

**Land to the rear of 6 Watergate
KIRKWALL
ORKNEY**



**DESK BASED ASSESSMENT AND
ARCHAEOLOGICAL EVALUATION**

MAY 2009

**Land to the rear of 6
Watergate,
Kirkwall,
Orkney**

**Desk based assessment and
archaeological evaluation**

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EXECUTIVE SUMMARY

A desk based assessment and archaeological evaluation of land at the rear of 6 Watergate, Kirkwall was undertaken by ORCA in March 2009, in advance of the proposed development of the site and construction of a dwelling. The proposed development site is within the area of Kirkwall known as The Laverock, which developed in the medieval period to house the growing ecclesiastical community associated with St Magnus Cathedral. Limited excavations in the vicinity of the site have previously exposed Iron Age, medieval and early post-medieval deposits and features. Although the proposal is not within the Kirkwall Conservation Area and does not directly impact upon any previously recorded archaeological features, evidence drawn from the desk based assessment of the site suggested that there would be a very strong possibility that important sub-surface early medieval remains relating to the development of Kirkwall survive in situ in the area and will be disturbed by development.

As a consequence, and in consultation with the Regional Archaeologist, five evaluation trenches were excavated across the site to expose and record any below-ground archaeological deposits or structures. In all but one of the trenches, archaeological remains were encountered. These comprise structural remains which have been interpreted as the basal courses of a substantial wall, or building foundations; a stone-lined drain or culvert; a massive ditch/cut with silt fills; and an extensive rubble deposit / demolition layer. It is likely that these are all medieval in date and may relate to structures that once formed part of the ecclesiastical precinct with the Bishops Palace to the east of the proposal area. Post-medieval and medieval pottery, animal bone, and a fragment of medieval painted vessel glass were recovered from deposits on the site.

The high archaeological potential indicated by the desk based assessment has been confirmed by the intrusive evaluation; and consequently the proposed development would disturb potentially important archaeological remains. The structural remains appear to be concentrated to the east of the proposed development area; it is therefore recommended that, in discussion with the Planning Dept, the architect and potentially engineers, the proposed building footprint is moved several metres to the west to minimise the impact on the underlying archaeology and that the below-ground remains are taken into account when the foundations are designed. Furthermore, as a minimum mitigation strategy, ORCA recommend that monitoring of all ground breaking works associated with the development of the site takes place in the form of an archaeological watching brief.

1 Introduction

ORCA was commissioned by Ms. T. Irvine to undertake an archaeological assessment of land between to the rear of 6 Watergate, Kirkwall prior to its proposed development. The proposed scheme of works includes the felling of several trees, the clearance of land and the construction of a one-and-a-half storey dwelling house. The assessment took the form of a desk-based study complemented by a site visit, and the excavation of five evaluation trenches on the site, in order to assess whether there are any features and deposits of archaeological significance that will be impacted directly or indirectly by the proposed development. The desk-based evidence is mostly derived from the information from recent watching briefs and small-scale archaeological excavations, with consultation of early maps, historical documents and the results of academic research into the history of Kirkwall. A brief site inspection was also made by the author and Nick Card, ORCA Projects Manager, on the afternoon of Thursday 23rd April 2009, in the presence of the client. The site is in close proximity to the Scheduled Ancient Monument known as the Bishop's Palace, in one of the city's most significant historical areas known as the Laverock. The considerable historical value of the area makes any development in the vicinity archaeologically sensitive, and there is consequently a high potential for the survival of sub-surface early historic and prehistoric features and deposits in this part of Kirkwall. As a consequence, and in consultation with the Orkney Regional Archaeologist, five evaluation trenches, totalling 37.44m² (circa 10% of the development site) were excavated across the site on 4th May 2009. With the exception of one trench, archaeological remains were encountered across the site. These were exposed, cleaned and recorded *in situ*, but were not excavated due to time constraints. The trenches were backfilled on Tuesday 5th May. The structural remains appear to be concentrated to the east of the proposal area, as the stonework exposed in Trench 1 did not extend westwards into Trench 2. Extensive rubble deposits were encountered in Trench 4, at the western end of the site, but did not appear to be *in situ*, and are likely to be demolition dump layers. It is recommended that the depth of stratigraphy encountered across the site is taken into account when planning and designing the foundation and construction of the dwelling in order to minimise the impact on the below-ground remains. Due to the high archaeological potential of the development area, ORCA also recommend that monitoring of all ground disturbance associated with the re-development takes place in the form of an archaeological watching brief in order to record any archaeological deposits or structures that will be disturbed by the development.

2 Site Location, Topography and Geology

The city of Kirkwall occupies a central low-lying area within the Orkney Mainland, between the Bay of Kirkwall to the north and Scapa Bay to the south. The site itself lies to the south of the city centre in an area historically known as the Laverock and is located to the rear (west) of the dwelling known as the Old Manse at 6 Watergate. The proposal area is centred upon NGR HY 44905 10778 (see Figures 1 and 2). The building plot covers an area of approximately 26m by 13m and is oriented roughly ESE by WNW. Within this plot, the proposed dwelling footprint covers an area measuring approximately 7.6m by 15.6m on the same alignment. The site is bounded by Palace Gardens to the north and 16-20 Victoria Street (currently Victoria Hair Salon and a private dwelling) to the south. The Old Manse at 6 Watergate, which abuts the Bishops Palace, bounds the development site to the east. The natural ground level rises gently towards the east of the site and there is consequently a greater depth of made ground towards the west of the site. Several trees were recently felled on the site and there were extensive tree root systems encountered in the trenches. There are raised beds on its southern and eastern sides of the garden and several flagstone paths cross the site. The underlying geology is Stromness flagstone with clay drift deposits (Mykura 1978).



Plate 1: The north eastern part of the development area, with the Old Manse and the Bishops Palace in the background. Looking northeast.



Figure 1 (above): The proposed development area shown on the Ordnance Survey town plan 25" to 1 mile 1st edition, 1880 (Sheet CVIII.3). Not to scale.

