Kilwinning Community Archaeology Project: 2011 Excavation Season

Data Structure Report

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Overview

- 1. The Kilwinning Community Archaeology Project (K-CAP) was proposed by Irvine Bay Regeneration Company in their Kilwinning Town Regeneration Plan (2008). This project was primarily intended as a vehicle to stimulate tourism and community within the burgh, with subsidiary education and health benefits.
- 2. The remit focused on the potential community aspects of the project; these encompass community control/direction of the project, volunteering opportunities, training opportunities and outreach to explain the project to the community. Kilwinning & District Preservation Society, the client body for the K-CAP, have brought forward and adopted the project within their programme.
- 3. Archaeology services have been provided by Rathmell Archaeology Ltd to Kilwinning & District Preservation Society in support of their development and implementation of the K-CAP. This covered the development of method statements, consent applications, sourcing land access and preparation of grant application forms. In addition Rathmell Archaeology are implementing the training and support necessary for the on-site works.
- 4. Throughout these works Rathmell Archaeology Ltd continue to liaise and consult with members of the public, local historical societies, and statutory bodies. We have also consulted heritage professionals and potential partners to explore how they might be prepared to interact with the public during the project.
- 5. The archaeological works involved in the K-CAP consist of intrusive archaeological works, building survey, post excavation works and a collection of oral history. This document presents the findings of the intrusive archaeological excavation and building survey for the K-CAP which were carried out in the 2011 Season.

Archaeological and Historical Background

Historical Overview

- 6. The burgh of Kilwinning is dominated by the twelfth century Tironensian Abbey, most likely founded by Richard de Morville, Lord of Cunninghame. Portions of the Nave and the cloistral range of the abbey are in the guardianship of the state, having been excavated and consolidated in the 1960s. A larger land holding including the Abbey Church (constructed 1775) and its churchyard are protected as a Scheduled Monument under the terms of the Ancient Monuments and Archaeological Areas Act 1979.
- 7. However, Kilwinning is believed to have been an established community prior to the twelfth century. The kil- element of the place name suggests long standing Christian presence in this area and MacGibbon and Ross propose the abbey was built on the site of the cell of St. Winning. *Segdoune* may have been the original name of the settlement by the Garnock; whether this indicates another founder for the town is uncertain though Camerarius in 16th century attributes a well established church at Kilwinning by AD 640.
- 8. The first detailed post-reformation plan of Kilwinning is from 1747-55 (General Roy's Military Survey of Scotland, Figure 1a); it forms a cluster settlement formed from three locales along what is now Main Street. The central hub is located around the Abbey buildings; another is located immediately on the east side of the river Garnock near the Corsehill and the third to the west at Byres.
- 9. By the 1st edition Ordnance Survey (1856; Figure 2a) Kilwinning had expanded to include a full street frontage on either side of Main Street. This rigid streetscape has been progressively altered through the nineteenth and twentieth century with the opening out of the 'square' area at the west end of the Main Street and clearance to form the entrance to the Old Parish Church (removing the eighteenth century building of the Freemasons Mother Lodge of Scotland).

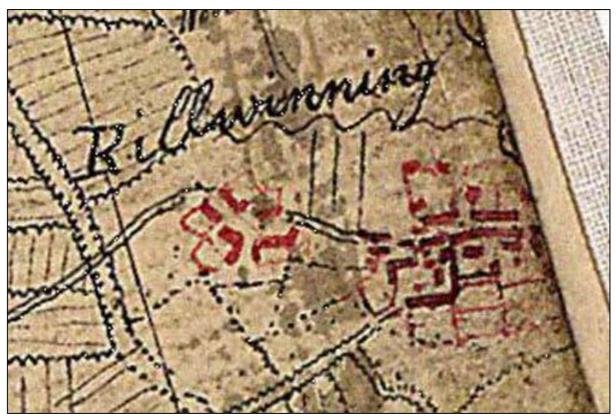


Figure 1a: Roys' Military Survey of Scotland 1747-55



Figure 1b: Estate Map 1789 (structures labelled 'e' are Abbey ruins)



Figure 2a: 1854-59 6 Inch 1st Ordnance Survey



Figure 2b: Kilwinning Abbey from Vaults Lane showing South Transept

Historic land use of Kilwinning Abbey

- 10. Following the reformation 1559-60 the ruins of Kilwinning Abbey continued to be used, although in radically diverging manner for the two core elements. The Abbey Church and the immediate grounds to the north and east remained in religious use. The first Reformed Church was formed within a portion of the Abbey Church with the medieval north-west tower becoming its bell tower and the balance of the ground becoming graveyard. In contrast, the Cloisters and all other portions of the precinct appear to have transferred into secular use.
- 11. The state of the abbey buildings in the immediate aftermath of the reformation is uncertain. Certainly all the earliest depictions show extensive loss; although interestingly the scale of loss since those first depictions is minimal. The monastic community was eventually dispersed, of the eight remaining monks at least two converted to the new protestant religion. One of the converted monks, William Kirkpatrick, became the first minister of Kilwinning.
- 12. Elements of the abbey church were definitely reused, including the original medieval tower, and built upon to form the first Reformed Church. The location and character if this building is uncertain. There are texts that suggest it was adjoining to the bell tower while the excavations in 2010 (Rees *et al* 2010) suggest that the church was formed of the main vessel of the Nave. The church remained in use as the parish church until 1775 when it was decided that a new building was required. The second Reformed Church was then built and this is the building still in use to this day (see Figure 1b). The medieval tower which was still in use collapsed in 1814, and was rebuilt on a smaller scale at the same time as considerable restorations were made to the ruins of the Abbey Church.
- 13. The Cloister on the other hand appears to have been used for housing until the twentieth century. Whether the Cloister was moved into wholesale and subjected to partial rebuilding over the years, or whether it had been part of the buildings destroyed after the reformation then rebuilt to act as housing, is unclear. There was also a suggestion that William Kirkpatrick, the first minister of Kilwinning, may have lived on the abbey grounds with his young wife; if that were the case it would most likely have been within the Cloister. By the twentieth century the buildings had become squalid and were considered slums prior to their demolition in the 1960s.

Archaeology within Kilwinning Abbey Ruins

- 14. There have been three known phases of archaeological works carried out at Kilwinning Abbey. The first was carried out by the architect William Galloway in the late nineteenth century. Galloway published his findings in 1878, in the first volume of the Archaeological and Historical Collections of the Ayr and Wigton Archaeological Association as Chapter X: 'Remarks on the Existing Buildings at Kilwinning Abbey'.
- 15. At the time of his study, the condition of the abbey was in some ways quite different from its present condition. Most of the area once covered by the Abbey Church was in use as the parish graveyard, with the Western Transept, Western Range and the Cloister covered by post-medieval buildings (one dating from AD 1596), yards and vennels.
- 16. The works undertaken by Galloway in the spring of 1878 included a series of exploratory excavations. The results of his work still provide our best understanding of the layout of the Abbey Church and have contributed strongly to the modern layout of the Cloisters. The excavations revealed many aspects of the Abbey including:
 - the North Transept, including a porch and chapel;
 - the line of the eastern and southern walls of the Chancel;
 - exposing the SW buttress of the SW tower;
 - revealing and unblocking the SW facade of the Chapter House; and
 - excavating within the Slype below-floor levels, with the unexpected exposure of

medieval burials.

- 17. The project was not limited to excavation: William Galloway also undertook the first detailed recording of the fabric of the abbey in order to capture the architectural character of its buildings. The quality of his record is impressive; indeed, the recorded detail of the processional doorway from the Cloister to the Nave is stunning. Given the current weathered condition of the doorway it provides us with our best record of this architectural gem.
- 18. The second set of archaeological works took place in the early 1960s, just prior to Kilwinning Abbey being brought into state guardianship; the site was prepared for public access and display by the Ministry of Public Buildings and Works, the predecessor of Historic Scotland. This work involved the consolidation of all upstanding medieval masonry, along with the demolition of boundary walls and buildings which had been built upon the site between the seventeenth and nineteenth centuries, obscuring the layout of the medieval structures beneath.
- 19. Two buildings were removed, one located in the Cloisters, the other occupying the footprint of the former West Range. This latter structure, known as 'The Vaults' had been subject to large-scale alterations since the medieval period, and by the 1960s was in such poor condition that demolition was inevitable. It was reduced to its medieval core and preserved as footings.
- 20. This clearance work was accompanied by extensive excavations, concentrating in and around the Cloister including the West Range, and also extending into the south aisle of the adjacent Abbey Church. This revealed traces of medieval walls and other structural remains, allowing a greater understanding of the site's layout. The works within the south aisle must have also involved the excavation of burials from the graveyard which used this ground.
- 21. The 1960s work concentrated on emphasising the medieval fabric through the removal of later features. Eighteenth and nineteenth century burials which had been placed within the south aisle of the Nave were, for instance, removed and re-located elsewhere.
- 22. The third set of archaeological works took place in the 1983 and 1985, which were carried out by Kirkdale Archaeology ahead of an anticipated programme of works of consolidation and full excavation. These works concentrated on the West Door, the South West Tower and the Secondary West Wall. Some other minor monitoring works have also been carried mainly to do with the installation of floodlighting.

Significant Medieval Archaeology elsewhere in Kilwinning

- 23. In October 2002 an archaeological watching brief (Macfadyen & Addyman 2002) was carried out on the excavation of foundation trenches for an extension to the rear of the Abbey Parish Church Hall. During these works a ditch was observed running east to west, measuring 1.5m wide and 0.75m deep, with an irregular profile. Late medieval reduced ware pottery was recovered from the lower fill of the ditch. It was concluded that the ditch was potentially a pre-reformation boundary associated with the abbey buildings on the south side of the abbey Cloister.
- 24. A second ditch had been observed in February 2001 (Mudie 2001) during an archaeological evaluation at 47 Almswall Road, Kilwinning. The ditch here was also aligned east to west though far more substantial, measuring 3-4m wide and 1.5m deep with a V shaped profile. While it was thought that this ditch was associated with the medieval abbey, its east to west alignment caused consideration as it was not what had been thought to be the likely case for alignment of the abbey boundary in this area, in addition the ditch was visible in only some of the evaluation trenches. This lead to the conclusion that the ditch either had a terminus that stopped between the trenches or it changed in alignment. However a second stage of works monitoring the building works, confirmed the existence of a terminus.
- 25. Given the size and alignment of these ditches it is likely that they relate to the abbey precinct boundary. While both ditches are on a common alignment they do not appear to

be in line, which suggests either a double ditch boundary or that one of them may be a delimitation of an enclosure associated with the abbey precinct. The abbey precinct is thought to have occupied several acres, though the exact extent of the precinct remains unknown. In all likelihood it extended as far north as the Main Street, to Almswall Road in the West, potentially no further south than Ladyford Avenue and as far east as Doocot Lane. Unfortunately so far this supposition remains untested.

26. With the exception of these two features, there is little else of archaeological significance out with the Abbey that has been identified within Kilwinning, though this may have more to do with the minimal amount of archaeological works that have been carried out in the area rather than a lack of archaeology.

