

Fig. 1: excavations at the St Bartholomew's Medical College site, looking south across The Green.

# The London Charterhouse

THIS REPORT discusses the history of the London Charterhouse and summarises the results of excavations of its remains, particularly of recent excavations by the Museum of London's Department of Greater London Archaeology, which have revealed five of the Carthusian cells, as well as shedding light on the post-Dissolution use of the site.

#### The Carthusian Monastery

In 1348/9 two parcels of land in the fields to the north of St Bartholomew's Priory were set aside for the burial of victims of the Black Death, the City cemeteries having become full. The lands lay south of the Priory of St John of Jerusalem and between Goswell Road to the east and the River Fleet to the west. The first was purchased from the Priory of St John by Ralph de Stratford, Bishop of London. He acquired three acres of land – which lay to the north of modern day Clerkenwell Road – upon which he built the "Pardon Chapel". This remained in use until after the

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Dissolution. The second parcel of land was leased from St Bartholomew's by Sir Walter Manny, a friend of the Black Prince and a knight of some distinction. This land, known as the Spital Croft, lies approximately under present day Charterhouse Square and the Charterhouse itself<sup>1</sup>.

Some years later the new Bishop of London, Michael de Northburgh, suggested to Manny that a Carthusian monastery be founded on the site. The Bishop left £2000 in his will to found the monastery but it was nine years before the arrangements were made by Manny and Dom Luscote, the Prior of Hinton Charterhouse, Somerset. In 1370 the General Chapter at La Grande Chartreuse confirmed the foundation, making Luscote the Rector. The house was dedicated to the Salutation of the Mother of God and was a double foundation for 24 Carthusian monks, although by the Dissolution it may have had as many as  $30^2$ .

The Carthusian order was founded by St Bruno in 1084 and its first house was built at Chartreuse in the French Alps. It

2. D. Knowles and W. Grimes Charterhouse (1954) 21.

1. G. Davies Charterhouse in London (1921) 34-53.

originally comprised seven wooden huts around a chapel but, over time, became a series of stone-built cells around a large cloister<sup>3</sup>. The principles of the Carthusian order were of seclusion and quiet. Each monk was assigned his own cell in which he spent most of his time, only venturing out for services in the church and meals in the refectory on Sundays and feast days. Speech was only permitted after the meals in the refectory or on the three-hour walk, taken once a week. Each cell was assigned a letter which was the first letter of a sentence from a psalm or verse.

South-west of the Great Cloister were the quarters of the lay brethren or *conversi* which at London were on the west side of the Little Cloister built in 1436. They took vows similar to those of the monks but had greater freedom: for instance they were allowed out of the monastery. The number of *conversi* was restricted to 16. There were also a number of servants, or *donati* attached to the monastery who did not take any vows. The first English house of the Carthusian order was founded at Witham in Somerset in 1178. The austerity of the order undoubtedly contributed to its lack of foundations: there were only 9 English houses in total, the last of which was at Sheen in 1414<sup>4</sup>.

In 1371 work began on the London buildings under the supervision of Henry Yevele, the master mason and architect responsible for the nave at Westminster Abbey and the roof of Westminster Hall. The cells around the Great Cloister were built piecemeal over a considerable period of time: the land for the east side was not purchased from the Priory of St John until 1377. The frater and chapter house were not completed until 1414<sup>5</sup>.

In 1431 a water supply was brought into the cloister from springs to the north through lead and elmwood pipes. A map shows the water brought to a conduit in the centre of the Great Cloister and then fed out to the four sides of the cloister. The water was distributed on the southern side by a complex system of cocks and pipes. The cells were fed by a pipe that ran through the cell gardens behind each cell building.

In the 16th century three new cells were added to the south-east of the Great Cloister and a new cell was constructed for the  $Prior^{6}$ .

#### Excavations from 1947-1989

The earliest archaeological investigation within the precinct of the London Charterhouse was carried out between 1947 and 1949 by the Roman and Medieval London Excavation Council under W. F. Grimes<sup>7</sup>. The site had suffered extensive damage in German air raids of May 1941, and the opportunity for excavation arose in the course of repair and restoration work. Grimes concentrated his trenches within

3. Op cit fn 2, 75-82.

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5. Op cit fn 2, 51-67.

