south-west axis, with the 'L' extending to the north-west from the southern end of the building. It has been extended and altered since construction, yet still retains the architectural evidence of the first, single storey structure. The following section is a descriptive account of the building, and is followed by a discussion which will outline the evidence for the development and phasing of the school building.

4.2 PLAN AND FABRIC

4.2.1 ***Plan:*** the main building is two-and-a-half storeys high, with a ground floor, a first floor and an upper ground floor, which is a narrow corridor on the western side of the building located above a low ceilinged ground floor corridor. The building measures approximately 35m long by 10m wide, the 'L' measuring approximately 28m long by 7.5m wide with the main elevation facing Clematis Street. At the end of the 'L' part of the building, are two single storey classrooms (Rooms **1** and **2**) (Fig 2). There are various extensions and additions to the main building which include (on the ground floor) Rooms **6** and **6a**, an extension to Room **11**, Rooms **13** and **14**, Rooms **15** and **16**, and Rooms **3**, **17**, **19** and **20**. Two classrooms within the rear playground (Rooms **21** and **22**), are modern and were constructed in 2008. As far as can be determined, the main access was via the entrance at the north end of the main building (Room **12**). There are two playgrounds at the rear of the building which are partly divided by a low brick wall, and a perimeter wall and fencing surrounds the whole site.

4.2.2 ***Fabric:*** the whole of the main building, including the various additions, is of red brick construction of varying types (Plates 1, 2, and 3). The main building is of dark red brick laid mainly in English bond, and is of alternating headers and stretchers (Plate 4). There are some areas of later rebuilding and patching, particularly at the rear of the main school building (Fig 7). The perimeter wall which surrounds the site is of stone with a wire fence construction at the front of the building (facing Clematis Street), to stone (lower portion) and brick construction at the rear (Plate 9). The wall at the rear also partly serves as a retaining wall and reflects that the site has been cut into the slope. The

extensions attached to the main school building (including the main hall and kitchens (Rooms **4** and **6**)) and Rooms **1** and **2**, are of slightly different brick but laid in the same bond. The two classrooms in the rear playground (Rooms **21** and **22**), together with a modern addition at the front of the building (forming part of Room **11**), are of modern brick.

4.2.3 There are various embellishments and decorative elements present including copings, moulded bands and other features, such as kneelers, and are all of sandstone and of the same appearance as the window surrounds and gate posts. All the windows are of timber sliding sash types except for those in the recent extensions and the two classrooms (Rooms **21** and **22**) at the rear of the building, which are of uPVC. The rain water goods are mainly cast iron with ogee-shaped gutters and plain hoppers, although some uPVC down-pipes are also present.

4.2.4 The predominate roofing material of the school buildings is slate, there being two main types visible. The main school building and Rooms **1** and **2** (the lower parts of both slopes of the roof of Rooms **1** and **2** have been replaced with felt), have green slate laid in diminishing courses, whilst the roof of the main hall (Room **4**) is of grey slate of larger dimensions laid in straight courses. The main school building has terracotta ridges, including some which are decorative, whilst Rooms **1** and **2** and the main hall (Room **4**) have plain grey ridge tiles and are relatively steeply pitched. All of the visible valleys are lined with lead. There are sandstone copings and kneelers at the front of the building (facing Clematis Street) and timber bargeboards at the rear (facing St Silas Street). The main hall building (Room **4**) has stone copings at the front (facing Clematis Street) and timber bargeboards on the side (south) side. Rooms **1** and **2** have timber barge boards. There are several flat roofs of later twentieth century appearance, including Rooms **6** and the extension to Room **11**. The roofs of Rooms **3**, **17**, **19**, and **20** are of concrete tile.

4.3 EXTERNAL DETAIL

4.3.1 The following sections describe the appearance of the exterior of the buildings commencing with the main elevation facing Clematis Street which includes the elevations of the main hall (Room **4**) and the kitchens (Rooms **6** and **6a**).

4.3.2 ***The Front (Main) Elevation:*** this elevation faces Clematis Street and is the most decorative, having a distinct gothic revival style. It is two storeys high and seven windows wide (Figs 5 and 6; Plate 10). The elevation is symmetrical about a projecting central bay, with each flanking part being three windows wide. The central bay extends above the eaves to form a dormer roof, as do the centre sections of each flanking part. The right flanking section is partially obscured by a later extension building (Room **11**) (Plate 10). The elevations of the main hall and the kitchen are visible at the south end. There is no current doorway in the elevation, neither is there evidence for any former entrances. The brick of the ground floor, is of slightly different style and colour to that on the upper floor.

4.3.3 The main visible feature of the elevation is the fenestration, which is of stone mullion construction with tall, narrow glazing divided by thick chamfered sandstone mullions and transomes (Fig 5; Plate 10). The central bay windows

are three light mullions, the flanking parts are four, two and three light mullions. All the surrounds have sloping sills and the ground floor lintels are of similar appearance. Above the ground floor lintels, a projecting moulded sandstone band is present which spans the whole elevation and is shouldered around the windows. The jambs of all the window apertures are of brick, which are also chamfered.

4.3.4 The fenestration differs between the upper and ground floors; the main difference being the nature of the window heads and, consequently, the lintels. The head of each light on the upper floor has two-centred arches or 'lancet'-type windows, necessitating the use of more massive lintels which have canted upper corners (Figs 5 and 6; Plate 10). The upper window of the central bay has a more decorative and elaborate treatment. Each light has a two-centred arched head with trefoil detail set behind. Above this is a large two-centred moulded arch with decorative ball ends. Set within the arch is a large circular opening which formerly housed a large clock. Above this is a small aperture with a two-centred arch and a trefoil set within; it is now blocked with brick. The gable of each dormer has a sandstone coping with a moulded apex, and there are decorative trefoils below each apex. Each of the gables has sandstone kneelers, as do the ends of the flanking gables which are visible. Each dormer projects above the roof and has side elevations (Plate 2).

4.3.5 There is a projecting plinth at the base of the elevation with a sloping sandstone band above. Below this are four sandstone blocks, located beneath each ground floor window, and each with quatrefoil apertures. Set within each of these is a cast iron grille, although two have been blocked with brick. There are two sandstone buttresses on either side of the central bay which extend to the top of the ground floor windows, and appear to serve a more decorative than structural function. The rainwater goods are all cast iron; the gutter being ogee-moulded.

4.3.6 The east facing gable elevation of the main hall (Room **4**) and the kitchen (Rooms **6** and **6a**) are immediately to the south of the main elevation (Figs 2, 5 and 6; Plate 10). The most obvious difference between these two elevations and the main elevation is that they were constructed from a different brick type but laid in the same bond; the general construction details, however, remain the same. The gable of the main hall is of similar appearance to the other gables and contains a large gothic window with three 'lancet'-type windows with similar trefoil detail as those on the central bay. Above the lancets is a large quatrefoil window set within an ashlar surround.

4.3.7 The elevation of Room **6**, facing Clematis Street, is relatively plain and contains a central mullion window with four lights with two flanking single windows. They are of the same general appearance as those windows on the ground floor of the main elevation but without transoms. There are two sandstone bands above and below the windows and a sandstone coping that caps a parapet. Two cast-iron grilles are present in the lower part of the elevation.

4.3.8 The north-facing elevation of Room **6** contains an entrance which has been sealed internally (*Section 4.4.8*), and the construction details of this elevation are generally consistent with the elevation facing Clematis Street. The north-facing doorway (Plate 11) consists of a large sandstone surround, the intrados

having a flat-shouldered arch, whilst the extrados has a three-foil cusped arch with mouldings. There is a quatrefoil window above the door and the jambs are of alternating long and short work. The threshold is approximately eight courses above ground level and the brick below the door is rough, indicating the position of former steps.

