A recently identified valley in the City

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IN 1841 RICHARD KELSEY completed a survey of the contemporary ground surface within the City of London as part of his mapping of the existing sewer system. This remarkable record entitled Original Plan of Contours 1841 shows the first attempt to represent a contoured profile of London, at intervals of 3ft1. A study of this map shows a marked correspondence between the pre-Roman natural terrain as attested by modern archaeological observation and the street levels of early 19th century London, an association which cannot be established by examination of more recent contour maps of London. One example of such a correspondence occurs in the east end of the Roman city where a shallow linear 'valley' is indicated, roughly at right angles to the course of the Thames, running around the northwestern side of Tower Hill (Fig. 1). In profile, though not in extent, this feature is reminiscent of the valley of the upper Walbrook, further to the west, and its configuration strongly suggests the course of an old stream-bed, a tributary of the Thames. Today we find no reference to it and only the hint of a depression at street level: the feature has long been forgotten. Nevertheless, the proposition that a stream valley did exist in this part of London holds up well when evidence from both archaeological and documentary sources is consi-

An examination of the results from a large number of bore-hole samples and from a smaller number of archaeological investigations has enabled us to construct a fairly clear picture of the geology and natural surface terrain in the area. Gravel capped by a thin deposit of brickearth occurs here, as it commonly does elsewhere in Roman London. The southern edge of this brickearth usually corresponds to the point where the Thames terracing begins to cut more steeply into the drift geology and is interrupted only by small rivers and streams such as the Fleet and the Walbrook which flow into the

Thames. In the area examined, this southern edge of the brickearth follows a course corresponding more to the northwestern edge of the feature suggested by the contours on Fig. 1, before turning to follow those contours to the south and east. Further evidence comes from a plot of levels of natural subsoil which shows a general north to south trend but also a valley-like depression in the gravel similar to, but in fact more pronounced than, that indicated by the survey of 1841.

Evidence for the presence of a stream, or rather several streams, comes from three sites in the area. An examination by Peter Marsden in 1963-64 of a large site at Mariner House, Crutched Friars (site A. Fig. 1), indicated 'the course of a small stream' in the natural gravels on an east to west alignment2. Further north at 2-4 Jewry Street (site B. Fig. 1), Peter Rowsome in 1980 recorded a stream in a section cutting through the natural brickearth on a roughly north to south course3, while nearby at Rangoon Street (site C, Fig. 1), a site excavated by David Bowler in 1982, two probably natural streambeds were observed following differing courses4. Unfortunately all these sightings were brief or limited and no direction of flow was recorded, but the main conclusion is that a number of separate stream-courses existed within the area defined as the valley in prehistoric times, perhaps representing branches of the same stream. As will be seen later, confirmation of this comes from a stream called the Lorteburn recorded east of Seething Lane in the late 13th century.

The conclusion is supported at Rangoon Street, where careful excavation revealed a succession of drainage ditches thought to represent Roman field boundaries, some cut along the main axis of the valley while others ran across it. This initial occupation was later abandoned, to be replaced by the familiar accumulation of dark earth from towards the end of the 2nd century. At Jewry Street, earliest

To be found in manuscript form at the City of London Record Office. It is proposed to publish this document in order to demonstrate its possibilities as a topographic model when considering the development of the Roman and medieval city.

^{2.} P. Marsden, 'Archaeological finds in the City of London,

^{1963-4&}quot;, Trans London Middlesex Archaeol Soc 21 part 3 (1967) 214.

Museum of London D.U.A. Archive notes CAS75.

^{4.} Museum of London D.U.A. Archive Report RAG82.