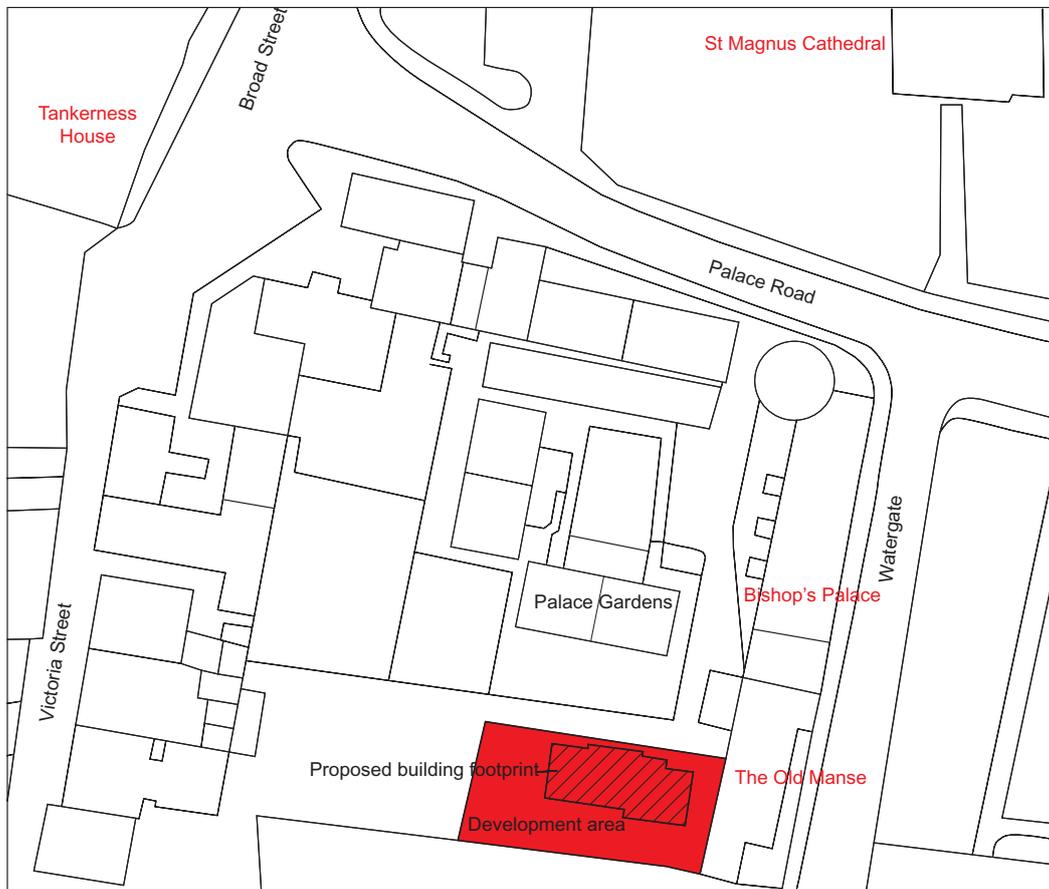


Figure 2 (above) Detailed site location of the development area and proposed building footprint (map data supplied by client). Not to scale.

3 Context and Aims of the Assessment

3.1 Planning Policy Context and Guidelines

The importance of the cultural heritage, including archaeological remains, is recognised in legislation as well as local and national planning policy. This desk based assessment has been undertaken within the context of relevant policy and legislation as outlined in:

Scottish Planning Policy 23 (SPP23): *Planning and the Historic Environment* 2008, with the companion Planning Advice Note 42 (PAN42) *Archaeology – the Planning Process and Scheduled Monument Procedures* 1994; Historic Scotland's *Scottish Historic Environment Policy* (SHEP) 2008; and its *Memorandum of Guidance on Listed Buildings and Conservation Areas* (1998); Orkney Island Council's Local and Structure Plans (soon to be superseded by Local Development Plans): *The Orkney Structure Plan* (2001) and *The Orkney Local Plan* (2004), available at www.orkney.gov.uk.

Some monuments are deemed to be of national importance and are therefore given legal protection through *The Ancient Monuments and Archaeological Areas Act* 1979 (Scheduled Ancient Monuments), and the *Planning (Listed Buildings and Conservation Areas) (Scotland) Act* 1997 (Listed Buildings).

3.2 Aims and Objectives of the Desk Based Assessment

The aims of this assessment were to assess the known or potential archaeological resource within the site proposed for development and the likely impact of the development on the archaeological resource, and to recommend a strategy for mitigating this impact upon any known or potential archaeological remains. The specific objectives of the assessment were:

- To identify any previously unknown archaeological sites or deposits surviving below-ground through the examination of documentary and cartographic evidence and the excavation of evaluation trenches;
- To identify any previously known archaeological monuments present on the site through a search of the National Monuments Record of Scotland and other documentary sources, as well as through consultation with local professional and amateur archaeologists;

- To assess the potential impact of the development on the archaeological resource, taking into account its varied significance, and
- To establish where possible the presence or absence, character and extent, date, integrity, level of preservation and relative quality of archaeological sites within the proposed development area;
- To evaluate the archaeological significance of these sites in terms of their local, regional and national importance.

3.3 Aims and Objectives of the Archaeological Evaluation

The general aims of the archaeological evaluation were to gain information about the below-ground archaeological resource in order to make an assessment of its archaeological and historical merit in its local, regional and national context.

It was agreed in consultation with the Regional Archaeologist, Ms Julie Gibson, that this would be best achieved through uncovering an appropriate sample area of the development site and exposing any archaeological deposits or features in the proposal area, in order to assess the impact of the proposed development.

The specific objectives were:

- To strip several trenches using a mechanised digger to expose any underlying archaeology;
- To remove by hand any overburden in order to expose the archaeological deposits;
- To record any exposed features or structures photographically and, where appropriate, on written context sheets;
- To suggest appropriate mitigation measures for the protection of the archaeological resource or, where necessary, the investigation and recording of any sites likely to be affected by the development where preservation *in situ* cannot be achieved.

