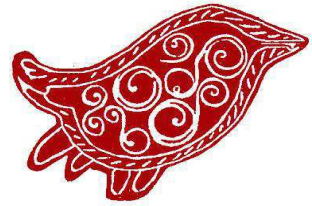


Journal of the Cork Historical and Archaeological Society



www.corkhist.ie

Title: Excavations at Red Abbey, Cork, 1992 and 2000

Author: Sheehan, C., M. F. Hurley and M. Ní Loingsigh

Journal of the Cork Historical and Archaeological Society, 2004, Vol. 109, page(s) 1-38

Published by the Cork Historical and Archaeological Society

Digital file created: September 20, 2017

Your use of the JCHAS digital archive indicates that you accept the Terms and Conditions of Use, available at <http://corkhist.ie/terms-and-conditions/>

The Cork Historical and Archaeological Society (IE-148166, incorporated 1989) was founded in 1891, for the collection, preservation and diffusion of all available information regarding the past of the City and County of Cork, and South of Ireland generally. This archive of content of JCHAS (from 1892 up to ten years preceding current publication) continues the original aims of the founders in 1891. For more information visit www.corkhist.ie.

Excavations at Red Abbey, Cork, 1992 and 2000

By C. SHEEHAN, M. F. HURLEY
and M. NÍ LOINGSIGH

INTRODUCTION

The Red Abbey Tower is a recorded monument (CO 074-041) in the care of Cork City Council. It is the church tower of the eponymous friary and is the only intact, clearly visible medieval building surviving in Cork city. The site lies within the Zone of Archaeological Potential as defined by the Cork Urban Archaeological Survey (Bradley *et al.* 1985); as such, it is a recorded monument under the 1994 Amendment of the National Monuments Act. The monument is located in Red Abbey Street in the Parish of Saint Nicholas, Cork city (NGR 17000, 07110). The earliest medieval layers recorded during archaeological excavations at Red Abbey have been dated by the associated pottery assemblage to the mid-to late thirteenth century. Excavation of an area known as Red Abbey Yards was undertaken by Cathy Sheehan in April 1992 (Excavation Licence No. 92E48) prior to redevelopment. In November 2000, Cork City Council undertook excavation (Excavation Licence No. 00E0618) in advance of upgrading a public amenity area located at the site of the friary church (Map 1). As part of the Heritage Council's 'Unpublished Excavations Initiative', a generous grant was made available to enable the preparation of this report.

The report is presented in three main sections: 1) excavation at Red Abbey Yards, 2) excavation at the church site,

and 3) the finds. The descriptions of the excavations are presented separately as the sites are physically unrelated and were individually excavated. Trenches at Red Abbey Yards were numbered 1-4, and those at the church site I-IV. The finds are presented in a series of specialist reports.

HISTORY

The Augustinian Friary commonly known as the Red Abbey was probably founded in the late thirteenth century (O'Sullivan 1943, 10). The earliest known historical reference to the friary dates to 1306 when it was referred to in John de Wynchedon's will:

... and my body to be interred with the Hermits of the order of St Austin, Cork ... For the keeping of the choir stalls of the Augustinians in repair I bequeath eight marks, and to the same community three marks so that a friar shall celebrate Mass for my soul every day for the first year [following my decease]. Also twenty shillings – sustenance for the Augustinian Friars – during the assembly of their Chapter in Ireland. (O'Sullivan 1956, 76-7)

The friary is depicted on maps of Cork city dating to the sixteenth, seventeenth and later centuries (Maps 2-4).

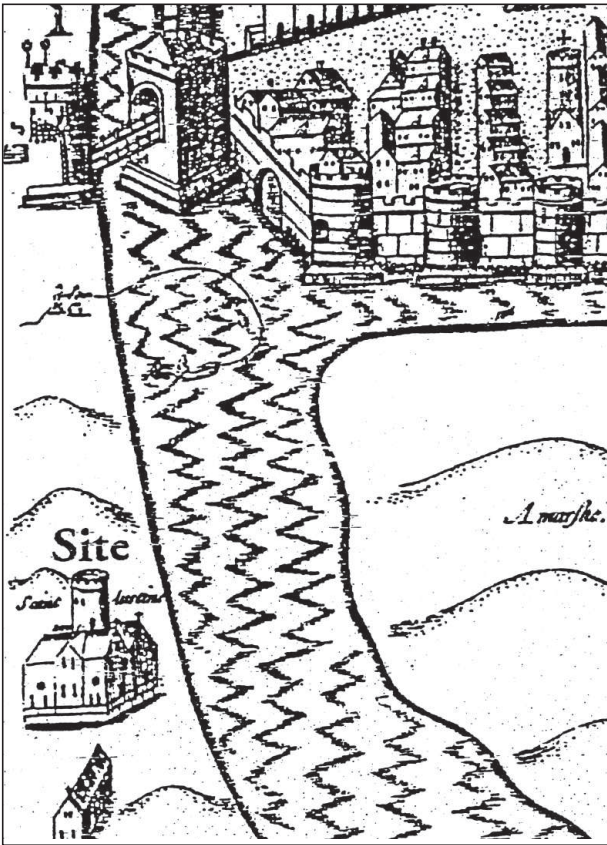
There are few historical references to the building from the foundation down to the suppression of religious houses in the sixteenth century. The friary was dissolved in 1541, at which time it was recorded as



Map 1. Location of Red Abbey, with trench layout (OS 1: 1000)

comprising 'a church, chancel, two chapels, an old and a new dormitory, a hall, a buttery, a kitchen, a cloister, six rooms and six cellars' (Gwynn & Hadcock 1988, 298). The complex was leased to John Coppinger of Cork in 1570 and to Cormac m'Teig M'Cartie in 1577, and it has been suggested that the friars remained in occupation until 1641 (*ibid.* 298). In 1629, there is a reference to wine

being unloaded at the abbey (Bradley *et al.* 1985, 75). During the siege of Cork in 1690, the Duke of Marlborough is thought to have made use of the tower as a look-out post and gun emplacement (O'Flaherty 1978, 92). Contemporary accounts (for instance, *The Journal of the Rev. Rowland Davies* and the *London Gazette* (No 25982-6, October 1690, quoted in Ó Murchadha 1990, 7, 8) describe the landing of



Map 2. Red Abbey/St Augustine's as depicted in *Pacata Hibernica* (c. 1587)

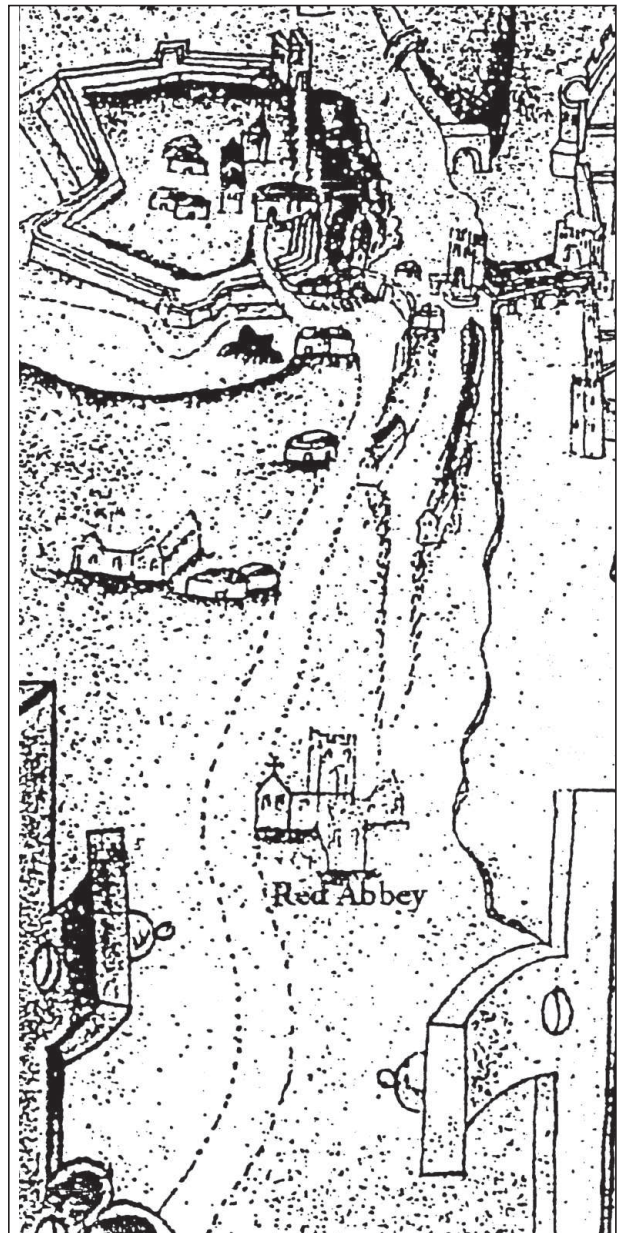
cannon near the Red Cow (probably a tavern – see Ó Murchadha 1990, note 39) close by Red Abbey, where batteries were set up near the old shoreline and the south-east wall of the city was bombarded. Archaeological support is given to this evidence by the results of an excavation in 1977 (O'Flaherty 1978), when over three hundred pieces of lead shot were uncovered (no lead shot was recovered during either the 1992 or 2000 excavations).

By 1755, part of the Red Abbey land was taken over by a sugar house, which incorporated parts of the old Abbey itself (Harrison 1999, 127), but this burnt down in 1799 (O'Sullivan 1943, 11).

Charles Smith's 1750 map depicts a range of buildings at the site; however, by the end of the eighteenth century

(Roque's map of 1773), the layout of the friary is no longer identifiable, although some of the buildings may still have been intact.

By 1852, there was no obvious trace of the friary in the street plan, and Cumberland Street (now Red Abbey Street) and Wellington Place were parallel streets at either side of what is now the public park at Red Abbey (Map 4). At present, the friary buildings, with the exception of the



Map 3. Red Abbey in Hardiman (c. 1585-1600)



Map 4. Red Abbey in Ordnance Survey (5": 1 mile) 1895, Sheet LXXIV.55 (with excavation trenches superimposed)

tower, have more or less disappeared. Parts of the friary, however, appear to be incorporated into walls to the north and north-east of the tower.

ARCHITECTURAL DESCRIPTION

The Red Abbey tower is now a freestanding structure (c. 20 m in height) (Ill. 1), but the original layout shows that the tower stood at the crossing or central part of a cruciform church. The tower has four storeys and above the arches these are marked by two string courses. The arches are pointed gothic, and the supports for

the ribs of the east and west arches are carried on corbels. The roof of the arched crossing is barrel vaulted with a central bell-hole. The lower part of the tower is faced with limestone ashlar, while above the arches the masonry consists of evenly coursed limestone. The windows are generally plain lancets, but the top floor has two twin-light round-headed windows and two single-light windows with rectangular hood mouldings. Large overhanging water-spouts are a feature of the top of the tower. The tower is built in an architectural style typical of the fourteenth century,



Ill. 1: Red Abbey tower, from west

indicating that it was a later addition to the Augustinian Friary. The open arches on the ground floor of the tower would have led to the chancel to the east, the nave to the west and stone-vaulted transepts to the north and south. The walls, which originally continued to the north and south, are on average 1.38 m thick.

An extensive complex of buildings also surrounded the friary church. These included a dormitory, a hall, a buttery, a kitchen, a cloister, six rooms and six cellars (Gwynn & Hadcock 1988, 298). A large rectangular stone building survives to the north-east of the tower and this seems to be one of the above-mentioned buildings. In addition, several low stone walls are incorporated into various modern boundary walls and structures on the north side of the tower. There are references to an old well in the car park to the north, which is said to have been covered over, and it was also said that the bell of the church was buried nearby (Bradley *et al.* 1985, 75). The well may be that recorded during the 2000 excavation, but no trace of the bell was uncovered. Lunham (1908, 34) described the ancient well as lying 'at the southern end, in an open yard . . . covered over, but said to be full of water. These premises are now used as a stable'. It is likely that foundations of the church and associated monastic buildings remain below ground level in the area to the north of the tower.

Arched window/doorway, 23 Dunbar Street

A rectangular stone building, known locally as the refectory, is located to the north-east of the tower. A more extensive structure survived in the early twentieth century:

In the same street still exists a building extending north and south, in the eastern wall of which are the remains of four low pointed

windows. There has been originally a large one at the northern end, surmounted by carved stone heads, and probably furnished with mullions. This was taken down some twenty years ago, being unsafe. This building, perhaps, constituted the Refectory, the dormitory or dortoir occupying the upper storey. A number of skeletons in a fine state of preservation were found under the floor, and others remain in the space between the east wall and Dunbar Street. (Lunham 1908, 34)

In the east wall of this building, to the rear of No. 23, Dunbar Street, a blocked-up aperture with a pointed arch is visible. Although the wall shows evidence of eighteenth/nineteenth-century alteration in the form of cast iron lintels and red and yellow brick, much of the fabric of the limestone and red sandstone building may be medieval. The pointed arch of a blocked-in doorway or window is visible in this section of the wall. The pointed stone arch is constructed of fourteen limestone voussoirs, the arch measures 0.7 m in internal width and 0.5 m in height. The point of the arch is 2.3 m above the present ground level. The arch has been filled in with mortared limestone and red sandstone and the jambs are no longer visible, making it impossible to determine whether this was a door or window opening.

PREVIOUS ARCHAEOLOGICAL WORK

A small-scale trial excavation cross-sectioning the church nave *c.* 13 m to the west of the Red Abbey tower was undertaken in 1977 (O'Flaherty 1978). Excavation revealed a total of ten undisturbed skeletons and fragments of fifteen other skeletons. Three hundred pieces of lead shot which O'Flaherty believed to be associated with the 1690 Siege of Cork were also found (O'Flaherty 1978, 89, 91, 92).

The area north of the tower was subject to an archaeological assessment

(Excavation Licence No. 92E32) prior to development in 1992 (Hurley 1992). A number of test pits were investigated in four areas. Two parallel north/south walls c. 6 m apart were recorded in Trench 3, c. 13 m to the north of the tower. These walls may have been part of the buildings associated with the abbey. Two deposits of human bone were recorded in sandy silt to the east of these walls.

EXCAVATION AT RED ABBEY YARDS 1992

by Cathy Sheehan

Prior to redevelopment in 1992, the car park to the north of the Red Abbey Tower required archaeological excavation. Excavation was required as a condition of planning permission for new houses granted by Cork City Council (Planning Ref. No. T.P. 17,305-310/92). Four trenches were opened (Map 1), and these were confined to the areas to be disturbed by the proposed construction. The trenches were located in close proximity to each other. Despite this, however, there was very little continuity of stratigraphy between them. Trench 2, although it was located closest to the tower of the Abbey, was devoid of archaeological material due to modern disturbance. Trench 3 contained material dating from the mid- to late thirteenth century (Fig. 1). With the exception of a single medieval wall, the stratigraphy within Trench 1 dated from the seventeenth century (Fig. 2). The eighteenth century was represented in Trench 4, which was located approximately 50 m from the tower and 125 m south of the modern quayside. In order to present the material chronologically, the archaeological layers within Trench 3 are described first, followed by Trenches 1 and 4.

Trench Three (Fig. 1)

A deposit of brown/orange gravel (F62) was recorded at the base of Trench 3. This naturally occurring geological deposit was overlain by a thin lens of pink, compacted, silty clay (F61) representing the buried sod of the old ground surface. A pit (F54/60), 0.47 m E/W by 2.3 m N/S by 0.33 m deep, was cut into the gravel at the north-west end of the trench; the pit was backfilled with light brown, sandy silt and gravel with fragments of shell (F60). This pit (F54) was sealed by an extensive deposit of organic silt (F38) which also overlies the buried sod. The 0.1 m to 0.35 m thick organic silt layer was recorded for the full extent of the trench. It contained fifty-three sherds of mid-thirteenth-century pottery.

