



## **Petuaria: Finding its Place in Roman Britain**

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## Abstract

The site of Roman occupation under modern Brough on Humber, now identified as Petuaria, has drawn the attention of archaeologists for centuries. Over the course of investigations and writings on the site, there has been a multitude of theories created around it. These range between a lowly fort abandoned early into the Roman occupation, a thriving *civitas* capital for the region, and a naval base from which the Yorkshire coast was guarded against invaders.

This thesis sets out to collate and assess all previously recorded data from the environs of Petuaria and utilise them to produce key criteria through which the site may be understood. This comprises of a review of both literary and archaeological data produced on the site alongside a programme of community engagement and research carried out to further this archaeological record with personal collections of material from the town. In this, the research provides an overarching exploration of the data present at Petuaria, alongside comparable features to other sites, with the final goal of understanding the nature of the site and what role it played in its immediate context, Roman Britain, and beyond. This research has found Petuaria to be a site of much needed further interest but has determined that the site was occupied for a longer period and to a larger extent than previously thought. It is also more probable than not that the site is of a military purpose than an entirely civil occupation.

“Town or fort, it can be seen that Brough is a most unusual site and would amply repay closer investigation.”

– John Wacher (1995). *The Towns of Roman Britain, 2<sup>nd</sup> Edition*

“Consequently the student who attempts to unravel the tangled history of Petuaria from these reports may gain more instruction in the technique of excavation rather than the history he seeks.”

– Philip Corder and Ian Richmond (1942). Petuaria. *Journal of the British Archaeological Association*

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## Abbreviations

**ADS** – Archaeology Data Service

**CIL** – *Corpus Inscriptorium Latinarum*

**ERAS** – East Riding Archaeological Society

**HER** – Historic Environment Record

**HFA** – Humber Field Archaeology

**NAA** – Northern Archaeological Associates

**RIB** – Roman Inscriptions of Britain

**RR** – Roman Road

**WYAS** – West Yorkshire Archaeological Services

**YAJ** – Yorkshire Archaeological Journal

**YAT** – York Archaeological Trust

# Chapter 1 Introduction

## 1.1 Introduction

The study of the Roman occupation of Britain is a multi faceted and continuously explored aspect of the archaeological discipline in the British Isles. With subjects of interest ranging from Julius Caesar's brief campaigns across the Channel in BC 55-54, through to the invasion under Claudius ninety-seven years later and the subsequent, albeit tumultuous, occupation and conquest of the islands over the following centuries, academic and public interest in the Romans has been a constant aspect of the country's culture. This is no less the case in Brough on Humber, where the streets proudly boast the names Petuaria and Centurion and the town has a number of commemorative plaques stating its origins under the Romans along with community groups and a local paper bearing the enigmatic name Petuaria.

Although a site of some archaeological interest has been reported at Brough as far back as 1699, there has been little in the way of comprehensive investigations carried out at the site. Whilst excavations have taken place in the town throughout the last ninety years however, due to limitations in area and time, very few attempt a comprehensive assessment of the site itself. The most recent publication, itself an excavation report and not a widely consumed textbook, is that of John Wachter's 1969 report of excavations carried out between 1958 and 1961. This is the last time a text was singularly focussed on the Roman site at Brough with all subsequent publications mentioning it in brief alongside either the wider region or Britain as a whole, and almost all of them using theories and assessments as stated by Wachter or Philip Corder before him (Corder & Richmond, 1942, Wachter, 1969).

As stated by the authorities of Corder and Wachter, the Roman site at Brough is one of complexity and in need of further investigation. Named Petuaria, a title now broadly accepted following the discovery of the theatre inscription by Corder in 1937 following its first suggestion by Abraham de la Pryme centuries prior (de la Pryme, 1699 206), the Roman site at Brough has intrigued and challenged archaeologists for decades and antiquarians for centuries before them. Emerging as both a fort and a town in the literary evidence and historic understanding of Roman Britain, Petuaria appears to have held somewhat of an enigmatic role within the study of the region. Noted appearances in most of the contemporary sources written on Roman Britain suggest a site of prominence and longevity during the Roman occupation. Although Brough had been visited by antiquarians over the centuries, the occupation of Petuaria was first explored under the investigations carried out by Corder and Wachter and these mark the first broad attempts to understand the site and provide a narrative to its occupation using archaeological evidence.

## **1.2 Location**

Throughout this thesis reference is made to both the specific layout of modern Brough as well as its location within the surrounding region, therefore two maps are provided to illustrate the location of Brough (Figure 1) as well as the suspected layout of the forts of Petuaria, from the work of Philip Corder and John Wachter (Figure 2).

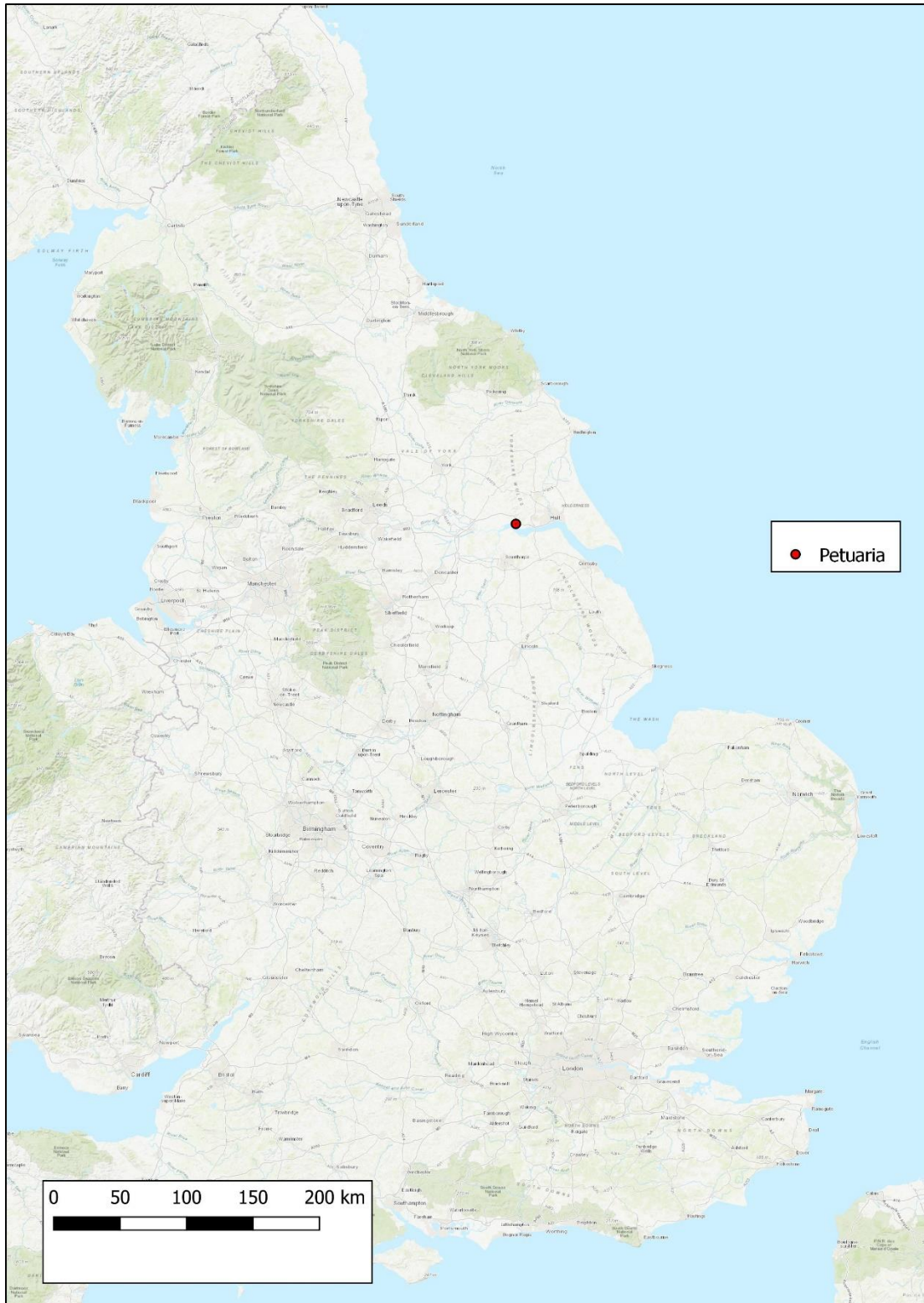


Figure 1 Location of Brough on Humber in the wider United Kingdom.