4.3.9 ***The South Elevation:*** the southern aspect of the building consists of the separate elevations of Rooms **1**, **4** and **6a**, together with the elevation of the additional Rooms **15** and **16**; the elevation of Room **1** projects forward. Access to the elevation was limited and part of it was obscured by a large metal container (Plate 2). The nature of the construction of the elevations is similar to that described for the front elevations of Rooms **4** and **6**. None of the elevation extends above ground floor height.

4.3.10 Most of the aspect is occupied by the south elevation of the main hall - Room **4**, which is five windows wide. The windows are of similar construction to those already described for the ground floor of the main elevation and comprise tall, three-light mullions, together with shorter three-light mullions. The tall windows have a taller middle light extending up into the gable of a dormer roof above. The pattern alternates thus, tall, short, tall, short, tall (Plate 2). The dormers differ slightly from those on the main elevation in that there are no side walls, or verges projecting and are without copings. There are five buttresses attached to the elevation, which are similar to those on the main elevation but are of brick and stone, rather than wholly stone construction. All the rain water goods are of cast iron and/or plastic.

4.3.11 The south elevation of Room **6** is similar to that facing Clematis Street and there are two single windows, together with an inserted door accessed via a flight of brick steps. Water drains from the flat roof via an opening in the parapet. The elevation of Room **1** projects out from the line of Room **4** and a small extension (Rooms **15** and **16**) has been built into the corner, and is of plain brick construction. There is a window in this elevation which is similar to the tall windows in the elevation of Room **4**, the only major difference being that it has timber rather than stone muntins. The verges of the two dormer roofs project and their purlins are visible.

4.3.12 Behind the main hall (Room **4**), the south gable elevation of the main building is partially visible (Plate 2) and clearly shows that the gable has been partially rebuilt using the same brick as Rooms **4** and **6**. This was probably carried out when the main hall was added.

4.3.13 ***The Rear Elevation:*** the ground and upper ground floor of the rear elevation of the main building was obscured at the time of the survey by several additional buildings and extensions (Fig 2; Plate 3). It is not as decorative as the front elevation and is relatively plain and functional. The elevation exhibits extensive repointing and there are some areas of patching, including five small square areas (Fig 7).

4.3.14 The elevation extends to two-and-a-half storeys, is symmetrical about a central dormer bay; however, unlike the front elevation, this bay does not project from the main face. The elevation is dominated by the fenestration which is of a variety of sizes based on the same style as the ground floor windows on the front elevation, and is practical rather than decorative in form. The ground and

upper ground floors contain an arrangement of small twin stone mullion windows of which eight are visible, together with a four-light stone mullion and two timber-framed windows which contained three sliding sashes. There are two doorways, each of which is fairly plain and contain late twentieth century doors.

4.3.15 There are three dormers extending above the top floor, each one accommodating tall windows (Fig 7). The central dormer contains a tall three-light mullion, whilst the other two each have a tall two-light window. Four-light mullions flank either side of the central windows and three-light mullions are situated at either end of the elevation. The dormers all have projecting verges and are without the decoration observed on the front elevation. The profile of each of the dormer roofs splays out at the eaves and is unlike any of the other roofs on the building.

4.3.16 The south end of the elevation is obscured by the external aspect of the south staircase (Room **18**). The north end of the elevation continues to two flat-roofed sections containing the north stairs (Room **12**) and the entrance. This part contains similar detailing to the flat-roofed Room **6**, together with two small windows. Other details include an external brick flue and chimney stack (partially rebuilt), which is situated close to the south dormer and probably served a boiler room in the basement, which is only accessible from outside and was locked at the time of the survey.

4.3.17 The rear elevation of Rooms **1** and **2** was clearly visible and contains four stone mullion windows of similar appearance to the windows on the gables (Plate 8). Each of the windows has three lights divided by substantial stone mullions, each light being further divided by timber transoms. The remainder of the elevation is plain, the only other visible features are two cast iron and two terracotta ventilation grilles, situated at the base of the elevation.

4.3.18 The north gable and rear elevation of Rooms **1** and **2** are visible at the rear of the building (Plate 8). The north gable is identical to the south gable, containing a window of identical appearance. The lower part of the elevation is obscured by the addition of Rooms **20** and **19**. The roof shoulder projects over and is splayed in a similar fashion to the dormers on the rear elevation (*Section 4.3.15*).

4.3.19 ***The North Elevation:*** the northern elevation consists of several separate parts, the gable end of the main building, the upper storey elevation of a flat-roofed extension housing the north staircase, and the ground floor elevation of the north entrance lobby flat-roofed extension (Plate 6). The brick is similar in character to the brick of the rear and the upper part of the front elevations. The ground floor elevation is plain with similar sandstone band and coping (Plate 6). but otherwise has no distinguishing features. The doorway allowing access to Room **12** is of identical appearance to that situated on the north elevation of Room **6** as described in *Section 4.3.8*, suggesting they were from a similar phase of construction.

4.3.20 The upper, gable elevation is of similar character to the ground floor elevation and similarly has stone coping and kneelers. The upper, flat-roofed, extension contains a single two-light mullion window, which is of similar appearance to the windows on the upper floor of the main elevation, with two-centred arched

heads and large lintel with canted corners. There is a projecting moulded sandstone band above the window and a stone coping that caps the parapet. The lower part of the elevation is not visible.

4.4 INTERNAL DETAIL GROUND FLOOR

4.4.1 The interior appearance of the school building is described in the following sections commencing with Room **12**, which is the ground floor entrance lobby at the base of the stairs at the north end of the building. A logical route will be followed around the building through all the ground floor rooms. The room numbering system was taken from the existing 1904 plans (OA North 2010), to which additional numbers were added. There are 23 rooms on the ground floor, seven on the upper ground floor and 12 on the first floor (Figs 2-4). Some of the rooms are of modern appearance and have been created by dividing larger rooms or have been added when the various extensions were constructed. The later extensions will be omitted from the following account, as they contain little information pertinent to the development of the building, and comprise Rooms **3**, **13-19**, **21** and **22.**

4.4.2 ***Room 12:*** upon entering the building via the north door, Room **12** is the first room encountered and allows access to all the upper floors via a substantial half-turn staircase with stone steps (Plate 7). A landing is present on each of the upper floors from which access to the respective floors is available. The steps are covered with modern carpeting and the decoration is plain, all of the walls having plain painted plaster coverings. The floor is concrete-covered with modern vinyl. There is a decorative dado moulding (1.15m from the ground) set within the plaster, which is of the same appearance as those observed in other parts of the building (Plate 5), and there is also a tall plaster skirting. The internal aspect of the main door is also visible, with the shouldered arch and quatrefoil window being carried through internally.

4.4.3 ***Rooms 9, 9a and 10:*** passing though a plain doorway at the south end of Room **12**, Room **10** is entered which, together with Room **9**, forms a long, low corridor at the rear of the building, through which the classrooms (Rooms **8** and **11**) at this north-eastern end of the building are accessed (Fig 2). Rooms **9**, **9a** and **10** are divided by an inserted plaster board partition and appear to have once been a single space. The overall room is fairly plain with plaster walls, plasterboard ceiling and concrete floor (vinyl covered) and appears to have last been used as a cloakroom. Access to the rear playground is available through a modern doorway in the rear western wall. This wall also contains the fenestration which consists of a timber mullion with three sliding sashes, and three smaller two light stone mullions with modern timber frames.