4 Assessment Methodology

4.1 Desk Based Assessment

The study area lies within a considerably built up part of the old city centre of Kirkwall. Given the relatively limited nature of the proposed development, it is beyond the remit of this current assessment to discuss every site of archaeological and historical significance within the city. Although a search was conducted for the area within a 1km radius of the site of the proposed development, only archaeological and historical sites of direct relevance to the historical development and potential of the immediate proposal area have been discussed in the main body of this report. As a result only Listed Buildings, Scheduled Ancient Monuments and other archaeological sites within 100m of the development area were considered. The results of the search are listed in the appendices. It was however necessary to place the site within the historical context of the Laverock area of Kirkwall and within the wider setting of the city as a whole and this is reflected in the history and archaeological potential of the site as described below. The following sources of data were consulted for the purposes of this report:

- A review of policy considerations and the current legislative framework;
- Local Development Plan and Kirkwall Conservation Area information from www.orkney.gov.uk;
- The Orkney Sites and Monuments Record (SMR) via 1:10,000 maps and index cards (held at Orkney College);
- National Monuments Record of Scotland via the Canmore on-line database available at www.rcahms.gov.uk;
- The database of listed buildings, scheduled ancient monuments and monuments proposed for listing, and designed landscapes held by Historic Scotland and available at www.historic-scotland.gov.uk;
- The Buildings at Risk Register for Scotland, maintained by the Scottish Civic Trust and Historic Scotland and available at www.buildingsatrisk.org.uk; (there are no buildings at risk listed within the study area);
- Historical and Ordnance Survey maps for Kirkwall;

- Appropriate archaeological and historical journals, monographs and books, including the Old and New Statistical Accounts of Scotland;

4.2 Archaeological Evaluation

Fieldwork comprising the excavation of five evaluation trenches was undertaken by the author on Monday 4th and Tuesday 5th May. A total of 37.44m² were excavated, representing just over 10% of the development area. The trenches were excavated using a Takeuchi TB016 mini-digger fitted with a 1m toothless ditching bucket under the supervision of the author to remove topsoil and subsoil. Overburden was then removed by hand using a mattock and shovel, with further cleaning by trowel. Archaeological features were recorded with digital photography. Drawn sketches and written notes were also made on pro forma context sheets where appropriate. A total of 67 photographs were taken and 16 context numbers were assigned within Trenches 1, 3 and 5. Trenches 2 and 4 were recorded on pro forma Trench Record sheets only. Artefacts were retained for post-excavation analysis. With the exception of Trench 2, in which the subsoil directly overlay the glacial till, all of the trenches revealed archaeological features and deposits. The weather during the fieldwork was variable, with heavy rain showers and overcast conditions on the Monday giving way to lighter showers and bright spells of dry weather and sunshine through Tuesday. The trenches were backfilled on Tuesday 5th May.

Several artefacts were recovered from the evaluation trenches; these include medieval and post-medieval pottery, vessel and window glass, animal bone and a human tooth. These are currently being housed at Orkney College. The archive is housed in the Orkney Sites and Monuments Record; copies of the report will be lodged with NMRS. An entry has been submitted to *Discovery and Excavation in Scotland*.

5 Desk Based Results

5.1 Monuments Records

A search was conducted for the site of the proposed development and for the area within a 100m radius through the National Monuments Record for Scotland on-line search facility Canmore, the Orkney Sites and Monuments Record and the databases of Listed Buildings and Scheduled Ancient Monuments maintained by Historic Scotland through the on-line facility Pastmap. There are two Scheduled Ancient Monuments within 100m of the proposed development, The Bishops' Palace and the Earls' Palace, on Palace Road. They are also Category A Listed Buildings, as is St Magnus' Cathedral. Tankerness House, now the Orkney Museum, and located at 35-41 (odd numbers)

Broad Street, is also A Listed. It is highly significant that all of the four A Listed Buildings in Kirkwall (two of which are also Scheduled Ancient Monuments) are within 100m of the proposed development area and this is indicative of the historical importance of this part of the city. There are a further large number of B and C Listed Buildings within 100m of the proposal area and it is beyond the remit of this assessment to detail all of these; their significance is summarised as a group and listed in the appendices. The most important of these is the building known as the Old Manse, which abuts the Bishop's Palace to the north. Whilst it is unlikely that the proposed development will directly or indirectly impact upon any of these known sites, the original footprint of the Bishop's Palace is not known and there remains a strong possibility that the development will disturb sub-surface archaeology related to the medieval occupation of Kirkwall.

There are no designated gardens or designed landscapes within the study area. Several other sites are recorded by the NMRS and SMR within the vicinity of the study area; these include the location of deposits and features revealed through archaeological investigations, and the location of unstratified artefacts, and range in date from the prehistoric period to the 20th century. These are discussed in more detail where relevant below and are listed in the appendices of this report.

5.2 Cartographic Sources

Historical and contemporary maps of the study area were consulted in order to determine the presence or absence of past structures and landscapes that may not have been included within the NMRS or SMR. Early maps of Orkney dating to the 17th and 18th centuries tend to be small scale, and depictions of Kirkwall are rare. Bleau's map of 1654 is the most detailed early historical map, and although largely schematic, its stylised depiction of 'Kirkewale' shows the Midtown connecting the Burgh and Laverock areas of the city by the mid 17th century (Irvine 2006, Plate 5).

Nicholas Sanson's 1665 map shows the Cathedral only, and Moll's *Orkneyshire* of 1745 is similarly stylised. Aberdeen's chart of 1769 and Bennett and Sayer's 1781 map show the extent of the Peerie Sea but do not offer much detail about Kirkwall. John Thomson's Atlas of Scotland (1832) shows the development of settlement in Kirkwall, but is largely schematic and not very useful to the current assessment. The Great Reform Act Town Plan of the same year, 1832, however, is more detailed and shows buildings on Palace Road, Victoria Street and Watergate, including the Bishop's Palace and the Old Manse. The proposed development site is shown as a vacant plot between the Old Manse and dwellings on Victoria Street.

The first accurate mapping of Kirkwall is represented by the Ordnance Survey County Series of the early 1880s. The OS Town Plan of Kirkwall c1880 was viewed on-line at www.nls.uk/digitallibrary/map. This plan was the basis for the First Edition Ordnance Survey map and shows the same information. These maps show recently constructed Junction Road (although not yet joined to Scapa Harbour) forming the east shore of the Peerie Sea. The proposal area is blank and remains unoccupied by this time; there are no structures visible on the map. The Second Edition Ordnance Survey map of 1902 was viewed in the Orkney SMR and very little appears to have changed in relation to the assessment area.

5.3 Previous Archaeological Investigations

There have been numerous small-scale excavations and archaeological investigations in the older parts of Kirkwall, mainly in the form of monitoring of intrusive works for service replacement and refurbishments. The accompanying reports are mostly unpublished, but have recently been summarised by Lamb and Robertson (2005). Of particular relevance to the current study are the results of a watching brief undertaken in 1982 on the site of the Earl's Palace, which exposed medieval structures and deposits surviving just below the topsoil. A rare 13th-century Scandinavian comb was recovered from the investigations and waterlogged medieval deposits were also encountered (Cox et al 1998). Test trenches dug at the corner of Broad Street and Palace Road have also exposed the remains of a medieval drainage system associated with the Bishop's Palace (Lamb & Robertson 2005, 187).