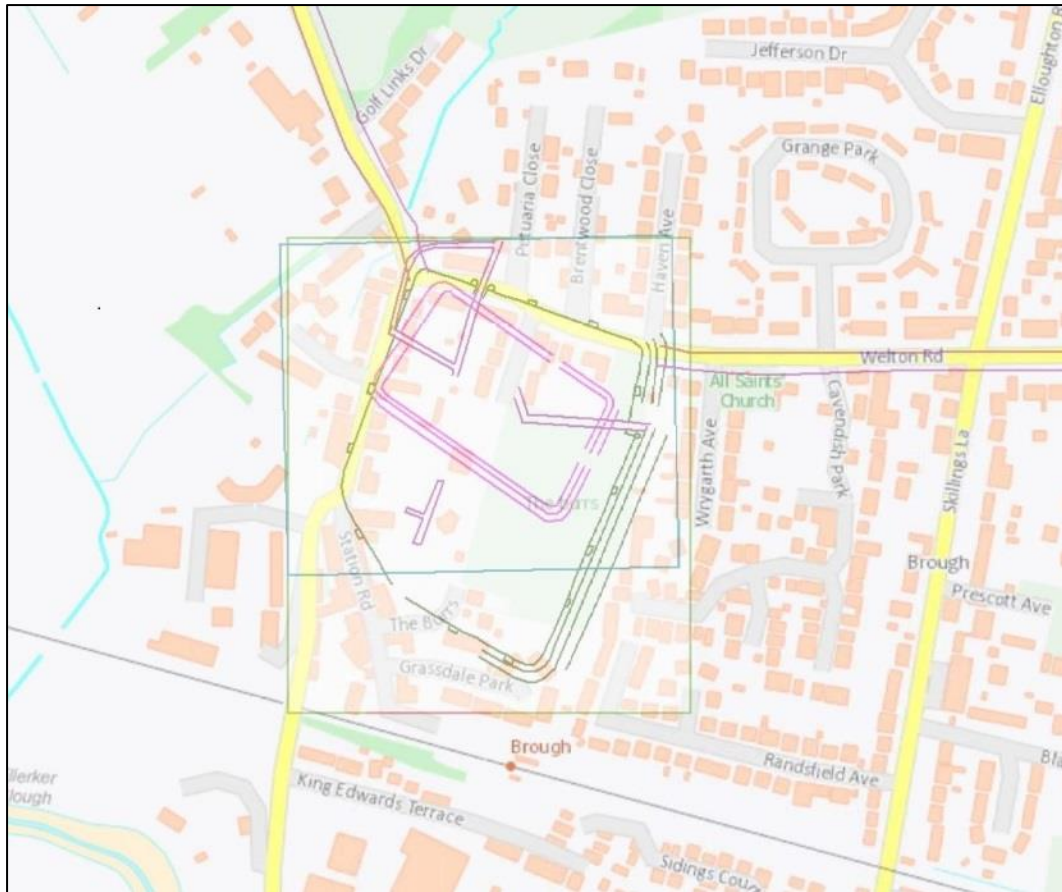


Figure 2 Proposed layout of the forts of Petuaria after Corder and Wachter, the larger irregular fort is later period over the regular Flavian fort (P.Halkon).

### 1.3 Timeline

The narrative of Petuaria as it stands is of a site first occupied in the early AD 70s likely under the orders of Quintus Petillius Cerialis, Governor of Britannia at the time, who spent the period campaigning against the Brigantes to the north. This initial phase comprised of little more than a beachhead for the estuarine crossing and a supply depot shown to be defended by a basic ditch and rampart layout. Following this the development of a true auxiliary fort at the site with significant turf and clay defences appears to take place, securing the position for further transportation across the Humber. This fort is short lived as ultimately the site experiences a brief period of abandonment, possibly due to the need for soldiers to the north or to develop forts at other points in the region. This break in occupation lasted a few

decades and is estimated to have begun in the mid-Flavian period, around AD 80. Upon the commencement of construction at Hadrian's Wall roughly a hundred miles north of the site the reoccupation of Petuaria seems to take place. This consists of a redeveloped defensive layout, suggested by excavations to comprise of a newly made turf and clay rampart most likely with stone footings, alongside the construction of stone buildings within the walls. It is immediately following this, during the reign of Antoninus Pius, that Petuaria faces its first true complexity. During the fourth year of investigations under Philip Corder an inscribed facing stone was discovered, tipped on its end within a house suggesting either repurposing or the destruction of the wall that housed it. Tantalisingly broken at the time of discovery, the inscription read:

ob honor[em] | domus divi[nae] | imp(eratoris) Caes(aris) T(iti) Ael(i) H[adri] | ani Ant[o]nini  
A[ug(usti)] | 5 p(atris) p(atriciae) co(n)s(ulis) I[I] | et Numinib(us) A[ug(ustorum)] | M(arcus)  
Ulp(ius) Ianuar[i]u[s] | aedilis vici Petu[ar(iensis)] | proscaen(ium)[...] | de suo [ dedit] - RIB  
707

For the honour of the divine house of the Emperor Caesar Titus Aelius Hadrianus Antoninus Augustus Pius, father of his country, consul for the second time, and to the Divinities of the Emperors, Marcus Ulpius Januarius, aedile of the village of Petuaria, presented this [new] stage at his own expense. – RIB 707 (Translation)

As is clear from the transcription, significant quantities are lost with further sections lost in the subsequent decades since its discovery. The inscription now simply states *PETV* as opposed to *PETVAR* at the time of Corder's discovery.

This inscription marks an important shift in the understanding of the site of Roman Brough by not only providing it with a name as conclusively as is possible for archaeological sites, but also a date range for a presumably significant population presence. The discussion over Petuaria's definition as a civilian settlement, as well as the accuracy of this inscription, is rife in the discussion surrounding the site and is explored in depth a number of times in this

thesis. The inscription has proven to be both useful and frustrating for investigations into Petuaria, providing archaeologists with both a clearly datable and seemingly confirmed period of occupation under Antoninus Pius between AD 138-161 but also an enigmatically missing *proscenaeum*. Despite potential positives for the feature recorded in geophysical surveys both on the Burrs Playing Field and the golf club to the north of the town, no such feature has appeared in archaeological excavations. To this end, the original goal of the community-led Petuaria ReVisited project was to determine the nature of a “D-shaped” feature on the Burrs Playing Field with organisers supposing that it was the missing *proscenaeum*, however, that feature was found to be that of a gravel courtyard relating to a large house with multiple phases of occupation (Halkon & Lyall, 2021a; 2021b). Although no physical evidence towards a *proscenaeum* has been recorded at Petuaria, the inscription still suggests the possibility of an economic or civil presence of some significance through the mid to late second century under Antoninus Pius.

Following on from the period in which Petuaria is related to a *proscenaeum*, Petuaria seems to undergo a period of steady occupation before a number of changes take place throughout the third century. Firstly the site’s defences change with the construction of a stone wall surrounding the previously clay ramparted area. Corder suspects this is Antonine in origin and contemporary to the inscription, suggesting the inscription previously related to the eastern section of the wall (Corder & Richmond, 1940). Wachter disputes this, dating the walls to be of a later construction in the third century (Wacher, 1969). However, more recent evidence gives this date to the added bastions implying the walls themselves are of at least an early third if not second century date of construction. It is also likely that during this period Petuaria’s maritime role comes into its own, with the civil or economic presence



necessitating the gifting of a *proscenaeum* possibly the result of a prosperous and busy harbour.

The third century appears to be the most eventful for Petuaria, with significant defensive additions alongside coinage records suggesting ties to several dramatic crises across the western empire. The addition of bastions to the walls of Petuaria, presumed by Corder (1936, 45) to be Constantinian but again shown by recent investigations to be of an earlier date (Evans & Atkinson, 2009), is likely part of an effort to increase the capabilities of the site as a defensive point both along the coast but in the major inlet of the Humber Estuary as well, the site being the only surviving evidence of Roman military presence on the banks of the Humber.

The fourth century provides the most contention around Petuaria, and as such this period and the end of occupation at the site are discussed throughout this thesis. Previous interpretations (Hildyard, 1958) often have the site dwindling into obscurity, however archaeological and contextual evidence may indicate a different course of events. Whether the site's eventual abandonment is due to the Humber, regional reorganisation, or the wider Roman withdrawal is uncertain. What is certain, however, is the lack of a dateable occupation in the fifth century with Petuaria remaining archaeologically sterile until the Middle Ages.

