# New Leisure Centre, Irvine, North Ayrshire: (Stage 1b) Evaluation Works

Data Structure Report

by Claire Williamson and David Swan  ${}_{\text{issued}} \ 7^{\text{th}} \ \text{November 2013}$  on behalf of North Ayrshire Council



## Quality Assurance

This report covers works which have been undertaken in keeping with the issued brief as modified by the agreed programme of works. The report has been prepared in keeping with the guidance of Rathmell Archaeology Limited on the preparation of reports. All works reported on within this document have been undertaken in keeping with the Institute for Archaeologists' Standards and Policy Statements and Code of Conduct.

Signed	Thomas Rees.	Date	7 <sup>th</sup> November 2013
	g with the procedure of Rathmell A ave been reviewed and agreed by an		
Checked	AGordon	Date	7 <sup>th</sup> November 2013

Copyright Rathmell Archaeology Limited. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Rathmell Archaeology Limited. If you have received this report in error, please destroy all copies in your possession or control and notify Rathmell Archaeology Limited.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Rathmell Archaeology Limited, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Rathmell Archaeology Limited for any use of this report, other than the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Rathmell Archaeology Limited using due skill, care and diligence in preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Rathmell Archaeology Limited has been made.

## Contents

Introduction	4
Historical Background	4
Previous archaeological investigations	4
Site Investigation works in 2011	5
Site Investigation works in 2012	8
Archaeological Evaluation in 2012	8
Historic Building Recording in 2012	9
Scottish Water works on the High Street	11
Bridgegate works on the High Street	11
Project Works	13
Findings	13
Conventions	13
Trench Summaries	15
Finds	19
Discussion	19
Natural Sediment	20
Original Topography	20
Medeival Soil Horizon	20
Burgage Plot Boundaries	20
Structural Evidence	21
Chronological evidence	21
Site truncation and other impacts	21
Proposed Excavation Areas	23
Conclusion	25
Acknowledgements	25
References	
Appendix 1: Registers	
Context Register	
Finds Register	
Samples Register	
Photographic Register	36
Drawing Register	
Appendix 2: Discovery & Excavation in Scotland	45
Contact Details	

#### Introduction

- 1. This Data Structure Report has been prepared for North Ayrshire Council in respect to the construction of the new Leisure Centre in Irvine, North Ayrshire. The archaeological works were designed to determine the archaeological potential of the development area.
- 2. The West of Scotland Archaeology Service (WoSAS) who advise North Ayrshire Council on archaeological matters provided guidance on the structure of archaeological works required. North Ayrshire Council required a programme of archaeological works to be undertaken as a requirement of the issued planning consent. Rathmell Archaeology Limited was appointed by LA Architects Ltd on behalf of North Ayrshire Council to undertake the development and implementation of archaeological mitigation works.
- 3. This report details the findings from the intrusive evaluation undertaken in keeping with this Written Scheme of Investigation during September and October 2013.

#### Historical Background

- 4. The development area lies in the core of the medieval burgh of Irvine, overlying several key elements of the municipal life of the burgh from its origin. These include the earliest medieval civil foci of the Tolbooth and Market Cross; some later burgh structures are also present, such as the Customs House and the Market House, both inserted into the street frontage of the High Street.
- 5. The 1860s saw a radical change to the area with the replacement of these medieval to eighteenth century structures with new municipal structures, including the Townhouse and the Police Station. While transforming the area, and clearing the thoroughfares, the continuing role of the burgh council ensured that the same civic functions continued to be delivered from the same portion of the High Street.
- 6. The late twentieth century, with the arrival of the Irvine Development Corporation and the end of the burgh council in local government reorganisation, saw the function of some structures reduced (such as the Townhouse) and the clearing of large portions of the site to provide car parking for those functions that continued.

## Previous archaeological investigations

- 7. Prior to the current development proposal there had been no archaeological investigations within the study area, other than a desk-based assessment undertaken as part of the Scottish Burgh Survey (Simpson & Stevenson 1980) and its subsequent reassessment (Gallagher, 1993).
- 8. This dearth of existing information was addressed prior to the preparation of this document through a series of archaeological tasks, agreed through early consultation with WoSAS, and delivered in order to inform the determination process. These commenced with the following:
  - Desk-based Assessment (Sneddon 2010) identified three notable sites; and
  - Watching Brief on early Site Investigation works (Rennie 2011).
- 9. Following the subsequent appointment of Rathmell Archaeology Ltd to develop a Written Scheme of Investigation, a comprehensive desk-based assessment was undertaken (see Rees & Turner 2013 for detailed information). Three further stages of on-site works were also undertaken to inform the understanding of the historic environment:
  - Watching Brief on later Site Investigation works;
  - ❖ Historic Building Recording on the Police Station and Industrial School; and
  - Intrusive archaeological evaluation over the police compound car park.
- 10. The two watching briefs and the intrusive evaluation are of particular interest in considering the ongoing potential of the site as they yielded information that partially informs on the likely nature and extent of the archaeological resource across the development area. These are summarised in greater detail below.

#### Site Investigation works in 2011

- 11. The Site Investigation works undertaken in 2011 were carried out by BAM Ritchies (Bradley 2011) and comprised six boreholes, two windowless samples and five test pits; archaeological monitoring was undertaken by GUARD Archaeology Ltd. The details of the findings from these works are summarised in Table 1 below (note these are selective extracts from two specialist reports) while the locations are shown in Figure 1a.
- 12. Overall, BAM Ritchies have most commonly characterised the made ground as a medium dense greyish brown fine to medium coarse sand and ash with gravel sized angular fragments. Universally this overlies sand subsoil, although the recorded depth varies across the site. The archaeological monitoring was limited to four test-pits (when referring to Rennie 2011 note that different test pit numbers are used).

Table 1: Summary of Site Investigation works from 2011

SI Id	Depth of Made	Notes on description	Archaeology Notes
Silu	Ground	(from BAM Ritchies)	(from GUARD)
BH01	2.00m	Sandstone masonry, burnt shale, brick, coal and glass.	
BH02	1.50m	Cobble sized sub rounded sandstone and occasional burnt shale, brick, concrete and metal.	
ВН03	2.10m	Cobble sized sub rounded sandstone and occasional burnt shale, brick, concrete and metal.	
BH04	0.95m	Cobble sized angular sandstone masonry and occasional burnt shale, brick and glass.	
BH05	1.05m	Black gravelly sand and ash	
BH06	0.50m	Cobble sized sub rounded sandstone and occasional burnt shale, brick concrete and metal.	
WS01	0.80m	Fine to coarse gravel of concrete, sandstone and brick with occasional sub angular cobbles of concrete. Sand is fine to coarse with inclusions of ash.	
WS02	0.70m	Occasional angular cobbles of sandstone. Gravel is angular to sub rounded fine to coarse of sandstone, concrete and brick.	
TP01	1.00m	Gravel to cobble sized brick and occasional concrete glass and metal.	Tarmac over 1.10m of rubble with animal bone, over 0.7m depth broad interface onto sand subsoil at 1.90m
TP02	1.00m	Gravel to cobble sized brick and occasional concrete glass and metal.	
TP03	1.80m	Occasional cobble sized brick, glass and metal.	Tarmac then 0.90m depth of rubble over 0.60m depth broad interface onto sand subsoil at 1.80m
TP04	1.00m	Gravel to cobble sized brick and occasional concrete glass and metal.	Topsoil for 0.24m, overlying 0.48m depth of rubble incorporating sandstone fragments over 0.41m depth broad interface onto sand subsoil at 1.00m
TP05	0.90m	Gravel to cobble sized brick and occasional concrete glass and metal.	Topsoil for 0.28m, over then 0.62m of rubble incorporating sandstone fragments over 0.80m depth broad interface onto sand subsoil at 1.40m

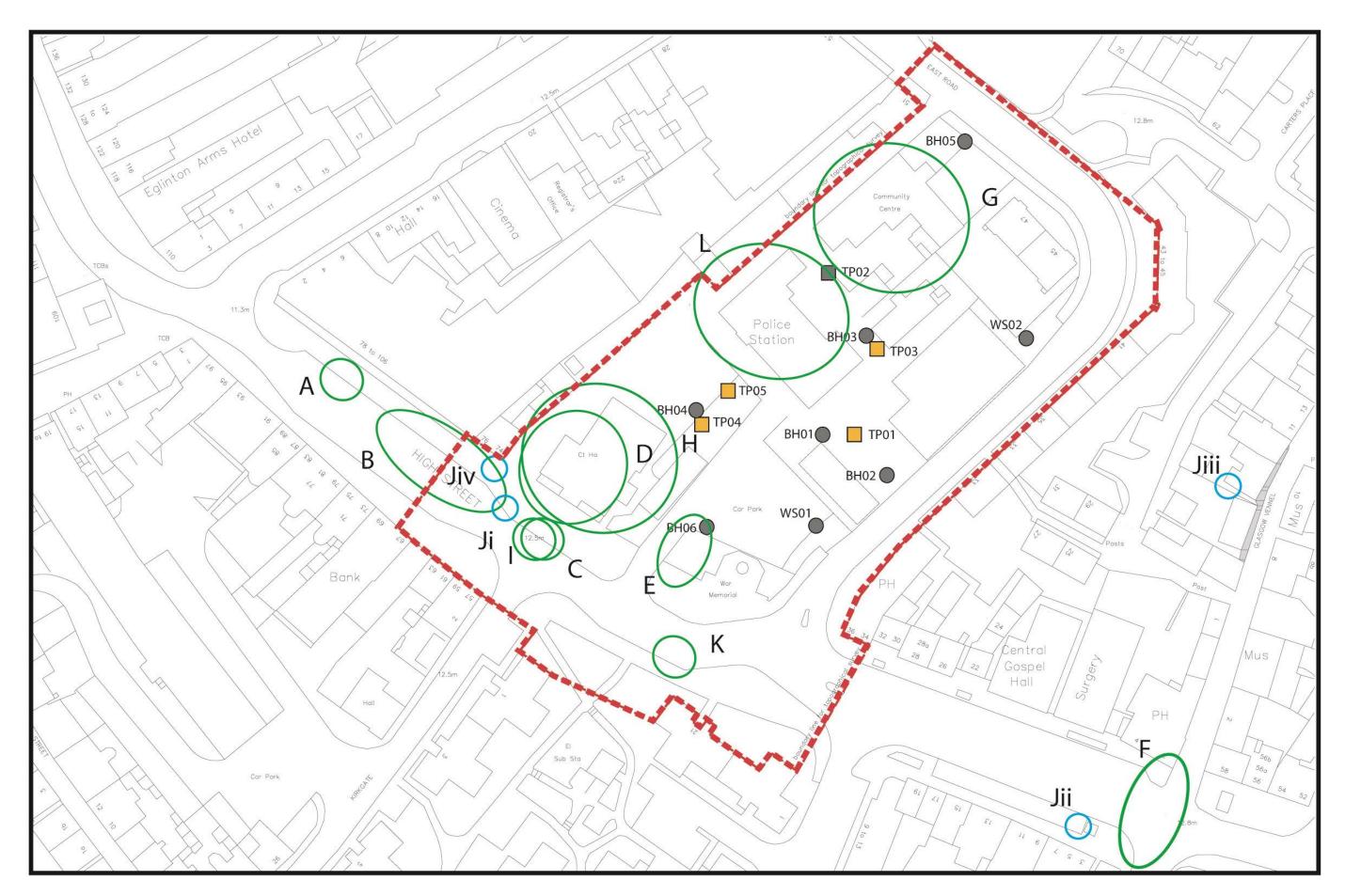


Figure 1a: 2011 SI information points (BH - Borehole, WS - Window Sample, TP - Test Pit (where orange Archaeologically Monitored by GUARD))

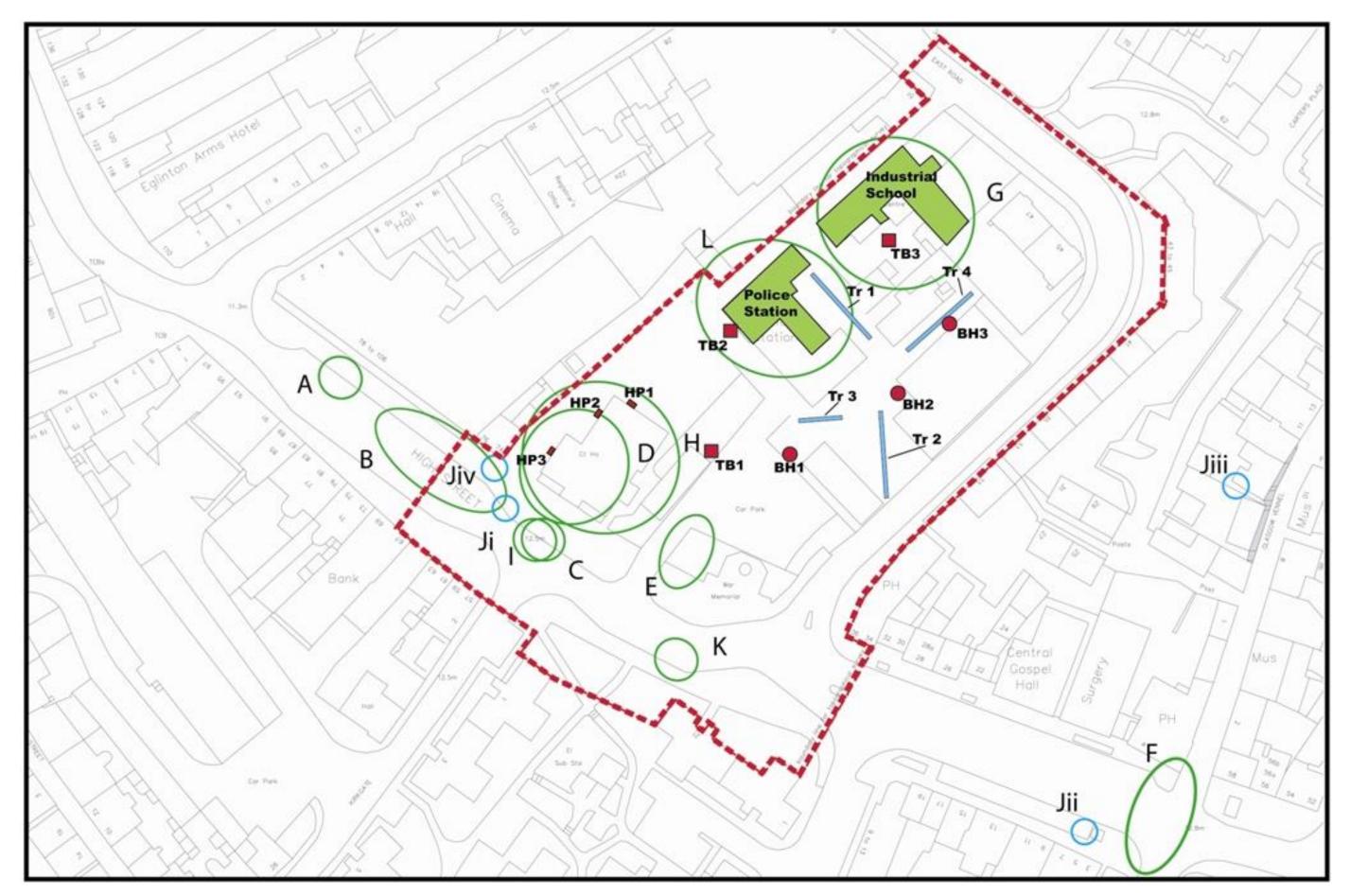


Figure 1b: Archaeological works carried out by Rathmell Archaeology (Red - 2012 Site Investigation, Blue - 2012 Evaluation trenches and Green - 2012 Historic Building Recording)