The 2010 K-CAP Field Season

27. Our first season of archaeological excavation and building survey was undertaken in Kilwinning from August to September 2010. This summary of findings is drawn from the fuller technical report on these works (Rees *et al* 2010).



a: Post-holes under South Range Figure 3: Images from 2010 excavations



b: Infill wall in southern Nave arcade

- 28. During these works medieval structural remains relating to the South Range of the Cloister were uncovered. This included the north and west wall of the refectory (the South Range) as well as a probable internal wall falling to the south that may derive from a subdivision of the range. In the same trenches a small number of postholes were also exposed, which suggest an early timber structure on the site, either contemporary to or pre-dating the Cloister. Excavations in the Cloister garth located two sections of the foundation for the Cloister arcade around the garth.
- 29. The building recording team surveyed in detail a ground plan of all the surviving structures, medieval and later, to enable a better understanding of the surviving structures and to allow us to understand any structure we found within the trenches.
- 30. Structural evidence of the sixteenth century first Reformed Church was also revealed within the Nave of the abbey church. Stretches of walling that appear to fill between the arches of the southern aisle of the Nave were exposed, as well as a raised (relative to medieval levels) internal floor. The architectural form and position of these walls and floor fit well with the recessed western gable that still stands, suggesting a coherent renewal of the core of the aisled Nave post-1560 as the Reformed Church.
- 31. A large amount of bone was recovered and although animal bone was present; the majority was human. This disarticulated human skeletal material was within the 1960s backfill across the whole of the area, not just in the Nave which is known to have been used as the post-reformation graveyard. The volume of bone suggests that the exhumed skeletal material from the Ministry works in the Nave were substantially intermixed with the excavation spoil, which was then used to reinstate the site dispersing the skeletal material across the guardianship area.
- 32. In addition to these disarticulated remains, there were several articulated burials

uncovered in Trenches 1 and 3 within the Nave. These burials, aligned east to west, are of uncertain date given that at the depth they were exposed they could not only derive from the post-reformation use of the Nave as a graveyard, but equally from the prereformation burial of individuals within the Nave. These burials were recorded but not disturbed by our excavation.

- 33. A large amount of artefacts were recovered throughout all of the trenches. While the majority of the material was eighteenth to modern in date; there were many pieces of medieval pottery including white gritty ware (12th to 15th Century) and reduced ware (15th to 17th Century). The most significant finds recovered were two pieces of incised slate one of which had been incised with graffiti gaming boards, also known as a Merelles Board (see Star Find note for more information).
- 34. Trench 17 examined the ground to the south of the Cloister and Vaults Lane, next to the line of a known medieval ditch, and located some structures of uncertain date while recovering medieval pottery. Test pits were also excavated in garden areas in Ladyford Avenue and Kyleswell Street to search for spreads of medieval artefacts that may hint at the full extent of the abbey precinct. No medieval artefacts were recovered from Ladyford Avenue, but a range of medieval pottery came from Kyleswell Street. These works outwith the immediate known abbey are seeking to understand how extensive medieval Kilwinning was.

Project Works

- 35. Prior to the commencement of archaeological works Scheduled Monument Consent (AMH/90187/1/1) was obtained from Historic Scotland. The on site works were carried out from the 17th August to the 17th September 2011 and were conducted in keeping with the Scheduled Monument Consent and the Method Statements for Intrusive Works (Rees 2010) and Building Survey (Rees 2010).
- 36. A limited photographic archive and some plans have survived from the Ministry of Public Buildings and Works, but unfortunately the findings were never drawn together or fully published. One of the objectives of the K-CAP, in cooperation with Historic Scotland, is to assess the surviving archives from the 1960s and re-expose the archaeological features that were located to record them in greater detail. This will increase the 1960s archive's value and enable a richer interpretation of the development of the abbey for both the Community and for the wider archaeological profession.
- 37. The 2011 Season works consisted of three distinct parts; the intrusive archaeological trenches within the abbey, intrusive test-pits around the burgh and the survey of walls for re-used medieval masonry.
- 38. Thirteen of the trenches were excavated within the Scheduled Monument, combined with the eleven in the previous season this means that some seven trenches that had received Scheduled Monument Consent were not excavated. The excess of available trenches was intentional as it allowed the capacity to abandon trenches where necessary, while retaining the ability to carry on with others. The consented trenches for 2011 were numbered 18-32, continuing the number run from the 2010 season (Trench 17 being out-with the Scheduled Monument). The trenches that were excavated were 11, 18, 19, 21, 22, 24, 25, 26, 27, 28, 29 and 31.
- 39. A series of six 1m by 1m test pits were also excavated at locations in the east of the burgh. These test pits continued the number run used in the 2010 season (Nos 4 to 9). None of these test pits were within the Scheduled Monument and all were within either open public ground or within areas that are not anticipated to be subject to subsequent development proposals.
- 40. The locations of the intrusive trenches and test pits were also surveyed. A series of stations were created across the area, which were geo-referenced using known points around the Abbey. The data was then initially downloaded into Liscad Plus v8.03 (Surveying and Engineering Environment) with Arcview GIS v3.2a and Adobe Illustrator CS also used to handle the data into its final product.

- 41. All of the archaeological remains uncovered were investigated within the confines of the Scheduled Monument Consent or as far as the interests of Health & Safety permitted, given trench depth or soil stability. All of the significant archaeological remains uncovered were recorded according to the process described in the Method Statements (Rees 2010).
- 42. All works were conducted in accordance with the Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statements. Where works fell within a Scheduled Monument, as defined by the *Ancient Monuments and Archaeological Areas Act 1979*, these were subject to the restrictions of the granted Scheduled Monument Consent.
- 43. A variation to the Scheduled Monument Consent was applied and agreed to with Historic Scotland in regard to the investigation of features within Trench 24. This was in keeping with the Scheduled Monument Consent and the Method Statement for Intrusive works (Rees 2010)

Volunteer Attendance and Training

44. A series of office based training sessions were carried out prior to the excavation to familiarise the volunteers with archaeological theory, excavation techniques, recording conventions and archaeological tools.

Prior to beginning on site, all volunteers were talked through risk assessments to make them aware of any Health and Safety issues. They were also kept up to date with any revisions to the risk assessments which were carried out at the end of each week. While on site there was a ratio of one professional archaeologist to four volunteers, the objectives of the professionals were to provide supervision and further on site training, while allowing the volunteers to carry out the archaeological work.



a: Dig team each day



c: Volunteers digging under supervision Figure 4: Volunteer roles within project



b: Training prior to works



d: Volunteers trained in surveying

45. The field team consisted of twenty volunteers and 5 professionals per day, which across the twenty days on site amounted to four hundred person days volunteered. This was separate to those volunteers who staffed the Abbey Tower Heritage Centre.

Public Access and School Visits

- 46. During the 2011 Season the excavation at the Abbey was open to the public, this consisted of mostly passing members of the public, as well as tourists visiting Kilwinning and organised visits from the local schools.
- 47. The volunteers took the lead in talking to the public as well as answering any questions they had regarding the archaeology or general history of the Abbey. School visits were from five local primary schools as well as one visit from the local secondary school. In each case they were guided around the Abbey and the excavations by a professional archaeologist.





Archaeologist explaining the dig

Figure 5: Educational involvement in the Project

Update Report

48. In early September 2011 a funders Update Report was prepared covering issues surrounding learning, training, volunteering and communication (Rees & Baird 2011). This report gives a fuller discussion of the successes of the project in these areas of activity.

Findings: Trenches

- 49. In total thirteen trenches (Figure 6) were opened, all were within the grounds of the Scheduled Monument with twelve being at newly agreed locations and one (Trench 11) returning to a location agreed but not excavated in the 2010 season. The trenches were in general 3m by 2m in size with the exception of Trench 28 that was slightly constrained by the physical dimensions of the Slype.
- 50. The positioning of the trenches within the Abbey had been chosen specifically to expose archaeology that had been identified in previous works. In particular those identified from the photographs from the 1960s works but also to record the 1980s excavations. The excavations proceeded in keeping with the agreed Method Statement as formalised through the Scheduled Monument Consent issued by Historic Scotland. To maximise artefacts recovery, all trenches were regularly scanned by a metal detector and all sediment hand sieved.
- 51. Presented below are the findings for each trench. A full table of appendices with context records and other registers are supplied on the supporting computer disc.