#### **1.4 Aims**

From this background the aims of this research are formed and are as follows; firstly, this research seeks to understand the physical and temporal extents of the site with a specific focus on the spread of material and smaller settlements, such as individual domiciles, within

the study area and the full extent of the site's occupation from first establishment through to the last Roman material recovered from the town. Secondly, this research aims to determine the nature of the site, namely whether it was a singularly civil or military site. There has been debate around this topic over the past century, with both Corder and Wachter discussing the possibility of a dual role in the site (Corder & Richmond, 1942; Wachter, 1969) however Petuaria's recent definition as a *civitas* capital seems to continue further the debate over the nature of the settlement (Halkon, 2013). These first two aims will be addressed through a collation and assessment of the literature produced on the site, both in wider explorations of Roman Britain and in site-specific works, although the latter of which is limited somewhat, alongside an exploration of newer data produced by commercial investigations and community projects (Corder, 1934, 1935; Corder & Romans, 1936, 1937, 1938; Corder & Richmond, 1942; Wachter, 1969; Halkon & Lyall, 2021a, 2021b, 2023, *forthcoming*).

A further aim of this research is to determine the role Petuaria played both regionally and internationally as explored in Chapters 6 and 7. The potential for Petuaria's relevance on a national scale can be seen in the site's position on the Humber Estuary, a crucial inlet for the country and a key element of intercontinental trade with mainland Europe for millennia (Ellis & Crowther, 1990; Wright, 2014). Furthermore, it is possible to argue that the developments seen at Petuaria's fortifications into the later period, as excavated by Philip Corder and recent projects (Corder & Richmond, 1942; Halkon & Lyall, *forthcoming*) are related in some way to third or fourth century changes that take place across the empire, particularly under the Gallic Empire or Carausius. Exploring the site's role in this regional and national context provides Petuaria with a place of relevance in the wider discipline, and in turn, answers the thesis title of this research.

The final aim of this research, and the aim upon which the project was first conceived, is that of engagement and dissemination of information with the public. Petuaria, or rather Brough, has a strong sense of historical identity in its current residents. As such, this research seeks to utilise and involve members of the public throughout the process. As is discussed in Chapters 2 and 8, the international Covid-19 pandemic had a significant impact on this process, however, despite these difficulties the act of engaging with the residents of Brough and collating and assessing the material recorded by residents who took part in the research was able to be carried out successfully. Part of the inspiration behind engaging with the public throughout this project not only comes from the research's affiliation to the Petuaria ReVisited excavations (Halkon & Lyall, 2021a, 2021b, 2023, *forthcoming*) but also the site's history of archaeological projects engaging with the public. This is particularly prevalent during the excavations of Corder, in which members of the public and residents shared their collections of artefacts, primarily coins, to help further the archaeological record, something which this research has sought to continue (Corder & Romans, 1938; Chapter 5; Appendix I). Furthermore, and as is discussed in Chapter 4, the involvement of the local community in developing the archaeological record predates Corder, with some of the earliest archaeological accounts of the site coming about due to residents sharing material with local antiquarians (De La Pryme, 1699; Horsley, 1732). It is clear in the community of Brough that the identity and sense of place provided by the Roman settlement are important to them. This can be seen in the information collected by the participants of this research, but also in the support given by the local community to the Petuaria ReVisited project, which is as of 2024 entering its fifth year of excavations. This local affiliation with the site has emerged through the prior literature and the current research and shows the importance of

engagement, outreach, and collaboration with the public when undertaking such investigations elsewhere.

Overall this research sets out to collate and explore the data presented on the site of Petuaria, both literary and physical, with a strong focus on more modern non-academic or traditional investigations such as community groups, individuals, and developer-led units. This evidence is then compared to several sites in both a regional and national context to provide the most current or up to date interpretation of the site of Petuaria possible, in regards to both the site's physical scale and nature, as well as the possible roles it may have held both locally and in the wider empire.

## **1.5 Glossary**

Efforts are made to explain these less familiar terms however, as they are used frequently, they warrant a reference at the beginning of the text:

***Aedile*** – Like *civitas*, *aedile* has several translations throughout the Roman period. For this thesis, it is taken to refer to a lower level magistrate or official who would usually be in charge of public works. Traditionally this would be for a specific town however in the case of Petuaria's Marcus Ulpius Januarius it is likely his remit was of a larger area.

***Civitas/Civitates*** – Multiple meanings throughout the Roman period. For this research and to a greater extent the commonly used interpretation regarding Romano-British archaeology it is taken to refer to allied locals and their Romanised capitals. The clearest example of this can be found with the Brigantes who traditionally occupied Stanwick before its destruction and the Roman establishment of Aldborough as *Isurium Brigantum*.

**Colonia/Coloniae** – Refers to the third and largest settlement of the Roman Empire.

Traditionally may involve the habitation or at least the presence of a Legion, as is seen at York and Lincoln, and usually becomes the capital of a wider region. This can be seen in York's position as the capital of *Britannia Inferior*.

**Flavian** – An Imperial Dynasty encompassing the period AD 69-96 and comprising the continuous reigns of Vespasian and his heirs Titus and Domitian.

**Gallic Empire** – One of the breakaway groups during the third century, further explained in Appendix I.

**Lead Pigs** – Lead ingots made for trade and shipment from the lead mines. Of the selection discovered in and around Petuaria most are accredited to the mines of Ludutarum, Derbyshire.

**Numerus** – A section of the Roman military, literally translates to unit. Originally used to describe a third element of the army after Legionary and Auxiliary troops and comprising of a looser formation of 'barbarian' troops likely formed under Hadrian. By the time of the production of the *Notitia Dignitatum*, it is likely the term referred to a more formalised unit

**Vicus/Vici** – Smaller of the Roman provincial towns, usually with no political or magisterial attachment. Traditionally these are found attached to a larger military settlement.

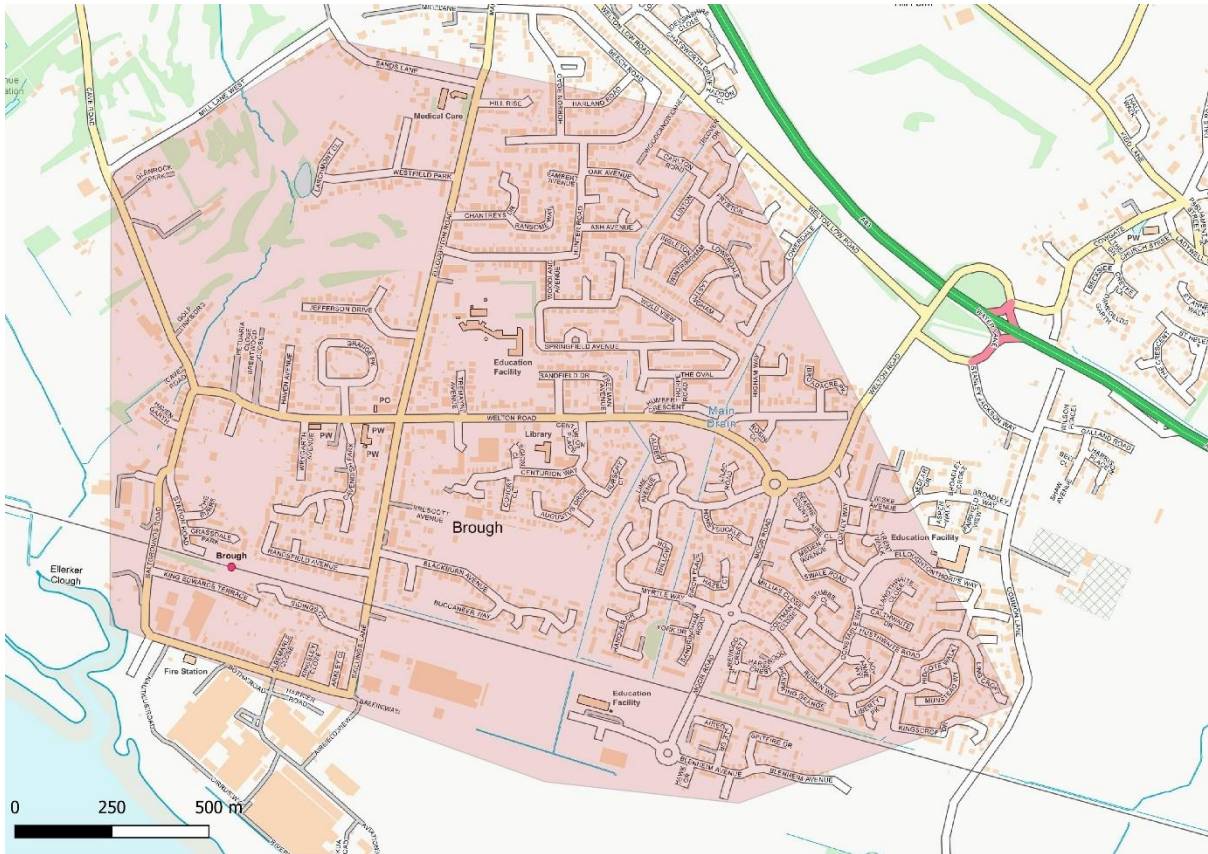
## Chapter 2 Methodology

### 2.1 Choosing the Study Area

One of the biggest challenges regarding data collection for this project was determining the extent of the study area that would be employed. Although the project is focused on the site of Petuaria it is evident that both the site's prolonged occupation and usage tie into the Roman occupation of the wider region, particularly when considering the site as a civilian settlement and how it would not have had such defined borders as the walls and defences, which are most likely related to the development of the fort rather than the town. It is also possible that through the potentially non-defensive nature of the Parisi a Roman occupation would be able to flourish in the region, leading to a substantial spread throughout the East Yorkshire and Humber region as exhibited by the number of villas and small-scale settlements in the region. This argument for a lack of local aggression can also be seen through the significant lack of hillforts within the region compared to the country as a whole, with only a single example recorded from aerial photography located to the north of Mount Airey Farm, some 4.4 km north of the northern wall of the walled settlement at Brough (Humber Archaeology Partnership 1995, Lock and Ralston 2017). Alternatively, this lack of nearby hillforts may be instead due to the landscape not befitting a traditional hillfort layout, with the higher ground of East Yorkshire being that of undulating wolds with few specific high points or defensible positions. This may even be seen in the placement of Roman defensive sites along this high ground, with many placed along river crossings roadways as opposed to higher ground as is seen in settlement patterns elsewhere, such as Cumbria and the South (Biggins & Taylor, 2004; Peacock, 2016; Seaman, 2022)

