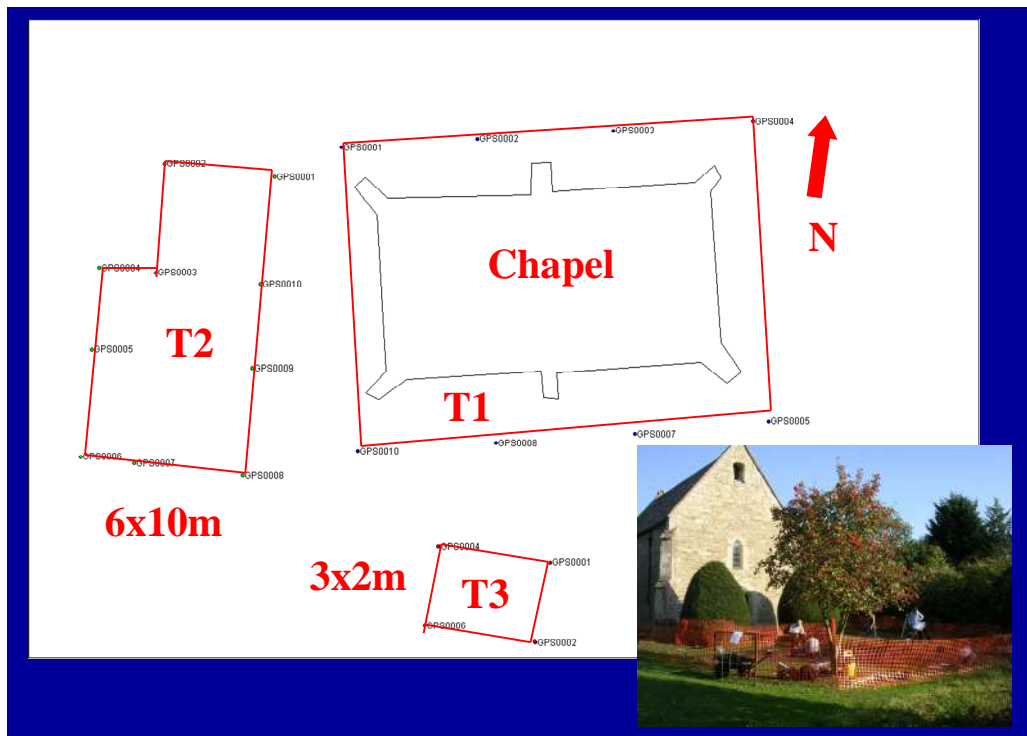


Bartlemas Chapel Excavations: Trench 1

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Trench 1 Introduction and Summary

This generally one metre wide trench running all the way round the chapel provided an opportunity to discover more about the history of the existing Chapel building. The patching and changes revealed in the foundations and buttresses of the Chapel, also visible in the fabric of the standing building, emphasised how much the structure has been repaired and rebuilt over the centuries. Documents tell us that the Chapel was rebuilt in the fourteenth century, needed repair in the fifteenth and sixteenth centuries and demanded a great deal of work after the damage caused during the seventeenth century Civil War (Peshall and Wood ref). This cycle of neglect followed by reconstruction was also illustrated by the amount of limestone building rubble found in the trench, especially to the south and west of the Chapel. Some of the fragments were finely worked.

The foundations of the standing Chapel, documented as built in about 1329, were found to be relatively shallow (about 0.8m), and included three wide relieving arches of large, fanned limestone 'wedges': one between each pair of buttresses on the southern and eastern sides. These arches may have been intended to spread the weight of the walls over ground constantly softened by small springs running NE-SW across the site from the spring-line now above Oriol College's playing fields. One of these surviving water courses caused the damp problem in the NE corner of the Chapel and prompted the need for excavation around the building. The complexity of both the stonework of the buttresses and their relationships with the walls supported the idea of repeated neglect and repair. In the west wall, the height of the west door above the ground matched evidence from Trench 2 to suggest the ground level in this area had been lowered through levelling or top-soil stripping by at least 0.25m. This perhaps happened in the early twentieth century when the site was gradually restored to domestic and religious use after being part of a working farm. The west door also seemed to be built into wall courses above the foundations, suggesting changes were made to the entrance; this is supported by the traces of an earlier arch above and to the north of the present door.

To the north and east of the Chapel, rather than foundations, the walls were built onto the remains of an earlier building. A stretch of west-east wall was revealed running from the NE buttresses west to the area disturbed by a modern drainage down-pipe, just east of the present north door. However no earlier structure of this kind appeared under the western wall of the Chapel. This earlier wall or foundation was slightly differently aligned to the present building (in fact more nearly true W-E), differently constructed and clearly not keyed into the fabric of the standing walls. These may have been remains of the original Chapel built when the leper hospital was founded in the twelfth century. However, as the first Chapel was reputed to be wooden, these wall remains might possibly belong to a stone

structure built sometime after 1126 AD but replaced by the fourteenth century Chapel. Again there was more evidence for several phases of change and repair. The central buttress on the northern side was built over, and slightly to the west of, an earlier buttress; the earliest wall on the northern side ran under both the standing Chapel walls and this earlier buttress suggesting that the first stone building on site, superseded by the present Chapel in the fourteenth century, may itself have been altered by the addition of buttresses. In the eastern wall the N-S return of the earliest wall seemed to appear from under the rubble and slippage at the base of the NE buttress to be incorporated into the later foundations encompassing the central relieving arch. There were also hints that the earlier stone Chapel had an eastern extension, the size and shape of which was impossible to determine. The first stone structure was therefore around 3.5m wide and perhaps 11m long; both narrower and shorter than the present building, but possibly with an eastern extension. The pottery associated with the remains of this extension was predominantly 13th century. At some point before the rebuilding in the 14th century, buttresses were added to this first stone structure.

