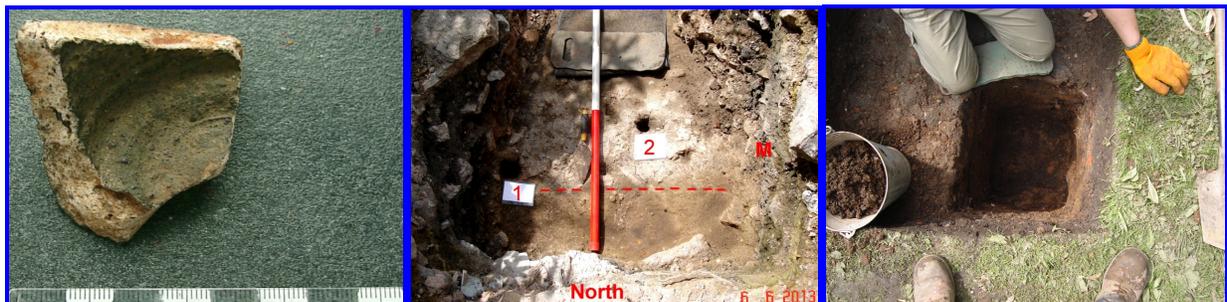




An Archaeological Evaluation of St John's Street, Wirksworth, Derbyshire

Grant-in-aided by Derbyshire County Council Greenwatch Action Fund

Anton Shone
1st August 2016



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Other Reports

The Culvert at Wirksworth: an Archaeological Evaluation Report. May 2007

The Street: A re-evaluation of the Roman road from Wirksworth to Buxton, May 2008

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The Portway: An Archaeological Assessment of the Roman road from Wirksworth to Brough, June 2013

A word of thanks

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Introduction and Executive Summary

The main purpose of this fieldwork carried out in St John's Street was to attempt to see if the immediate area of St John's Street had any role to play in the defence of Wirksworth, for Wirksworth has a Mercian charter of 835 referring to it as a town and it is inconceivable that it was undefended in the face of the later Viking threat of the 870s and 880s. The reason for the choice of St John's Street was that it lies on the south west edge of a tongue of land (the Hannage peninsula) upon which historic Wirksworth stands and this might have represented a good defensive position.

The outcome of this fieldwork is that we have not been able to identify any defensive works associated with the west side of St John's Street. Therefore any defensive structures either do not exist here, have eluded us or remain to be found. It has to be said that our view tends towards the latter because of the weakness of evidence for a successful Viking takeover of the area (e.g. the wholesale lack of Viking origin place-names when compared to Derby or Scarsdale districts). In the words of Ottery's masterly 1966 thesis about Wirksworth, there was "little or no Viking influence" on the town. This implies its defence against the Vikings was ultimately successful and therefore the archaeological evidence should somewhere exist of that defence.

However, the investigation did enlighten us considerably in mediaeval terms and does lead us to conclude that St John's Street, as a whole, was the product of Burgage development by the deFerrers (Earls of Derby) in the years after the Norman Conquest. This outcome has been both surprising and fascinating, and finally gives us one area of Wirksworth which we might at least begin to regard as being better understood due to our efforts.

In terms of finds, the most productive outcome was the discovery of (relatively) large amounts of mediaeval pottery and these assemblages are included in this report. In addition, finds of unfinished eighteenth century blackwares might indicate the need to re-assess the possibility of two periods of post-mediaeval pottery production in Wirksworth, for the dating of these blackwares pre-empts that of the known Wirksworth China factory of the 1790s.

The investigation and its associated survey work also threw out some unexpected branches, such as in our examination of the St John's Street place-name, which might (and I stress that word) indicate the possible presence of a hitherto unknown mediaeval hospital at the south end of St John's Street on the east side where the Wheatsheaf public house now stands. It also settles, if we may, the issue of whether St John's Street is St John's or St John Street (or indeed Nether Street, a name it briefly held), for the earliest documents do indeed refer to it as St John's Street.

No obvious defences have been found in the fieldwork examinations undertaken in this report, although the ditch running on the west side of the rear gardens of St John's Street, which is most pronounced south of Fogs Entry, is unusually substantial for a boundary or burgage ditch.

Principal archaeological and support work in this report was carried out by Anton Shone, Dean Smart, Ivan Wain and John Wheeldon, with kind assistance in documentary work from Lyn Murray, Sue Woore and Mary Wiltshire.

Looking forward should there be opportunities for further examinations in the town and indeed in the Meadows west of St John Street, such opportunities should be taken.

Location, Geology and Hydrology

The historic settlement of Wirksworth is constructed on the Hannage peninsula, bounded by the headwaters of the Ecclesbourne on the east side, the course of the former Warmbrook on the south side (and possibly on the west side), and a dry valley, probably a continuation of the Dale, which runs down the centre of Coldwell Street on the north side. This peninsula rises gently from its south east corner at Water Lane about 10 metres by contour up to the old Market Place in the north-west corner. The peninsula appears to be formed of a hill of glacial material partly overlying shale, being a deep layer of hard packed limestone rubble in sandy grit towards its north and east side and Clay Till over the shale in the rest, and probably also over Oat Hill a little further south. The Clay Till is a cold hard clay, often fawn in colour turning to streaky grey as it lies in contact with the shale bedrock below it. The clay till also contains a certain amount of large pebble.

In addition to the potential suitability of this site as a dry hill in comparison to the surroundings, it is also necessary to consider its suitability for a settlement in terms of water supply. Once on the limestone plateau water becomes a problem for settlements because of the permeability of the rock and reliable water supplies were difficult. However, being at the junction of the limestone and gritstone strata means that Wirksworth was well supplied with streams, springs and wells. Most importantly, some of these springs were thermal. The hydrology of Wirksworth was drastically changed during the Jacobean and Georgian periods when many drainage soughs were built, destroying the thermal springs and the streams they fed. The first sough being the Dovegang Sough, started in 1632. A good example of this loss is the Warm Brook, which ran along the south side of Water Lane, once called Water Dale, where its course is now completely obliterated, but whose remains might be indicated by the series of wells which appear in the back gardens of houses there shown on the 1880 O/S map.

We also know from local comments that an old well was found in Hilary Dennis's unreported examination of the middle of the rear yard (Grammar School side) of what is now Agricola House, on the east side of Church Street, the site of the examination where the Wirksworth Scaat was also found. Within less than 100 metres, although on the opposite side of Coldwell Street, a well still exists in the grounds of the Old Manor House, almost adjacent to the Street. This well continues in use for watering the Manor House Garden, so its source either still flows or there is sufficient groundwater to fill the well at intervals.

So we have a site that was potentially defensible, and had an accessible year round water supply, at the head of a sheltered valley containing both good woodland (for fires and for building) and good agricultural land and with pasture for the grazing of animals on the surrounding hillsides.

We have looked, in general terms, for the location of any conceptual defended area, but with no previous archaeological work undertaken prior to this project and no recognised features which might be implied as defensive, except the possible terrace line on the west side of the town below Bowling Green Lane, this assessment is really the first time the matter has received attention.

The early settlement of Wirksworth

The early settlement history of Wirksworth is not yet sufficiently well understood and a great deal more archaeological work is required.

It is necessary to observe that Wirksworth exists in close proximity to a number of recorded Iron Age or Bronze Age barrows and that the number of unrecorded barrows or tumuli is far greater in close proximity to the town than is conventionally understood, for example there are at least three major tumuli at Tatlows on the high ground at Hopton Lane immediately above the town. This high ground, which also has a megalith on the Brassington Lane side, is known to contain a number of burials discovered in 1828 adjacent to Brassington Lane which were accompanied by jet beads like large buttons, which Flindall (2005) regarded as indicators of the Bronze Age. The site may therefore have been settled in those ages. Local barrows become much more common once you begin actively to look at field and place-names: Chewlow near Pitty Wood, Henlowe near Prathall Lane, Crichlow at the north end of Chapel Lane, Pillow Butts on the west side of Derby Road at Oat Hill, Tatlow between Brassington Lane and Hopton Lane. More are suggested from old field names such as Highlow Furlong, Long Lowe, Beardingslowe, Brymmynglow and Ravenslowe near the town, as well as others nearby: Callow, Mootlow, Roundlow, etc and possibly others whose names are now corrupted such as Longoe (Longway Bank) possibly from another Longlow; also Farlow, now Farnah Green, as well as Stanburnlow at Stainsborough.

The evidence for considering Wirksworth as possibly having late Iron Age or Roman origins is that there is a missing major site in the central Peak District (Lutudarum) for which Wirksworth is a serious candidate and for which we can consider the following issues:

1. Wirksworth lies at the centre of a network of Roman roads. Of these the two which have had the most serious archaeological work are The Street, which runs from Wirksworth to Buxton and The Derbyshire Portway which runs from Wirksworth to Brough-on-Noe. The connection between Wirksworth and Little Chester appears to be via Belper Lane End and North Lane and over a crossing of the Derwent at Milford, but this requires further archaeological study. An attempt by us to date North Lane archaeologically by an examination of the road was not successful, although it was found that the road was turf revetted (built of a turf embankment). This technique is more commonly known to be favoured by the Roman military, rather than being, say, a mediaeval road making technique. In addition a Roman coin hoard of nine coins, two being apparently of Antoninus, is associated with North Lane. These were found under a field wall where North Lane passes the former Belper rifle range (Reynolds, 1886). In addition the road passes close to a number of Roman pottery and kiln finds around the Chevin Golf Course as well as the Quern making site at Starbuck House at Blackbrook.

2. The Ecclesbourne river name and other Celtic place-name survive locally. The Eccles element being the Latin and Celtic name for a church. Given the antiquity of St Mary's church, we might be looking at a church founded in the late Roman age, perhaps the mid fourth Century. Churches of this age often have dedications to St Mary who was a cult figure of the time and would have been the chief church of a province. Churches in these former Roman provinces were often built within the walls of former forts, not only as this still represented the safest place to do so, but also because these locations represented the remembrance of imperial authority.

3. Roman archaeological sites around Wirksworth are unusually concentrated and include pottery kilns and quern making south and east of the town, villas and small settlement sites north and west of Wirksworth and even a paint-making site at Kniveton. In Wirksworth itself there have been small finds mainly on the east side of the town around the Great Hannage and in Noble's Yard in St Mary's Gate. Similar pottery and spindle whorl finds have been made in Pittywood Road.

4. A major first and second century Roman coin hoard was found in 1735, allegedly near Blobber Mine on the west side of the town, consisting of 83 silver denarii of Emperors Augustus to Lucius Verus. A denarius would be the equivalent of a day's pay for a soldier or a skilled person, let us suppose that to be about £80 now, then this hoard would amount to about £6,600. The time spread of the coinage in the hoard (over 150 years) is also interesting, as it starts with Augustus (27BC to 14AD) and ends with Lucius Verus (161AD to 169AD), this will reflect the coins in circulation at the time the hoard was hidden. The large amount may suggest a trader's or shopkeeper's hoard. It is, by inherent value, the largest hoard in the Peak District, for while there have been hoards found with many more coins, such as the huge Barbarous Radiate (forged or emergency coinage) hoard found recently at Heage, these are

typically of low denomination bronze coins, rather than silver. In terms of finds, the recent discovery at Reynards Kitchen Cave in Dovedale of a hoard of Iron Age and Roman Republican coins may indicate the existence of trade between the district and Rome in the first century BC.

The evidence for Wirksworth as a town in the Mercian Age is that:

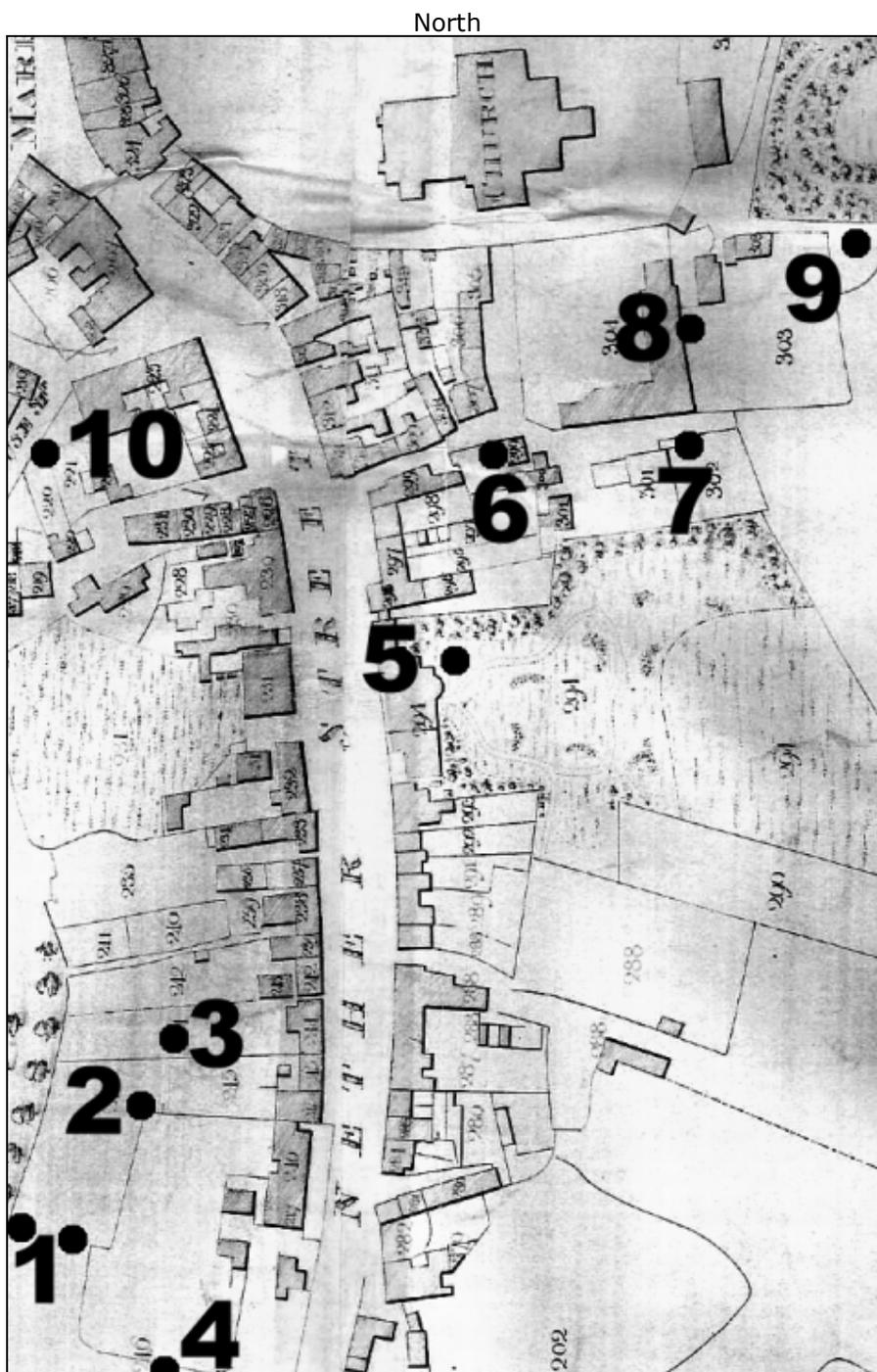
1. A Mercian charter survives at Canterbury cathedral for the payment of a lead render to the cathedral from the lands of Abbess Cynewaru's lands around her *township of Wirksworth*, granted to Duke Humberht of Tamworth. Unfounded claims are often made that this is a charter of Repton Abbey, but Repton is not anywhere mentioned in the charter. Cynewaru is more probably Abbess of Wirksworth itself: her name translates as "Royal resident or Royal citizen".

2. The Wirksworth Stone. This is the most important piece of early funerary (possibly Northumbrian) stone sculpture in the country. It is a carved sarcophagus lid telling the story of the ascent to heaven of an abbot or bishop. Much argument is had amongst scholars about its date, but a common view is that one of the pictures shows the lamb on the cross, a design that ceased to be used after a church council ruling in 692. If this argument is valid then the sculpture dates from before 692 and given that Wirksworth has some possible paternal links with St Chad (Bishop of the Mercians until 672), then the time frame of this sarcophagus lid probably puts it and the burial associated with it into the middle years of the seventh century. Our view does include the consideration that a battle recorded in Welsh sources for 636, in which the Welsh defeated Northumbrian forces at Caer Lwytcoed and killed a bishop, should not be considered to be at Lichfield, as has been the case for many years of antiquarian debate, but may be Wirksworth. For the Wirksworth Stone may be representative of the bishop and the marker of his resting place.

3. The Wirksworth Scaet. A tiny coin about the size of a 5p, found in Hilary Dennis's dig in Church Street in 1986, by Cath Housley. The Scaet is a coin of King Eadberht of Northumbria, who reigned from 737 to 758. These coins are generally found in Northumbria, but outside that kingdom their find spots are almost without exception at abbeys or at monastic sites.

4. The extensive nature of Mercian Age stone sculpture surviving in the church besides that of the Wirksworth Stone, such as the knotwork of a stone cross built into the north choir aisle wall and many sculptural fragments built into the north and south transept walls. For the church to have been so richly endowed implies the existence of a settlement large enough to support and pay for it.