#### Site Investigation works in 2012

- 13. Further monitoring of site investigation works were carried out by Rathmell Archaeology Ltd in March 2012. These comprised the monitoring of three test-pits (HP1-3), hand-excavated in immediate proximity to the foundations of the Townhouse. In addition, three window-sampler boreholes (TB1-3) and three boreholes (BH1-3) were sunk at various locations across the site (see Figure 1b). These works were performed by Aitken Laboratories Limited, on behalf of Johnson, Poole & Bloomer. The works were generally monitored until natural sterile subsoil was reached, though on occasion the presence of services led to the test pit or borehole being abandoned.
- 14. The three test-pits yielded deposits associated with the Townhouse, or post-dating its construction, while the boreholes varied in their composition. Most revealed made ground overlying natural subsoil at a depth between 1.8m and 2m, but some interesting observations could be made. Firstly, there was evidence of a charcoal rich layer which may, it is suggested, date to the 18<sup>th</sup> century, when the last major fire occurred within the town. Some revealed in addition traces of a potential old ground surface (TP02, TP03, BH03) which may have the potential to contain medieval features.

#### Archaeological Evaluation in 2012

- 15. These works, which were carried out by Rathmell Archaeology in July 2012, comprised the digging of four trenches within the compound of the former police station (Table 2). They predominantly exposed made ground but some structural elements were revealed, probably dating to the 19<sup>th</sup> and 20<sup>th</sup> centuries. However some redeposited medieval pottery was recovered from the disturbed ground in Trench 1, with this same trench also revealing some additional features that may predate the 19<sup>th</sup> century.
- 16. Trench 1 to the rear of the Police Station (the NW trench) exhibited a heavily disturbed stratigraphy (005), with various services present such as a lead water pipe, several waste water drains that fed into to manholes within the trench. Only two features of note were uncovered, the lower courses and foundation of a wall (013) and a probable culvert (012). The remains of wall (013) are most likely 19<sup>th</sup> century as they were on the same alignment as a wall still present on site. The possible culvert (012) however consisted of two flat mortared sandstone slabs, a void was evident under the slabs, a probe was used to gauge depth (200mm) and also established that a clean yellow brown sand was present in the base of the void. Two small sherds of medieval pottery were recovered from (005).
- 17. Trench 2a and 2b (the S trench) were excavated through made ground, this part of the yard appears raised as it slopes up from the entrance and when compared to the street to the immediate east of the yard. The made ground in the trench consisted of (018) and (019), which was demolition detritus within sand. A modern paved surface (017) was exposed in the base of the trench. It consisted of yellow ceramic building material and measured 2.4m by 1.1m. Where it met the eastern side of the trench three courses of red brick was evident and may indicate the position of a wall.
- 18. Trench 3 (the W trench) was also excavated through made ground (018), within this trench two areas of the modern paved surfaces (023) and (024) were uncovered. These surfaces were the same as (017), (023) measured 2.5m by 2m while (024) was 1.5m by 0.55m. The northern corner of (023) was made up of rough cobbling (021) measuring 1.3m and up to 0.62m wide which appear to have been incorporated into the surface.
- 19. Trench 4 (the NE trench) unlike the other trenches was covered with concrete (026) rather than tarmac (001). Under the concrete (026) was a disturbed modern strata (005) which in turn sat over a mid brown sandy deposit with small chunks of coal inclusions that contained eleven sherds of medieval pottery. Both (005) and (026) were truncated in the NE end of the trench by a modern rubbish pit (027).
- 20. From the work carried out so far, which is a limited sample, Trenches 1 and 4 appear to show islands of surviving archaeology. While in Trenches 2 and 3 only made deposits were visible along with modern paved surfaces, this may mean that archaeology could survive under these made deposits or equally may have been scalped.

- 21. It is not surprising given the character of the site that Trenches 1 to 3 predominantly exposed made ground with some structural elements that most probably date to the 19<sup>th</sup> and 20<sup>th</sup> centuries. However even within this material medieval pottery was recovered (from the disturbed ground in Trench 1). Further at the base of the trenches some features survive that may prove to predate the 19<sup>th</sup> century, such as the possible culvert again within Trench 1.
- 22. Trench 4 was notable for apparently exposing an *in-situ* soil horizon beneath the made ground within this trench which contained medieval pottery. This may link to the sediment described as a 'broad interface' onto the subsoil described in earlier 2011 SI works by monitoring archaeologists. While this layer had been disrupted by modern activity in places, the survival of the horizon suggests the sound potential for significant archaeological features in this area.
- 23. Overall, all the trenches predominantly fell in Zone 4 (though some of the southern trenches extend into Zone 3) which was the zone assessed to have the best potential for the survival of pre-19<sup>th</sup> century significant archaeological features. The recovery of medieval pottery and the identification of a soil horizon within this area suggests that there are archaeological features surviving in this area.
- 24. Of interest, made ground was more evident in the southern trenches (Trenches 2 & 3) with a clear 1m of material overlying the 19<sup>th</sup> and 20<sup>th</sup> century surfaces. The survival of these surfaces, not noted by earlier 2011 monitored SI works, in apparently good condition suggests that the mid-20<sup>th</sup> century demolition of structures from this area (Zone 3) may not have been as destructive as suspected. The demolition process has clearly left the ground floor surface of structures predominantly *in-situ* in this area, buried by demolition material. This raises the potential that this surface may cap more important strata similar to that being directly exposed in the Zone 4 trenches.
- 25. The scale of modern disruption evidenced to date further suggests that we may be unlikely to expose extensive medieval or post-medieval remains. However, there will clearly be at least islands of survival of strata from these critical time periods.

Table 2: Summary of Findings, Archaeological Evaluation 2012

Trench	Size	Depth	Strata	Modern Features	Significant Features	Artefacts
1	21m by 2m	1m	Disturbed Ground	Services	Culvert	Medieval Pottery
2a	15.2m by 2m	1m	Made Ground	Paved Surface		
2b	5.4m by 2m	1m	Made Ground			
3	10.6m by 2m	1m	Made Ground	Paved Surfaces		
4	10.4m by 2.5m	1m	Possible medieval deposit	Rubbish Pit		Medieval Pottery

#### Historic Building Recording in 2012

- 26. A programme of historic building recording was undertaken by Rathmell Archaeology Ltd. during the spring and summer of 2012 (see Turner 2012 for full details). This was in response to the presence of two historic buildings, noted as being present in the proposed location for the Irvine Leisure Centre. These comprised the former Police Station (L) and the former Public and Industrial School (G). Both were built c. 1860, and while neither structure was listed, it was deemed appropriate to undertake recording prior to an application for demolition.
- 27. Both structures were recorded to Level 2 standard (RCHME), which involved a

photographic survey of interiors and exteriors, the preparation of a written record accompanying these photographs, the preparation of measured floor plans and an accompanying report which detailed the various phases evident in the structures.

- 28. Of the two structures, it was the former Public and Industrial School (G) which showed the least change. The basic layout of the structure remained consistent throughout the nineteenth century. The only change evidenced throughout the whole of this period was the addition of an outbuilding projecting from the east end of the south elevation, shown first on the Ordnance Survey 3<sup>rd</sup> edition map of 1911, and this supposedly 'new' addition may reflect a lack of detail in the available mapping rather than a change to the structure itself. The Ordnance Survey 2<sup>nd</sup> edition map, on which this structure first appears, also fails to show either of the projecting entrance vestibules located on the north and east elevations, and with no evidence of any blocked windows present in the south fenestration, it seems likely that the presence of this outbuilding (now lost) formed an integral part of the original build from the outset.
- 29. As far as the Public and Industrial School (G) is concerned, the only alterations to the fabric, both internally and externally, appear to date to very recent times, i.e. the late twentieth century. These alterations included the reworking of the interior space through the creation of two access corridors, the conversion of the east-facing entrance vestibule into a disabled toilet, the conversion of a window at the east end of the north elevation into a doorway allowing disabled access, and the infilling of gaps on the east elevation to create additional spaces used for male and female toilets, and additional storage space.
- 30. The Police Station (L), by contrast, was more complex in terms of its development. Though known to have been built in 1860, it bore a datestone over a disused entrance in the west elevation which yields the date '1892'. This suggested two phases of building. With the earliest Ordnance Survey mapping predating the construction of the police station and the 2<sup>nd</sup> edition map post-dating 1892, evidence for a two-phase build was sought in the fabric of the structure. Such evidence was clearly visible in the north-facing cell-block, but it is less easy to establish in either the west-facing elevation or the internal layout.
- 31. It is possible that the original structure, built in 1860, comprised a simple two by two bay structure, looking south onto the rear of plots fronting High Street (later to become the site of the Townhouse). On the rear, northern, elevation was a projecting rectangular stair tower, plus an outshot to the east which housed a single prison cell. The original layout of this north elevation must, however, remain uncertain on account of later alterations.
- 32. This accommodation must have soon proved itself insufficient, and in 1892 the building was extended to the north, forming a two-storey, seven bay west-facing façade which overlooks the vennel running south from East Street. With the construction of this extension, the focus seems to have shifted from the south to the west elevation, the latter having then been adopted as the public entrance to the police station judging by the presence of the datestone, the survival of two lamp brackets over the doorway and the generally fine appearance of the masonry.
- 33. At this point, it could be envisaged that the original 1860 core of the structure found use as a domestic residence for a senior police officer, with the extension functioning as offices for any junior or part-time officers. The cell bay was also extended, with a further four cells added. These alterations created the plan of the building as it is depicted on the 2<sup>nd</sup> edition map of 1897, and the structure appears to have remained unchanged until the late twentieth century, when it was incorporated into a much larger structure and subject to some internal remodelling in the process.
- 34. Since both buildings are roughly contemporary, and funded from the municipal purse, some similarity in character might be expected. This is not immediately apparent, though it may be the case that later west elevation of the police station, with its coursed rubble masonry and abundant use of cherry cocking, was deliberately styled in a manner which compliments the pre-existing Public and Industrial School (G) which lies immediately to the north. Excepting this, any perceived similarities may merely reflect the fact that

these buildings were designed and built by local firms, employing local craftsmen who made widespread use of local materials.

35. Both buildings had been subject to extensive internal remodelling, but sufficient evidence was garnered during the survey to establish their original layout, with the resulting archive (including photographs, notes and the measured plans) to be deposited in the National Monuments Record for Scotland.

#### Scottish Water works on the High Street

- 36. Mention must be made of observations made during the course of a site visit to inform an earlier version of this Written Scheme of Investigation. During this visit, four open pits were observed, three sited on the east side of the High Street in front of the Townhouse (H) and one on the west side, in front of 57 to 63 High Street. These pits resulted from work on the water mains carried out by Scottish Water.
- 37. One of the eastern pits (see Figure 2) exposed a cobbled surface underneath the modern pavement. This surface did not continue out into the roadway, having been truncated by the substructure of the modern running surface. The deposits revealed within this pit suggest that the early nineteenth century cobbling of the High Street survives beneath some sections of the pavement, giving a potential for improved protection and the survival of medieval and post-medieval deposits should they occur underneath these cobbles.
- 38. The western pit exhibited a significant depth of sandy soil overlying sand subsoil beneath the modern pavement surface (see Figure 3). This deposit may be a truncated but *in-situ* soil profile that could be comparable to the sediment described as a 'broad interface' in the GUARD monitoring of site investigation works within the site (Rennie 2011).
- 39. The presence of these utility works within the High Street also highlights the destructive process of not only the renewal of pavement and road services but of the ongoing maintenance and upgrade of utilities. Any archaeological deposits in this environment are likely to be significantly impacted by these modern activities. However both pits revealed what appeared to be cut features penetrating the underlying sand subsoil (as circled on Figures 13 and 14).