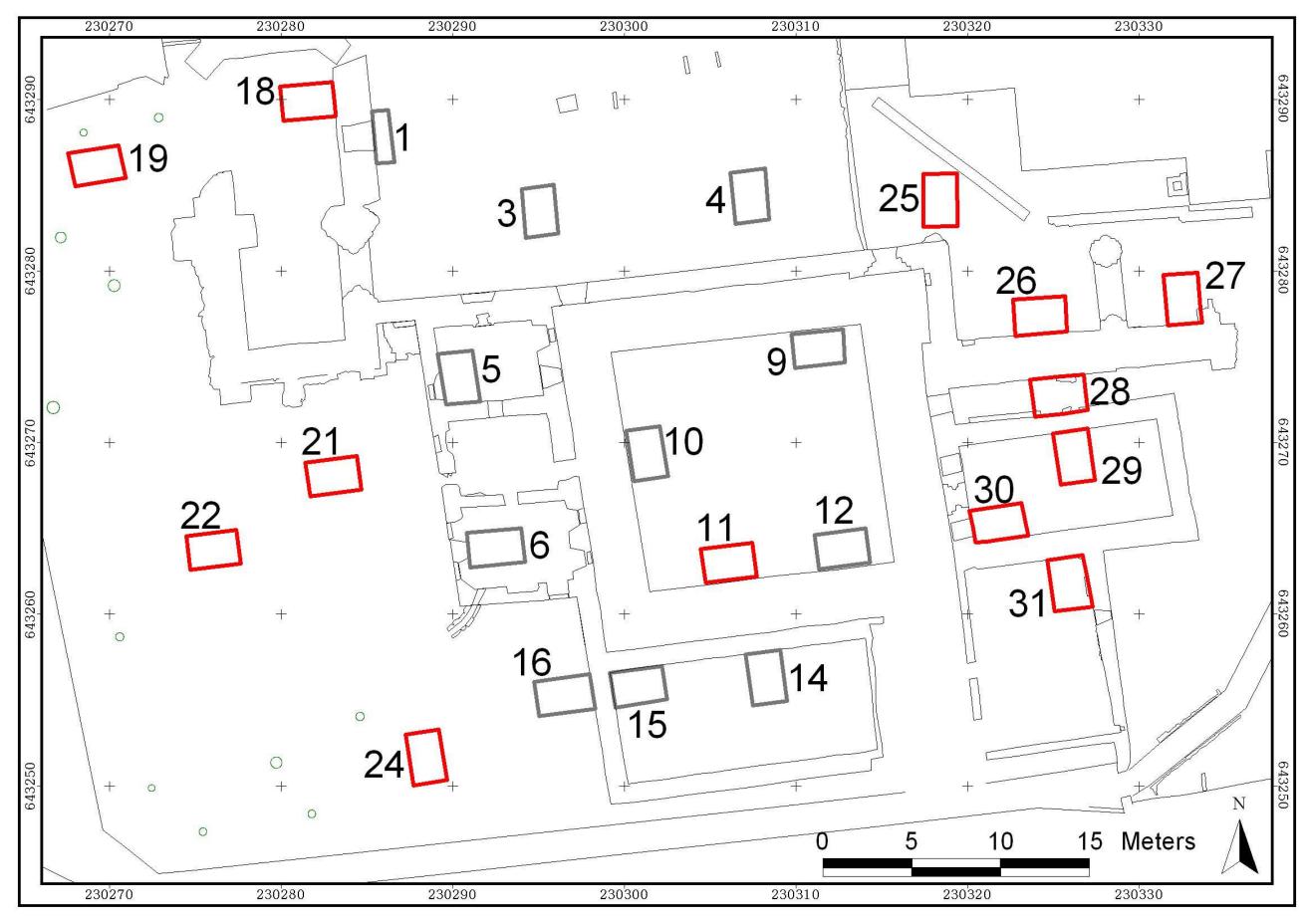


Figure 6: Trenches excavated within 2010 (grey) and 2011 (red) seasons

- 52. Trench 11 was placed at the southern side of the Cloister (1960s wall layout) in order to find any original medieval walls. The trench was 3m by 2m in plan, and aligned east to west.
- 53. The trench was reduced through 150mm of loose dark-brown topsoil (1101) and 200mm of dark-brown silty sand material (1102) until the upper wallhead (1103) was located. The wall was aligned WSW to ENE and crossed the full length of the trench. The exposed section of the wall (1103) measured in maximum 0.6m wide and 0.5m in depth over two courses. The lower course consisted of rectangular shaped sandstone blocks while the upper course was a mixture of shaped sandstone and rubble. The wall was held together by cement mortar.
- 54. The wall sat on a bed of mortar with rubble foundations (1110) beneath. (1110) comprised of a mixture of angular and sub-angular stones in a matrix of mortar and compact clay. It ran the full length of the trench and extended north beyond the base of the wall (1103) by 0.33m. In revealing the north face of the wall multiple deposits (1114), [1115], (1104), (1105), (1116), (1106), (1107), (1108), (1112), [1111] and (1109) comprising drainage cuts and 1960s ground levelling were removed. (1109) was bottomed by a sondage which revealed a loose, sandy yellow-brown material thought to be natural (1113) at its base, 1.2m below ground surface. The trench was not excavated further and this was its lowest level (see Figure 7a).
- 55. A range of modern, nineteenth century and medieval pottery finds were recovered from the fills. Included in the wide range of other finds were metal, bone, glass, worked stone, slate, window glass, wood, cement render, slag, clay pipe, mortar, brick and oyster shell. No sediment samples were recovered from this trench.

- 56. Trench 18 was located on the west side of the recessed gable wall at the west end of the Nave. It was 3.2m by 2m and aligned west-east. The east end sat tight against the recessed gable wall. The purpose was to ascertain the presence of any surviving remains of the medieval abbey foundations existing beneath the current ground level.
- 57. The uppermost horizon (1801) (topsoil and turf) was a loose mid-dark brown sandy silt and grass, 70mm deep. Removal of this exposed (1803) covering the whole of the trench. A loose, light-brown sand (1802) 50mm to 90mm deep was visible within the south facing section. This is a modern construction/levelling deposit above a plastic sheeting (only visible in section) and is attributed to modern service works in the area to the north of the trench. In contrast (1803) was loose mid-dark brown clayey silt 70mm deep containing rare coal/charcoal. Modern ceramics and glass with occasional medieval pottery sherds were removed from this deposit.
- 58. Excavation of (1803) exposed (1804) in the western and central areas of the trench a compacted dark-reddish brown silty sandy clay, with pockets of light-brown sand. Large sandstone pieces/degraded sandstone and occasional areas of coal/charcoal were included within the deposit which was 170mm deep. Finds included modern and medieval pottery, bone, slate, metal, a fragment of wooden post, stone, glass, metal slag, slag, clay pipe, and shell. The mixed nature of this deposit would indicate that it is the result of backfilling or landscaping in the area, while the compacted nature suggests a layer of trample.
- 59. (1805) was located beneath (1803) at the east end of the trench, immediately west of the recessed gable and running underneath it (also looks to continue further north and south beyond limits of excavation). (1805) consisted of large angular and flat stones in a friable mid-dark brown sandy clay matrix. Deposit was 0.9m west to east (at north end) and 0.55m west to east (south end). Found in this deposit were pottery, bone, glass, wood, and burnt material.
- 60. The removal of (1804) also revealed (1810) and (1806). (1810) was a mid-brown silty layer extending from (1805) to the edge of (1806) in the west side of the trench. (1806)

was a mid-dark brown mottled yellow sandy silt. Finds from (1806) included medieval pottery, bone, metal nails, glass, slate, shells, lead and stoneware. A sondage was cut though (1806) and the edge of (1810) in the southwest of the trench (Figure 7b). This revealed that (1810) lay on top of (1806) and that beneath (1806) there was a yellow-brown silt sand (1807) which was thought to be natural with a sub-circular feature cut into it [1809] (1808) with dimensions in plan of 430mm by 540mm.

Trench 19

- 61. Trench 19 was located in the northwest corner of the modern abbey grounds to the west of the medieval abbey western entrance. The area has been heavily altered in the twentieth century not least by the removal of a car park visible in the images from the 1960s. The main aim was to assess the depth of deposits and the potential for survival of medieval archaeology.
- 62. Trench 19 was 3m long (east-west) and 2m wide (north-south). The topmost layer which had the turf growing on it was very loose dark reddish grey silty sand 140mm thick (1901). Beneath (1901) there was a sub-circular area in the southeast corner of hard compacted slate deposit (1902) about 500mm by 560mm visible extent and 70mm thick. (1903), beneath both (1901) and (1902), was loosely compacted dark-reddish brown silty sand 240mm thick that covered the full extent of the trench. It was during the excavation of (1903) that an electricity cable was discovered running diagonally across the west side of the trench. This area was then left unexcavated.
- 63. The removal of (1903) revealed (1905) a rectangular level or very compacted rubble/clay dark brown in colour and (1904), a moderately compact dark reddish brown sandy gravel that might be natural. A semi-circular feature [1907] was cut into (1905) and went out with the trench edge but its visible width was 700mm. It was filled with (1906) a black burnt clay/ silty sand. (1905) and [1907] were unexcavated.
- 64. A range of nineteenth and twentieth century and medieval pottery finds were recovered from (1901) to (1903). Metal finds were also common as were glass, slag, slate and bone most of which was probably animal. Also recovered were worked stone, flint, and shell. Sediment samples were recovered from (1902) and (1906); <110> and <111> respectively.

- 65. Trench 21 was placed beyond the known layout of the Abbey buildings on the green to the west, in the location of an AD1597 town house to investigate this area and discover any remains. The trench was 3m by 2m in plan, aligned east to west.
- 66. The trench was reduced through 200mm of topsoil (2101) until a hard packed reddish brown gravel sand (2105) appeared (Figure 8a). This was thought to be natural. Cut into (2105) were features [2108] (2103), [2109] (2107), [2110] (2106), [2111] (2102), and [2112] (2104):
 - [2109] was a linear feature 700mm wide running northeast-southwest with its ends going out-with the trench. It was 170mm deep and filled with (2107) and may be the remnant of a truncated drain. A sample <108> was taken;
 - [2108] (2103) was a sub-circular feature about 330mm in diameter filled with loose, granular dark reddish brown gravel and small flakes of charcoal and was unexcavated;
 - [2110] (2106) was a sub-circular feature 360mm across with a visible extent of 100mm where it ran beneath the north edge of the trench. It was filled with a loose mix of dark reddish brown to reddish brown gravel with some larger stones to a depth of 250mm. A sample <109> was taken;
 - [2111] (2102) was a sub-circular feature 100mm diameter filled with loose dark reddish brown gravel with charcoal flecks. It was unexcavated; and



a: Trench 11 from east fully excavated



b: Trench 18 from west with sondage visible front right through (1806)(1810) Figure 7: Images of Trench 11 and 18



a: Trench 21 from east showing section through [2109]



b: Upper surface of demolition rubble in Trench 22 from east Figure 8: Images of Trench 21 and 22

- [2112] (2104) was sub-circular, 140mm diameter and 80mm deep. It was filled with a loose black silty sand and included burnt material. A sample <107> was taken.
- 67. A range of modern and nineteenth century finds were recovered from deposit (2101): <2324> to <2337> inclusive. A single piece of flint <2338> was recovered from (2107).

- 68. Trench 22 was located in the middle of the green to the west of the abbey buildings close to if not actually in the position of houses demolished in the 1960s. Its aim was to discover if there were remains of houses and/or post holes or pits from the medieval phase. It was 3 m by 2 m and aligned east-west.
- 69. The turf and top soil (2201) was a fairly compact mid-brown silty sand level to a depth of 150mm sitting atop a layer of tightly compact twentieth century rubble (2202) Figure 8b. A sondage was cut though the rubble to reveal the sandy gravel natural (2203) 100mm beneath. All of (2202) was then removed from the trench but no other archaeology was found.
- 70. A varied mix of modern material came from these layers including metal, glass, pottery, stone, tile, glazed brick, bricks, concrete, mortar, a marble, splinters of wood with paint, stone with paint, and industrial slag. In addition some medieval pottery and some flint were recovered.

- 71. Trench 24 was placed beyond the known layout of the Abbey buildings on the green to the southwest to investigate whether there were structures and/or features in this area. The trench was 3m by 2m in plan, and aligned north to south.
- 72. The trench was reduced 350mm through loose dark-reddish brown/grey topsoil (2401) and a thin 50mm thick layer of hard compacted dark grey-black trample (2402). Investigation through the trample was undertaken by sondage (see Figure 9a) which clarified its shallow nature and supported subsequent excavation to expose (2403) a hard compacted yellowish red sandy gravel was exposed across the full bed of the trench (see Figure 9b). Several negative features [2405], [2407], [2408] and [2410] were discovered cutting into the gravel surface exposed at the 400mm depth:
 - [2405] was a sub-circular feature, u-shaped in section 750mm wide by 210mm deep with (2404) upper fill and (2413) lower fill located in the northwest of the trench;
 - [2407] was a sub-circular pit roughly bowl-shaped in section and 1010mm across at its greatest visible extent (north edge was out with trench and the east side was truncated by [2408]). Fills were (2406), (2411), and (2412) top to bottom;
 - [2408] was a linear trench running north-south at the east side of the trench. Its east edge was out with trench and its visible width was 500mm, its depth 300mm and it continued north and south out of the trench. It had vertical sides and was flat bottomed. It had a lead pipe along the base of the cut; and
 - [2410] was a very shallow (90mm) deep bowl-shaped cut filled with (2409) and sub-circular in plan (420mm at greatest extent), located in the southwest of trench.
- 73. A range of modern, nineteenth century, some medieval pottery finds, and some bone, were recovered from (2401), (2402) and (2403); <2301> to <2318> inclusive. Bulk sediment samples; <101>, <102>, <103>, <104>, <105>, and <106>, were recovered from the fill of the features excepting the water pipe trench.