Roof and floor tile, stone rubble, window glass and leading were frequent finds in Trench 1 as was human bone. The grave-yard around the Chapel, for which evidence was found to the west in Trench 2 (skeletons 2, 5-6, 7, 11 and 13), south in the soakaway (skeletons 8, 9 and 10) and east of the Chapel (skeletons 1 and 12) had been badly disturbed at least once in the Chapel's history: long bones and fragments of human bone were found in all Sectors of Trench 1 and especially in Sectors C (east), B (north-east) and E (south-west). Skeleton 1 found in Sector C, the eastern sector of the Trench, was discovered lying west-east, on its back, with the skull around 0.3m from the east wall of the Chapel. No grave goods were found, but the grave was stone-lined, with the remains of the wall of the early eastern annex forming the northern side of the grave. The skeleton was of a young man or woman: both bones and teeth were in good condition. At a later stage another grave had been dug to the east disturbing the lower legs of skeleton 1. The skull of skeleton 12 was seen in an extension of Trench 1 Sector C - made to reveal the full-length of skeleton 1 - above where the feet and lower leg bones of skeleton 1 should have been found. Two human long bones and various fragments of human bone were also found near the Chapel wall just to the north of skeleton 1's grave.

Two charnel pits, dug to re-bury human bones disturbed by work in the grave-yard or around the Chapel, were discovered in Sector B (north-east) of the trench and Sector E (south-west). The lower layer of the one to the north contained mostly carefully arranged long bones but the bones in upper layer, which seemed to have been laid in the same reburial, were tossed in along with a dog skull, horse leg bone, cattle rib and fragments of glass. The charnel pit to the south had been dug into an earlier west-east aligned stone-lined grave and had been disturbed by later drainage works. In that pit the bones were more varied and in general more fragmentary.

Trench 1: Excavation Report

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Trench 1 surrounded the Chapel and extended approximately 1m from the standing walls. It was, at first, flush with the north and south buttresses and extended less than 1m beyond the four corner buttresses, but in the final weeks of the excavation the trench was extended about half a metre out from the two central buttresses. Trench 1 was dug to discover and investigate any evidence for earlier structures, and to try to determine if these represented an earlier chapel expected, to meet the requirements of a leper hospital, to have existed on the site.

The uppermost 0.15-0.3m of ground surface was removed using a small mechanical digger. With some variations, much of this consisted of topsoil, rough vegetation and drainage pebbles (See sketch of Chapel ground-plan and Context Checklist for (1000) 'removed by digger'.)

The six buttresses divided Trench 1 into 6 sectors A-F - beginning with A east of the NW buttress - which were dug individually.

Trench 1 Sector A

Summary

This was a metre-wide strip along the north side of the chapel, between the central northern buttress and the doorway at the western end. After removing the topsoil and layers of rubble we found stone foundations built approximately 0.5 m out from the current north wall and on a slightly different alignment; because they run under the buttress and the chapel walls, we suggest that they may be part of the first chapel to be built on this spot. Medieval Oxford ware pottery (1075 -1400) dominated the collection from the fill of the trench dug to construct the present Chapel.

Sector A: The contexts

Sector A, centred on (16, 19.1), extended approximately 2.5 m west from the central buttress on the northern wall. This was just east of the area around the modern drain, in turn east of the door, where the ground was too disturbed to provide meaningful analysis.

Layer (1000)

Removal of the upper 0.25 m of (1000)/A by the digger revealed a course of masonry running east-west approx. 0.5-0.6 m from the Chapel's north wall. These stones are on a slightly different alignment from the extant wall, being closer to a true east-west direction. A roughly circular darker area was apparent to the west of the buttress. There was an area of damper soil closer to the drain.

Removal of layer (1000) proceeded using a trowel. This was mid-brownish yellow sandy silt with lenses more rich in sand and clay, degraded mortar and drainage grit. Inclusions of limestone rubble were notable (see Fig. 1), especially towards the drain, with a few broken slabs up to 0.3 m long. Bulk finds were scant, including clay pipe fragments, pottery sherds and animal bones.

Cut [1012] and Fill (1013)

As (1000) was removed, the darker circular patch west of the buttress became more pronounced. This was cut [1012], filled by (1013). The feature was completely excavated. Centred on (16.5, 19.3), the cut had an oval/sub-circular cross section, its longer SE-NW diameter being 0.2 m. Steeply sided to the NE, it shelved more gently to a circular base on the NW side. It was truncated, its original depth being in excess of 0.1 m. On excavation, it became clear that the original cut went through (1000) into (1014). The fill (1013) was mid-dark grey-brown sandy silt with some charcoal and sub-angular limestone fragments. Cut [1012] is similar in size and position to another two in Sector B. It is suggested that these were for scaffolding associated with reconstruction of the roof following damage during the Civil War.



Figure 1 Post-hole for scaffolding in Sector A, following removal of fill (1013) from cut [1012]; also showing limestone rubble inclusions of (1000)/ (1014) in foreground.