These factors all lead to the argument for defining a study area, without which the data collection could quickly become swamped if considering Roman findings from the surrounding towns such as Welton, Elloughton, Melton and further. Additionally, the sheer extent of information involved in the research if any period of occupation later than the Romans was considered, with that period itself comprising of possibly the entire length of the Roman occupation of Britain with finds dating into the mid-fourth century and later recovered from various sites (Fraser, 2004; Hunter-Mann et al., 2000; Adamson, 2009; Halkon & Lyall, 2021). It was therefore necessary for this research to draw up limits for its study area to focus the data and research on the site itself and not attempt to understand the Roman occupation of the entire region.

By using the pre-existing recorded spread of Roman data provided by the Humber HER to create a specific area of study a few trends became clear with much of the data recorded and associated with Roman Brough being found between three distinct points in the area. Investigations and evidence recorded along Cave Road, heading northwest from the northern edge of the site of Petuaria, provide somewhat of an indication of the extent of the site to the northwest, while investigations carried out along Welton Road to the east can be seen to provide the suggestion of an eastern extent to the site. Additionally, the recorded finds and investigations from the northern side of Welton Road, in particular those towards the Brough golf course and Elloughton, show the extent of the site's northern development. Combining these three extents with the geographical history of the area, those being the reclaimed land from Brough train station south to the Humber estuary, and the extent of the tidal floodplains to the west of the walled settlement, a clear study area presents itself. Through this methodology, the study area decided upon for the data collection aspect of this research was an area of 2.43 Km<sup>2</sup> (Figure 3).



*Figure 3 Study Area as determined by data from HER and ADS*

This study area allowed for the inclusion of sites of interest around Cave Road as well as the developer funded investigations towards the southeast of Brough (Moon, Richardson and Wrathmell, 2020). Due to the reclaimed nature of the land to the south of the train station, this area also provides an image of what the region would have looked like in the Roman period with the Humber rising to a much closer proximity to the Roman settlement, further supporting the evidence for a Roman harbour and possible naval base in the area of Station Road and to the west, along with a site of significant harbour development on Cave Road (Armstrong, 1981; Fraser, 2004 a, b, c). As many of the sources used for the analysis of pre-existing data would be stored at the Humber HER, it was the researcher's decision to limit the data to Brough and the parish of Elloughton when searching these records, as the



proximity of the sites suggests a clear link, and this would allow for a further refinement of the data delineated by modern boundaries.

## **2.2 Issue faced relating to the chosen Study Area**

Despite the benefits of limiting the archival research to the area of Elloughton-cum-Brough it also brings with it some limitations and issues. For example, the Roman era occupation would not be limited to such an area with the potential for sites and areas of interest outside of these modern boundaries being not insignificant. Secondly, it is important when considering the reasons for a Roman settlement to have existed on this site to explore the local environment and region in geographical and social terms. For example, the site would most likely have ties to the Roman settlements further north, into South Cave and beyond as they would only be a short journey from the site of Petuaria. Likewise, the presence in the region of the Iron Age people known as the Parisi would have had an impact on the founding and development of the site, something which is proven by the site's believed use as a *civitas* capital for the Parisi (Halkon, 2013).

## **2.3 Description of the Literature Review**

For the gathering of sources to be used in the literature review and background chapters the process mainly consisted of taking the starting points of the Corder and Wachter publications and extrapolating them into recent works that have referenced them. This led to finding several publications by Wachter along with multiple publications on Roman Britain and Yorkshire that discuss the findings of both Corder and Wachter along with other

archaeological investigations of the site. These literary sources were then evaluated in Chapter 3, where their relevance, usefulness and reliability were all considered in comparison to one another. For example, an issue found and one which has been discussed in other publications is that of the disagreement with Corder's theory for the site's development within Wachter's reports of excavations (Wacher, 1960; Wachter, 1969). In this instance other evidence from more recent publications as well as recent investigations, both invasive and non-invasive, were used to determine that Corder's theory of the site's longevity and development was more likely to be accurate and compliment the narrative of the site being formed by the recent evidence found (Adamson, 2009; Halkon & Lyall, 2021). Another discrepancy that was examined throughout this process is that of whether the author of the publication believes the site to be Petuaria. Albeit a far more common consensus now, the debate of the placement of Petuaria was common in the early twentieth century and before, as several authors put up for debate the likelihood of Petuaria being Scarborough, Malton, or other possible undiscovered sites in the wider Yorkshire region (Wilson, 2017). It is important therefore at this stage to acknowledge the evidence found by Corder, primarily the inscription stone which is believed to directly name the site as Petuaria, despite its eroded nature (Corder & Richmond, 1940).

In contrast to the literature review the artefactual data extracted from these sources formed the basis of the background chapter where, as opposed to literary critique of the authors, the aim was for a strictly evidence-based interpretation of the site to be drawn up. This chapter also aimed to incorporate other physical data recorded in non-literary sources such as grey literature and the findings of units during commercial projects, both of which were collated via the Humber HER and Archaeology Data Service. These developer-funded and commercial sources are crucial to understanding the complex history of the site as many of

the archaeological investigations in Brough have taken place through commercial excavations undertaken by a variety of units and groups over the past decades, particularly since the introduction of PPG16 in 1990 (Darvill et al., 2018). It is also important to compare the approaches and methodologies employed over these various excavations as a way of exploring the changing attitudes and theories of archaeological investigation, with the site of Petuaria allowing for one of the broadest timelines of archaeological interest in the area, with investigations ranging from the antiquarian period through to the modern day (Horsely, 1732; Halkon & Lyall, 2021).

This 'raw' archaeological data is important in creating the narrative of the site for further research as well as public consumption, as the evidence uncovered in prior excavations helped to inform the understanding and analysis of data both uncovered in concurrent excavations (Halkon & Lyall, 2021, 2022a, 2022b) as well as the data submitted by Brough residents as part of the community outreach aspect of this project.

## **2.4 Physical Evidence: Prior and 'New'**

### **2.4.1 Data Handling**

As a key aspect of this project was the handling and dissemination of evidence to the public, throughout the process of data collection efforts were made to follow a set methodology for the storage and use of evidence. The most prevalent method used was the creation and maintenance of a database of evidence, covering both the literary sources used as background evidence as well as the recent data deemed primary or 'new' during this project. This database was used to not only store the references collected during this project but would also be used as a public engagement tool upon the completion of this research. In

collating all of the evidence recorded at and the publication produced on the site of Petuaria, this database aimed to provide the public and future researchers with a comprehensive dataset of investigations and evidence from the site of Petuaria.

### **2.4.2 Prior Data**

For this research the prior data section was used to form the background for the arguments presented about the site. To achieve this, the pre-existing data was primarily drawn from literary sources, both published books and reports as well as grey literature accessed through the Archaeology Data Service and the Historic Environment Record. Essentially the dividing factor between the prior and 'new' data in this research will be the proximity to the beginning of this project in 2019, with work undertaken prior to that year or within the context of the Petuaria ReVisited group's work being 'new' research while the data provided from the published and grey literature sources prior prior data. Throughout both these chapters it is important to consider the context in which these datasets were recorded, and whether a noticeable change in recording and presentation between the prior and 'new' periods, this is addressed further within Chapter 3 and to a lesser extend in Chapter 4.