The excavation of five sites in 1978, on the west side of Albert Street, Broad Street and Victoria Street provided further opportunity to assess the survival of deposits in Kirkwall generally (McGavin 1982). Sites at Tankerness House and Gunn's Close revealed a sequence of deposits ranging from the 12th to the 19th centuries. Also within the vicinity of the development area, excavations at the south end of Broad Street and the north end of Victoria Street in the 1980s revealed considerable prehistoric structural remains, probably of an Iron Age broch (Lamb and Robertson 2005, 186). Excavations in the close vicinity of the proposed development area have consistently encountered medieval (and older) deposits and a very good survival of organic remains. Many authors have suggested that Kirkwall may well have a buried waterfront archaeology comparable with that of York or Bergen (Lamb & Robertson 2005, 171); certainly, the results demonstrate 'the very high archaeological potential' of this part of the city (Cox et al 1998, 569).

5.5 Documentary Sources

The First and Second Statistical Accounts for Scotland were consulted but did not contain any information relevant to the development site. Secondary sources were also consulted in order to place the proposal area into a historical context. A detailed description of Kirkwall was written in 1900, focusing upon the more well-to-do residents of the city and their properties (Hossack 1900). The book describes the city, street by street, detailing many of the early post-medieval properties, including those in the Laverock area which bound the proposed development site. Published excavation reports in academic journals, such as McGavin 1982, and Cox et al 1998, and recent journal articles and chapters within academic publications, such as Lamb 2003 and Lamb & Robertson 2005, have also provided useful background information about the history and development of Kirkwall.

6 Historical and Archaeological Background

6.1 The Prehistoric Landscape

Evidence for prehistoric activity within Kirkwall itself is generally limited to unprovenanced finds, such as a late Iron Age Bronze hair pin from the Quoybanks area (NMRS: HY41SE11); and three carved stone balls, possibly from Hillhead House (NMRS: HY40NW12; HY40NW13; HY41SE14). However, the low rise visible in the street at the junction of Tankerness Lane, Broad Street, Palace Road and Victoria Street, known as Spence's Corner, marks the spot of what appears to be an extensive Iron Age settlement, most probably incorporating a broch site (NMRS: HY41SW133). Trenching in the 1980s by the current Royal Bank of Scotland revealed substantial rubble deposits, coursed masonry, burnt material suggestive of hearths and Iron Age domestic refuse material (Lamb & Robertson 2005, 186). This lies within 100m of the proposed development and is of considerable archaeological importance as it suggests that further prehistoric remains may be located in the vicinity. Although a Roman coin dating to the 2nd century AD was found in the graveyard of the cathedral (NMRS: HY41SW14) and a contemporary trumpet brooch was found in the vicinity of the Bishops' Palace (NMRS: HY41SW18), there is no evidence for Roman activity in Kirkwall. It is possible, however, that the Iron Age settlement indicated by the broch continued in use and that there was a Pictish nucleus at the head of the Tankerness Lane at the heart of the Laverock, prior to the construction of the Cathedral and the development of the Norse town (Lamb 1986, 20).

6.2 The Earlier Historic Landscape

The first documentary reference to Kirkwall is in the *Orkneyinga Saga*, 'during a troubled period in the reign of the great 11th-century jarl Thorfinn Sigurdarson, the Mighty' (Lamb 2003, 176). Kirkwall, whose name is derived from Old Norse *Kirkjuvagr* for 'church bay' (Gourlay & Turner 1977, 1), is the best surviving example of a Norse town of the medieval period and, as such, its earlier historic landscape is of international importance (Owen et al 1994). As a medieval settlement, the nearest parallels are in Norway, namely Trondheim and Bergen, and early Norman influences are evident, yet Kirkwall predates the English Boroughs and the Scottish Royal Burghs by a generation (Lamb 2003, 175).

The *Orkneyinga Saga* suggests that Kirkwall was an important settlement in the 11th century, and was probably already well serviced by merchants and a market when Rognvald Kali Kolsson seized power in 1136 and set about developing it as an urban centre (Lamb & Robertson 2005, 166). St Magnus Cathedral, started in 1137, was located on the shore outside of the main 12th-century town. Kirkwall developed as two separate foci that eventually joined; in the northern part of the town was an area of settlement associated with the earls called the Burgh, and in the south was the Laverock, an ecclesiastical community around the Cathedral, with dwellings for diocesan officials, burgesses and lairds (Owen et al 1994).

Just to the east of the development area, the Bishop's Palace was founded in the 12th century and formed an English style cathedral close with St Magnus' when the cathedral centre was moved from Birsay to Kirkwall (Lamb 2003, 181). The first floor Great Hall of the Bishop's Palace saw the death of the Norwegian King Hakon IV in 1263 following his defeat by Alexander III of Scotland at Largs (Simpson 1991, 3). In 1320, it is recorded as being in ruins, and apparently lay in decline until 1526 when, under the orders of the Privy Council, William, Lord Sinclair seized it with the aim of restoring it to the bishop. The buildings were extensively reconstructed and renovated by Bishop Robert Reid in the 16th century. Under the control of the Stewart Earls from 1568, it was further renovated, but started to fall into disrepair soon after the 1614 rebellion (Simpson 1991, 7). The extent and lay out of the original Palace has never been fully determined (RCAMS 1946, 145), and there is thus a very strong possibility that buildings associated with the Palace may survive below-ground close to, or within the proposed development area.

Under the control of the Bishops, the Laverock became a rival trading centre to the Burgh which was under the control of the Earls. This rivalry was probably exacerbated when the St. Clair earls constructed a castle in c1330 (NMRS: HY41SW17) on the shorefront between the Burgh and the Cathedral (Lamb & Robertson 2005, 171), occupying previously undeveloped land at the junction of the modern Broad Street, Castle Street and Albert Street. The final fragments of the castle, which had been demolished in 1615, were removed in 1865 when Castle Street was created.