4.4.4 ***Room 11:*** this room is at the northern end of the building and has been extended to the east (in 2006, as there is a date stone on the external elevation of the extension). The room is of similar appearance to Room **8** and contains the same features, such as the suspended ceiling. The floor is laid down to similar vinyl and carpet and parts of the floor structure below are visible, which consists of wooden strip flooring approximately 2 ¾" wide, and is of similar appearance to that in the main hall (Room **4**). The extension required the removal of the lower part of the windows on the east wall, which were

presumably of the same appearance as those in Room **8**. The doorways are all of modern appearance and plastic concertina doors separate this room from Room **8**.

4.4.5 ***Room 8:*** this room, the largest of the classrooms, was accessed via Room **10** and provides through-access to Rooms **8a** and **11** (Plate 12; Fig 2). Rooms **8** and **8a** appear to have once been part of a larger space, and are divided by a timber and plasterboard partition. The room, in common with most of the other rooms and spaces within the building, has been extensively modernised and has a suspended polystyrene and steel frame ceiling, which slopes at the east side to allow illumination from the windows. It is plain plastered and has painted walls and the floor is laid down to vinyl and carpet, below which appears to be timber. There are two large windows on the east wall, which contain timber sliding sashes divided by timber mullions (Plate 13); modern blinds are fitted. Below the windows is a wooden dado rail, which has fluted moulding (Plate 13) and continues along the wall. Most of the fixtures and fittings are of late twentieth century appearance, including cupboards that are fitted to the west wall. There are, however, some large diameter heating pipes running along both sides of the room that may be of nineteenth century origin.

4.4.6 ***Room 8a:*** this room is similar in internal appearance to Room **8**, and as already outlined, may have been part of a larger room. The main difference from Room **8** is that the room extends to the full width (uniquely) of the building and has windows on both sides. Consequently, it is well lit, although the windows on the western wall are rather high. This room is well provisioned for heating, with four cast iron radiators. The wall dividing this room from Room **7** is partly of plasterboard, suggesting that the doorway was wider than at present (Fig 2). It appears that, together with Room **8**, a large L-shaped area was present here, with possible open access into Room **7**.

4.4.7 ***Rooms 5 and 7:*** this room is of the same general appearance as the other rooms on this floor; it has been extensively modernised and is fairly plain in appearance. The doorway leading from Room **8** appears to have been wider than at present and these rooms may have been interconnected. A plasterboard partition now fills the gap and a standard doorway is present. The floor is laid down to vinyl, below which appears to be timber. There are two cast iron radiators present, together with associated large diameter pipes. A large door of nineteenth century appearance allows access to Room **5**. This small room (Room **5**) is presently a small corridor allowing access into Room 4, but originally would have been an entrance lobby for an external access door on the southern side of the building prior to the construction of the 1896 extension. The present doorway through to Room 4 was probably constructed at the same time as the construction of the 1896 wing. It has two single light mullion windows, a suspended ceiling and a vinyl covered floor down onto floor boards.

4.4.8 ***Rooms 4 and 6:*** Room **4** is the main hall and was a later extension onto the main school building, constructed in 1896 (*Section 3.1.6*). It is a large hall 16.7m x 6.7m in size and closely corresponds with the contemporary description of the main school room being of 54' x 22' in size (Plates 14 and 15). There is a kitchen extension added to the eastern end of the hall, which partly obscures the ornate gothic window at that end. The main hall has a large

open roof space, and the roof is supported by four ornate large hammer beam trusses, with iron tie rods between the horizontal beams (Fig 8). One purlin is exposed on each side of the roof and is supported by the hammer beam trusses; there may, however, be additional purlins that are presently obscured. The windows are of similar construction to those in Rooms **7** and **8** and comprise three tall, three-light mullions together with two shorter three-light mullions set into the southern elevation of the room. The room has strip wooden flooring, with 2 ¾" wide planks and 7" skirting around the side of the room. There is a large dado rail extending around the room at the base of the tall mullioned windows. Doorways provide access into Room **5** and into Room **17**, and the latter would originally have been an external entrance into the playground. Entrances at the west end of the hall afford access into class rooms **1** and **2**, and a further doorway provides access into the kitchen Room **6**. A cupboard is built into the northern elevation, and the door style is comparable to the others in the room.

4.4.9 Room **6** is a later extension, formerly an entrance-lobby, but now is in use as a kitchen. In the northern wall is an elaborate doorway, now blocked, which provided the main external access to this southern wing of the building. A secondary doorway is set on the southern side of the former lobby, and was accessed by an external stair. A later partition wall separates off the southernmost part of the room (**6a**) and relates to the use of Rooms **3**, **6** and **6a** as a kitchen.

4.4.10 ***Rooms 1 and 2:*** Rooms **1** and **2** were two class rooms constructed at the same time as the main hall (Room **4**) and have similar architectural characteristics. The class rooms have low suspended ceilings, but extending below these are the imposts, wall piece and brace of hammer head beams (Plate 16), which are identical to those within the main hall (Room **4**). The fenestration is again similar, comprising a pair of three-light stone-mullioned windows in each class room. A dado rail, comparable to that in Room **4**, extends around each of the class rooms. Each class room was primarily accessed from the main hall, although a modern entranceway affords access into the modern extension Room **15**. The eastern corners of each room has been blocked off but there is no indication as to the purpose.

4.5 INTERNAL DETAIL UPPER GROUND FLOOR

4.5.1 A row of four rooms (**35-38**) occupy a raised part of the building above the corridor Rooms **9** and **10**, but were originally below the level of the first floor and were accessed from the first level of stairs from Room **12** (Plate 17) (Fig 3). This group of low ceilinged rooms is here called the Upper Ground Floor, and were originally used as toilets according to the 1904 plan of the school; now they are used as offices. The walls have plaster surfaces, and the ceiling joists are similarly plaster-covered; the rooms are divided by plywood partitions on one side and of brick construction on the other. The fenestration closely matches that on the ground floor, and was seemingly of contemporary construction with a line of four, short, two-light stone mullioned windows, to the south and a larger three-light timber-mullioned window to the north. The floor is carpeted on top of wooden boarding.

4.6 INTERNAL DETAIL FIRST FLOOR

4.6.1 ***Rooms 23-27:*** this is a series of five identical-sized classrooms (Plates 18 and 19; Fig 4), accessed by a long corridor Room **28** on their western side. The classrooms all have solid walls except for the western wall, adjacent to the corridor, which is constructed of plywood. This wall is evidently a later replacement for an earlier partition wall, possibly constructed of glass, as above the suspended ceiling is a line of glazed partitions (Plate 21), that are above the modern partition walls between corridor Room 28 and the four class rooms; these are evidently survivals of earlier partitions, even though the lower fabric of the partitions has been replaced.