The evaluations at St John's Street



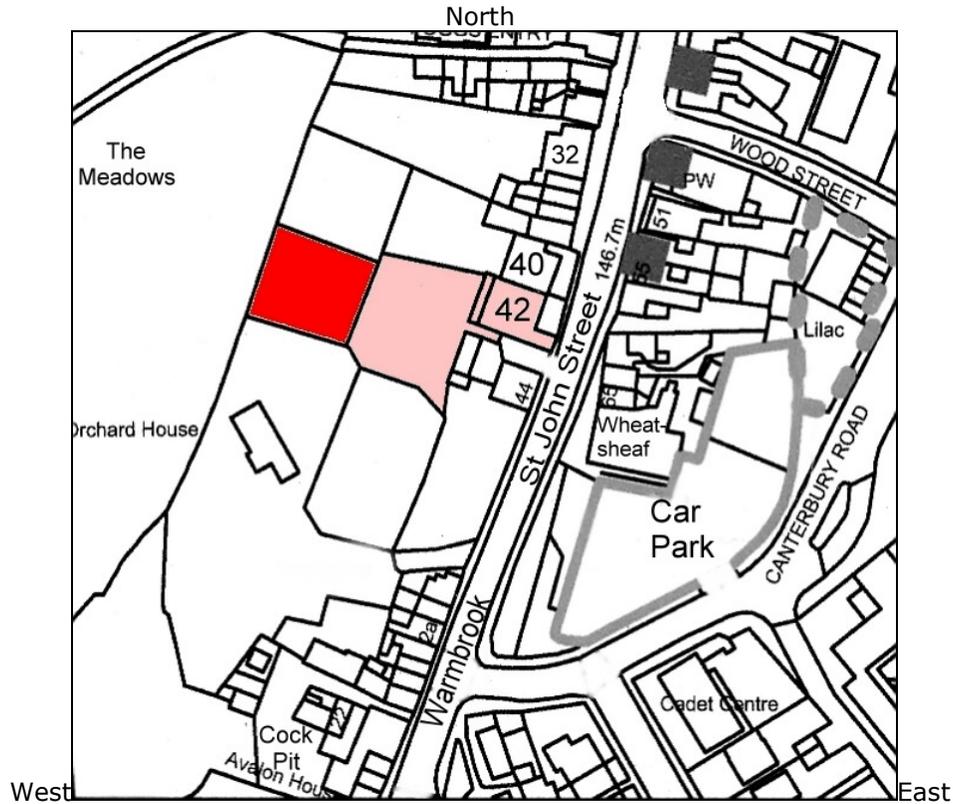
Plan 2: Map showing St John's Street ("Nether Street") examinations and findspots

Evaluations and Find Spots

1. Garden of number 42 St John's Street.

This, the principal examination, was centred at SK 2862 5372 and was located in the lower garden of 42 St John's Street (Ashcombe House). The garden, perhaps 0.4ha in extent, is divided into two parts, upper and lower by a stone terrace wall running through it in a more or less north-south direction.

The geology of the site is shale bedrock overlaid by clay till.

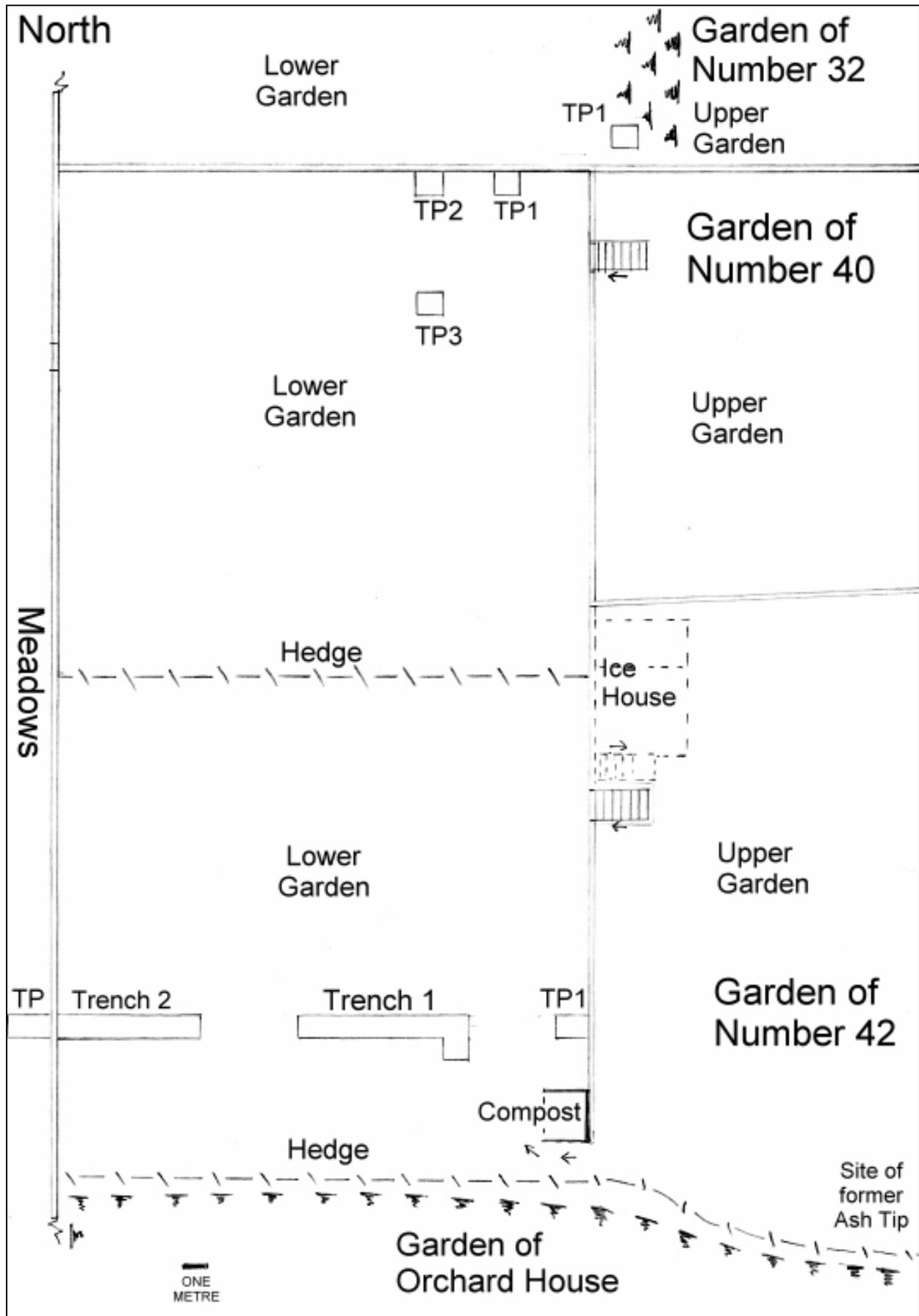


Plan 3. The lower garden of 42 St John's Street (Ashcombe House) shown in red

Methodology

The lower garden slopes gently for a distance of 22 metres from the terrace wall on the east side to the boundary wall with The Meadows on the west side. Small test pits were put in at 2 metre intervals down the slope to see if any differences in the underlying materials were evident, and where this was the case further examination took place.

Where archaeological features and/or deposits were identified, these features were further examined by expanding the original test pits into trenches. There were two trenches and all the features were dealt with by hand, recorded and photographed. The height above Ordnance Datum at the bottom of the garden is 142 metres, rising at 1 in 18 through the garden.

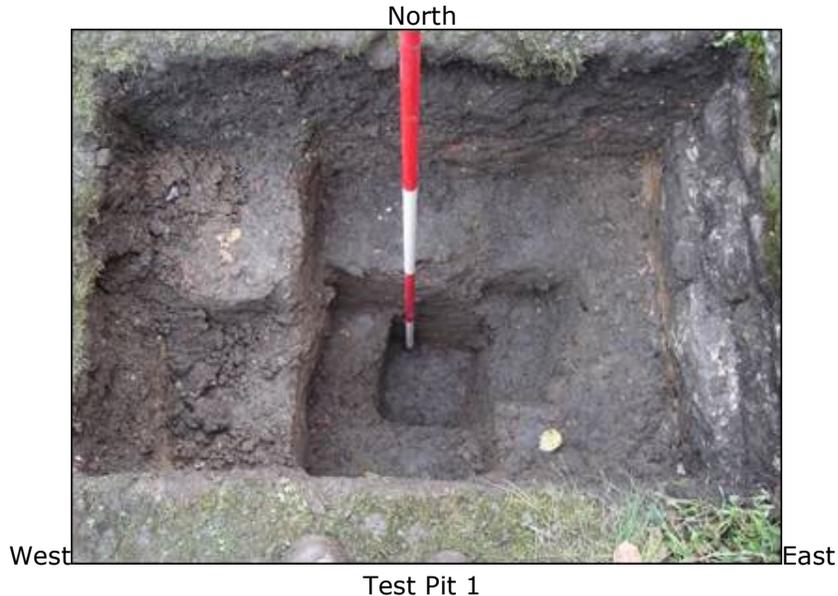


Plan 4: Trench location Sketch. Site Code WSJS14/15

Note: The garden boundary walling with the Meadows runs at 205 degrees from compass North.

Test Pit 1

Test Pit 1 was put in immediately adjacent to the terrace wall to see if the wall appeared to be substantially built. This is not the case. The wall rests on top of the clay till with no more than three courses below current ground level to a depth of 50cm. In front of the line of the wall appears to be a cut, almost a robber trench, down to shale bedrock at 1m 45cm and the fill is almost entirely of unstratified soily loam with a random mixture of almost entirely post mediaeval and modern pottery but with four small body shards of late mediaeval sandy ware (e.g. shard 125).

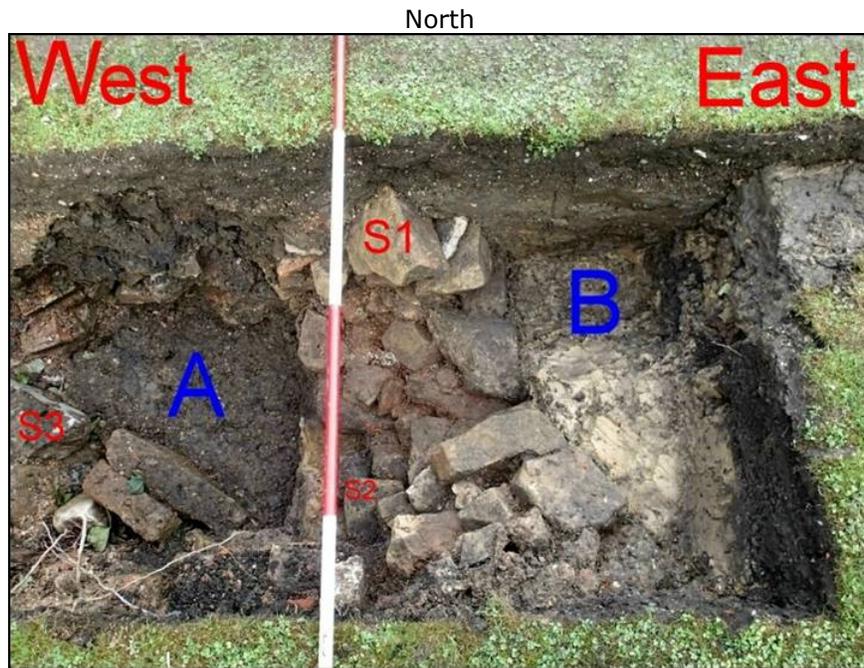


The clay till was cut into for about 1 metre in front of the wall but resumed again on the west side of the Test Pit. The sequence of overburden here was 50 cm of modern topsoil, then fawn clay probably N1 30cm, then Shale N2, natural. This cut appears to run in front of the wall as if it were a robber trench.

Trench 1

Trench 1 developed from a process of inserting small Test Pits at intervals down the slope of the lower garden towards the west boundary wall with the Meadows. Trench 1 therefore took in both TP2 and TP3.

In the east end of the trench is what appears to be the natural clay bank of the slope, a continuation of that in the west end of TP1. The sequence here is topsoil, then heavy fawn clay, sandier fawn clay then shale. Laid into this at the east end of the trench were the remains of a unmortared revetment wall with a spread of fallen and disturbed stone up to 2.5 metres wide lying west of it. The wall is wider at the bottom than the top, and this consists of perhaps only three courses of mixed stone. Spread in front of this is only one course, often of stones on edge in a randomly diagonal sequence and sometimes none; but a relatively large amount of building stone, both gritstone and dressed limestone. On top of this spread of stone is a very large amount of tipped brick, tile and mortar demolition rubble over 2 metres wide and up to 80 cm deep, which grows thinner down the slope. The wall rests in what appears to be a shallow cut trench containing broken shale and small stone; the wall is wider at the bottom, which might imply that a cut was made through the natural clay, the wall built and then the clay tamped down on to the wall. Finally, the bottom of the wall contains patchy red clayey sand and palm sized lumps of white mortar. We removed a section of the wall to see if any dating material was contained in it, but there was nothing. Lying between the fawn clay and the wall was a single handmade brick thinner and smaller than the modern brick contained in the tipped demolition layer in front of it and on top of it. It is curious that the stone should be under the brick rubble – if the wall had a stone plinth and a brick upper and was demolished top down we might have properly expected the brick rubble to be under the stone not on top of it because the brick rubble would have fallen first.



East End of Trench 1

A is the base layer with all the rubble and fallen stone removed.
 B is the fawn clay into which the wall is built. Note the curve of the wall.
 S numbers record locating stones.
 For example S3 can be seen in the picture above and the picture below.



East middle of Trench 1

The base shale with all the rubble and lower stone removed except locating stones

Lying to the west side of the wall is a section consisting of topsoil 30cm, heavy lumpy black clay with post mediaeval materials 40-50cm, the thinning out demolition layer 20-10cm, then a layer of grey clay 30cm+, which contains roots, charcoal, gravel and quite a lot of medieval coarseware shards. As far as we can tell, this clay layer runs from the west of the wall feature's base (S4) right through the trench westwards. It overlies what appears again to be the natural substrate of sandy fawn clay and shale.

S5 appears to be a random stone although the mortar next to it and under it was unusually coherent compared to the rest of the tipped material.

North

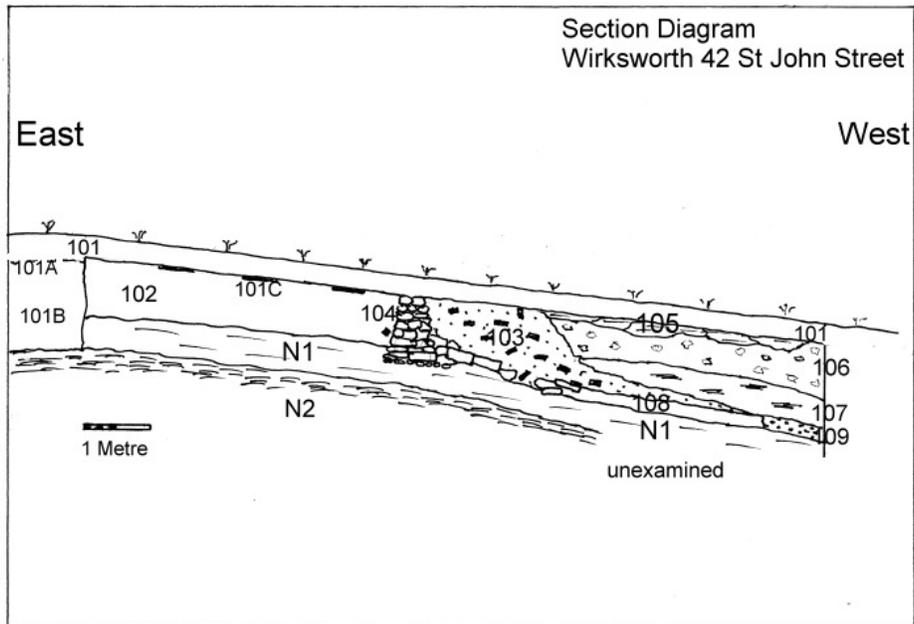


West middle of Trench 1



West end of Trench 1

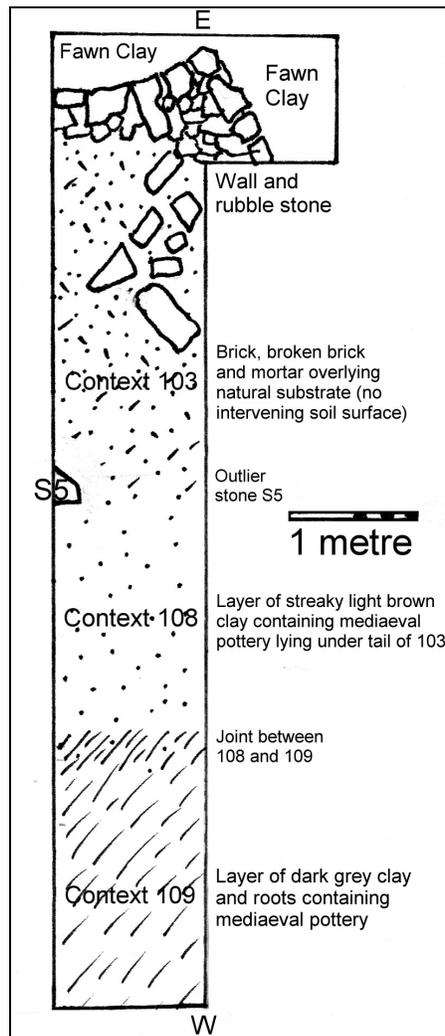
The grey clay layer contains residual roots, gravel, bits of charcoal and various coarsewares of mediaeval date (see pottery appendix, items with an alphabetic listing).