Layer (1014)

After about 0.27 m of (1000) had been removed, the colour and composition of the soil gradually changed to reveal layer (1014) which was greyer, loose, sandy silt, the main inclusions again being limestone rubble which in this context increased from 15% up to 30% at its lower limit. This context was noticeably drier towards the west. The diffuse nature of the boundary between (1000) and (1014) was such that the depth to which (1014) covered the earlier masonry features was not clear. It was also clear that parts of (1014), especially over the masonry courses, had been disturbed by later reconfiguration and repair of the 14th c. chapel, and elsewhere by drainage work.

Layer (1014) was first dug in an approx. 1 x 1 m square (see Fig. 1), but was subsequently extended westwards towards the drain, exposing the edge of the masonry courses (see [1036]). The east-west extent was almost 3 m. Finds were scant and included a small red glass bead, and a fragment of early mediaeval pottery. The limestone rubble in this layer included several wedge-shaped stones, up to 0.2 m (longest dimension) and 0.05-0.1 m thick. Many seemed set point up in the context in short rows. Patches of degraded mortar adhering to the stones suggested a purposeful design. However, as (1014) was excavated, this idea was discarded and these stones were interpreted as small wedge-shaped infillers that had fallen from earlier upstanding masonry, from which larger blocks of dressed stone could have been reused (Fig. 3).

Layer (1014), max depth 0.1 m, is interpreted as the backfill of an original construction or foundation trench, although whether for the earlier chapel or the 14th c. building is unclear. It may have served the same purpose for both building campaigns.

Layer (1021)

This was a friable mid-yellowish brown mixture of decayed mortar (60%) with rubble and gravel that appeared in two areas of the sector: in the SE corner between the buttress and the north wall of the chapel, as an apparent untidy 'dump' (17.1, 19.2); and against the west face of the northern buttress, below the current ground level (17.2, 19.8), see Fig. 2. This layer was hard to trowel which hampered resolution of its stratigraphy. Removal was effected using a mini-mattock.

As shown in section 1.7, layer (1021) can be interpreted as having been a later application patching the current buttress, with excess material being dumped here and in the SE corner. Its chronological relationship with the scaffolding post-hole is unclear.

Layer (1022)

This context lay beneath (1014), to the north of the masonry courses. Its boundary with (1014) was diffuse, but it was distinguishable, being coarser silty sand, and more yellow-brown. Limestone rubble inclusions were fewer (5-10%). However, towards the west, this became more disturbed and excavation did not proceed beyond the modern drain. Adjacent to the northern buttress, there is also considerable disturbance and the context contains patches of mortar that resemble (1021). Layer (1022) is thought to be an earlier backfill of a foundation trench. It was excavated to a depth of approx. 200 mm to clarify the nature of the masonry courses [1036].



Figure 2 Showing the two patches of reddish decayed mortar (1021). The large flag at the centre belongs to the upper course of [1036], the edge of which seems to curve to the right.

Structure [1036]

Structure [1036] consisted of several courses of masonry running beneath the extant Chapel walls and northern buttress. Its alignment was approx. east-west, being 5-10 deg. further NW of the current chapel walls. The line of [1036] clearly runs into Sector B, where its equivalent context is [1037]. Structure [1036] emerged as the overlying contexts were removed. Its upper course was first detected north of the Chapel's north wall during mechanical digging of the topsoil. Removal of (1000) and some of (1014) from above the upper course showed that it had been disturbed. The masonry that was gradually revealed was stepped in profile, the upper layer of stones having an oblique, almost curved, edge which was 0.15 m from the north wall to the west, and a maximum of 0.3 m where it met the later mortar dump (1021). Later analysis suggested that this was because some of the upper course of [1036] had been lost during rebuilding of the chapel, or when scaffolding was erected to repair the roof after the Civil War damage. This was a likely source of the limestone rubble and wedge-shaped infillers found in (1014) and (1022).

As (1014) was excavated out and pulled back westwards, the edge of [1036] became more and more clear, being approx. 0.45 m out from the north wall. As (1014) was replaced by (1022), this edge persisted and the minimum depth of the masonry courses was the limit of the excavation, i.e. >0.28 m. However, the stones were not neatly vertical but were in three steps of one or two courses each, each being further out northwards than one above, and in many places the lowest parts of the stones of an upper course were recessed relative to the edge of the one below. This made drawing elevation S102 difficult.



Figure 3 Phase 2 of [1036] emerges from (1014), centre right. Small upright wedge-shaped infillers can be seen in the unexcavated context.

Structure [1036] consists of courses of limestone building stones in 2 or 3 phases. There are three types of limestone represented here: yellowish, fine-grained; grey, shelly; and a few flags that are a darker grey. The bonding is a degraded gritty mid-brown mortar. Courses are random, with stones ranging from 0.25 to 0.1 m wide and long, and 0.1 to 0.05 m high. The faces are rough worked.

The three steps described above were interpreted as being 3 separate construction phases (see sketch on context sheet and Plan 1.7), although Phase 3 may be an upper course of Phase 2.



Figure 4 The three steps of [1036], looking west, north chapel wall on the left. In the right foreground are examples of the wedge-shaped infillers.

Phase 1 (the lowest): Two courses were visible, with a maximum total height of 0.08 m above the limit of excavation. In places to the east of the exposed section, only one course was visible. Where visible, the lower course consisted of fairly regularly sized stones, approx. 0.05 m high and 0.2-0.07 m long. The upper course was more irregularly sized, and also contained some of the wedge-shaped infillers noted previously. A horizontal step back of c. 0.16 m to the south separated this from Phase 2.