4.6.2 There are no internal partition walls within the classrooms. The floors are all carpeted beneath which is 2¾" wide wooden strip flooring which is identical to that in Room **4**. The classrooms have mullioned windows in the east wall with the lower portion having modern glazing and the upper portion being of sash construction. There are single modern doorways in each classroom on the west wall elevation. All the rooms have modern suspended ceilings with strip lighting and have the original ceilings above. There are no exposed roof trusses or beams visible at ceiling level. The rooms are heated by cast-iron radiators with the product name 'The Marshall' written on the side, and are all still connected by the original piping. The radiator in Room **24** has an original radiator stand marked with the maker's name 'Mercer Brothers Blackburn' on the side. There are no further original internal fixtures or fittings visible in the classrooms

4.6.3 ***Room 28:*** comprises a long linear corridor on the west side of five classrooms (Plate 20). It is accessed from lower floors via stairwells on opposing ends (Rooms **29** and **32**). The windows on the west external wall mirror the distribution of windows on the opposing external wall in the classrooms and there is an additional single light window at the south-west end. The roof and floor are identical to those described in the classrooms and the exposed cast-iron heating pipes run along the western elevation. This western wall has a decorative 5" wide dado rail, located beneath the windows and is 1.02m from floor level. A small modern room has been partitioned off at the southern end of the corridor with plywood walling; at the north end of the corridor is a later extension presently serving as a toilet (Rooms **33** and **34**). A small cupboard (Room **31**) has been formed at the western part of the stair well room (Room **30**) by the establishment of a modern plasterboard partition, and has a single light window.

4.7 ROOF STRUCTURE OF THE MAIN BUILDING

4.7.1 Limited access was available to the roof space above the main school building, allowing inspection and photography but not the production of detailed survey plans. A brief description is provided below as to the form and character of the roof structure.

4.7.2 The roof over the main building had at its centre a pyramidical-shaped timber lattice to accommodate a transept arrangement of dormer bays protruding out from the line of the principal roof ridge. On either side of the pyramid was a

symmetrical roof structure, with the ridge beam and purlins supported at one end by the timber pyramid, and at the other end by the brick gable walls, additional support was provided by two trusses on each side of the pyramid. The trusses had a variant late-nineteenth century form of the traditional king post design, with large principal rafters and tie beams and a narrow iron rod king post set into an iron shoe at the junction of the principal rafters, and a bolt into the tie beam. From the bolt beneath the tie beam were additional rods extending to the lower limbs of the principal rafters (Plate 22). The use of the narrow iron rod clearly demonstrates that the king post operated only under tension, as it did not have the capacity to take compression loads. There was a pair of diagonal struts located between the principal rafters and the tie beam. The trusses supported two purlins on either sloping side of the roof and as many as fourteen pairs of common rafters supported the roof between the two trusses. At the south-western end of the roof, the purlins have been strengthened with modern RSJ beams.

4.7.3 The roof structure for the small dormer bays was set external to the purlins, with a triangular arrangement of common rafters, with a ridge board extending out from the upper of the two purlins. The roof structure for the large central dormer bays extended out from the central pyramid, but otherwise had a similar arrangement, albeit also having lateral purlins to support the larger roof structure of the central dormers.

4.7.4 In the centre of the pyramid is a box faced with semi-circular section, rough-faced timbers which was empty at the time of survey, but was believed to have accommodated the mechanism for a former clock which had a face set into the circular aperture above the upper three light window of the central bay, and was a well documented feature of the school (Plate 23). The clock face was set below the mechanism box and the drive chain for the clock would have required a complex gearing arrangement to connect them; however, none of this survives. Apart from the box, there is no other visible surviving remnant of the clock.

5. DISCUSSION

5.1 INTRODUCTION

5.1.1 The results of the building recording survey has outlined the general appearance and constructional details of St Silas' School. The results have been combined with the desk-based assessment evidence (OA North 2010) in order to outline the origins and development of the current school buildings.

5.2 DEVELOPMENT OF ST SILAS' SCHOOL

5.2.1 The construction of the current St Silas' School, along with many others in the country, can be traced back to the Education Act of 1870, when school attendance started to become compulsory and, subsequently, free for all children between the ages of five and twelve years of age (OA North 2010). Prior to this much of the education provision was provided by religious institutions, for those who could afford it. When the local Sunday School became overcrowded it was decided that a new, purpose-built school was required to accommodate up to 750 pupils. The architect appointed was a Mr Bentley of Kendal, the main contractor being Kenyon and Moulding. An Indenture dated 1884, agreed that the school would be built on land bounded by the new streets of Clematis Street, New Bank Road and St Silas' Road. The school was opened in 1885, apparently as a single-storey structure, to which, a new wing was added in 1896, and at some date a first floor was added to the main school building.

5.2.2 The school consists of various wings and extensions of various dates and styles, with the central block, containing Rooms **5**, **7**, **8**, **8a**, **9**, **9a**, **10** and **11** on the ground floor (Fig 2), forming the core of the original building as was probably opened in 1885. The 1892 Ordnance Survey map (OA North 2010) shows the footprint as having two projecting wings at the rear of the building which no longer survive. These may have been removed when the upper floor was added, evidence for which is visible in the front elevation as the ground floor brick differs from the upper floor brick in both colour and quality (Fig 5). It is probable that the rear and gable elevations were rebuilt as the entirety of these walls are of the same brick.

5.2.3 The date of the addition of the first floor was suggested as being 1904 from an anonymous source in 1934 (*ibid*), but there is evidence externally to suggest that it was added prior to this, and, in particular, prior to the addition of the new wing in 1896 (Rooms **1**, **2, 4** and **6**) for which there is reliable documentary evidence; the description of the sizes of the rooms in the Blackburn Standard of 1896 exactly matches the size of the present main hall (Room **4**). The upper part of the south gable of the main building has been rebuilt in exactly the same brick as the new extension added in 1896, and markedly contrasts with the brickwork of the rest of the main building. This suggests that the addition of the new wing required the rebuilding of the previously existing gable, and indicates that there was a full height gable prior to the construction of the 1896 wing. The population of the school had increased by so much, so quickly, that it is likely that the upper floor was

required very soon after the original school was built (it was common for schools to undergo rapid expansion during this period). It was therefore probably added at some time between the opening of the school in 1885 and the addition of the 1896 wing.

5.2.4 At the same time as the addition of the first floor, both staircases were probably added, including Rooms **12** and **18** on the ground floor, Room **39** on the upper ground floor and Rooms **30** – **32** on the upper floor. This resulted in flat-roofed extensions being added to the north end of the building. The staircases are identical and contain similar features, such as the moulded dados that were set into the original plaster. The establishment of the upper ground floor was established at the same time as the present western elevation was erected, which would appear to relate to the estalishment of the first floor.

5.2.5 Following the raising of the building, the new wing was added to the south end of the main building (Rooms **1**, **2, 4** and **6**), which had separate entrances, front and rear to keep the sexes of the children apart. The description of the layout and the dimensions exactly matches the current appearance of the rooms. Only Room **6** has changed function, latterly being used as a kitchen and necessitating the blocking of the former entrance.

5.2.6 A plan dated to 1904 (OA North 2010) shows the layout of the school in its ultimate form and illustrates the internal layout of all the floors, this also matches the footprint of the building as illustrated on the 1911 Ordnance Survey Plan. The division of the building into the boys and girls schools is obvious, the girls have twice as much playground as the boys, and from this it may be inferred that there were more children in the girls school than the boys, and the girls school occupied a larger portion of the building. It is also clear how little the internal layout of the school has changed since 1904, the only major change being the division of Rooms **8** and **9**, as well as the alteration of the upper ground floor, which was originally the lavatories, possibly for the girls school, which must have occupied the first floor.

5.2.7 Rooms **13**, **14**, **15** and **16** were probably added in the 1950s during alteration works when the children were relocated; the general outward appearance and the internal fixtures supports this date. Extension Rooms **17** and **13** are of mid-twentieth date, and they butt onto the 1896 constructed Classrooms **1** and **2**. However, this extension was subsequently extended with the construction of a toilet block and entrance lobby (Rooms **19** and **20**), which are of later twentieth century build. A new wing was added to Room **11** in 2006 and two new classrooms (Rooms **21** and **22**) were added in 2008 (Caretaker *pers comm*).