Section diagram of Trench 1



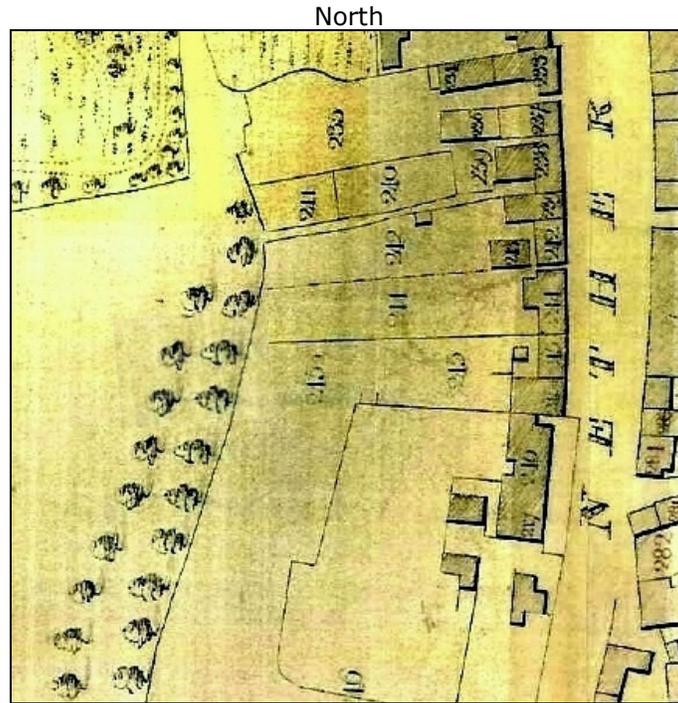
West end of Trench 1 showing build up of successive layers of overburden



Plan view of Trench 1 at 1.4 m depth

In summarising Trench 1 we take the prevailing view that the huge amount of demolition material associated with the wall feature in the east end of the trench represents the remains of a wall demolished between 1821 and perhaps 1830, when changes in the garden layout evident from maps saw the construction of the current terrace wall and the Ice House. The bottom of this demolition layer contained shards of unfinished Staffordshire Blackware. Identifying this pottery caused considerable difficulties, given that we kept finding it on top of natural strata N1 we initially thought we had found some Roman ware that was unfamiliar to us.

The shards were wasters, that is to say they were disposed of before the glaze firing had been complete and some of them had the remains of the glaze coating, a kind of white powder on them, a feature we originally thought was some kind of organic or paint residue. Eventually samples were taken to Stoke on Trent Museum. This pottery dates from 1720 to 1740 and because the pottery was unfinished its date of deposit is likely to be close to that time. Broken and uncompleted pottery of this type and condition was often sold cheaply for drainage and road repair activities. In this case its presence in the garden may be accounted for as an attempt to break up the clay and improve the drainage. This may also suggest the demolished wall was constructed on top of it at the time of various attempts to improve the garden.



1821 map of St John's Street showing wall previous to current terrace.

We conclude, therefore, that the demolition materials in the trench are the remains of a wall which was upstanding in the garden prior to the construction of the current terrace, with a date range of perhaps 1740 to 1830 and that the wall was of brick construction on a rubble stone plinth, with some dressed stone at the base of the wall.

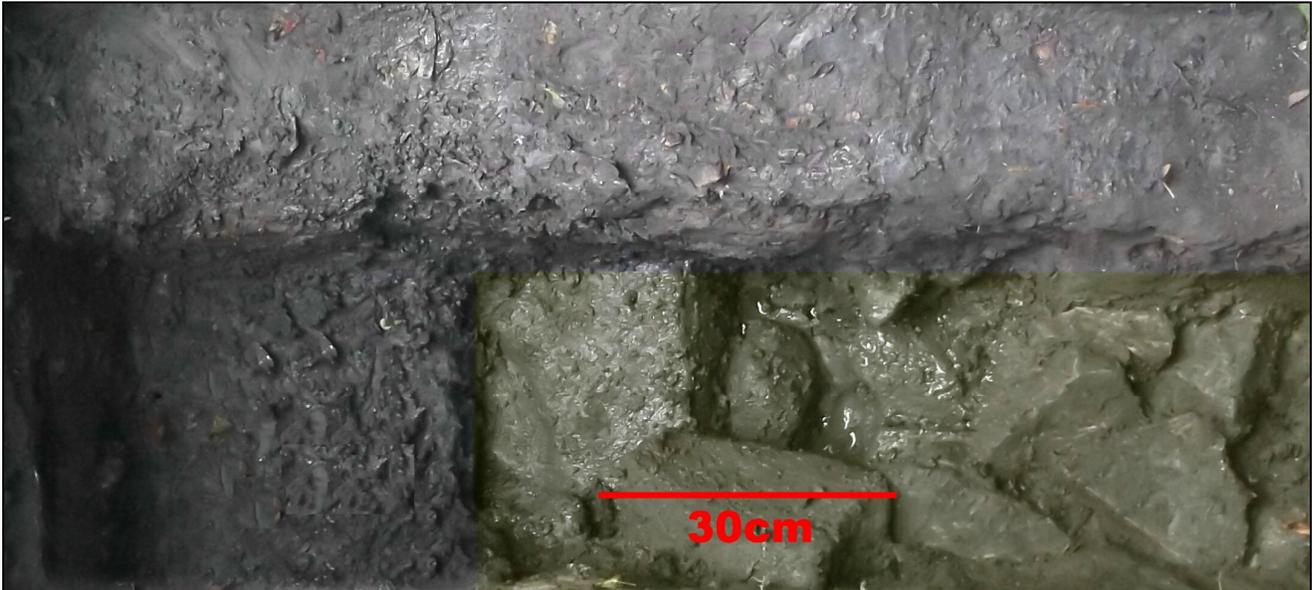
We feel, though that it is incumbent upon us to observe the difficulties in interpreting this trench. For example, if we take the view that the wall which we date from 1740 was demolished onto the garden (so into our trench), then given that the wall appears to have been a stone plinth with a brick superstructure, why, then, in the stratification is the brick not underneath the stone in the trench? Surely to topple such a wall this would have had to have been done from the top down, one could not demolish the wall from the bottom up, so the brick should have been in the bottom of the trench and the stone on top of it. Or there are two separate demolished walls and we cannot disentangle them.

Trench 2

Trench 2 developed from TP4 and was extended until it reached the west boundary wall of the lower garden.

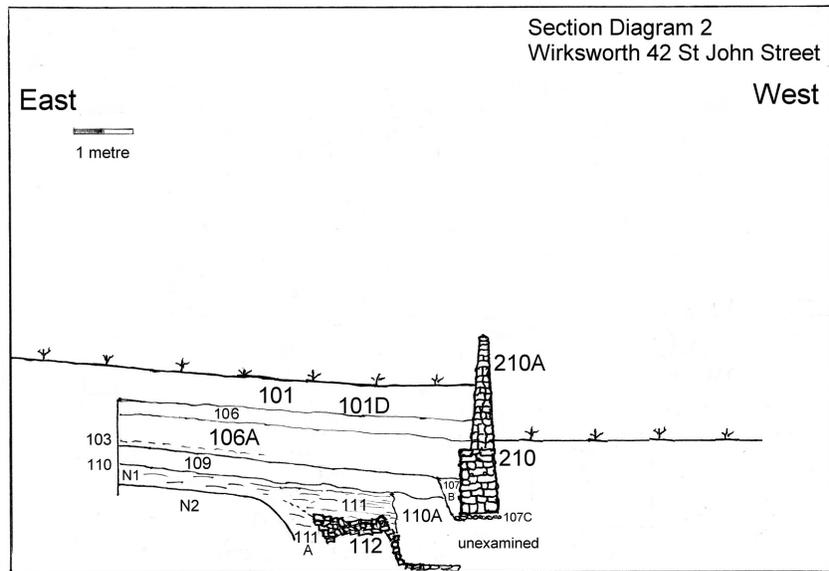


Trench 2 in course of development towards the west boundary wall



East West
 Trench 2 showing edge of buried ditch (left middle) 111A and tipped stone (middle and right) 112

The overwhelming obstacle to developing the trench down to the natural substrate proved to be the extent to which the overburden had been built up by the efforts of successive gardeners to level the lower part of the garden.



Section diagram of Trench 2

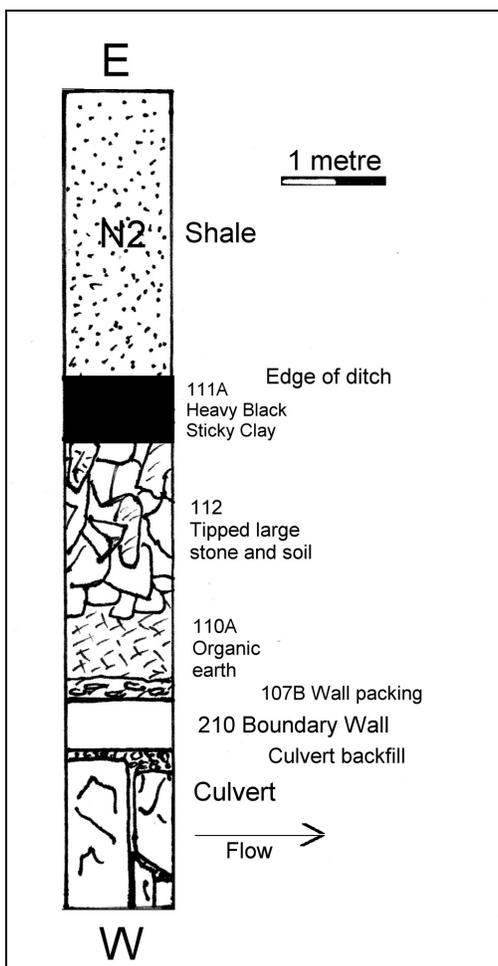
The sequence of activity is considered to be:

1. Construction of a ditch of an unknown date underlying all the modern features, whose edges appear to be composed of very heavy sticky black clay.
2. The filling of the ditch with large amounts of stone at an unknown date but given the two clay pipes in the overlay and that the older of one of them from within context 111 rather than on top of it, implies a terminus post quem, the earliest possible date of the activity, of 1630.
3. That the current boundary wall was built after an intervening period because of the presence of organic earth apparently overlying the ditch fill and upon which the wall was built into a layer of rammed stone.

4. The unfinished Staffordshire Blackware which keeps occurring implies a terminus post quem, earliest date of activity, of 1720, for much of the gardening "redesign" activities. The red clayey sand which occurs from time to time, strangely intermittently, is also unusual and might be "marker" sand for laying out gardening features.

5. The culvert on the Meadows side of the boundary wall was butted up against boundary wall and so must be after it: it being unconnected in time as far as we can tell to the gardening works and the wall. There was a burst of "civic" type activity in Wirksworth in the later eighteenth century, particularly from 1775 to 1795 and the culvert, which may drain Hammonds Court, perhaps dates from this time and must have been long present before the trees shown on the 1821 map had grown over it, say thirty years, otherwise the trees would not have been worth marking on that map.

6. The build up of various levels of the lower garden appear to be associated with further garden boundary changes in the 1830s and several deposits during the Victorian and (perhaps) modern periods, notably 101, 101D, 106 and 106A have built the garden up to its current level.



Plan of trench 2 at 2.5 metre depth
(Top of culvert shown for location only)

Continuation Test Pit of Trench 2

On the west side of the boundary wall a Test Pit was put in to attempt to see if the conceptual ditch feature continued. On the west side is less overburden as there is no garden build up. From the wall coping to modern ground level is 180 cm as opposed to 80 cm on the garden side of the wall.

There was a sequence of 30 cm of leaf mould, 30 cm of fawny soily fill with broken stone, china and salt glazed stoneware shards, then at 60 cm a huge limestone slab 140 cm by 50 cm, one of several

adjacent covering a culvert which runs against the wall. The culvert is stone constructed, U shape 50cm wide in interior profile with the slabs forming the capstones of it. The culvert interior depth was a further 70cm below the capstones. The total depth from the wall coping was therefore equivalent to the base of the wall as found on the east side. The culvert still runs (north to south flow) and was butted up against the wall. The root plates of the Linden trees which grow here overlay the slabs of the culvert and these trees appear on the 1821 map. We therefore conclude that they must have been sufficiently large to have been recorded, let us say 20 or 30 years of growth and if this were the case, the culvert perhaps dates from the later eighteenth century, as noted above.



West side of the boundary wall of 42 St John's Street showing culvert slab.

We also conclude that the culvert must be constructed on a stable base and that adjacent to and apparently under the base is a layer of stone, once again. Overlying this, although not obviously stratified, the ground being disturbed by the culvert construction, was a small bowled clay pipe shard of a type dating between 1680 and 1710 (Hume, 2015).

Causeway or ditch?

Locally, the feature which runs between two lines of trees along the west boundary of the gardens of Orchard House and numbers 42, 40 and 32 St John's Street tends to be referred to as "the Causeway". The deeds of number 42 refer to its west boundary as being the "Causeway Head", and that (anecdotally) the Causeway was somehow a road approach or carriage drive to Gate House. However, none of this really withstands thoughtful assessment. The modern Causeway street name, north of Hammonds Court, may be a misconception or even a misplacement, as early maps (1821) call it Gate House Street. Also the name Causeway Head is extremely odd from the point of view that the land falls from north to south at this point, Causeway Tail or Causeway End might have been conceivable, but unless a crucial piece of information is missing, this name Causeway Head, implying somehow the top of a Causeway, is inexplicable with our current understanding.

Visually, however, there appears to be a ditch here, running north to south and at the lowest point of the surroundings. In addition, given that we take the principal stone fill of this ditch to be almost another two metres below its current ground level, it would be startlingly obvious as a ditch were it

cleared down to its stone fill. On the west side of the wall it is 12 metres across and may originally have been wider because the random nature of the various kinds of overburden suggest it has been the destination for illicit tipping activity over time. On the east side of the wall we know from Trench 2 that it runs from the wall to a defined edge with width of 3 metres. This suggests a total width possibly in excess of 18 metres.



The west side boundary ditch of St John's Street

Given the terminus post quem of the two clay pipe bowl shards, it may be conceivable that the term "Causeway" results from the feature being filled with stone in the years following the Civil War, (after 1651), it is not terribly conceivable that one would be filling a ditch during Civil War. However, as a road or horse causeway it would be improbable, it is at the lowest point of its surroundings, it would flood, therefore the purpose of filling it with stone, if this is what has indeed been done, cannot have been road making. In any case a culvert was later added above the filled surface implying its role as a "road" was either short-lived or not its real purpose. In short, we feel that what still looks like a ditch is indeed a ditch, a substantial one and historically far more impressive than it now is. Alternatively, it may be a filled former watercourse and if this were the case it may perhaps have been a tributary of the lost Warmbrook.

2. Garden of number 40 St John's Street

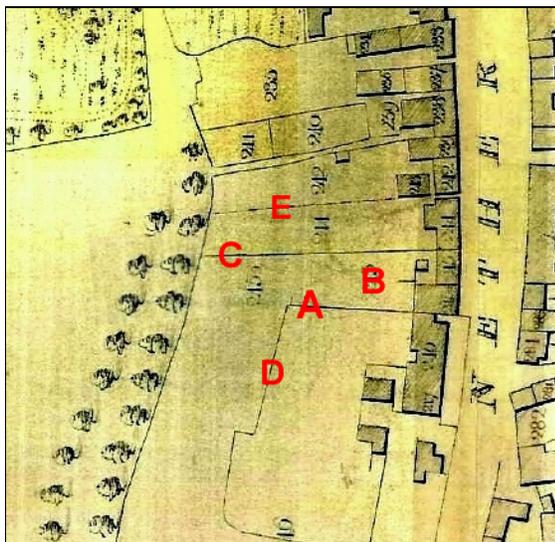
Three test pits were put into the lower garden of number 40 and one test pit into the garden of number 32. The first two test pits (TP 1 and TP 2 in number 40 - see plan 4) were put in adjacent to the north boundary wall of number 40 St John's Street.

Test pit 2 was put in next to the wall joint which can be seen in this picture below, between the wall and the remains of a greenhouse whose pipework can be seen in the middle foreground of the picture. Test pit 1 was put in against the wall but to the very right of this picture. Here we are looking north.