A watching brief at the Earl's Palace revealed well-preserved medieval structures and deposits, overlain by only a thin layer of 'garden soil' (Cox et al 1998, 569). Excavations at Tankerness House in 1978 revealed 12th- and 13th-century deposits, with a secondary phase of reclamation dating to the 13th and 14th centuries overlain by post-medieval dumped soils (McGavin 1982). The main street in Kirkwall, running from Bridge Street through Albert Street and onto Broad Street, Victoria Street and Main Street follows the original medieval waterfront of the city, along the shore of the Peerie Sea; the plots along the Laverock shore may have been marked out as early as the 12th century (Lamb & Robertson 2005, 174). In particular, many of the buildings at the north end of Victoria Street, including ones in close vicinity to the development area, would have formed part of the ecclesiastical settlement, and are possibly medieval in origin (McGavin 1982, 431). The group of houses on Palace Street, which run downhill from the Bishop's Palace, are 16th-century in date (RCAMS 1946, 151). The Old Manse at 6 Watergate, which abuts the Bishop's Palace, is mostly 17th-century in date but includes much earlier fabric within its structure (ibid). Hossack notes that, some distance back from the present Gospel Hall on Victoria Street, "near the site now occupied by the old manse, stood, in Romish times, the Chapel of Our Lady in the Laverock" (Hossack 1900, 290).

The 1486 Town Charter of Kirkwall mentions a grammar school that was at the west end of Palace Street (NMRS: HY41SW16). A house of at least 16th-century date stood at the junction of Victoria and Broad Streets and was demolished in 1930, during which works a medieval cresset was found (RCAMS 1946, 151). Two further houses in Victoria Street can be traced historically back to at least the 16th century, but are thought to incorporate medieval fabric (Clouston 1923a, 1923b, 1927); it is likely that the medieval and early post-medieval settlement of Kirkwall was far more extensive than has been recorded. With the exception of Kirkwall Castle which would have been built out on a small promontory, all of the buildings constructed in Kirkwall in the medieval period south of the Aire lie to the east of the main street line (McGavin 1982, 431), reflecting the position and extent of the Peerie Sea at this time. Excavations by the Earl's Palace, only a short distance from the development area, indicated that the ground level has changed very

little since the late medieval period (Cox et al 1998, 569). Overall, the evidence indicates that the proposed development area is within one of the most historically significant areas of the city and there is a high possibility of surviving below-ground medieval deposits and features.

6.3 The Later Historic Landscape

The excavation in 1978 of five sites on the west side of Albert Street, Broad Street and Victoria Street (McGavin 1982) showed that the southern part of Kirkwall expanded westwards into the area of the Peerie Sea during and after the medieval period. Excavations in Gunn's Close revealed two sea walls, corresponding to a map of 1827 and showing the waterfront established 80m from the street frontage of the houses on the west side of Victoria Street, corresponds with one of the sea walls discovered during excavations in Gunn's Close in 1978 (McGavin 1982, 404). The excavations confirmed the seawards expansion to the west between the 16th and 19th centuries. Victoria Street became built up in the 17th and 18th centuries, with an intensification of urban in-filling by building on vacant plots on either side of the main streets (McGavin 1982, 432). After the Bishop's Palace fell into disrepair in the 17th century, there does appear to have been any significant building near the site. Examination of cartographic and documentary evidence does not indicate any occupation of the development site and later historic remains are unlikely to be encountered below-ground.



Plate 2: General view of the proposed development area, prior to excavation. Looking south.



Trench 3, looking north



Trench 5, looking north



Trench 2, looking north



Trench 1, looking north



Trench 4, looking north

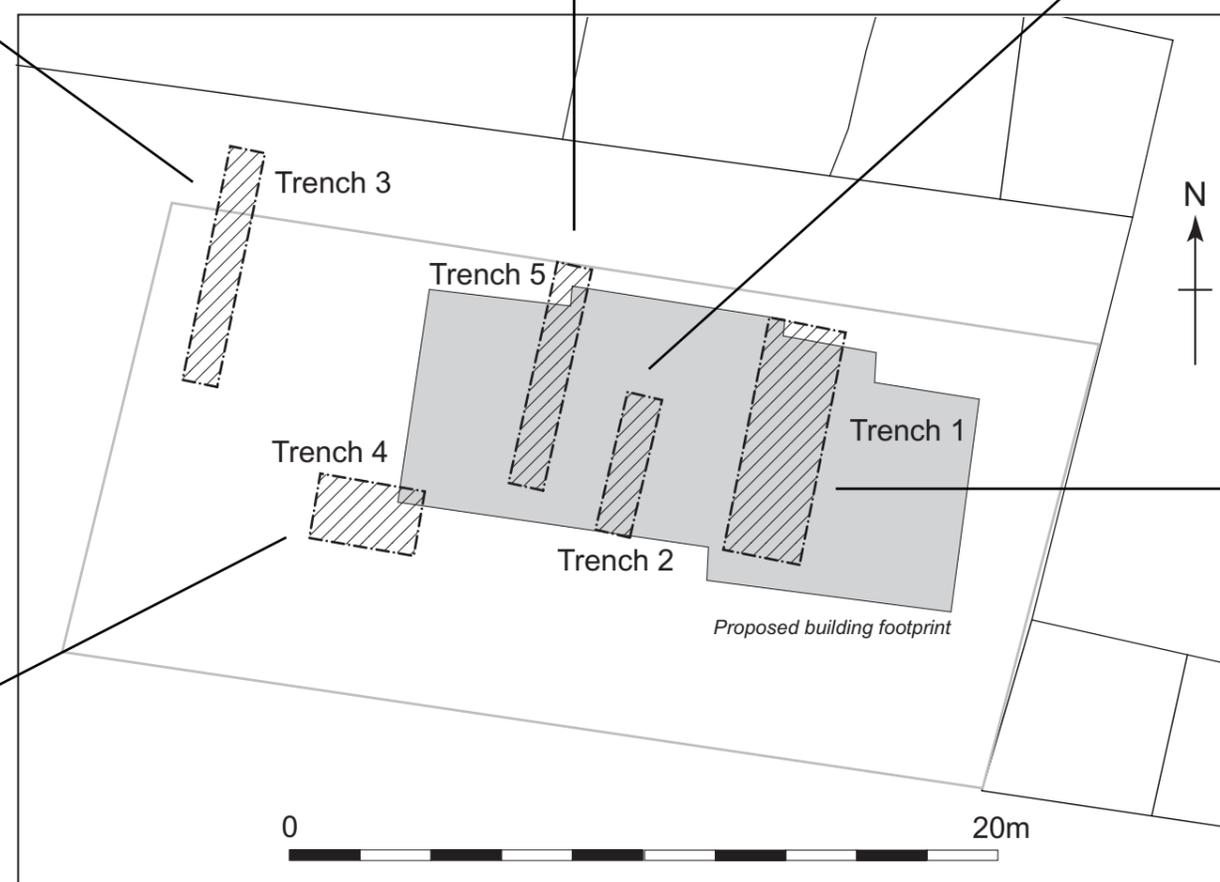


Figure 3: Trench location plan with photographic detail of trenches (map data supplied by the client)