6. List of sites mentioned in the text:

1) 52-54 St John St.	JOH88	DGLA
2) 94-100 St John St.	STJ88 & STJ89	DGLA
3) 10-13 Carthusian St.	CTW86	DUA
4) 2-5 Carthusian St.	CAR90	DGLA
5) 7-8 Carthusian St.	CAR89	DGLA

and around the standing buildings on the north side of Charterhouse Square, and confirmed the original ground plan of the monastic church and its attendant chapels, the Great and Little Cloisters, and an area of monks' burials. The tomb of the founder was located and opened at the foot of the High Altar, and was found to contain a lead *bulla* of Clement VI (1342-52). Work in 1949 on the site of the new student accommodation (still standing as College Hall) led to the discovery of the internal north-east angle of the Great Cloister and enabled Grimes to describe the complex as a rectangle 340ft (103.50m) east-west by 300ft (91.40m) north-south. Drainage trenches dug across the cloister garth at the same time did not reveal any significant remains<sup>8</sup>.

Archaeological work since 1986 by the DGLA has uncovered evidence for occupation both within the monastic precinct and immediately around its boundary (Fig. 2)<sup>9</sup>. To the west, watching briefs at 52-54 and 94-100 St John Street in 1988-9 revealed lengths of the precinct wall at the rear of redevelopment sites. At 52-54, some 6.40m (21ft) of red brick wall was recorded with a height of over 1.70m (5ft 7in). Footings also appeared to be of brick, although it was not possible to expose their full extent. Chalk walls were found, presumably from tenements which lined the east side of St John Street by at least 1370<sup>10</sup>. At 94-100, over 17.00m (56ft) of red brick wall, forming the present back wall to that site, was found to rest on footings of mortared chalk. A short distance to the south, a length of the same wall in brick can be seen at the rear of Hat and Mitre Court. Footings of chalk and brick were recorded in a test pit in the yard of Charterhouse Mews in 1986, and may belong to boundary tenements in that area.

Around the south-east angle of the precinct, excavations and watching briefs on both sides of Carthusian Street (a historical access to the precinct) since 1986 have produced evidence for land use directly associated with the monastery. At 10-13 Carthusian Street, the Department of Urban Archaeology excavated extensive 13th-century deposits in 1986, including a large building with arched chalk and flint foundations, associated chalk-lined pits and a well incorporating re-used 15th/16th-century architectural fragments. Whilst no evidence for the precinct wall was found, it was felt that the layout of the excavated features reflected its alignment here. On the north side of the street, and within the precinct, test pit surveys at Nos. 2-5 and 7-8 produced evidence for gardens and pits of late medieval to Tudor date that must have lain just within the boundary wall.

Work was carried out on sites within the eastern part of the precinct in 1989-90. At Litton House, 27 Goswell Road, test pits produced evidence for post-medieval quarrying but no trace of the boundary wall. A short distance to the south,

6) 27 Goswell Rd. (Litton House)	LIT89	DGLA	
7) 7-21 Goswell Rd.	<b>GSW90</b>	DGLA	
8) 110-115 Aldersgate St. (Teziak House)	<b>TEZ89</b>	DGLA	
9) St. Bartholomews Medical College	MED89	DGLA	
10) St. Bartholomews Medical College	MED90	DGLA	
7. Op cit fn 2, 17-21.			
8. Op cit fn 2, 1-7.			

9. Op cit fn 1, 26-28.

10. Op cit fn 2, 18.



Fig. 2: location of excavations within the Charterhouse precinct.

an excavation in the basement of 19-21 Goswell Road in 1990 uncovered a much-truncated length of mortared chalk wall on the same alignment as the present street frontage. It has been provisionally identified as part of the monastic boundary. Two shallow linear cuts which may have been monastic garden boundaries or drainage features were also found.

Towards the centre of the precinct area, a trial excavation at Teziak House, 110-115 Aldersgate Street, in June 1988 showed the extensive survival of mortared chalk walls belonging to cell Y. Walls 0.90m (3ft) wide were found in association with chalk and mortar demolition horizons, and it was clear that survival of the monastic fabric was far greater here than at any other point within the cloister. Further archaeological work here is eagerly awaited.