### **2.4.3 Reasoning**

Much like the reasoning for the selection of publications used in the literature review, the reasoning for publications used for archaeological data collection is determined on whether they are based on or involve the Roman site of Petuaria. Many of these publications are grey literature sources produced following the introduction of PPG16 in 1990 with the first

commercial archaeological publication on Brough being produced in 1990, which establishes an almost constant publication of at least one report a year until 2009 as discussed in Chapter 4. Similarly to limiting the study area, the selection of these publications and reports is based on their proximity to Brough and the chosen study area for this research as the involvement of any of the surrounding areas would have increased the number of reports substantially and would have begun to muddle the archaeological evidence between different sites outside of the focal Petuaria region.

One issue with reliability regarding these sources is the misinterpretation or misidentification of finds and features. For the most part the actual evidence that these reports and publications are discussing is not accessible for a re-evaluation and in some cases, the amount of material itself is too great to be effectively re-evaluated without an extensive project facilitating the effort, as was the case for the ceramic finds from the 1977-8 Cave Road dig that until recently had not be re-examined and is currently undergoing re-evaluation by a team under Martin Millett. Despite these potential issues, although there is some small margin of potential for individual pieces to be misidentified by specialists and archaeologists recording them, that margin is too small to constitute a genuine risk within this research project. This is because it is more concerned with the overall narrative of the site being produced through this evidence rather than what individual specific pieces are. As such these issues are addressed in further within Chapter 4 where a margin of error will be used when attributing Roman finds and evidence to the site.

Data selected for the archaeological background chapter will also include any source that involves archaeological evidence from the site that has not been traditionally recorded through investigation, often due to their production before the wide scale development of

the archaeological discipline. This means that early sources such as the mention of a Roman settlement in Abraham de la Pryme's 1699 diary entry are included as well as the Horsley visit to the still visible Roman walls, as both sources discuss the site in the context of either found or still visible archaeological evidence (de la Pryme, 1699; Horsley, 1732). Therefore, it will be the aim of the background chapter to provide both this research, as well as any future research into the site, with a compiled collection and interpretation of the recorded archaeological evidence published in relation to the site at Brough.

#### **2.4.4 Usefulness and Reliability**

The usefulness of sources collected within the archaeological background chapter of this research will be determined by the perceived reliability of how they were recorded and written about. In some instances, the researcher may question the accuracy of certain claims, particularly those made decades or centuries ago and under a different school of archaeological theory. Alternatively, modern reports are not entirely faultless with investigations such as watching brief reports, of which there are many in Brough, being by design somewhat limited to recording only what is uncovered during the process of a large and potentially inaccurate machining process. This potential for missed evidence or features not uncovered during the process is an issue inherent to watching briefs, however arguably a watching brief is far better than no investigation taking place and as such can be seen to mitigate any issues presented by this methodology.

The usefulness of these sources is substantial, with only the newer data proving more useful due to the integration of modern archaeological methods to achieve a greater level of interpretation for the archaeological record. The background data as mentioned will inform

any understanding of the site prior to the involvement of primary data and even then, will provide the primary data with a context to relate to. This proved especially useful given the areas of Brough which have been the site of both past and present excavations, one of note being the suitably named Petuaria Close, the site of multiple archaeological investigations over the past decades (Halkon, 1980; HFA, 1991). This means that the background data for these areas is not only useful to the research but can provide an interesting and relevant piece of information for the residents currently residing in the areas who have become interested in archaeology over the course of the recent Petuaria ReVisited excavations.

#### **2.4.5 'New' Data**

The primary data that is used in this research came from any data collected concurrently to the duration of the PhD in addition to any recent locally recorded data that has been published or otherwise. Examples include the data from the Petuaria ReVisited excavations and geophysical surveys in Brough, data from test pitting organised by the Humber Timelines group as well as data recorded or collected from Brough residents including some oral histories of features uncovered within the town. The reason for defining this data separately to the data discussed in the background data chapter is that this data is largely new to the discipline, with the exception being the interim reports from the Petuaria ReVisited excavations that are available as published works (Halkon & Lyall, 2021; 2022a; 2022b; *forthcoming*). This data was used to add to and compare with the data from the secondary sources and as such has helped the researcher further develop the understanding of the site, whilst also incorporating the community of Brough itself in an attempt to form a lasting legacy of archaeological engagement within the town. Although the data collected by parties

other than the researcher is not necessarily a firsthand account, for this research project the definition is being made to divide the older research from this new evidence and as such allows for a clear argument to be informed from the newest available data.

Although an unofficial partner in this research, the work carried out by the Petuaria ReVisited group, a subgroup of the Elloughton-cum-Brough Playing Fields Association (PFA) will prove invaluable for the incorporation of new findings within this thesis. Not only is Petuaria ReVisited the group responsible for three substantial excavations taking place during this research, but they also organised several outreach events through which public engagement was able to be carried out as discussed further in Chapter 5. Throughout the course of this project, the research and physical investigation into Brough has been carried out working closely with Petuaria ReVisited as they have been able to carry out investigations that would be otherwise impossible for an individual researcher to accomplish during a three-year project.

Additionally, the community research and engagement aspect of this project, as discussed in Chapter 5, utilised the opportunities presented by these community excavations to carry out this work. This aspect of engaging and involving the community within the research is crucial for the final aspect of the primary or 'new' data as it is through work with the residents of Brough that this research not only aims to create the most developed idea of Petuaria to date but also to instil a greater sense of archaeological awareness in the community and a sense of place. The involvement of the local community in archaeological research at Brough traces its history as far back as Abraham de la Pryme and appears throughout subsequent investigations (de la Pryme, 1699; Corder & Richmond, 1940).



## 2.4.6 Collection

The way in which data was recorded from residents was dependent on their choosing to participate and consenting for any evidence they have found to be used in the production of this thesis and the wider PhD project. Over the course of the PhD following the approval of the research methods being granted by the University of Hull Research Ethics Committee, residents of Brough were invited to share with the researcher any archaeological material they have found on their property within Brough. At several outreach and community events, primarily hosted by the Petuaria ReVisited group, a call for participants was put out including a consent form as well as a brief description of the research they would be contributing to. Each resident has had the option to retract their data up until the end of writing up period and as stated in the ethical approval application specific details such as addresses and names have not been used or stored as any part of the project data. Instead, the information submitted to the project being attributed to a broader location such as a street, postcode or general area of Brough while the resident themselves are identified as a Participant, numbering 1-7. The reasoning behind determining what data is attributed as which area will come from the extent of information submitted as well as the location within Brough. For example, Welton Road essentially runs the entire length of the developed centre of the town and as such attributing sites to Welton Road would be too vague and leave too great a margin for error in the spatial analysis. Therefore, in cases such as this, a relative location to another site of interest within Brough would be used either coming from the modern town or from pre-existing and published archaeological investigations such as the first fort annexe uncovered at Petuaria Close during ERAS excavations in 1980. Using these alternative locations and reference points for the attributing of data it was the hope of this

research to provide an accurate a map of evidence within Brough while also retaining a level of anonymity and privacy for the individual residents of the town who have agreed to sharing their evidence with the project. When mapping participant information, as seen in Chapter 5, the scale of the map and the marker identifying each collection of data was used in such a way as to not indicate the exact location of any one assemblage. Although troublesome from an archaeological science perspective, this inaccuracy is in keeping with the nature of the data provided, with the residents themselves often unable to recall exactly where they found certain items.

#### **2.4.7 Usefulness and Reliability**

The question of reliability regarding this primary or ‘new’ data has many elements to it, on the one hand the evidence recorded in officially led Petuaria ReVisited investigations, with the group having professional archaeologists involved and providing training, is likely as reliable as the data recorded on previous investigations with the added benefit of modern tools such as the Portable Antiquities Scheme (PAS) and various location and map-based software. Alternatively, the data recorded from participating residents is reliably only to the level at which they remember where they found it in the town, with one possible margin of error being the submission of evidence found elsewhere, such as another location or bought from someone selling archaeological material.

One possible method for negating this risk is to only record an overview of the evidence submitted by the residents, with a focus more on the quantities of different ceramics, coins and metal work as opposed to individual pieces that may be misattributed to the area. As is to be expected any especially informative finds such as coins, decorative or unique sherds as

well as speciality metalworking were to be recorded separately and photographed with the owner's permission. It is the hope therefore that in producing an overview of the material found in specific areas of the town that this research is able to produce a concise and informative image of the archaeological background of the area without creating too complex a data set for readers and future researchers. Therefore, with these considerations in place it is reasonable to assume that the chance of unreliability within this sample is small and ultimately negatable especially when considering the size of the sample area and the density of archaeological evidence within.

## **2.5 Map Methodology**

The production of maps is a further important aspect of this research as it allows there to not only be a collated overview of the archaeological material found at Brough, but it also allows for relationships and distances to be viewed between said sites. Spatial data is an important part of any archaeological research and understanding Petuaria is no exception, with very little pre-existing work done on showing the relationship between excavated and recorded sites.