7 Fieldwork Results

7.1 Trench 1

Trench 1 was oriented north-south and located towards the east of the site, and measured 2.2m by 6.7m. It was excavated to an average 500mm depth. The topsoil **100** consisted of a rich, humic, dark blackish brown slightly clayey silt and measured an average of 250mm. This overlay the subsoil **101**, a dark greyish brown slightly clayey silt of up to 200mm in depth. Extensive stonework **103** was encountered at 350mm below ground level; at this point, the machine excavation ceased and the remaining overburden was removed by hand. Several sherds of post-medieval pottery, animal and fish bone, a human molar and a fragment of medieval painted vessel glass were recovered during cleaning and excavation of topsoil **100**. The stonework **103** formed a fairly regular and level surface extending more than 4.3m; whilst the northern edge was revealed, the southern, eastern and western limits of the structure were not exposed as they continued into the trench edge sections on these sides. The structure consisted of large, slabby, flagstone pieces, measuring an average of 380 x 280 x 60mm; these were not bonded and have been laid straight onto the bright reddish yellow clay glacial till **102**; no construction cut was visible.



Plate 3: Stonework 103. Looking west.

The greater extent of structure **103** was north-south as it was revealed during the excavation, but the east-west direction of the face on the northern edge indicates that it is either the basal courses of a substantial wall or foundation layer of a structure running east-west across the site.

7.2 Trench 2

Trench 2 was positioned parallel to Trench 1, 2.3m to the west, in order to attempt to uncover more of structure **103** that had been revealed in Trench 1. It measured 1m by 4m and was excavated to a depth of 380mm. In contrast to Trench 1, however, no archaeological deposits or structures were exposed; nor were any finds recovered from the upper layers. The well-sorted rich, humic, dark blackish brown slightly clayey silt topsoil measured an average depth of 310mm; this overlay the dark greyish brown slightly clayey silt subsoil, which was up to 70mm deep. Both of these layers were considerably disturbed by tree roots. Directly underlying the subsoil was the bright reddish yellow clay glacial till. No context numbers were assigned to this trench and it was recorded photographically prior to backfilling. Structure **103** in Trench 1 must either terminate just to the east of Trench 2, or be entirely removed on its western end.



Plate 4: Trench 2, post-excavation to level of glacial till. Looking west.

7.3 Trench 3

Trench 3, measuring 1m by 6.75 and oriented north-south, was positioned 8.6m to the west of Trench 5 at the western end of the site. The rich, humic, dark blackish brown slightly clayey silt topsoil **300** measured an average depth of 680mm; this overlay the dark greyish brown slightly clayey silt subsoil **301**, which was up to 370mm deep. Both of these layers were considerably disturbed by tree roots. At a depth of 800mm below ground level at the northern end of the trench, the bright reddish yellow clay glacial till of **304** was encountered. Glacial till **304** only extends for 1.2m to the south however, before it is sharply cut by a near vertically-sided linear cut **302**. Cut **302** is filled by **303**, a mid greyish brown sticky semi-waterlogged well-sorted clayey silt with occasional to moderate small rubbly inclusions. A body sherd of green-glazed medieval pottery was recovered from this fill, which is at least 150mm deep. Access difficulties and the presence of extensive tree roots prevented the excavation of the trench further to the south and the other (southern) side of the cut, if it exists, was not revealed. Excavation in Trench 3 ceased at 1.2m depth for Health and Safety reasons; the base of the cut **302** was not reached and it is not known if there are further fills below **303**. This feature appears to be a massive ditch cut (more than 5.5m wide), of unknown date, probably oriented east-west.



Plate 5: East facing section at the northern end of Trench 3, showing ditch cut 302 filled by silt 303. Looking west.

7.4 Trench 4

Trench 4, measuring 3m by 1.85m and oriented east-west, was positioned at the southwest of the development area and machine excavated to a depth of 600mm. The rich, humic, dark blackish brown slightly clayey silt topsoil measured an average depth of 400mm; this overlay the dark greyish brown slightly clayey silt subsoil, which was at least 200mm deep, but not fully excavated. Both of these layers were considerably disturbed by tree roots. In the southwest corner of the trench, an extensive rubble deposit was encountered measuring 1.1m by 1.4m and oriented east-west; at this point, machine excavation ceased and the overburden was removed by hand with a shovel. The rubble deposit was very voidy and seemed to be from a demolition dump layer rather than relating to *in situ* remains. Several sherds of post-medieval pottery and animal bone were recovered from the topsoil. Trench 4 was recorded on a pro forma trench record sheet and by photograph; no context numbers were assigned to this trench and the rubble layer was not further investigated. Glacial till was not exposed and its depth is not known in this trench; it is possible that the rubble forms part of the extensive fill of the massive cut feature **302** encountered in the Trench 3 to the north. Time constraints prevented the removal of the remaining subsoil layer in this trench and the rubble deposit not further investigated.



Plate 6: Extensive rubble layer in the southwest corner of Trench 4. Looking west.

7.5 Trench 5

Trench 5 measured 1.1m by 6.4m and was located 5m west of Trench 1 and 8.6m east of Trench 3. The rich, humic, dark blackish brown slightly clayey silt topsoil **500** measured an average depth of 400mm; this overlay the dark greyish brown slightly clayey silt subsoil **501** which was 260mm deep. The trench was excavated to a depth of 660mm, at which point the bright reddish yellow clay glacial till of **502** and some stonework was encountered. Machine excavation ceased at this point and the remaining overburden was removed by hand. The stonework was cleaned by shovel and trowel and was revealed as the remains of a stone-lined culvert or drain. This feature is oriented northwest-southeast and consists of a linear, vertically-sided cut **503** into the glacial till **502**. This 660mm wide feature extended beyond the eastern and western limits of excavation and is wider than 1.5m. Medium sized slabby, unbonded and undressed flagstone pieces **504** line the cut. Capping stones from the culvert were visible in the section but not remaining *in situ* within the trench. In the middle of the drain **503**, bounded on either side by the stones of **504**, was a well-sorted, dark greyish brown soft clayey silt **505** with frequent small pea-grit inclusions. The drain and its fills were not excavated and were recorded as exposed by photograph and on pro forma context sheets.