The most recent work by the Museum within the precinct has concentrated on the deposits buried beneath the buildings of St Bartholomew's Medical College. Between July and September 1989, trenches to the north of the cloister garth produced evidence for low-level cultivation in the form of shallow cuts and layers, as well as larger-scale pitting. The latter activity, although not firmly datable, may relate to the construction of the monastery before this area was given over to the monks' orchard. A further area to the east of the cloister garth contained extensive evidence for the post-Dissolution re-use of the monastic lands, with rubbish pits, spreads of domestic refuse and a substantial masonry wall constructed from robbed medieval materials.

#### Excavations in 1990 – the monastic cells

The Museum returned to the College in August 1990 to carry out further trial work on a site straddling the northern arm of the Great Cloister. This led to a full excavation in December which produced evidence for five cells as well as post-Dissolution walling and rubbish pits. The evidence of these last two sites is described more fully below.

Only those areas to be destroyed by development were excavated: 48 holes, ranging from  $2m \times 2m$  (6<sup>1</sup>/<sub>2</sub>ft × 6<sup>1</sup>/<sub>2</sub>ft) to 4.5m × 4m (15ft × 13ft), were excavated or monitored as laid out by the contractors (Fig. 3). The letters assigned to the investigated cells were H, J, K, L and M (Fig. 4). Their founders and the approximate dates of their foundations are known<sup>11</sup>. Construction was probably started on all of them within ten or 15 years of the foundation of the Priory, and the similarity in their construction supports this view.

The first stage of construction was the digging of a large cut where the cell building and corridor (1) were to be sited. Against each edge of the cut was built a wall: to the south lay the cloister wall, to the north, east and west lay a wall dividing the cell from its garden. Between the two were dumped large quantities of brickearth interleaved with layers of construction material. The cloister alley was also filled with brickearth and construction debris. The external wall of the cloister arcade was not located in these excavations but a shallow robber trench found by Grimes on the east side marks its location<sup>12</sup>. It almost certainly lies on the same



Fig. 3: excavated medieval walls and robber cuts from the St Bartholomews Medical College site: MED 90.

line as the southern edge of the excavation area. The alley was approximately 9ft (2.75m) wide. The foundations of the cloister wall were made of squared blocks of chalk surmounted by a second stage of construction in chalk, ragstone and green sandstone. The walls surrounding the garden were simply laid in construction trenches and were built from chalk. The entire cell area measured about 16.50m (54ft) N-S by 16m (52ft) E-W, and the cell buildings measured about 7.5m (25ft) square.

The cell was entered by a door in the cloister wall which led into a lobby (2 and 3). Cell doors, or blocked cell doors, survived for cells B, T and V13 and possibly for cells C, D and Y. The lobby was a narrow room, parallel to the cloister, about 5.9m long by 0.60-0.95m wide. It was divided in two by a north-south aligned wall which ran the full length of the cell. It was probably floored mostly in tile, much of which had been robbed although evidence of tiles was found in cells K and L. Bricks, which were used elsewhere as edging for floors were found in cell J. A section through the lobby in cell L revealed a layer of red plaster in the demolition material which would certainly have come from a cell if not the lobby itself. In a robber cut to a wall in cell J were a number of pieces of plaster which had been written on: it is tempting to speculate that they may have been part of the psalm or verse by the cell door. There would have been a hatch in the cloister wall, probably at its east end, to allow food to be passed through to the monk by the lay brethren. The lobby gave access to a walkway along the inside of the cloister wall (Fig. 5; 1) and the main cell itself (4 and 5).

The main cell building was little investigated due to the nature of the excavation. However a north-south aligned wall sub-divided it into two roughly equal-sized rooms (4 and 5)  $4.2m \times 3m$  (14ft  $\times 10$ ft). There was, no doubt, access between the two. One side was sub-divided further still at Mount Grace<sup>14</sup>, but not enough was excavated to find evidence for this at London. The main dividing wall was built principally from ragstone, with some chalk and flint, and was faced with render. The floor it enclosed was laid in mortar in cell L, and cuts for timber joists were located in cell M. The function of these rooms is not clear but on the analogy of Mount Grace they may have comprised the bedroom, study and living room with workspace on the floor above<sup>15</sup>.