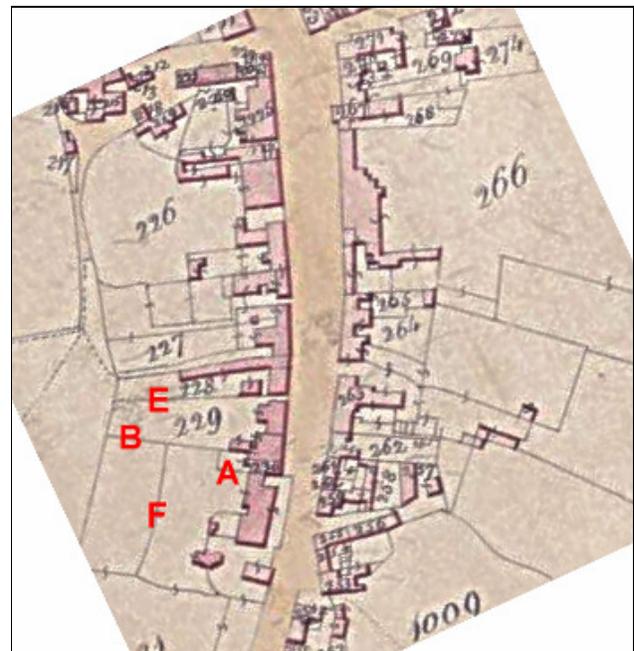
The north boundary wall of the lower garden of number 40 St John's Street
The left hand element is rubble stone, the right hand element is a brick upper on a stone plinth

This wall is curious in so far as the joint between the well-built brick wall on its dressed stone base to the right and the rough stone-built lower wall on the left is an oddity. This might be due to a cosmetic decision on the part of the owners of the wall or perhaps they ran out of money while building it, however, if we look at the maps below, a third explanation might be possible.



1821

(South)



1837

Two comparative maps of St John's Street, Wirksworth, called Nether Street in the late Georgian period.

The walls and features in the comparative maps are:

A. A boundary wall on the north side of the plot of number 40 making a right angled joint with feature D in 1821 but shortened to a stub by 1837.

B. A stub of wall in 1821 that became the current north boundary wall of number 40 shown in 1837 running the whole length of the plot down to the west side boundary with the Meadows (the trees in the 1821 map are still there, but are not shown in 1837). The wall is the current north boundary wall of number 40 shown in our photograph. This wall is also the current south boundary wall of number 32. (Houses 34, 36 and 38 have no garden plots).

C. The "original" south boundary wall of number 32, demolished before 1837.

D. A wall (or terrace) enclosing the garden of number 40 in 1821, when its garden was very large.

E. The north boundary wall of number 32, the only east-west running boundary feature to be in the same location nearly two hundred years ago, in 1821, as it is now.

F. The current garden terrace of numbers 40 and 42, which must have been constructed between 1821 and 1837.

What might be the possible third explanation of the wall join in the modern wall, shown in our picture, that is wall B? Well, the owners of these plots were certainly juggling their ownership in the 1820s and 1830s, this resulted in almost all the boundaries being changed except Wall E.

If it had been the case that number 40 acquired a plot on the north side after 1821 and so had to move its boundary wall, the decision may have been to demolish a length of wall A to open up the garden and use its materials to build the rest of wall B, this would be the cheapest way of doing it: you just tip the old wall over and re-use it. However, because wall A didn't run the full length of the plot, the materials were re-used only as far as they ran, perhaps so a nice wall could still be seen from the house, and so the rest of wall B was constructed of rubble. Only once this was done was the terrace (F) built, because it butts up to wall B. Therefore the earliest the current wall B can date from is 1821.

Test Pit 1 wasn't particularly instructive except that it showed that the dressed stone and brick part of wall B was constructed by cutting a trench into the underlying clay, filling it with rubble, tamping that down and laying five courses of dressed stone, then the rest being brick with stone copings on top. The soil and overburden had been dug over by modern gardening and overlay more of the fawn clay which seems (note the comment below) to be natural in most of this location. There were no finds except some modern pottery, and no unusual issues.

Test Pit 2 was exactly adjacent to the wall join but in a difficult confined space between the wall and the remains of a greenhouse, which was overlain by various modern soil, broken glass and Victorian garden rubbish and a lot of rubble and concrete plinth work from the demolished greenhouse. Below that however, a context was reached clear of all rubble and more recent materials, which represented the garden before the greenhouse was built. This contained post mediaeval pottery, charcoal, clay pipe shards and a single sherd of gritty fawn (mediaeval) coarseware pottery with a dull grey surface, not a glaze. Below this context (layer) was more of the familiar fawn clay, with some streaking which we assumed was natural. As usual, for the sake of thoroughness we put a sondage (small hole) into this and found to our considerable surprise that it overlay, not the expected shale bedrock, but a layer of mortared worn gritstone, with fragments of large limestone. The mortar having a pink colouration, often associated with the use of pigs blood as a constituent.



Shard of fawn fabric grey coated late mediaeval sandy ware 1301-1500, in redeposited material

Now the matter of mortared stone well below the level of wall B and not associated with it gives us some issues. Firstly, it tells us that the fawn clay *at this point* is not natural, but put there. Secondly, it seems likely that we have yet more gardening and boundary building activity and this underlying context of mortared worn gritstone perhaps represents the remains of a previous boundary in the same place as the current Wall B

Test Pit 3 was put in away from the boundary wall to see if the materials and layers of overburden differed and once again we have a number of layers of overburden dumped on top of (and upside down) over the underlying natural substrate. As this test pit was relatively complicated, the contexts were:

1. Turf and modern topsoil 30cm including large amounts of blue and white china, post 1810.
2. Thin layer of small stone possibly marking the line of a former path overlaying more modern soil and materials down to 40cm
3. Redeposited patches of fawn clay mixed with soil containing Ticknell feather trailed slipware (1660-1750) and a further shard of mediaeval grey coated ware similar to that shown above, at 50cm depth.
4. Fawn clay with grey streaks 60cm-90cm with inclusions of small gritstone and broken brick.
5. Further soil layer continuing down to 130cm with shards of Nottingham salt glazed earthenware (1690-1790) towards the top of the layer as well as a shard of Midland yellow ware
6. Fawn clay with small pebble – natural.

This implies the overburden on top of test pit 3 context 5 was the result of gardening work which had seen the upper layers from another part of the garden turned over and redeposited on top of context 5.



Nottingham brown salt glazed earthenware 1690-1790 from TP 3 in number 40's garden
This vessel may have been a tobacco jar

The gardens of numbers 42, 40 and 32 are adjacent (as some of the other numbered houses in this part of St John's Street don't have gardens). In the case of numbers 42 and 40 one plot in the late Georgian and early Victorian period, as the garden terrace which runs through them is all one work.

3. Garden of number 32 St John's Street

The garden of number 32 differs in that it also consists of an upper and lower garden, but in this case there is no terrace wall, the separation is in the form of an embankment with stepped terracing for planting.

The instructive issues about the garden of number 32 are that the lower garden is also built up at the bottom (the west end), but in this garden this raising of the garden level is evident in the north boundary wall (wall E), that is the boundary wall with the properties fronting onto Fogg's Entry. The reason for this is that the north boundary wall is built in two parts, through which passes a diagonal line at a gradient of about 1 in 10: this was obviously the line of the top of the original wall and it disappears towards modern ground level at the west (Meadows) end of the garden.

What has then been done is that the copings have been removed from the top of this original wall and the wall built up to its current modern height in a rebuild and the copings re-used. This then allowed the bottom of the garden to be built up in the same way that Ian's garden and Pamela's garden have been. The timing of this would have to be about the same as the construction of the Meadows boundary wall and so between 1740 and 1790, given what we already know about that wall and the stone-filled ditch which it is built on top of.

One of the main purposes of this investigation has been to see if any evidence of fortifications and for this reason it was important to look at the embankment in number 32 was because it is set back from the terracing work in the other two gardens, that is to say the walled terrace in number 40 and 42 now cover the line of the embankment where it must have continued.

The Test Pit in Number 32 went in towards the lower part of the embankment and this embankment visually consists of a series of levels, that is to say four small stepped elevations which make up the terrace. The Test Pit (1m x 1m) was a metre from the south boundary wall, and 18 and a half metres from the west boundary wall, and consisted of:

1. 10cm modern compost over Geotext
2. 20cm of modern garden soil including various post mediaeval pottery
3. A further 20cm of (find free) limestone dust.
4. Below this was 10cm of soil containing what appears to be exclusively mediaeval pottery.
5. The mediaeval context overlays the usual fawn clay 30cm and shale and natural sand down to the maximum examined depth of 110cm.

This garden is much less disturbed than the gardens of number 42 and 40. Although the lower garden of number 32 has obviously been built up, the point at which the terrace leaves the lower garden and rises towards the upper garden has not been seriously covered in overburden.



Pottery shards in mediaeval soil layer (context 4):

1. Pink gritty Ticknell (Hartshorn) type ware (pale cream fabric) 1101-1300
2. Pale green rouletted Ticknell (Hartshorn) ware (pale cream fabric) possibly 1201-1300

3. Green lead glazed incised ware (grey fabric, possibly Brackenfield) 1300-1425
4. Unglazed Thin red brown slip colour coated oxidised sandyware (fawn fabric) 1101-1300
5. Midland purple ware (coal measures fabric, probably Ticknell) 1475-1550
6. Midland purple ware (orange fabric) as Ticknell date range 1475-1550

The embankment appears to be natural. We have been looking for a fortification and this does not seem to be it. Had the embankment contained, let us say, a robbed defensive wall, we would have expected at least a mortar and dropped stone spread representing the robbing. There is no such material. Had the embankment contained, let us say, a bank upon which a palisade might have been constructed, we should have expected there to be a steeper scarp and for it to have been constructed of something more than natural geology. Although there might be considered to be an element of doubt in so far as a palisade might have been possible on the top of a natural slope, but there were no finds which suggested anything but a mediaeval date for any activity. Had the embankment represented a rampart, that is to say the back of a wall or turf revetment, again we should perhaps have found different layers of material which it was built with. An oddity is that the clean limestone dust directly overlays a mediaeval context, with apparently no post-mediaeval layer. We assume this to be because modern gardening activity had stripped any post-mediaeval element off for some reason.

Burgage Boundaries

We concluded that the only feature on the west side of St John's Street which might represent a structure of a date more than 300 years old is the ditch. Although this ditch has quite a lot of stone dumped in it and was overlaid by a couple of eminently datable mid seventeenth century clay pipe bowls, the dating material coming out of all the gardens adjacent to it is overwhelmingly mediaeval. We therefore feel that the ditch is perhaps the Burgage Boundary, that is to say the boundary with the Meadows of the line of mediaeval houses and strip plots on the west side of St John's Street. It might be argued on the basis of known archaeological investigations of burgage boundaries in other towns that we should still expect to see a boundary ditch accompanied by a bank. However, in some cases such as Newport, Dyfed (Murphy, 1994) the banks had been removed and no evidence of them remained.

In the case of the boundaries between the plots the only enlightenment we have is that wall B, the current wall between numbers 40 and 32 appears to overlay the remains of a previous wall, suggesting that the burgage boundary between these plots had been in use, then fallen out of use as the ownerships of the plots had changed, then been restored to use as ownership changed again.

In the case of the boundary between number 42 and Orchard House, this boundary appears to be a filled ditch overlain by a post-mediaeval wall and hedge, however, this boundary gives the impression of being beyond the area of the boundaries between the houses, and might represent the outer ditch of the burgaged area in general, in the same way that the boundary between the plots and the Meadows does, admitted the fill is different but one might reasonably expect one of the following:

1. That a boundary ditch in this location is the continuation of the burgage boundary ditch on the Meadows side and must therefore curve round the whole of St John's Street but remains to be found on the east side. There may be a ditch present at Rennie House, Nobles Yard, St Mary's Gate, and this may represent the return on the east side, although this ditch contained a sherd of Roman Derbyshireware.

or

2. That the ditch between number 42 and Orchard House is not a burgage ditch but a town boundary ditch, for this is where the south-western approach road historically came up into the town, and it is not related directly to the burgage boundaries as such.

or

3. This *is* a fortification ditch, it contains the demolition material of a fortification wall and the extensive changes to the gardens above it have prevented us identifying or interpreting it properly. I am extremely conscious of the serious problems faced in Nottingham in identifying the remains and circuit of the town wall, the wall having been demolished *before 1540*.

4. Garden of Orchard House, Warmbrook

Three test pits were put into the gardens of Orchard House. The first in the very south west corner of the west garden of Orchard House, 5m north of the Pig Sty and 2m east of the Meadows boundary wall. Beneath 1 m of overburden, a tarmac surface and more overburden at 2 metres depth (note; the height of the overburden varies) there was a roughly built narrow (30cm) watercourse edged with large stone including a gritstone mullion window sill. We took the date of this watercourse to be between 1650 and 1690 because of the re-use of the mullion, and the style of that mullion.

The second test pit was put into the north east corner of the upper orchard garden 5 metres from the boundary with number 42 and 5 metres from the boundary with number 44 and was one and a half metres deep. Below about 20 cm of topsoil there was a metre of clay and ash type rubble with modern material (i.e. Victorian and Georgian pottery, stoneware, earthenware, china, tile, clay pipe shards etc). Below this the fill changes to a more dark grey ashy material with fawn clay patches, containing a gritty man-made fill of ash, degraded and burnt red gritstone, tiny pieces of charcoal and coal and almost no pottery except 1 mediaeval shard (1250-1350) of an orange and grey fabric with a very pale green yellow thin glaze and 1 shard of Midland Purple Ware (1475-1690) again near the top horizon of the two fills. The ashy fill continued for approx 30cm.



Mediaeval, Burley Hill type sherd



Midland Purple sherd

Between the ashy fill and the bedrock of reddy grey shale was one shard of unglazed cream coloured coarseware with inclusions of mica and chaff, that is to say grass-tempered ware, which we take to be of possible late Roman or early Saxon date.

The third test pit was put in against the northern boundary wall 5 metres from the boundary with number 44 and we went down 2 metres without finding any underlying bedrock. This pit was crammed with large red pottery shards, composed almost exclusively of piled up broken pots of at least 30 cm diameter some 30 cm in length (height) some less, and a very few with exterior applied decoration. We concluded that as the wall was south facing the location had been used for the planting and nurture of fruit trees in these large pots (this is, after all, called the Orchard).

The boundary wall rested on some of this material at a depth of about a metre and the fill carried on to a depth of two metres without us reaching the underlying shale substrate. Immediately under the boundary wall were not only more large pieces of garden pots, but also two shards of Ticknell type slipware, indicating the boundary wall to have a terminus post quem of 1660, that is the earliest possible date before which it cannot have been built. The gardening activity must predate the wall and may have continued past its construction date, although the nature of the amount of broken pot surrounding the wall makes disentangling the sequence difficult, that is to say the pot activity may have stopped before the wall was constructed and the material against the wall a result of backfilling against the wall.



Post Mediaeval Ticknell Calke Mill type feather trailed slipware produced 1660 -1762

5. Memorial Hall Garden, St John's Street

This test pit in the south-east corner of the Memorial Gardens 2 metres from its respective east boundary wall and a metal fence at the rear north corner of the Memorial Hall was the usual 1m x 1m and was composed of:

1. 40 cm of modern thin turf and topsoil.
2. 50 cm of tipped shale, mainly a kind of ashy grey colour but with some variations, mixed with occasional small limestone, some building stone, a little brick and plaster,
3. 15 cm of dark grey soil with small chert gravel and occasional pieces of brick and a limited number of pottery shards and clay pipe pieces
4. 40cm of sandy fawn loamy material containing some chert gravel and heavily corroded limestone pieces and no finds whatsoever, partly formed of and on top of:
5. A natural hard though partly corroded limestone glacial strata of unknown depth ("bedrock"), very similar to the bedrock of the Hannages.

The main difference is that in the larger Hannage pit (Shone, 2009), there was a thin layer of soil on top of the glacial strata which represented the mediaeval soil layer in the Hannages and that contained both mediaeval and Roman pottery shards. In the case of the test pit in the Memorial Garden, no such layer exists and we therefore conclude that in the making of the Memorial Garden, or when it was Nether House, that the soil layer must have been stripped off, perhaps to level or reconstruct the garden and no longer exists or was re-deposited, so what remains is badly mixed up and confused and possibly within context 3. Finds were:

1. Shard mottled brown ware fawn fabric, 1690-1750
2. Shard brown glazed earthenware ware, 1650-1900
3. Shard of hard red fabric ware with pale cream thin glaze, mediaeval 1200-1400
4. Shard of fine unglazed red, worn mica-inclusive pottery, unknown date.
and some CBM (brick bits).

6. Rear yard of 31 St John's Street (Wirksworth Heritage Centre).

Investigation work took place in the rear yard of number 31 St John's Street adjacent to St Mary's Gate. Test Pit 1 contained various modern surfaces down to a demolition layer which we associate with the levelling of the yard and removal of a small building in the north east corner about 25 years ago. This small building was still shown on a plan of nearby China House Yard of 1984 relating to an investigation of the short-lived Wirksworth China Factory (1772-1777) by Brown and Cox.



Test Pit 1 looking east. The trowel lies across the line of the culvert, marked by the edge of the big stone.