The process by which these maps were collated and created was via taking either points of data, for example a specific address registered on the Historic Environment Record, or the outline of excavation sites and overlaying them onto a GIS basemap. The use of GIS also allowed for easily exportable maps to be used in public outreach and in the writing of this research but will also for some level of analysis to take place on such factors as density, proximity, and overall area of investigation. Additionally, the use of a GIS system instead of overlaying the data by hand hopefully created a far more accurate display of the points and

allowed this data to be exported easily for the use of others with the specific GIS software used initially being ArcMap by ArcGIS before a pivot to using the open source QGIS. The use of other GIS software, such as QGIS or GRASS GIS, was considered at the start of this project due to the potential benefits of their open source or free nature which would allow for the data to be shared with community groups to produce their own maps and analysis however ArcGIS was chosen due to the university's licensing of the software. Unfortunately following the work from home mandate that came into effect in early 2020 the remote access programmes in use at Hull University were not able to properly process ArcGIS work and following the change of remote access provisions in 2021 the choice was made to produce maps using QGIS instead.

The first aspect of this map making methodology, the use of data points, followed a relatively straightforward process with the coordinates being lifted from whichever resource held them, such as the HER, ADS, and others, and either directly implemented or converted to the coordinate system in use by the basemap to draw the points onto the map. The main risk of accuracy regarding this data would be conversion issues between coordinate systems, however this risk is minimal and as such didn't pose a major issue during the production of this research. Further points of interest will be taken from other publications and sources on the site and would allow for a greater spread of evidence to be evaluated over the full extent of the site. Additional points were drawn from the primary data aspect of this research and proved to be somewhat less straightforward as only the investigations led by Petuaria ReVisited had accurate coordinates attributed to them. Instead, the evidence recorded from residents needed to be attributed to an area rather than the ability to record direct coordinates on site, this was to help keep residential addresses and locations anonymous in

the production of this research, as previously discussed in the primary data collection section of this chapter.

The second aspect of map production is the overlaying of site maps to show the areas of archaeological investigation in relation to other features. Regarding the use of site maps produced for publication some further issues arise such as the accuracy of the site maps, the scale in which they are drawn as well as the level of detail being unable to transfer clearly to a larger scale map. These issues especially emerge when extracting maps produced during the Corder excavation in the 1930s, as these maps are published without any form of coordinate system shown. Despite this issue affecting the overall accuracy of these site maps, there are solutions available and one of which has been implemented within this research is the overlaying of the map with other historical maps and then extrapolating that location to a modern GIS basemap. Another solution that has been used is to overlay the original Corder plans onto the more modern Wachter excavation plans which include outlines of streets and buildings, due to the excavations taking place in closer proximity to developed areas and as part of a civil works project, which can in turn be overlaid onto modern features. Following Petuaria ReVisited excavations to the north of the Burrs Playing Field in 2021-2023 it became apparent that the theoretical extent of the site as produced by Wachter was likely to be inaccurate to an extent, with most prior assessments placing the northern wall of the fort to the north of Welton Road. Due to the curve of the wall as observed in the Burrs Playing Field it is apparent that the fort does not follow this exact plan, and as such the suggested course of the defences is used more as a suggestion of the site's scale, rather than a precise layout of the fort.

## 2.6 Community Engagement Methods

Unfortunately, the majority of the preliminary research and work for this section was due to take place during 2021-2022 in a period where the COVID-19 pandemic was in full effect for much of the country. As such and as stated in this thesis' methodology chapter accommodations were made, however, community outreach was a difficult to pursue goal due to both government restrictions and moral obligations due to the vulnerability of some Brough residents. Despite COVID-19 limitations however, successful outreach and engagement programmes were run during the Petuaria ReVisited excavations in all four years of the project so far (Halkon & Lyall, 2021a; 2021b; 2023, *forthcoming*). As no participant interaction was planned for the first season of excavations in 2020 the engagement aspect comprised of providing information and explanations for a number of facets of the project through socially distanced tours led by either the researcher or Dr Peter Halkon. This included archaeological investigations and methods, the history of the site both archaeologically and literary, and what the material comprised of that was being recorded. This was received very well by the residents of Brough and visitors to the site from further afield, with many noting how they were unaware of Brough's extensive Roman history. In the following two years further effort was made to provide the visitors to the site with a point of contact for archaeological questions and information, made especially important by the continued need for social distancing and other health and safety protocols. Apart from issues relating to the pandemic, by the second year of excavation the trench was too deep for visitors to view safely. To provide a contact point a small pop-up museum (Figure 4) was created comprising of various printed maps and prior reports alongside artefacts from both

the excavation and previous investigations in the region. These objects included typical finds such as greyware and buildings material alongside rarer objects from the excavation such as the identified copper alloy “fob dangler” with an iron chain and the coin of Julia Domna recorded in the first season. This museum was then operated by the researcher for the duration of the 2021 season, during which over 400 unique visitors were recorded with many returning for repeat visits. The pop-up museum proved to be extremely popular during the Roman festival put on by the Petuaria ReVisited group and intended to convene with CBA’s yearly Festival of Archaeology. COVID-19 affected the running of this event, with only a smaller version taking place in 2019 and again in 2021.



*Figure 4 The project's pop-up museum being visited by (L-R) Neil Redfern and Dr Claire Corkill of the Council for British Archaeology, with Dr Peter Halkon and the Researcher*

It was through this pop-up museum that a majority of the later participants of this research were first contacted as a sign-up sheet was provided on each day for either them to leave their email or take the email of the project; [petuariaproject@gmail.com](mailto:petuariaproject@gmail.com) an email address with shared access between the researcher and the project supervisor, Dr Peter Halkon.

Beyond this, the community engagement focus of the Petuaria ReVisited excavations drew attention from a number of media outlets including BBC's *Look North* and Radio Humberside's *Kofi Smiles Show* both of which visited the project and the latter interviewing the researcher about the site and the museum (Smiles, 2021). In this there was a clearly growing interest amongst not only the local community but a community further afield, shown as much in Participant 7, anonymised as per the forms provided in Appendix II, having moved away from Brough some years prior and only happening to visit the site after hearing about it while in the area. Indeed, there is a clear and strong local interest in the site of Petuaria and one that will hopefully be further served by the completion of this research.

Over the following seasons of excavation in 2022 and 2023 community engagement continued to develop, with the most recent season including tours of the site and a children's day to try excavation themselves. In addition to this the Roman Festival returned on a larger scale and now included both an information booth on the site, containing most of the printed material from the previous pop-up museum, in addition to specific children's activities and a talk given by the researcher. Additionally in this year, through an established connection with one research participant, a geophysical survey was able to be carried out on their property providing yet further information and context for the Roman remains of Petuaria.

In addition to engagement carried out on site at the excavation, further opportunities were utilised such as a community update presentation. At this meeting, held a few months prior to the commencement of work on the 2022 season of excavations at Elloughton Community Hall, presentations were given by the researcher, Dr Peter Halkon, James Lyall, and the Roman Roads Research Association. The topics covered included excavation updates, PhD



related research and data, a geophysical survey of the line of the Roman road heading north from Petuaria and a discussion of the theatre inscription. The community reception to these presentations were received warmly and only further highlights the burgeoning interest in the site itself.

It is evident that Petuaria and the wider Roman context of Brough and its environs is a popular topic in the population of it and its neighbouring towns. A goal of both this engagement and the wider Petuaria ReVisited project was to develop a community awareness and identity around the site, something which has clearly taken place through the Petuaria ReVisited excavations and the engagement efforts made both on site and at other events.

# Chapter 3 Theoretical and Literary Background

## 3.1 Introduction

The study of the Roman conquest and occupation is a deep and extensively documented aspect of British archaeology. This is arguably due to a variety of factors including the scale of some sites, the nature by which British settlements have adapted from original Roman territories, the sheer quantity of Roman sites within the British Isles or, perhaps most prevalently, the undeniable presence of classically focussed studies interlinking with and in some cases forming the backbone for the archaeological discipline since its inception (Hingley, 2008, 2016). Whether it is due to this presence in the education of early archaeologists, or the presence of material in the archaeological record at a vast number of sites across the country, it is impossible to ignore the impact on British archaeology that the Roman conquest and occupation holds. Considering this, the literature review section of this research had a near abundance of sources to utilise in the name of contextualisation and providing a background to both the research methodology that will be applied but also the site itself, drawing on a variety of comparable sites and regions of Roman expansion in an attempt to illustrate further the potential history of the site of Petuaria itself.