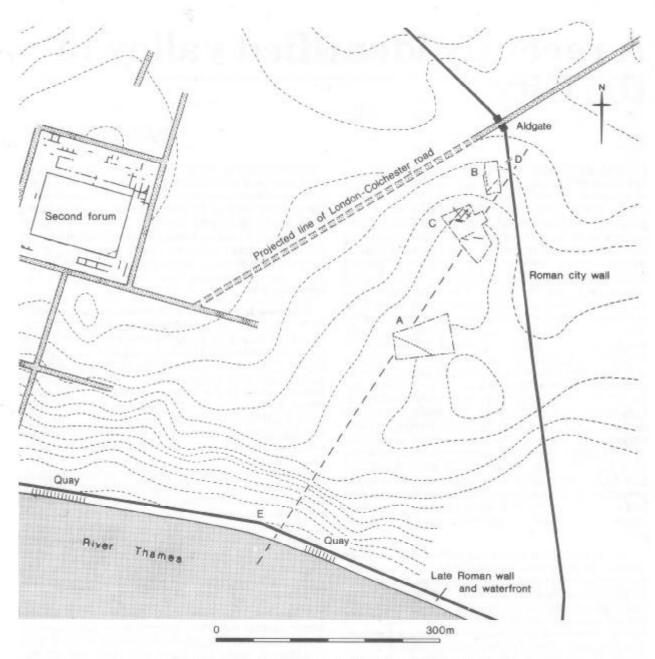


Fig. 1: main axis of suggested stream valley in conjunction with Roman features.

occupation took the form of extensive dumping, which was cut by a broad U-shaped ditch on a northeast-southwest alignment. This feature was gradually infilled and finally sealed over before the end of the Roman period.

Further evidence for drainage and land management within the upper part of the valley comes from a possibly contemporary brick culvert in the Roman city wall immediately east of 4-6 Jewry Street (D, Fig. 1), found in 1933 by F. Cottrill⁵. The record states that the culvert was constructed in order to accommodate a stream-bed (containing 1st century pottery), that had been cut through by the Roman wall at this point. It may well be that the large ditch found at Jewry Street had a direct relationship with this feature, aligned as they both are towards the head of the valley where the

 F. Cottrill, 'Roman Britain in 1933', Journ Rom Studies 24 (1934) 211.

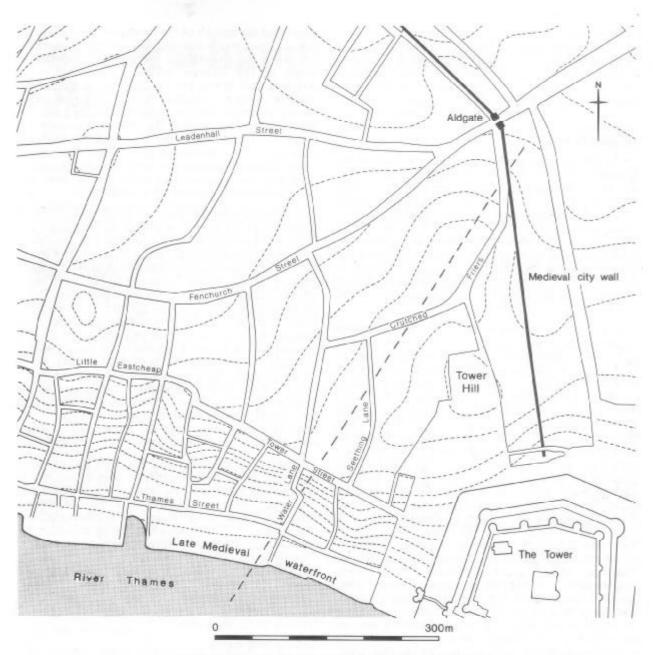


Fig. 2: suggested stream valley in conjunction with medieval features.

suggested stream-course would have crossed the wall line. Evidence that this culvert was designed to carry water eastwards out of the city, presumably into the city ditch, does not preclude the existence of a stream on the suggested course at either an earlier or a later date, but supports the indications of a significant source of water in the vicinity, which it was considered necessary to control at this time.

As far as they are known, other Roman features in

this area, such as roads and the city wall, avoid crossing the valley, strongly suggesting that the local topography was a significant factor in the planning of this part of the city. Thus, from a high point at Aldgate, the Roman city wall followed a course to the Thames which took it wide of the floor of the valley on its castern side, wholly enclosing it within the Roman city (Fig. 1). The main Roman road linking Colchester to London in the 1st century followed a known course outside the city as far as

Aldgate and if that line is projected further into the city to meet the main east-west street within Roman London, as has been suggested, it would also be seen to take the higher ground following the northwest side of the valley, just as the city wall took the higher ground on the east side. There is as yet no evidence to indicate what course either of the main east-west streets south of the forum took, beyond where they are marked on Fig. 1.