A randomly coursed mortar-bonded limestone wall (F26; Fig. 1), aligned north/south, was recorded adjacent to the west baulk of Trench 3. The wall survived for a maximum length of 5.76 m, although it had been cut back to make way for later construction. The full width of the wall was 1.01 m in places where it survived undamaged. An offset footing projected 0.19 m from the east face of the wall. The wall was constructed with roughly worked limestone blocks and survived to a height of a few courses. Mortar containing shell and charcoal was used liberally to bind the rubble core.

A thin lens (0.02-0.04 m) of mortar (F37), similar to that used in the wall (F26), extended eastward from the wall face and was recorded for the full extent of the trench. The mortar overlies the organic silt layer (F38) and denotes the construction level for the wall. Traces of render were evident on the east (interior) face of the wall above the line of the footing. This rough render was buff in colour with a maximum thickness of 0.02 m; its application was contemporary with the

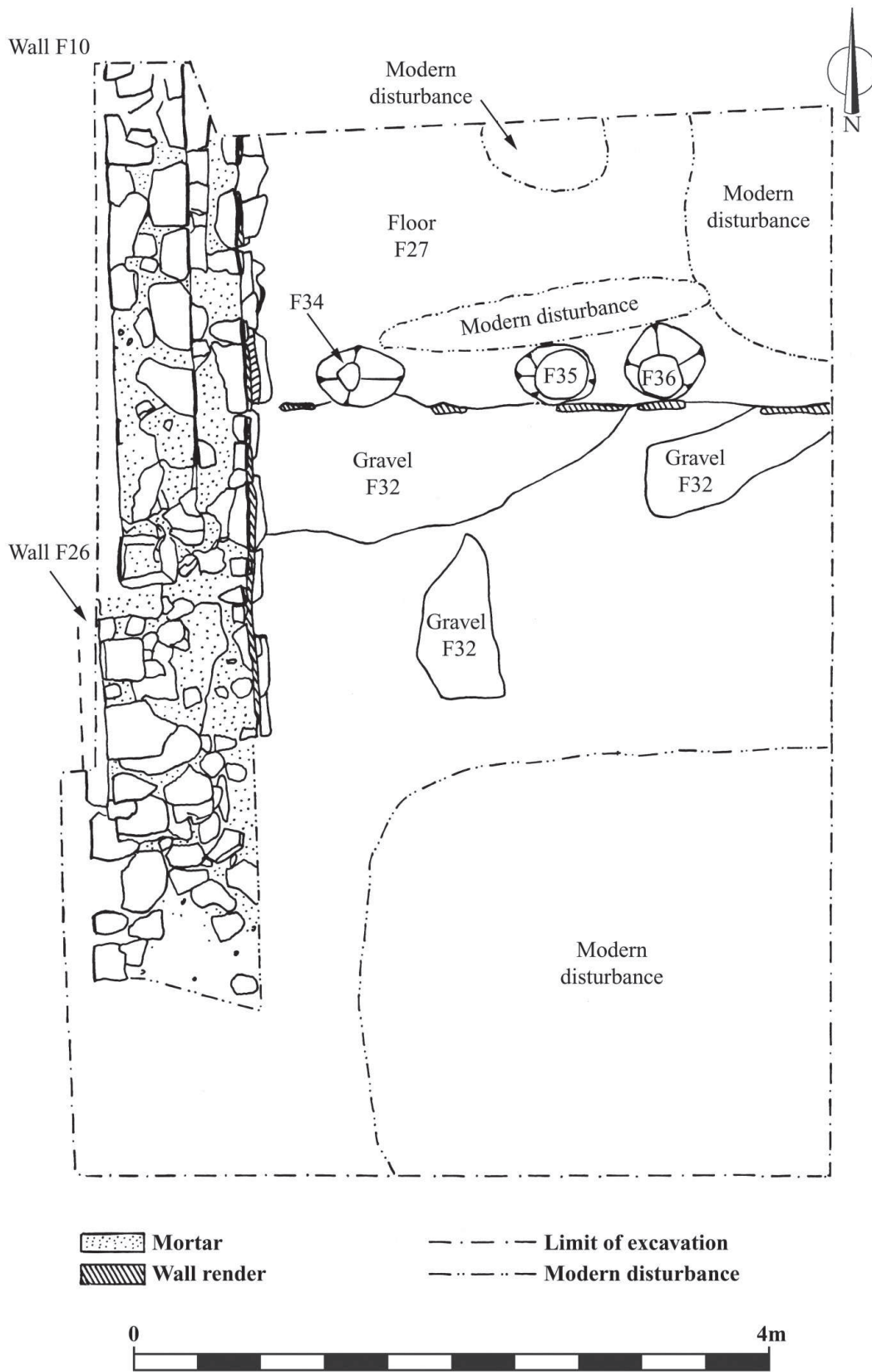


Fig. 1: Red Abbey Yards, Trench 3 – plan of mid-/late thirteenth-century wall and later division

laying of the primary floor surface (F30).

A 0.06 m thick deposit of sandy gravel (F32) containing silt, charcoal and mortar overlay the construction debris (F37) and the footing for the wall, and acted as a sub-floor levelling. The primary floor (F30) overlay the gravel deposit (F32) and abutted the basal course of the wall (F26). The 0.03 m thick floor consisted of a buff, compact, clay and mortar mix. A thin lens of occupation debris consisting of a compacted, organic silt covered the floor. The organic debris was sealed by a 0.05 m thick layer of sterile, sandy gravel (F28), which was recorded for the full extent of the trench.

Prior to the laying of the secondary floor (F27), the structure represented by the N/S wall (F26) was divided internally (Fig. 1). The division was postulated on the evidence of three post-pits (F34-36), aligned east/west, located adjacent to the north baulk. One pit (F34) measured 0.34 m N/S by 0.56 m E/W, tapering to a depth of 0.14 m. The second pit (F35) measured 0.42 m N/S by 0.4 m E/W by 0.6 m deep, while the third pit (F36) was 0.5 m in diameter and was 0.56 m deep. The fill of all three pits was similar, consisting of mid-brown sandy silt containing mortar and charcoal flecks.

Contemporary with the construction of the dividing wall, the inner face of the stone wall (F26) was rendered for a second time. This render was buff in colour and had a rough finish. A similar mortar was recorded on a line commensurate with that of the internal division. Here, the mortar survived to a height of 0.10 to 0.15 m and had a concave south to north slope, suggesting that the internal division, represented by the post-pits, may have been rendered on its north face.

The new floor (F27) also consisted of a buff, compact clay and mortar with slight traces of charcoal. It had a maximum

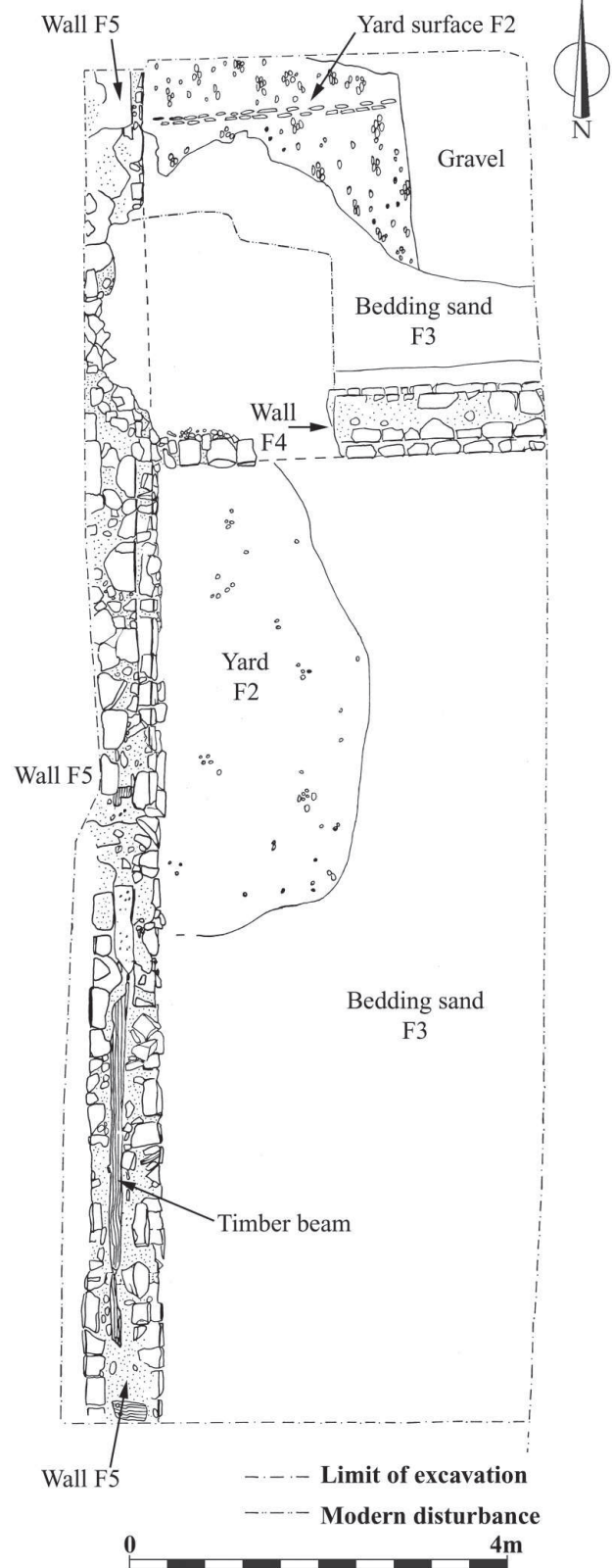


Fig. 2: Red Abbey Yards, Trench 1 – early-modern levels

thickness of 0.09 m and was confined to the area north of the internal division. To the south, a thin lens of charcoal-flecked clay and mortar covered the intermediate levelling agent (F28).

No further archaeological deposits survived to the east of the stone wall (F26). One further level of construction was, however, recorded. A second wall (F10; Fig. 1) was built using the medieval wall (F26) as a foundation. The new wall was similarly aligned and had a maximum width of 0.4 m; a length of 3.31 m was recorded.

Trench One (Fig. 2)

Naturally deposited mid-brown to orange gravel (F49) was present at the base of Trench 1. This gravel was overlain by a thin lens of pink, sandy, compacted sod (F49B) representing the old ground surface. A deposit of dark brown organic silt (F47), which contained mid-thirteenth-century pottery, overlay the buried sod. The silt was recorded for the full extent of the trench. A pit (F48) containing a shell dump was cut into the organic silt. The 0.19 m deep pit was exposed adjacent to the east baulk. Maximum dimensions of 0.39 m E/W by 1.40 m N/S were recorded; however, the full extent lay outside the limit of the trench. The pit was backfilled with oyster shell, gravel, sand and organic silt.

At the level of the organic silt (F47), a north-west/south-east-orientated wall (F46) extended from the west baulk for a distance of 3.31 m. Only one course of the 0.6 m wide wall survived, and this consisted of roughly worked sandstone and limestone bonded with a buff mortar. No further medieval features were recorded within Trench 1.

The mortar-bonded wall (F46) was truncated and a deposit of mid-brown to orange gravel (F40) was spread within

Trench 1. This gravel resembled the naturally occurring geological deposits which formed the base of all trenches. Here, it was mixed with an organic silt and contained charcoal and shell. Pottery sherds dating to the late sixteenth to mid-seventeenth centuries were recovered from this layer. The gravel layer is likely to have been used to raise and level the ground prior to the setting of a cobbled yard (F39) (Ill. 2). The truncated surface of the earlier wall (F46) formed an intrinsic part of the yard surface. The yard was composed of tightly packed red sandstone, limestone, granite and red-veined marble. A camber was set on either side of a drain which was aligned east-west. The pottery recovered dated to the sixteenth and seventeenth centuries and was comparable to that recovered from the underlying bedding layer (F40).

A linear arrangement of limestone and sandstone flagstones was recorded at the north-western extent of the yard. A slight return eastwards was evident, giving a curvilinear aspect to the stone setting. The edging stones and cobbled surface were disturbed to the north and east, exposing the underlying gravel bedding (F40). A substantial deposit of charcoal-rich silt (F41), containing inclusions of slag and oxidized clay and a bone scoop (92E48:41:49; Fig. 12), was recorded abutting the inner edge of the flagstones and extending southwards over the exposed gravel (F40) and the yard (F39). The stone feature may represent the western edge of an oven or kiln. The silt deposit was spread after the yard surface and the flagstone feature had been truncated, i.e., after the dismantling of the oven/kiln and the scattering of kiln/oven detritus in the immediate area. Again, the date of the pottery assemblage centred on the late sixteenth to mid-seventeenth centuries.

Both the yard surface and the charcoal-rich layer were covered by a deposit of compacted organic silt (F31) which accumulated during subsequent use of the area. Partial resurfacing/resetting of the cobbled surface occurred at this level. The overlying layer consisted of a deposit of mid-brown sandy silt (F29, 24) which contained oxidized clay and charcoal and a high proportion of eighteenth-century pottery sherds, including wasters from a kiln. Almost half of these wasters represent small shallow dishes, which may have had an industrial use. Also included are straight-sided bowls, ointment jars, chamber pots, wig curlers and roof tiles. The pottery detritus was present throughout the trench, with a higher concentration at the northern end. A sub-circular concentration of limestone mixed with mortar flecks and oxidized clay was recorded at the northern extent of the trench. This formed an intrinsic part of the layer itself, as it was not set in a pit, but was spread within the trench along with the sherd fragments. It may, perhaps, represent the scattered remains of a denuded kiln/oven, located nearby.

The pottery-rich silt (F29, 24) and limestone dump were overlain by a deposit of black silt (F9), containing oxidized clay and large amounts of charcoal which may represent rake-out from a later kiln. This layer was covered by a layer of light



Ill. 2. Red Abbey Yard, Trench 1, cobbled yard

brown, compacted, sandy silt (F8), 0.12 m in depth, which contained some crushed and fragmented pottery sherds. This silt is likely to have resulted from the gradual accumulation of debris. The silt was sealed by a deposit of buff clay (F7) containing some charcoal.

A north/south limestone wall (F5) was

exposed adjacent to the west baulk. This had a recorded length of 16 m within the confines of the trench. The footing, which overlay the sealing layer (F7), projected eastward from the wall for between 0.12 m to 0.20 m, and contained a 4 m long timber beam within the core. Two courses of the upper elements of the wall survived, consisting of randomly coursed mortar-bonded roughly worked limestone blocks. A short span of the wall (F5) was also recorded within Trench 4 (F58) where it overlay the foundations of an east-west boundary wall (F42) (see below).

The kiln evidently continued in use as the overlying layer, a 0.23-0.35 m thick deposit of silt (F6), which abutted the east face of the wall (F5), contained a large amount of pottery sherds and wasters. No further kiln-related layers were recorded within the trench.

The site was further modified by the construction of a mortar-bonded east/west-aligned wall (F4) which abutted the east face of the earlier wall (F5). The new wall had a recorded length of 2.2 m. The foundation trench cut through the layer of silt (F6). The foundation course consisted of limestone boulders which projected from the north and south faces of the wall for between 0.08 m to 0.14 m. Two courses of the wall survived and these were randomly laid. One piece of moulded buff sandstone (see specialist report) was incorporated into the fabric of the wall.