A door would have led north to a passage (6) along the edge of the garden behind the cell. This led to the latrine (8). The passage (6) was bounded by a wall with a chalk inner face and a ragstone outer face. It was c 0.41m (15in) wide and may have supported a timber superstructure. The passage was about 1.25m (4ft) wide and may have been at a lower level than the cell. A door may have led into the garden at its south end as at Mount Grace<sup>16</sup>. Little of the latrine was excavated, and disturbance to the north of the cells had destroyed much information. However no drain

13. Op cit fn 2, 66-67.

14. W. Hope 'Architectural History of Mount Grace Charterhouse' Yorks Archaeol Journal 18 (1905) 292.

15. Op cit fn 14, 293.

16. Op cit fn 14, 293.

has been discovered at the back of the cells and there is no evidence that, before the introduction of the supply in 1431, there was water to flush the latrines. It therefore seems likely that they were served by cess pits which were periodically cleaned. Slight evidence for this comes from the corner of an heavily robbed and disturbed chalk and ragstone wall to the north of cell K. The base of this wall lay more than 0.55m (22in) deeper than any other wall on the site.

Along the south wall of the cell garden, parallel to the cloister, lay a short corridor (1). This measured between 7.35m and 6.7m (24ft and 22ft) long and between 1.75m (6ft) and 1.45m (5ft) wide. It was designed as an area for the monk to walk in under cover since he would only have used the Great Cloister as access to and from the church and other buildings when permitted. The corridor was tiled in a yellow and black chequerboard pattern. An area  $2.3m \times 0.85m$  ( $7\frac{1}{2}$ ft  $\times$  3ft) was excavated in cell K (Fig. 6). The floors of many cells had been robbed but the tile impressions often remained in the mortar below. As with the passage to the latrine, the north wall to this corridor may have had a timber superstructure or perhaps an arcade. In cell M a brick threshold at least 0.63m (2ft) long was excavated at the east end of the passage leading into the garden.

A garden (7) surrounded the cell building on its north and west sides. On the north and east sides of the Great Cloister the cell occupied the right hand side of its garden, on the west side its left side. The garden was not necessarily cultivated although a monk could do so if he wished. Little evidence of cultivation was discovered. Possible evidence in the form of a trench 0.16m (6in) deep, filled with sand at the base, presumably for drainage, was found in cell J. Immediately to the north of the door in cell M lay a deep cut 1m (3ft) across filled with angular pieces of greensand and chalk. It was 1.72m (5ft) deep, founded on gravel, and appears to have been backfilled in the early to middle 15th century. Its size and fill suggest that it may have been a well,



Fig. 4: plan showing the location of the monastic cells.

demolished and filled in when the water supply was laid on. The monks would have found it difficult to maintain the strict rules of their order without a supply of water to their cells since they were only allowed out at specific times, so it may be that every cell was furnished with a well. After the cut had been backfilled, a gravel path was laid over it which was superceded by a hearth 0.78m  $\times$  0.73m (2ft 7in  $\times$  2ft 5in), made of pitched roof tiles.

A robber cut, for the most part about 0.5m (20in) wide, ran east-west through the gardens, north of the cell buildings. It has been interpreted as a cut to remove the water pipes laid in 1431 to supply the cells. The line matches that shown on the map of the water supply, drawn during the medieval period and still preserved today at the Charterhouse. In cell K, remains of the original cut for the pipe were preserved. Here it was bedded on a chalk base, 50mm (2in) thick. A tap would probably have been placed in the passage to the latrine where the water pipe crossed it. In cell L a north-south aligned cut,  $1.40m (4^{1/2} ft)$  deep was found to contain a lead pipe. This was almost certainly the main pipe bringing the water into the cloister. It was at a much greater depth than the robber cuts for the pipes in the gardens and it had not been robbed out. Whilst the lead was taken from the other pipes, the main supply could not be broken to the mansion in the post-dissolution period. It remained the only supply of water there until 1767. The foundations of the conduit in the centre of the Great Cloister were exposed in the late 19th century but no record was made of them<sup>17</sup>.