Phase 2 consisted of two courses with a total height of approx. 0.13 m. Here the stones were more squared and, in general, more regular than in the phase below, and the size range was tighter (0.2-0.1 m long), suggesting greater care in their finishing and fitting. In the eastern part of the section, the upper course was missing, and there was an area of exposed soil c. 0.4 m wide and 0.15 m deep. A horizontal step back of c. 0.24 m to the south separated this phase from Phase 3.

Phase 3 consisted of one course of stones c. 0.07 m high. Its edge in plan was roughly curved, as noted during excavation and removal of (1000) and (1014) (see Plan 1.7). The three flags covering the vertical area of soil noted

above were particularly large (up to 0.2 m long), and the stones in this phase were generally larger than those below (0.25-0.15 m long), with a greater number of the more yellow variety than in the lower courses. The larger flags on the east of the structure were associated with the degraded mortar (1021). Above this phase was the north wall of the current chapel, following the slightly different alignment described above.



Figure 5 North-facing section showing the phases of [1036]: Phase 1 (lowest), 2 courses; Phase 2 (middle), 2 courses; Phase 3 (upper, slightly recessed), one course of larger flags.

Phase 3 of [1036] runs under the northern buttress, as well as the north wall of the current chapel.

Beneath the later buttress are rough-worked limestone flags that may represent earlier buttressing (Section 101, west facing). The masonry here is particularly obscured by degraded mortar and later grey mortar.



Figure 6 Eastern area of Sector A, showing the three phases of [1036] adjacent to the northern buttress. Note the area of soil below the three large flags of Phase 3 (centre left) where the upper course of Phase 2 has been lost.

Drawings: Section 102; Plan 1.7

Trench 1 Sector B

Summary

East of the central buttress more of the early structure was discovered as well as the remains of a buttress footing which ran over the earliest wall but under the existing buttress. The early west-east walling had also been altered perhaps to allow the creation of a new doorway into the Chapel just east of the central buttress. A charnel pit, which contained 17th century pottery, was also excavated. The pit contained human bone, especially long bones, but also a dog skull and other animal bones.

Sector B: The Contexts

Sector B, centred on (21, 19.6) extends from the north-east buttress west to the central northern buttress (c. 5.10 m), and north to approx. 1 m from the Chapel wall and a pebbly path to the north. The area comprises firm, compacted topsoil with path pebbles/drainage gravel. In wet weather water, surface water and below-ground seepage running downhill from the north/north east, collects against the north wall of the chapel, creating an on-going damp problem.

Layer (1000) Digger

About 0.15m was removed using the small mechanical digger. Below the immediate more porous surface material substantial stones/flagstones were soon evident and excavation continued by hand. This context was generally friable, mid brownish-yellow, with marked variations. Nearer the northern edge, by the path, it was more gritty and sandy, whereas on its southern side adjacent to the chapel wall it was wetter and more clay-rich, especially towards its western extent and towards the northern buttress and its angle with the chapel wall.



Figure 7 Structure [1045] to W of existing N chapel buttress appearing. Patch of darker earth to SW of [1045] later to reveal posthole fill (1003)/cut [1005]. All figures looking south

Figure 8 Structure [1037] appearing to E next to chapel wall. Dark earth still visible to W next to [1045]



Figure 9 Moving E, more of [1037] becoming evident



Figure 10 Structure [1044] becoming visible to W of NE chapel buttress

Layer (1000) – continuation by hand of (1000) Digger after stone structures revealed at 0.15+m depth

Removal of a layer of (1000) - loose rubble and mid brownish-yellow sandy silty with clay lenses - clearly revealed some substantial flagstones at 0.25m down in the areas adjacent to the north buttress structure [1045], and the north-east buttress structure [1044]. In between centred on (2.14, 19.4), what appears to be a width of less substantial stone masonry, structure [1037] became evident; although the stones of [1037] gave way to claggy earth to the west before meeting [1045]. Also revealed were two sub-circular patches of darker earth (c.0.2-0.3m diam), between the NE buttress and the chapel wall, and between the N buttress and the chapel wall, this latter feature being cut [1005] and fill (1003), see below.

Figure 11 Substantial flagstones of [1045] revealed in W at foot of N buttress. To E, stone course of [1037] becoming clear: note the earth gap in between; [1045] runs under the chapel N wall and buttress.



The main inclusions of (1000) were limestone rubble (c.15%) (0.25-0.12 m, with a few flags being 0.3-0.2 m); shell (<1%), charcoal (<1%) and a few nails, glass sherds, clay pipe bits, bone fragments and glazed pottery. The maximum depth of (1000) was 0.35 m. This context was interpreted as a disturbed layer of topsoil and backfill of limestone rubble, with path pebbling and drainage grit.



Figure 12 Further E, upper stone course of [1037] becoming clearly visible, the loose rubble layer having been removed by hand: the 2 lower courses of the chapel N wall have been revealed and [1037] runs under.

Figure 13 Large flagstones of [1044] visible to E (left of photo) near angle of chapel wall with NE buttress; note post hole semi-circular cut.





Figure 14 Eastern end of [1044] at foot of NE buttress; substantial flagstones becoming visible: south round buttress NE corner flagstones disappear: major disturbance/tumble in this area.

