

# *Archaeological Excavations on the site of the Roman Fort at Water Newton.*

*by Stephen G Upex FSA*

## **Introduction**

Excavations took place at the site of the Water Newton Roman fort in the summer of 2012. The site of a Roman fort at Water Newton (TL 116974) was brought first to light in 1939 and scholars have assumed that the fort was Claudian and dated to the very earliest phase of Roman occupation. More recently this dating has been challenged and the movement of troops and the process of the Roman invasion within the lower Nene valley are now being questioned. Archaeological evidence from many sites within the province has formed the basis for some degree of reinterpretation of the Roman advance in AD 43/44, and the discovery of new military sites in the East Midlands and the questioning of the actual date of the Water Newton fort thus stimulated the need for excavation at the site to try and resolve this dating problem.

To this end the Nene Valley Archaeological Trust (NVAT) linked with the Middle Nene Archaeological Group (MidNag) formed a committee to carry out limited excavation at the Water Newton fort. Permission for excavation was granted by the land owner Mr R Waterworth and the project was fully supported by the farm/estate managers Mr Ian Wright and Lewis Butlin. Thanks to all three are recorded here for their help, co-operation and enthusiasm for the project.

In addition, a grant of money for excavation and post excavation work was made available by English Heritage (EH) as part of the wider Nene Valley Archaeological Park Project and thanks are due to David Kenny and Will Fletcher for their support with this project. Additional financial support was given by the NVAT and MidNAG. The site is a scheduled monument and so consent was needed from EH prior to any work starting at the site.

## **The Fort and pre-excavation surveys**

The fort was traditionally thought to have been established in the early years of the invasion period and a suggested date of c. AD 44-5 was thought possible for its foundation as a fort guarding the road crossing of the river Nene. The fort is about 5 acres (2.025ha) in size and is situated on a low island of gravel above the floodplain of the river and some 300m north-west of the Roman town of *Durobrivae*.

*Fig 1: Air photograph of the Water Newton fort showing the three defensive ditches cut by the West Gate (right side) and the South gate (top)*



The fort was protected on the north side by the Nene itself, and on the east and south by the low valley of the Billing Brook. The site was known only from aerial photographs (**Fig 1**) and thus information on the details of the defences and of any internal buildings and their arrangements was very limited. Part of the programme of work prior to the excavation of the site in the summer of 2012 was a partial geophysical survey which showed the fort's ditches, gateways and some internal features. The link between the air photographs and the geophysical survey also allowed the pin-pointing of particular places where excavation might reveal useful dating sequences for the fort. In particular these included the terminal ends of the defensive ditches around the site, where it was hoped that rubbish and debris thrown out of the fort when it was being abandoned at the end of its life might aid dating.

What can be said with certainty is that the fort is of typical playing-card shape with three defensive ditches on its eastern, southern and western sides, which were the sides not immediately protected by the Nene or the Billing Brook. The inner ditch appears to have been the widest and there are clear breaks in all the ditch lines along the southern,

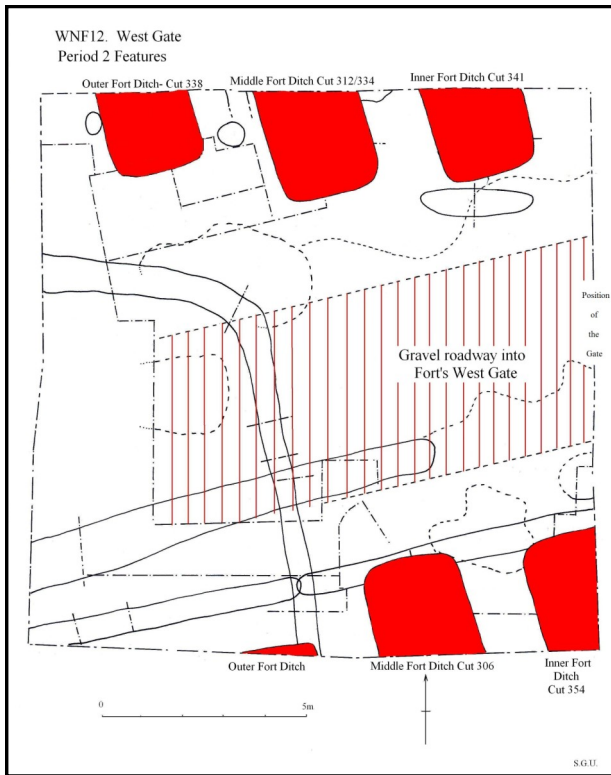


Fig 2: Plan of the West Gate showing the positions of the military ditches (red) and the military road entering the fort (red vertical lines).