#### Bridgegate works on the High Street

- 40. Of further relevance in informing our understanding of the nature and extent of Irvine's surviving archaeological resource are the results of Site Investigation works associated with the ongoing renewal of the Bridgegate streetscape extending up to the Cross (the junction of Bridgegate with the High Street and Bank Street). These works at this location compared three test pits that were subject to archaeological monitoring by Rathmell Archaeology Ltd (Gordon 2011):
  - Test Pit 9 measured 1m by 0.75m and 1.3m deep and contained 360mm of tarmac overlying natural orange sand;
  - ❖ Test Pit 10 measured 0.6m by 0.4m by 1.4m had a monoblock surface over a 480mm sand and concrete sub-base. This overlay a brown sandy soil, with occasional ceramic building material fragments, which in turn overlay natural orange sand; and
  - ❖ Test Pit 11 measured 0.9m by 0.65m by 1.3m with stratigraphy similar to Test Pit 10 although the natural orange sand was not reached within the test pit.
- 41. While none of these test pits revealed archaeological material that was confidently pretwentieth century in date, two of them replicate the Scottish Water pits in exposing this truncated soil profile extending to the north of the Townhouse site suggesting it is a general layer in the burgh and indicative of the remnants of an original soil profile that has co-existed with the burgh.
- 42. Subsequent archaeological monitoring works which took place between July and October 2012 (Klemen and Gordon, 2012) were targeted on two specific areas. These comprised the west section of Bridgegate ('Area B') where archaeological monitoring was to be



Figure 2: Eastern pit of Scottish Water works outside the Townhouse (H) with nineteenth century cobbled surface visible underneath modern pavement.



Figure 3: Western pit of Scottish Water works outside 57 to 63 High Street with truncated *in situ* soil profile visible under cobbles and over sand subsoil.

carried out on any soft sediment ground works that exceeded a depth of 1.2m (owing to the considerable depth of made ground which had been identified during the previous site investigation works). Another area of concern lay around the Trinity Church, where the soil profiles revealed during the site investigation works had appeared natural and the degree of truncation uncertain ('Area C').

43. Unfortunately no significant archaeological features or deposits were identified, with most of the evidence and deposits recorded in both areas comprising made-ground material, laid during the redevelopment of the area in the 1970/80s in order to level the original sloping ground that ran west to the river and bridge.

## **Project Works**

- 44. This archaeological evaluation was undertaken between the 29th September to the 25th October 2013, which was carried out in keeping with the methods detailed in the Written Scheme of Investigation (Rees and Turner 2012) and the supporting Risk Assessment. This evaluation consisted of the excavation of a series of intrusive trenches to expose an 8% sample of the available elements of the development area after demolition (when comined with the July 2012 evaluation that was condicted pre-demolition excluding the Townhouse structure). The combined target was a minimum sample of 500m² to be archaeologically examined; in total 690m² of trenching was excavated of the available ground, this exceeds the required 8% sample achieving 11%. The position of the trenches as machined is shown on the site plan (Figure 4).
- 45. The distribution of trenches was influenced by appropriate safety buffers placed on water, telecom and electricity services. The positioning of the trenches was largely in keeping with the agreed trench plan; though minor variations to the position and alignments of some trenches were made due to ground conditions and safety considerations.
- 46. All works were conducted in accordance with the West of Scotland Archaeology Service Standard Conditions, the Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statements.

## **Findings**

- 47. Some sixteen additional evaluation trenches (Figure 4) were excavated during the postdemolition evaluation phase across the available portion of the development area, using a tracked 360° mechanical excavator with a toothless 2m ditching bucket.
- 48. All putative features identified within the bed of each trench were investigated in accordance with the WSI with some being discounted as products of turbation or modern structures rather than significant anthropic features. Those that were determined to be potentially significant in origin are described below.
- 49. All trenches are depicted on Figure 4 while *Appendix 1* contains the registers for context description, photography, drawing, sampling and finds from the project.

#### Conventions

- 50. Where significant features are discussed their location will normally be quoted as a distance along the relevant trench (such as +23m). This distance was measured from the end of the trench quoted first for the orientation of the trench.
- 51. All depths given for features are given from the base of the trench after the removal of topsoil and/or modern overburden unless otherwise stated. The reader should presume a homogenised topsoil was present in all trenches over the upper surface of the drift geology unless an alternative description is provided. Where a number of cut features were identified in close proximity, they have been described together as Feature Groups while this may reflect an association between them, at the current time the only definite association is physical proximity.
- 52. The context is the basic archaeological unit of description relating to either a structure,

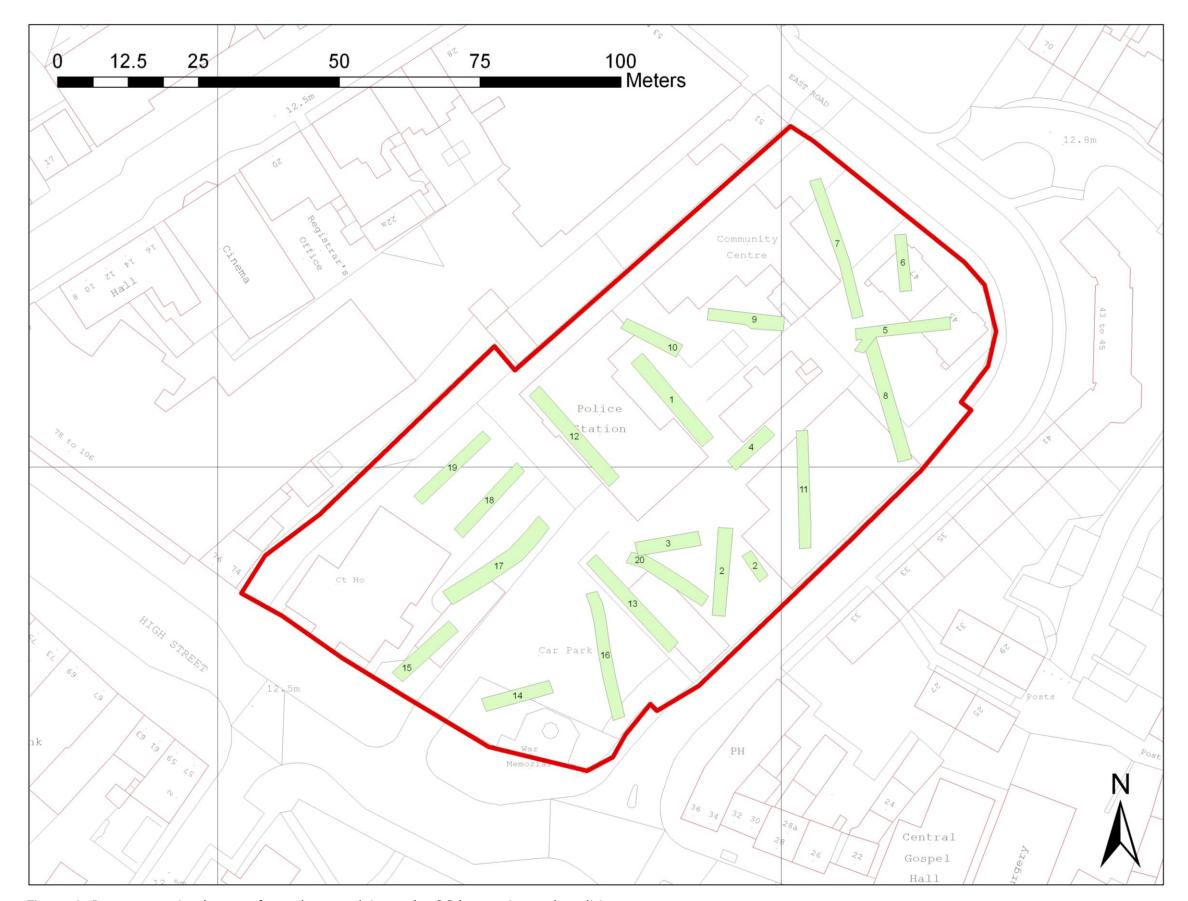


Figure 4: Post-excavation layout of trenches overlain on the OS base prior to demolition

cut or sediment of common characteristics. Structures (such as walls or built surfaces) and cut features (normally identified as they cut the underlying subsoil) are denoted by squared brackets (e.g. [040]). Sediments, including the fills of cut features, are denoted by rounded brackets (e.g. (041)).

53. When discussing broadly circular features in plan our general approach is to consider those features over 500mm in diameter are taken to be pits while those under 500mm are considered postholes. The difference in size is an indication of only a possible function; a posthole only requires being large enough to hold a post and may contain stones for packing around the post. While a pit which is larger may have been dug to extract sand & gravel, to create an obstacle or for the purpose of rubbish disposal. Where clear evidence of function is present, such as packing stones, post-pipes and ramps, then such features will be described by inferred function regardless of size.

#### Trench Summaries

- 54. Trench 5 measured 22.5m x 2m and was orientated ENE-WSW. Excavated through made ground (5020), 0.9m thick, the features encountered within this trench comprised a modern linear feature, (5021) located at + 9.5m, 1m wide and orientated roughly E-W across the width of the trench, and a N-S orientated line of small pits or post-holes [5001]/(5002), [5003]/(5004), [5005]/(5006) and [5011]/(5012). All the features were excavated into a medieval/post-medieval soil horizon (5017) which contained many medieval/post-medieval ceramic sherds.
- 55. Trench 6 measured 10.4m x 2m and was orientated N-S. Excavated through made ground (6001), roughly 1m thick this trench had been disturbed in several places by the construction of modern features all of which cut through the underlying medieval/ post-medieval soil horizon (6003).
- 56. Trench 7 measured 24.5m x 2m and orientated NW-SE. Excavated through made ground (7013) 0.5m thick that lay directly on top off a medieval/post-medieval soil horizon (7012) which was roughly 0.4m thick and which in turn lay above the natural sand subsoil (7011). Two linear features [7001]/(7002) and [7003]/(7004) cut into this medieval deposit and sitting side by side in a E-W orientation were located at the extreme north of the trench. Both travelled through unexcavated ground to the west, had rounded terminals at their east ends and were 1m wide respectively.
- 57. At +18m two further linear features, [7005]/(7006) and [7007]/(7008) and positioned side by side were discovered excavated into the underlying natural sand subsoil (7011). Both were 0.5m wide, and orientated NW-SE across the trench where they travelled below unexcavated ground at both ends.
- 58. Trench 8 measured 21m x 2m and orientated NW-SE. Excavated through made ground (8001) 1.2m thick, the deposit directly below was a medieval/post-medieval soil horizon (8002) 0.5m thick and containing sherds of medieval/post-medieval ceramics. Two slots were excavated to show that the natural sand subsoil (8003) was present directly below (8002).
- 59. Trench 9 measured 12.3 m x 2m and orientated E-W. Excavated through tarmac and redeposited topsoil (9001) 1.2m thick directly onto to the medieval soil horizon (9002) 0.35m thick. A test slot in the centre of the trench revealed that this deposit sat directly on top of the natural sand subsoil (9003). No features were encountered.
- 60. Trench 10 measured 10.2m x 2m and orientated NW-SE. Excavated through made ground (10001) 0.85m thick, this trench had numerous features, orientated NW-SE, that cut through the underlying medieval/post-medieval soil horizon (10002) which was 0.3m in thickness and lay directly on top of the natural sand subsoil (10003). At +1m linear cut [10009]/(10010) 2.5m x 1m exposed, +4m linear feature [10006]/(10007) 2.5m x 1m directly SE of [10009]/(10010), +1m and directly 0.5m SW of [10009]/(10010), linear feature [10012]/(10013) 2.5m x 1m exposed, +4m and directly SE of [10009]/(10010) linear feature [10008]/(10009) c. 2m x 0.4m exposed, runs below unexcavated ground to the SE.

- 61. Trench 11 measured 22.5m x 2m and was orientated N-S. Excavated through made ground (11001) 1m thick which lay directly on a medieval/post-medieval soil horizon (11002) 0.8m thick. A test slot at the far north of the trench revealed a linear cut feature [11004]/(11005] excavated into the natural sand sub-soil (11003) and which was orientated NW-SE across the width of the trench under unnexcated ground at both sides, 0.7m wide.
- 62. Trench 12 measured 20m x 2m and was orientated NW-SE. Excavated through made ground (12001), 1.2m thick, this trench was heavily disturbed at the extreme NW for 7m across the trench and comprised a sub-rectangular cut [12009] with a modern brick and stone infill (12008). At +7.5m a medieval soil horizon (12010) was located, 0.2m thick and contained several medieval/post-medieval ceramic sherds. This lay directly on top of the natural (2014), a mid yellow granular sand. At +14m a linear cobbled feature (12013) 2.5m wide and orientated roughly N-S was found to have been constructed directly ontop of the natural subsoil.
- 63. Trench 13 measured 20m x 2m and orientated NW-SE. Excavated through made ground (13001) 1.4m thick, this trench had numerous positive and negative features. At +1mthe remains of a stone built truncated well (039) 2.1m x 1.9m exposed, +4m linear cut [13038] orientated N-S, 2.3M wide, exposed for 2m, +4.2 post-hole [13036]/(13035), +4.25 possible foundation cut for a rectangular structure [13031]/(13032) and [13033]/(13034) orientated NE-SW before travelling below unexcavated ground to the south, +5m linear cut [13034]/(13029) orientated NE-SW across width of trench, 0.4m wide, +5.5m linear cut [13028]/(130270 orientated across width of trench, 0.4m wide, +0.7m sub-rectangular pit feature [13026]/(13025) orientated N-S for 1.2m x 0.95m, +10m linear cut [13024]/(13023) orientated NE-SW across width of trench, 0.55m width, +11.5m linear cut [13022]/(13021), +13m large linear cut [13020]/(13019) orientated NE-SW across the trench, 1.6m wide, +14.5m post-hole [13018]/(13017) 0.35m diameter, +16m rectangular cut [13016]/(13015) orientated towards the south and under unexcavated ground, exposed for 0.7m, width 1.34m,+16.5 trapezoidal cut [13014]/(13012) orientated north below unexcavated ground, 1m wide, +17.5 ovoid cut [13012]/(13011) 0.45m x 0.74m, +18m large circular cut feature 13007-13010, 0.45m diam, travels north below unexcavated ground, +19m post-hole [13006]/(13005), 0.21m diameter, +0.20m post-hole [13004]/(13003), 0.45m diameter. All features were excavated through the natural sand sub-soil (13002).
- 64. Trench 14 measured 12m x 2m and orientated NE-SW. Excavated through garden soil (14001) 0.4m thick, this deposit was found to lie directly upon the natural sand subsoil (14002) which had numerous features excavated within it. +1.5m, post-hole [14004]/(14003) 0.4m diameter, +1.5m, post-hole [14026]/(14025) 0.26m, +3.5m sub-oval pit [14010]/(14009) orientated NE-SW, 2.5M X 1M, +6M post-hole [14012]/(14011) 0.35m diameter, +7m post-hole [14014]/(14013) 0.29m diameter, and +10m post-hole [14022]/(14021) 0.17m diameter. At +9.5m, +10m and +11.5m respectively, three linear features, [14016]/(14015), [14018]/(14017) and [14020]/(14019) were located all orientated N-S for 2.5m and running below unexcavated ground to the north. At +13.5m a post-hole [14026]/(14025) was located with a diameter of 0.26m.
- 65. Trench 15 measured 12.5m x 2m and orientated SW-NE. Excavated through garden deposit (15001) which was 0.4m thick and located directly on top of (15002) heavily disturbed natural sand sub-soil. No features were detected.
- 66. Trench 16 measured 23.5m x 2m and orientated WNW-ESE. Excavated through made ground 1.5m thick, this trench had numerous positive and negative features all of which were excavated into the medieval soil horizon (16021). At +5m stone built linear feature (16004) orientated N-S across width of trench, partially clay bonded undressed foundation stones, 0.65m wide.