The revealed structures [1044] and [1045] were discovered to run under the NE and N chapel buttresses respectively and, similarly to [1037], to run cleanly under the chapel north wall. This suggested earlier building phase/s rather than purpose-built foundations of the standing chapel: so perhaps the buttressing and foundations of earlier chapel/chapels? What was clear was that this masonry prevented the drainage of excess water build-up next to the chapel N wall, especially to the west. The two round dark areas are possibly scaffolding post holes from chapel rebuilding/renovation stage. See (1003) and [1005] below.



Figure 15 Looking W along Sector B: [1044] in foreground; [1037] in centre of context: [1045] visible at foot of N buttress

Fill (1003)

This was the fill of cut [1005], friable-loose mid-brown sandy silt (30% coarse sand). There were limestone rubble inclusions (10%), CBM (3%), some with adhering decomposed mortar, pea grit and modern domestic pottery fragments (>1%).

Cut [1005]

This had a sub-ovate profile (0.35 m N-S, 0.27 m (E-W), 0.1 m deep), centred on (18.7, 19.2). The cut is truncated, with steep sides, a flat base, and a sharp break at the top. Filled by (1003), this was interpreted as a post-hole, possible for scaffolding associated with the post-Civil War reconstruction and repair. The original cut went through (1000) and (1008). This was similar to the post hole in Sector A on the other side of the northern buttress, and it is assumed that the sub-circular patch of darker earth close to the north-eastern buttress is another example of disturbance caused by 17th century building work.



Figure 16 Cut [1005], fill (1003) removed: flagstones of [1045] to east of north buttress clearly visible.

Layer (1006)

Layer under (1000) and over (1033/1030), between the northern edge of the Sector and the earlier masonry courses [1037] revealed closer to the chapel wall; 1.05 m E-W and 0.3 m deep. The upper 0.2 m were the same as (1008), and the lower 0.1 m are the same as (1020), and similar to (1025) and (1026). Friable/loose yellow brown sandy (60%) silt, with 15-20% limestone inclusions (0.05-0.15 m), including a few larger flags. Excavating this layer down, a large kerb (0.33 m) of [1037] appears to jut out of the masonry courses, similar to the stepped profile in [1036], Sector A.

In the centre of the context, between the path and the earlier courses, there was an E-W line of upright wedge-shaped stones. These were thought to be tumbled infillers from an earlier masonry wall that had collapsed into original construction trench, of which (1006) is a later layer of backfill. Likewise, at the eastern end of this sector, an apparent setting of upright stone slabs (0.1-0.2 m) is now also thought to be remnants of a collapsed wall.



Figure 17 Wedge-shaped infillers within (1006).

Small finds were few, including fragments of brown, modern glass (>1%), a few bone fragments and oyster shells (close to western extent). Also found was a large echinoderm fossil (0.1 m diam. max.) possibly placed. There was also a gryphea fossil set into what appears to be the NW corner edge of [1037], defining the gap in the earlier course that runs a further 0.6 m westwards.

Layer (1008)

This L-shaped context centred on (19.3, 19.6) under (1000) comprised three distinct areas: eastern, western and southern. (1008) firstly continued Sector B back to the west towards the N buttress as a continuation of (1006), but only to a depth of 0.2m; right-angled south to meet the chapel wall. The first eastern section was very similar to (1006), friable, mid yellowish brown sandy silt; finds increased, especially beyond the gryphea fossil. These included fragments of tile, clay pipe, glass and bone fragments, domestic china and a piece of lead strip, and a piece of worked stone (SF 38).

Figure 18 During removal of upper 0.2 m of (1008) showing the gap in [1037] above and right (west) of the string. The gryphea fossil is the bright white round object left of centre, and the worked stone (SF 38) is emerging on the extreme left just below the string





Figure 19 During removal of (1008) to the right (West) and after removal of (1006) to the left (east): the masonry courses of [1037] are becoming clearer: it becomes apparent that the courses are at a slightly different alignment E-W to the chapel north wall.



The edge of earlier masonry [1037] to the south of the gryphea. But it becomes more apparent that, after the fossil and running into the western section, at least one upper course of masonry has been removed or disturbed; the soil to the south is darker, damper and claggier. But the masonry courses seem to continue at lower level. In the western section closer to the buttress the context texture changes. It is less gritty and includes more bulk finds; lumps of plaster, oyster shell, pottery, roof and floor tiles and an increasing number of large bone fragments. This suggests the disturbed upper fill of a pit: perhaps a charnel pit. The dimensions of the combined E and W sections were: 2.1m (E-W) x 0.5m (N-S)

Figure 20 To north of [1037] and south of path, E and W sections of layer (1008) extending trench from (1006) in foreground to [1045] in W at foot of N buttress



Figure 21 Western section of (1008) abutting [1045], before excavation of L-shaped southern section around posthole cut [1005]

Continuing southwards to the Chapel wall and bounded by [1045] to the west, the southern section (1m square), which is cut by post hole Cut [1005], is much wetter, looser, sandier with less rubble. Along the eastern edge of the context any evidence of the stone coursework of structure [1037] disappears. There was however a small find (SF 41): a Civil War musket ball close to west edge of [1005], again suggesting that [1005] may have been for scaffolding for the documented 17th century restoration of the chapel.

Layer (1020)



Centred on (18.8, 19.5) this context is under S and W sections of (1008) and cut by [1027] to the north. Its dimensions are 1.3m (N-S) x 0.6m (E-W along chapel wall) to 0.75m (E-W) at path edge to north. Its depth is 0.1m i.e. to the same depth as the bottom level of (1006). To the S by the chapel wall the 60% gritty/20% silt mid grey/brown earth is friable but sodden. To the N nearer the path, around the bone/pottery/tile clusters mentioned in (1008) the composition changes: to drier with pebbles (5%), rubble (10%), more pottery (1%), largish glass sherds, plaster (1%) and bits of animal/human bone.