- 74. Trench 25 was located in the east end of the abbey Nave north of the west wall of the South Transept. This location was chosen to ascertain whether medieval remains were in existence beneath the modern level. The trench was 3m by 2m and aligned north-south.
- 75. The uppermost deposit was (2501), a very compact dark bluish grey silty gravel surface 90mm thick. This lay atop (2502) which was a compact dark brown stony silt deposit 50mm thick which included worked stones. Below (2502) lay modern pits [2510], [2511], [2513] and [2515]:
 - Possible robber cut [2510] was linear in shape with a sub-rounded terminus running SSE-NNW located in the southeastern corner of the trench. It measured 1m long by 0.65m wide and 280mm deep and was filled by compact dark grey silt (2509);
 - At the northern end of the trench sat [2511], another possible robber cut. This was a sub rounded corner of a cut which extends outwith the northern side of the trench. It measured 1.8m wide by 320mm deep and was filled by compact dark brown stony gravel (2512); and
 - In the centre of the trench lay two small modern sub-rounded pits [2513] and [2515] which sat quite close together. [2513] measured 0.38m by 0.34m and 140mm deep and was filled by dark grey stony silt (2514). [2515] measured 0.18m by 0.19m and 190mm deep and was filled by dark grey stony silt (2516).
- 76. Also underlying (2502), and cut through by the modern pits mentioned above, sat 1960s backfill deposits (2504) and (2505). (2504) was a moderately compact yellow and orange sandstone and silty sand layer 150mm thick which covered the southwest corner and extended 2m north. (2505) was a moderately compact dark brown silt 100mm thick which sat at the north of the trench covering approximately 1m.
- 77. The removal of (2504) and (2505) revealed feature [2507] at a depth of approximately 300mm below ground level. This was a linear cut running roughly east-west across the centre of the trench measuring 2m long by 1.5m wide and 230mm deep filled by a moderately compact dark brown and light brown silty rubble and sand (2506). This was also cut by pits [2510], [2513] and [2515] along its southern side.
- 78. Cut through by [2507] and also underlying deposits (2504) and (2505) were possible medieval working surfaces (2503) and (2508). (2503) sat to the south of [2507] at a depth of approximately 150mm below ground level. It was a compact light brown mixed silt and sandstone layer 100mm thick and measuring 1m by 2m across the south side of the trench. (2503) was also cut by [2510] at its eastern end. (2508) sat to the north of [2507] at a depth of approximately 320mm below ground level. It was a very compact yellowish brown silty sand with sandstones 100mm thick measuring 1m by 2m across the north side of the trench. (2508) was also cut by [2511] along its northern side.
- 79. Pits [2510] and [2511] bottomed onto (2517), a very compact dark grey rubble which likely represented a medieval deposit although its exact date is unknown. It sat at a maximum depth of 630mm below ground level. The trench was not excavated further and this was the lowest level reached (Figure 10a).
- 80. A range finds were recovered; from (2501) glass, charcoal, metal, ceramic, from (2502) stone, glass, bone, ceramic, shell, metal, bone, slate, burnt material and a button, from (2503) bone, glass, metal, from (2506) stone, glass, bone, ceramic, metal, bone, slate, from (2505) ceramic, metal, glass, bone, and from (2509) metal, bone and slate. A head stone also came from (2512). Bulk sediment samples were recovered from (2514) and (2516); <121> and <122> respectively.



a: Trench 24 from north initial sondage to ascertain character of trench



b: Trench 24 from south with features fully excavated including water pipe trench [2408] Figure 9: Images of Trench 24



a: Trench 25 from north showing scale of modern disturbance



b: Trench 26 from northeast showing brick lair (2603) and South Transept wall Figure 10: Images of Trench 25 and 26

- 81. Trench 26 was placed at the south end of the South Transept to discover any remains of the South Transept floor and other medieval remains. It was 2m by 3m and aligned eastwest.
- 82. The first layer was (2601) a moderate to loosely compacted dark grey silty sand and gravel. This lay atop 1960s backfill deposit (2602), a moderately compact dark grey silt which ran across the northern half of the trench measuring 1m north-south and 100mm thick. Beneath this layer, and below (2601) across the southern half of the trench was (2604), another 1960s backfill deposit, comprising a loosely compact mid brown sand 100mm in thickness. Upon removal of the layer (2604) a wall (2603) was discovered at 0.26m below ground surface. This was yellow brick mortared together, aligned in an L-shape, and ran 1.25m from the east side of the trench before turning north for a further 1.8m. The wall measured 0.24m wide but its full depth was not revealed.
- 83. To the east of the wall sat (2605) a moderately compact dark grey silty clay at least 50mm thick, and to the west sat (2606) a very compact dark grey sandy clay at least 100mm thick. These layers were not excavated due to the presence of inhumations within deposit (2606) which meant excavation of the trench was halted at a maximum depth of 0.44m below ground surface (Figure 10b).
- 84. Excavation of the trench also revealed the base of the South Transept wall (2607) as well as the base of (2609). Both ran along the southern side of the trench with (2609) set into wall (2607) on the eastern side. (2609) consisted of mortar bonded yellow sandstone sub-round and sub-angular stones with human remains mortared *in situ* at the base. Both (2607) and (2609) sat on foundations (2608) at 0.27m below ground level. (2608) consisted of two courses of shaped sandstone blocks which were stepped and extended 0.3m out from the base of the wall above.
- 85. Finds consisted of metal, glass, bone and slate in (2601), and bone, metal, wood, ceramic, coal, bottle top, glass, slate, a marble, mortar and metal in (2602).

- 86. Trench 27 was positioned in the southeast corner of the South Transept to trace the remains of its south and east walls as well as any floor level or other medieval remains. It was 2m by 3m and aligned north-south.
- 87. Uppermost were a series of deposits. (2701) comprised the surface deposit and was 80mm of moderately compact dark grey gravel and silt. Beneath this was 70mm of very compact dark grey mixed gravel and small rubble fragments (2702) which was in turn above (2703), a compact dark grey silt with small stones deposit 60mm thick which lay above a deposit of friable mid to dark brown slightly sandy clay (2704) 80mm deep. Removal of these layers revealed (2705) which sat below (2703) in the northeast area of the trench. (2705) was a mid to dark brown sandy clay which measured 0.55m east-west by 1.76m north-south and 380mm deep. (2705) was found to disturb [2710] consisting of a rounded linear feature partly revealed at the eastern end of the trench measuring 0.60mm wide by 0.75m long. This was filled with (2711), a moderately compact dark grey stony fill, containing (2709), a human skeleton (Figure 12a). [2710] and its fills were not excavated.
- 88. The trench also exposed more of (2707) the east wall of the South Transept and (2708) the south wall of the South Transept which had courses continuing down below ground level. The bases of the walls were not exposed due to the presence of inhumations which stopped the excavation of the trench at 500mm below ground surface (Figure 12b).
- 89. Finds consist of metal, glass, pottery, a modern coin, shell, slate, ceramic, flint, slag, and stone in (2703), bone, glass, metal, slag, ceramic, coal, stone, glass, slate, stone and metal in (2704), ceramic, metal, stone, bone, glass, mortar, slate, flint, and shell in (2706), and bone, ceramic, mortar, slag, glass, shell, slate, metal, and mortar in (2705).

- 90. Trench 28 was placed in the Slype to investigate the lower parts of the medieval walls and to investigate the floor level. It was 2m by 3m and aligned east-west.
- 91. Trench 28 abutted the upstanding remains of the Slype along its northern and southern edges. Along the northern edge sat (2806), (2811) and (2813) from west to east respectively:
 - (2806) being the barrel-vaulted internal wall of the Slype with benching at its base, showing signs of being a later modification with a possible blocked doorway to the west; and
 - (2811) and (2813) are the door jamb and the section of wall to its east respectively, which represent a later phase of modification when the doorway exiting to the east of the Slype was added.
- 92. Along the southern edge of the trench sat (2805), the intervening wall between the Slype and the Chapter House which sits to the south, which ran along the full length of the trench. This had been modified with the apparent benching (2809) and door jamb (2810). Visible at ground level, benching (2809) runs along the base of (2805) entering the trench from the west and stopping after 0.8m. Door jamb (2810) is located near the eastern end of the trench, mirroring the position of, and relating to the same phase of modification as, door jamb (2811) to the north.
- 93. The trench itself was initially covered by 50mm of loose gravel (2801), which comprises the pathways around the abbey remains, below which sat a series of deposits representing 1960s backfill. (2802) was a 50mm thick layer of compact, very dark grey sandy clay forming an interface between (2801) and (2803). (2803) was a 100mm thick layer of very dark brown compact silty sand with pebbles and angular sandstone. Beneath (2803) at the west end of the trench was (2804) a loose to moderately loose very dark brown sandy clay gravel 200mm thick. Finds from (2803) included bone, glass, mortar, ceramic, slate, slag, metal and shell. Finds from (2804) were bone, glass, slate and stone.
- 94. Beneath (2804) and across the western half of the trench was (2814) and (2818). (2814) was a medium to loosely compact dark reddish brown course silty sand while (2818) was a compact layer of reddish brown silty sand with rubble inclusions. Neither of these deposits were excavated although (2814) could potentially have been the natural subsoil (Figure 13a).
- 95. Across the eastern half of the trench sitting below (2803), although the top edge of some were visible at ground surface level, was an area of large boulders (2808) which measured 1.9m north-south by 1.5m east-west and 380mm in depth. They are very similar to (2807), a set of large boulders which also sit below (2803), running along the southern edge of the trench to the west of door jamb (2810) aligned east-west. (2807) measures 1.6m east-west by 0.47m north-south and 300mm deep. (2807) lay below (2809) and also (2805) at this end. Due to their similar composition it appears likely that (2807) and (2808) may relate to the same phase.
- 96. The removal of (2801) to (2804) also revealed additional structural details for the surrounding upstanding remains. The substructures of the surrounding walls were exposed at varying depths of between 6mm and 130mm below the ground surface level: (2812) below wall (2806); (2815) below jambs (2810) and (2811); (2816) below wall (2813); and (2817) below the east end of wall (2805) (to the east of (2810)).
- 97. The foundations were all of a similar composition: a mixture of small to medium sized unworked angular and sub-angular grey and yellow sandstones varying in depth from 70mm to 350mm although some were not fully exposed. The maximum depth the trench reached was 430mm.