Figure 5a: Trench 15 showing minimal topsoil over truncated natural subsoil



Figure 5b: Trench 18 showing minimal topsoil over truncated natural subsoil



Figure 6a: Trench 13 showing well structure under 1m of made ground



Figure 6b: Trench 16 from N showing deepening made ground and numerous stuctures

- 67. Trench 17 measured 21.5m x 2m and orientated NE-SW. Excavated through made ground (17004) 1.2m thick and lying directly on the natural sand (17001) three features were uncovered which were excavated into the natural. At +1.3m the remains of a clay bonded medieval/post-medieval foundation wall (17003) was revealed, 5.2m in length x 1.3m wide, orientated roughly N-S with returns at both ends orientated E-W. At +7.7m a sub-oval feature (17002) was present, 1.2m in diameter with a dark grey-brown claysand fill which had many inclusions of medium sized stones while at +13.8m a modern foundation cut was shown to be 1m wide and crossing the width of the trench on an E-W orientation.
- 68. Trench 18 measured 16m x 2m and was orientated NE-SW. Excavated through made ground almost 2m thick in parts the base of this trench was heavily disturbed by modern construction throughout. From 0m to +5m (18004) was a demolition deposit of mortar and stone set into a clay-sand deposit, 0.7m thick and overlying the natural sand (18002). Depth of trench and subsequent collapse of its sides prevented a more closer examination of the base.
- 69. Trench 19 measured 16m x 2m and orientated NE-SW. Excavated through made ground (19001) 0.6m thick in parts, this modern overburden was found to have been laid directly onto the underlying natural sand (19002). No further features or deposits were encountered.
- 70. Trench 20 measured 15.5m x 2m and orientated NW-SE. Excavated through made ground (2002) 1m in thickness and lying directly upon the underlying natural clay sand (20001) two large features were located at either end of the trench. Possibly orientated N-S these features (2003) and (2004) were 2.8m and 3m in width repectively and ran below unexcavated ground to the east and west separated by an expanse of natural. Both features were of a similar deposit namely a moderate to hard dark grey-brown claysilt similar to the medieval/post-medieval soil horizon found elsewhere on the development site.

#### Finds

- 71. Small finds were recovered throughout the evaluation with fourty seven finds deriving from sediment contexts recorded (note each find can be multiple objects from a shared context / trench).
- 72. The assemblage obtained from works to date at Irvine Townshouse is dominated by ceramics. A total of 195 sherds of medieval pottery types have been recovered. This is dominated by gritty wares, thought to be in use between the 12<sup>th</sup> and 15<sup>th</sup> centuries (Hall, 2008), with only a few sherds of later redwares and post-medieval reduced wares present. There is a lack of ceramic evidence indicating use in the period between 1600 and 1800, with the exception of one bowl from a clay tobacco pipe, which appears to date from the period 1650-1700 and which may English in origin. Numerous sherds of 19<sup>th</sup> and 20<sup>th</sup> century ceramics have, however, been recovered.
- 73. Glass is present in small quantities. This appears to be restricted to late 19<sup>th</sup> or 20<sup>th</sup> century bottle glass, with late 18<sup>th</sup>/early 19<sup>th</sup> century bottle glass absent. Structural materials derived from buildings have also been recovered. This material is dominated by iron (Fe) nails, all hand-made but difficult to characterise beyond this, with occasional roofing slates also present.
- 74. Industrial activities on or near the site may be attested by a number of horn and antler fragments, possibly representing waste material from manufacturing processes occurring nearby. Animal bones are present, and a small quantity of marine shell has been recovered; of particular interest is a piece of worked bone which may be the heel from a shoe or patten.

#### Discussion

75. The results of the evaluation revealed a suite of anthropic features. Presented below is a discussion of the nature of the site which, by the limited nature of any evaluation sample, is to some degree speculative.

#### Natural Sediment

- 76. The natural subsoil present in the majority of trenches it was encountered or tested for and consisted of a moderately compacted slightly granular sand that varied only slightly in colour from a greyish yellow to a more reddish.
- 77. This deposit was nearly always found below a moderately compacted dark grey-brown silt-clay interpreted as a medieval soil horizon. The depth at which this deposit was located varied considerably across the site from east to west with the natural sand subsoil existing at a depth of roughly 1.8m in Trench 11 while work carried out in the watching brief programme of works revealed this deposit to survive at a depth 0.10m below the existing ground surface at the extreme south-west of the site.

#### Original Topography

- 78. The trenching has made clear that the general level site, falling slightly to the northeast, is a poor reflection of the underlying original topography of the site. Utility works in front of the Townhouse (see Figure 2) already suggested very shallow sediments over natural sand strata to the southwest of the site. This was supported by Trench 14 and 15 with shallow deposits over disturbed sand subsoil suggesting that the High Street frontage at best retains its original levels, or may have suffered some degree of truncation.
- 79. Trench 16 within the war memorial carpark tested the rising ground at this location that, prior to works, had been assumed to be likely to derive from dumped material from the emolition of the original frontage buildings onto the High Street. To some degree this was sound, with made ground of upto 1.5m overlying the complex structural remains (see below) which were cut into natural subsoil. This overall suggests a level to slightly falling original topography as you move northeast from the High Street.
- 80. As the modern topography falls to the northeast, the underlying natural subsoil upper surface falls slightly more rapidly with the greatest depth being to the eastnortheast. This all suggests an original natural gradient falling to the northeast with natural sediment up to 1.8m below modern ground surface.

#### Medeival Soil Horizon

- 81. A sediment has been consistently identified in the northern two-thirds of the development area that has been terms a medieval soil horizon (northeast of Trenches 12 and 11). The attribution of date was based on the pottery sherds recovered from this sediment when combined with the post-medeival and modern features identifiable cut into its upper surface on occasion. As such this appears to be a generalised soil that ceased accumulation and/or turbation in the post-medeival period with subsequent dumping of material, forming of new soils and levelling up of the site above the upper surface of this sediment layer. The layer, where identified, varied in depth between 0.2m (Trench 12) and 0.8m (Trench 11) with typical northern thicknesses of 0.4m.
- 82. The inference made on site from the sediment when observed was that this was a homogenised soil with consistent characteristics. Clearly, within a sampling process this is not a confident determination but a suggestion at this stage. Any subsequent works should aim to clarify whether the sediment is a homogenous sediment or whether there are heterogenous elements to this sediment in particular whether cut features (e.g. pits) can be discerned commencing within this sediment (as opposed to being cut beneath it of from its upper surface).

#### Burgage Plot Boundaries

- 83. The majority of the trenches in the northeastern two-thirds of the site failed to provide any evidence of burgage plot boundaries. This may reflect the use of organic boundaries (such as hedges) that would be challenging to locate within the limited footprint of an evaluation trench. Some possible horticultural features were identified in Trenches 10 and 11 showing both the variation in use of the backplots and the potential to identify burgage plot boundaries if they are present.
- 84. In contrast, the work in southwestern Trenches 13 and 16 revealed numerous walls and

linear cuts that are likely to include boundary features for the burgage plots. Of note, while Trench 20 did not contain structural features there were two linear cuts at either end of the trench containing sediment that was comparable to the medieval soil horizon found further northeast. These cuts, based on their orientation, may well be burgage plot boundary features striking northeast to the rear of the activity exposed in Trenches 13 and 16.

#### Structural Evidence

- 85. As has been noted, the trenches that exhibited cleareast and most complex structural evidence were trenches 13 and 16 in the southern corner of the site. Here in Trench 16, a sequence of walls, surfaces and cut features interwove in a complex pattern along the trench. The density of these feature reduced to the immediate northeast in Trench 13 with the identification of a well here illustrates the reduction in intensity of use and the change to more open, horticultural activities inthe balance of the plots. Within a single trench it is not reasonable to elucidate with confidence seuqwnece of patterning of activity.
- 86. To a much lesser degree, fragmentary structural evidence was recovered from the northern element of Trench 17 and southeastern end of Trench 12. Both hint at a broader landscape of activity though whether a coherent comprehension of these fragmentary remains could be achieved is uncertain.

#### Chronological evidence

- 87. Artefactual material can remain within a landscape for a considerable period and become incorporated into the fills of later features, hence chronological inferences from single objects should be treated with caution though they will in general provide a Terminus Post Quem for the sediment they are within (i.e. date after which the sediment must have been deposited).
- 88. However, the material recovered from the evaluation (as detailed in the finds summary) was dominated by gritty wares from the 12<sup>th</sup> and 15<sup>th</sup> centuries, with only a few sherds of later redwares and post-medieval reduced wares present. There marked lack of ceramic evidence between 1600 and 1800 suggests that sediments from this period were notably absent fromt he evaluation trenches, especially when contrasted with the numerous sherds of 19<sup>th</sup> and 20<sup>th</sup> century ceramics recovered.
- 89. It is clear that there is a significant volume of medieval artefactual material present on the site deriving from the 12<sup>th</sup> to 15<sup>th</sup> century. The dearth of 17<sup>th</sup> and 18<sup>th</sup> century material cannot be taken to evidence a lcak of site use during this period (we are in the middle of an active and vibrant burgh) and so is more likely to relect patterns of site truncation and loss (see below).

#### Site truncation and other impacts

90. As has been touched on within the preceding sections, there are complex patterns of surivial and loss across the site. It is useful to link this consideration of the patterning to the zones of archaeological otential presented in Table 4 of the WSI reproduced below:

Table 4: S	Summary (	of Zones	of Archaeolog	ical Potential
	,,			

Zone	Name	Description of Potential	Sites
1	The High Street	Current roadway overlies the site of the Tolbooth and Market Cross; fragments of these monuments may survive. In addition any historic variation in the street breadth may have left remnants of early street frontage (especially forebooths) under modern pavements. This area is likely to be significantly truncated by 20th C resurfacing of roadway and by modern utility works.	
2	Later Street Frontages	Location of 18 <sup>th</sup> to 19 <sup>th</sup> C frontages that may survive beneath modern surfaces, coupled with potential for earlier frontage structures that were absorbed or overlain by the 18 <sup>th</sup> to 19 <sup>th</sup> C	D, E & H

	Docklot	structures. Area will be heavily impacted by 20 <sup>th</sup> C clearance – though where new structures were introduced there may have been no attempt to remove earlier foundations, hence better archaeological survival	D&H
3	Backlot (Developed)	Traces of back tenements and early industrial or commercial activity with structures developed up to early 20 <sup>th</sup> C before being progressively demolished. This Zone is likely to be the most disrupted given the constant reworking of this area through the 19 <sup>th</sup> and 20 <sup>th</sup> C (if not earlier).	D&H
4	Backlots (Undeveloped)	Traces of early industrial or commercial activity that is likely to have predominantly remained in open ground until the 20 <sup>th</sup> C (except Zone 4a, see below). Best survival potential in this area, should activity have occurred that generated significant archaeological deposits	L & G
а	Burgh Land	Original backlots of the 1694 burgh purchase of land for the Market House – this ground may have had significantly less 18th to mid 19th C disturbance as it was in burgh ownership (see Fig 2). However, subsequent focus of 1857-62 burgh building programme increases the 19th C disturbance. Ground to immediate rear of Townhouse most interesting for pre-17th C backlot archaeology.	L & G
b	East Back	As Zone 4 reaches the original line of East Road there is the potential to encounter burgh boundary features (hedges, fences or ditches) as well as the line of the back road. The back road may also have been a post-medieval focus for street frontages.	