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APPENDIX 1: PROJECT DESIGN

1.1 INTRODUCTION

1.2 PROJECT BACKGROUND

1.2.1 A proposal to redevelop St Silas' Primary School, Blackburn, Lancashire (NGR SD 6684 2853), will entail the demolition of the existing late nineteenth century school buildings and the construction of a new replacement school building. A condition of the planning consent for the development was that a desk based assessment be undertaken to assess the archaeological importance of the building and to design a programme of mitigation. Consequently, Oxford Archaeology North (OA North) was contracted by Capita Symonds, in July 2010 to carry out such an assessment (OA North 2010).

1.2.2 Following the results of the assessment, Lancashire County Archaeology Service (LCAS) have requested that an English Heritage Level 3 building investigation (English Heritage 2006) be undertaken prior to the proposed development as part of the existing archaeological condition to the planning consent. This takes into account the significance of the school within both the local area and the Blackburn district together with the extensive survival of original features. A Level 3 investigation is an analytical and systematic account of the building's origins development and use. This level of recording includes an account of the evidence upon which the analysis has been based. The present project design outlines the specifications for the survey.

1.1.3 ***Archaeological Background:***. Blackburn's urban expansion is relatively recent, commencing in earnest during the late eighteenth to early nineteenth century. An important element in this was the expansion of the textile industry and associated workers' housing. Former handloom weaver's cottages survive within the study area (comprising Sites **01**-**02**, **06**-**07** and **10**). By the late nineteenth century, housing had been built across the study area. Much this would have been erected to house the large numbers of people employed by the mills, which substantially expanded in number during the second half of the nineteenth century. Alongside these residential areas were community and recreational buildings, including churches, chapels and associated buildings (Sites **09**, and **15**-**17**) and schools, including Sunday Schools (Sites **03**, **08** and **18**). One of these is the extant Victorian St Silas school building (Site **08**), which began as Billinge Sunday school, Preston New Road, Blackburn in 1834 accommodating 150 boys and 150 girls. In *c* 1876, the school was extended with the addition of a classroom to provide an infants section. The building incorporates some ornate architectural detail within its design, and has seen relatively little alteration to the fabric. It is in good condition and is a significant architectural survival of the period. The building is not within a Conservation Area and is not listed; it is therefore not statutorily protected. However, the original fabric of the building both internally and externally does have a direct beneficial impact on the character of the area.

1.3 OXFORD ARCHAEOLOGY NORTH

1.3.1 Oxford Archaeology North has considerable experience of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 24 years. Evaluations, assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.

1.3.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct (1994).

2. OBJECTIVES

2.1 The archaeological programme of work aims to provide an origin, development sequence, and discussion of the plan, form and function of the school buildings and the site outlined

within the planning application boundary as a whole. The required stages to achieve these ends are as follows:

- ***Buildings Investigation:*** to provide a drawn and textual record of the buildings on site to a Level 3 standard (English Heritage 2006).
- ***Report Production:*** a written report will be produced following completion of the fieldwork, and will assess the significance of the data generated by this programme within a local context. A site archive will be produced to English Heritage guidelines (1991) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3. METHODS STATEMENT

3.1 BUILDINGS INVESTIGATION

3.1.1 ***Introduction:*** the following paragraphs in this section outline the general approach to be undertaken for the production of site drawings, photographic archive and the written record. The investigation will be undertaken at the outset and after the school is no longer in use.

3.1.2 ***Photographic Archive:*** a photographic archive will be produced utilising 35mm cameras to produce black and white prints and digital photography. A full photographic index will be produced and the position of photographs will be marked on the relevant floor plans. The archive will comprise the following:

(i) the general external appearance and wider setting of the buildings;

(ii) oblique views of all the external elevations, right angle views only if necessary and appropriate (if the cross-section and elevation drawings cannot be supplied as hardcopies);

(iii) the overall appearance of the principal rooms and circulation areas, right angle views of internal elevations only if necessary and appropriate;

(iv) any external or internal scaled detail, structural or architectural, which is relevant to the design, development and use of the buildings, and which does not show adequately on general photographs;

(v) any internal scaled detailed views of features of especial architectural interest, ephemera, fixtures and fittings, or fabric detail relevant to phasing the buildings which does not show adequately on general photographs.

3.1.3 ***Survey Drawings:*** the following as existing drawings will be produced for the building:

(i) plans of the ground floor, first floor and upper floor will be produced of the main school building. These will be produced by enhancement of existing architects' drawings. They will show the form and location of any structural features of historic significance (1:100 scale);

(ii) drawing of the principal north-west and south-east external elevations of the buildings (1:50) will be produced by rectified photography (see 3.2.6);

(iii) one cross-section through the main school building, the position of which will be determined on site (1:50); this will be undertaken by instrument survey;

(iv) detailed drawings of any pertinent detail not more readily captured through photography.

3.1.4 The survey drawings will normally be produced by the enhancement of existing drawings. New survey, by means of a reflectorless total station, will be needed for select elements, such as the cross sections and for control for the rectified photography. The reflectorless total station is capable of measuring distances to a point of detail by reflection from the wall surface, and does not need a prism. The instrument to be used will be a Leica TCR800 reflectorless total station, which emits a visible laser beam that can be visually guided around points of detail. The digital survey data will be captured within a pen computer running TheoLT software, which allows the survey to be directly inserted into AutoCAD software for the production of final drawings.

3.1.5 Rectified medium format photography will be carried out in order to create the elevations of the two principle elevations. The rectified photographs will be adjusted using Photomodeller software to take out any residual distortion, and then the images will be digitised within AutoCAD software to produce accurate representative elevation drawings. The drawings will show principle detail, which will include ashlar stone, quoins, changes in construction, but will not show all individual stones.

3.1.6 The existing floor plans will be checked for accuracy prior to any recording work being carried out. If inaccuracies significantly impede the progress of the archaeological survey they must be rectified to allow the archaeological survey to proceed, a charge for this correction will be made as required.

3.1.7 The drawings will be used to illustrate the phasing and development of the buildings. Detail captured by the annotation will include such features as window and door openings, an indication of ground and roof level, and changes in building material. The final drawings will be presented through an industry standard CAD package (AutoCAD 2004).

3.1.8 ***Interpretation and Analysis:*** a visual inspection of the buildings will be undertaken utilising the OA North building investigation *proforma* sheets. A description of the building will be undertaken to Level 3 standard (English Heritage 2006), which will include a systematic account of the origin, development and use of the buildings as well as the evidence on which this account is based.

3.1.9 The written record will include:

(i) analysis of the plan, form, fabric, function, age and development sequence of the buildings;

(ii) an account of the past and present use of the buildings;

(iii) an account of the fixtures, fittings associated with the buildings, and their purpose;

(iv) identification of key architectural features (including fixtures and fittings);

(v) a discussion of the relative significance of rooms within the buildings;

(vi) a description of the historic context of the building including its relationship with nearby buildings in architectural and functional terms.

3.1.10 ***Watching Brief:*** following the building investigation and during the demolition works a watching brief should be maintained by a buildings archaeologist in order to inspect areas of the building which were obscured. The time scale of this will depend upon the results of the initial survey and the demolition timetable.

3.1.11 The watching brief will consist of a buildings archaeologist being present on site when areas identified as being of particular interest are being demolished. Demolition will need to be temporarily suspended if any features of interest are discovered. These will be recorded in the same manner as above.