The overlying layer (F3) consisted of a deposit of pink to light-brown sand 0.7 m to 0.13 m thick. Two sherds of nineteenth-century stoneware were recovered from the layer. This layer overlay the foundation levels and wall trench of the wall (F4). It abutted the upper elements of the earlier wall (F5). The deposit extended beyond the wall to cover the entire cutting and was used to level the site prior to the setting of a new cobbled yard

surface (F2). The cobbles survived best at the northern and western ends of the trench, but the sand was recorded for the full extent of the trench. It is likely that the yard originally extended over the entire area of sand and possibly covered a greater area.

Trench Four (Fig. 3)

A naturally deposited layer of water-rolled orange gravel (F57) was present at the base of Trench 1. This layer was exposed only at the southern extent of the trench, and its absence further north may be taken as indicative of a gradual slope northwards towards the river in the seventeenth to eighteenth centuries. There was no evidence for medieval material within this trench, i.e., approximately 50 m north from the Red Abbey Tower.

A dark brown organic silt (F56) overlay the gravel. This silt layer contained burnt clay, charcoal fragments and oyster shell. The pottery from the layer dated from the sixteenth to seventeenth centuries and was similar to that recovered from the cobbled surface (F39) in Trench 1. The organic silt is likely to represent the accumulation of dumped refuse at the northern extreme of the site, a deposit comparable in date to the period of use for the yard (F39).

An east/west-aligned mortar-bonded wall (F42: Fig. 3) was constructed at the level of the organic silt (F56) and formed a clear demarcation between the established ground to the south and the riverine silts to the north. The wall was located at the interface between the two layers. The foundation trench (F45) for the wall cut through the organic silt (F56). The wall-footing consisted of unworked limestone and red sandstone slabs which were offset by 0.2 m from the north face of the wall. The upper element of the wall was constructed exclusively from

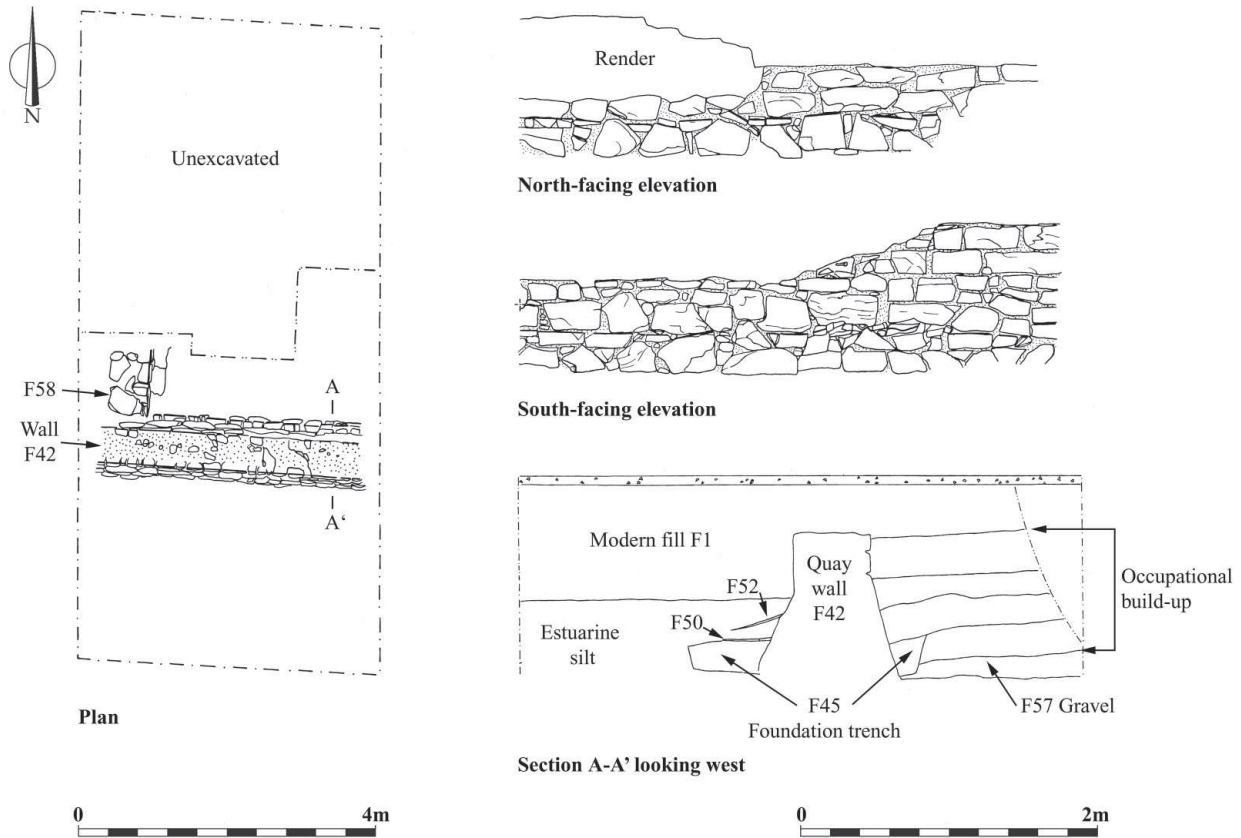


Fig. 3: Red Abbey Yards, Trench 4 – plan, elevation and section of eighteenth-century wall (F42)

limestone. It was fair-faced and randomly coursed and rose from the footing with a gradual batter which was more pronounced on the north face of the wall. A basal width of 0.95 m and a maximum width of 0.56 m for the uppermost course of the wall were recorded. The bonding material consisted of a buff to grey mortar which contained small pebbles, grit and charcoal flecks. There was a clear distinction between the deposits to the north and south of the wall. The wall was constructed prior to the deposition of the pottery-rich layers (F24, F29, F6) recorded in Trench 1. Evidence for this was provided by the presence of comparable sherd-rich layers (F55, F53) abutting the south (inner) face of the wall to a depth of 0.5 m. To the north of the wall, a deposit of riverine silt (F59) was recorded at the

base of the trench. This silt (F59) may represent a flood layer as it contained gravel and sand and moderate amounts of organic material which may be a combination of riverwash and dumped habitation refuse. The riverine silt was overlain by the organic silt layer (F56: see above) through which the foundation trench was cut. Subsequently, a substantial deposit of dark brown silt (F44) accumulated; this contained a high quantity of organic material, oyster shell and two sherds of eighteenth-century creamware. The north face of the wall was rendered twice, and two distinct seams of mortar within the organic silt (F44) denote the levels at which the render was applied. The first (F50) consisted of a buff gritty surface, contemporary, presumably, with the original construction period. The second

coating of render (F52) consisted of a white, gritty surface, and was applied as the organic silt (F44) accumulated.

No further archaeological layers survived north of the wall. To the south, a layer of pink to light-brown sand (F43) formed the uppermost surviving archaeological deposit. This was similar to the bedding layer (F3) recorded in Trench 1, and implies that the nineteenth-century cobbled surface of Trench 1 extended north for a further 6 m.

DISCUSSION

An organic silt layer which accumulated during the mid-thirteenth century was recorded within Trenches 1 and 3. Structural remains from this period consisted of a substantial north/south wall uncovered in Trench 3. This wall is likely to be the western limit of the abbey precinct, and indeed the floor surfaces abutting the inner face of the wall confirm that the interior of the structure lay to the east. The boundary represented by the wall survived until the late nineteenth century, and it is shown on the Ordnance Survey map of 1877. The re-building of the wall formed a boundary between properties, access to one of which was obtained via a laneway from Margaret Street. Structural remains representing the northern limit of the medieval abbey were not present within the trenches. A medieval wall, less substantial than that exposed in Trench 3, was uncovered within Trench 1. This was of similar date but was devoid of associated indications as to use. It is likely that such remains may have been removed prior to the setting of the sixteenth-century cobbled surface. It is clear, from the presence of the organic silt accumulation which extended north to the limit of the trench, that the complete area of Trench 1 was in use during the mid-thirteenth century. It is possible that structural evidence

for the northern limit of the abbey may lie in the unexcavated area between Trenches 1 and 4. In this context, it is noteworthy that there was no evidence for medieval structural remnants or land reclamation activity within Trench 4. It is also apparent that this area was untouched until the eighteenth century, eliminating the possibility that the boundary wall in Trench 4 represents a rebuild of a medieval structure. The absence of skeletal remains from Trenches 1 and 3 confirms that this area was not a cemetery; it is more likely to have formed part of a range of domestic buildings.

The cobbled surface exposed within Trench 1 dates from the sixteenth century. It may have been the work of one of the post-dissolution occupiers, although Webster (1920) suggests that the friars remained in occupation until after the rebellion of 1641. Dissolution occurred in 1541, and it was noted that, at that time, the buildings consisted of 'a church, chancel, two chapels, an old and a new dormitory, a hall, a buttery, a kitchen, a cloister, six rooms and six cellars' (Gwynn & Hadcock 1988, 298). Prior to the setting of the cobbles, the medieval wall was truncated and its foundation levels were incorporated into the yard surface. The rake-out from an oven or kiln, in contemporary use with the yard, was recorded at the north of the trench. The structural remains of an oven/kiln, consisting of a setting of flagstones, were recorded in proximity to the rake-out deposit. The nineteenth-century Ordnance Survey maps (1832 and 1877) show open space to the north of buildings denoted as '(ruins of) Red Abbey'. Trench 1 was located within this area, and it could be that the setting of the yard here in the sixteenth century may have preserved a tradition of open space to the north of the church. This may have been a subsidiary cloister.

The nineteenth-century boundaries continued a similar demarcation of space. The placing of the claustral ranges to the north or south of the church was 'as much controlled by the access to drainage and a water supply as by any other preference' (Coppack 1990, 66). At the Dominican Priory of St Mary's of the Isle, Cork, the claustral range was located to the north of the church (Hurley & Sheehan 1995, 52-5). At Red Abbey, the adjacent marsh to the north of the abbey would have provided a convenient dumping area. No evidence for medieval land reclamation, however, was recorded within the area of the trenches.

There was no evidence for medieval structures or strata within Trench 4, which was located approximately fifty metres north of the Red Abbey tower and one hundred and twenty-five metres south of the modern quayside. Here, the archaeological stratigraphy dated exclusively from the sixteenth/seventeenth centuries. The period of use was contemporary with the setting of the cobbled surface recorded in Trench 1 to the south. There was no evidence for the yard surface within Trench 4. Land reclamation had, however, commenced in the area by this period, as the primary organic silt layer within the trench contained material dating exclusively from the sixteenth century. Consolidation of the marsh area, which had commenced in the sixteenth century, was formalized in the eighteenth century with the construction of a substantial wall aligned east/west, parallel with the River Lee. The wall formed a clear demarcation between the established ground to the south and the riverine silts to the north. The wall was constructed prior to the deposition of the pottery-rich silt layers recorded in Trench 1, as contemporary layers abutted the south (inner) wall face. Following construction of the wall, con-

tinued reclamation of the marsh was evidenced by the accumulation of dumped domestic rubbish abutting the north (outer) face of the wall. This consisted of a deposit of estuarine silt containing gravel, sand and organic material, which may be a combination of riverwash and dumped domestic rubbish. A comparable boundary wall was excavated at Cove Street (Cleary 1996). Evidence for similar land reclamation has been recorded at a domestic and industrial site at Wexford (Sheehan, in prep.), where eighty metres of riverside were reclaimed between the thirteenth and nineteenth centuries. At Wexford, approximately thirty-six metres of new land were established during the medieval period, raising the ground surface level by almost one metre. A further fifty-six metres were reclaimed from the early post-medieval period onwards, and in this area, adjacent to the modern quayside, reclamation deposits exceeded a depth of two metres. At Red Abbey Yards (Trench 4), the underlying natural silt layers sloped towards the river. The old ground level now lies at approximately 1.3 m below the level of the modern surface.

The wall at Red Abbey continued to function as a boundary limit until the late nineteenth century. In the Ordnance Survey map of 1877, the northern limit of the open area to the north of the Red Abbey Tower corresponds in location to that of its eighteenth-century predecessor, thus retaining boundary traditions.

EXCAVATION AT RED ABBEY CHURCH SITE 2000

by M. F. Hurley and M. Ní Loingsigh

Cork City Council intends to re-pave and upgrade the general surrounds of Red Abbey Tower, which at present consist

of a small public park to the north and west of the tower. It is considered essential visually to link the tower with the surrounding park. To this end, three archaeological trial trenches were excavated in November 2000 (a fourth trench was opened, but excavation was not carried out due to the presence of a number of modern services within the area) (Map 1).

THE EXCAVATION

The description of the excavation is presented from top to bottom, that is, the upper levels, or those closest to the modern surface, are described first. It was decided to present the information in this format because of the limited extent of the trenches and because the bottom, or earliest, level of human occupation on the site was not reached.

The area to the north and west of the Red Abbey Tower is presently a public amenity area. Before excavation, the area where Trenches I and IV were excavated was grassed over, while the other two areas (Trenches II and III) were paved. Trench IV was opened at the western limit of the site to determine whether any of the abbey buildings extended this far west. Plans to excavate this trench were abandoned when three modern services were uncovered at a depth of *c.* 0.4–0.5 m. Trench I was located across the presumed nave of the friary church. Trench II was sited in order to optimize chances of discovering the north wall of the nave. In Trench III, it was hoped that the north transept wall would be uncovered. Following manual removal of the paving at Trenches II and III, excavation of the upper levels of each trench was carried out using a mechanical excavator. Once modern levels had been removed, the remainder of the excavation was carried out manually.

Trench I (Fig. 4)

This trench was located *c.* 22 m west of the tower and *c.* 7.5 m west of the trench excavated in 1977 by O’Flaherty in (1978). It measured approximately 6.1 m north/south by 1.2 m east/west. The trench was excavated to a maximum depth of 0.75 m.

The upper level of stratigraphy was composed of sod and topsoil (F1) and had been planted with grass in the 1980s. Beneath this was a thin layer of grey clay, mortar and ash (F4), which covered a cobbled surface (F2). The cobbles were set in dark brown stony silt (F40 and F41). The cobbles were cut by an east/west trench (F9), which was a minimum of 0.36 m deep, and was filled with stones and mortar (F42) as well as stones, grit and broken slate (F3). This trench (F9) extended beyond the excavated area. Beneath the cobbles, part of a north/south drain (F5/8) was recorded; it had also been cut by the trench.

The sidewalls of the drain were *c.* 0.3 m apart. The east wall (F5) was constructed of coursed, mortared sandstone and red and yellow brick; it was a minimum of 0.1 m wide and 0.2 m high. The 0.24 m high west wall (F8) was visible only in the south baulk; elsewhere, it had been truncated to the excavated level. The drain was filled with dark brown gritty material (F44). Beneath the cobbles and associated layers (F40/41) was a layer of red brown sandy clay (F6/7), which was a minimum of 0.22 m in depth. The sandy clay was cut by the trench (F9) and the drain (F5/8). At least two burials (B1 and B2) were exposed in this clay at *c.* 0.65 m below ground level. The bones were not disturbed; they were recorded and left *in situ*. Excavation was not carried out below this level. This sandy clay layer may be comparable to O’Flaherty’s (1978) ‘pink sand’.