cut from the surrounding area. These turves would have been piled up at the front and back of the rampart and then filled with loose soil, perhaps derived from the ditches. On top of this bank of earth a timber wall walk and parapet would have allowed ease of access along the top of the rampart and given access to a walk way over the gates and to the upper watch-tower like structures that would have been built over the gates' entrances. As for the inside of the fort, wooden barrack blocks might be expected if the fort were meant to last for a few years, but in some forts where occupation lasted for a matter of a few months, rows of tents would have been set up to house the troops.

## The Excavation

A machine was used to move topsoil from the areas that were targeted for excavation. The geophysical surveys showed exactly where to locate trenches over the terminal ends of the defensive ditches of the south gate of the fort. However, a large, irregular anomaly added to the complication of interpretation at this stage and once excavation began this anomaly proved to be a large pit that post dated the fort and had cut through almost all of the military features in this part of the site.

A trench was also cleared by machine over the west gate where the military ditches were suspected. Here there were initial problems of a different kind as it soon became apparent that the layers that corresponded to the military phase of the site were overlain by considerable deposits that represented occupation in the period after the fort had been abandoned. Thus to get to the layers that represented the fort's occupation, the upper and later layers had to be excavated and recorded first, and this all took time.

eastern and western sides, presumably marking the positions of the gateways. The defences on the north side are masked by a modern hedge line which obscures the crop-marks and also the digging, at some unknown date, of a large quarry which has destroyed the fort's remains on this side.

Inside the fort there are a few crop marks and indication from the geophysics that show the layout of possible buildings, which would presumably have all been of wood, and there is an indication of possible drains that ran along the internal roadways. From this evidence and by comparison with other similar sites we can construct a general view of the arrangements within the fort. It appears from the evidence of the aerial and geophysical surveys that the fort faced to the south-east with a road (*Via Praetoria*) leading from a central headquarters building to a gate on the shorter south-eastern line of the defences. On either side of this central head-quarters building and along another road running south/north (*Via Principalis*) it would be usual to find granaries and a building to accommodate the commander and his family. The rest of the interior would have been taken up with workshops and barrack blocks providing accommodation for a total of perhaps 700 troops.

There was no sign of any stonework for any of the features associated with the fort and it must be assumed that all the internal structures and the defences were built out of timber and turf. Thus the rampart surrounding the fort on the inside of the three defensive ditches would have been constructed with turves



Fig 3: View from the west looking at the excavated area of the West Gate with the three defensive ditches on the left - with a figure standing in each ditch - and the fort roadway to the right.





*Fig 4: The West gate's middle ditch (north side of road) showing its "V" shaped profile with the "ankle breaker" slot at the base of the ditch.*

dating evidence from the terminal ends of the fort's ditches, the finds were pitifully scant. Neither from the west nor the south gates were quantities of pottery or other artefacts recovered to give, with absolute confidence, a positive date for the fort's occupation. However, sufficient material was accumulated to suggest that the fort was occupied at some point between AD 60-65; perhaps significantly in the period after the revolt of Boudicca in AD 60.

Perhaps the reason for such sparse finds from any of the military contexts that were excavated was the fact that the fort appears, from the excavated evidence, to have lasted for a very short period of time - perhaps a matter of a few months. The finds were few and the ditches were very clean with no sign of accumulated 'primary silting' which one would encounter if ditches had been left open through a winter period for example. In addition, in some of the inner ditch sections one could see where the turf rampart (and part preserved turves) had been pushed down and into the ditches when the fort was abandoned and the defences were presumably 'slighted' to prevent use by hostile groups. Thus the general impression from the excavation was that the fort had only existed for a few months and that at the end of its life it had been deliberately 'de-commissioned' by its partial and deliberate destruction.