3.2 **REPORT PRODUCTION**

3.2.1 ***Report:*** one bound and one unbound copy of a written synthetic report, together with a digital copy supplied on CD, will be submitted to the client, and a further copy to be submitted in pdf format to LCAS within eight weeks of completion. The report will include;

(i) a site location plan related to the national grid;

(ii) a front cover to include the planning application number and the NGR;

(iii) a concise, non-technical summary of the results;

(iv) an explanation to any agreed variations to the brief, including any justification for any analyses not undertaken;

(v) a description of the methodology employed, work undertaken and results obtained;

(vi) copies of plans, photographs, and other illustrations as appropriate;

(vii) a copy of this project design, and indications of any agreed departure from that design;

(viii) the report will also include a complete bibliography of sources from which data has been derived;

(ix) a photographic index;

(x) list of archive contents.

3.3 ARCHIVE

3.3.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. OA North conforms to best practice in the preparation of project archives for long-term storage.

3.3.2 This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Lancashire SMR (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the appropriate County Record Office, in this case Preston.

3.3.3 The Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

3.3.4 ***Confidentiality:*** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. HEALTH AND SAFETY

4.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A risk assessment will be completed in advance of any on-site works and copies will be made available on request to all interested parties.

4.2 OA North may require the hire of lighting and a generator if there is insufficient interior lighting. This can be provided by OA North at additional cost.

5. WORK TIMETABLE

5.1 ***Buildings Investigation:*** it is anticipated that the site work will require approximately 8 days in total to complete. This is based on unobstructed access, and should this not be possible this may affect timescale and hence cost. The exact timescale is dependent upon the accuracy of the architect's plans to be gauged once the fieldwork is underway. The provisional allocated time for each part of the survey in the buildings is outlined in the table below:

Survey Element	*Time*
Exterior Elevations	2 Days
Cross-section	1 Day
Interior Survey	5 Days

	8 Days

5.2 ***Watching Brief:*** the duration of the archaeological presence for this element is unknown and will be dictated by both the results of the survey and the schedule of works.

5.3 ***Report Production:*** a report will be submitted within approximately eight weeks of the completion of all elements of the fieldwork.

6. OTHER

6.1 ***Access:*** liaison for access to the buildings during the assessment will be arranged with the client, unless otherwise instructed prior to commencement of the archaeological investigation.

6.2 ***Project Monitoring:*** whilst the work is undertaken for the client, the Archaeologist at LCAS will be kept fully informed of the work and its results, and will be notified in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with LCAS in consultation with the client.

7. STAFFING PROPOSALS

7.1 The project will be under the direct management of **Jamie Quartermaine BA Hons Surv Dip MIFA** (OA North senior project manager) to whom all correspondence should be addressed.

7.2 The project will be supervised in the field by **Karl Taylor BSc AIFA** (OA North project officer), who will also undertake the documentary research. Karl has a great deal of experience in the recording and analysis of historic buildings throughout the North West. Karl will be assisted on site by an OA North assistant supervisor.

ILLUSTRATIONS

FIGURES

PLATES

Plate 19: View of Room **27**

Plate 20: View of Room **28** facing south

Plate 21: The line of original partitions preserved above suspended ceilings between the upper five class rooms and corridor Room **28**

Plate 22: The lower part of a main school building truss preserved above a suspended ceiling, showing tie rods supporting the principal rafters

Plate 23: The roof structure above the main school building showing a truss and the box of the clock mechanism beyond