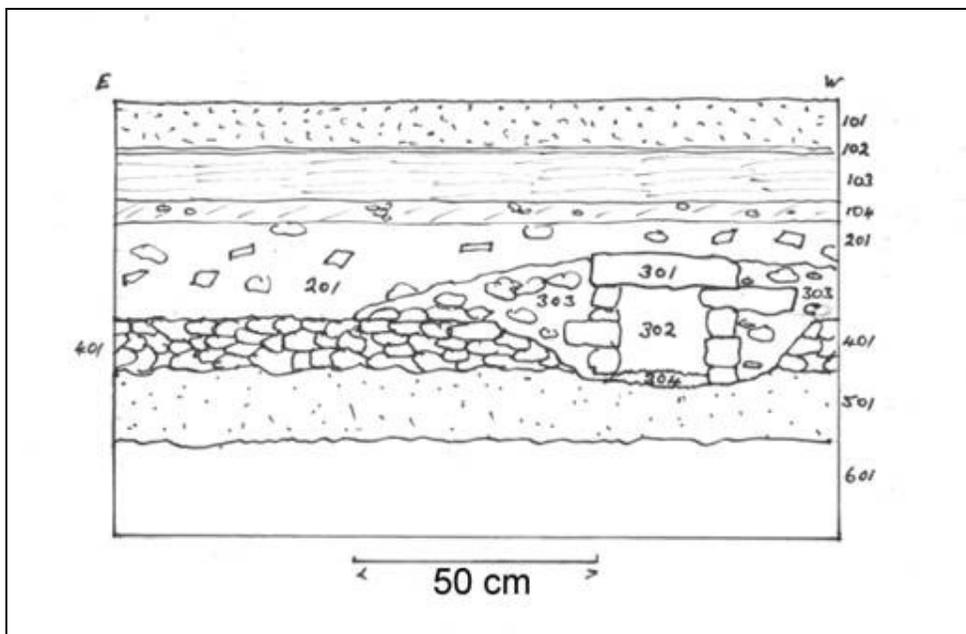
The demolition layer contained all kinds of post mediaeval materials, some very modern and some not. This overlaid a yard surface of limestone cobbling which was quite hard and contained mortar and bone but no obvious dating material. This surface was cut by a very late eighteenth century culvert which ran NNW to SSE across the Test Pit and which was completely blocked. The very top of the silting up had

ring pulls from drinks cans of a design approx 1970-1990 (i.e. disposable tear off type: modern ring pulls do not tear off). We concluded therefore that the culvert had been blocked for the last 25 years. The culvert was more or less square. Beneath the limestone cobbling was a layer of very dark almost black cold heavy clay which had bits of charcoal, tiny flecks of ceramic materials, bits of bone and remnants of very degraded wood. The culvert rested on top of some of this layer, which the culvert builders may have regarded as a suitable bottom layer for their culvert, but which must predate it because the clay runs under the cobbling. However at the south end there was some base lining of stone for the culvert within the clay layer, not present elsewhere.



Test Pit 1 looking south, line of culvert marked in red dots

The section diagram below shows the contexts of the test pit down to the natural bedrock. The test pit area was quite badly disturbed by the culvert and many of the small finds have been re-deposited at a different place than where they must originally have been.



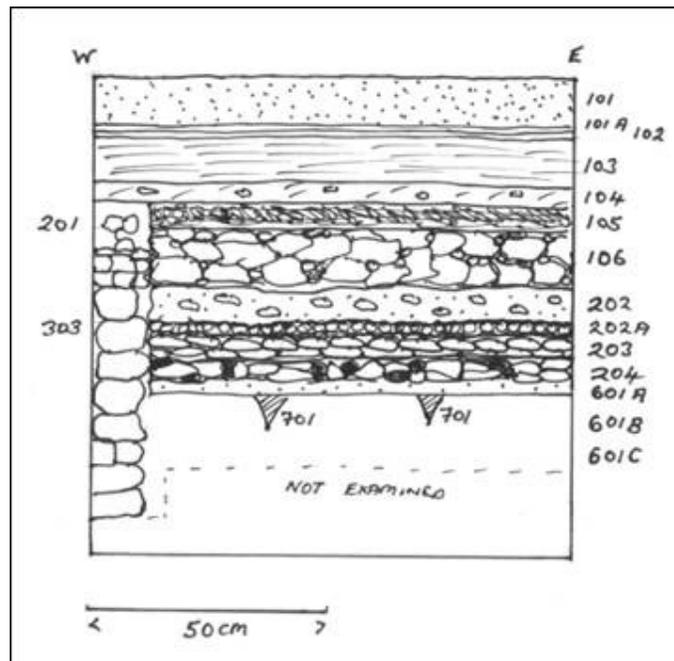
In general our thoughts at this present time are that the cobbled surface is possibly mediaeval, it is overlain by the post mediaeval demolition layer (201) and it rests on a layer of clay (501) which we have not been able to date, but which is clearly man-made and seemingly laid on top of the bedrock. The clay layer might represent the floor or foundation of a building of some kind.

Test Pit 2.



Test Pit 2 showing stake holes 1 and 2 (context 710), the earliest activity found.

Here is the section diagram for Test Pit 2.



We had originally thought 601A (a very thin layer of grey clay) was part of the bedrock solifluction layer, as it is extremely thin in TP1 and most of TP2. But at the north end of TP 2 it cuts across the pit on an E-W line and is parallel to St Mary's Gate. At this point it deepens to about 10 cm and widens to about 15cm. It seals two stake holes (context 701) which contained dark brown fine loamy soil which we assume to be totally degraded wood residue. These are therefore the earliest features of the site and must be prior to a spot glazed jug handle (Burley Hill Ware 1250-1350+) found on the top of 601A the grey clay. Several shards of unglazed oxidised ware (131) were found embedded (as if trodden down) within 601A on top of 601B, so we are not able to date it with certainty.

The small finds immediately under the floor of the workshop or stables building which appears on all maps of the location since 1710 up until 20 years ago would suggest it was constructed in the late seventeenth century, say after 1660. This is because a large amount of datable and different slip wares existed under the floor, and the sheer amount therefore implies deposition in the peak period of its use range.

Prior to this the various layers going back in time provide us with snapshots of the sequence of it being used as a yard or a garden with various mediaeval shards going back to Burley Hill wares. At some time quite early in this sequence a layer of burnt limestone suggests an industrial activity. There is some metalworking slag amongst the small finds.



Shards from TP2.

1. Spot (partial) lead (green) glazed coarseware, orange/red surface and very dark grey/black fabric 1200-1400
2. Oxidised ware.
3. Pale yellow/green glazed orange gritty ware 1200-1400
4. Spot (partial) lead (green) glazed coarseware, orange/buff fabric 1200-1400
5. Clear glazed shard, very middle grey fabric 1200-1400

In terms of the shards of pottery found in the lower layers of the Test Pit, the vast majority of these appear to be of an assemblage which would suggest Burley Hill ware or similar types. Of the sample shown in the picture above from context 203, they are fairly consistent. However shard 2 is an exception, it is an unglazed oxidised ware shard, and it is considerably rougher and more worn than the other shards, perhaps suggesting it has been moved around more (e.g. by digging activity) and may therefore be older than the rest of the assemblage.

We conclude, therefore that there has been a yard/garden at 31 St Mary's Gate since the 13th century and that there is no structural archaeology (i.e. walls etc) prior to the 17th century stables building. It may be that the weight of finds from the earlier periods represent some kind of increase in activity at that time. The earliest activity, represented by the two stakeholes, may represent an original boundary of St Mary's Gate dating from prior to the 13th century, and might imply that St Mary's Gate was originally wider than it now is. The small finds from the various stoned yard layers appear to be representatively mediaeval, although there are some oxidised ware shards, of more than one type, which may be earlier.

Finally, to return to Test Pit 1, a number of fragments of wall plaster were found, these have a delicate pale blue painted surface. We cannot date them and they were found mostly in context 201, and mainly at the south end. We have never found intact wall plaster before and so have nothing to compare it to.

7. Findspot of Roman pottery, Nobles Yard, St Mary's Gate

Prior to the construction of Rennie House, Nobles Yard, St Mary's Gate, a limited archaeological investigation was undertaken in 2000 by John Wheeldon as part of an effort to identify pottery from the former Wirksworth China Factory, which was on the opposite side of St Mary's Gate (note: St Mary's Gate eastern stub is called in some old deeds "Hannage Road"). This find spot is 20 metres from Test Pit

2 in the yard of 31 St Mary's Gate, above) and included a base corner shard of Roman Derbyshireware of the 2nd-3rd century. This find was immediately adjacent the north boundary wall of Nobles Yard at approx 3 metres depth in what was described by Mr and Mrs Rennie as a large ditch on which the house now stands, for which piles had to be put in to strengthen the foundations of the house.

8. Findspot of Roman pottery, NW corner of Great Hannage

The Great Hannage investigation is recorded in detail in our previous report "Issues in the archaeology of Wirksworth" (Shone, 2009). Both mediaeval and Roman pottery was found in and around the north-west corner of the Great Hannage (Anthony Gell School Playing Field). These included a Roman Severn Valley Ware body shard, early 2nd to 3rd century; a Roman Nene Valley colour coated ware body shard of the 2nd or 3rd century and Roman oxidised ware rim shard, 2nd century, and a Roman handmade roof tile.

9. Site of examination of China House Yard by Brown and Cox

China House Yard was investigated by Brown and Cox in 1984 to see if china from the short-lived Wirksworth China Factory could be found. Unfortunately, the report of the work in the Northern Ceramic Journal, hardly touches the archaeology except to mention that the stratification appeared to be upside down. No notes of other kinds of pottery or finds apart from Wirksworth china were recorded in the report.

10. Test pit adjacent to the Causeway

Test pit into the garden of 14 The Causeway: with the kind permission of Marian Vaughan. The Causeway was also known as Gate House Street, it leads to Gate House, a former town house of the Wigleys and the Gells. Gate House is given in the listed building status as dating from the "early seventeenth century", but is first recorded in 1553 when John Wigley married Helena Gell.

This was a standard 1m x 1m test pit, 1 metre from the street itself on the lawn side of the garden boundary wall and hedge.



The test pit having removed the turf showing a modern garden border of large stones.

The test pit contained:

20cm of turf and modern topsoil with a recent garden border on the street side (left in the picture). Then 140 cm of loamy garden type soil containing charcoal bits, assorted small bone, a small amount of broken brick, a typical mixture of small post mediaeval pottery sherds, clay pipe pieces, metal working slag, oyster shells, bits of post-mediaeval glass, some broken mortar and tile fragments. All the pottery ranged from post 1660 with the oldest being a little feather-trailed slipware.

Then 35 cm of more beige coloured sandy fill, again not unlike garden soil but grittier, with almost no

pottery or datable material but a lot more white mortar some with evidence of being attached to wood, some small mixed stone, some very rough brick-red handmade tile, and a further amount of very soft darker brown tile fragments with shelly inclusions.



A sample of the small finds in the test pit

1. Modern red tile
2. Victorian blue and white china ware, 1810 onwards.
3. Oyster shell
4. Metalworking slag
- 5 and 6 Feather trailed slipwares of which the earliest possible date would be 1660, up to 1760 and then
7. White fine grained friable mortar, showing striations where it had been attached to wood.
8. Brown very soft friable hand made tile with white shelly inclusions, unknown date

At the very limit of our achievable depth, that is to say two metres, there appeared to be a further layer of broken mortar and red tile and no bedrock was reached.

It is difficult to interpret these limited results, but subject to the usual caveats, we might perhaps find the depth without bedrock or road edge a little odd given the pit was effectively next to the street. The bedrock in the Gate House parterre, a short distance away to the west, is well below a great deal of made ground. The absence of bedrock even 2 metres down in the test pit and the materials in the test pit suggest that the street has been substantially built up. This may account for the Causeway name. It may be that the Causeway was built up to provide a level access from Gate House to the town. Another interpretation available to us is that the test pit was in a ditch of greater depth than we were able to reach. Finally, there is anecdotally a "Lead Mine" in this immediate area, but without easy access to the Barmaster's records we are not able to determine an accurate location.

Immediately to the west of the examination site, a house was being constructed in the grounds of Gate House in the summer of 2015 and the site was looked at during the construction phase and the predominant view was that it was virtually all made ground, neither we nor the builders had found bedrock and there was at least 150 cm of overburden of soil, post mediaeval pottery and modern broken bottle at this point. On the 1821 map there appears to be a small formal garden here, a parterre. The land rises only very gently through the garden of Gate House from south to north until it reaches what appears to be a limestone outcrop on the north side of the Gate House approach, behind the Lodge. However, it is possible that this outcrop is the result of quarrying or open-cast lead mining (perhaps the "Lead Mine" noted above).

The mediaeval origins of St John's Street

St John's Street appears to have houses fronting strip plots. In the sketch plan below you can see the results of a survey of plot frontages and map regression.

Map regression is where we go back in time as far as maps will allow us.

West



St John's Street, Wirksworth

Key:

- Boundaries and houses: In black 1821 map; in red 1709 map; in blue 1806 map.
- Modern plot widths in blue (metres). Modern house numbers in black.
- Red numbers are plot numbers in the 1709 map.
- Feature A the line of the modern terrace in numbers 42 and 40.
- Feature B the line of the embankment in the garden of number 32.
- In orange, the line of wall E, the only plot boundary not to have moved in 200 years.

In this sketch, which is based on the 1821 Duchy map of Wirksworth, we have overlain some previous information. In 1821 St John's Street was called Nether Street. We had thought that "Nether Street" was the original name of this street, but this is not the case, 100 years before it was called St John's Street and this must be its correct name: Our attention was drawn by Lyn Murray to two documents in the Gell archive. The first dated 1712 is a Feoffment (a deed) giving John Holloby the rent of a house in St John's Street. The second dated 1795 gives a lease to John Toplis of a cottage in Wirksworth "near Nether Street, formerly known as St John's Street". In the 1790 and 1821 maps the street is called Nether Street, but by 1880 it had reverted to St John's Street. This is rather baffling, not only that there should be such to-ing and fro-ing with the street name, but also because we do not at this present time know of any reason why it should be called St John's Street. The only church known in Wirksworth of any age is St Mary's and none of its chantries were called St John's either.

St John's as a place name is quite common, there is perhaps a certain level of association of St John with hospitals and a number of known mediaeval hospital sites are called St John's, but there is no

known mediaeval hospital in Wirksworth, so an association of this kind cannot be made more forcefully than to merely note it in passing, although the de Ferrers (original Norman Lords of the Manor of Wirksworth) did have associations with the Knights Hospitallers, and Letitia de Ferrers is known to have founded a hospital of St John in Stony Stratford between 1120 to 1135 or a little earlier. It is also necessary to note that the plot on which the Wheatsheaf stands at the south end of St John's Street, is not correctly aligned with the street line and the north boundary of that plot runs in a more or less exact east-west direction. This east-west alignment would be necessary if a chapel or religious house hospital and its burial ground were sited there.

The plots marked in red are taken from the 1709 map of Gell's estate, which is not a complete map, it only shows the bits he owned, but he owned the plots which later became Nether House (now the site of the Memorial Gardens) and you can see that there were a lot of small houses fronting the plots. We don't know the size of them, because the 1709 map isn't scaled, but visually they are not generally different from what might be expected and what now remains. Gell also owned plots on the west side, now the site of Waltham House, and this tells us something important – the plots didn't go all the way down to the Ropewalk, that is the section of ground now a path which joins Hammonds Court to the Meadows near Fogg's Entry.

The plots marked in blue are taken from the 1806 enclosure map, another (very) incomplete map of the town, but the little section of St John's Street shown gives us some more boundaries which are no longer there, as well as a curving path between St John's Street and the Ropewalk.

The strip plots, known as Burgage Plots, tend to be composed of a house on the street frontage with a strip plot of land for workshops and a garden at the back, and they were rented out in mediaeval times, to burgesses, who were the chief citizens of the town and elected the town's Bailiff or town council. The Bailiff was a kind of Town Clerk, responsible for the day to day running of a manor or town and its surrounding area.

St John's Street is three perches wide between number 30 on the west side and number 45 on the east side, specifically 15.15 metres. A perch is 5.03 metres so three would be 15.09 m - the six centimetre difference is probably neither here nor there. Also you will see from the sketch that we do indeed have houses on some plots of 5 metres: these are numbers 53 and 55; numbers 41, 43 and 45; numbers 8 and 14; and 38. In almost all cases the strip boundaries have moved, because when we go back through the series of maps available to us to 1709, we find that the only strip plot boundary not to have moved (apparently) is the one marked in orange, that is to say the north boundary wall of Laura's house, number 32 (wall E). It is the only one, certainly on the west side of the street, which does not seem to have moved in 200 years.

Originally, the burgage plots might have been two or more plots wide and have been sub-divided over time or joined together again. This is the case with Laura's house, which was two houses demolished in 1750 and then their plots were joined when the current house was built later that year. We also know that many of the houses in Wirksworth are older than their frontages suggest, for example numbers 15 and 17 St John's Street were the subject of dendrochronology dating (tree ring analysis) by Nottingham University which found them to have beams from trees felled in 1676, much earlier than their frontages suggest. The date of the Cruck Beam House at number 29 St John's Street, and whose cruck remains visible to the public on the corner of St John's Street and St Mary's Gate, would date from between 1260 and 1550, as this was the primary construction period for these types of houses (Catling, 2013).