## The Dissolution

The religious life of the Charterhouse was brought to an end in June 1537, when the last of the brethren were forced to surrender the monastery to the King; suppression followed in November of the same year. Whilst the church and chapter house were protected initially, the royal commissioners took charge of large areas of the property, including the east, north and south walks of the Great Cloister, and carried out a wholesale plundering of a wide range of materials: wainscoting and furniture from the cells. silver ware from the prior's apartments and trees from the orchard. A full account of this operation was made by the commissioners' supervisor, one William Dale, from 1539 onwards. It would appear that Dale left the cells more or less complete, for they were used as store houses from 1542 when the property passed back to the king's servants, and a survey carried out just before the next change of ownership records tenants occupying the monks' quarters<sup>18</sup>.

### **Post-Dissolution**

In 1545 the entire property was sold to Edward North, a wealthy landowner who had aided the King in the collection of the spoils from the Dissolution. The Carthusian chronicler Maurice Chauncy, a former monk of the London house, records North's destruction of all but the west arm of the Great Cloister and his conversion of the monastic church into a dining hall. Certainly, all the available evidence points to North being responsible for the great majority of the remodelling of the monastery up to his sale of it to the Duke of Northumberland in 1553, when the property is

17. Op cit fn 1.





described as a "mansion". Following the execution of the Duke shortly afterwards, North regained the site, Mary having decided that the ruinous condition of the property precluded the restoration of a Carthusian house there. In 1564 North died and his property passed to the ill-fated Thomas Howard, 4th Duke of Norfolk. In creating Howard House from North's mansion, Norfolk carried out much of the work still visible today. His son held the property from 1571 until its sale to Thomas Sutton in 1611, whose legacy founded both Charterhouse School and the Sutton Hospital<sup>19</sup>.

The following description of the post-medieval aspects of the Museum's work on Charterhouse will be primarily concerned with the excavations of the Medical College sites in 1989 and 1990, although an attempt will be made to correlate them with other sites around the precinct.

The first post-Dissolution activity recognisable in the archaeological record is the robbing of the walls and lead pipes from the areas of the cloister that came under Dale's control. Although it would appear from Dale's account that the majority of the cell walls were left standing up to 1542, the archaeological record indicates that the removal of the lead water pipes, surely one of the first operations, post-dates the reduction of the cell walls on the north side of the cloister. A shallow trench crossing the gardens of cells K, L and M was identified as the robber cut for the pipe.

The archaeological record indicates that the walls of the individual cells on the north side of the Great Cloister were extensively robbed before the main cloister wall here was taken down. Whilst the majority of the main structural walls

18. Op cit fn 1, 330-5.

of the cells were largely robbed out (fragments remained in cells H and K), the smaller internal dividing walls were only reduced to ground level and were clearly considered too slender to be worth robbing. Otherwise robbing appears to have been intensive; the backfills of the cuts contained only small fragments of chalk and lumps of the binding mortar, although there are indications that perhaps not all of certain walls were robbed in one action. The reduction of these walls produced demolition debris up to half a metre thick in places, comprising stone, tile, brick, mortar and plaster, which was particularly marked within the bodies of each cell, although it also spread around them.

The north cloister wall, though partially robbed throughout, was in no place entirely removed by post-Dissolution activity and survived in places up to 1.80m (6ft) from foundation level. Its demolition and robbing appears to have been one of the later events of the immediate post-Dissolution period, possibly due to its retention as a boundary wall during the robbing of the cells and before the new perimeter was in place.