Plate 7: Stone-lined culvert or drain 503 in Trench 5. Looking west.

To the north of **503**, a 1.5m long linear patch of well-sorted pale yellowy grey greasy silty clay **506** was exposed during cleaning. This was not excavated but is possibly the fill of a linear (oriented east-west) cut feature running across the trench, although interpretation is cautious given that this feature was not investigated.

7.6 Summary of the fieldwork results

With the exception of one trench, varied archaeological remains were encountered across the site. The structural remains appear to be concentrated to the east of the proposal area, as the stonework exposed in Trench 1 did not extend westwards into Trench 2. Extensive rubble deposits were encountered in Trench 4, at the western end of the site, but did not appear to be *in situ*, and are likely to be demolition dump layers. These possibly form part of the fill of the massive cut feature **302** encountered in Trench 3. The lack of archaeology encountered in Trench 2 is surprising given the discovery of stonework in Trench 1 which extends westwards, and the culvert in Trench 5 which extends eastwards. There is the possibility therefore that the archaeological remains in the location of Trench 2 have been destroyed.

The extent and lay out of the original Bishops Palace, which is just to the east of the development area, has never been fully determined (RCAMS 1946, 145), and there is thus a very strong possibility that the structural remains encountered in Trenches 1 and 5 relate to the original buildings of the Palace. The Bishops Palace started to fall into ruin by 1320 and the structural remains represented by stonework **103** in Trench 1 and the culvert/drain **503** in Trench 5 are therefore likely to be medieval in date. The massive ditch cut **302** in Trench 3 is of unknown date, although a sherd of medieval pottery was recovered from the (upper?) silt fill **303**. Additional medieval finds, in the form of a further sherd of medieval pottery from the subsoil **501** in Trench 5 and a fragment of decorated window glass from topsoil **100** in Trench 1 correspond to the tentative dating of the archaeological features. The semi-waterlogged silt **303** encountered in Trench 3 also suggests the very high potential for organic remains to be recovered from this part of the site. The frequency of waterlogged deposits yielding organic remains along with other finds from previous archaeological investigations close to the site suggests that similar deposits may be encountered in the development area. Valuable palaeoenvironmental remains (flora and fauna) and pollen could also survive.

8 Conclusions and Recommendations

Archaeological investigations within this area of Kirkwall have previously indicated that there is considerable potential for the survival of important stratified medieval deposits and structures. This potential has been confirmed by the desk based assessment and archaeological evaluation of the proposed development area. The structural remains appear to be concentrated to the east of the site; it is therefore recommended that, in discussion with architects, the Planning Authority and potentially engineers, the proposed building footprint is moved several metres to the west to minimise the impact on the underlying archaeology and that the below-ground remains are taken into account when the foundations are designed and excavated. Furthermore, as a minimum mitigation strategy, ORCA recommend that monitoring of all ground works associated with the development of the site takes place in the form of an archaeological watching brief.

While the recommended mitigation strategy was developed following consultation with the Orkney Regional Archaeologist, ORCA would stress that these recommendations are intended for guidance only and final decisions on the nature and extent of any future archaeological work rest with the Planning Authority.

9 Acknowledgements

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Planning Policy and Legislation

Historic Scotland	1998	<i>Memorandum of Guidance on listed buildings and conservation areas.</i>
Historic Scotland	2008	<i>Scottish Historic Environment Policy.</i>
Orkney Islands Council	2001	<i>The Orkney Structure Plan.</i>
Orkney Islands Council	2004	<i>The Orkney Local Plan.</i>
Scottish Office	1979	<i>Ancient Monuments and Archaeological Areas Act 1979.</i>
Scottish Office	2008	<i>Scottish Planning Policy 23: Planning and the Historic Environment</i>
Scottish Office	1994	<i>Planning Advice Note 42: Archaeology – the Planning Process and Scheduled Monument Procedures.</i>
Scottish Office	1997	<i>Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.</i>

Appendix 2: Archaeological and Historical Sites

Listed Buildings within 100m of the site

Address	Date Listed	Category	HBNUM
St Magnus Cathedral, Broad Street	08-DEC-1971	A	36668
35,37,39,41 Broad Street	08-DEC-1971	A	36677
(Orkney Museum) The Earl's Palace, Palace Road	08-DEC-1971	A	36685
The Bishop's Palace, Palace Road and Watergate Street	08-DEC-1971	A	36682
7 Victoria Street, including courtyard walls and railings	15-MAR-1999	C(S)	36686
29 Victoria Street	09-DEC-1977	B	36691
33 Victoria Street	09-DEC-1977	C(S)	36693
35 Victoria Street	08-DEC-1971	Group Category B C(S)	36694
47-49 (odd numbers) Victoria Street	09-DEC-1977	Group Category B B	36701
62, 64 Victoria Street	08-DEC-1981	B	36704
ST. Magnus Cathedral Green, Drinking Fountain	15-MAR-1999	C(S)	45979
59 Victoria Street	15-MAR-1999	C(S)	46025
36 Broad Street (Former Grammar School)	08-DEC-1971	B	36680
27 Victoria Street	08-DEC-1971	B	36690
The Bishop's Palace, Palace Road and Watergate Street	08-DEC-1971	A	36682
6 Watergate Street, the Old Manse, including boundary walls and railings	08-DEC-1971	B	36683
14 Victoria Street	08-DEC-1971	B	36687
1 Victoria Street (Royal bank of Scotland), including boundary walls, railings and gatepiers	15-MAR-1999	C(S)	46023
66a and 66b Victoria Street	15-MAR-1999	C(S)	46029
19, 21, 23 Victoria Street	08-DEC-1971	B	36688
41 Victoria Street	15-MAR-1999	Category: C(S) Group Category: B	36696
54, 56 Victoria Street	08-DEC-1971	B	36702
58 Victoria Street	15-MAR-1999	C(S)	46027
Colwyn, Watergate Street and Victoria Road, including boundary walls and railings	15-MAR-1999	B	46030
22, 24, 26 Victoria Street	08-DEC-1971	B	36689