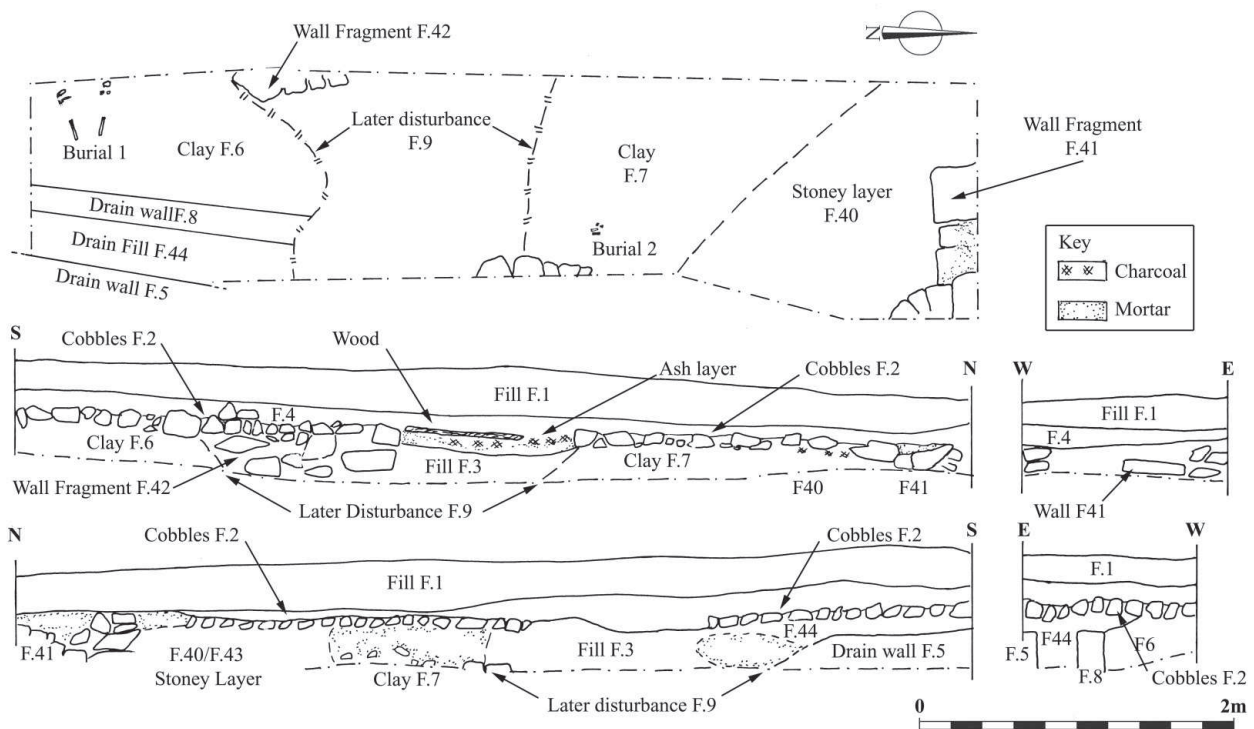


Fig. 4. Red Abbey church site, Trench I, plans and sections

It is possible that the walls of the nave were not located in this trench because they were removed or else their remnants are below the excavated levels. There was, however, no evidence of a robbed out wall trench, and the sandy clay (F6/7) appears to be natural. It therefore seems likely that the nave was wider than the trench, i.e., over 6.1 m wide. The surviving width of the base of the tower is 7.7 m, and this is likely to have been constructed within the pre-existing nave/choir division. A third possibility is that the trench was located to the west of the nave, thereby indicating that the nave was less than 22 m long.

Trench II (Fig. 5)

This trench was located to the north-west of the tower. It measured approximately 4.6 m east/west by 3.4 m north/south. The trench was excavated to a maximum depth of 0.95 m.

The stratigraphy consisted of up to 0.7 m of modern paving, overlying fill and disturbed material (F10). In the north part of the trench, a layer of mortared stone (F12), possibly a wall foundation associated with nineteenth-century housing on this site, was recorded. In the eastern part of the trench, a north/south drain (F13), a minimum of 1.1 m wide, was located under this mortared stone. Red brown clay (F14) containing human bone was found around some of the stones used in the construction of the drain. In the north of the trench, under F12, a small stone-lined, limestone capped, drainage pit (F53), 0.71 m (E/W) by 0.36 m (N/S), was also interpreted as being nineteenth-century in date. The pit had cut a medieval layer (F52) containing a burial (B7). A watermain and gas pipe had truncated the stratigraphy in the southern part of the trench to a maximum depth of *c* 0.75 m below ground

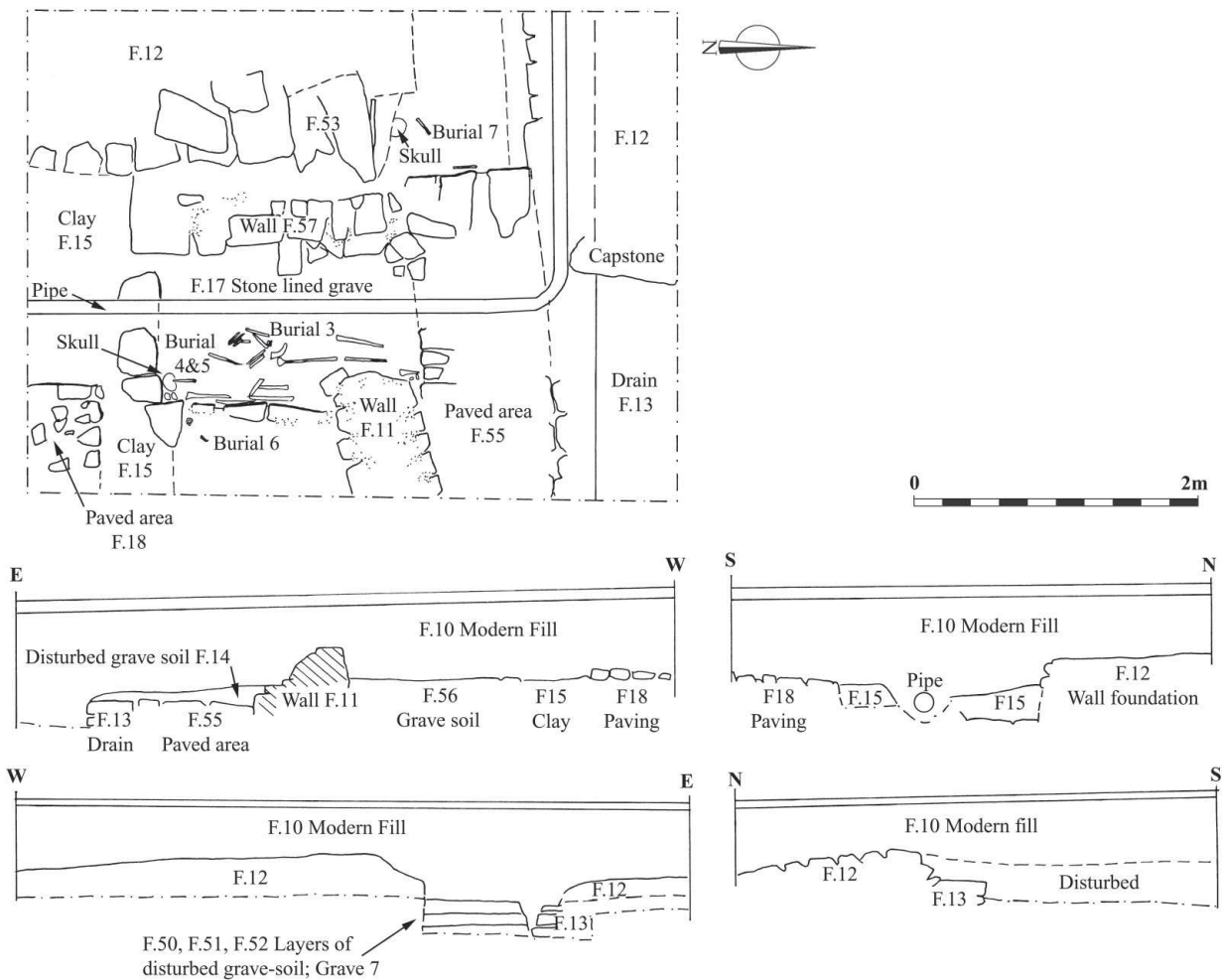


Fig. 5: Red Abbey church site, Trench II, plans and sections

level. Part of a north/south post-medieval wall (F11), built of mortared limestone and 0.65 m wide and 0.45 m high, was recorded in the south part of the trench. The wall had been cut by the gas and water services which extended across the trench. To the west of the wall, an area of undisturbed red-brown sandy clay (F56) contained human bone (B6). To the north of this area, a line of stones (F17) extended east/west. Further north lay an area of rubble masonry (F16), possibly the rubble core of a wall. On removal of the rubble, it was revealed that the line of stones (F17) formed the south wall of a stone-lined grave, containing one articulated skele-

ton (B3) and the remains of at least two other burials (B4, B5). The skeletons were buried in a layer of red-brown clay (F19). The bones were exposed, recorded and left *in situ*. The grave measured 1.85 m long (east/west) by c. 1 m wide; it was a minimum of 0.45 deep. The south and east sides of the grave were constructed of coursed mortared limestone and sandstone. The west side had been cut by the water main, but the red sandstone slabs were still present. The north side of the grave was of irregular construction and may be part of an earlier wall (F57). Internal mortar rendering was visible on the south and west sides of the grave.

In the south-west corner of the trench, a layer of small stones formed a roughly paved area (F18). This area had been cut to the north by the construction of modern services. Beneath the services, undisturbed red brown clay (F15) was apparent. This clay yielded a human tooth and the rim sherd of a thirteenth-century Saintonge pitcher. Much of the material at this level was similar, i.e., red brown sandy clay with flecks of charcoal.

This area was probably within the nave of the church. Burial was common within church naves up until post-medieval times; however, burial within the former church may have continued for some time following the disuse of the church. Dating of the burials by stratigraphic means or finds association was not possible. The presence of medieval pottery within the layers indicates that at least some undisturbed medieval strata survive.

Trench III (Fig. 6)

Located to the north-east of the tower, the trench measured 3.5 m east/west by 2.9 m north/south. The trench was excavated to a maximum depth of 1.6 m (within the well F26).

Beneath the modern paving (F20) and a layer of loose mortar and rubble (F21) dating to the eighteenth century, a cobbled surface (F22) was exposed. The cobbled surface sloped to the east. The cobbles were on average 0.1 m thick and were set in a loose layer of brown silt, grit, and small stones (F24). Red earthenware and a sherd of Saintonge ware were recovered from the layer.

Beneath the cobbles and their setting, a layer of lime mortar, clay and cobbles (F38) formed a compact floor, 0.2 m in depth. Underneath this floor, in the south-east part of the trench, were layers of oxidized material (F30), silty clay (F31) and an earlier mortared floor (F29). Dis-

articulated human bone was found in these layers. A sub-circular well (F26) of rough drystone construction was located in the western part of the trench. The capstone of the well formed part of the clay and mortar floor (F38). The well was built in a circular pit (F48), which measured 2.5 m E/W and 1.8 m N/S. A layer of loose stone (F25), containing a large amount of red earthenware pottery, filled the pit. The well measured c. 0.7 m in internal diameter and c. 1.5 m in external diameter. It was also filled with loose stone rubble, red earthenware, slag and cinders (coal) (F34), similar to the pit fill. Within the well, the rubble overlay stony clay at least 0.7 m deep. Excavation was suspended at this level.

A north-west/south-east wall (F28) was located in the north-east corner of the trench. The north face of the wall had an even face, while the rough south face had either been cut or formed a revetment. This wall was abutted on its north face by a north-east/south-west wall (F33). The area between these walls and to the north of F28 was filled with rubble, mortar and lumps of lime (F39).

A single east/west course of limestones (F35), set in red-brown sand (F37), was recorded in the south-west corner of the trench. The stones and sand had been cut by the pit (F48) dug for construction of the well. This wall (F35) predates the well, and it is possible that it is medieval in date.

Post-medieval construction in this area had removed almost all medieval contexts. There was evidence for industrial activity, and particularly interesting are the fragments of sugar-cone moulds and syrup-collecting jars from the layer (F24) under the cobbles and fill (F25) of the well-pit. These features corroborate the documentary evidence for a sugar refinery at Red Abbey.

BURIALS (Figs 4 and 5)

Excavation in 1977 recovered the remains of at least twenty-five individuals (O’Flaherty 1978, 89). In 1992, the disarticulated remains of at least two individuals were found during archaeological testing (Hurley 1992, 3).

A minimum of seven inhumations were recorded during the most recent excavation at Red Abbey; these were numbered

B1-B7. All the burials were in red brown sandy clay which was assigned different feature numbers in the various trenches. The grave cuts for the burials were not distinguishable. The bones were identified on site by Catryn Power. The exposed bones were cleaned at the level where they were identified, but were not removed from the ground. Disarticulated bone was recovered from each trench

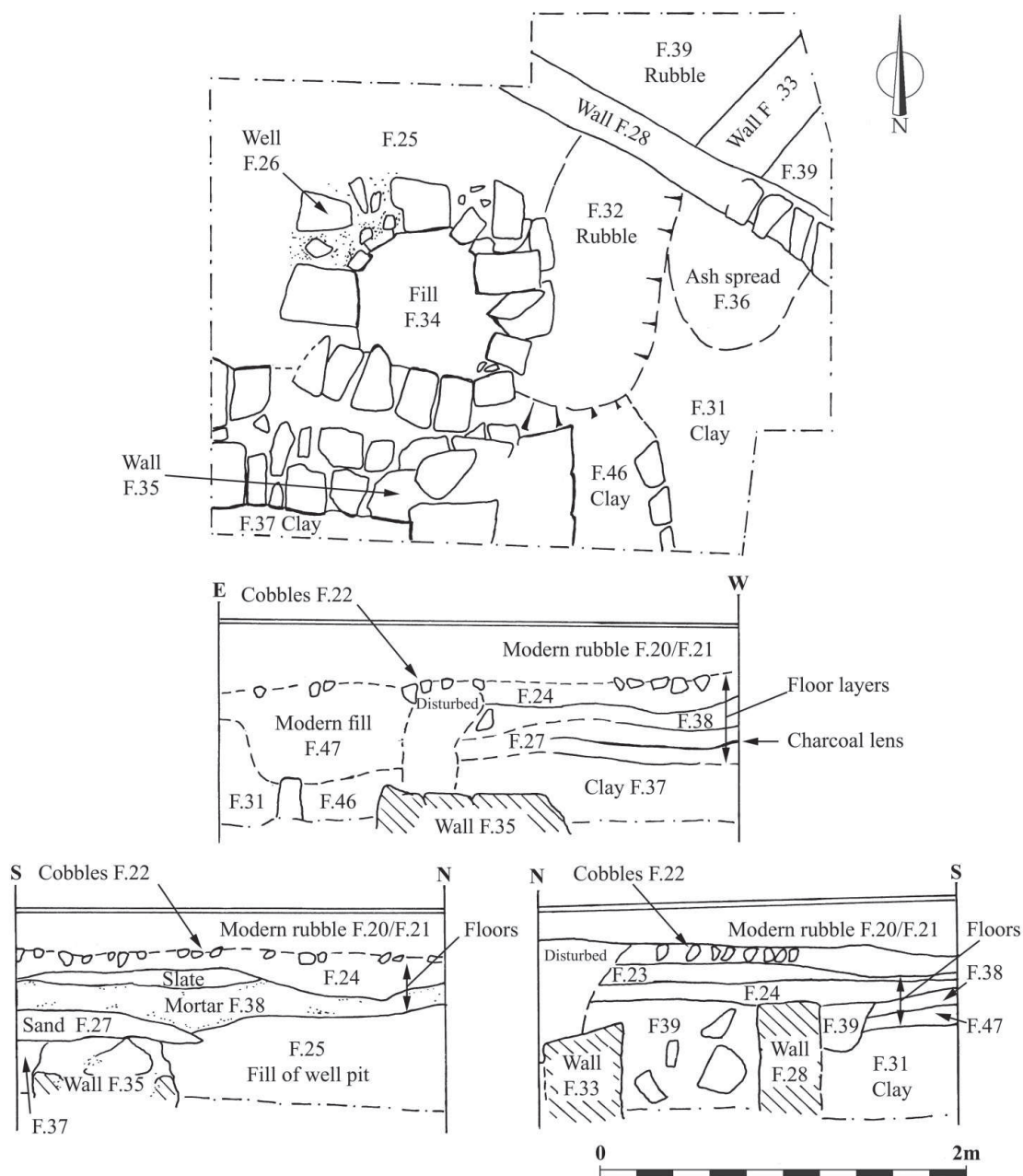


Fig. 6. Red Abbey church site, Trench III, plans and sections

(see human bone report below). No finds were associated with these burials. All the skeletons were aligned east/west and bone preservation was good.