- 91. Trenches 14 and 15 tested Zone 2, the Later Street Frontages, and clearly showed that the scale of disruption from the demolition of the 19<sup>th</sup> and 20<sup>th</sup> century street frontages when combined with the shallow deth to the natural subsoil have effectively removed any identifiable traces of earlier frontage structures. Indeed the absence of more modern frontage foundations suggests comprehensive clearing of this ground when demolition occurred.
- 92. Zone 3, developed backplot, was more varied given that the trenching to the rear of the Townhouse (Trenches 18 and 19) showed large scale relatively modern disturbance with no potentially significant remains identified. Moving southeast and Trench 17 revealed occasional hints of structures while Trenches 13 and 16 evidenced complex patterning of structures, surfaces and pits that are taken to relate to the continuous use of the backplots over centuries. In general, for Zone 3, the roadway running into the site past the war memorial carpark is taken as an effective boundary between areas of good survivial to the southeast and significant loss to the northwest within Zone 3.
- 93. The trenching in Zone 4 showed a marked difference between this and Zone 3 the presence of the medieval soil starting from a shallow thickness at the base of deep made ground in Trench 12, thickening to the northeast and east. This sediment appearing to reflect the lower intensity use of the more distant portions of the burgage plots with more focus on orticultural activity at various points int he use of the ground.
- 94. Zone 4a, the plots in burgh ownership since at least 1694, does not seem to have exhibited any different level of use when compared to the balance of Zone 4. In terms of loss, it is clear the intensive use of the ground for the Police Station and School from the mid 19<sup>th</sup> century has delivered significant depths of made ground and presumeably truncation of pre-19<sup>th</sup> century strata. Trench 7 cutting into Zone 4b did locate some east/west aligned features underneath the medieval soil horizon, though the scale of exposure prevcented assessment of whether these related to a boundary at the rear of the burgage plots.
- 95. The depth of made ground across the site (typically at least 1m of material) has a significance in illustrating the scale of disruption from construction, levelling and

demolition over the centuries – particularly the  $19^{th}$  and  $20^{th}$  century. That the finds evidence shows a dearth of  $17^{th}$  and  $18^{th}$  century material suggests that the level of disruption during the  $19^{th}$  cand  $20^{th}$  century was such that activity from these preceding two centuries – what would have been the most immediate, shallowest remains on the site then – have been scoured away to a significant degree.

### **Proposed Excavation Areas**

- 96. Working within the WSI it is now proposed that a series of open area excavations are undertaken to excavate to archaeological protocols agreed those areas of the site that have the credible potential to both be adversely impacted by the construction process and to provide significant information into the medieval and post-medeival development of Irvine.
- 97. Figure 7 depicts the three excavation areas proposed, each of which has a specific aim and objective relative to the comprehension of the site. The areas proposed have balanced the nature and scale of impact the greatest adverse impacts punching through the 1m plus of made ground being subterranean structures (the plant room, small pool and main pool) as well as the piles (vibrocompacted rock). This pattern of impact results in considerable areas where there will be minimal impact at the depth of the archaeological strata, these areas are considered to be in effect preservation in-situ.
- 98. Area 1 is in the southern area, overlying Trenches 13, 16 and 20 as well as the balance of the war memorial carpark. The aim of this trench is to expose the concentration of the complex structural remains in this area leading back from the truncated belt at the High Street frontage. It is expected that the western edge of this area may be only 0.5m deep, increasing to 1.5m at its eastern edge machine reduction would reduce the area directly onto the horizon where the structural evidence survives. The open area excavation of this concentration will enable sound comprehension of the activity present at this location.
- 99. Area 1 will be impacted by the development due to the excavation of the small, training pool in the centre of this area and the formation of piles at a high intensity level surrounding this pool structure.
- 100. Area 2 covers Trench 11 and Trench 4, the area of the deepest evidence of the medieval soil horizon (0.8m thickness). As such this is the area where there is the greatest potential for the exposure of evidence for heterogeneity within this sediment. By orientating the area northwest to southeast the potential to expose and recognise burgage boudaries is also maximised.
- 101. It is expected that the area will be up to 2m deep machine reduction would reduce the area directly onto the upper surface of the medieval soil horizon (roughly 1m depth) to enable the inspection of features cut into the upper surface of this deposit. The soil horizon would then be reduced in upto four machined spits of 0.2m with the surface of each spit inspected for the potential to identify newly emerging cut features. Concentrations of artefacts exposed by this process will also be mapped incease they are markers for deeper features. The final spit will expose the underlying subsoil that will be inspected for cut features.
- 102. Area 2 will be impacted by the development due to the excavation of the main pool in this area and the formation of piles at a high intensity level surrounding this pool structure.
- 103. Area 3 covers Trench 7, matching the scale and orientation of Area 2. While the medieval soil horizon is shallower in this area (0.4m) a common sampling and investigation strategy with Area 2 will enable the comparison between these two areas. Maximum working depths are likely to be around 1m. Further, on reaching the natural subsoil a fuller investigation of the east to west aligned features identified by the evaluation trench will resolve whether these are bounding features at the back of the burgage plots.
- 104. Area 3 will be impacted by the development due to the excavation of the plant room in this area.

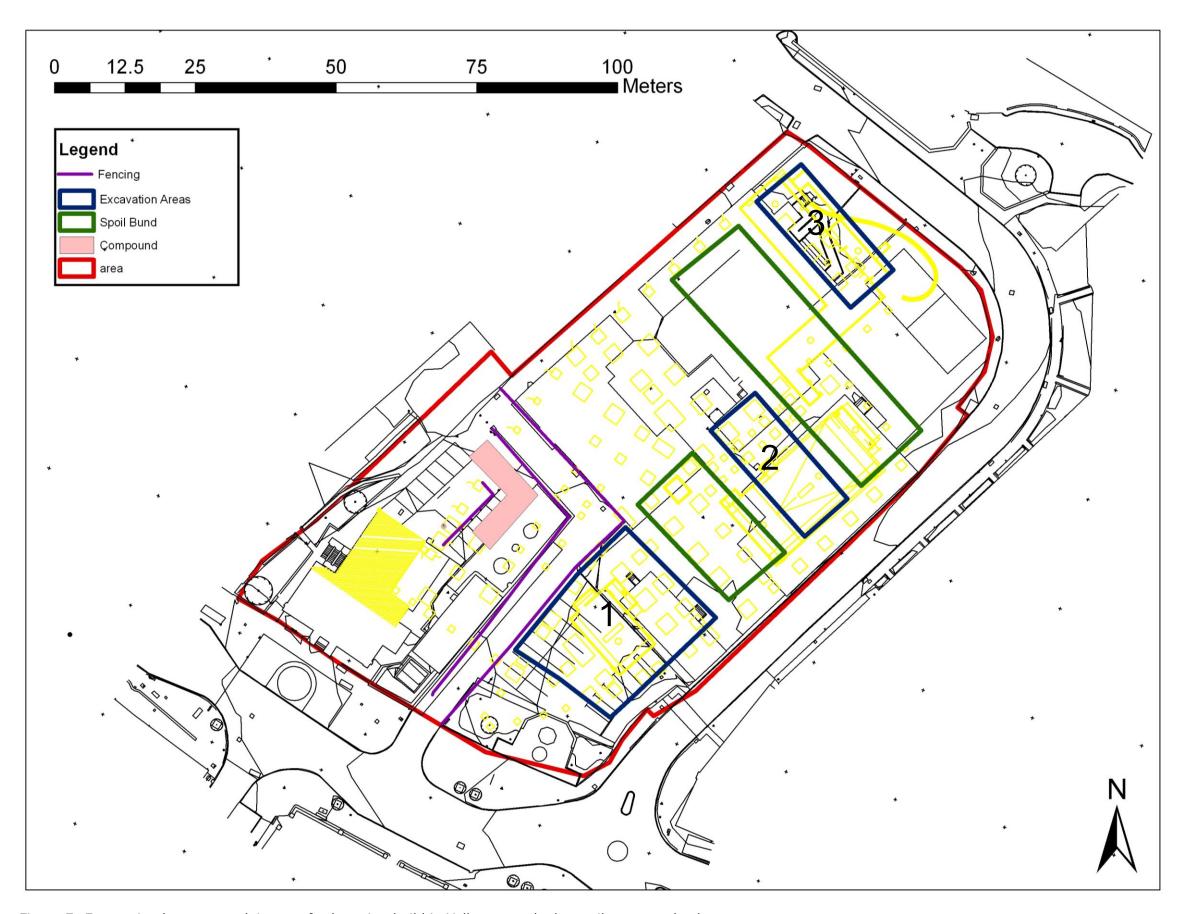


Figure 7: Excavation layouts overlain over forthcoming build in Yellow – marked are pile caps and subterranean structures.

#### Conclusion

- 105. A programme of archaeological investigative works was required by North Ayrshire Council in respect to the construction of the new Leisure Centre in Irvine, North Ayrshire. The archaeological works were designed to determine the archaeological potential of the development area and hence inform the specification for mitigation of the impact on the archaeological remains within the development area.
- 106. The archaeological investigative works consisted of an intrusive evaluation which was designed to assess an 8% sample of the proposed development area. The works were carried out from the 4<sup>th</sup> July 2012 to the 25<sup>th</sup> October 2013, twenty trenches were excavated in total.
- 107. The patterning of survivial of potentially archaeologically significant strata can be divided into four main areas. The immediate frontage ontot the High Street appears to have suffered significant distruption and truncation during the 19<sup>th</sup> and 20 centuries with no significant strata identified. To the rear of this frontage, int he war memorial carpark, an area of dense structural remains including surfaces, wall foundations, ditches, pits and a well have been located. While many of the features may be 19<sup>th</sup> century in origin, there are likely to be earlier features surviving within this complex. In contrast, the equivalent area behind the Townhouse has suffered sever disruption and truncation with no comparable survival.
- 108. The fourth area is the northeastern two-thirds of the site where significant depths of modern made ground (upto 1.2m) overlay a potentially homogenous medieval soil that in trun was up to 0.8m thick. This soil horizon exhibited occasional features cut into its upper surface and surviving beneath it cut into the natural subsoil. These features appeared to be a range of pits and ditches with no notable sturcural evidence.
- 109. A range of finds were made, dominated by gritty wares, from the 12<sup>th</sup> and 15<sup>th</sup> centuries, with only a few sherds of later redwares and post-medieval reduced wares present. There is a lack of ceramic evidence between 1600 and 1800, with numerous sherds of 19<sup>th</sup> and 20<sup>th</sup> century ceramics recovered.

## Acknowledgements

110. The authors would like to thank the Reigart team, especially Peter Reilly and Donna Dodd for their help, guidance and understanding during the on site archaeological works. We would also like to thank Thomas Rees for his edits of this report, as well to thank Claudia Caldeira, Steve Thomson, Steven Watt and Sandra Mulligan for their help on site and with the production of this report.

#### References

Bradley, M, 2011, *Ground Investigation Report, Townhouse, Irvine*, unpublished commercial report by BAM Ritchies for Ironside Farrar

Gallagher, DB, 1993, Historic Irvine: the archaeological implications of development, Edinburgh

Gordon, D, 2011, *Bridgegate, Irvine, North Ayrshire Archaeological Monitoring: Data Structure Repor*t, unpublished commercial report by Rathmell Archaeology Ltd

Kelman, P & Gordon, D, 2012. Bridgegate, Irvine, Archaeological Monitoring, unpublished commercial report by Rathmell Archaeology Ltd

Rees, T & Turner, L, 2013, *Irvine Leisure Centre, Irvine. Arcaheological Written Scheme of Investigation*, unpublished commercial report by Rathmell Archaeology Ltd

Rennie, C, 2011, East Road/High Street, Irvine; Archaeological Watching Brief, Unpublished GUARD Report 3242

Sneddon, D, 2010, East Road/High Street, Irvine; Archaeological Desk-Based Assessment, Unpublished GUARD Report 3242

Simpson, AT & Stevenson, S, 1980, Historic Irvine, the archaeological implications of development, Scottish Burgh Survey

Turner, L, 2012 *Towns House, Irvine, North Ayrshire: Historic Building Recording Data Structure Report*, unpublished commercial report by Rathmell Archaeology

# Appendix 1: Registers

Within this appendix are all registers pertaining to works on-site during the evaluation.