Address	Date Listed	Category	HBNUM
37, 39 Victoria Street	08-DEC-1971	B	36695
61 Victoria Street and 2,4,6,8 Gunn's Close	08-DEC-1971	B Group Category B	36705
Sheriff Court and Police Station, Watergate, including boundary walls, gatepiers and railings	15-MAR-1999	B	46010
25 Victoria Street	08-DEC-1971	B	46024
32 Broad Street and 1 Palace Road	08-DEC-1971	B	36679
3,5,7,9 Palace Road	08-DEC-1971	C(S)	36681
5 Walls Close, including boundary walls	09-DEC-1977	C(S)	36692
51 Victoria Street	08-DEC-1971	B	36700
60 Victoria Street	08-DEC-1971	B	36703
66 Victoria Street	15-MAR-1999	C(S)	46028

Scheduled Ancient Monuments within 100m of the development area

Name	Type of site	Original schedule	Last schedule date	NGR
Bishops' Palace	Secular	26-SEP-1921	18-AUG-1999	HY 449 108
Earls' Palace	Secular	26-SEP-1921	30-JUL-1998	HY 449 107

Other NMRS and SMR listings within 100m of the development area

Name	Type of site	NMRS no
St Magnus Cathedral	Hogback stone	HY41SW10.1
St Magnus Cathedral	Coin (Roman)	HY41SW14
Town cross	Cross	HY41SW15
Palace Street	School	HY41SW16
Watergate	Cellar	HY41SW41
Broad Street	Human remains, settlement	HY41SW133

Appendix 3: Fieldwork Site Registers

Contexts Register

Context No.	Site Sub-division	Type	Description
100	Trench 1	Layer	Topsoil
101	Trench 1	Layer	Subsoil
102	Trench 1	Layer	Glacial till
103	Trench 1	Structure	Flagstone pieces - possible foundation layer or wall base
300	Trench 3	Layer	Topsoil
301	Trench 3	Layer	Subsoil
302	Trench 3	Cut	Steep cut into glacial till
303	Trench 3	Fill	Clayey silt fill of (302)
304	Trench 3	Layer	Glacial till
500	Trench 5	Layer	Topsoil
501	Trench 5	Layer	Subsoil
502	Trench 5	Layer	Glacial till
503	Trench 5	Cut	Northwest / southeast oriented stone-lined drain/culvert feature
504	Trench 5	Fill	Slabby flagstones lining drain/culvert feature (503)
505	Trench 5	Fill	Mixed silty fill of drain/culvert feature (503), within stones (502)
506	Trench 5	Layer	Pale yellowy grey silty clay running east-west across trench. Possible fill of linear feature. Not investigated.

Photographic Register

Frame No.	Site Sub-division	Description	Direction of shot
1	n/a	General pre-excavation view of site	SW
2	n/a	General pre-excavation view of site	NW
3	n/a	General pre-excavation view of site	SE
4	n/a	General pre-excavation view of site	NE
5	n/a	General pre-excavation view of site	S
6	n/a	General pre-excavation view of site	N
7	Trench 1	Working shot during machine excavation	N
8	Trench 1	Stonework revealed during machine excavation	N
9	Trench 2	Working shot during machining	NW
10	Trench 2	Working shot during machining	NW
11	Trench 2	Working shot during machining	N
12	Trench 2	View of exposed natural clay (202) post-excavation	S
13	Trench 2	View of exposed natural clay (202) post-excavation	N
14	Trench 2	West-facing section	W
15	Trench 2	East facing section	E
16	Trench 1	Working shot during excavation	E
17	Trench 1	Working shot during excavation	S
18	Trench 1	Working shot during excavation	S
19	Trench 5	Detail of drain / culvert feature (503)	E
20	Trench 5	Detail of drain / culvert feature (503)	W
21	Trench 5	Detail of drain / culvert feature (503)	S
22	Trench 5	Detail of drain / culvert feature (503)	N
23	Trench 5	General view of trench post-cleaning	S
24	Trench 5	General view of trench post-cleaning	N
25	Trench 5	Silty ?fill? (506)	E
26	Trench 5	General shot of trench, no scales	S
27	Trench 5	General shot of trench, no scales	N
28	Trench 3	General shot of trench, no scales	S

Frame No.	Site Sub-division	Description	Direction of shot
29	Trench 3	General shot of trench, no scales	N
30	Trench 3	General shot of trench, no scales	E
31	Trench 3	General shot of trench, no scales	W
32	Trench 3	Detail of cut (302), east facing section	W
33	Trench 3	Detail of cut (302), west facing section	E
34	Trench 3	Detail of cut (302)	N
35	Trench 3	General shot of trench	S
36	Trench 3	General shot of trench	N
37	Trench 3	General shot of trench	S
38	Trench 1	Working shot during cleaning	S
39	Trench 1	Working shot	W
40	Trench 1	Working shot	S
41	Trench 1	Working shot	N
42	Trench 1	General trench shot, no scales	S
43	Trench 1	General trench shot, no scales	W
44	Trench 1	General trench shot, no scales	N
45	Trench 1	General trench shot, no scales	E
46	Trench 1	General shot of trench	S
47	Trench 1	General shot of trench	N
48	Trench 1	General shot of trench	W
49	Trench 1	General shot of trench	E
50	Trench 1	Detail of stonework (103)	S
51	Trench 1	Detail of stonework (103)	W
52	Trench 1	Detail of stonework (103)	N
53	Trench 1	Detail of stonework (103)	E
54	Trench 1	Detail of stonework (103) with Old Manse in background	E
55	Trench 1	Detail of stonework (103), north end	E
56	Trench 1	Detail of stonework (103), middle	E
57	Trench 1	Detail of stonework (103), south end	E
58	Trench 4	Working shot	W
59	Trench 4	Working shot	E
60	Trench 4	Final shot of trench before backfilling	S
61	Trench 4	Final shot of trench before backfilling	W
62	Trench 4	Final shot of trench before backfilling	N
63	Trench 4	Final shot of trench before backfilling	E
64	Trench 4	Detail of rubble in southwest corner of trench	S
65	Trench 4	Detail of rubble in southwest corner of trench	E
66	Trench 1	General view of trench, no scales	S
67	Trench 1	General view of site with Trench 1 in foreground	SW