What also became very apparent during the excavation was that the site of the fort, once abandoned as a military area, continued in use throughout the Roman period. The former military road into the fort's west gate was resurfaced several times over the next 300 years with imported limestone which was packed over the earlier military road surface of packed gravel. The wear on this re-surfaced road was considerable with ruts developing in some areas, which suggests that there was considerable traffic. This traffic may have been associated with the rise of settlement to the northwest of the site, within the modern parishes of Stibbington and Wansford, where we know that there were villas and numbers of pottery production and other manufacturing sites. In addition to this through traffic however, there was clearly local traffic

Eventually the military ditches were revealed at both gateways. At the west gate it was seen that the inner and middle ditches were set in line along the approaching roadway that ran into the fort, while the outer ditches were set back by about 2m. (Figs 2 & 3). In fact this layout of the outer ditches, which is fairly unusual, caused a problem in that the outer ditch on the southern part of the west gate was only just clipped at its very end by the excavation box. Each of the ditches was 'V' shaped in profile, with the inner ditch being the deepest at 2.10m. At the base of each of the ditches was a slot, sometimes called an 'ankle breaker' which would have caused problems for attackers trying to break through the defences but it would also have allowed the military to clean out the ditch bottom as the slot was a spade width (Fig 4). Each of the ditch terminals was also slightly rounded as it butted up against the roadways into the fort.

These roadways, which would have taken the traffic into and out of the fort through wooden gates, were surfaced with packed gravel (Fig 5). Nothing of the gateways, which lay outside of the excavation boxes, was explored during the excavations but it is assumed that the gates would have been built entirely out of timber.

Considering that the main aim of the excavation was to recover



*Fig 5: Detailed view of the military road surface of packed gravel, with the later limestone road surfaces above.*

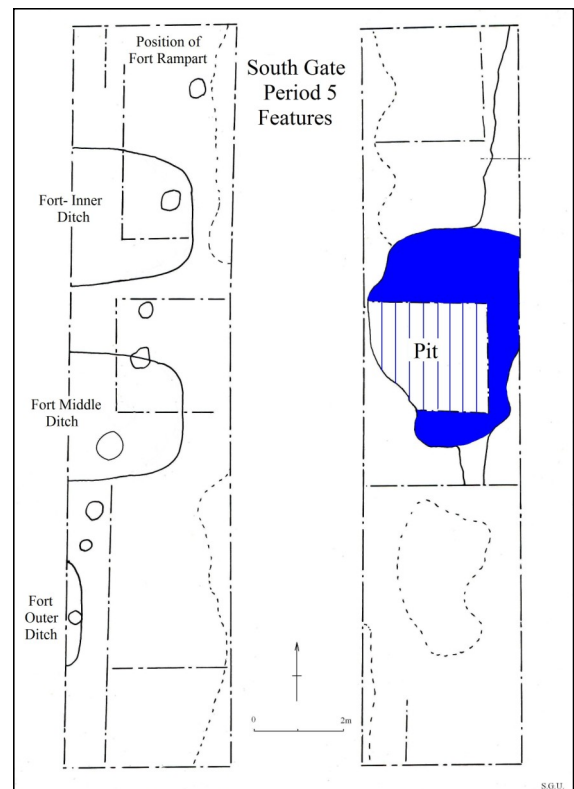
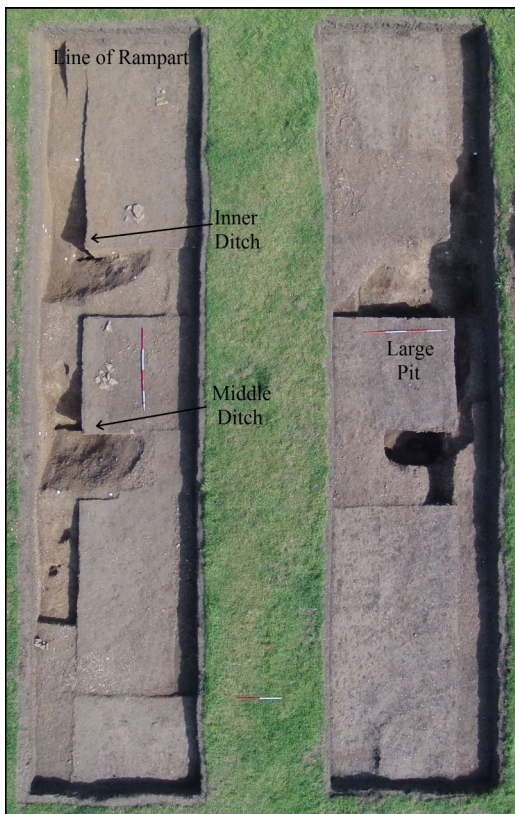