Burials 3-7 were in Trench II, within the church, in the north part of the nave. Burials 1 and 2, in Trench I, may be within the church (see Trench I above). The presence of disarticulated human bone within Trench III indicates that there may also have been burials within the north transept, and that these were disturbed by later post-medieval developments. It is unclear whether all the burials were contemporary with the use of the church or if some post-date its demolition. The stone-lined grave (F17) containing three burials (Nos 3-5) is likely to be contemporary with the use of the church, as this type of grave appears to date from the fourteenth to sixteenth centuries (Hurley & Sheehan 1995). Disarticulated human bone was also found in Trenches II and III in soil possibly disturbed by removal of the church walls and by subsequent phases of building on the site.

Burials 1 and 2

In Trench I, at least two skeletons were recorded in red brown sandy clay (F6/7). The hand bones and longbones of one skeleton (B1), and the hand bones of a second individual (B2), were identified *in situ* at a level of *c.* 0.65 m below ground level. The grave cuts for these burials were not apparent. Once human bone was exposed, no further excavation took place.

Burials 3-5

These burials in Trench II were within a stone-lined grave (F17), 1.85 m long by *c.* 1 m wide. From the exposed bones, it appeared that Burial 3, that of an adult, was almost complete. The skull had rolled or fallen to the south. The pelvis, hands,

arms and legs were present. A single vertebra and part of three ribs were exposed. This adult was approximately 1.65 m tall. Burial 3 displaced bones of the two earlier burials (B4-5), of which only arm and leg bones were identified.

Burial 6

The longbones of an individual were recorded in the red brown gritty sandy clay (F56) to the south of the stone-lined grave (F17). This layer was not excavated.

Burial 7

The skull and two longbones of a skeleton were exposed in red brown sandy clay (F52). In the disturbed layer (F51) above this skeleton, a number of disarticulated human bones were recovered. This skeleton (B7) was probably disturbed by drainage works in the eighteenth/nineteenth century.

Stone-lined grave (F17)

The grave was 1.85 m long by *c.* 1 m wide. This grave type can be compared with examples at the Dominican Priory, St Mary's of the Isle, Cork, where a total of sixty stone-lined graves of late fourteenth- to mid-sixteenth-century date were excavated in 1993 (*ibid.*). The grave at Red Abbey closely resembles Type 3A at St Mary's of the Isle, but here the grave is rectangular rather than trapezoidal in shape, and unlike the majority of graves at St Mary's of the Isle, mortar was used to bond the stones (*ibid.*, 63). The interior of the grave (F17) was also rendered, possibly to give the impression of a stone lining. This type of grave was dated to the mid-thirteenth to late sixteenth/early seventeenth centuries at St Peter's Church, Waterford (Hurley & McCutcheon 1997, 216).

As the burials in this grave were not removed, the depth of the grave was not

recorded (it was a minimum of 0.45 m deep), nor was the base of the grave exposed.

DISCUSSION

The excavation at Red Abbey Church was undertaken in advance of paving and improvement works at the site. The walls of the church nave were not located in Trench I. It was not clear whether this was because the trench was located outside, i.e., to the west of, the church, or whether the trench did not extend far enough north or south to expose the walls. The burials in this trench were not fully exposed; consequently, it is not possible to offer precise dates for them.

Trench II was heavily disturbed by modern drains and services, but the south part of it had undisturbed medieval layers. A stone-lined grave of fourteenth- to sixteenth-century date, containing three burials, was recorded, but the skeletons were not removed.

In Trench III, evidence for eighteenth-century industry at the site included a dump of red earthenware. This corroborates evidence from the 1992 excavation for the occurrence of a pottery kiln in the vicinity and documentary evidence for a sugar refinery. The well excavated in this trench may be that referred to by Lunham (1908, 34) as located in a stable to the north of the Tower (see Bradley, Halpin & King 1985, 74).

There was no conclusive evidence for the church walls or other buildings associated with the medieval friary. Numerous burials attest to the use of the church and precincts as a burial ground, and the graves recorded appear to be contemporary with the ecclesiastical use of the church.

The medieval layers were disturbed by building and drainage at site. In contrast with the 1977 excavation (O'Flaherty

1978), no lead shot was found, and, apart from pottery, glass and human bone, there were no other finds.

THE POTTERY ASSEMBLAGES FROM THE RED ABBEY EXCAVATIONS

by Clare McCutcheon
and Rosanne Meenan

Three distinct groups of pottery were recovered from these excavations, and the information is combined here into a single report. The first assemblage refers to a small amount of medieval and post-medieval material from Trench 1 during the 1992 excavations. The second group, also from the 1992 excavations, consists primarily of pottery and kiln waste, presumed to be from a kiln in the vicinity, although no kiln or associated workshops have been found. The third assemblage consists of material recovered in the 2000 excavations, from a well shaft and surrounding area.

POTTERY RECOVERED FROM THE 1992 EXCAVATIONS

A total of 258 sherds of pottery, other than the locally made ware, were recovered in the 1992 excavations. Of these, 63 sherds (24%) are medieval in date, the majority from feature 38, mostly representing glazed jugs. While 39 medieval sherds (61.90%) are of Saintonge green glazed and unglazed ware, the presence of Redcliffe, Cork-type and a sherd from a Saintonge sgraffito mortar suggests a date of later thirteenth/early fourteenth century for this assemblage. This is very typical of contemporary assemblages in Cork city (cf. Hurley 1985, 1986 and 1990; Gahan *et al.* 1997; McCutcheon 1996, 1997 and 2003). The balance of the post-medieval sherds (195 sherds), apart from some described below, ranged from North Devon

gravel tempered ware (seventeenth century) to transfer printed and stoneware (late nineteenth-early/twentieth-century). Again, these are all typical of the later levels in Cork city sites.

Three distinctive continental pieces were amongst the material recovered in the kiln waste and these have been illustrated (Fig. 7). The first is a handle from a possible Dutch vessel, in red sandy clay and thick dark green glaze (Fig. 7.1). The second is a large portion of a Martincamp slipware dish, decorated in trailed red and green slip probably originally forming a foliage pattern (Fig. 7.2). The lead glaze was pale yellow in colour. The hammer-head rim is similar to the example found in Plymouth in a context of 1550-1650 (Clark 1979, 29). On Guernsey, Martincamp slipware is never found in contexts before *c.* 1740 (Bob Burns, pers comm.). It is found in eighteenth-century contexts in French Canada but not commonly found in England (Hurst *et al.* 1986, 104). Hurst suggested that, as Staffordshire was

already supplying the pottery market in England in the eighteenth century, there was no market for the French import (*ibid.*). The Plymouth example, therefore, may have been intrusive in its seventeenth century context.

The third 'exotic' piece is the base of a chafing dish in a creamy white fabric with a copper-rich green glaze (Fig. 7.3). This appears to be from the Beauvais area where such dishes date to the sixteenth century (Hurst *et al.* 1986, 106-108, fig. 49.152).

Four sherds of tin glazed earthenware had been remodelled as gaming counters.

LOCALLY PRODUCED WARE

Although the kiln structure was not located, the consistency of the wares and the presence of waste material strongly hinted that the pottery had been manufactured close by. In addition, the material was found deposited on a cobbled surface abutting a wall, i.e., it had not been deliberately dumped on marshy soil in order to

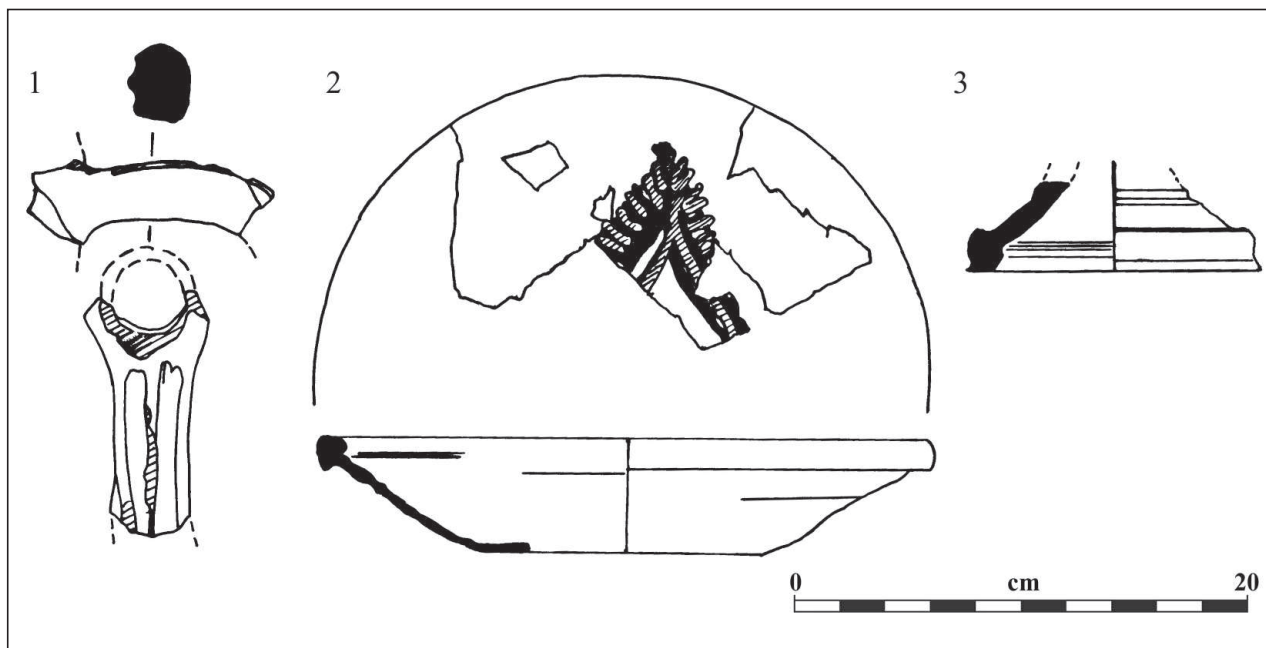


Fig. 7. Late medieval continental ware from 1992 excavations: 1: Dutch (?) jug handle; 2: Martincamp slipware dish; 3: Beauvais (?) chafing dish base

provide a foundation. Two sherds of Red Abbey Yard ware, one from a brown glazed table ware and the second from a straight-sided bowl or possible saggar, were amongst 23 sherds thin-sectioned by Maureen McCorry of NUI Galway as part of a thesis on Cork-type medieval pottery (McCutcheon 1995a). The fabrics were subsequently divided into groups, and it is clear that the sherds from Red Abbey fell within the grouping of medieval wares from the city. As medieval sherds from Youghal had also been thin-sectioned, it was possible to compare these with the Cork city sherds, and they were found to be similar, although not the same. The importance of Youghal in this instance is based on the evidence of the supply of clay in the mid-eighteenth century, the probable date of the Red Abbey production. 'In the neighbourhood of Youghal there is, near the surface, a ten-foot-thick bed of very good reddish shaly clay, very smooth and close, but having a slight mixture of sand' (Smith 1750), and clay from Youghal was brought to Cork for the production of bricks and coarse pottery (*ibid.*).

The fabric of the medieval Cork-type wares had been categorized for some time and was generally described as fine and sandy with little or no obvious inclusions. The value of thin-sectioning such an apparently simply described group could be questioned, as 'in many cases the amount of effort needed to try and characterise a pottery fabric cannot be justified by the meagre and inconclusive results' (Vince 1984, 43). It was felt to be useful for the purpose of the study, however, to confirm the basic description, as 'thin-sections can reveal characteristics which could not be predicted by eye and it is worthwhile examining a small number of samples of even the most visually unpromising untempered

or quartz sand-tempered wares' (*ibid.*).

Consideration was given to counting the sherds present as a method of quantification, but this quickly proved unproductive. The material was divided by type by context, and then weighed as the most practical method of quantification, followed by a description of the various forms represented. This method was used with the 50 kg of kiln waste at Goldsmith Street, Exeter (Allan 1984, 136-8, figs 69-72). The total weight of material came to just over 260 kg, of which 213 kg (82%) was recovered from a single context (F29). Some 43% of the total material consisted of straight-sided bowls which may have had some industrial function rather than having served as domestic vessels or kiln furniture.

The shallow dishes formed a distinct group as they broke laterally, and therefore the complete profile was present in almost every sherd. The green/yellow sgraffito sherds were easily identifiable, but they were also very small and may have represented plates.

Glazed red earthenwares

Glazed red earthenwares (brownglazed wares) are defined by their earthenware bodies that range in colour from light red or buff to a brown or dark red. The lead glaze takes its colour from the fabric. The vessel forms found are usually coarse tablewares, kitchen and dairy vessels and sanitary wares. The production of these wares may have followed in the tradition of the medieval pottery industry, possibly continuing through the sixteenth and seventeenth centuries, although no evidence for kilns of that date has yet been recovered either in Cork or elsewhere in the country. There is some evidence for eighteenth-century kilns elsewhere in Ireland (see below).

The range of vessels from Red Abbey is

typical of the forms that were in popular use in the eighteenth century. These comprised pipkins, jugs, mug, chamber pots, bowl/jars, dishes; ointment jars in local glazed red earthenware are a less commonly found form. Decoration techniques consisted of trailed slip and sgraffito.

The pipkins (Fig. 8.1-2) featured straight, doubled-over handles that spring from the waist of the pot; there was no evidence that these vessels had pouring spouts or feet. Another rim with handle (Fig. 8.3) may have formed part of a skillet or pipkin. Both of these vessel types were used in cooking.

A wide selection of rims of bowls or jars (Fig. 8.11) was recovered. It is not possible to differentiate between a bowl or jar unless the height of the vessel in relation to the diameter of the rim can be established. The examples that are illustrated show a variation in the profile of the rim edges. One example probably formed part of a wide shallow bowl, possibly used in dairy processing (Fig. 8.11(9)).

Other table wares included jugs (Fig. 8.6); a smaller jug form was also present (Fig. 8.4). The straight-sided mug (Fig. 8.5) was a very common form of the eighteenth century; in Ireland, they are less commonly found in glazed red earthenware and more usually in imported wares from England and Staffordshire in particular. Candlesticks (Fig. 8.7, 8) occur regularly but in small numbers on sites dating to the seventeenth and eighteenth centuries – for example, they were present in most of the different classifications of glazed red earthenware that were found in Dublin Castle (Meenan 1990).