Figure 1: Site location

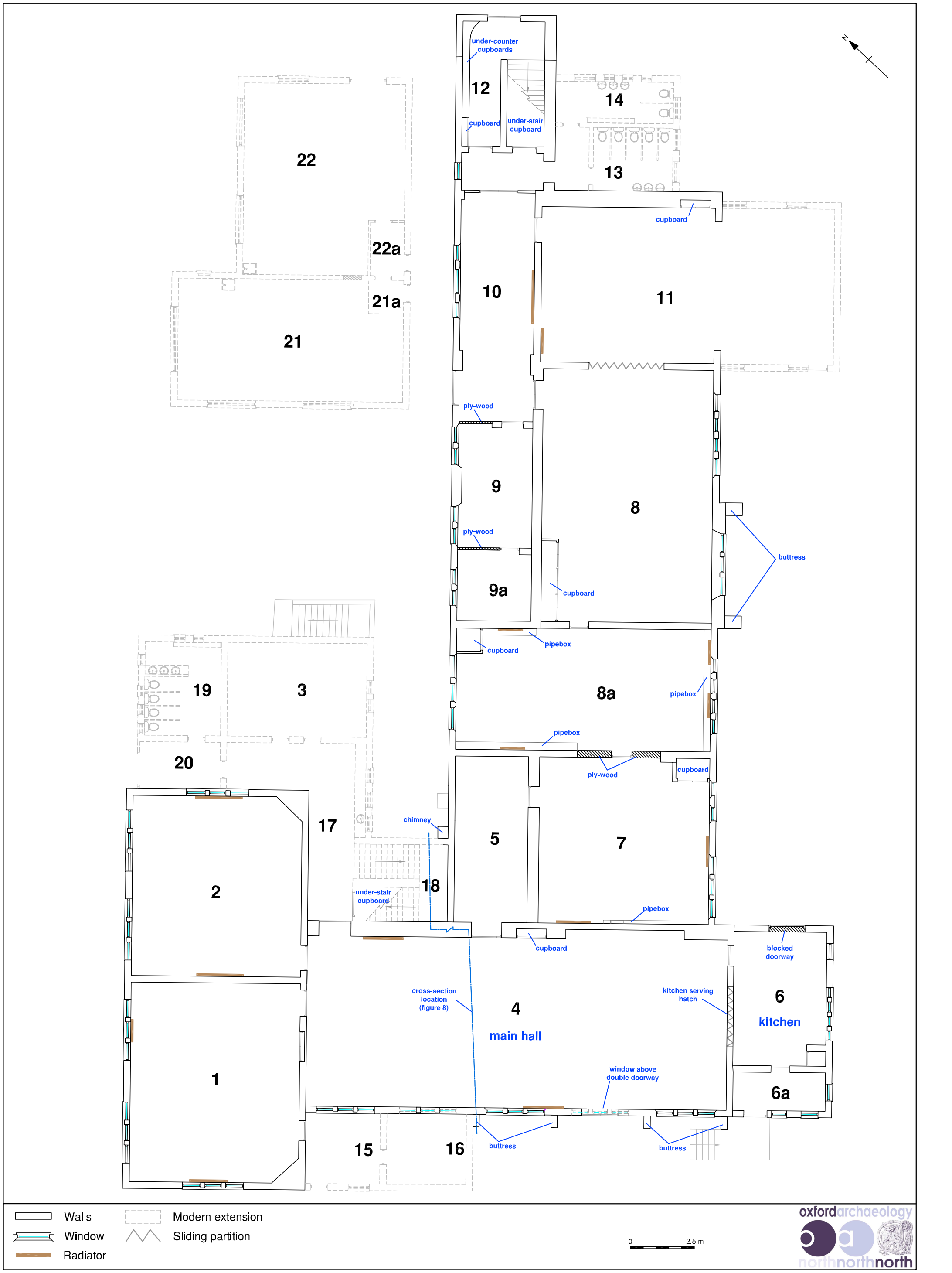


Figure 2: Lower-ground floor plan

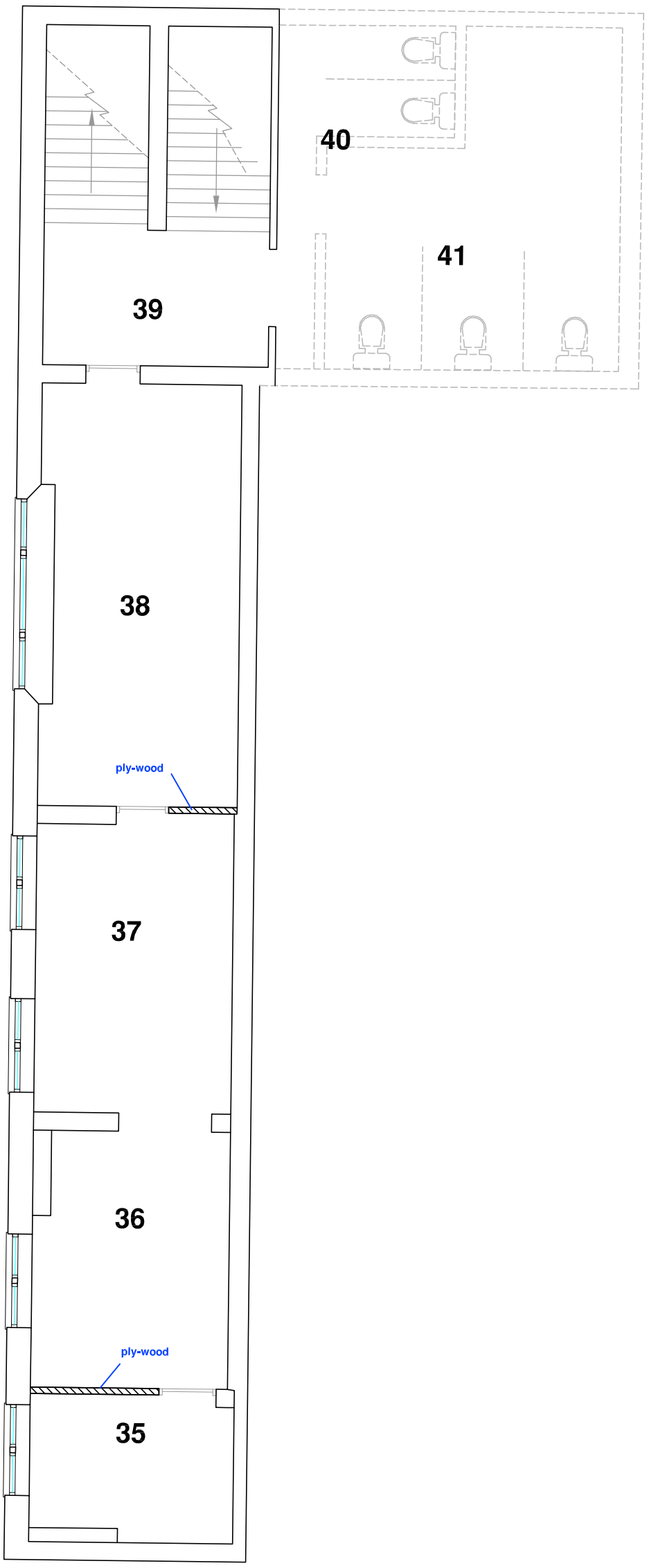


Figure 3: Upper-ground floor plan

Figure 4: First floor plan

Obscured

0 2.5 m

1:100 @ A3

oxfordarchaeology northnorthnorth

JQ*L10311*AMS*301110

Figure 5: Front elevation of St Silas School, showing rectified photography

Stone
Brick
Glass
Air vent
Obscured

0 2.5 m
1:100 @ A3

oxfordarchaeology
northnorthnorth

JQ*L10311*AMS*301110

Figure 6: Front elevation of St Silas School, showing principal and obscured detail

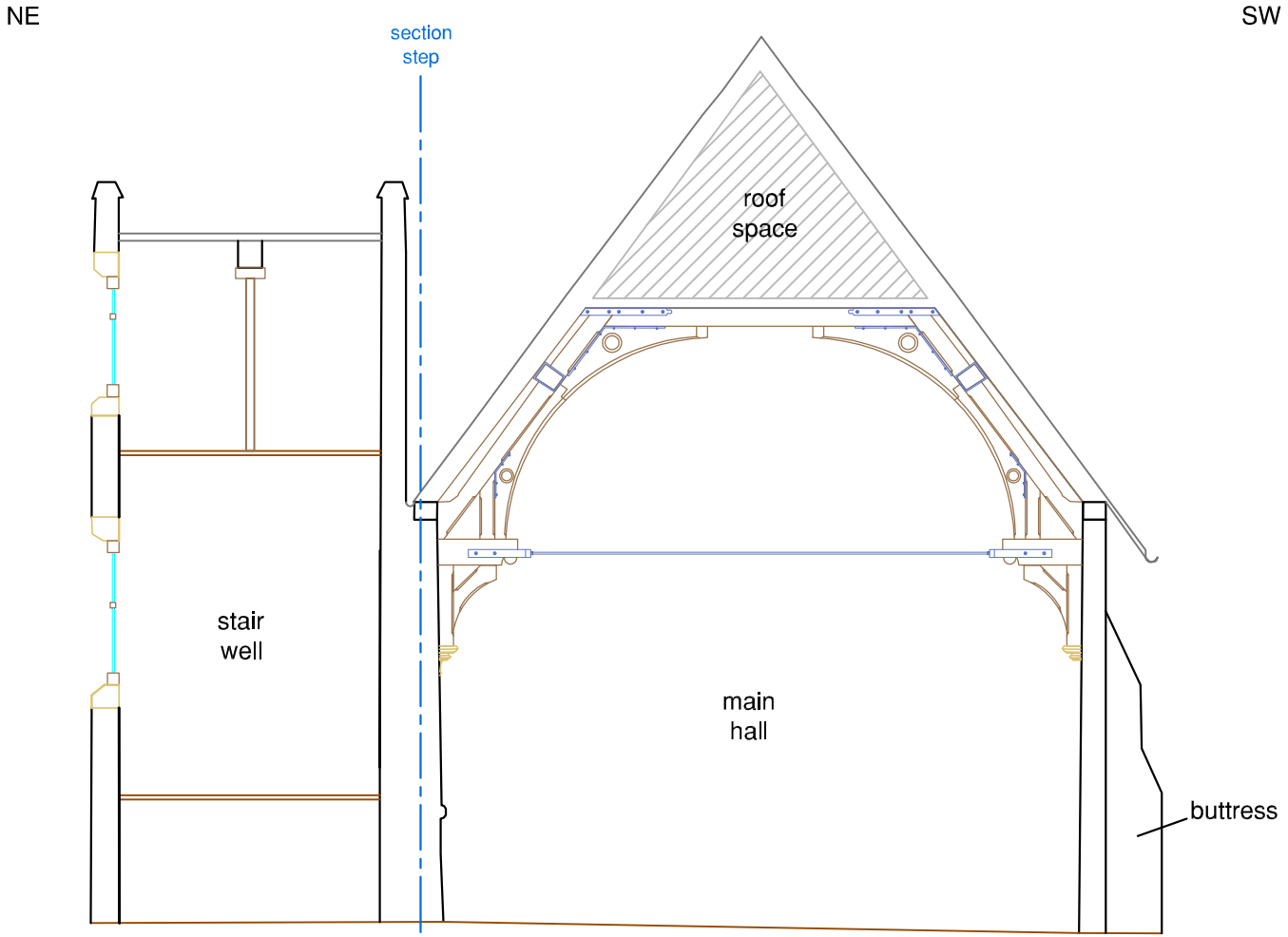
Obscured

0 2.5 m
1:125 @ A3

oxfordarchaeology
northnorthnorth

JQ*L10311*AMS*301110

Figure 7: Rear elevation of St Silas School, showing rectified photography



Stone
Wooden beam
Metal brace
Glass

0 2 m
1:75 @ A4

oxfordarchaeology north north north

Figure 8: Cross-section through the main hall

Plate 1: General view of the front of St Silas' School from Clematis Street, facing south-west