Fig 6: Aerial view of the west gate taken from a remote controlled 'drone' showing the fully excavated area. The military ditches show on the left and right edges of the excavation box and the later 2<sup>nd</sup> - 4<sup>th</sup> century ditches can be seen running along and also cutting the later road line.  
(photo courtesy of Ian Schreiber)

which was associated with a series of buildings which were found within the excavation boxes. None of these buildings were fully uncovered but the bases of large posts and internal and external flooring surfaces indicated that there were permanent buildings constructed on the site and probably lining the roadway which originally had led into the fort. These buildings dating to the 2-4<sup>th</sup> centuries could have been structures which developed within the suburban sprawl of the growing town of *Durobrivae* which lay some 400 m to the east, across the Billing Brook. The numbers of coins that were found, especially those recovered from the west gate, also suggested that there may have been some form of market or series of shops on or close to the site. Money had clearly been changing hands and was being lost within the area of the excavation boxes and often markets are the most likely place where this loss of coins could have occurred.

In fact the post-military history of the excavation site was far more complex than was expected. Not only was there a series of buildings erected at the site but there were also ditches that were cut to mark out some form of boundaries. Some of these ditches ran parallel to the road line at the west gate and may have acted as roadside ditches during the 2<sup>nd</sup> and 3<sup>rd</sup> centuries (**Fig 6**). However, a late 4<sup>th</sup> century ditch had cut across the line of the road that clearly implied that at some point the use of the road was discontinued. At some late period however, this ditch was filled in and the area across the line of the ditch was resurfaced and the road's use reinstated.



Figs 7a & 7b : Ariel view taken from a remote controlled 'drone' (7a) and a plan of the South gate of the fort. The military ditches are marked as is the position of the late rubbish pit which cut through all the earlier features. (Photo 7a courtesy of Ian Schreiber)



The whole area's development as a suburb of *Durobrivae* is presumably linked with the rise of industrial activity, especially pottery production. The growth of the town and the suburbs clearly had a significant effect on how the landscape was being utilised. Across part of the former south gate the excavations found a large pit, originally dug for gravel, which had later been used as a rubbish pit for either suburban rubbish or rubbish coming out of the town (**Fig 7a & 7b**). The unfortunate aspect of this pit is that it had been dug over the top of, and thus had destroyed, most of the detail relating to the south gate at this point.

## Discussion and conclusions

The best view of the dating, based on the limited pottery, including Samian, is that the fort was constructed at some point in the middle of the first century A.D. and probably in the period c. 60-70 AD. The lack of quantity of dating evidence has to make this dating speculative at present, but the lack of rubbish of any sort within the ditches and the lack of silting also suggests that the fort was only there for a very short time – perhaps a matter of a few months.



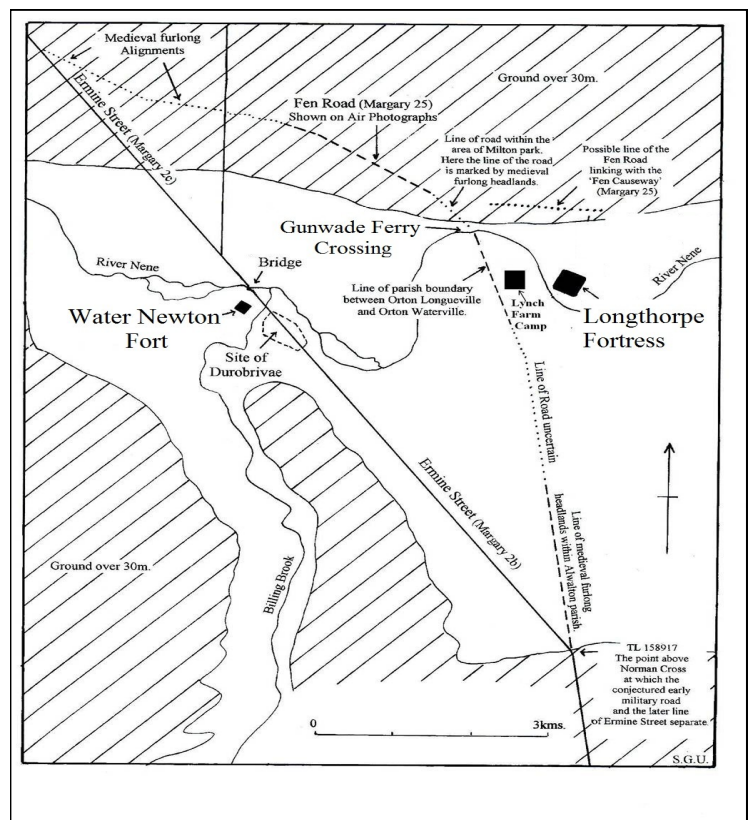
*Fig 8: The large pit which cut through part of the earlier military features of the South gate. The pit may have been dug originally for gravel but was later used in the 3rd and 4th Centuries as a rubbish pit.*

If this short lived and mid first century dating is accepted then it poses interesting questions about the other military sites at Longthorpe and Lynch Farm, which have both been dated slightly earlier in their foundations - perhaps to just after the Roman invasion of AD 43. The three sites and the reason for their positions and their dates could be explained by the realignment of the early Roman road that ran through the area.