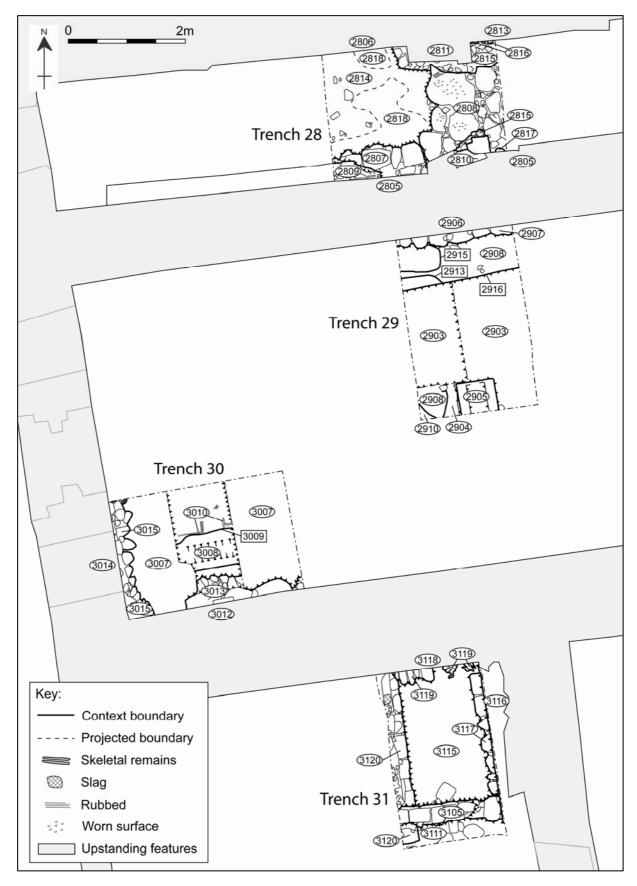


Figure 11: Detailed plan of trenches in eastern cloistral range



a: Trench 27 from northwest showing [2710] cut through eastern wall (2707)



b: Trench 27 from north with human skeletal material recovered with spoil Figure 12: Images of Trench 27



a: Trench 28 from west showing boulder foundations (2807) and (2808)



b: Trench 28 detail of abraded upper surface of boulder within (2808) Figure 13: Images of Trench 28

- 98. Trench 29 was placed within the Chapter House with its northern end placed against the middle of the northern wall. It was placed here in order to discover the remains, if any, of the medieval Chapter House floor and to reveal the foundations of the north Chapter House wall. The trench was 3m by 2m in plan, aligned north-south and was reduced through 1960s backfill deposits of (2902), (2903), (2904) and (2911).
- 99. The reduction exposed the foundations of the northern Chapter House wall (2907) and the cut of a 1960s trench [2916]. (2907) consisted of large sub-angular and sub-rounded boulders with small stones mortared in and around the boulders to form the foundation for the north wall of the Chapter House. No evidence for the flooring was evident, nor any for benching along the wall.
- 100. [2916] ran parallel with the northern Chapter House wall between 0.74m-0.85m to the south of the wall. The platform that this left consisted of the natural subsoil (2908) a dark red sandy silt, into which had two graves been cut [2913] and [2915]. [2913] was 0.7m long within the trench 0.2m wide and 0.63m deep, with vertical sides and a flat base. Its fill (2909) consisted of a dark reddish brown silty sand with stones and has been truncated on its southern side by the 1960s trench [2916]. [2915] was sub-rectangular in plan measuring 0.63m by 0.55m, with a dark reddish brown silty sand fill (2912).
- 101. A range of modern, nineteenth century and medieval pottery finds were recovered from the 1960s fill <2819>, <2826>, <2833>, <2844>, <2848>, <2852> and <2866>. Bone finds were also common <2816>, <2824>, <2832>, <2839>, <2850>, <2862> and <2865> of which some were clearly disarticulated human skeletal material <2883>. Of particular interest was a large rectangular worked stone <2884>, the stone measured 680mm by 640mm and 230mm deep. A rectangular recess had been carved within its centre, measuring 580mm by 310mm and 70mm deep. No sediment samples were recovered from this trench.

- 102. Trench 30 was situated in the southwest corner of the Chapter House in order to investigate the lower reaches of the Chapter House wall and discover any remaining medieval levels. The trench measured 3m by 2m, was aligned east-west and was reduced through 1960s backfill (3002), (3003), (3004), (3006) and (3007).
- 103. Its topmost layer was modern gravel (3001) above a 30mm thick very dark grey gravel and sand-silt interface (3002) which in turn lay atop (3003). (3003) was a medium compact dark reddish brown sand silt 110mm thick. Included within this were ceramic, bone, mortar, glass, slate, shell, metal, wood, plastic and a piece of flint.
- 104. Beneath this sand silt (3003) was (3004); a hard compact grey stone and sandstone, mortar mix of yellowish red colour. There were medium and large stones some sub rounded and some sub angular with mortar adhering within this sediment. A sample was taken <81>, and finds were slate, glass, bone, slag, ceramic, shell, wood and flint. There may be two mortar trample layers; (3006) and (3011), both of compact sandy gritty silt, and sub angular stones 50mm thick. Beneath this was (3005), a compact brown sandy silt with medium sub rounded and sub angular stones that extends 0.78m by 0.66m. It contained bone, ceramic, horn, slate, and slag. Lastly (3007) was fairly compact weak red sandy silt with frequent sub-angular and sub-rounded stones. Included was slate, ceramic, mortar, shell, plaster, glass, metal, bone, flint, stone and fibres.
- 105. Their removal revealed the lower reaches of (3012) the south wall of the Chapter House, (3014) the west wall of the Chapter House, and (3013) and (3015) the foundation layers of large boulders beneath these walls respectively. A sondage was dug through (3007) to reveal bedrock (3008), and [3009] a grave cut in the north side of the trench with (3010) a skeleton emerging from its upper surface. This skeleton was not excavated or disturbed further.

- 106. Trench 31 was located in the northeast corner of the Warming Room. It was aligned north-south and measured 3m by 2m. The purpose was to fully expose the lower courses of the warming house walls and investigate the possibility of surviving medieval floor levels.
- 107. The uppermost horizon was 80mm of turf/topsoil (3101) which was loose, mid-dark brown sandy silt and grass which covered the whole of Trench 31. Removal of (3101) and some of (3102) partially exposed an east-west aligned stone wall (3105) at the south side of the trench. A modern clear plastic tarp was apparent in the centre and eastern side of the trench, protruding from within (3102) in places. (3102) was a mix of topsoil (3101), and lower deposits (3103) and (3104), with depth ranging from 40mm-60mm. Removal of (3102) revealed two deposits, (3103) and (3104). (3104) was located only in the western side of the trench while (3103) covered the rest. (3103) was loose, dark-reddish brown sandy silt of 200mm deep and sat above the modern plastic tarp. (3104) was friable, black silty sand 200mm deep including mortar and small sandstone pieces, with rare charcoal/coal inclusions. Modern ceramics and glass were removed from this deposit.
- 108. On the north side of the trench (3103) was removed to reveal (3108). This was fairly compact olive brown silty sand later revealed to be 1.05m by 0.9m and 300mm deep. Modern ceramics and glass were also removed from this deposit.
- 109. Removal of the plastic tarp exposed modern debris consisting of plastic crisp packets, glass bottles, plastic carrier bags etc. within (3106). This was loose dark reddish brown silty sand containing abundant ash, charcoal and coal inclusions, 1.0m by 1.0m west and 350mm deep. A large rectangular blonde sandstone block bearing droving was removed from within (3106).
- 110. Removal of the tarp also exposed more of stone structures (3105) and (3107). Two surviving courses of stone wall (3105) ran west-east across south end of the trench. The lower course was boulders, the upper course mortar bonded worked stones. The upper and lower courses were mortared together. Measured 1.79m long (west-east) and 310mm broad. This feature butts against the eastern wall of the Warming Room (3116); this feature sits stratigraphically above (3116).
- 111. A stone linear feature (3107) ran north-south at right angles to (3105). This consisted of two long rectangular flat sandstone blocks which sat on their side (average size 0.82m by 0.2m and 0.16m deep). These were similar to the loose sandstone block removed from (3106) and also had droving marks. The combined length (north-south) was 1.6m. The stones were loosely placed and not mortar bonded. Modern dump (3106) was located between these (3105) and (3107) (north side of (3105), east side of (3107)). Excavation of (3106) revealed (3104) below. The removal of (3103) on the south side of wall (3105) revealed (3104) below.
- 112. Below (3104) was (3109), a compacted rubble deposit in a very dark grey slightly sandy silt matrix, containing abundant ash and occasional sandstone pieces (dimensions 2.3m by 0.7m and 300mm deep). Excavation of (3109) exposed (3111) at the south side of (3105). This was loose dark reddish brown sandy silt which contained demolition rubble, fragments of sandstone, flecks of coal and burnt material. (3109) was 1.09m by 0.32m and 0.42m deep as excavated. Also below (3109) was (3112), located north of (3105) in the western, central and eastern areas of the trench, surrounding (3108) on its western and south sides. (3112) was moderately compacted, black and dusty red sandy clay, 2.3m by 1.2m and 0.5m deep.
- 113. A slot was excavated through deposits (3108), (3113) and (3114). The slot began at the south facing wall of the Warming Room, at the east side of the trench. Slot revealed (3113) below (3108). (3113) was compacted dark olive brown silty clay with small sandstone fragments and mortar (this is the same deposit as (3114)). (3114) produced medieval pottery and bone, and also modern glass ceramics.
- 114. (3115) was exposed below (3113/3114) within the slot, a loose compacted reddish

brown sandy silt with degraded sandstone, modern ceramics and glass and medieval pottery shards. (3115) covered base of trench and was excavated to a depth of 0.4m.

- 115. The eastern wall of the Warming Room (3116) formed the west facing section of the trench and ran north-south. This consisted of conglomerate blonde sandstone blocks facing (0.32m by 0.22m by 0.29m). The three lower courses of this wall included within the trench are stepped out from the upper courses. Areas of plaster survive intact on stone block facing (0.02m thickness). The foundation course (3117) is boulders and worked stones and protrudes 0.15m-0.2m westwards from upper courses (3116). (3117) is 0.18m high, runs along the west-facing section and possibly extending southwards beyond limits of excavation.
- 116. The north wall of the Warming Room (3118) runs west-east and forms the south-facing section. This consists of conglomerate worked sandstone blocks (average size 0.21m by 0.42m). The uppermost part has facing stones removed revealing and inner rubble core. Three lower courses of this wall are located within the trench itself, including foundation course (3119) (approximately 0.3m deep)). (3119) is mortar-bonded boulders and field stones with irregular sandstone pieces. This course does not abut (3117), but a gap suggests a connecting stone was once there.
- 117. Wall (3120) runs north-south along the east-facing section. Later wall (3105) sits on top of this wall. (3120) is rectangular blonde mortar bonded conglomerate sandstone blocks (range from 0.2m-0.92m by 0.15m-0.21m). The western edge of the wall is obscured by limits of excavation. Two courses visible as excavated. This feature extends from (3118) and possibly extends south beyond limits of excavation. It may have originally abutted (3118) but the connecting stone of the lower course is missing. The upper stone looks different and is not mortared in place, but an apparent recess just to the north indicates its possible location here at one time.
- 118. Both the upper and lower deposits of this trench contained modern glass and ceramics which indicates this is an area heavily disturbed in modern times. The inclusions of medieval pottery suggest the deposits could include disturbed medieval contexts.



a: Trench 29 from south showing [2916] cutting through graves [2913][2915] to north



b: Trench 31 from southeast with walls (3105) and (3120) visible Figure 14: Images of Trench 29 and 31



a: Trench 30 from east after initial reduction



b: Trench 30 from above showing foundations, sondage and grave [3009] Figure 15: Images of Trench 30

Findings: Test Pits

- 119. A further six test pits were excavated during the 2011 season; these were in public open ground at the east end of the town on ground owned and managed by North Ayrshire Council. They were excavated as part of the strategy of mapping the physical spread of material culture associated with the Abbey precinct
- 120. The test pit locations are shown in Figure 16 with some representative images in Figures 17 and 18. Tabularised data on the materials recovered from these test pits and the sediments exposed are provided below.