Chamber pots (Fig. 8.9) in glazed red earthenware occur regularly. Ointment jars (Fig. 9.1-3) in glazed red earthenware are unusual. In the assemblages from the Dominican Priory, Cross's Green, the

North Gate (McCutcheon 1995b and 1997) and from Skiddy's Castle and Christ Church (Gahan & Twohig 1997), all in Cork city and all of which produced quantities of glazed red earthenware, no ointment jars were recovered. The market for this vessel type was filled either by the Staffordshire producers or by manufacturers of tin-glazed earthenware.

The slip-decorated dishes, again, are a typical form of the eighteenth century. The Red Abbey examples are relatively deep in relation to the rim diameter (Fig. 9.8-12). The wavy line motif, with or without dots, is very common on slipwares of the period.

A ridge tile (Fig. 8.12), similar to the illustrated example was found at the Dominican Abbey, Crosse's Green (McCutcheon 1995b, 96); both were decorated with a wavy horizontal line.

Straight-sided bowls (Fig. 9.5-7)

These bowls were wheel-thrown, unglazed with coarse fabric. They were found in different sizes, ranging from approx. 160-180 mm in diameter; profiles that survive indicate heights of 40–90 mm. The rims were simple; occasionally, the angle between the wall and the base was bevelled.

Similar straight-sided forms were found by Harold Leask in Desmond's Hall, Askeaton, Co. Limerick, in 1933, when he found a 'pottery oven' in a recess in the wall of the hall. They were wheel-thrown and unglazed, although a couple of sherds showed evidence for accidental splashes of glaze. The fabric was highly fired, buffred in colour, with banding in the clay. These were wider than the Red Abbey examples, in the 200-220 mm diameter range; surviving profiles stand 76-113 mm high. The rims tended to be slightly everted and squared. The surviving profiles featured perforations at the base of the

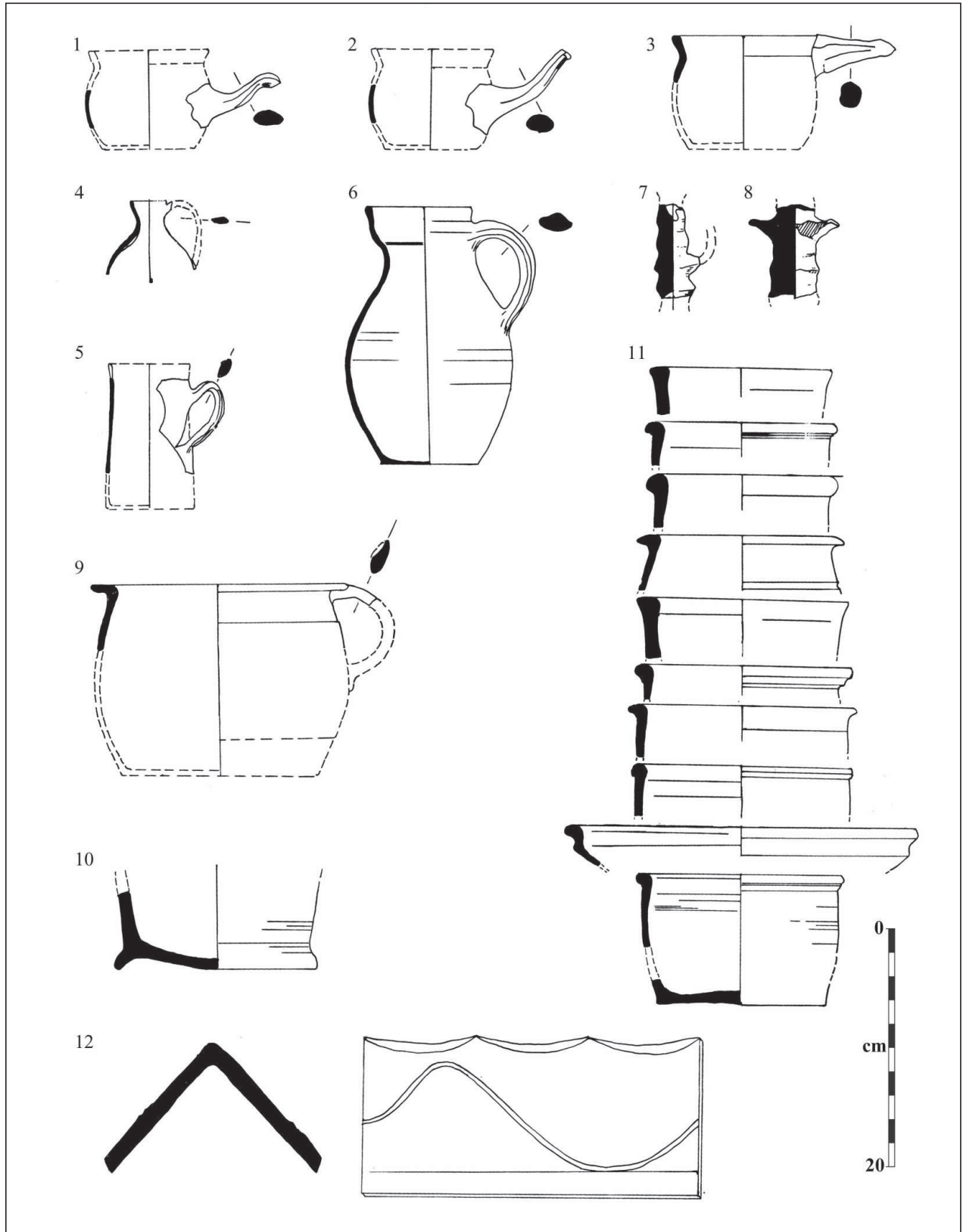


Fig. 8: Red Abbey Yard ware: 1-2: pipkins; 3: skillet/pipkin; 4: drinking jug; 5: mug; 6: jug; 7-8: candlesticks; 9: chamber pot; 10: syrup collecting jar; 11: bowl/jar rim profiles; 12: ridge tile

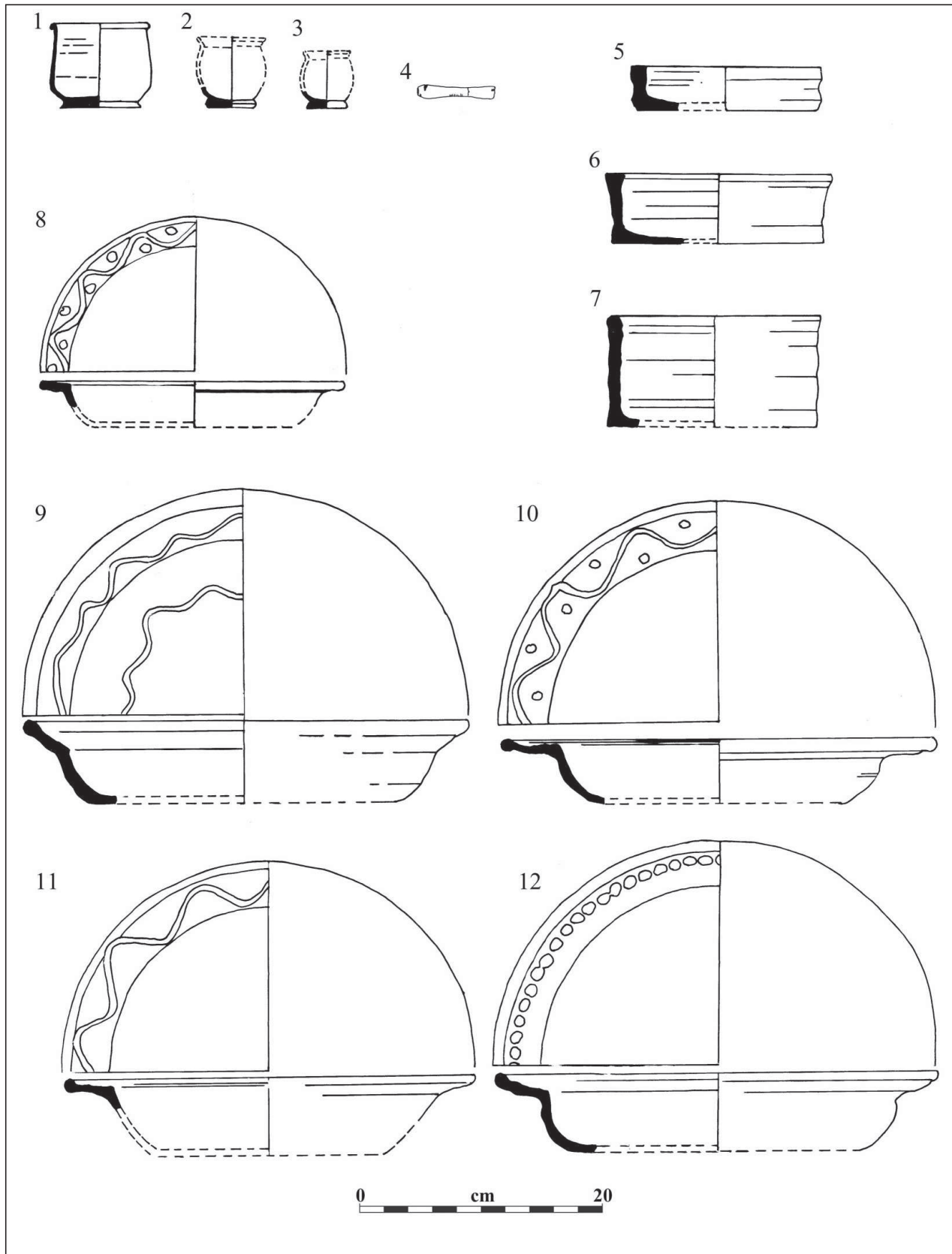


Fig. 9. Red Abbey Yard ware: 1-3: ointment jar; 4: wig curler; 5-7: straight-sided bowls; 8-12: slip decorated plates

walls which were driven from inside out; some had more than one perforation. Each perforation featured a triangular scar over the perforation on the exterior surface, as if a spout or handle had been placed over the perforation. There was a smaller number of bases with perforations through the base. Other forms such as drinking vessels, jars, pipkin and a possible candlestick were also found.

Leask (in a typewritten script, dated 20 May 1933, housed in the National Museum of Ireland) estimated that the oven would not have been in use before the end of the sixteenth century, therefore dating them to the seventeenth century or even the eighteenth. He did not present any other evidence to reinforce the proposition that there was a pottery kiln here.

Straight-sided vessels were also found in some quantity in Tuam, Co. Galway, during excavation of a brick-built pottery kiln of the eighteenth century (Meenan, 2004). These were much taller than the Red Abbey examples. Two surviving profiles stand 210 mm and 215 mm high; the diameters of the bases ranged between 190 mm and 210 mm. The diameters of the rims range between 130-180 mm, resulting in a vessel that was slightly narrower at the rim than at the base. The bases, many of them featuring central perforations, were manufactured separately from the walls. They were unglazed, although some showed accidental dribbles of glaze, some had large cracks and others had broken pottery chips adhering to them. The fabric was normally coarse, often with banding within it.

Excavations by Alan Hayden in the Coombe in Dublin produced a huge volume of pottery, suggesting that there had been a kiln in the vicinity of the excavation site. Thousands of pottery sherds, many of them wasters, had been introduced to raise ground level prior to con-

struction of houses. While no evidence of a kiln structure was exposed on the excavation, Hayden was of the opinion that it must have been located close by as there was such a large volume of sherds. This phase of the site dated to the first quarter of the eighteenth century. Study of the 69,000 sherds did not produce examples of the straight-sided forms found at the three sites listed above.

Straight-sided vessels known as 'saggars' were used in the manufacture of pottery in the post-medieval period. Small vessels were placed inside them to protect them during firing. The Tuam vessels had too small a diameter in relation to the height for them to function as saggars; they had slight constrictions around the necks, and it would have been difficult to place the unfired objects inside them. The small vessels which would have been placed inside them were not found in the assemblage from the site. This was also the case with the Red Abbey examples, where small vessels would not have fit inside these straight-sided bowls. For these reasons, it would appear that these straight-sided vessels did not function as saggars.

It is possible that these vessels had an industrial function, perhaps as measures or for use in mixing materials. As they were not glazed on the interiors, it seems unlikely that they were used for food processing, and they have not been found in domestic assemblages. The Askeaton vessels might have functioned as saggars, although the presence of the triangular scars on the exteriors is difficult to explain, if that was their function.

SUGAR-CONES AND SYRUP-COLLECTING JARS

The assemblage recovered from the well area (00E618) in 2000 contained a small quantity of later eighteenth- and nineteenth-century sherds, including

creamware and shell-edged ware, but primarily consisted of waste pieces from sugar cone moulds (798 sherds) and syrup-collecting jars (244 sherds) associated with sugar refining. The sugar cone mould group contained a total of 72 rim fragments and eight perforations, while there were 32 rim fragments and 41 base fragments of the syrup collecting jars. The distinctive difference is characterized by the smooth interior surface, often slip coated, of the sugar cones and the internal glazing of the syrup collecting jars. The detailed quantification by context has been included with the site archive. Apart from a single sherd of Saintonge green glazed ware recovered from Trench II, all of the pottery recovered from the excavation was found in Trench III.

The fabric is not appreciably different from that previously recovered at Red Abbey in 1992, but red earthenware is a ubiquitous material and the clay contains few if any distinguishing features visible to the eye, and little further information on analysis. The 1992 assemblage contained a wide range of tablewares, but the vast majority of the assemblage consisted of shallow, straight-sided, flat-bottomed bowls. With the recovery of the material around the well area in 2000, the function of these straight-sided bowls may be somehow connected with the production of the large vessels produced for the sugar refinery, but it is very odd that the two groups should be so distinct. The base of a collecting jar was illustrated as part of the 1992 assemblage (Fig. 8.10), but no evidence was found of the distinctively rounded rims and projecting shoulders of the syrup-collecting jars (Fig. 10.3), although several heavy rims were recovered and illustrated (Fig. 8.11).

As noted, two types of vessels were recovered, sugar cone moulds (Fig. 10.1, 2) and syrup-collecting jars (Fig. 10.3, 4).

The moulds are defined as ‘a large, straight-sided, conical vessel, open at the top and bottom, used as a mould for sugar-loaves, made in a range of sizes, and used in conjunction with a syrup-collecting jar’ (MPRG 1998, 9.10). The jars are defined as ‘a large, high-shouldered jar with heavy rim and thick base . . . to collect the molasses which drained out of the opening at the mould base’ (*ibid.*, 9.11).

Three of the sherds of sugar cone moulds had fragments of names stamped into the clay and this was reconstructed as ‘PRESCOTT’ (Fig. 10.1). What is curious about the moulds is that the name is stamped just below the rim, but inverted, so that it can only be read if the mould is not in use. Similarly marked moulds were recovered on the Power’s Distillery site in Thomas Street, Dublin, in 1977 (P. Healy, NMI typescript). An earlier find in the same area during the building of the Oliver Bond flats in the 1930s shows considerable stacks of sugar cones and associated syrup collecting jars in an area known from c. 1190 as Crocker Street (Brooks 1936). A further sherd was scratch-marked with ‘H’, possibly indicating cone size (Fig. 10.2).