The arguments for this re-alignment are that an early road line ran close by both the Longthorpe fortress and the Lynch Farm fort but was by the period c. AD 60 (the period of the Boudiccan revolt) becoming problematic to maintain and use (**Fig 8**). This problem may have arisen due to the river crossing to the north of the meander in the river Nene and the regular flooding that may have occurred there during the winter months. Such flooding is still a problem even today, but in the first century with supplies to get to the north this would have been ever more worrying for the Roman military. This point about supplying the north and the frontier may have been brought to a head with the foundation of Lincoln, perhaps as early as AD 65 and the need for an all weather crossing of the Nene.

The simple answer to the problem could have been to re-locate the road line so that it crossed the Nene where there was less of a flood plain for it to cross and where flooding could either be minimised or controlled in some way. This new crossing, which has become the accepted crossing of Ermine Street between Castor and Ailsworth parishes to the north and Chesterton on the southern bank, had the advantage that the valley width here was minimal. In addition and on the southern side the Roman engineers seem to have taken the line of Ermine Street and elevated it by 1.5 m above the surrounding ground level on an artificially constructed causeway (**Fig 9**).

The date of this realignment may be linked with the Water Newton fort and its construction. The fort may have provided short term, temporary accommodation for troops and engineers to survey, construct the new road line and build the bridge over the Nene. Once this phase of road and bridge works was completed the troops moved away and the fort was abandoned.



*Fig 9: Map showing the probable line of the early military road and its later realignment—with regard to the Water Newton fort and the military sites at Longthorpe and Lynch Farm.*

Part of this idea of road realignment can be tested by an appraisal of the finds from early (1970s) excavations within Normangate Field in Castor parish. Here an archaeological section through Ermine Street was taken and, in addition, several buildings were recorded either lining Ermine Street or associated with it. If Ermine Street was realigned in the period after c.AD 60-70, then it should follow there ought to be no early (Claudian) occupation in this area to the north of the bridge head - simply because there was no road at this period and thus settlement would not have started here. The reappraisal of the material from these 1970s excavations is part and parcel of the long term policy of the NVAT to publish their excavation backlog.

There was no evidence of any bath house associated with the fort at Water Newton. Areas around the fort, which remain largely under grass cultivation, were walked and inspected visually along with a search through air photograph collections and a search through the Historic Environment Records (HER) maintained by Peterborough City Council. Nothing was found that would suggest the location of or presence of any bath arrangements. Considering the suggested, short-lived, nature of the fort – it may be that baths were never considered for the troops stationed at the site. Short term arrangements for bathing may have been within some form of temporary structure. The areas most likely for such a facility, should one have been built, would have been close the river Nene or along the side of the Billing Brook.

What does develop from the fort's excavation is the concept of the continual presence of occupation at the site after the fort had been abandoned – or at least the continuing use of the military road that had run through the fort, especially at the west gate. The work at the west gate clearly showed that the early military gravel surfaces had been maintained by the later addition of limestone patching and resurfacing. The precise dating for this remains uncertain due to the limited scope of the excavation– which was aimed specifically at the recovery of the military chronology at the site. However, enough material was encountered to show that the use of the road continued after the military period and eventually buildings were constructed near the site of the former fort's west gate.