The lengths of rebuilt wall recorded in 1989 and 1990 are the only structural remains of the immediate post-medieval period recorded from those excavations, and the archae-

19. Op cit fn 1, 114-193.

ological record indicates that their raising was closely contemporary with the reduction of the surviving cloister wall, the latter probably providing much of the neccesary material. In 1989, a section some 10.46m (34ft) long, 0.73m (2ft 5in) wide and 2.87m (9ft 5in) high was uncovered in the extreme south-west corner of the excavated area, on an east-west alignment (Fig. 7). The recorded, external, face was made up of three separate builds. The central one contained a predominance of massive ragstone ashlar blocks, the weight of which had caused the build to sag centrally and be shored up with sandstone slabs. The blocks here can be compared to those in the lower west wall of present-day Master's Court, which Grimes identified as re-used from the monastic Popham Chapel<sup>20</sup>. The builds on either side of this central section comprised smaller, roughly coursed, pieces of ragstone, green sandstone, chalk, flint, brick and tile, with the first two materials most common.

Incorporated into the left-hand build was a finely carved and painted block of greensand, that has been interpreted as part of a canopy or niche, possibly from a tomb (Fig. 8). Close examination has produced evidence for red, blue and white paint as well as gold leaf decoration, which allows a comparison with the surviving fragments of Manny's tomb displayed in the present Charterhouse buildings. It is

20. Op cit fn 2, 65.



Fig. 6: tile floor in cell K.



Fig. 7: post-dissolution boundary wall from the St Bartholomews Medical College site: MED 89.

anticipated that further pieces await discovery in the rest of the wall, which was threatened with demolition by the original development, since indefinitely postponed.

Rough footings only were identified for the right-hand build, supporting the identification of the central build as an in-filling of an earlier feature, albeit in an irregular form. Probable back-filled putlog holes were identified at comparable levels across all three builds, and may relate to the reduction of the structure in later times. The wall here cut layers containing pottery dating to 1350-1550.

The wall in the 1990 area ran for some 30m (100ft) across the site on a comparable east-west alignment, with a central truncation. It had a width of 0.90m (3ft) and a recorded depth of 1.79m (6ft). It was possible to examine both faces in full section, and a clear difference in both materials and construction was recorded. The northern, external, face was built up of well-defined courses of red and yellow brick (including an upper level of red king closers), re-used ragstone ?coping stones set on edge to resemble an ashlar course, and smaller ragstone blocks forming the bottom levels. Tiles were used as levelling in the upper courses and shards of struck flint were inserted between blocks throughout, possibly as a decorative feature. In contrast, the opposing face was formed from rough, randomly coursed, blocks of chalk and ragstone, liberally mortared.

The walls described above are identified as parts of the same boundary, most likely raised to enclose the first post-Dissolution property, of North, sometime around 1546. The example on the 1990 site was partly founded on the upper fills of robber cuts to the cell walls, demonstrating the close relationship between the two phases of activity.

The final phase of post-medieval activity recorded here was represented by pits and dumps on either side of the re-built walls. Most of the area to the north of the walls on both sites was dotted with large pits whose fill suggests a date in the first half of the 17th century. On the 1990 site, examples were typically filled with a black clay containing animal bone and oyster shell. Some were more than 2m across and up to 2.70m (9ft) deep, often largely truncating the natural brickearth and suggesting an element of quarrying in their function. Pottery from them dates to 1550-1750. Pits from the 1989 site included an inter-linking group measuring 15.00m  $\times$  6.00m  $\times$  2.40m (49ft  $\times$  20ft  $\times$  8ft) overall with medieval roof tiles in its lower fill and a large collection of domestic pottery at its uppermost level, including tin-glazed plates and other 17th century wares.

To the south of the walls, extensive dumps were built up to the masonry face; there is evidence that this was a controlled activity. On the 1989 site, the inner face of the re-built wall was rendered and brick walls built up to it to define separate rubbish pits. Pottery from the pits was dated to the 17th century. On the 1990 site, layers appear to have been kept to a proscribed level behind the wall: one dump of 17th-century distillation vessel fragments forms an extensive shallow spread that runs the entire length of the site. There is thus good evidence for the re-built wall forming a division between two largely separate activities, with the domestic refuse from the Tudor manor dumped as backfill in large pits outside the property and more general debris laid as levelling immediately within the perimeter wall. Survey drawings such as those by Faithorne and Newcourt (1658), Morgan (1676) and Rocque (1746) indicate that the wall survived well into the post-medieval period.

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Fig. 8: conjectural reconstruction of a canopy based on the greensand block re-used in the Post-dissolution wall at MED 89.