This group of pottery is of particular interest, given that the Red Abbey was leased as a sugar refinery in 1755 to George Randall and associates (Harrison 1999, 127). It is clear that this was the reopening of a refinery previously run by the Randalls (*ibid.*). While the Randalls had connections with Barbados in the early 1700s when Samuel Randall, Jnr, had a quarter share in the galley *Mary* (*ibid.*), other islands in the West Indies were closely associated with Ireland, particularly Montserrat (Akenson 1997). In this connection, the reference to a sugar refinery in Montserrat dating to post-1750 and owned by a David Galway (Pulsipher & Goodwin 1982, 21; cf. Brooks 1983) gives

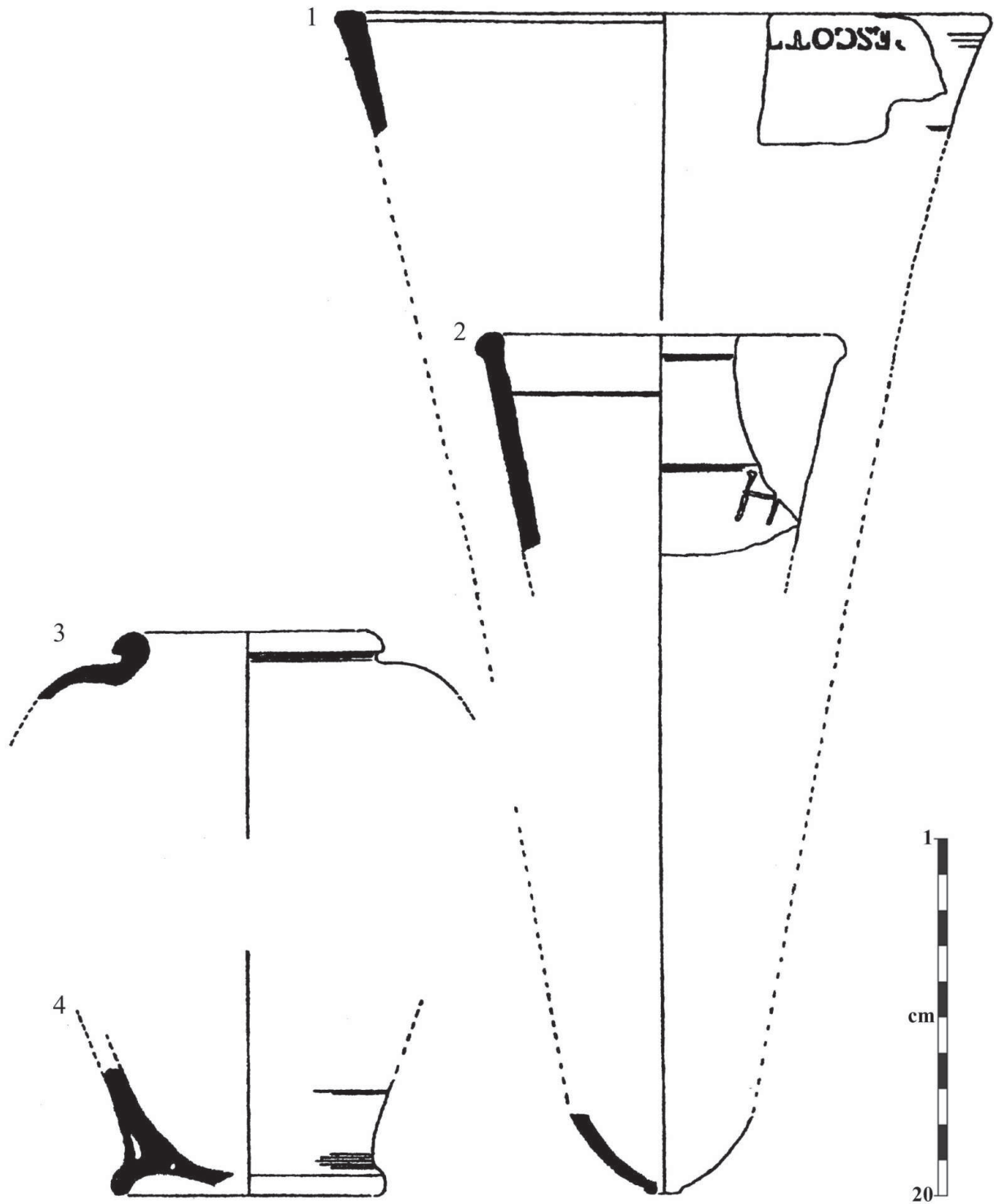


Fig. 10. Sugar cones and syrup-collecting jars: 1: sugar cone rim stamped 'PRESCOTT'; 2: sugar cone rim marked 'H'; 3-4: syrup-collecting jar, rim and base

a probable connection with Cork, where Galway was one of the great Cork names along with Skiddy, Tirrey, Gould and so forth. In a charter of 1666, for example, three lanes in the core of the medieval city were named for the Galway family (Mulcahy 1963). No connection with the name Prescott has been established to date between the sugar refinery or the possible pottery works, but research on this continues.

WIG CURLERS

by Joe Norton,
National Monuments Service

A total of fifteen wig curlers (Fig. 9.4), only one complete were recovered within the waste heap from the pottery kiln. Two of the curlers have a grey/black stoneware finish.

Wig curlers are very difficult to date,

and the only major research carried out thus far is by le Cheminant (1982). He has constructed a typology, but he acknowledges that it is very loose and much needs to be done. Using his typology as a guide, a date of c. 1690-1750 is tentatively ascribed to the Red Abbey curlers. All of them are of the same orange/brown fabric as curlers recovered at Hanover Street, Cork (Norton 2003), and all appear to have come from the Red Abbey Yard material.

THE CLAY PIPE FROM RED ABBEY YARD

by Sheila Lane

This is an ornate, spurred, straight-sided bowl (92E48:1:1). On the left side, there is a man's bust in profile to waist level (Fig. 11). He is possibly bearded and holding a scroll. The name 'O CONNELL'

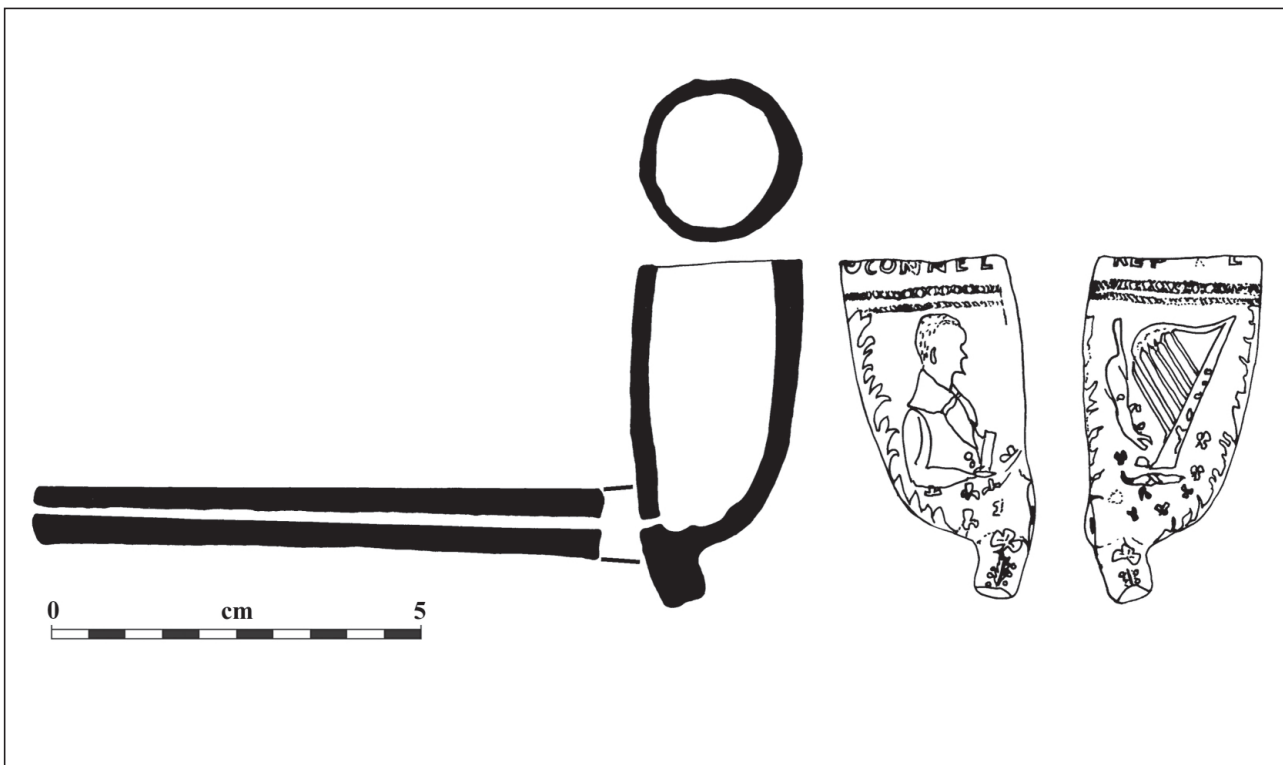


Fig. 11: Clay pipe from Red Abbey Yard

runs along the top of the bowl above the bust. There is a line of decoration between the bust and the name. On the right side of the bowl there is a harp. The lettering above the harp on this side has been cut off during trimming of the bowl top. It is possible that this reads 'REPEAL'. There is a decoration of scrolled leaves along the spine of the bowl. The spur is quite thick, with a tree-like motif on each side and a shamrock above each tree.

Daniel O'Connell (1775-1847) campaigned for Catholic Emancipation in 1829, and in 1840 he founded the Repeal Association to repeal the Act of Union. 'Repeal' pipes were very popular during the nineteenth and twentieth centuries. Six Repeal pipes were recovered from a clay pipe dump discovered during the excavations at the Dominican Priory, St Mary's of the Isle, Cork (Lane 1995, 124-6).

THE COIN FROM RED ABBEY YARD

by M. Kenny,
National Museum of Ireland

This coin (92E48:1:6) was found during clearance of the site at the beginning of the excavation.

Clipped groat? Silver, London, possibly fourteenth century.

Obverse: Legend missing. Facing bust with tressure.

Reverse: Outer legend missing. 'CIVITAS LONDON' around inner circle. 'N's of Lombardic type.

The coin is no earlier than 1351, from which date groats were regularly minted. Since the entire obverse legend and mint-mark are missing and since the coin is in very poor condition, it is not possible to suggest a precise date.

ARCHITECTURAL STONE FROM RED ABBEY YARD

by Sarah McCutcheon

A single moulded stone (92E48:1:42) was found during the course of the excavation at Red Abbey Yard. It consisted of a window sill which had been reused in an eighteenth-century wall (F4). The sill was fashioned from a coarse-grained, buff sandstone, probably from the Bridport Sandstone formation that outcrops in south-west England (A. Wheeler, pers. comm.). Yellow sandstone was used for the chamfered door surround of a fourteenth-century house in Phillip's Lane, Cork (O'Donnell 2003, 94). Moulded sandstone was also found in fourteenth-century contexts at the North Gate excavations (Hurley 1997a-c, 116).

Window sill (92E48:42:01): One sandstone sill, possibly from a two- or multi-light window. Max. dimensions 0.29 m long x 0.2 m wide x 0.12 m high. The central sill is 50 mm wide at the side, expanding to 55 mm at the centre. The width of the ope represented on this stone is 0.11 m.

BONE ARTEFACT FROM RED ABBEY YARD

by M. F. Hurley

A single bone artefact (92E48:41:49) was recovered from a seventeenth-eighteenth-century context (Fig. 12). Scoops made of sheep/goat metapodials are commonly found in post-medieval contexts. Generally the distal end forms the handle, while the proximal end is cut off and half the wall of the shaft is removed. The edges are usually pared and polished. In Britain, there is a tradition that objects of this type 'were made by young men for their sweethearts' (MacGregor 1985, 180).

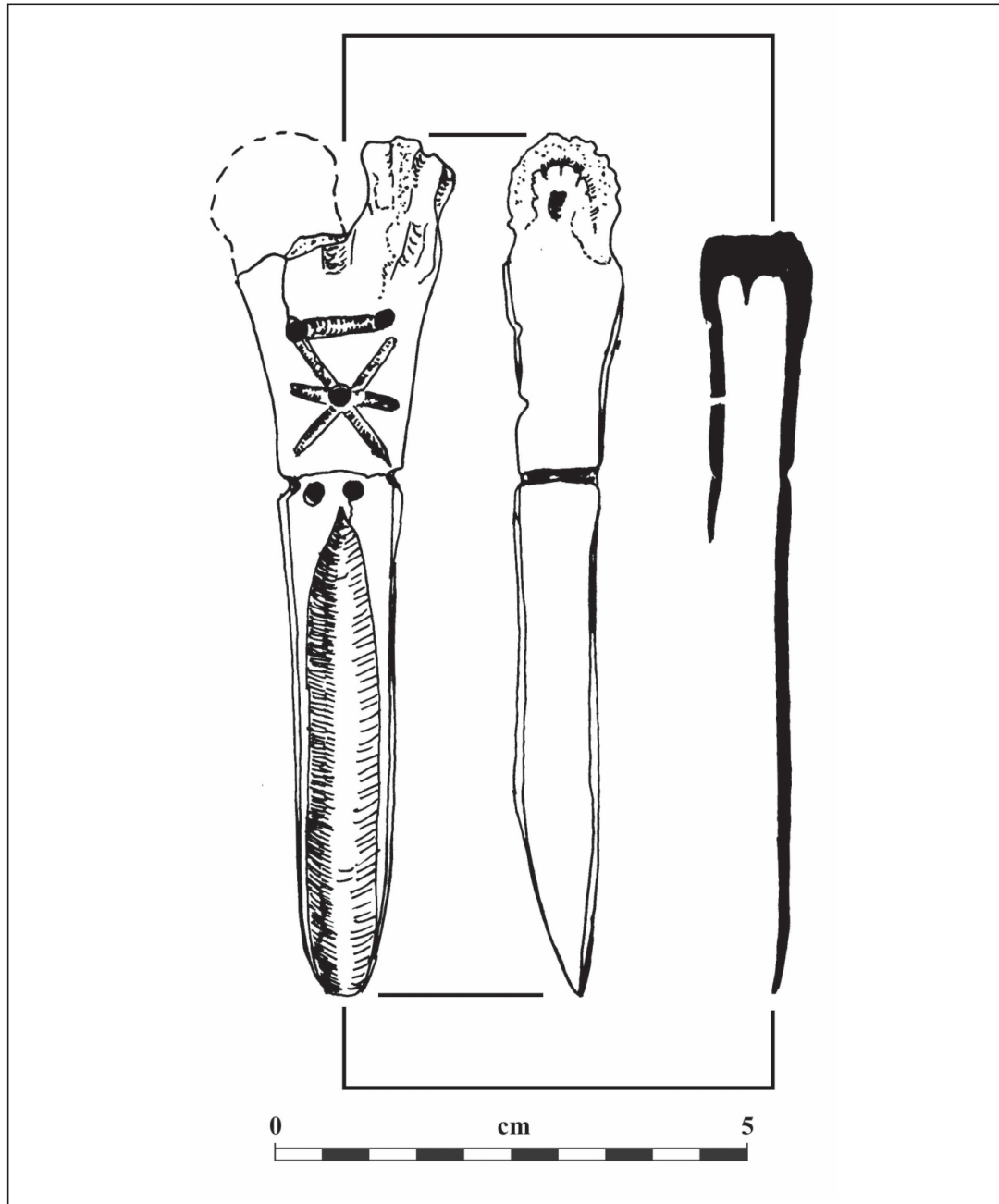


Fig. 12: Bone scoop from Red Abbey Yard

There is also a widespread belief that such scoops were used 'as an aid to eating apples by those who had lost their teeth' (*ibid.*). Amongst the other suggestions are cheese scoops for sampling 'cheeses to test their ripeness' (*ibid.*).