Plate 2: General view of the front of St Silas' School from Clematis Street, facing north-east

Plate 3: General view of the rear of St Silas' School from the rear playground, facing north-west

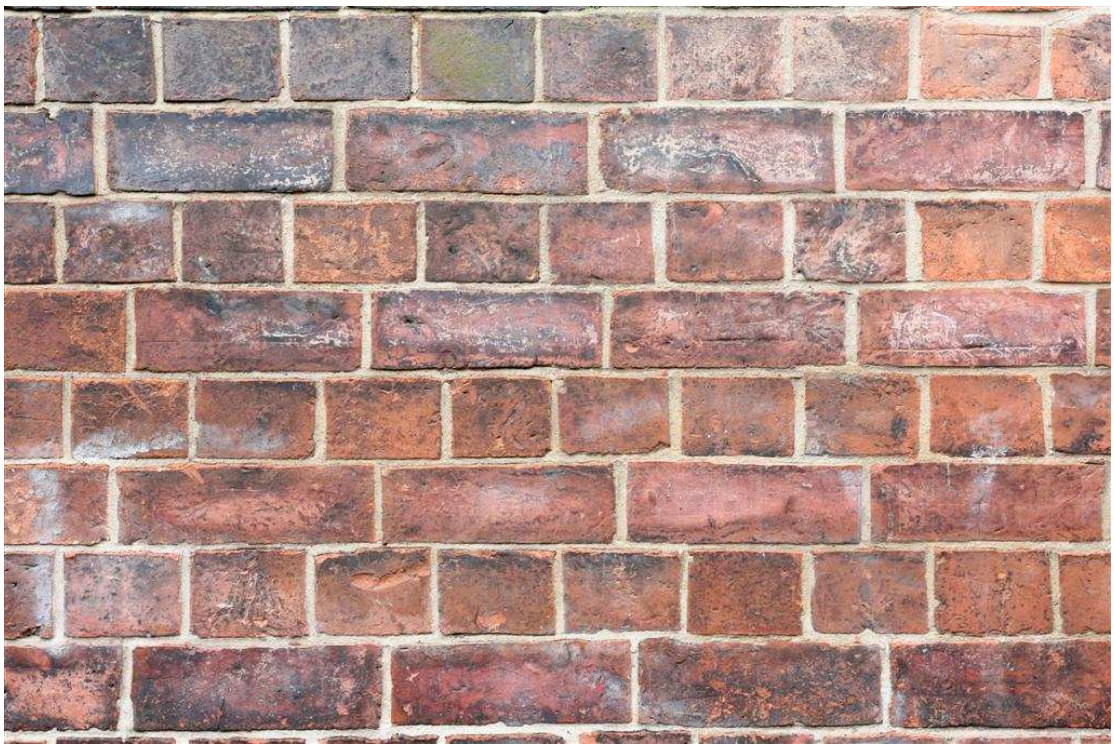


Plate 4: Example of the brickwork of the main school building

Plate 5: Example of the decorative dado moulding

Plate 6: View of the north aspect of the main building

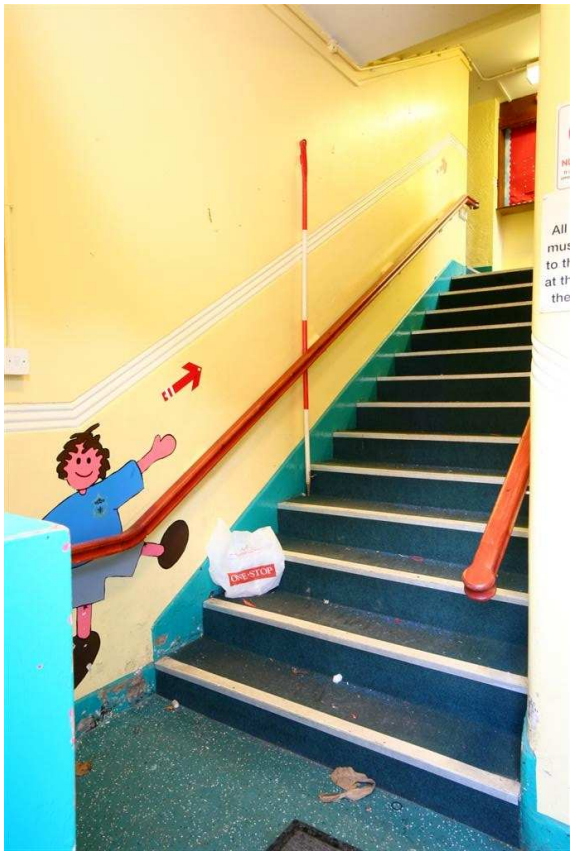


Plate 7: View of the stairs in Room **12**

Plate 8: The rear aspect of Rooms **1** and **2**

Plate 9: The appearance of the perimeter wall as visible from the rear playground

Plate 10: Rectified image of the front (main) elevation of St Silas' School

Plate 11: North Elevation of Room **6** showing former entrance

Plate 12: View of Room **8** facing north towards Room **11**

Plate 13: Example of a window in Room **8**

Plate 14: Room **4**, looking east, showing the distinctive hammer beam trusses of the main hall

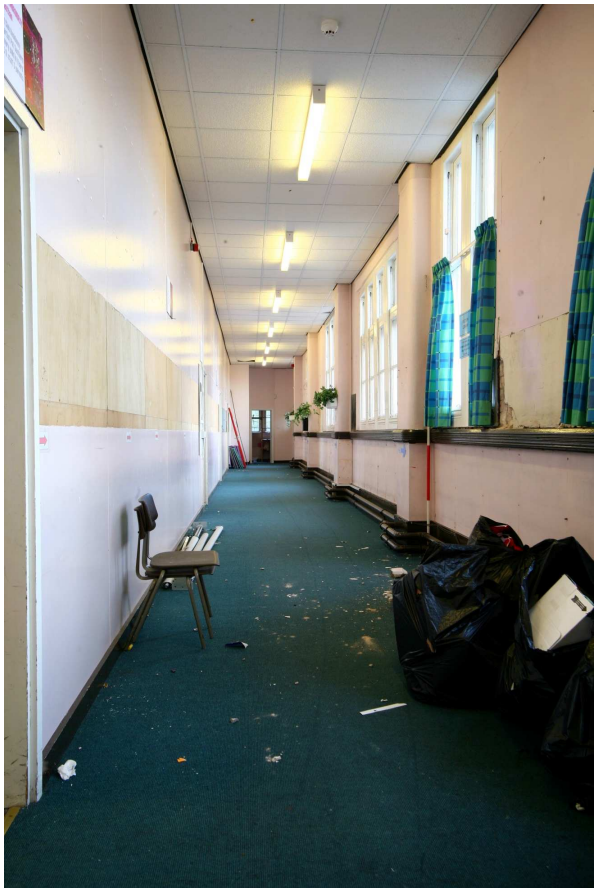
Plate 15: The wall plates and braces of the hammerbeam truss in Room **4**

Plate 16: The wall plate and braces of a hammerbeam truss in Room **1**

Plate 17: Rooms **36-38** looking south

Plate 18: View of Room **25**

Plate 19: View of Room **27**



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