Burgages are a mediaeval town planning activity, because creating them was a mechanism to improve the commercial attractiveness of a town. In terms of Wirksworth, there is a reference to a grant from Thomas le Daney of various burgages and lands to Tutbury Priory, including a burgage in Tutbury itself, as well as the one in Wirksworth. This grant makes reference to both William, Earl of Ferrers and his brother Robert, the 6th Earl of Derby. The grant has no date but the names give a time frame for the grant of between 1261 when William came of age and 1269 when Robert lost control of his lands to Edmund, brother of King Edward I. It also states that these properties were formerly held by Brun de Colonia of Echam (possibly Oakham or Atcham) and this would suggest that the burgage existed before the time frame of the grant. It is also possible that a field referred to as "le Boroxeyeong" in an early document, but whose location is not currently known, may represent "Burgage Oxgang", that is to say an area of 15-20 acres which might be associated with the burgages in the town, an oxgang being the area an ox could plough in a season. This happened in other towns. In Leeds the area of Burmantofts was an additional allocation of agricultural land given with the burgages. Some other Wirksworth field

names might have to be considered in the same light, such as Burley Flatt, which again contains the <bur> or <burgh> element, but this might be older and refer to a defensive position.

The pottery we found in St John's Street dates from the eleventh century onward, and this also might imply quite an early burgage development. The earliest pottery, Doncaster Frenchgate ware, is from a time frame not before 1050 and unlikely to be after 1200, though pottery does hang around. Given that it is known that the de Ferrers were granted a market in Tutbury in 1086 and burgage is mentioned in Tutbury from 1141, we are probably seeing the same kind of commercial development activity by the Ferrers in both Tutbury and Wirksworth at the same time, a way of improving their towns, their assets and their income. In short, the Wirksworth burgage development may date from almost immediately after the Norman Conquest and at the same time as that of Tutbury. We also cannot exclude the possibility that the Wirksworth development was earlier than Tutbury because Wirksworth was a richer manor (even setting aside the profits of lead mining) and so it might have been "higher on the list" than Tutbury for commercial improvement of the burgaging type by the deFerrers. Later, there is no evidence of Burgesses, but this could be a result of the royal "acquisition" of Robert de Ferrers lands by the crown in the form of Edmund (the acquisition being considered rather underhand). If this were so, the later "Free Tenants" who appear in the later manorial accounts would be these people: it might have been necessary for the crown to reduce the status and power of any Burgesses as they could have represented strong support for Robert in this rich manor. Such an approach, to weaken support for the deFerrers, might also account for the break up of the manor into two parts, the royal manor and the Holland manor, as well as the transfer of the church to the jurisdiction of the Dean of Lincoln in 1272, the date of all these activities being curiously close.

Finally, there are items shown in green, and this relates back to our work in Ian's garden. "A" represents the line of the walled terrace between numbers 42 and 40 upper gardens and the lower gardens, formerly all one plot. "B" represents the line of the embankment in number 32 garden which separates the upper and lower garden. You will see that the embankment is nearer the street line than the walled terrace. This difference has only come to light as a side-effect of the surveying, but it deserves attention. The reason it deserves attention is that it tells us something we didn't know. In all the work we did in Ian's garden we always felt that the walled terrace had been cut into the upper garden. This, not unreasonable, assumption was wrong. We are back with our busy Georgian and Victorian householders and gardeners. They have done this by building an Ice House and the Terrace Wall in front of the embankment and then filled the gap to the height of the upper garden, in this way they expanded the original size of the upper garden. This may also account for the presence of the "Ash Tip" on the south side of the garden - there simply may not have been enough material to raise the whole garden on that side too, so ash was tipped (communally) to do this.

Conclusions

We have not been able to shed any light on the fortification issue. We had felt that if a Roman or Mercian fortification existed (and Wirksworth is old enough to justify at least the consideration that this may be so) then St John's Street had a reasonable potential to be within that circuit. This is based on the view which is expressed by Beresford (1967) where no visible remains of walls or gates now exist, that the "*former limits of a town can be detected at the points where the road system was freed from the constriction of the walled town: where a fan of minor roads and footpaths suddenly breaks out, we can be certain that we have passed through the town gate and are outside the walls*". This is just the case at the south end of St John's Street, where Summer Lane and Water Lane join the Derby Road and ascend up into the town. However, given the lack of early finds so far on St John's Street, it may be that Hammonds Court and St Mary's Gate (Hannage Road) could represent this fanning out, so further consideration is necessary as to whether we should be looking nearer the church. Alternatively, we may simply have been unlucky. The list of towns where fortifications have been sought, not found and then discovered at a later date is unfortunately long. Appendix 4 of this report gives the extent of our current thinking about the matter and those places which, perhaps, future workers may wish to consider. The absence of visible remains is no bar to the consideration of the issue. We know Nottingham's town wall was demolished before 1540 and Leicester's town wall was in ruins by 1587 having been stripped of its stone for profit: in both cases there were no virtually visible remains by the 1700s, with the ditches being filled in, built over and the gates taken down.

These things said, there is a note of caution. We have interpreted the wall remains in Trench 1 at 42 St John's Street as a garden feature: the remains of a garden wall. We have interpreted the ditch on the west boundary of 42 St John's Street as a filled watercourse or a filled but rather large boundary ditch.

The wall remains in Trench 1 are difficult to interpret, if anything they are oddly upside down: we noted that the demolition pattern is unusual. If this were a demolished garden wall with a stone plinth and a brick upper (as is the garden wall on the north side of number 40, see picture page 20), then the demolition material in the trench seems to be the wrong way round: one would expect the brick to be at the bottom and the stone to overlie it, because you would demolish a wall from the top down. Therefore the top brick material should lie underneath everything else because it falls first: but the opposite is the case here. We cannot resolve this, and, worse, the spread of materials down the slope of the garden is extensive, with much mediaeval pottery in a disturbed length of almost 3 metres.

The ditch is so deep within the modern garden that its excavation proved to be beyond safe examination with the resources we had. All we can say is that it appears to be an extensive ditch, taken from its edge in Trench 2 to its visual edge on its west side in the Meadows. As a (supposed) watercourse it would have to be a fairly major one to present such a large width. Alternatively, it may represent a defensive or town/manorial boundary ditch, but its size, at 18 metres wide, is rather beyond the width one would conventionally expect from a Burgage boundary ditch.

Also in the garden of number 42 we found relatively large quantities of unfinished blackwares. These would date to the second quarter of the eighteenth century. Their presence is unusual, and although they may well be an import from the Stoke area, their unfinished state might imply an earlier period of industrial pottery making in Wirksworth than the relatively well researched Wirksworth China Factory of the 1790s.

To end, however, on a more certain note, we conclude that St John's Street is the product of Burgage development in Wirksworth by the de Ferrers, Earls of Derby, in the years following the Norman Conquest. Similar development is known in Tutbury (another de Ferrers manor) by 1141 and the balance of probability is that the Wirksworth activity is of a similar date or possibly earlier, as Wirksworth, at least at the time of Domesday, appears to have been a very profitable manor, with its three lead works. Burgaging was a mechanism to improve the income from a manor. In some cases it was an appendage to an existing settlement or in others an entirely new plantation on a manor.

It is possible that in addition to the Holland Manor House which is at the north end of this development, there may have been a chapel or hospital of St John at the south end, in the plot which the Wheatsheaf now occupies. This is a tenuous consideration but nevertheless worthy of some further thought and research. Should this indeed prove to be the case, it would account for the St John's Street place-name. There are examples of burgage developments where, such as at Southwell, the manor house is at one end of the street and a chapel is at the other end. There has also long been a debate in the town about

whether the street is correctly St John Street, or St John's Street, and in this respect, the earliest documents available to us refer to St John's Street.

That St John's Street was of considerable importance in the medieval period is evidenced from the amount of pottery of that date range found in the various digs. This would tend to lead us to believe that in those days, St John's Street held a market perhaps as an extension to the market in the current Market Place, or as a location where greater events could be held such as fairs.

That the modern houses are stone and later brick reflects a change in building practices during the Elizabethan age, when timber houses in the Midlands began to be replaced in stone after 1580 (a little earlier in the south of England). This was still a relative novelty in Wirksworth by about 1600 but had taken serious effect by 1630 with major house building in stone taking place all over the town (as evidenced by The Old Manor House, Babbington House, Hopkinson's House and the interior of the Hope and Anchor), replacing earlier mediaeval timber cruck-frame houses and hall-type buildings, with stone houses with chimneys instead of central hearths. This change was so noticeable that it was observed, certainly in other places, for example in a village near Bath in 1577, that "the old men marvelled at the multiplicity of new chimneys lately erected." (Manco, 1992). This was also the case in Wirksworth, with stone houses being sufficiently unusual to be of note: for example a Wirksworth deed of 1606 refers to a "messuage called the stone house".

Of the modern houses, plots and gardens in St John's Street, although many of the building frontages suggest these are of eighteenth or nineteenth century date, the reality is that these house plots date back perhaps almost to the Norman conquest, and that current houses throughout St John's Street probably overlie their medieval timber predecessors, which they replaced.

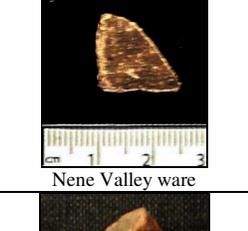
I am most grateful for the financial support of Derbyshire County Council through various grants-in-aid to support the Project.

Appendix 1: The pottery

The Roman pottery. Paul Booth and Bob Smith.

I am most grateful to Paul Booth of Oxford Archaeology and Bob Smith of the Sherwood Archaeological Society for their assistance with the Roman pottery.

The Roman pottery from the St John's Street examinations is not as common as the mediaeval material, and that which has been found is predominantly from the north end of the area closer to St Mary's Church.

Site Code	Sherd No	Type	No	Wt	Part	Form	Decoration	Date range	Notes	Reference
WSM00	01	 Derbyshireware	1	35	Base	Jar	U/Dec	C2nd – C3rd	Fabric almost white with dark grey exterior	Leary, 2013
WSJS14/42	128	 Parchment ware	1	1	BS/Flake	Hollow ware	Patch of red slip ext	Mid C3rd - C4th	Fine buff fabric w/ fine round ferrous black grains & red grit; Possible local copy of painted Oxford ware (e.g. Pase WILT-AF4C22). Not Oxford fabric.	Young, 1977
WGH08	401	 Severn Valley ware Gloucester type 11b	1	2	BS	Hollow ware	U/Dec	Late C1st Early C2nd	Very fine soft buff fabric	Timby, 1990
WGH08	402	 Nene Valley ware	1	1	BS/Flake	Hollow ware	Black colour coat	C2nd – C3rd	Nene Valley colour coated ware	Tyers, 1996
WGH08	403	 Roman Oxidised ware	1	3	Rim	Hollow ware	U/Dec	C2nd	Roman oxidised ware rim shard,	Tyers, 1996
WOH12	01	 Grass tempered ware	1	5	BS	Hollow ware	U/Dec	C5th- C7th	Soft cream fabric with chaff, i.e. grass tempering. Late Roman or possibly Mercian. From closer to the Cock Pit rather than upper St John's Street.	Laing, 2006

The Mediaeval pottery. Chris Cumberpatch BA PhD

The first datable mediaeval pottery is a shard of Doncaster Frenchgate Ware of which the earliest possible date would be immediately after the Norman Conquest and is described below by Chris Cumberpatch, to whom I am extremely grateful.

Assemblage 1:

Pottery sherds from excavations in Wirksworth were examined on 5th and 6th June 2014 with a view to providing identifications and dates to assist in future work on the site.

The problems of dating local medieval wares in Derbyshire were summarised by the author in 2004 (Cumberpatch 2004a) and in the subsequent ten years little has changed to alter the picture. Locally made wares, even those which achieved a regional distribution (Brackenfield and Burley Hill), remain poorly dated and in some cases poorly defined. The lack of publication of significant assemblages from Derby, Nottingham and Chesterfield is largely responsible for this state of affairs. In the case of Burley Hill and Brackenfield, two of the sites that have been published, dating evidence was limited and only broad date ranges have been assigned to the wares; these are quoted in the data tables and full discussions can be found in the articles listed below.

One unexpected observation was the presence of a sherd, apparently of Doncaster Frenchgate type (sherd H). This type of pottery, hand-made and relatively crude compared with later Doncaster products, seems to have been associated with the construction and use of the post-Conquest timber castle on the site of the Roman fort and is believed to date to the late 11th or early 12th century. Its presence in Wirksworth is unexpected to say the least, given its rarity even within Doncaster itself.

Site Code	Sherd No	Type	No	Wt	Part	Form	Decoration	Date range	Notes	Reference
WSJS14/42	A	 Brackenfield type 19	1	3	BS	Hollow ware	Pale green glaze ext	C14th - EC15th		Unpublished
WSJS14/42	B	 Buff Sandy ware	1	3	BS	Hollow ware	U/Dec	Medieval	Abraded fragment in a soft buff sandy fabric	Undocumented
	C	 Reduced Sandy ware	1	11	Rim	Jug	Thin green glaze ext	Medieval	Unidentified fabric	Undocumented
WSJS14/42	D&E	 Buff Sandy ware	2	5	BS	Hollow ware	U/Dec	Medieval	Abraded pale grey fragment w/ abundant fine quartz	Undocumented

WSJS14/42	M	 Derbyshire Soft Orange Sandy ware type	1	2	BS	Hollow ware	U/Dec	Medieval	Cumberpatch 2004
WSJS14/42	O	 Derbyshire Medieval Sandy ware type	1	5	BS	Hollow ware	U/Dec	Medieval	Cumberpatch 2004
WSJS14/42	P	 Derbyshire Soft Orange Sandy ware type	1	2	BS	Hollow ware	U/Dec	Medieval	Cumberpatch 2004

Assemblage 2:

An assemblage of thirty-two sherds of medieval pottery from excavations in Wirksworth was examined on 6th and 7th September 2015. The details are summarised in the accompanying data table.

The medieval pottery falls in to three categories.

The first includes the wares that have been identified to specific types from known potteries. These include Brackenfield near Chesterfield, Burley Hill near Derby and Hartshorne near Ticknall. Details of the first two sites have been published (Cumberpatch 2002-2003, 2004a) but the second is known only from informal fieldwalking which identified an area with abundant sherds and kiln wasters in buff to pale grey sandy fabrics. The character of the pottery suggested a late 13th to late 14th or early 15th century date but no definite dating evidence is available at the time of writing.

The second group includes those wares described elsewhere (Cumberpatch 2004b) but for which no production sites have yet been identified. It is possible that these were manufactured in small scale rural potteries but further research is needed to identify and locate such sites. The difficulties of dating such sherds have been discussed in greater detail in the publication cited above.

Unidentified wares have been assigned generic names and brief descriptions of the fabrics have been included in the data table ('Notes' column). It is highly probable that these are products from potteries in or close to the medieval towns of Nottingham and Derby. Several possible potteries have been identified in Nottingham but the details have yet to be published and the pottery industry, which was undoubtedly a significant element in the economy of the town and the surrounding area, remains virtually unknown.

With the exception of a single sherd, the latest pottery falls into the broad Midlands Purple type ware category and may originate from the Ticknall area, known to be a major centre for the manufacture of pottery throughout the post-medieval and early modern periods. The term Midlands Purple ware is a wholly unsatisfactory one as a wide range of late medieval and post-medieval wares are subsumed

within it. It is probable that the examples in this collection came from Ticknall or the Ticknall area but other sources cannot be ruled out as the range of fabrics from Ticknall has yet to be defined and individual variants characterised.

Note: It is possible that some of the shards may be a local product. It is known that a potter held 5 acres of land at Wigwell in 1247 (lePatourel, 1968), but the exact place is unlocated at the moment, the nearest viable location would be close to Wigwell Cottage Farm and the headwaters of the Mere Brook.