Figure 22 Layer (1020) having been removed to S, the W end lower course of [1037] stonework is revealed. Context next to the chapel wall is very damp - darker earth colour in photo; note the semi-circular cut in the stone in the angle of the chapel wall and [1045]. To the N further evidence of bones as charnel pit is revealed (for which (1020) was disturbed top-fill. Pot handle can just be seen towards right-hand corner of photo lying diagonally SE-NW. The substantial flagstone courses of Structure [1045] are further revealed to W.

In the southern section of this context by the wall it is evident that a section of stonework course of [1037] has been removed. A great deal of surface water had percolated through and accumulated in the gap in the masonry in this area. A possible archway outline was visible in the stonework of the chapel wall above this area, suggesting that the stone course may have been removed to create a doorway. There is also evidence of a circular cut in one of the stone slabs in this area which might suggest a doorpost position. To the north of this context it became clear that this layer contained the top fill of a pit containing a jumble of animal/human bones, some embedded in rubble of tile, plaster, brick, and glass fragments.

Layer 1025

Centred on (19.7, 19.8) under E section of (1008), same as lower 0.1m of (1006) to E, this context was 1.2m (W-E) x 0.4m (N-S) x 0.1m deep. The layer comprised friable yellow brown silty sand (60%), gritty and damp to W; gritty but drier and more compacted to E with stone rubble (10%), chalk, brick/tile bits and only fragmentary bone. The removal of the rubble continued to reveal the masonry courses of [1037] and the stepped profile - mentioned in context (1006) and similar to the profile in [1036], Sector A. Similarly it also verified that the orientation of the courses of [1037] are a truer E-W than the north wall of the existing chapel - as noted in [1036] in Sector A. Further to W however the course of stones peter out/has been removed (see also (1020). The interpretation is that this layer is a continuation of the layers of backfill/rubble in a construction trench(s). Structures [1037], together with [1036] in Sector A could be interpreted as foundations of the same true E-W lying northern wall of an earlier (and perhaps original) chapel.

Fill (1026)

This was the fill of cut [1027]. Layer (1020) was seen to contain some of the top fill of this pit and even in context (1008)/southern section there were signs of its existence. It is centred at (18.8, 19.85) to a depth of c.0.5m at deepest. The fill was friable yellow/gritty silty sand with pea grit round outer south and east edges, in the NW some rubble and pottery (1%), glass sherds (>1%). Fe nails (>1%), shell and tile mortar (3%) i.e. composition similar to top fill noted in (1020) towards the NW. In the NW corner was found an earthenware pot handle, possibly medieval? Excavating deeper, round the increasingly revealed bone cluster (some animal at first, then human) to N by path, the



earth is darker mid brown, light and friable with fewer bits of rubble.

Figure 23 Upper level of (1026) has been removed revealing a jumble of bones within a pit contained between structures [1045] to W (right of photo) and [1037] to S (top). To E (left) the profile is slowly appearing and to N (bottom) it is clear that the pit continues under the path. Dog upper jaw/other animal bone to E (left) with human bones to W (right).

Figure 24 Dog's skull in fill (1026) lying over human Pelvis

Under the rubble layer was a fairly substantial Charnel pit (with a top layer of randomly thrown together animal and human bones, including a well preserved dog's skull with some teeth intact).



Figure 25 Position of Pit: Chapel wall to South (left), path to North (right); charnel pit (1026)/[1027] to N of W end of [1037], to W of excavated layer (1025); substantial dressed stone courses of [1045] to W (top of picture).

Figure 26 Second level of (1026) has been removed. Dog's skull has been lifted (revealing a human right pelvis), wrapped in foil and bagged, as have other animal and human bones.



Figure 27 Lower level of Fill (1026) - human bones in path bank

At deeper level in the damper earth there are well preserved intact human bones (most fairly substantial), which although are not articulated, increasingly at lower level have been purposefully lain neatly E-W. The layers of human bone are seen to continue into the N 'wall' of cut [1027] and continue under the chapel path.



Figure 28 E-W lying human bones in Fill (1026), including more hidden bones continuing N into the bank of the path (see photos in [1027] below), have been well preserved at lower level in the damper earth.

Until dating of the bones determines their age, this layer might be interpreted in various ways: the reburial of Civil War victims, or possibly earlier hospital or almshouse inmates, in a purposeful position under the chapel roof overhang to benefit from the 'holy' water washing off the roof. Good sized bones, they appear to be those of tall, substantial individuals. While washing the bones at a later date it was noticed that some of the leg bones have circular 2mm diam bore holes through their joint ends and might therefore have come from a medical skeleton, owned perhaps by surgeon Samuel Glass, whose laboratory was in St. Bartholomew's House (now Bartlemas Farmhouse), which he rented from Oriell College and where he invented his 'famed Milk of Magnesia' in 1760s.

Cut/Pit [1027] Centred on (18.8, 19.8)

As the north of (1020) was removed, the marked difference in the context make-up became more apparent. Clear signs of the charnel pit and its contents emerged. The cut was semi-circular; the sides near vertical with a flat base. The southern edge was directly in front of the area of missing upper courses in the structural remains [1037] below the existing chapel. Its western edge was hard up against the revealed courses of substantial flagstones of the structure [1045] below the N buttress. Its northern extremity was not fully established as the excavation stopped at the path edge. Its dimensions were 0.67m W-E x 0.4m N-S x 0.2+m deep (0.54m from top of path to base of pit).