Table 1: Test Pit Data

NO.	Location	Depth	Seaments	Arteracts
4	Area F east of graveyard wall	0.9m	TP4/001 very dark grey sandy silt with frequent small stone inclusions	Medieval pottery fragments found as well as artefacts relating to nineteenth century onwards
			TP4/002 black clayey silt with frequent small stone inclusions	
			TP4/003 dark reddish brown clayey sand with frequent small stone inclusions	
5	5 Area D Flower bed next to Dovecot Lane	-	TP5/001 dark brownish grey silty clay with a few stone inclusions	Glass, ceramic, stone, slag, metal
			TP5/002 moderately compact dark grey silty rubble	Twentieth century glass, ceramic, metal, stone
			TP5/003 moderately compact mixed grey ashy silt with wall (TP5004) and rubble	Metal, stone, slag
			TP5/004 modern yellow brick garden wall running SW-NE	
6	Area D Grass next to Dovecot	0.73m	TP6/001 very compact mottled brown/grey clay and turf	Glass, ceramic, metal
Lane		TP6/002 brown sandy silt with some stones	Twentieth century glass, ceramic, metal, stone	
			TP6/003 twentieth c yellow brick garden wall with floor joined to base.	
			TP6/004 twentieth c inert metal gas pipe with rusted metal cover beneath floor level	
7	Area B next to Main street	0.60m	TP7/001 Moderately compact mid-brown silty clay with a very few very small stone inclusions. Turf	
			TP7/002 moderately compact dark grey soil with a few stones.	Possible medieval domestic ware mixed with nineteenth - twentieth ceramics, glass, metal.
	Main street bus	n street bus	TP8/001 Mid brown clayey silt turf layer	
	stop		TP8/002 loose to moderate dark brown sandy soil with clay lumps with small round stones and	Glass, ceramic, flint, metal, modern coins

			modern pottery.	
			TP8/003 compact black soil with coal and charcoal, angular stones. Smells oily	Modern brick, wood, modern metal, pottery, clay pipe, ceramic, button, plaster, glass
			TP8/004 loose reddish-brown sandy deposit with inclusions of a few small stones.	Modern metal, bone, glass, pottery, slate, tooth
9	Area F east of graveyard wall	1.10m	TP9/001 loose black soil with small stones	Clay pipe, bone, glass, slate, metal, plastic
	(approx 4m south of test pit 4)	TP9/002 loose dark grey friable soil with flecks of charcoal and sandstone and rounded pebbles	Plastic, glass, metal, ceramic, clay pipe	
			TP9/003 compact reddish brown loam with flecks of charcoal and pebbles.	Bone, tooth

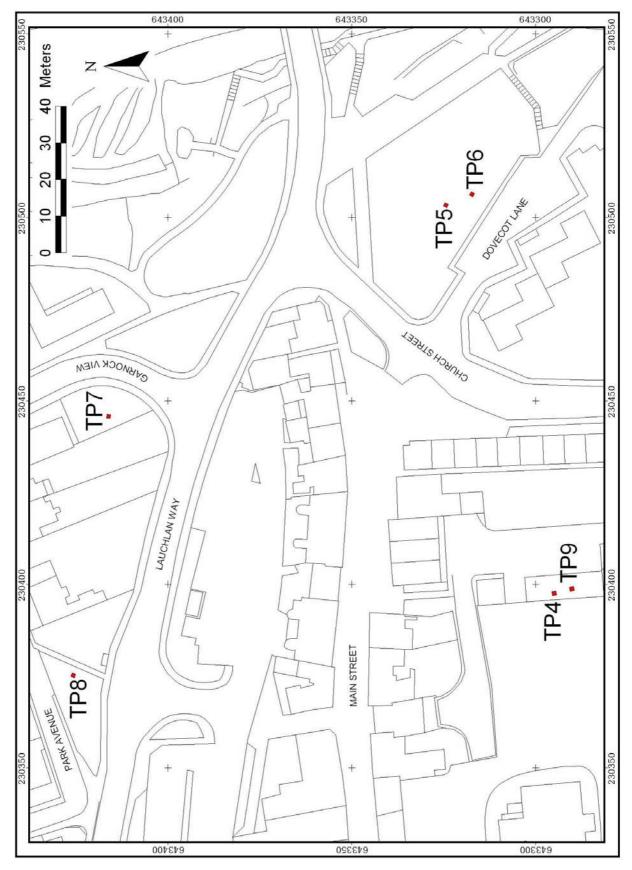
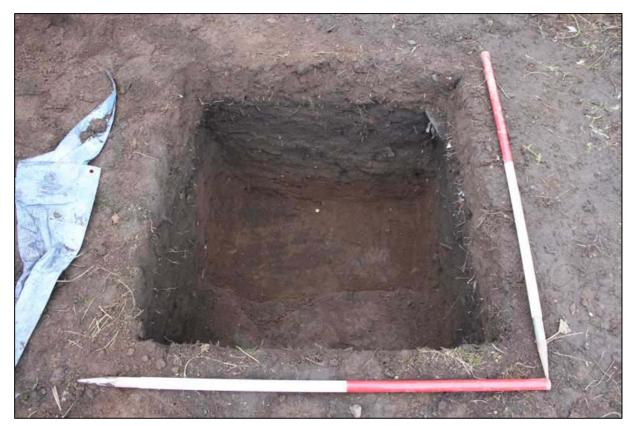


Figure 16: Location of 2011 Test Pits



a: Test Pit 4 from the east



b: Test Pit 6 from the northwest Figure 17: Images of Test Pits 4 and 6



a: Test Pit 7 from the southwest



b: Test Pit 8 from the west Figure 18: Images of Test Pits 7 and 8

Findings: Reused Masonry Survey

- 121. The wall encompassing the graveyard to the east of the Abbey was inspected for fragments of shaped masonry re-used from the Abbey itself.
- 122. On the 9th and 17th of September a team of volunteers walked both the interior and exterior faces of the wall covering some 390m in total length. Each stone identified was photographed and recorded by way of a sketch with measurements noted, including height up from ground level. On the internal face the locations of the stones were recorded using a reflectorless EDM (REDM) Leica TCR307. The stones on the exterior were located by simply using a tape measure to record how far along they were from the wall's end.
- 123. In total 22 fragments of shaped stonework were identified which could be placed under four main groupings: stones with a chamfered edge; fragments of column shaft; fragments of roll moulding and a piece which may have been part of a blind arcade. Thirteen pieces had a chamfered edge: the corner of the block has been cut off to create a surface, often found in the surrounds for a window or doorway. Six of the stones were possibly fragments from the shaft of a column or pier. Two possibly represent fragments of roll moulding: moulded decoration, often around windows or doorways, which is semi-circular in section. One fragment could possibly have been taken from a blind arcade: a series of arches with supporting piers or columns applied to a wall surface.
- 124. Two blocked windows and a blocked doorway were also surveyed at the eastern end of the northern wall with the sill and lintel of the easternmost window containing sockets for a metal grill. Some sections of the wall had been rendered in recent years, particularly along the eastern side, so the stones in these areas were no longer visible.
- 125. From the stones identified, a sample are listed below:
 - a. A stone with a chamfered edge along its top left corner located along the exterior of the southern wall. Measures 440mm wide by 330mm high, sat 6.2m from the west end of the wall at 1.98m up from ground level;
 - b. A stone with a chamfered edge along its top left corner located along the exterior of the southern wall. Measures 390mm wide by 220mm high, sat 16.18m from the west end of the wall at 1.76m up from ground level;
 - c. A fragment of column shaft along the interior of the southern wall. Circular in shape with a short offshoot on the left hand side. Measured 250mm in diameter with the offshoot 180mm high by 50mm wide. Sat at 23.1m from the west end of the wall and 700mm up from ground level;
 - d. A possible roll moulding fragment along the exterior of the southern wall which comprised of a roughly square block which had been shaped in the top right corner by way of two semi-circular cut outs, one along the top edge and one along the right edge, creating a type of 'jigsaw piece' effect. This measured 270mm wide by 280mm high and sat at 34.5m along from the west end of the wall at 1.25m up from ground level;
 - e. A fragment of roll moulding located along the exterior of the southern wall. Roughly semi-circular in shape although with a straighter left hand edge and base. Measures 200mm wide and 110mm high. Located at 21.3m along from the west end of the wall and 1.36m up from ground level; and
 - f. The possible fragment from a blind arcade. Located on the exterior of the northern wall this comprised a roughly square block with a decorative motif carved into the centre. It measured 500mm wide and 460mm high and was located at 11.4m away the east end of the wall and 1.09m up from ground level.
- 126. This survey was by no means exhaustive and merely hoped to add to work already carried out or to be carried out in future.



a: Stone with chamfered edge



b: Stone with chamfered edge



c: Shaft fragment



d: Fragment of roll moulding



e: Fragment of roll moulding



f: Fragment of blind arcade

Figure 19: Reused masonry fragments in graveyard wall

Discussion

- 127. The scale of the disruption and removal of archaeological strata by the 1960s Ministry of Public Building and Works excavation has already been evidenced through the works from the 2010 season (Rees *et al* 2010). It is clear that the majority of upstanding structures retained after these works were those considered by the Ministry workers to be predominantly medieval in origin. Given the lack of records from the 1960s works the destruction of the original strata is quite a significant loss and has removed the opportunity to ascertain any of the archaeological relationships that may have been present.
- 128. It also became apparent during the 2010 excavation that the visible walls of the South Range were in fact of recent origin. As the northern wall was not only mortared with cement but actually sat on a foundation bed of concrete. It would seem that the Ministry of Public Building and Works had the walls built to aid in the visualisation of the size and shape of the southern range, in some cases re-using medieval stonework within their structure.
- 129. This meant that the excavation trenches were reduced through purely 1960s backfill and any significant material culture recovered was at best of a secondary if not a tertiary deposit. However, the working presumption is that the material culture has been reworked within the grounds of Kilwinning Abbey rather than being imported material. What significant archaeology there was to be found was that which had been left *in situ* from the 1960s, and appears to represent medieval to post reformation periods.