Site Code	Shard No	Type	No	Wt	Part	Form	Decoration	Date range	Notes	Reference
WSJS15/40	101	 Hartshorne type ware	1	30	BS	Hollow ware	Thin dark red slip ext	Medieval	Hard buff sandy fabric w/ common, well-sorted quartz up to 1mm, occ larger	Unpublished
WSJS15/40	102	 Late Medieval Sandy ware	1	38	BS	Hollow ware	Spots of dark glaze ext	C14 th – C15 th	Hard, fine pale orange sandy fabric w/ moderate well-sorted quartz up to 0.2mm occ larger	Unpublished
WSJS15/40	103	 Late Medieval Sandy ware	1	10	BS	Hollow ware	U/Dec	C14 th – C15 th	Hard, dense, semi-vitrified buff fabric w/ quartz up to 0.5mm & finer	Unpublished
WSJS15/40	104	 Midlands Purple type ware	1	18	Base	Hollow ware	Spots of purple glaze on underside	LC15 th – C16 th	Hard dense, semi-vitrified reduced fabric w/ moderate quartz w/ sparse rock frags	Cumberpatch 2003, Spavold and Brown 2005
WSJS15/40	105	 Brackenfield 001	1	3	BS	Hollow ware	Small spots of yellow glaze ext	C13 th – C14 th	Bright white fabric w/ moderate quartz & red grit	Cumberpatch 2004a

WSJS15/32	106		1	8	BS	Hollow ware	Thin red slip ext w/ patchy clear splashed glaze int & ext	C12 th – C13 th	Hard white fabric w/ abundant angular quartz up to 1mm, occ larger & fine muscovite	Unpublished
WSJS15/32	107		1	6	BS	Hollow ware	U/Dec	LC15 th – C16 th	Hard, fine dull red sandy fabric	Cumberpatch 2003, Spavold and Brown 2005
WSJS15/32	108		1	5	BS	Hollow ware	Dark green glaze ext	C13 th – C14 th ?	Slightly finer with sparser inclusions than is typical for Burley Hill	Cumberpatch 2002-2003
WSJS15/32	109		1	5	BS	Hollow ware	Thin glaze fuming int & ext	LC15 th – C16 th	Hard, fine red fabric w/ abundant fine quartz sand	Cumberpatch 2003, Spavold and Brown 2005
WSJS15/32	111		1	5	BS	Hollow ware	Crazed pale green glaze ext, slightly friable	C13 th ?	White fabric w/ abundant quartz up to 1mm, cf 106. Note rouletting.	Spavold and Brown 2005
WSM13	112		1	4	BS	Hollow ware	Thin patchy green glaze ext	C13 th – C14 th	Hard, fine, dense grey fabric w/ moderate quartz up to 0.4mm	Cumberpatch 2002-2003

The Post-mediaeval and modern pottery. Anton Shone.

The post mediaeval pottery takes us from about 1500 to 1750 and then modern to the present day. By the middle years of the sixteenth century (1550 onwards), the traditions of local mediaeval pottery making (such as Wigwell, Brackenfield, Burley Hill, Hartshorn and Ticknell) were coming to an end and we see the emergence of pottery making on an industrial scale. For example Cistercian wares were being produced at Ticknell, although these in origin date from the years before 1500. They are characterised by an almost black treacle coloured glaze on a fine red fabric. At the same time, a white or buff fabric ware is being produced with a clear glaze giving what is known as a yellow ware.

From the early 1500s (the early sixteenth century) the other pottery being mass produced tends to be red earthenware, with an orange or green glaze. This is followed in the late sixteenth century (1590s) and early years of the seventeenth century (1600s onwards) by the introduction of white tin glazed earthenware, a technique brought in originally from the Netherlands. By the later middle years of the seventeenth century (1660 onwards) potteries such as Ticknell and Staffordshire are producing feather trailed and other slipwares and these are typically yellow and brown.

By the 1690s and early 1700s the glaze on earthenware becomes a much darker brown or purple brown and perhaps a little streaky as manganese was being added to the glaze, with the Staffordshire products the fabric of these tends to be buff and quite heavy, although drinking cups were also being produced which were not as heavily made. Yellow wares are present about the same date, but by this time the yellow effect is from a layer of white slip over a red or orange fabric, then glazed which results in a yellow ware.

About 1720, potteries around Stafford were producing Blackwares (a follow-on from Cistercian ware). Also white salt glazed stoneware starts to be produced, it looks rather like white china, but in a good light the surface will appear very finely pitted. By the middle of the eighteenth century (1750) this type of pottery is followed by cream ware, a lead glazed fine white earthenware with a slight yellow tinge. By the end of the eighteenth century from about 1790 and into the early years of the nineteenth century, 1810 etc, then proper white china is developed especially items with blue transfer printed decoration.

For an interesting and detailed summary of post mediaeval pottery, see the website of Bingham Heritage. Bingham is a market town the size of Wirksworth, and lies some 9 miles east of Nottingham.

www.binghamheritage.org.uk/history_of_settlement/field_walking/description_of_finds/post_medieval/

We cannot list all the post mediaeval and modern pottery found in the St John's Street examinations, the amount is simply too large for our resources to cope with. Here we merely discuss some types and some exceptional issues. In general the amounts of post mediaeval wares are significant and the amounts of modern wares vast and everywhere. In the principal trenches of the garden of number 42, modern wares occur in the successive upper contexts of the lower garden which have been built up in sequential gardening activity. However, this sequential gardening activity at number 42 and the wares within it might not represent large gaps in time between depositions: indeed we might simply be seeing the sequential deposition of these layers as part of one single activity to raise the height of the garden within a short time frame.

"Wirksworth Blackware"

An assemblage of Blackware sherds posed something of a problem given their context (invariably directly on top of the natural substrate N1 in trench 2 of Number 42) and their association with pottery of medieval type in the same context.

In terms of their identification, they represent a group of fine stonewares and the forms are of 18th century type (notably the handle terminal on sherd X and shouldered vessel, sherd W). Their sharp condition, when compared with the worn medieval sherds, suggests that they had seen little post-deposition disturbance and were probably not redeposited. In contrast, the medieval sherds show all the signs of having been subject to considerable abrasion and it may well be that they are residual in a redeposit and that this deposit dates to the early 18th century as well.

This gives us a problem of interpretation of the very bottom contexts of the garden of number 42, contexts including 108 and 109 and higher numbered contexts overlaying the apparently natural. The

Blackware dates fairly closely to between 1720 and 1740, and samples were taken to Stoke Museum for their view on this. I am very grateful to Miranda Goodby, the Curator of Ceramics for her immediate and lively interest in them. That the Blackwares are in an unfinished state is also unusual, highly unusual in fact.

Stoke or Wirksworth?

We do know that unfinished and broken pottery from manufacturers was used for road repairs and drainage projects, and therefore the easiest interpretation to lay on these finds is that we are seeing efforts to improve the drainage of the garden by digging pottery into the heavy clay, and this also may explain the movement of the medieval material. The gardeners have turned over the historic soil and clay, dug in the waste pottery to improve the drainage and then turned over the next shovel load on top of it and so on working gradually up the slope in spits.

It has to be admitted that the presence of this unfinished blackware so far from Stoke is exceptional but given that Wirksworth is transporting lead to Stoke by packhorse train for use in the potteries, then return loads of both finished and (perhaps) unfinished pottery would be needed to make the packhorse operation pay. An alternative is that these unfinished wares might be evidence of another unrecorded attempt at founding a pottery in Wirksworth before that of the Wirksworth China Factory of the 1770s. Thomas Tudor's rather rambling and slightly confused article about the latter (Tudor, 1918) does mention two periods of alleged modern pottery manufacture in Wirksworth, but the dates do not match this evidence.



Shards of Blackware (1720-1740) (sherd X on the left).
(Sherd Y on the right showing unfired glaze residue)



Shards of Blackware (1720-1740) (sherds left to right W, X and V)

In so far as we had quite a large number of various Blackware shards but didn't at first know what the residue on them was (we thought it was either organic or paint), on deciding it was unfired glazed, we took a small shard with the residue and fired it. This resulted in test fired sherd Z1, which shows the

colour of the finished product, a very treacle dark brown, nearly black colour. Given the length of time which the sherd has been in the ground this was a remarkably successful result, with particular thanks to John Wheeldon for this experimental archaeology.



Shards of Blackware (1720-1740)
Shard V bottom and M top



Shards of Blackware (1720-1740)
Shouldered vessel shard W (left) and test fired shard Z1 (right)

Other ware examples found in the examinations

Important note: Pottery "hangs around" after the date of its manufacture. Therefore it is most useful in the dating of features "not before", rather than end dates. It might be entirely possible for a stoneware jar made in the Georgian age to be knocking around your grandad's garage even now.



Brown glazed wares and slipwares No 40 TP3
Brown glazed earthenware top left 1690 to Victorian and recent
Brown mottled ware top right 1690-1750
Ticknell slipware bottom left 1650-1800
Ticknell Feather trailed slipware bottom right 1660-1750



Assemblage from no 42, trench 2:

1. Oyster Shell. 2. Mottled brown ware 1690-1750. 3. Salt glazed stoneware
 4. Clay pipe bowl shard 1730-1790 5. Nottingham brown salt glazed earthenware 1690-1790
 6. Mottled brown ware 1690-1750 7. Brown glazed earthenware top left 1690 to Victorian and recent



Nottingham brown salt glazed earthenware 1690-1790
 Possible tobacco jar. No 40 TP3



White china with blue transfer printed decoration, 1810 onwards No 40 TP3



Wedgwood white china "Willow pattern" Victorian to recent. No 40 TP3

Appendix 2: Context Registers

Context register of Test Pit 1 and Trench 1, garden of number 42.

Context	Description	Max Dimensions	Max Depth	Colour	Texture	Small Finds
101	Modern topsoil	Over all examined area	25 cm	Dark grey/black	Friable	Modern items inc plastic wrappers
101A	Thin layer of modern brick rubble	TP 1 only	10cm	Red brown	Loose	Nil
101B	Modern loamy soil in cut trench in front of current terrace wall	TP 1 only	145cm	Dark grey/black	Friable	Modern items, china, brown glazed wares 4 shards coarsewares
101C	Odd thin patches of broken red tile	At intervals 1 m to 7 m from terrace wall	5cm	Red brown	Compacted	Nil
102	Heavy fawn clay with no apparent inclusions and no finds of any kind	Underlies terrace wall, then 1 m break then continuous up to context 104	80cm	Fawn/beige	Solid	Nil
103	Very large amount of tipped possibly Georgian handmade brick and tile rubble and mortar. This pile of rubble has a very long mortar tail which thins and spreads down the hill under other contexts such as 107 and still shows as a very thin layer between 107 and 109 in the west end of the trench	2 m at maximum depth but continues with a thinning spread down to a tail of mortar the full length of the trench	160cm	Red brown and white	Rubble	Very rare shards of brown glazed ware

104	Unmortared dry stone wall butted up to and under context 102, with a continuation of large stones (both gritstone and limestone), some on edge in a strange diagonal pattern across approx 2.9 metres of trench, mostly lying on natural streaky light brown clay substrate N1, which overlays natural shale substrate N2.	Width 50 cm of standing wall	80cm	Pale brown grey	Can be loosened	Nil. Thin exceptional pale red pink brick up against east side.
105	Thin layer of redeposited fawn clay	Along trench 4 metres	15cm	Fawn beige	Heavy patchy	Occasional modern pottery
106	Layer of heavy, lumpy black clay	Along trench 4.5 metres	40cm	Dark grey/black	Lumpy	Victorian pottery shards
107	Grey clay with grey shale patches	Along trench 4.4 metres	35cm	Mid/dark grey	Mixed heavy and friable	Nil
108	Layer of streaky light brown clay similar and slightly diffuse with N1 but containing mediaeval shards	3.2 metres diffuse with 109	30cm	Fawn beige brown	Medium heavy sticky	Mediaeval Pottery of various kinds
109	Layer of dark grey clay with roots and a considerable amount of big pebble butted up to 108 and containing mediaeval shards	1.5 metres at west end of trench	30cm	Dark grey/black	Medium heavy	Mediaeval Pottery of various kinds and Staffordshire blackware
N1	Streaky predominantly fawn clay becoming diffuse with N2	Throughout except where cut adjacent to terrace wall	30cm	Fawn beige mid grey streaks	Heavy	Very occasional shard of mediaeval pottery
N2	Shale.	Throughout	Undetermined depth	Grey/black/rust red	Solid friable when scraped	Nil

Context register of Trench 2, garden of number 42

Context	Description	Max Dimensions	Max Depth	Colour	Texture	Small Finds
101	Modern topsoil	Over all examined area	25 cm	Dark grey/black	Friable	Modern items inc plastic wrappers
101D	Modern redeposited topsoil as levelling build up	5 metres up to boundary wall	Diffuse with above to 60 cm	Grey black	Friable	Modern items inc plastic wrappers
103	Mortar tail of 103 demolition layer in Trench 1.	More pronounced at E end but gradually fades out	2cm	White	Patchy and friable	Nil
106	Layer of heavy, lumpy black clay	Along trench 4.5 metres	40cm	Dark grey/black	Lumpy	Victorian pottery shards
106A	Fine friable grey soil	Throughout	80cm	Mid to dark grey	Friable	Georgian and Victorian pottery
107B	Redeposited grey clay mixed with small random stone as packing to wall foundation 210	Adjacent to and then up to 30 cm from boundary wall	70cm	Mid to dark grey	Lumpy and stony	Nil
107C	As 107B with rammed stone underlying wall foundation 210	80cm	20cm	Mid to dark grey	Stony	Nil
109	Layer of dark lumpy grey clay	Throughout except 30 cm adjacent to boundary wall	30cm	Dark grey/black	Medium heavy	Roots and big pebble containing mediaeval pottery (gritty orange and splash glazed wares), clay pipe shards and bits of white china.
110	Thin fading layer of red patchy sand	Intermittent but throughout under 109	2cm	Dark red	Fine sandy	Containing some unfinished Staffordshire Blackwares
110A	Soft organic earth with a little mixed clay soil and stone	30cm from wall up to 120cm from wall	120cm to maximum depth of probe	Dark grey	Soft	Nil

111	Thick heavy streaky dirty clay diffuse with N1 at edge	180cm	35cm	Dark grey / Black	Heavy	1 shard of brown glazed ware 1 clay pipe shard 1630-1665
111A	Thick heavy black clay diffuse with N1.	30cm wide strip goes down at an angle	Determination of depth not possible beyond probe 1 m	Very Black	Heavy and sticky	Nil
112	Tipped large dark grey gritty stone rubble with attached mortar in a dark organic soil matrix	Starts 120cm from wall up and then to 310cm from wall	Beyond 40cm deeper examination not safely possible	Almost Black	Wet	Animal bone
N1	Streaky fawn clay turning to very dark grey and then overlapping feature 112, implying it had been extended or collapsed at least over the edge of 112	From E end of trench to 310cm from wall where it becomes diffuse with 111 and then disappears	30cm	Fawn beige mid grey streaks	Heavy	Very occasional shard of mediaeval pottery
N2	Shale.	Throughout	Undetermined depth	Grey/black/rust red	Solid friable when scraped	Nil
210	Wall foundation plinth of undressed stone	Crosses trench	105cm	Grey light brown	Undressed stone	Nil
210A	"Presentation" wall of neat stone	As above	190cm	Grey light brown	Partly dressed stone	Nil

Context Register of Test Pit 1 St Mary's Gate (31 St John's Street)

Context	Description	Max Dimensions	Max Depth	Colour	Texture	Small Finds
101	Top dressing of beach pebbles. Pea size at bottom.	Across TP1	12cm	Grey/Brown	Pebbly	Dandelions
102	Geotext fabric	Across TP1	0.5 cm	Light Grey	Cloth	
103	Limestone chatter	Across TP1	10cm	Fawn Brown	Coarse	Choc bar wrappers
104	Limestone chatter and dust	Across TP1	5cm	Mid Grey	Coarse	Plastic film
201	Demolition layer, mixed soil, stone, brick, tiles	Across TP1	20cm	Dark Grey	Mixed	Mainly post mediaeval and modern pottery and artefacts, bone, ceramic building materials (CBM)
301	Stone / Brick Culvert	1500mm x 300mm x 3000mm				Mixed pottery of various periods around culvert cut
302	Culvert Fill Blocking whole culvert	Within culvert		Dark Brown	Fine	Post 1800 small pottery fragments and some very modern items at the very top of the fill e.g. 1980s ringpulls
303	Backfill and spread of culvert cut	50cm either side	15cm	Dark Grey	Mixed	Mixed pottery of various periods, bone, charcoal bits etc.
304	Gritty small gravelly culvert bottom	30cm	3cm	Mixed grey grit	Gritty	Tiny post mediaeval pottery fragments
401	Mortared hard limestone surface	Across TP1 cut by culvert	12cm	Light Grey	Stony 5-10cm	A little slag and bone Otherwise none
501	Sticky clay	Across TP 1	15cm	Almost black	Heavy	Small bits of charcoal, very tiny flecks of CBM Otherwise none
601	Natural Bedrock	Across TP1	Beyond 50 cm	Grey/Brown	Solid Rubbly with pale Grey thin clay surface	None

Context Register of Test Pit 2 St Mary's Gate (31 St John's Street)

Context	Description	Max Dimensions	Max Depth	Colour	Texture	Small Finds
101	Top dressing of beach pebbles.	Across TP2	11cm	Grey/Brown	Pebbly	Dandelions
101A	Thin layer of small pea gravel	Across TP2	1 cm	Dark brown/black	Pea	Nil
102	Geotext fabric	Across TP2	0.5 cm	Light Grey	Cloth	
103	Limestone chatter	Across TP2	10cm	Fawn Brown	Coarse	Modern drinks can
104	Limestone chatter and dust	Across TP2	2-4cm	Mid Grey	Coarse	Plastic film
105	Beaten dark ash	Across TP2	5cm	Black	Fine	Metal washers, bits of plastic
106	Large stones with small stone packed in gaps and a doorstep foundation. Floor.	Across TP2	10-12cm	Grey	Large Stone	Resting on pieces of slip trailed ware (1660-1690)
201	Demolition layer, mixed soil, stone, brick, tiles	W edge of pit only	20cm	Dark Grey	Mixed	Mainly post mediaeval and modern pottery and artefacts, bone, ceramic building materials (CBM)
202	Dark grey ashy soil, diffuse with and on top of 202A	Up to W cut	5-10 cm	Dark Grey Black	Ashy	Considerable amount of slip trailed wares (1660-1690)
202A	Small mixed stone	Up to W cut	2-4cm	Various	Limestone and gritstone	As above
203	Layer of loose flat limestones	Up to W cut	2cm deep, 10 cm broad	Light grey	Limestone	A great deal of green glazed pottery. Residual roots of grass type.
204	Burnt limestone layer also containing brown gritstone	Up to W cut	5-7cm	Red brown tinge denoting burning	Limestone and rough gritstone	Nil
303	Backfill and spread of culvert cut containing very large stones	Cut on W side	45cm	Dark Grey	Mixed	Mixed pottery of various periods, bone, charcoal bits etc.