## Context Register

	Context		
Trench.	No	Description	Interpretation
Tr.5	5001	Oval shaped cut in plan, 0.54m x 0.3m, un-excavated	Poss medieval/post-med pit/ph
Tr.5	5002	Mod compact dark grey-brown silt-clay, charcoal flecks	Fill of [5001]
Tr.5	5003	Sub-circ cut in plan, 0.45m diam x 0.17m deep	Poss medieval/post-med pit/ph
Tr.5	5004	Mod compact dark grey-brown sand-silt	Fill of [5003]
Tr.5	5005	Oval shaped cut in plan, 0.15m x 0.45m, x 0.07m deep	Poss medieval/post-med pit/ph
Tr.5	5006	Mod compact dark grey-brown sandy silt-clay	Fill of [5005]
Tr.5	5011	Sub-circ cut in plan, 0.4m diam x 0.16m deep	Poss medieval/post-med pit/ph
Tr.5	5012	Mod compact dirty dark grey-brown sand-silt	Fill of [5011]
Tr.5	5017	Mod compact dark grey-brown silty clay-sand	Medieval/post-Med soil horizon
Tr.5	5018	Mod compact drak grey-brown gritty sandy silty-clay	Lower fill of 5011/5012
Tr.5	5019	Mod compact mid yellow sand	Natural
Tr.5	5020	Mixed rubble, stone, ash, gravels, modern detritus	Demolition rubble/ made ground
Tr.5	5021	Linear cut in plan, c. 0.3m width, orientated E-W	Modern drain
Tr.6	6001	Mixed rubble, stone, ash, gravels, modern detritus	Demolition rubble/ made ground
Tr.6	6002	Mod compact dark grey-brown silty clay-sand	Buried topsoil
Tr.6	6003	Mod compact dark grey-brown silty clay-sand	Medieval/post-Med soil horizon
Tr.6	6004	Red glazed ceramic pipe	Modern water pipe
Tr.6	6005	Linear cut in plan, c. 0.3m width, orientated NW-SE	Slot for 6004
Tr.6	6006	Compact dirty dark grey-brown clay-silt	Fill of [6006]
Tr.6	6007	Oval shaped cut in plan, 0.4m x 0.25m x 0.023m	Possible pit
Tr.6	6008	Compact dark grey-brown silt-clay with charcoal flecks	Fill of [6007]
Tr.6	6009	Square shaped cut, steep sided, flat base, 0.9m x 1.1m	Modern services feature
Tr.6	6010	Compact dark grey-brown silt-clay with mod detritus	Fill of [6009]

_	Context		
Trench.	No	Description	Interpretation
Tr.7	7001	Linear shaped cut, 2.2m x 0.94m x 0.25 NW-SE	Drainage?
Tr.7	7002	Mod compact dark grey-brown sandy silt-clay, ch flecks	Fill of [7001]
Tr.7	7003	Linear shaped cut, 2.5m x 0.95m x 0.25 NW-SE	Drainage?
Tr.7	7004	Mod compact dark grey-brown sandy silt-clay, ch flecks	Fill of [7003]
Tr.7	7005	Linear shaped cut, 3.5m x 0.74m x 0.08m NW-SE	Drainage?
Tr.7	7006	Mod compact dark grey-brown sandy silt, ch flecks	Fill of [7005]
Tr.7	7007	Linear shaped cut, 2.3m x 0.75m NW-SE	Drainage?
Tr.7	7008	Mod compact dark grey-brown sandy silt, ch flecks	Fill of [7007]
Tr.7	7009	Sub-oval/ poss. Linear shaped cut, 1.1m x 0.9m x 0.08m N-S	Poss Medieval/post-Med cut feature
Tr.7	7010	Mod compact dirty dark grey-brown sand-silt, ch & slag	Fill of [7009]
Tr.7	7011	Mod compact mid yellow sand	Natural
Tr.7	7012	Mod compact dark grey-brown silty clay-sand	Medieval/post-Med soil horizon
Tr.7	7013	Mod compact silt-clay with frequent inclusions of detritus	Modern made ground
Tr.7	7014	Mod compact dark grey-black silt-clay with frequent stones	Old topsoil below made ground
Tr.8	8001	Mod compact dark grey-brown black silt-clay with mod detritus	Modern made ground
Tr.8	8002	Mod compact dark grey-brown silty clay-sand	Medieval/post-Med soil horizon
Tr.8	8003	Mod compact mid yellow sand	Natural
Tr.9	9001	Mod compact dirty dark brown mixed sand and silt	Redeposited topsoil
Tr.9	9002	Mod compact dark grey-brown silty clay-sand	Medieval/post-Med soil horizon
Tr.9	9003	Mod compact mid yellow sand	Natural
Tr.10	10001	Loose to mod compact dark grey-brown silt and rubble	Modern made ground
Tr.10	10002	Mod compact dark grey-brown silty clay-sand	Medieval/post-Med soil horizon
Tr.10	10003	Mod compact mid yellow sand	Natural
Tr.10	10004	Linear shaped cut, 1.45m x 0.3m NW-SE	Drainage/ allotment plots
Tr.10	10005	Mod compact dark grey-brown silty clay-sand, ch & stones	Fill of [10004]
Tr.10	10006	Linear shaped cut, 2.6m x 0.96m x 0.25m NW-SE	Drainage/ allotment plots
Tr.10	10007	Mod compact dark grey-brown silty clay-sand, ch & stones	Fill of [10006]
Tr.10	10008	Linear shaped cut, 2m x 0.8m NW-SE	Drainage/ allotment plots
Tr.10	10009	Mod compact dark grey-brown silty clay-sand, ch & stones	Fill of [10008]

	Context		
Trench.	No	Description	Interpretation
Tr.10	10010	Linear shaped cut, 0.5mx 0.9m NW-SE	Drainage/ allotment plots
Tr.10	10011	Mod compact dark grey-brown silty clay-sand, ch & stones	Fill of [10010]
Tr.10	10012	Linear shaped cut, 0.5mx 0.9m NW-SE	Drainage/ allotment plots
Tr.10	10013	Mod compact dark grey-brown silty clay-sand, ch & stones	Fill of [10012]
Tr.11	11001	Loose to mod compact dark grey-brown silt and rubble	Modern made ground
Tr.11	11002	Mod compact dark grey-brown silty clay-sand	Medieval/post-Med soil horizon
Tr.11	11003	Mod compact mid yellow sand	Natural
Tr.11	11004	Linear shaped cut, 0.95m x 0.7m becoming oval 1.3 x 1.45 NW	Fluid channel/ sump ?
Tr.11	11005	Mod compact dark grey-brown silt-clay, ch & small stones	Fill of [11004]
Tr.12	12001	Brick, stone, mortar, with sand & clay matrix	Mod. overburden demolition & make up
Tr.12	12002	Mid brown clayey sand, occ. ch, concrete and small stones	Fill of [12003]
Tr.12	12003	Ovoid cut 0.8m x 0.6m	Probable pit
Tr.12	12004	Mid brown clayey sand, occ. ch flecks	Fill of [12005]
Tr.12	12005	Sub circ cut 0.4m x 0.3m	Poss pit
Tr.12	12006	Mid brown silty sand occ. ch frags & small stones	Fill of [12007]
Tr.12	12007	Ovoid cut 0.5m x 0.3m	Poss pit
Tr.12	12008	Mid grey clayey sand w. brick, stone, mortar frags	Fill of [12009]
Tr.12	12009	Sub-rectangular cut 3.5m x 1.7m exposed	Modern cut
Tr.12	12010	Mid brown slightly clayey silty sand freq ch/coal frags occ small stones	Medieval ground surface?
Tr.12	12011	Dark brown, slightly clayey silty sand	Fill of [12012]
Tr.12	12012	Circular cut feature c. 0.2m	Prob. Post hole
Tr.12	12013	Linear feature 2.5m wide SE-NW dark brown-grey compact, prob. Cobbled	Likely lane/track
Tr.12	12014	Light brownish yellow sand	Natural
Tr.13	13001	Heavily disturbed clay, sands, brick, stone, slate, tile etc 0.5m -0.9m deep	Modern overburden demolition debris
Tr.13	13002	Mod compact mid yellow sand	Natural
Tr.13	13003	Dark brown slightly silty sand	Fill of [13004]
Tr.13	13004	Partially ecposed semi circular cut 0.45m x 0.16m	Poss pit or ditch terminus
Tr.13	13005	Dark greyish brown slightly silty sand	Fill of [13006]
Tr.13	13006	Circular cut 0.21m	Poss post hole

	Context		
Trench.	No	Description	Interpretation
Tr.13	13007	Mottled dark brown and mid brown clayey sand	fill of [13010]
Tr.13	13008	Rectangular partially exposed 0.66m x 0.40m	Intermediate cut truncates 13010
Tr.13	13009	Dark brown slightly silty clayey sand	Fill of [13010]
Tr.13	13010	Semi circular partially exposed 1.2m x 1.6 m	Poss pit
Tr.13	13011	Mottled dark greyish brown and light silty sand	Fill of [13012]
Tr.13	13012	Ovoid cut, 0.74m x 0.45m	Poss pit
Tr.13	13013	Dark brown silty sand, occ small stones	Fill of [13014]
Tr.13	13014	"Trapezoidal cut" 1.1m x 1m	Poss pit
Tr.13	13015	Dark brown slightly clayey sand, coal frags occ stones 0.02m - 0.2m	Fill of [13016]
Tr.13	13016	Rectangular cut 1.34m x 0.7m	Poss pit. Truncates [13014]
Tr.13	13017	Dark black clayey sand occ gravel	Fill of [13018]
Tr.13	13018	Sub circular c.0.35m	Poss post hole
Tr.13	13019	Compact matrix of clay, sand, mortar and small stones 0.02m - 0.08m	Make up for track [13320]?
Tr.13	13020	Linear 'cut' NE-SW 1.6m x 2.0m	Poss track/lane?
Tr.13	13021	Soft mottled mid brown & yellow brown slightly silty sand occ sml stones	Fill of [13022]
Tr.13	13022	Linear cut 0.46m x 2.0m SW - NE orientation partially overun by 13019	Ditch cut?
Tr.13	13023	Same as (13021)	Fill of [13024]
Tr.13	13024	Linear cut 0.55m x 2.0m SW - NE orientation cut by 13026?	Ditch cut
Tr.13	13025	Firm dark brown clayey sand occ small stones	Fill of [13026]
Tr.13	13026	Rectangular cut 1.2m x 0.95m exposed. Cuts 13024?	Poss pit
Tr.13	13027	Mottled mid greyish brown & yellow silty sand	Fill of [13028]
Tr.13	13028	Linear cut 0.42m x 2.0m exposed. SW - NE orientation	Ditch cut?
Tr.13	13029	Mid grey slightly clayey sand	Fill of [13030]
Tr.13	13030	Linear cut 0.4m x 2.0m	Ditch cut. Cuts [13032]
Tr.13	13031	Soft mottled mid brown & yellow slightly silty sand	Fill of [13032]
Tr.13	13032	Rectangular cut 0.56m x 0.60m	Poss pit. Cut by [13032] + [13034]
Tr.13	13033	Dark brown clayey sand, occ gravel black mottling	Fill of [13034]
Tr.13	13034	Linear cut 0.7m x 2.0m exposed NW - SE	Wall foundation cut
Tr.13	13035	Dark brown sandy clay, freq ch frags	Fill of [13036]

	Context		
Trench.	No	Description	Interpretation
Tr.13	13036	Circular cut c.0.4m truncates 13037	Poss post hole
Tr.13	13037	Mid grey sandy clay, freq stones, mortar frags	Maybe remnants of overburden. Poss fill of [13038]
Tr.13	13038	Poss cut c.2-3.0m wide 2m exposed N-S broadly	Poss cut
Tr.13	13039	Semi circular stone lined feature 2.1m x 1.9m exp. internal light brown silty sand fill	Medieval/post-medieval well
Tr.14	14001	Dark grey and yellow mottled silty sand 0.4m - 0.5m deep	Garden soil
Tr.14	14002	Mod compact mid yellow sand	Natural
Tr.14	14003	Mottled light grey & brown slightly silty sand occ. Gravel	fill of [14004]
Tr.14	14004	Circular cut c.0.4m	Poss post hole
Tr.14	14005	Same as (14003)	Fill of [14006]
Tr.14	14006	Linear cut N-S orientation	Poss ditch terminus
Tr.14	14007	Mottled light grey - brown and yellow slightly silty sand occ/rare gravel occ mortar	Fill of [14008]
Tr.14	14008	Circular cut c.0.38m	Poss. Post hole
Tr.14	14009	Mottled grey and yellow clayey sand freq ch & coal	Fill of [14010]
Tr.14	14010	Kidney shaped cut - Poss. Two cuts	Pit
Tr.14	14011	Same as (14009)	Fill of [14012]
Tr.14	14012	Circular cut c.0.35m	Poss. Post hole
Tr.14	14013	Dark grey silty sand freq roots	Fill of [14014]
Tr.14	14014	Circular cut c.0.29m	Poss. Post hole
Tr.14	14015	Dark grey brown silty sand freq roots	Fill of [14016]
Tr.14	14016	Linear cut N-S 0.4m x 1.7m	Poss. Bedding trench
Tr.14	14017	Same as (14015)	Fill of [14018]
Tr.14	14018	Linear cut N-S 0.45m wide x 1.8m long	Prob. Bedding trench
Tr.14	14019	Same as (14015)	Fill of [14020]
Tr.14	14020	Linear cut N-S, 0.55m wide 1.6m long	Prob bedding trench
Tr.14	14021	Dark brownish grey silty sand	Fill of [14022]
Tr.14	14022	Circular cut c.0.17m	Poss post hole
Tr.14	14023	Dark grey silty sand freq gravel occ mortar frags	fill of [14024]
Tr.14	14024	Linear/rectangular cut 0.39m wide x 0.8m exposed	Prob continuation of bedding trench [14020]

	Context		
Trench.	No	Description	Interpretation
Tr.14	14025	Mottled light grey and yellow silty sand rare gravel	Fill of [14026]
Tr.14	14026	Circular cut c.0.26m	Poss post hole
Tr.14	14027	Same as (14025)	Fill of [14028]
Tr.14	14028	Rectangular cut 0.8m x 0.4m exposed rounded corners	Prob pit cut
Tr15	15001	Loose compacted blakish brown silt sand	Garden soil
Tr15	15002	Mod compact mid yellow sand	Natural
Tr16	16001	Demolition rubble and modern detritus	Modern overburden
Tr16	16004	Linear, cobbles & roughly hewn stones	Wall foundation
Tr16	16005	Hard to mod dark greyish brown clay sand	Fill of [16006]
Tr16	16006	Circular cut	Possible pit
Tr16	16007	Sandstone blocks in linear formation approx 0.4m N-S oriented	Wall foundation
Tr16	16009	Cobbles	Cobbled surface poss med/post med
Tr16	16010	Sandstone blocks in linear formation approx 0.4m N-S oriented	Foundation
Tr16	16012	Roughly cut flat sandstone slabs	Floor surface
Tr16	16013	Poss N-S linear arrangement of river cobbles varied sizes 5x10cm contained by 16014 & 16010	Cobbled surface poss med/post med
Tr16	16014	Sandstone blocks in linear formation approx 0.4m N-S oriented	Foundation
Tr16	16020	Mod compact mid yellow sand	Natural
Tr16	16021	Mid brown slightly clayey silty sand freq ch/coal frags occ small stones	Medieval/post-Med soil horizon
Tr.17	17001	Mod compact mid yellow sand	Natural
Tr.17	17002	Hard to mod dark greyish brown clay sand occ med stones 1.2m x 0.80m	Medieval/post-Med soil horizon
Tr.17	17003	Sandstone and river cobbles in linear roughly N-S oriented formation 5.2m x 0.3m	Poss med/post med wall foundation
Tr.17	17004	Sub-oval feature	Poss pit
Tr.18	18001	Stone, brick, modern debris in dark grey clayey sand 0.5m - 1.0m deep	Modern overburden
Tr.18	18002	Light yellow sand	Natural geological deposit
Tr.18	18003	Dark grey brown spread containing stone and mortar frags	Poss feature
Tr.18	18004	Mid grey & light brown lenses. Clayey sand, mortar frags, stones	Poss structural remains & dem. debris
Tr.19	19001	Dark grey clayey sand matrix, brick, stone frags, 0.2m - 0.6m thick	Modern overburden
Tr.19	19002	Light brownish yellow sand	Natural