Literature that regards the site of Petuaria within the wider context of Roman Britain, although small in number, has gone on to influence the research questions that have been carried through into the comparison and context chapters of this work. However, the literature focussed specifically on the site itself is extremely limited in comparison, but those limitations are what provide this research with its overall aim of compiling these sources, comparing them to the archaeological evidence, and creating an updated evaluation of the

site. Only a small number of publications make any significant mention of the site with most of the in-depth exploration coming from the reports of Corder's excavations, Wachter's excavations, and later analysis and the work by Peter Halkon and Martin Millett on the Romans and Iron Age Parisi tribe of the region alongside some of the lengthier produced reports from the developer-led and grey literature sides of archaeology (Corder, 1934, 1935; Corder & Romans, 1936, 1937, 1938; Corder & Richmond, 1942; Wachter, 1969; Burnham & Wachter, 1990; Wachter, 1995; Halkon, 2013). These publications provide the narrative and theoretical backbone of this research with the physical evidence and later archaeological excavation and analysis developing the narrative formed within them and creating a clearer and compiled understanding of the site of Petuaria and providing it with a status in the wider field of Roman Britain.

This literature review is broken down into sections focussing first on the chronological explorations of the site followed by contextualising the site with specific examples as well as analysing the strengths and weaknesses of the work carried out by previous researchers into the site itself and critiquing the theories produced. An added benefit for this literature review is that the archaeological investigations of Corder and Wachter not only serve as a strong basis for the creation of an understanding of the site but also provide insight into the wider changing theories and methodologies of archaeology over the 20<sup>th</sup> Century in particular the theories regarding Roman Britain.

### 3.2 Chronology of the Site

Petuaria, as with most Roman or Romano-British sites to have a name attributed to them, traces its origins to one, or many, of the classical texts that cover Britain under Roman rule. In the case of Petuaria these are Ptolemy's *Geographia*, the *Notitia Dignitatum*, and the Ravenna Cosmography with the name of Petuaria appearing in each in some form and some writers also believing the Antonine Itinerary's Praetorio refers to Petuaria (Poulson, 1829; Creighton et al., 1988; Wilson, 2017). In the case of Ptolemy's *Geographia* Petuaria is noted in the list of settlements of northern Britannia and for the *Notitia Dignitatum* it is given in reference to troops garrisoning Stamford Bridge's Derwentio. In the Ravenna Cosmography, a severely anachronistic work produced centuries after Rome retreated from Britain, the place name *Decuaria* is listed alongside the known Eboracum and the unknown *Devovicia*. It is likely *Decuaria* is a misspelling of Petuaria while *Devovicia* in the same logic should be Delgovicia, Malton, although the placing of these names is the point of some contention and as such is explored throughout this research. Despite all of these being not only beholden to translation errors and temporal distance between subject matter, time of production and interpretation, they all provide the basis through which Petuaria is explored as a concept in the following literature.

Although the merging of the place name Petuaria with the site at Brough is a much later development, and one that is further discussed in this research, the fundamental concept of a site in East Yorkshire by the name of Petuaria has existed for centuries. Ptolemy's *Geographia* provided many early archaeologists with the basis of their research, something which is carried through into modern interpretations. In translation Ptolemy's entry comprises of; "Eboracon...Legio VI Victrix...Camulodunum...Near a bay suitable for a harbour

the Parisoi and the town Petuaria” - Ptolemy *Geographia* 2.3.17 (Ptolemy, Stückelberger & Grasshoff, 2006). Not only does Ptolemy’s reference to Petuaria and the ‘Parisoi’ (Parisi) cement a link between the people and the site, but it also provides crucial contextual information about the settlement being at a point suitable for harbourage.

One of the earliest non-classical references in a published work to mention the Roman settlement at Brough is two entries into the diary of Antiquarian Abraham de la Pryme, written between 1680 and 1704 but collated and published in 1870. What is perhaps most important to consider when regarding the diary of de la Pryme is that it is a collection of private correspondence and so cannot be expected to hold the same level of academic rigour or integrity as later publications that will be explored. The diary in question is by no means a comprehensive or particularly in-depth account of the archaeological or historical environment of Brough however de la Pryme’s diary includes what is likely the first documented mention of the name Petuaria outside of classical literature in an entry on the fifteenth of May 1699. As stated, the concept of a Petuaria existing in what is now East Yorkshire comes from a single reference in Ptolemy’s *Geographia*. This leads to potential misattribution in the case of de la Pryme, especially when considering he himself cannot decide whether to attribute an inscription to a soldier of either Petuaria or *Pretoriu* (de la Pryme, 1699, 206).

“This may be some other soldier, that belonged to Petuaria or Pretoriu (?) and not ye same whose epitaph Mr. Cambden gives, both because that Cubus is not mentioned in his, and that nobody would give themselves ye trouble to convey such a great mon[ument] as this is from York hither, seeing that it is so little good to. Pardon, good Sr, my suddain thoughts hereof. If I have erred, it is but like a man.”

– Abraham de la Pryme in correspondence to the Dean of York, fifteenth of May 1699

De la Pryme appears to have made a common error, due in part to the lack of the Petuaria inscription at this time, when assessing Roman sites in Yorkshire by suggesting that the name Petuaria is possibly equated to Praetorio as found in the Antonine Itinerary. Praetorio is now more commonly considered to belong to a coastal site further north, potentially lost to the sea as is suggested by Peter Wilson (Wilson, 2017). Later that year de la Pryme goes on to connect certain Roman artefacts found in the Brough area to the site that will become Petuaria, in what is an account of the earliest publication of recorded archaeological material at the site (de la Pryme, 1699, 206, 218-219).

“As to ye town where it was found, it was an old Roman town, ye landing place of their forces out of Lincolnshire, and at it, as soon as they had got over, they cast up three huge banks, one of which ran towards York, another towards ye north, by Ripplingham — yet to be seen— and another towards Beverley, and thence to Pattrington, scarce now visible. And, last of all, when ye Roman forces were all sent for home, in great hast, about ye year 400, to defend their own country from the barbarous natives that invaded, ye soldiers and Roman inhabitants that were very rich here hid their money and treasure in thousands of places in this land, in hopes to have return'd again and possessed it, but they never returning is ye reason that there are such great number of their coins found in this nation.”

– Abraham de la Pryme in response to Robert Mason, twenty-fourth of October 1699 (de la Pryme, 1699, 219)

However, being written in 1699 its place within the wider context of archaeological research and understanding is of some significance having been produced within a few years of John

Aubrey's *Monumenta Britannica*, one of the first substantive early archaeological works, as well as within the same century that the earliest archaeological excavations were carried out in Britain by William Harvey, Gilbert North, and Inigo Jones (Jones, 1655; Aubrey, 1668-1670; Keynes, 1966). The context through which this reference of Petuaria is found shows clear evidence of an early awareness and interest of the site. As such, the work of de la Pryme goes a long way towards establishing the study of Petuaria and Roman Brough as a viable topic of interest for later investigations and projects to be carried out.

Other early references to the existence of a site of interest at Brough can also be found in the works of John Horsley, Yorkshire Antiquarian Francis Drake and George Poulson produced in 1732, 1736, and 1829 respectively. The mention in Horsley's *Britannia Romana: or the Roman Antiquities of Britain: in three Books*, consists of recognising the site as a point of passage over the Humber and the name Brough being potentially Roman in origin (Horsley, 1732). Horsley also makes an effort to link Petuaria and Brough through references in the Antonine Itinerary, again through mention of the existence of a Humber crossing in addition to recording his impression of an actual visit to Brough itself. It becomes apparent in this account, and again in that of Poulson, that fairly substantial archaeological evidence remains visible at a surface level even into the 18<sup>th</sup> Century; "The one side of the town, which consists but of two or three scattered houses, seems to stand on the west rampart; and for about fifty or sixty yards there is somewhat very like the foundation of a rampart appears." (Horsley 1732, 374). The existence of structural remains still visible some thirteen hundred years after the site's presumed abandonment only goes to further the argument for the site at Brough to be one of significance and substantial bearing both archaeologically and structurally. This eye-witness account and these written accounts of visible evidence is explored further in Chapter 4.

The next reference to Brough being a site of significant interest, and one prominent in the antiquarian study of the time, is its appearance within Francis Drake's *Eboracum* (1736, Figure 5) a substantial volume produced by Drake to cover Roman York and its surroundings. In the book there is a labelled map of what Drake believes to be Roman Yorkshire's layout with corresponding place names. On the map Drake has stated that Petuaria is located somewhat to the southwest of York and that the Parisi, the Iron Age people who occupied East Yorkshire and are believed to have occupied Petuaria as a *civitas* (citizen community), were instead based towards the northeast of York and towards Bridlington (Drake, 1736). Aside from what is now believed to be severe misattribution for Petuaria, Drake also named Malton as Camulodunum and Stamford Bridge as Derventio, only the latter of which has retained general support throughout the centuries, despite frequent disputes, and the former instead belonging to Colchester (Crummy et al., 1997; Wilson, 2017). Despite other inaccuracies in both names and locations, it is important to acknowledge that Brough appears prominently on the map, as part of a direct Roman road between York (Eboracum) and Lincoln (Lindum Colonia). Despite the lack of any Roman name attributed to Brough, it is evidently seen as an important part of Roman networking which supports later theories of the site's origins as a supply depot for crossing the Humber. It is entirely possible that Drake, a prominent early archaeologist working in the region, had encountered literary or physical evidence for a Roman settlement or fort at Brough and as such marks it as a site of interest. This most likely comes again from the name Brough originating in the Old English or Saxon *Burh* meaning a fortified site, with the ramparts still visible up until the sixteenth century this is a likely explanation to the name (Martin et al., 1988; Draper, 2008).