The East Range

- 130. Four trenches were excavated within the East Range of the Cloisters, complementing the work in the 2010 season in the West and South Ranges. The four trenches were within the Slype (Trench 28), the Chapter House (Trenches 29 and 30) and the Warming Room (Trench 31). The last designation, the Warming Room, appears to have no substance for this attribution other than being one of the typical uses for the most southerly chamber in the East Range (though this is not the sole location where the Warming Room can be positioned).
- 131. All these areas have clearly been significantly reduced by the 1960s works, although no plans or images survive of these works. To the immediate east is a low but steep incline as the ground climbs to the undisturbed level of the parish graveyard outwith the Property in Care. The Slype and Chapter House were not overbuilt by the burgh as they are recorded as having been within the graveyard post-reformation, and these areas were investigated by Galloway in 1878. In contrast the 'Warming Room' appears in part overlain by a structure on the 1st edition Ordnance Survey (Figure 2a) which is the first purpose built parish school.
- 132. Trench 28 exposed the portion of the Slype around the inserted door jambs at the eastern end of the chamber (Figure 13a). While the northern door jamb was robustly integrated into the South Transept gable wall, the southern jamb was poorly aligned and of an appearance that suggests they may have been subject to reconstruction during the 1960s consolidation of the monument.
- 133. The exposure of a massive boulder foundation (2808) crossing the eastern end of the Slype under the door jambs strongly supports the proposal that this was originally a closed chamber (postulated as a Sacristry). That some of these boulders were eroded on their upper surface, indeed one appeared to be scored by a door (see Figure 13b), suggests that after the insertion of the doorway they acted as the threshold and illustrate the medieval floor level given that this was part of the parish church graveyard post-reformation.
- 134. The boulder foundations also ran westwards along the southern side of the trench as (2807) with a single course of stonework (2809) resting upon this foundation. The 2010 detailed instrument survey of the consolidated ruins (see base of Figure 6) shows the progressive narrowing of the intervening wall between the Slype and the Chapter House

moving from west to east to create a consistent breadth to the passage. A reasonable interpretation is that the foundations and initial stone course ((2807) & (2809)) are the original line of the south wall of the closed chamber with the realigned wall face (2805) designed to support the later barrel vaulted passage. Given that the retained single course (2809) stands proud of the inferred floor surface, this may have been reused as a base for benching comparable to that on the north side of the passage.

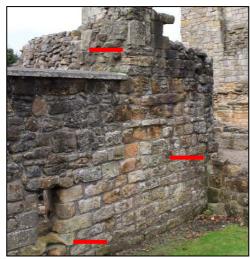
- 135. The Chapter House is known to have been excavated both in the 1870s and during the 1960s general site clearance. There is indirect evidence of the level of the post-reformation graveyard in this area by the level at which the internal wallface has been lost suggesting the surface that was above ground during the graveyard use of this area. This level suggests that the wall between Slype and Chapter House was beneath the ground surface in the graveyard (note this wall is not mapped on the 1st edition Ordnance Survey (Figure 2a).
- 136. Trench 30 illustrated that the 1960s excavation had reduced the interior of the chamber at least to the upper surface of the subsoil (though this may also have been truncated) exposing the full depth of the boulder foundations to the walls (3013)/(3015). This reduction failed to distinguish or excavate an *in-situ* burial noted in the bed of the trench that was within a visible grave cut [3009] (Figure 15b). Hence it is possible that this was an arbitrary reduction of the interior.
- 137. The northern limit of Trench 29 showed a similar behaviour in the 1960s, but then an additional east to west aligned trench had been cut deeper. This 1960s trench sliced through (indeed bisected) two graves on its northern side (Figure 14a) leaving skeletal material visible within the section. This 1960s trench continued to excavate deep into the subsoil (much like the sondage recording in Trench 5 in 2010) with no credible archaeological goal or purpose.
- 138. A single trench (Trench 31) in the 'Warming Room' exposed a considerable depth of dumped material from the 1960s. Once this had been cleared two additional walls were revealed, one aligned north to south (3120) abutted the north wall of the chamber but was of comparable build quality to the medieval wall. This wall was overlain by an irregular wall running east to west (3105) which appears to coincide with the northern wall of the first purpose built public school depicted on the 1st edition Ordnance Survey (Figure 2a).

Structural Notes on the East Range

- 139. The modern ground levels within the East Range are broadly comparable, though lower than the interior of the South Transept. However, the level of the foundation course noted in Trench 31 is significantly lower, suggesting that the floor of the East Range steps down as it runs south. This step is reinforced by the height difference between the surviving cills of the ground floor windows in the south wall of the Chapter House and the east wall of the Warming Room. The sunken character of the South Range (as evidenced by Trenches 14 and 15 in 2010 season) suggest that this step may reflect a general gradient of falling ground across the Cloister from north to south.
- 140. During site works an additional fragmentary cill was also noted in the highest section of the external face of the east wall of the Warming Room identifying a first floor level (Figure 20a). The height of this cill excludes the possibility of a common first floor level between the Warming Room and the Chapter House.
- 141. The consistency in the character of this chamber is reinforced by the low height of the location of the lintel for the angled passage from the Arcade into the Warming Room and the evidence for a possible floor level at the east edge of the north wall where there is a ledge presumably to support or receive a timber structure. This may not be for the floor itself, but could be to receive a timber stair which could also be supported by the internal wall (3120) identified in Trench 31. Hence this portion of the Warming Room may have been a Day Stair.
- 142. The absence of any other known upper storey evidence for the East Range other than that presented by the outer face of the South Transept gable presents problems in

interpreting this structure. The barrel vaulted Slype, the second phase of use in this space, has a second barrel vaulted passage over it. The night stair in the southwest corner of the South Transept has an identifiable exit (visible from the stair) at a level above this. Hence we can infer at least three storeys to the East Range. The doorway to the night stair is not visible in the exterior face of the gable (Figure 2b) as it appears to have been resurfaced – though this appears not to have been 1960s work as historic images show the gable much as it is today.

143. The facade of the East Range is dominated by the use of conglomerate blocks. These sandstone blocks are generally viewed as being challenging to work due to the frequent beds of smaller stones incorporated within them. However, the colour of the fresh split stone gives pause for thought as to how remarkable it would have looked as opposed to the dull masonry now visible (Figure 20b). In turn this suggests that this portion of the Cloisters at least was not subject to limewash.



a: Three level of window cills



b: Weathered and fresh conglomerate

Figure 20: Architectural details in the East Range

The South Transept

- 144. Trenches 25, 26 and 27 sought to understand the scale of excavation that had taken place within the South Transept and in combination they suggest very little disturbance has occurred as a result of the 1960s work. The exceptional shallow depth to *in-situ* articulated skeletal remains in Trenches 26 and 27 evidence that while the graveyard furniture visible in historic images (late nineteenth century and early twentieth century) have been cleared, there has been no attempt to disinter the related graves. The reinstatement of a gravel surface just over the intact graves clearly presents issues of decency in the management of these graves.
- 145. The exposed stepped foundation courses for the internal face of the South Transept gable in Trench 26 (Figure 10b) were recorded passing under the apparent return in the wall face above. This return had been proposed by McAleer (1995) to represent the original return of the transept before its expansion a proposal that was always subject to doubt given the visible character of this return in a wall face otherwise worked smooth. That the stepped foundation runs unaltered under this return suggests this was a stone feature bonded into the wall and not a structural wall potentially an altar.
- 146. In contrast no buried human remains were identified in Trench 25, but the area had been subject to a sequence of intrusive disturbances that had broken up and damaged the medieval strata and the post-reformation overburden. This sequence of intrusions may in part derive from the 1960s works, but it is possible that some relate to Galloway's work in the 1870s searching for the remains of the great pier of the Crossing.

The Western Approaches

- 147. A series of four trenches (19, 21, 22 and 24) explored the ground within the Property in Care but to the west of the consolidated ruins of the Abbey. Trenches 19 and 21 had been overbuilt by the expansion of the burgh (see Figures 1a, 1b and 2a for progressive development of this ground) while Trenches 22 and 24 had the potential to lie in the Abbey Green.
- 148. All these trenches illustrated a shallow soil depth over the upper surface of the subsoil with Trenches 21 and 22 having only 200 to 250mm of deposit, slightly deeper for Trenches 19 and 24 reaching some 400mm (but contrast this to the depth of 1.2m in the Cloister garth as exhibited by Trench 11.
- 149. Both Trenches 21 and 24 contained post-hole and pit features comparable in character to those identified in Trenches 14 and 16 in the 2010 season. These reinforce a pattern of the survival of negative features to the periphery of the cloistral ranges where this ground is accessible for investigation. These features, where they contain artefacts, typically contain medieval pottery and appear broadly contemporary with the Abbey.
- 150. In contrast Trench 22 exhibited no archaeological features, but did contain a coherent and compact demolition layer. Unlike the dumping of 1960s spoil in all the other excavation trenches, this layer appeared as a direct spread of demolition materials directly onto the underlying subsoil. This is the best direct evidence that the 1960s works definitely stripped this area of topsoil (or any other overlying sediment) before dumping material and reinstating a topsoil layer over this ground.
- 151. Trench 19 recovered the fragmentary remains of a clay bonded structure (1905) or surface that is unlike any other structure exposed during the works to date. This surface, with its central pit-like feature, appears to potentially be the remains of a small post-medieval structure standing to the rear of the cottages that fronted onto the north site of the Abbey Green.

The Western Transept

- 152. Trench 18 was the only excavation undertaken in the Western Transept, an area that was extensively examined by Ewart in the 1980s. The purpose of the trench was to resolve, or at least clarify, the character of the recessed gable that last year's excavations have proposed are an element of the 1st reformed church formed from the main vessel of the Nave.
- 153. The trench evidenced that foundation course of the recessed gable rested on the subbase of a floor surface that appeared to correspond to the architectural details at the base of the great pier, to the immediate south. This suggests that when the recessed gable was inserted the original medieval floor surface had been abandoned, with the upper surface (slab or tile) removed. While not providing an absolute date for the insertion of the later gable, the major change in levels further supports a significant reworking of the Abbey Church rather than a simple abandonment of the Western Transept.
- 154. At the western end of Trench 18 the floor sub-base had been dug away; it was unclear from the excavation as to the antiquity of this removal. The upper layers of the fill gave initial suggestion of 1960s materials but excavation within the sondage of the deeper element of the fill of this truncation appeared more post-medieval in character. Analysis of the pottery from this fill should provide a *terminus post quem* for the filling of this cut which is considered to most probably be post-reformation in date. Given the construction of eighteenth and nineteenth century structures to the immediate west of the recessed gable such disruption was not to be unexpected.

Skeletal Material

155. In continuation of the trend identified in 2010, the excavation exposed disarticulated human skeletal material within the 1960s backfill across the whole of the area investigated within the Abbey. Some animal bone was also present; however the large

majority was human.