Layers (1030) and (1033) are the same

Centred on (22.5, 19.9), under (1000), layer (1033) began as a 1m slot to E of, but not directly next to, (1006), It was later extended north-eastwards round NE buttress to a depth of c.0.4m. Approx 0.4m wide, the context was defined to the south by the exposed north facing masonry courses of [1037] and those of [1044] as it goes round the NE buttress. The chapel path defines its northern edge. Its dimensions are c. 2m E-W x 0.4m but it was later further extended westwards through (1006) to (1025), (1026)/[1027] to a depth of c.0.2m to meet [1045]. The upper layer is friable, mid-dark damp yellowish brown, very gritty sandy silt (20% sand/coarse sand), with very poorly sorted limestone rubble (40-50%), grit (20%), limestone fragments, tile and limestone flecks. To W it becomes increasingly wetter as it meets the natural clay. Other inclusions are oyster shell (>1%) and Fe nail (<1%). The structural sequence of the masonry structure [1037] under the chapel was further revealed. Its jutting flagstone lower course (as first revealed in (1006)) was seen to continue along the majority of its E-W lying central section (similar to (1036) in Sector A); further evidence that they make up two adjoining lengths of the same original wall.



Figure 29 layer (1033) (continuing eastwards from E of (1006)), lies to N of [1037] and to S of path and continues round NE buttress and [1044] into Sector A. The wet clay base of trench to W changes to drier grittier soil rounding buttress to NE and tumble of [1044]. Note possible wall footings in trench as it rounds NE corner. Further jutting substantial lower course stones of [1037] are increasingly revealed westwards.

There was greater disturbance/tumble of the structures [1037] and [1044] in the E/NE section of (1033); rounding the NE buttress corner the clay at lower level gives way to a more compacted rubble mix. And at the corner of the NE buttress there is some evidence of a wall footing and possible floor tiling running N under path.



Figure 30 On removal of (1033) further evidence of the jutting lower stones course of [1037] continues to appear; note disturbed/tumble of [1044] to E (left of photo)

The rubble layer was interpreted as backfill rubble (with some stone tumble) next to the north wall and buttress of an earlier chapel/ previous chapel builds. For the three (at least) different phases of chapel build see Structures [1037], [1044] and [1045].



Figure 31 layer (1033) fully excavated to W towards N buttress. Slabs of [1044] clearly visible in foreground to S (left of photo). [1037] with clearly visible lower course of jutting stones (footings) running W towards [1045] whose substantial flag courses can be seen clearly at the foot of N buttress in W (top of photo).

Structure [1037]

Structure [1037] centred on (21.4, 19.4) consists of 2-4 random courses of rough edged/un-worked limestone slabs with some smaller stone fossil infill (see [1037] context list for sizes), bonded with gritty, sandy mortar. It has larger substantial footings (jutting proud to N by c. 0.1m) which were evident only in the middle section. The exposed structure's average height is 0.25m; in length along its northern edge it is 4.9m; with an average depth back to the existing chapel north wall of 0.65m. Positioned between the NE and N facing chapel buttress, its orientation is true E-W; see also [1036], Sector A - its equivalent context.



Figure 32 Looking E towards NE buttress, the north-facing edge of the stone courses of [1037] can be clearly seen. See also above Fig. 26 (looking W) and Fig. 25 (footings). The substantial jutting 'footings' are visible to E before [1037] is seen to run under [1044]; also the section of the top course of [1037] missing/ removed further to W, with lower courses revealed (bottom right hand corner) as [1037] continues W.

[1037]'s condition is patchy; to the west, (before it meets [1045]) a substantial width of the top course of stonework was missing/ removed, and to the east (before it meets [1044]) its courses were disturbed/have tumbled. What is evident however is that [1037] runs under the existing chapel north wall, and also, at lower level, under the substantially larger flagstone courses of structure [1045] to the West and those of structure [1044] to the East. Then, having run under [1045] and the central N chapel buttress, [1037] reappears further west as [1036] in Sector A; similarly, having run under [1044] and the NE chapel buttress, [1037] seems to right-angle southwards before reappearing running N-S as [1038] in Sector C. (See Fig. 30).



Figure 33 Stone courses of [1037] are seen to run under more substantial flags of [1044] which in turn run under NE buttress.

What can be deduced is that [1037] was part of an earlier structure, built on a true E-W alignment. What is less clear is how much earlier. Could it be the north wall of an original stone, rectangular, buttresses-less 12th century chapel built c. 1126 by Henry 1 as part of the St. Bartholomew's Leper Hospital foundation along with a dwelling(s) for the housed brethren and the chaplain's/warden's house? It has been surmised that the original might have been of wood, but this seems unlikely as it was a royal foundation, and according to the antiquarian Antony Wood, built from the 'overplus' from Henry 1's stone Beaumont Palace.

This interpretation is backed up by the other revealed separate (not tied-in) structures (buttresses foundations) built directly over [1037] which themselves run independently under the existing chapel: [1044] to the E and [1045] to the W. It is possible that the substantial buttresses might be vestiges of Oriel College's 14th century chapel replacement, built after their acquisition of the Hospital Foundation land and buildings in 1348/9. The existing chapel could therefore be the Oriel 17th century part rebuild, part thorough restoration, undertaken after the Civil War (the 14th century chapel having been 'ruinated almost to the ground': A. Wood). The north window (see Fig. 10), however, is thought to be original 14th century.