601A	Thin layer of grey clay	Up to W cut and up to an edge 20cm parallel to north edge of Pit	20cm	Light to mid grey	Smooth but with small stone inclusions	1 shard green glazed jug handle and 4 shards of same piece of oxidised ware having appearance of being trodden into it
601B	Natural Bedrock	Across TP1 up to and under culvert cut	Beyond 50 cm	Grey/Brown	Solid Rubbly with gritty inclusions and occasional random small stone	None
601C	Fawn clay with gritty hard small stone inclusions	At north end of pit and under the grey clay layer	Merges into bedrock	Fawn Brown	Very gritty	None
701	Two stake holes adjacent the line of the colour change between 601A and 601C Sealed by 601A	4 cm wide and 40 cm apart	10cm	Dark brown	Woody residue	None

Appendix 3: The Ice House at 42 St John's Street

Built into the garden terrace wall of Ian's lower garden is what has always been regarded as a domestic Ice House.

Ice Houses were common on country estates and in the grounds of Stately Homes, one being constructed as early as 1619 in Greenwich Park by James I. These were specialist structures, often cylindrical or cone shaped and they were used to store ice from frozen rivers or other sources. Ice wasn't originally used as a preservative but for its uses in making Ice Cream, cold drinks and for medicinal purposes. Gradually the supply of ice improved even to the point of Icebergs being towed from the north Atlantic and being used in industrial quantities, also brought from America and Norway once its use in preservation (initially of fish) was understood. As the middle classes and understanding during the industrial revolution developed it was possible for the well-off to use ice on a domestic basis for food preservation and storage, before the domestic gas or electric fridge made an impact in the 1930s. Ice was transported by train and then locally by horse and cart and stored in domestic Ice Houses for daily use, these were generally of a much simpler design than the ones in the grounds of country estates.



The Ice House entrance

The Ice House in the terrace wall of number 42 dates from between 1821 and 1837 and is a relatively simple brick vault construction. It has two chambers, the outer and the inner, and in so far as the outer chamber has a small window (shown near the ground in this picture), the smaller inner chamber must have been used for the storage of the ice.



The entrance porch of the Ice House, down 4 steps, looking east. The drain for the Ice House is a little forward of the ranging pole but not very obvious in this picture.



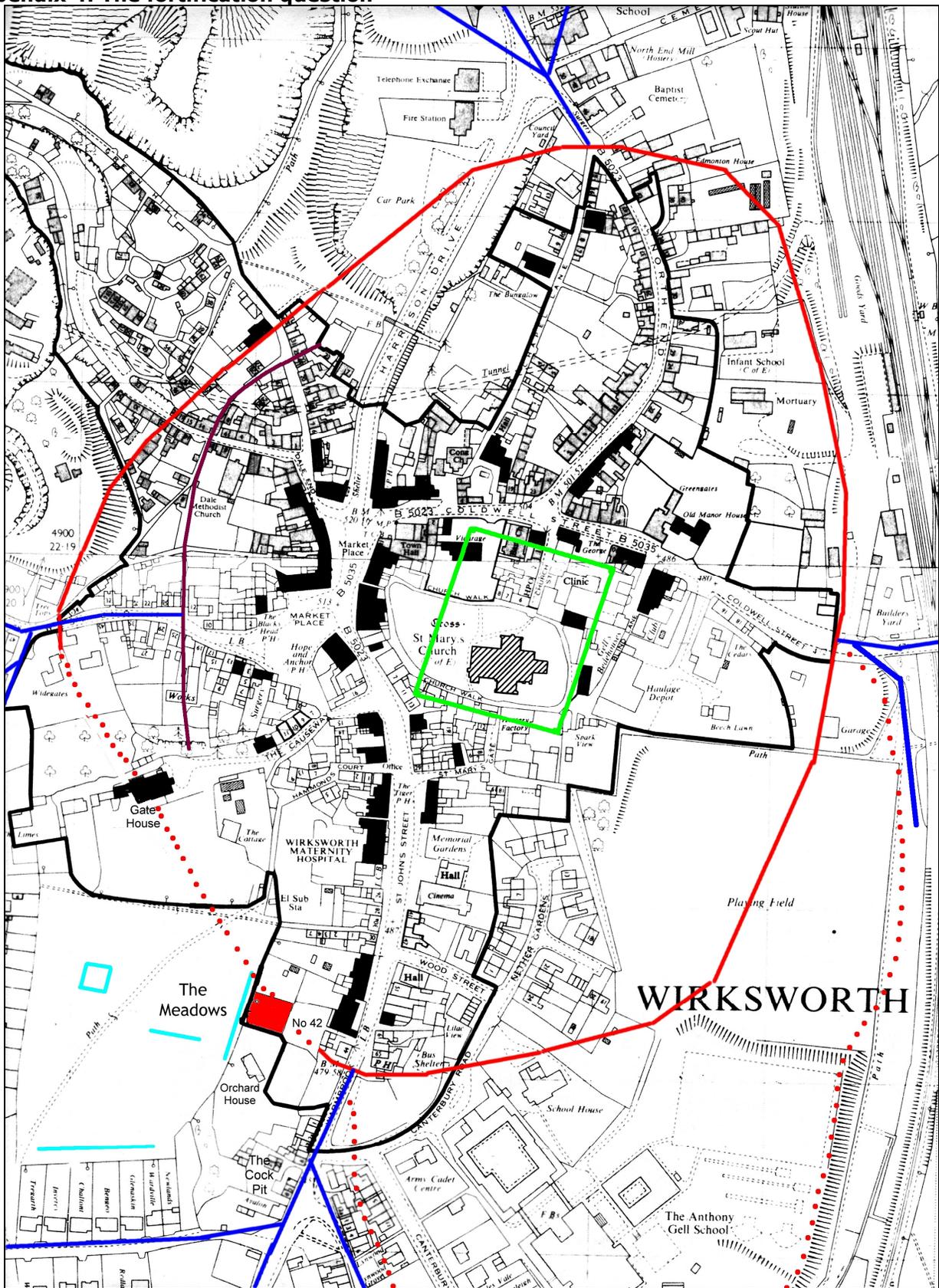
The outer chamber approx 5 metres square and 2 metres high to the top of the brick barrel vault.
The floor is also brick, looking north.



The inner chamber formerly had a door and is half the size of the outer chamber.

By the end of the Victorian age, the vapour-compression fridge invention was still not fully developed and domestic “refridgerators” were essentially a box with block of ice in the bottom, which had to be changed from time to time as it melted, and a new block taken from the Ice House. Ice supply to domestic houses continued until the 1930s but the decline of the Ice House was extremely rapid because of the impact, expansion and popularity amongst the well-off of the electric fridge during the late 1930s and, after the war, the early 1950s. By the late 1950s in England domestic Ice Houses had largely fallen out of use.

Appendix 4: The fortification question



Red and Red Dots: Historic Defensible contour – the area beyond which defences probably would not be.
 Green: Area required for a Roman fort the size of Brough on Noe or Chesterfield
 Blue: Roads & paths converging on the town on 1709 map.
 Light Blue: Linear and other features (e.g. building platform) in the Meadows.
 Purple: Line of terrace, possible line of rear of western defences.

Problems in the consideration of fortifications for Wirksworth

Wirksworth is a recorded pre-Viking town. It is inconceivable that it was undefended. However, no serious efforts have been made before this present time to consider the issue and until recently even we had not begun to give the matter detailed thought. There have been many reasons why this has been the case, but overlying reasons originate in the lack of understanding of Wirksworth's history and in the dismissal by Professor Cameron that the Weorcs element of the Wirksworth place name meant fortification. Professor Cameron's dismissal acted rather like a dead hand on both scholarly and archaeological consideration of the issue. Yet modern scholarship regards Cameron's 1959 place-name derivation for Wirksworth - as "weorc" representing a personal name, as being unsound (Stafford, 1985; Gelling, 2000). Even in Cameron's own time, AH Smith (1956) only gave "fortification" as the correct interpretation of "weorc".

In addition to the naming issue, the evidence for Wirksworth having both a major Roman role and a major Mercian role was considered in detail in our previous report "Origins and History of Wirksworth. The Search for Lutudarum: Evidence and Assessment". Finally, the recent work on the Roman road network tends to support a view of Wirksworth being an important route centre of that network in the Peak District. For these reasons we feel it is relevant to look at the fortification question.

In early Mercian terms, the extent of warfare in and around the Peak District with the Northumbrians in the seventh century begs the question of the weakness of known fortifications of the province, to deal with any invading force. In fact so little is known and so much clarity lacking that if no further evidence came to light one would have to take the view that the Peak District was so weakly defended by the Mercians that it could have been invaded and laid waste by a man at arms carrying a small knife. Yet successful battles were fought, so this cannot be so. There has to be a substantial defensive position in the central Peak District, with a large enough population to man it. If this substantial defensive position is not Wirksworth, then where is it? Later, we know from place-name evidence that although the Vikings successfully took and held the area east of Wirksworth including the east bank of the Derwent, and also Derby, they did not hold or could not hold the lead field or the area around and west of Wirksworth: a major strategic failure, for which there must be a reason, which may be the presence of a strong and active Mercian defence.

Considerations in the placement of Roman Forts, taking the view that Wirksworth may have been Roman in origin.

Johnson notes the recommendations of Roman engineers themselves on locating forts: the site should best be "upon a slight prominence on gently sloping land". Johnson notes that the favourite location was "undoubtedly at the end of a spur or on a small plateau with falling ground on three or four sides, at the confluence of two streams or a river with a tributary." In Wirksworth, such a gently sloping plateau at the confluence of two streams occurs in the Hannage peninsula. In almost all cases such choices also commanded routes or route centres.

The space required varies according to the type of fortification, for example legionary fortresses are extremely large. However, most of the forts which occur in the Peak District date from the late Neronian or Flavian periods (AD60-80), of which the remains are typically of the Flavian, and these forts, auxiliary forts, are typically no more than 130 metres by 120 metres and are fairly square (unlike their counterparts of other periods, which are more rectangular). For example, the dimensions within the ramparts at Melandra are 114 metres x 102 metres and at Brough are about 100 metres x 80 metres. The only completely excavated Flavian period fort in Britain is at Pen Llystyn in Wales and this is 120 metres x 100 metres within the ramparts.

Variations in reported fort sizes are often due to the failure to report which parts of the fort are being measured, or that the fort is being measured from the outer edge of a defensive ditch or ditches. For example, Chesterfield, which cannot be wholly excavated, is variously reported as being 130 metres x 115 metres (Turbutt, 1999) or 150 metres x 150 metres (Bates, 2007). It is entirely possible to fit a fort of this size in the area of the church precinct bounded by Coldwell Street, Old Market Place, St Mary's Gate and Blind Lane in Wirksworth, and there would be some logic to looking at the church precinct in more detail if the resources ever became available.

Ease of communication is an essential feature of fort location and often forts are located where they can command roads and/or river crossings. We now know that Wirksworth is at the route centre of a series

of Roman and medieval roads which radiate in several directions to Buxton (The Street), Chesterfield, Little Chester, Rocester and Brough on Noe (The Portway). The timber issue is also quite easy to deal with, Wirksworth even now is well equipped with woods all around, timber being essential for both building and for the provision of fires. The choice of location is also related to the provision of foraging, not only in terms of the availability of timber but in terms of general supplies of food for both troops and animals.

In terms of water supply, forts are often located near rivers, but are also generally found to have wells, and invariably such wells are within the courtyard of the principia or headquarters building, sometimes called the basilica. There is no longer any known well located in the churchyard of St Mary's, except that found by Hilary Dennis on her dig in Church Street, but the churchwardens accounts (Palmer, 2008) record a payment to Adam Wilde in 1697 for the repair of the church "well hole". The de-facto conclusion from this is that the church must have had a well regardless of whether the warm water spring in the churchyard mentioned earlier in this report fed it.

From none of these accounts or any others have we been able to identify the location of the church well precisely or of the "warm spring" in the churchyard apparently destroyed by the Lees Vein branch of the Hannage sough. However, it should be observed that both the church font and the chancel piscina (the priests wash-basin) are on the south side of the church chancel and it has to be supposed that water would be carried from a nearby location rather have to traipse across the church or churchyard with it. It is therefore not unreasonable to suppose the well must have been on the south side or nearby and that it is equally not unreasonable, given the co-incidence of the date of the sough building in 1696 and the repair to the well hole in 1697, to suppose that perhaps the two are related. If this is so then it is entirely possible that the warm spring and the church well water supply were one and the same.

Considerations in Mercian fortifications, taking the view that Wirksworth was a defended place in Mercian times.

The later Mercian fortifications of Tamworth, Hereford and Winchcombe are much larger than an auxiliary Roman fort and indeed larger than their earlier Mercian predecessors. To assess these in terms of the topographic layout of Wirksworth, the map above is provided. This map summarises two main issues:

1. The topography in terms of a defensible contour, in this case that area beyond which (note this) fortifications *could not* realistically be.

On the south side they could not realistically be much further south than the site of the Wheatsheaf pub and Numbers 44 and 42 St John's Street, because the land drops steeply.

On the east side they can only be on the *west bank* of the Ecclesbourne (a greater river in the past than it now is).

On the north side they could not realistically be further north than the junction of North End and Cemetary Lane, because again the land drops at an outcrop at Bailey Croft Steele, opposite the Old Lock Up.

On the west side any defence has to address the height of the hill at the Leas, the site of the current Almark Garage, but we must bear in mind is this does not seem to be its original topography, nor is the drop into the Dale, which is the result of quarrying. The defences here could not realistically be further west than the junction of West End and Yokecliffe Lane.

2. If Beresford (1967) is correct, then the location of the gates of such a fortification would show, still, where roads and footpaths fan out beyond the historic centre of the town. This fanning is again most obvious south of the Wheatsheaf, where Derby Road, Summer Lane and Water Lane meet and come up into the town. There would have to be a gate more or less outside of and a little downhill of the Wheatsheaf, a South Gate. On the east side a gate would have to be on the town side of the Ecclesbourne and sufficiently up what is a gently sloping contour that it wouldn't flood, so an east gate would probably have to be on the line of the current lorry repair yard, opposite and a little above Station Road. On the north side, the roads and footpaths fan out at the very end of North End (on the 1709 map), so any gate could not be beyond the Old Lock Up at Baileycroft Steele, that is the site of a medieval smithy (historically smithies and forges would

be outside of towns because of the risk of fire). On the west side, the roads fan out immediately west of a house called Widegates, where Hopton Lane, Yokecliffe Lane and another minor lane diverge from West End.

Summary

The difficulty of addressing the issue must not be underestimated. At Chesterfield, a similar urban situation, historians had felt that a fort existed in Chesterfield because of the place name alone, there being no archaeological evidence whatsoever. Indeed, Turbutt (1999) observed that there were so few finds and no excavations that its existence had long been doubted and these uncertainties remained until work was eventually done in 1973.

It could be argued that the position for Wirksworth today is much the same as for Chesterfield in 1973, perhaps worse in fact, in so far as there has been no "chester" place name for historians to play with, and the "weorc" place name being so wretchedly misunderstood. In looking for the most appropriate sites for fortifications it is necessary to consider the issues which the Romans and Mercians considered. In discussing the issues, Johnson's seminal (1983) work on Roman forts in Britain and Germany provides a thorough and detailed approach and the work of Bassett (2007) in discussing the Mercian fortifications of Tamworth, Hereford and Winchcombe does much the same for the eighth and ninth centuries. Indeed if the potential area which is mapped above for any conceptual fortification of Mercian Wirksworth were proved to be correct, then the area encompassed would be no less than the Aethelflaedian fortress at Tamworth.

If, therefore, we are looking for the fortifications of the town, and our assessment of the Wirksworth place-name as "fortified enclosure" is correct, then our whole and total problem, and that of future workers, is knowing where start. This said, we do have one potential area of examination. A line of terracing exists on the west side of the town and this terracing runs as a boundary from Greenhill across the Dale, below Bowling Green Lane and as far as the north side of West End. This line of terracing is shown in purple in the map above. The terracing, at its most pronounced, cuts into the hillside for the height of a house continuously from Greenhill to the Dale and because it provides many property boundaries, not just one, it must pre-date those properties – it must have been there before them.

It is necessary to exercise considerable caution however. Our resources are limited and our views may not be correct. These things said, the archaeological work which we have done in Wirksworth has been of tremendous benefit, for prior to this Project, Wirksworth could be, and was, all too often dismissed as having little or no historical value or resonance.

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