- 156. The Ministry excavations of the 1960s in the southern half of the Nave excavated an area approximately 6m by 25m. However, as this was part of the post-reformation graveyard there were numerous graves that were exhumed by the excavation. The volume of bone strongly suggests that the exhumed skeletal material was substantially intermixed with the excavation spoil. This spoil was then used to reinstate the site, which seems to have dispersed the skeletal material across the full extent of the guardianship area.
- 157. In addition to these disarticulated remains, there were several articulated burials uncovered in Trenches 26 and 27 within the South Transept and within Trenches 29 and 30 within the Chapter House. These articulated burials were all aligned east to west and, without removal and analysis, are of uncertain date. All were skeletal in character and none had evidence of a coffin or associated furniture. Those in the southern transept were very shallow and, given that some cut though the walls of the transept, were post-reformation in date and most likely nineteenth century. In contrast those in the Chapter House were buried at considerable depth and, given the known late nineteenth and twentieth century clearance and reduction of ground levels in the Chapter House, have a greater likelihood of being medieval. Given their location, within the Chapter House, this would suggest that they could be the graves of abbots.
- 158. Of note two of the graves [2913][2915] in Trench 29 in the Chapter House were part truncated by the 1960s trench cut through them in the centre of the chamber. This emphasises the evidence from Trench 5 in the 2010 season that the 1960s excavations saw arbitrary trenches excavated deep into the subsoil irrespective of the character of the sediments.

Artefacts

- 159. A large quantity of artefacts was recovered during the excavation; the vast majority of the material recovered was of a relatively recent origin, consisting of nineteenth to twentieth century material (pottery, glass and metalwork). There was however a significant volume of material of potentially medieval origin in the form of white gritty ware (12th to 15th Century) and reduced ware (15th to 17th Century). This included medieval pottery from the test pits, especially Test Pits 4 and 9.
- 160. Trench 30 within the Chapter House recovered an unusual find for a medieval abbey; a flint leaf-shaped arrowhead. The whole surface has been retouched to create the slender, thin symmetrical form, and has been provisionally dated to the early Neolithic (*c*.3500 BC) when the first farmers arrived in Scotland. But the reason why this arrowhead was within the Chapter House may have had little to do with those early settlers.
- 161. Neolithic flint arrowheads, during the Medieval period, were termed '*elf-shot*' or '*elf-arrow-heid*', as they were thought to have been projectiles used by elves to cause illness in people or animals. It was also believed that an elf-shot was capable of curing these illnesses a fairy object used against a fairy illness. So this arrowhead may well have been used as an amulet to protect the wearer from illness or treat the afflicted.

An Earlier Presentation Scheme

- 162. The socketed stone <2884> (visible in Figure 14a) exposed within the Chapter House appears to have been placed in this location in the 1960s as it in part rested on the backfill of the deeper 1960s trench. That it was placed on the axial line of the chamber (taking the midline through the door) and in line with the east wall of the range (excepting the extension east of the Chapter House) suggests that there was an understanding in the 1960s that this stone had a role to play in this location and the intent was to present this role within the consolidation.
- 163. In a similar manner the arcade wall (1103) exposed in Trench 11 appears to have been consolidated in the 1960s with a socket for a post visible in the wallhead. This can be linked to the apparent attempt to reconstruct a base for the arcade with rubble material noted in Trench 10 during the 2010 season.

164. Overall this appears to suggest that there was an attempt in the 1960s to rebuild or present more elements of the Cloisters than just the South Range (which has been shown to be a wholly 1960s structure, see 2010 report). The abandonment of this approach may reflect a decision that the reconstruction was taking the available evidence too far from that which could be justified.

The Graveyard Wall

- 165. The survey of the graveyard wall has identified numerous visible fragments of architectural details that are clearly derived from the medieval abbey. Given that the graveyard wall may well have been renewed or formalised at the same time as the construction of the second reformed parish church (the current church) then the downtaking of elements of the Abbey Church at that time would have been a likely source or this material. That the architectural fragments were not re-dressed reflects the irregular nature of the boundary wall.
- 166. The heritage value of this boundary wall should be recognised as should the potential for any post 1560 and pre 1880 structure in Kilwinning to contain reused architectural stones from the abbey.

Conclusion

- 167. A programme of archaeological intrusive works and survey was undertaken at Kilwinning Abbey from August to September 2011 as part of the Kilwinning Community Archaeology Project for Kilwinning and District Preservation Society.
- 168. In total thirteen trenches were opened, all were within the grounds of the Scheduled Monument with twelve being at newly agreed locations and one returning to a location agreed but not excavated in the 2010 season. The trenches were in general 3m by 2m in size and investigated the East Range, South Transept, Western Transept and the Abbey Green. In addition a series of six test pits were excavated in open public ground around Kilwinning to continue to search for medieval material in other portions of the burgh.
- 169. A large amount of artefacts were recovered, throughout all of the trenches and test pits. While the majority of the material was eighteenth century to modern in date; far older artefacts were recovered in the form of medieval white gritty ware and reduced ware pottery. The most significant finds recovered were two more pieces of incised slate one of which had been incised with graffiti gaming boards, also known as a Merelles Board. These add to the corpus of such fragments recovered during the 2010 season.
- 170. The ongoing programme of building recording works focused on surveying the boundary wall of the parish church graveyard to identify visible architectural fragments that derived from the medieval Abbey. Post excavation works are presently ongoing with the processing of artefacts, with reporting of the project aimed to conclude in March 2012.

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Watt, D.E.R. & Shead, N.F. (eds.)	2001	The Heads of Religious Houses in Scotland from the 12th to the 16th Centuries	The Scottish Records Society, New Series, Volume 24, (Edinburgh, 2001), pp. 127-30	Scottish Record Society
Mitchel, C	2001	47 Almswall Road Area Excavation, Kilwinning		
Mudie	2001	Evaluation at 47 Almswall Road, Kilwinning		
Sneddon, D	2001	Pathfoot Kilwinning		
Mudie, George	2001	47 Almswal I Road, Kilwinning	Discovery and Excavation in Scotland	The Council for Scottish Archaeology
Fawcett, R	2002	Scottish medieval churches: architecture and furnishings	52, 53, 61, 76-77, 202, 338, 365	Arcadia Publishing
Macfadyen,T. & Addyman, T.	2002	Abbey Church Hall, Vaults Lane, Kilwinning, North Ayrshire - Archaeological Watching Brief October 2002 for the Abbey Church, Kilwinning(2002)	n/a	

Sneddon, D	2003	GUARD, Coastal Zone Assessment Survey, Firth Of Clyde(2003)		Unpublished commercial report
Campbell, Thorbjorn	2003	Ayrshire An Historical Guide	p204-205	Birlinn Limited
Duffy, P	2003	'Kilwinning Abbey (Kilwinning parish), watching brief',Discovery Excav Scot,	(2003 d) 4, 2003, 100	The Council for Scottish Archaeology
Rees, T	2003	Evaluation of field for proposed nursing home, Buckreddan Nursing Home, Kilwinning.		
Duffy, P	2003	Kilwinning Abbey		
Ranson, P. G.	2001	Kilwinning Abbey: Condition, Survey & Conservation		

Cartographic

	T		
Adair, John, ca. 1650-1722	1686	A mape of the west of Scotland containing Clydsdail, Nithsdail, Ranfrew, Shyre of Ayre, & Galloway / authore Jo. Adair.	n/a
Roy, William	1747 - 55	Military Survey of Scotland, 1747-1755	n/a
Armstrong, Andrew, 1700- 1794	1775	A new map of Ayrshire	n/a
Ainslie, John, 1745-1828	1821	Ainslie's Map of the Southern Part of Scotland.	n/a
1 st Ed Ordnance Survey	1858	Ayrshire	1:10560
2 nd Ed Ordnance Survey	1897	Ayrshire	1:10560
3 rd Ed Ordnance Survey	1911	Ayrshire	1:10560
4 th Ed Ordnance Survey	1938	Ayrshire	1:10560
Bleau, Joan	1654	Bleau's Atlas of Scotland "Cuninghamia / ex schedis Timotheo Pont ; Ioannis Blaeu excudebat. Cunningham."	
Thomson, John, 1777- ca. 1840	1820	Northern Part of Ayrshire. Southern Part.	
Ordnance Survey	1843-82	Ordnance Survey Maps 1st Edition	Six Inch to the Mile
Moll, Herman, d. 1732	1732	The Shire of Renfrew with Cuningham [i.e. Cunningham]. The North Part of Air [i.e. Ayr] / by H. Moll.	n/a

Appendix 1: Discovery and Excavation in Scotland

LOCAL AUTHORITY:	North Ayrshire	
PROJECT TITLE/SITE NAME:	Kilwinning Community Archaeology Project	
PROJECT CODE:	RA08019	
PARISH:	Kilwinning	
NAME OF CONTRIBUTOR:	Thomas Rees, Douglas Gordon, Chris Muirhead, Diane Gormand and Claire Williamson	
NAME OF ORGANISATION:	Rathmell Archaeology Limited	
TYPE(S) OF PROJECT:	Excavation, Building Recording	
NMRS NO(S):	SAM90187, NS34SW 6.00	
SITE/MONUMENT TYPE(S):	Abbey, Cloisters	
SIGNIFICANT FINDS:	Graffiti Gaming Board, Medieval Pottery	
NGR (2 letters, 6 figures)	NS 682 591	
START DATE (this season)	August 2011	
END DATE (this season)	September 2011	
PREVIOUS WORK (incl. DES ref.)	Cullen, I (1997b) 'Kilwinning Abbey (Kilwinning parish), human remains', <i>DES</i> , Duffy, P (2003d) 'Kilwinning Abbey (Kilwinning parish), watching brief', <i>DES</i> , <i>vol.4</i> , Ewart, G (1983) 'Kilwinning Abbey (Kilwinning p), abbey', <i>DES</i> , MoPBW (1962a) 'Kilwinning Abbey, Ayrshire', <i>DES</i> , MoPBW (1963) 'Kilwinning Abbey, Ayrshire', <i>DES</i> , Galloway, west (1878d) 'Remarks on the existing buildings at Kilwinning Abbey', <i>Archaeol Hist Collect Ayr Wigton, vol.1</i>	
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	A programme of archaeological intrusive works and survey was undertaken at Kilwinning Abbey from August to September 2011 as part of the Kilwinning Community Archaeology Project for Kilwinning and District Preservation Society.	
	In total thirteen trenches were opened, all were within the grounds of the Scheduled Monument with twelve being at newly agreed locations and one returning to a location agreed – but not excavated – in the 2010 season. The trenches were in general 3m by 2m in size and investigated the East Range, South Transept, Western Transept and the Abbey Green. In addition a series of six test pits were excavated in open public ground around Kilwinning to continue to search for medieval material in other portions of the burgh.	
	A large amount of artefacts were recovered, throughout all of the trenches and test pits. While the majority of the material was eighteenth century to modern in date; far older artefacts were recovered in the form of medieval white gritty ware and reduced ware pottery. The most significant finds recovered were two more pieces of incised slate one of which had been incised with graffiti gaming boards, also known as a Merelles Board. These add to the corpus of such fragments recovered during the 2010 season.	
	The ongoing programme of building recording works focused on surveying the boundary wall of the parish church graveyard to identify visible architectural fragments that derived from the medieval Abbey. Post excavation works are presently ongoing with the processing of artefacts, with reporting of the project aimed to conclude in March 2012.	

PROPOSED FUTURE WORK:	Yes
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	Kilwinning & District Preservation Society (funded by Irvine Bay Regeneration Company and Heritage Lottery Fund)
ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
E MAIL:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to Historic Scotland, West of Scotland Archaeology Service and archive to RCAHMS Collections

Contact Details

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

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