	Context		
Trench.	No	Description	Interpretation
Tr.20	20001	Mod compact mid yellow sand	Natural
Tr.20	20002	Demolition rubble and modern detritus	Modern built ground
Tr.20	20003	Mod to hard dark greyish brown clay silt infreq sml stones, med pot	Poss med horticultural layer
Tr.20	20004	Mod to hard dark greyish brown clay silt infreq sml stones, med pot	Same as [20003]

## Finds Register

Find	Trench	Context	Material Type	Description	Excavator	Date
No.		No.				
1	Tr.1	1005	Ceramics x 2	Medieval/ Post-Med ceramic sherds	DG	05/07/2012
2	Tr.1	1005	Ceramics x 3	Modern glazed sherds	DG	05/07/2012
3	Tr.4	4025	Ceramics x 11	Medieval/ Post-Med ceramic sherds	DG	06/07/2012
4	Tr.4	4027	Ceramic & Glass		DG	06/07/2012
5	Tr.5	5006	Ceramics x 2	Medieval/ Post-Med ceramic sherds	DS	26/09/2013
6	Tr.5	5012	Ceramics x 3	Medieval/ Post-Med ceramic sherds	DS	26/09/2013
7	Tr.5	5016	Ceramic x 1	Medieval/ Post-Med ceramic sherd	DS	26/09/2013
8	Tr.5	5010	Ceramic x 1	Medieval/ Post-Med ceramic sherd	DS	26/09/2013
9	Tr.5	5016	Ceramic x 1	Medieval/ Post-Med ceramic sherd	DS	26/09/2013
10	Tr.5	5017	Ceramics x many	Medieval/ Post-Med ceramic sherds	DS	26/09/2013
11	Tr.6	6006	Animal bones x 4	Burnt animal bones x 4 small fragments	CW	26/09/2013
12	Tr.6	6006	Ceramic	Medieval/ Post-Med ceramic sherd	CW	26/09/2013
13	Tr.6	6008	Animal bones x 4	Burnt animal bones x 4 small fragments	CW	26/09/2013
14	Tr.6	6003	Ceramic x 1	Medieval/ Post-Med ceramic sherd	CW	26/09/2013
15	Tr.5	5018	Ceramics x 3	Medieval/ Post-Med ceramic sherds	DS	30/09/2013
16	Tr.5	5004	Ceramics x 4	Medieval/ Post-Med ceramic sherds	DS	30/09/2013
17	Tr.5	5006	Ceramic x 1	Medieval/ Post-Med ceramic sherd	DS	30/09/2013
18	Tr.5	5017	Ceramics x 6	Medieval/ Post-Med ceramic sherds	CW	01/10/2013
19	Tr.7	7002	Ceramics x 5	Medieval/ Post-Med ceramic sherds x 2 & 3 clay pipe	CW	03/10/2013
				frags		
20	Tr.7	7004	Ceramics x 7	Medieval/ Post-Med ceramic sherds x 4 & 3 clay pipe	CW	03/10/2013
				frags		
21	Tr.7	7006	Ceramics x 2	Medieval/ Post-Med ceramic sherds	CW	03/10/2013

Find No.	Trench	Context No.	Material Type	Description	Excavator	Date
22	Tr.7	7010	Ceramics x 9 & Fe+ x 1	Medieval/ Post-Med ceramic sherds & 1 iron nail	DS	04/10/2013
23	Tr.7	7012	Ceramics x 7	Medieval/ Post-Med ceramic sherds	DS	04/10/2013
24	Tr.8	8002	Ceramics x 4	Medieval/ Post-Med ceramic sherds	DS	04/10/2013
25	Tr.10	10007	Fe+ x 1	1 x iron nail	CW	08/10/2013
26	Tr.10	10007	Animal bone x 1	1 x butchered animal bone fragment	CW	08/10/2013
27	Tr.10	10007	Ceramics x 4	Medieval/ Post-Med ceramic sherds x 3 & 1 pipe stem	CW	08/10/2013
28	Tr.10	10002	Ceramic x 1	Medieval/ Post-Med ceramic sherd	CW	08/10/2013
29	Tr.11	11002	Ceramics x 2	Medieval/ Post-Med ceramic sherds	DS	09/10/2013
30	Tr.11	11005	Ceramics x 5	Medieval/ Post-Med ceramic sherds x 4 & 1 modern	CW	09/10/2013
31	Tr.7	7012	Ceramics x 8	Medieval/ Post-Med ceramic sherds	DS	09/10/2013
32	Tr.10	10002	Ceramics x 10	Medieval/ Post-Med ceramic sherds	DS	09/10/2013
33	Tr.13	13015	Ceramic x 1	Medieval/ Post-Med ceramic sherd	ST	18/10/2013
34	Tr.13	13009	Fe+ x 1	1 x iron nail	ST	18/10/2013
35	Tr.13	13011	Fe+ x 1	1 x iron nail	ST	18/10/2013
36	Tr.13	13029	Ceramic x 1	1 x tile fragment	ST	18/10/2013
37	Tr.12	12002	Ceramics x 2	Medieval/ Post-Med ceramic sherds	ST	18/10/2013
38	Tr.12	12009	Ceramic x 1 & Bone x 1	Medieval/ Post-Med ceramic sherd x 1 & 1 x animal bone	ST	18/10/2013
39	Tr.16	16002	Ceramic x 1	Medieval/ Post-Med ceramic sherd	ST	18/10/2013
40	Tr.16	16005	Ceramics x 2	Medieval/ Post-Med ceramic sherds x 1 & 1 pipe stem	ST	18/10/2013
41	Tr.16	16011	Ceramics x 2	Medieval/ Post-Med ceramic sherds	ST	18/10/2013
42	Tr.16	16009	Ceramic x 1	Medieval/ Post-Med ceramic sherd	ST	18/10/2013
43	Tr.14	14009	Ceramic x 1 & Bone x 1	Medieval/ Post-Med ceramic sherd x 1 & 1 x animal bone	ST	18/10/2013
44	Tr.16	16004	Slate x 1	Worked slate tile	DS	22/10/2013
45	Tr.16	16021	Ceramics x 4 & Glass x 1	Medieval/ Post-Med ceramic sherds & 1 x glass shard	DS	22/10/2013
46	Tr.13	13002	Ceramics x 9	Medieval/ Post-Med ceramic sherds	DS	22/10/2013
47	Tr.12	12014	Ceramics x 4	Medieval/ Post-Med ceramic sherds	DS	22/10/2013

## Samples Register

Sample No.	Area / Trench	Context	Sample Type	Description / Quantity	Excavator	Date
001	TR.1	020	1 x Med Bag	Mortar From Below 2 x Large Stones	DG	05/07/12
002	TR.26	017	1 x Bag	Yellow Brick	DG	05/07/12
003	TR.3	021	1 x Bag	Black	DG	06/07/12
004	TR.4	025	2 x Tubs	Mid-Brown Silty Sand	DG + DG	06/07/12
005	TR.6	6006	1 x Bag	Compact Dark Grey-Brown, Silty-Clay with Charcoal Flecks & Burnt Bone	CW	27/09/13
006	TR.6	6008	1 x Bag	Compact Dark Grey-Brown, Silty-Clay with Charcoal Flecks & Burnt Bone.	CW	27/09/13
007	TR.5	5018	1 x Large Bag	Mod Compact Dark Grey-Brown, Gritty Sand-Silt-Clay with Charcoal Flecks and Burnt Bone.	DS	01/10/13
800	TR.5	5004	1 x Large Bag	Mod Compact Dark Grey-Brown, Gritty Sand-Silt-Clay with Charcoal Flecks and Burnt Bone.	DS	01/10/13
009	TR.5	5006	1 x Med Bag	Mod Compact Dark Grey-Brown, Gritty Sand-Silt-Clay with Charcoal Flecks and Burnt Bone.	DS	01/10/13
010	TR.7	7004	1 x Large Bag	Moderately Compact Dark Great Brown Sandy Silty Clay with Charcoal Flecks	CW	03/10/13
011	TR.7	7002	1 x Large Bag	Moderately Compact Dark Great Brown Sandy Silty Clay with Charcoal Inclusions	CW	03/10/13
012	TR.7	7006	1 x Large Bag	Moderately Compact Dark Great Brown Sandy Silty Clay with Charcoal Flecks	CW	03/10/13
013	TR.7	7010	1 x Med Bag	Very Dark Grey Brown with Slag and Charcoal Flecks	DS	04/10/13
014	TR.10	10007	1 x Large Bag	Dark Grey Brown, Silty Sandy Clay with Frequent Charcoal Flecks – Fill of Linear Feature (Post-Med?)	CW	08/10/13
015	TR.10	10002	1 x Large Bag	Mid Reddy-Brown, Clayey-Sand with Frequent Charcoal Flecks – Earlier Med Deposit?	CW	08/10/13
016	TR.11	11005	1 x Large Bag	Dark Brown Silty Clay with Frequent Charcoal Flecks – Fill of [11004], Possibly Medieval Feature	CW	09/10/13

## Photographic Register

Image	Ref	Description	From	Date
001	1	Manhole-iron at S.End Trench 1	SE	05/07/12
002	2	General Trench 1	SE	05/07/12
003	3	(012) Stone Drain – Post-ex Possible Medieval?	NNE	05/07/12
004	4	[013] N.Side, E.Facing Elevation	SE	05/07/12
005	5	Showing [013] & Upstanding Wall to NE	WSW	05/07/12
006	6	Manhole At NW End Trench 1	NW	05/07/12
007	7	Trench 2a	N	05/07/12
800	8	Trench 2b	N	05/07/12
009	9	Section Trench 2b (S.Facing)	S	05/07/12
010	10	Section Trench 2a (SW.Facing)	W	05/07/12
011	11	Floor Surface [017]	S	05/07/12
012	12	Floor Surface [017]	E	05/07/12
013	-	ID Shot	-	06/07/12
014	13	[21] W.End of Trench 3 & [023]	ESE	06/07/12
015	14	[21] W.End of Trench 3 & [023]	ESE	06/07/12
016	15	[21] W.End of Trench 3 & [023]	SE	06/07/12
017	16	[021] Trench 3	E	06/07/12
018	17	[024] Trench 3	SE	06/07/12
019	18	Trench 4	SW	06/07/12
020	19	Trench 3	SW	06/07/12
021	73	Trench 6	N	27/09/13
022	74	Trench 6	S	27/09/13

023	75	Trench 6 – Linear [6005]	S	27/09/13
024	76	Trench 6 – Linear [6005]	SE	27/09/13
025	77	Trench 6 – Linear [6005]	NE	27/09/13
026	78	Trench 6 – Linear [6005]	NW	27/09/13
027	79	Trench 6 – Pre Ex of [6007]	E	27/09/13
028	80	Trench 6 – Pre Ex of [6007]	S	27/09/13
029	81	Trench 6 – NE Facing Section Showing Relationship Between (6004) & [6005]	NE	27/09/13
030	82	Trench 6 – NE Facing Section Showing Relationship Between (6004) & [6005]	NE	27/09/13
031	83	Shot of [6005] & (6004)	SE	27/09/13
032	84	Shot of [6005] & (6004)	NE	27/09/13
033	85	SE Facing Section of [6005]	SE	27/09/13
034	86	[6007] – Half Sectioned	S	27/09/13
035	87	S Facing Section of [6007]	S	27/09/13
036	88	S Facing Section of [6007]	S	27/09/13
037	89	Pre Ex of [6009]	SW	27/09/13
038	90	Pre Ex of [6009]	NW	27/09/13
039	91	Pre Ex of [6011]	W	27/09/13
040	92	Pre Ex of [6011]	N	27/09/13
041	93	Pre Ex Circular Feature [5003] / (5004) Trench 5 (Animal Burrow)	Above	27/09/13
042	94	Pre Ex Possible Feature [6011] / (6012) Trench 6 (Animal Burrow)	Above	27/09/13
043	95	NW Facing Section of [6009]	NW	27/09/13
044	96	NW Facing Section of [6009]	NW	27/09/13
045	97	Finds From (6010), Fill of [6009]	-	27/09/13
046	98	Post Ex [5003] / [5004] Trench 5	Above	27/09/13
047	99	W Facing Section [5003] / (5004)	W	27/09/13