Structure [1044]

Structure [1044], oriented NE-SW, under (1000), was centred on (23.0, 19.5); its dimensions were 2.42m on its NE-SW edge x 0.56m at its widest (measured from edge into buttress angle); its height varied between 0.1-c.0.5ms. It seems to continue under the chapel NE buttress and the chapel north wall at the NE end and is clearly over [1037].

In a less than well preserved state, [1044] comprised limestone slabs, including some very substantial, worked fair-faced stone, and some rougher un-worked stone, some of which has been disturbed and tumbled particularly at the NE corner. The bonding mix varies from orange sandy (fine) mortar to rougher, grittier in places. The number of courses (possibly 2) was difficult to establish as there had been considerable disturbance and tumble in E and W. There seemed to be a semicircular cut (posthole?) in one of its angled slabs to the west near the angle formed by the NE buttress and chapel N wall, similar to cut as seen in (1020) near N buttress angle with chapel wall.



Figure 34 Flags of [1044] can be seen to NW of NE chapel buttress; the state of this structure is patchy due to disturbance/tumble particularly to the NE corner. However, the flags of [1044] can be seen to run under the NE buttress (and chapel wall at angle with buttress) and over the E end of [1037; note posthole cut/tumble in flag near angle of buttress and wall.

The interpretation is that, with Structure [1045] to W, it is evidence of an earlier build than the existing chapel, but later than [1037]. Thus throwing up the possibility that [1044] is the NE buttress/ buttress foundation of Oriel's 14th century build, which replaced the plainer, smaller, rectangular, buttress-less 12th century original stone chapel [1037]. Certainly the stone used in [1044] is visibly different from that used in [1037] being for the most part more substantial and worked; the bonding mortar also differs. It is possible that Adam de Brome (the Warden of the Hospice and the architect of its acquisition by his newly founded Oriel College) wanted to make a grand statement, and so built a larger buttressed replacement using the best materials at his disposal: [1037] perhaps having been built from the left over material from Beaumont Palace.

Certainly, as particularly clearly revealed in [1045], the existing chapel buttresses are in a different alignment to those of [1044] and [1045]. Round the NE corner of the existing chapel NE buttress, it looks as if structure [1044] has been packed out with rough stone and used as the foundation for the later standing NE buttress (although this is made difficult to determine exactly because of the tumble in the area. It is much more clearly seen to the W of structure [1045]. The existing chapel NE and N buttresses can also be seen to have been refaced at their base with chamfered worked stone at some later date still – probably post 17th century.



Figure 35 Rounding the NE buttress minimal signs of [1044] in Sector C but lower structure [1037], having right-angled southwards under buttress and [1044], reappears running N-S as [1038] (see left top of photo). At the NE end of the NE buttress it is difficult to discern if, in this area, the base on which the buttress is sitting are part of [1044]. Noting the less substantial stone used here it is more probable that these stones formed part of later buttress bolstering (similar to rubble to W of N buttress).

Structure [1045]



Structure [1045], oriented c. N-S, under (1000), is centred on (18.25, 19.5); its dimensions are 1m N-S x 0.49m E-W x 0.36m in height. It is clearly seen to be lying **over** structure [1037] and its substantial stone slabs extend **under** both the north chapel wall to S and the existing N buttress to W. (See related context [1044]). Well preserved, it comprises c.3 fairly regular courses of substantial, dressed, fair-faced limestone irregular slabs bonded with orange sandy fine mortar on the top layers, with greyer mortar used in the lower courses.

***Figure 36** The flagstone courses of [1045] can be seen E of the N buttress base. [1045] runs under the buttress to W and the chapel wall to S; the W end of the lower structure [1037] (minus its top stonework course at this point) runs W under [1045] and continues westwards in Sector A as [1036] (just visible to). The lower level of the existing chapel N buttress appears to have been 'dressed'/ repaired with chamfered stone – clearly different to the upper courses where the stone used ties in with the chapel stonework (similar to the NE buttress).*

On trowelling back the S edge of the abutting chapel path, it becomes clear that the most substantial visible top-course flagstone/slab of [1045], situated at its NW corner (its N edge measuring 0.79m), runs under three-quarters of the width of the N buttress which has been built upon it. However the N edge of the [1045] flagstone is not in exact alignment with the N end of the existing buttress; the flag is set back to S by c. 0.07m, so the later existing buttress slightly overhangs [1045] to N. Also the top course of [1045] has been added to/ packed out in the west with rough-hewn un-worked stone, under the W side of the existing later N buttress, to form foundations for this later buttress. In Sector A layer (1021) there is evidence of further strengthening of these packed-out foundations to W of the N buttress.



***Figure 37** Large flagstone of [1045] runs W under two-thirds the width of N buttress. The buttress overhangs [1045] to N by 0.07m. It has been packed out to W of buttress to form a base for the later built buttress.*

The interpretation (similar to that noted in [1044], its related context) is that this earlier structure could be the central north buttress of the substantial 14th century Oriel Chapel replacement chapel, sitting over [1037] the earlier original 12th century rectangular buttress-less model. The existing chapel is thought to be a substantial restoration, almost rebuild in places of the 14th century chapel which was substantially damaged, practically razed to the ground in some places according to A. Wood, by Cromwell's troops during the Civil War.