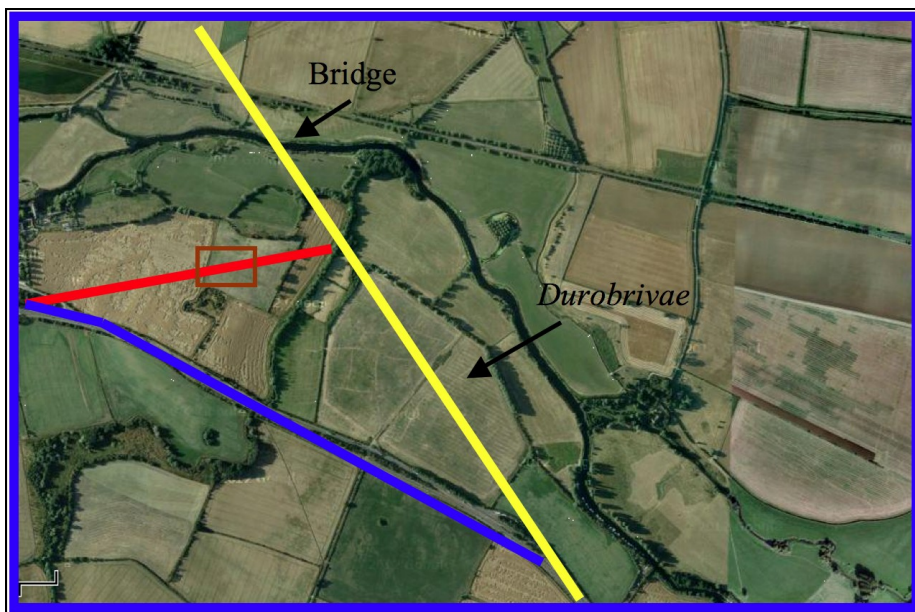


Fig 10: The area of the fort (brown rectangle) with the suggested road development. The yellow line represents Ermine Street which, when the Roman bridge collapsed, was replaced as a route to the north by the road (red line) over the site of the fort, which in turn was replaced by the line of the Great North Road (Blue line).

Both the short lived nature of the fort and the later building occupation bring into question the whole nature of the way that *Durobrivae* as a town developed. Formerly it was thought that *Durobrivae* had developed as a *vicus* settlement outside of the fort and close to the line of Ermine Street. Now the best view is to see the fort's abandonment as simply an early phase of landscape history and possibly not in any way connected to the development of the town. The fort may not have been there long enough (a matter of a few months) to have developed any sort of associated settlement outside of its walls. Thus, the town may not have had a military association at its founding but rather have been associated with the importance of the river crossing of the Nene once the bridge had been built.

The later occupation over the site of the fort also perhaps shows the way in which the sprawling suburbs of the town had by the 3<sup>rd</sup> and 4<sup>th</sup> centuries covered

large areas to the west and south of the town's walled perimeter. Edmund Artis shows on his map of 1828 how he either excavated or recorded buildings, 'potteries' and other sites within this area around the fort (but he was of course totally unaware of the fort).

The air photograph of the area, to the west and south of the fort, shows various crop marks which indicate that the line of the fort's road leading away from the West Gate extended for a further 300-400m, at least in the later Roman period, and eventually led into the line of the present road which forms the main street in the village of Water Newton. A comparison between the map drawn by Artis and the line of the Roman road shows that even in the 19<sup>th</sup> century the line of this earlier (Roman) road was being respected by hedge lines which, in turn, had perhaps limited the extent of quarrying that also shows on the air photographs of this area. This quarrying is almost certainly associated with the need for aggregates to provide surfacing for the Great North Road (modern A1).

In landscape history terms the line of routes to the north appears to have changed considerably over time. The line of Ermine Street, which the excavations at the fort suggest was possibly set out in the middle of the first century, crossed the Nene by a bridge and formed the first major route through the area. This route may have functioned in tandem with the line of the road that ran out of the west gate of the fort and to the west (**Fig 10**). In its early, but post fort phase, this road may have been simply a service road for Roman developments to the west - such as the potteries that were developing around Stibbington and settlements such as the large villa sited just to the east of Water Newton Village. In the later Roman periods the excavations showed that around the former west gate this road took a growing amount of traffic as the area developed as a suburb of *Durobrivae*.

The collapse of the Roman Bridge across the Nene, which may have been a 6<sup>th</sup> or 7<sup>th</sup> century phenomenon, would have limited access to the north along the line of the former Ermine Street. After the collapse of the bridge, traffic may have switched to the Nene crossing provided by a ford at the site of the later medieval village of Wansford – which gave its name to the later village. At this point, traffic may have increased along the line of the road through the abandoned, and by this time, long forgotten fort. At some later time, perhaps in the pre-conquest period or even as late as the era of coaching along the Great North Road, a short cut appears to have been made which cut off the need for travel through the former area of the Roman town and fort. This short cut formed the line of the main Great North Road which continued to be of major importance as a route for coaching traffic to the north and now follows the line of the modern A1 as it skirts to the south west of *Durobrivae* on its course between Chesterton and Wansford.

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