048	100	Pre Ex Circular Feature 6013	Above	27/09/13
049	101	E Facing Section [6013] (Burrow)	E	27/09/13
050	102	Possible Feature [6013] (Burrow)	Above	27/09/13
051	103	W Facing Section At NW End of Trench 6 Showing Modern Build Up	W	27/09/13
052	104	W Facing Section At NW End of Trench 6 Showing Modern Build Up	W	27/09/13
053	105	Trench 5 After First Clean	SW	27/09/13
054	106	Trench 5 After First Clean	NE	27/09/13
055	107	Pre Ex of [5005]	Above/SW	30/09/12
056	108	Pre Ex of [5007]	Above/SW	30/09/13
057	109	Pre Ex of [5003]	Above/SW	30/09/13
058	110	Pre Ex of [5001]	Above/SW	30/09/13
059	111	Pre Ex of [5011]	Above/SW	30/09/13
060	112	Pre Ex of [5013]	Above/SW	30/09/13
061	113	Pre Ex of [5015]	Above/SW	30/09/13
062	114	N Facing Section Through [5011] / 5012 / 5018	N	01/10/13
063	115	Post Ex Feature [5011] / 5012 / 5018	Above/N	01/10/13
064	116	Pre Ex 1009/1010	Above/SE	01/10/13
065	117	NE Facing Section Through 5003/5004	NE	01/10/13
066	118	Post Ex Feature 5003/5004	Above/NE	01/10/13
067	119	NE Facing Section Through 5003/5004	NE	01/10/13
068	120	N Facing Section Through 5011/5012/5018	N	01/10/13
069	121	N Facing Section Through 5005/5006	N	01/10/13
070	122	½ Section 5005/5006	Above/N	01/10/13
071	123	Shot of NW Facing Section at SW End of Trench 5 Showing Depth of (5017)	N	01/10/13
072	124	Trench 7 – General Shot	NNW	03/10/13

073	125	Trench 7 – General Shot	SSE	03/10/13
074	126	Trench 7 – Pre Ex of [7001] & [7003]	S	03/10/13
075	127	Trench 7 – Pre Ex of [7001] & [7003]	SE	03/10/13
076	128	[7001] – Slot Excavated	SE	03/10/13
077	129	[7001] – Slot Excavated	SE	03/10/13
078	130	[7001] – SE Facing Section	SE	03/10/13
079	131	[7003] – Post Ex of Slot	SE	03/10/13
080	132	[7003] – SE Facing Section	SE	03/10/13
081	133	Post Ex of Slots Through [7001] & [7003]	SE	03/10/13
82	134	Post Ex of Slots Through [7001] & [7003]	SE	03/10/13
83	135	Post Ex of Slots Through [7001] & [7003]	SE	03/10/13
84	136	Post Ex of Slots Through [7001] & [7003]	SE	03/10/13
85	140	Pre Ex of [7005] & [7007]	NW	03/10/13
86	141	Pre Ex of [7005] & [7007]	N	03/10/13
87	142	Post Ex of Slot Through [7005]	NW	03/10/13
88	143	Post Ex of Slot Through [7005]	NW	03/10/13
89	144	NW Facing Section of [7005]	NW	03/10/13
90	145	Pre Ex Shot 7009/7010	Above/N	04/10/13
91	146	S Facing Section of [7010]	S	04/10/13
92	147	SE Facing Section of Layer (7012)	SE	04/10/13
93	148	Trench 8 – General Shot	NNW	04/10/10
94	149	Trench 8 – General Shot	SSE	04/10/13
95	150	Trench 8 – Slot Through (8002)	SSE	04/10/13
96	151	Trench 9 Post Ex Shot (9002)/(9003)	SW	07/10/13
97	152	Trench 9 Post Ex Shot (9002)/(9003)	NE	07/10/13

98	153	Trench 9 – Sample S Facing Section	S	07/10/13
99	154	Trench 10 – Post Ex Shot (10002) + Various	SW	07/10/13
100	155	Trench 10 – Post Ex Shot (10002) + Various	NE NE	07/10/13
101	156	Trench 10 Post Ex Before Investigating Features	NW	08/10/13
102	157	Trench 10 Post Ex Before Investigating Features	SE	08/10/13
103	158	NW Facing Section Through [10006]	NW	08/10/13
104	159	NW Facing Section Through [10006]	NW	08/10/13
105	160	General Shot of Trench 11	S	08/10/13
106	161	General Shot of Trench 11	N	08/10/13
107	162	Pre Ex of [11004]	N	09/10/13
108	163	Pre Ex of [1004]	W	09/10/13
109	164	Mid Ex Through [11004]	W	09/10/13
110	165	Mid Ex Through [11004]	NE	09/10/13
111	166	Mid Ex Through [11004]	NE	09/10/13
112	167	NE Facing Section of [11004]	NE	09/10/13
113	168	Stones in [11004]	NE	09/10/13
114	1	Trench 13 (130039) Well	WSW	17/10/13
115	2	As above	WSW	17/10/13
116	3	Trench 13 linear feature [13038]	WSW	17/10/13
117	4	Trench 13 circular feature [13036]	WSW	17/10/13
118	5	Trench 13 linear features [13032] & [13034]	WSW	17/10/13
119	6	Trench 13 linear features [13028] & [13030]	WSW	17/10/13
120	7	Trench 13 rectangular feature [13026]	WSW	17/10/13
121	8	Trench 13 linear features [13022] & [13024]	WSW	17/10/13
122	9	Trench 13 linear feature [13020]	WSW	17/10/13

123	10	Trench 13 sub-circular feature [13018]	WSW	17/10/13
124	11	Trench 13 rectangular feature [13016]	WSW	17/10/13
125	12	Trench 13 trapazoidol feature [13014]	WSW	17/10/13
126	13	Trench 13 ovoid feature [13012]	WSW	17/10/13
127	14	Trench 13 features [13008] & [13006]	WSW	17/10/13
128	15	Trench 13 features [13004] & [13006]	WSW	17/10/13
129	16	Trench 13 post-ex shot	SE	17/10/13
130	17	As above	NW	17/10/13
131	18	Trench 12 post-ex shot	ESE	18/10/13
132	19	As above	WNW	18/10/13
133	20	Trench 12 linear feature/track (12013)	NW	18/10/13
133	21	Trench 12 post hole [12012]	N	18/10/13
134	22	Trench 12 features [12003], [12005] & [12007]	SW	18/10/13
135	23	Trench 18 post-ex shot	NE	18/10/13
136	24	Trench 18 shot of demolition rubble	NE	18/10/13
137	25	Trench 18 post-ex shot showing collapse	SW	18/10/13
138	26	Trench 19 post-ex shot	SW	18/10/13
139	27	As above	NE	18/10/13
140	28	Trench 14 post-ex shot	NW	18/10/13
141	29	As above	SE	18/10/13
142	30	Trench 14	W	18/10/13
143	31	Trench 16 post-ex shot	SE	22/10/13
144	32	As above	NW	22/10/13
145	33	Trench 16 linear feature/track (16004)	S	22/10/13
146	34	Trench 16 {16007]	S	22/10/13

147	35	Trench 16 (16003) cobbles	S	22/10/13
148	36	Trench 16 (16010) & (16012) foundation stones	S	22/10/13
149	37	Trench 16 (16014) foundation stones	S	22/10/13
150	38	Trench 17 post-ex shot	S	23/10/13
151	39	As above	N	23/10/13
152	40	Trench 17 (17002) sub-oval feature	W	23/10/13
153	41	Trench 17 (17003) foundation stones	S	23/10/13
154	42	As above	W	23/10/13
155	43	As above	W	23/10/13
156	44	Trench 20 post-ex shot	E	23/10/13
157	45	Trench 20 post-ex shot	W	23/10/13
158	46	Trench 20 (20003) linear feature	W	23/10/13
159	47	Trench 20 (20004) linear feature	E	23/10/13

## Drawing Register

Drawing No.	Sheet No.	Area/ Trench	Drawing Type	Scale	Description	Drawer	Date
1	1	TR.6	Plan	1:100	Post-Ex 6001-6010	CW	27/09/13
2	1	TR.6	Section	1:10	SE Facing Section 6006/6005	CW	27/09/13
3	1	TR.6	Section	1:10	South Facing Section 6007/6008	CW	27/09/13
4	1	TR.6	Section	1:10	West Facing Section 6001-6003	CW	30/09/13
5	1	TR.5	Plan	1:100	Post Ex 5001/5002 - 5005/5006 & 5011/5012-5013/5014 &5017	DS	01/10/13
6	1	TR.5	Section	1:10	NE Facing Section 5003/5004	CW	01/10/13

Drawing No.	Sheet No.	Area/ Trench	Drawing Type	Scale	Description	Drawer	Date
7	1	TR.5	Section	1:10	NE Facing Section 5005/5006	CW	01/10/13
8	1	TR.5	Section	1:10	NE Facing Section 5011/5012/5018	CW	01/10/13
9	2	TR.7	Section	1:10	SE Facing Section 7001-7004	CW	03/10/13
10	2	TR.7	Section	1:10	NW Facing Section 7005/7006	CW	03/10/13
11	2	TR.7	Plan	1:100	Post Ex 7001-7012	DS	04/10/13
12	2	TR.8	Plan	1:100	Post Ex 8001 + 8002	DS	04/10/13
13	2	TR.9	Plan	1:100	Plan of Trench 9	CW	07/10/13
14	2	TR.10	Plan	1:100	Plan of Trench 10	DIG	08/10/13
15	2	TR.10	Section	1:10	NW Facing Section of [10006]	CW	08/10/13
16	2	TR.11	Plan	1:100	Plan of Trench 11	DS	09/10/13
17	3	TR.11	Section	1:10	NE Facing Section of [11004]	CW	09/10/13
18	3	TR.11	Plan	1:20	Mid Ex Plan of [11004]	CW	09/10/13
19	4	TR.1	Plan	1:100	Plan of Trench 1	DIG	05/07/13
20	4	TR.2a	Plan	1:100	Plan of Trench 2a	DG	05/07/13
21	4	TR.2b	Plan	1:100	Plan of Trench 2b	DG	05/07/13
22	4	TR.3	Plan	1:100	Plan of Trench 3	DG	05/07/12
23	4	TR.4	Plan	1:100	Plan of Trench 4	DG	05/07/12
24	5	Tr.12	Plan	1:100	Plan of Trench 12	ST	18/10/13
25	5	Tr.18	Plan	1:100	Plan of Trench 18	ST	18/10/13
26	5	Tr.14	Plan	1:100	Plan of Trench 14	ST	18/10/13
27	6	Tr.13	Plan	1:100	Plan of Trench 13	SM	23/10/13
28	6	Tr.15	Plan	1:100	Plan of Trench 15	SM	23/10/13

Drawing No.	Sheet No.	Area/ Trench	Drawing Type	Scale	Description	Drawer	Date
29	6	Tr.16	Plan	1:100	Plan of Trench 16	SM	23/10/13
30	6	Tr.17	Plan	1:100	Plan of Trench 17	SM	23/10/13
31	6	Tr.19	Plan	1:100	Plan of Trench 19	SM	23/10/13
32	6	Tr.20	Plan	1:100	Plan of Trench 20	SM	23/10/13

# Appendix 2: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	North Ayrshire
PROJECT TITLE/SITE NAME:	New Leisure Centre, Irvine
PROJECT CODE:	RA11068
PARISH:	Irvine
NAME OF CONTRIBUTOR:	Claire Williamson & David Swan
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Evaluation
NMRS NO(S):	
SITE/MONUMENT TYPE(S):	Medieval Soil Horizon, Structures
SIGNIFICANT FINDS:	Pottery
NGR (2 letters, 8 or 10 figures)	NS
START DATE (this season)	5th July 2012
END DATE (this season)	25th October 2013
PREVIOUS WORK (incl. DES ref.)	Yes
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	A programme of archaeological investigative works was required by North Ayrshire Council in respect to the construction of the new Leisure Centre in Irvine, North Ayrshire. The archaeological works were designed to determine the archaeological potential of the development area and hence inform the specification for mitigation of the impact on the archaeological remains within the development area.
	The archaeological investigative works consisted of an intrusive evaluation which was designed to assess an 8% sample of the proposed development area. The works were carried out from the 4 <sup>th</sup> July 2012 to the 25 <sup>th</sup> October 2013, twenty trenches were excavated in total.
	The patterning of survivial of potentially archaeologically significant strata can be divided into four main areas. The immediate frontage ontot the High Street appears to have suffered significant distruption and truncation during the 19th and 20 centuries with no significant strata identified. To the rear of this frontage, int he war memorial carpark, an area of dense structural remains including surfaces, wall foundations, ditches, pits and a well have been located. While many of the features may be 19th century in origin, there are likely to be earlier features surviving within this complex. In contrast, the equivalent area behind the Townhouse has suffered sever disruption and truncation with no comparable survival.
	the site where significant depths of modern

	made ground (upto 1.2m) overlay a potentially homogenous medieval soil that in trun was up to 0.8m thick. This soil horizon exhibited occasional features cut into its upper surface and surviving beneath it cut into the natural subsoil. These features appeared to be a range of pits and ditches with no notable sturcural evidence.
	A range of finds were made, dominated by gritty wares, from the 12 <sup>th</sup> and 15 <sup>th</sup> centuries, with only a few sherds of later redwares and post-medieval reduced wares present. There is a lack of ceramic evidence between 1600 and 1800, with numerous sherds of 19 <sup>th</sup> and 20 <sup>th</sup> century ceramics recovered.
PROPOSED FUTURE WORK:	Yes
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	North Ayrshire Council
ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
EMAIL ADDRESS:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to West of Scotland Archaeology Service and archive to RCAHMS Collections.

#### **Contact Details**

111. Rathmell Archaeology can be contacted at our Registered Office or through the web:

Rathmell Archaeology Ltd

Unit 8 Ashgrove Workshops

Kilwinning t.: 01294 542848 Ayrshire f.: 01294 542849

KA13 6PU e.: contact@rathmell-arch.co.uk

112. The West of Scotland Archaeology Service can be contacted at their office or through the web:

www.rathmell-arch.co.uk

www.wosas.org.uk

West of Scotland Archaeology Service

Charing Cross Complex

20 India Street t.: 0141 287 8332/3 Glasgow f.: 0141 287 9259

G2 4PF e.: enquiries@wosas.glasgow.gov.uk