The suggested alignment of the north bank of the Thames and of the Roman riverside wall illustrated on the O.S. map of Londinium⁶ offers further support for the presence of a significant valley feature. Lines projected east and west from excavated quay sites imply a bend or kink in the relatively straight north bank in the area where the main axis of the stream valley would have joined the Thames (E on Fig. 1). The only other place in Roman London where there is a significant indented change in the river bank is at Dowgate where the Walbrook meets the Thames.

Relevant topographic evidence for this area from the medieval period comes mostly from cartographic and documentary sources. The maps of Agas and of Leake show a number of streets running down from Aldgate along the course of the valley, including Crutched Friars, Seething Lane and Water Lane (Fig. 2). At its south end, Water Lane crosses Thames Street, representing the line of the late Roman waterfront, at the point of the implied bend mentioned above. South of Thames Street the Lane continues to the Thames along an alley called Watergate, first mentioned in 1274-75. Ekwall, quoting Stow, presumes its name derived from its function as a public access and landing place on the Thames⁷. The same definition is applied to two other lanes, Water Lane (now Whitefriars Street) and Westwatergate at the foot of St. Andrews Hill, both of which correspond to the line of small but distinctive valleys running down to the Thames (known from Kelsey's plan and other sources). One need not dispute Stow's definition, in suggesting that there may be a direct association here between the use of the word 'Water' when applied to a lane or access-way to the Thames and the presence of a water-course which itself led to the Thames (notwithstanding that there were several other Watergates leading to the river which do not have any known association with a stream or valley). It is

likely that the mouth of such a stream would initially remain open when the rest of London's waterfront was being developed and therefore provide useful access to the Thames at that point. One might conclude that it was the relatively large size of the streams in these instances which gave them their names. It should also be noted that Water Lane and Water Gate represented the parish boundary between St. Dunstan's in the East and All Hallows' Barking. It is considered that parish boundaries often followed prominent natural features, which reinforces the argument that the street line here may have followed the course of a stream.

A reference in the Husting Roll⁸ to a property described in relation to a stream in Seething Lane provides more tangible evidence that a water-course continued into medieval times. A deed of 1288(?) refers to a property within the parish of All Hallows' Barking which adjoined a street to the west and a stream, called *Lorteburn*⁹, to the east. Other deeds of the same period show that the street was Seething Lane, and that the Lorteburn must therefore have flowed along a course east of, and more or less parallel to, the Lane. It has not so far been possible to locate the precise position of this property, but it seems likely to have been sited towards the valley centre. None of the subsequent references to the same property mentions the stream as an abutment. but only the owner of an adjoining property to the east. This may imply that the stream was covered over by the early 14th century10.

Despite the limitations of some of the evidence presented here, taken together it goes a long way to substantiate what must be seen as a significant and extensive topographical feature within the Roman and early medieval landscape. It is often assumed that we know all the important topographical influences which shaped the development of London, if only by inference from the depth of deposits, the configuration of streets and buildings or through documentary evidence. This valley provides a reminder that our knowledge is in fact relatively limited, and, as Kelsey's survey shows, considerably more remains to be discovered.

Acknowledgements

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Ordnance Survey, Londinium: a descriptive map and guide to Roman London, 1981.

^{7.} E. Ekwall, Street Names of the City of London, 1954.

^{8.} City of London Record Office, Husting Roll, deed 18/16.

^{9.} Ekwall identifies several references to a Lorteburn or similar

name in his English River Names (1928), where he states the word derives from the OE word meaning 'dirt', while in Winchester in the Early Middle Ages (eds) F. Barlow, M. Biddle et al (1976) 238 another Lorteburn appears (first mentioned 1337), probably meaning a dirty or muddy stream, possibly utilised for a sewer.

^{10.} I am grateful to Tony Dyson for this information.