Decoration in the form of criss-crossed lines usually occurs on the handles. The example from Red Abbey is typical,

except that the occurrence of five perforations on the handle is unusual. One articular condyle from the distal end has broken off, as both were normally left intact.

Comparable items are listed by MacGregor (*ibid.* Fig. 97), one was found in a seventeenth-/early eighteenth-century pit at Skiddy's Castle, North Main Street, Cork

(Hurley 1997a, 269, fig. 106), and another example was found in the rubble fill of a nineteenth-century wall in Clonmel (Buckley 2001).

THE HUMAN REMAINS FROM RED
ABBEY CHURCH

by Catryn Power

SUMMARY

This assemblage of human bones from Red Abbey is representative of disarticulated parts of skeletons from any normal demographic cemetery population. It comprises individuals varying in age from neonatal (newborn) through juveniles to mature adults. These human remains consist of disarticulated bones from several individuals; however, it is not possible to determine the number of subjects present, though an absolute minimum is five: a neonate, one child aged between two to five years, one child aged between six to nine years and two adults, one of whom is a female. It is likely that the number of individuals is considerably greater than five. Preservation of bone varies from those in excellent condition to those in a fragile and eroded state. In this small assemblage, three pathological conditions are evident: *cribra orbitalia* (an iron deficiency anaemia), dental attrition (tooth wear) and *ante mortem* loss of teeth. The latter could be due to any one of at least three aetiological factors: dental attrition, dental caries (bacterial infection) or a traumatic incident.

INVENTORY OF SKELETAL REMAINS.

(The bones listed below are assumed to belong to a mature adult, unless otherwise stated.)

Context F14, Trench II

Seven fragments of frontal bone from the skull

of at least one mature individual.

One fragment of the frontal bone, from the skull, containing the right orbit; *cribra orbitalia* is evident on the superior surface of the eye socket; this is indicated by porosity. This condition is caused by many factors, including iron deficiency anaemia, infection or poor nutrition.

The left petrous portion of the temporal bone, from the skull, probably of a child or young adolescent.

One fragment from the sternum, probably the manubrium, of an adult.

The body of a mandible containing the sockets of the incisors, canines and first premolars; the sockets of the second premolars and first molars are healed, indicating that these teeth were lost at least several months prior to death. It is not possible to determine the cause of this *ante mortem* tooth loss; it may have been due to trauma, dental decay or severe dental attrition.

One first rib.

Two fourth metacarpals from two right hands of two adults. Part of a third metacarpal of a mature adult.

One lumbar vertebra, the inferior processes are missing *post mortem*.

The right pubic bone of a mature adult.

The distal one-third of a left femur (thigh bone) of a mature adult.

Two fragments from the one proximal part of a shaft from the left femur (thigh bone) of a mature adult.

One fragment probably of a tibia (lower leg) of a mature adult.

The navicular bone of the left foot of a mature individual.

The proximal phalanx of a foot of an adult.

The right ulna (lower arm) of a neonate.

One left rib, the calcaneus of the left foot and the proximal epiphysis of a tibia of a child.

Context F16, Trench II

One fragment from the skull of a child, probably from one of the parietal bones.

A fragment of the left ilium from the pelvis of a child.

A fragment of the shaft of a right rib of a child.
Part of the distal shaft of an ulna (lower arm) of a child.

Part of the second metatarsal of a right foot of a mature individual.

Part of the right fourth metatarsal from the foot of a mature individual.

A fragment of the proximal shaft of a right ulna (lower arm) of a mature adult.

A fragment of the anterior surface of the proximal shaft of a left tibia (lower limb), probably of a mature adult.

Context F29, Trench III

The left radius (lower arm) of a mature individual; the head is missing *post mortem*.

The proximal end of a right ulna (lower arm) of a mature individual.

Part of the right rib, containing the head, of a mature individual.

The first metatarsal of the right foot of a mature individual.

The third metatarsal of the left foot of a mature individual.

The acromial process of the left scapula (shoulder blade) of a child.

The left ilium from the pelvis of a child aged five to nine years.

One fragment of the mid shaft of a tibia (lower leg) of a child.

Context F30, Trench III

One fragment of the frontal bone from the skull of a mature individual.

Part of the right orbit from the skull of a mature individual.

A large part of the ilium and ischium of the right pelvis of a mature female.

Part of the glenoid cavity and the axillary border of a left scapula (shoulder blade) of an adult.

The mid shaft of the radius (lower arm) of an adult.

The head and part of the posterior surface of the distal shaft of the left femur (thigh) of an adult.

Three fragments of bone, all probably from the one left femur (thigh) of an adult: two fragments of the distal shaft and one fragment of the proximal shaft.

Three fragments from the one piece of shaft from a tibia (lower leg).

Three fragments from a large long bone, of an adult, such as a femur, tibia or a humerus.

Part of the shaft of a left tibia (lower leg) of a child.

The proximal half of a left femur (thigh) of a child aged between six to nine years.

Context F31, Trench III

A fragment of the frontal bone of the skull of an adult, containing the nasion.

Three fragments of skull, two probably from the parietal bone(s) and one from the frontal bone. Part of the occipital bone containing the condyles and foramen magnum; the basilar suture is partially closed, indicating that this bone belonged to an individual aged between eighteen to twenty years.

A large part of the right scapula (shoulder blade) of a mature adult, part of the body and coracoid process are lost *post mortem*.

A fragment of a left scapula (shoulder blade) containing the scapular notch.

The proximal one-quarter of a left ulna (lower arm) of a mature individual.

The shaft of a left radius (lower arm) of a mature individual.

Fragments of two left ribs, including one first, from a mature adult.

The distal one third of the shaft of a left femur (thigh) of a mature individual.

The posterior portions of the condyles of the distal end of a femur (thigh) of a mature adult.

The medial malleolus of a right tibia (lower leg) of a mature adult.

A third metatarsal of the left foot of an adult.

Ten fragments from large long bones from at least one adult; these probably belong to the femur or tibia.

Context F51, Trench II

The glenoid cavity of a right scapula (shoulder blade) of an adult.

A fragment of the posterior surface of the distal shaft of the right femur (thigh), probably of a mature individual.

- The distal part of the shaft of a right fibula (lower leg) of a mature individual.
 The left femur (thigh) of a neonate.
 The shaft of one right and one left rib of at least one child, aged between two to five years.
 The shaft of a right tibia (lower leg) and part of the distal shaft of a femur (thigh), of at least one child aged between six to nine years.

Context F56, Trench II

- A maxillary right second molar of someone aged at least in the teens; dental attrition has resulted in rounding of the cusps, indicating that this tooth had been in occlusion for some time.
 A metatarsal from the right foot of a mature individual.
 A fragment possibly of the first sacral body of a child.

ACKNOWLEDGEMENTS

The excavation and initial post-excavation of Red Abbey Yards was funded by Messrs O'Flynn, Exhams & Partners, 58 South Mall, Cork. Excavation of Red Abbey Church site was carried out by Cork City Council. The authors would like to express our gratitude to the following: Ann Hennessy and the Environment, Personnel, Finance and Planning Departments of Cork City Council; the excavation staff; Gerry O'Neill, Ita O'Brien and Hugh Kavanagh for drawings and plans; Catryn Power for on-site comments on the human bones; Clare McCutcheon, Sheila Lane, Sarah McCutcheon, Catryn Power, Roseanne Meenan and Michael Kenny for specialist reports. Thanks are also due to Rose Cleary (UCC) for advice throughout.

The production of the final report was grant-aided by the Heritage Council. The authors gratefully acknowledge this assistance.

BIBLIOGRAPHY

- Akenson, D. H. 1997 *If the Irish ran the world: Montserrat 1630-1730*. Dublin.
 Allan, J. 1984 *Medieval and post-medieval finds from Exeter*. Exeter.
 Bradley J., Halpin, A. and King, H. 1985 *Urban Archaeological Survey*, part XIV (i) Cork City (unpublished).
 Brooks, C. 1983 'Aspects of the sugar-refining industry from the 16th to the 19th century' *Post-medieval Archaeology* 17, 1-14.
 Brooks, E. St. John, 1936 *Register of the Priory of S. John the Baptist without the Newgate, Dublin*. Dublin.
 Buckley, V. 2001 'Clonmel scoop' *Archaeology Ireland* 15, 5.
 Clark, A. 1979 'The French wares' in C. Gaskell-Brown (ed.), 'Castle Street: the pottery', *Plymouth Museum Archaeological Services* 1, 27-32.
 Cleary, R. M. 1996 'Medieval graveyard and boundary wall at Cove Street, Cork', *Journal of the Cork Historical and Archaeological Society* 101, 94-111.
 Cleary, R. M., Hurley, M. F. & Shee Twohig, E. (eds) 1997 *Skiddy's Castle and Christ Church, Cork - Excavations by D. C. Twohig*, Cork.
 Coppack, G. 1990 *Abbeys and priories*. London.
 Gahan, A., McCutcheon, C. & Twohig, D. C. 1997 'Medieval pottery' in R. M. Cleary, M. F. Hurley & E. Shee Twohig (eds), *Skiddy's Castle and Christ Church Cork: Excavations 1974-77 by D.C. Twohig*. 108-29. Cork.
 Gahan, A. & Twohig, D. C. 1997 'Late medieval and post-medieval/modern pottery', in R. M. Cleary, M. F. Hurley and E. Shee Twohig (eds) *Skiddy's Castle and Christ Church Cork Excavations 1974-77 by D. C. Twohig*, 130-59. Cork.
 Gwynn, A. & Hadcock, R. N. 1988 *Medieval religious houses in Ireland*. Dublin.
 Harrison, R. S. 1999 'Some eighteenth-century Cork Quaker families: a key to Cork city development', *Journal of the Cork*

- Historical and Archaeological Society* 104, 117-36.
- Hurley, M. F. 1985 'Excavations of part of medieval City Wall at Grand Parade, Cork', *Journal of the Cork Archaeological & Historical Society* 90, 65-90.
- Hurley, M. F. 1986 'Excavations in medieval Cork: St Peter's Market', *Journal of the Cork Historical & Archaeological Society* 91, 1-25.
- Hurley, M. F. 1990 'Excavations at Grand Parade, Cork, II (Part 2)', *Journal of the Cork Archaeological & Historical Society* 95, 64-87.
- Hurley, M. F. 1992 *Archaeological Report: Proposed Re-development of Housing at Margaret St./Mary St./Dunbar St., Cork 92E0032* (unpublished).
- Hurley, M. F. 1997a 'Architectural stone' in M. F. Hurley *Excavations at the North Gate, Cork 1994*, 116-8. Cork.
- Hurley, M. F. 1997b 'Artefacts of skeletal material' in R. M. Cleary, M. F. Hurley & E. Shee Twohig (eds) *Skiddy's Castle and Christ Church, Cork – Excavations by D. C. Twohig*. Cork.
- Hurley, M. F. 1997c *Excavations at the North Gate, Cork 1994*. Cork.
- Hurley, M. F. & Cleary, R. M. 1997 'The stone artefacts' in R. M. Cleary, M. F. Hurley & E. Shee Twohig (eds), *Skiddy's Castle and Christ Church, Cork – Excavations by D. C. Twohig*, 149-65. Cork.
- Hurley, M. F. and McCutcheon, S. W. J. 1997 'St. Peter's Church and Graveyard' in Hurley, M. F., Scully, O. M. B. & McCutcheon, S. W. J. *Late Viking Age and Medieval Waterford: Excavations 1986-1992*. Waterford.
- Hurley, M. F. and Sheehan, C. M. 1995 *Excavations at the Dominican Priory, St. Mary's of the Isle, Cork*. Cork.
- Hurst, J. G., Neal, D. S. and van Beuningen, H. J. E., 1986 *Pottery Produced and Traded in North-west Europe 1350-1650*. Rotterdam.
- Lane, S. 1995 'The clay pipes' in Hurley, M. F. and Sheehan, C. M. *Excavations at the Dominican Priory, St. Mary's of the Isle, Cork*, 123-7. Cork.
- Le Cheminant, R. 1982 'The development of the pipeclay hair curler – a preliminary study', in P. Davey (ed.), *The archaeology of the clay tobacco pipe*. BAR 100, 345-54. Oxford.
- Lunham, T. A. 1908 'The Red Abbey and its tenants', *Journal of the Cork Historical and Archaeological Society* 14, 33-5.
- MacGregor, A. 1985 *Bone, Antler, Ivory and Horn: The Technology of Skeletal Materials since the Roman Period*. London.
- McCutcheon, C. 1995a Cork-type pottery: a medieval urban enterprise. MA thesis, NUI. Unpublished.
- McCutcheon, C. 1995b 'Pottery', in M. F. Hurley & C. M. Sheehan, *Excavations at the Dominican Priory, St Mary's of the Isle, Crosse's Green, Cork*, 85-96. Cork.
- McCutcheon, C. 1996 'The pottery' in M. F. Hurley, 'Excavations in Cork City: Kyril's Quay/North Main Street (Part 2)', *Journal of the Cork Historical & Archaeological Society* 101, 42-54.
- McCutcheon, C. 1997 'Pottery and roof tiles' in M. F. Hurley, *Excavations at the North Gate, Cork, 1994*, 75-101. Cork.
- McCutcheon, C. 2003 'Pottery' in R. M. Cleary & M. F. Hurley (eds), *Excavations in Cork City 1984-2000*, 197-235. Cork.
- Meenan, R. 1990 *Post-medieval Pottery from Excavations at Dublin Castle*. Unpublished specialist report, Dúchas the Heritage Service. (Dublin).
- Meenan, R. 2004 'The pottery' in A. Carey, 'Excavation of a post-medieval pottery kiln in Tuam, Co. Galway', *Journal of the Galway Archaeological and Historical Society*.
- MPRG 1998 *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group Occasional Paper No. 1
- Mulcahy, M. 1964 'A Cork city grant of 1666', *Journal of the Cork Historical and Archaeological Society* 69, 29-37.
- Norton, J. 2004 'The wig curlers from Hanover Street and Grattan Street' in R. M. Cleary &

- M. F. Hurley (eds), *Excavations in Cork City 1984-2000*, 252. Cork.
- O'Donnell, M. G. 2003 'Philip's Lane' in R. M. Cleary & M. F. Hurley (eds), *Excavations in Cork City 1984-2000*, 78-98. Cork.
- O'Flaherty, B. D. 1978 'Red Abbey, Cork City', *Journal of the Cork Historical and Archaeological Society* 83, 89-93.
- Ó Murchadha, D. 1990 'The Siege of Cork in 1690', *Journal of the Cork Historical and Archaeological Society* 95, 1-19.
- O' Sullivan, D. 1943 'The monastic establishments of mediaeval Cork', *Journal of the Cork Historical and Archaeological Society* 48, 9-18.
- O'Sullivan, D. 1956 'The Testament of John de Wynchedon of Cork, Anno 1306', *Journal of the Cork Historical and Archaeological Society* 61, 75-88.
- Pulsipher, L. M. & Goodwin, C. M. 1982 'A sugar-boiling house at Galways: an Irish sugar plantation in Montserrat, West Indies', *Post Medieval Archaeology* 16, 21-27.
- Sheehan, C. M. in prep, '02E004: 62-68 North Main Street, Wexford'.
- Smith, C. 1750 *The Ancient and Present State of the County and City of Cork*. Dublin.
- Vince, A. G. 1984 'The use of petrology in medieval pottery', *Medieval Ceramics*.