In addition to Horsley and Drake before him another antiquarian seeming to believe there was a link between Ptolemy's Petuaria and East Yorkshire was George Poulson who, in his



book *Beverlac*, debates various other antiquarians' beliefs on the location of Petuaria (Poulson, 1829, 15). Some of the theorised locations named are Beverley, Patrington, Pocklington and finally Brough itself. In quoting Horsley's work Poulson indicates a strong association to Brough by ways of the *varia*, a Latin suffix allegedly meaning ferry terminus according to Poulson however disputed in the footnotes (Poulson, 1829). If true, this grammatical evidence could go even further to locating Petuaria as the site at Brough due to its place as a historic ferry crossing point over the Humber as well as the facing havens of both Brough and Winteringham (Wacher, 1969).

Poulson goes on to discuss the work of others in naming conventions around Petuaria. Here the references in Ptolemy's *Geographia* and the Antonine Itinerary are pitted against one another with further discussion over the placing of the Itinerary's Praetorio and whether it can be construed as the same site as Petuaria through the interpretation of the former as *Praetuarium* (Poulson, 1829, 16). Poulson attributes this creation of a word to a mistaken attempt to combine Praetorio and Petuaria with further issue in the creator of the word, 'Mr Dyer', marking the location of the hybrid site at Spurn Point due to his belief that *pre* or *bre* meaning head or promontory while *or* or *ar* mean border or point (Poulson 1829, 16).

Poulson disputes this evidence's interpretation as Spurn Point by expressing how the etymology simply indicates a headland. Interestingly a consensus among some authors (Corder & Richmond, 1942; Wacher, 1969; Halkon, 2013) is that at the time of the Roman arrival at Petuaria the land on which the site was constructed would have been somewhat of a headland or peninsula on the north bank projecting into the Humber itself with marshy ground to the east towards modern day, Hull and the large inlet of the Wallingfen to the west.



Figure 5 Francis Drake's 1736 Map "Eboracum", cropped to highlight PETVARIA and its location Southeast of 'Warram' Plate

1.47 (Drake, 1736)

Later in 1877 in a paper published in the fifth volume of the Yorkshire Archaeological Journal, a reference is made by Daniel Haigh to Petuaria under the guise of *Caer Peris* from the *Vita Merlini*, a Latin poem about the life of Merlin and often attributed to Geoffrey of Monmouth and as such is up for considerable speculation when treated as an academic or historic text (Haigh, 1877; Parry, 1925; Tatlock, 1943; Monmouth & Clarke, 1973). Whilst exploring references made in this text the site of *Caer Peris* is referenced in the passage; *"Caer Peris in portu sua menia rupta videbit Donec eam locuples cum uulpis dente reformet."* *"Caer Peris* will see its walls lying broken in its harbour till a rich man with a fox's tooth rebuilds them."

From the mention of a harbour or *portu* the author extrapolates that the *Peris* of the title must be descended from the Parisi people of the area and refer to their “capital” or *civitas*. Interestingly this argument is in direct contention with both contemporary and later interpretations of historic texts, with a later translation of a separate source attributing *Caer Peris* to Portchester, *Portus Adurni*, from the monk Nennius’ *Historia Brittonum* Vol. VI (Nennius & Mommsen, 1898).

Daniel Haigh provides further insight into Brough in the Yorkshire Archaeological and Topographical Journal on “Caer Ebrauc, The First City of Britain” (Haigh, 1879). Both of Haigh’s contributions largely relate to the discussion of Petuaria’s location in modern terms, with the second article relying on a translation of medieval poetry to attribute the location of Petuaria. Haigh seems to be content criticising the theories of other antiquarians while also suggesting that Petuaria is Kingston Upon Hull and is the reason for the city’s Kingston name where in fact this is due to the royal charter of Edward I as granted in 1299 (Haigh, 1879; Allison et al., 1969). Unlike other discussions, Haigh mentions the distances referred to in classical works and uses this to try and calculate the location of Petuaria in reference to other Roman sites, relying on the thirty-mile stretch between Lincoln and the Humber, which Haigh states is surely a Roman route to Winterton, the location of a Roman site closely related to the south bank site of Winteringham (Haigh, 1877, 91; Stead, 1976). Haigh then describes this distance as a set standard of thirty miles per each station from Lincoln to Eboracum. Through this mathematical process Haigh’s theory that Petuaria is Hull and not Brough originates, as the Winteringham to Brough distance of some two to two and a half miles does not correspond to the correct distance as calculated by Haigh. This use of distances as a measurement is the most evidence-based Haigh’s first article becomes, relying on a less scientific method of spatial analysis than is employed in today’s discipline. Although

the use of spatial data is arguably a more archaeologically proper method of exploring the relationship between sites, Haigh's reliance on historical writings to reach his conclusions produces some level of inaccuracy in his use of the measurements, there is little to no acknowledgement from Haigh on the natural changes that have occurred in the Humber Estuary since the time of the historical writing and how they may affect the perceived distances between sites.

After establishing the site as a place of potential interest, the first major excavation to be carried out and fully documented is that of Philip Corder's excavations in the 1930s during a crucial era for the archaeological discipline and its rise to popularity. Corder's work, along with that of John Wachter, has almost wholly formed the basis of what modern researchers know about the site of Petuaria. It was through his seasons of excavations that a substantial amount of material was uncovered and the beginnings of the narrative of Petuaria were formed, all the while either supporting or discounting the various prior theories. Corder was an experienced archaeologist known for his works on Roman Yorkshire in particular investigations at Castle Howard, Malton, Throlam and Langton prior to his involvement in Brough (Corder & Kirk, 1928, 1932; Corder, 1928, 1930a, 1930b). The excavations carried out by Corder relied on the involvement and support of various members of archaeological societies and the local population (Corder, 1934, 5-6). This brings to attention perhaps the main example of Roman Brough being a strong case for public outreach with public engagement being pivotal to its own history. This is something that is built on in later chapters of this research with the work of Corder and those contemporary residents providing the community outreach aspect of this research with a strong foundation.

Corder's excavations ran from 1933 through to 1937 and covered a total of sixteen trenches over different parts of Bozzes Field, what is now called the Burrs Playing Field, which allowed Corder to gather a considerable amount of archaeological data in terms of both artefactual and structural evidence. These excavations created the earliest idea of what Roman Brough could have looked like, with the Corder excavations revealing the heavily fortified eastern wall of a settlement as well as a gate and bastion (Corder, 1936, 45). From this Corder attempts to theorise the further extents of the site, with this aspect of the investigation being developed further in Wachter's later investigations. For the purposes of this literature review, as well as to differentiate from this research's later evaluation of Corder as a whole, the Corder excavations will be regarded as separate publications for the most part. Corder's initial investigation, the 1933 excavation (Corder, 1934) has produced some of the more interesting results of any investigation, and as such establishes a strong grounding for the research going forward. This report not only details the initial excavations by Corder and his team, encompassing a variety of defences along the northern and southern walls of the settlement, but also the uncovering of the some of the first structural evidence suggesting a multiple stage occupation of the site (Corder, 1934, 20). The discovery of a stone-slab lined fireplace, or hearth, that lay out of situ with the nearby ditches made for relatively reliable evidence for a longer occupation or re-occupation of the site. This feature in conjunction with the coins found during this investigation suggest a fairly long-lasting use of the site (Corder 1934, Appendix I). In addition to these finds highlighting the longevity and possible reuse of the site at Brough, Corder's initial excavation also uncovered inscribed lead pigs highlighting the site's possible economic and transportation role within the region as they bear similarities to lead pigs found in other archaeological sites across the region, as well as originating from Ludutarum in Derbyshire. The presence of such lead can be seen to show

signs of a potential trading hub, or even a naval presence of shipbuilding or mending, something explored in further chapters.

Corder's first excavation provides this research with both a definitive starting point of substantial investigations and the development of an archaeological informed narrative of the site, marking the first publications to utilise investigations or archaeological data in any significant way. Another key factor of Corder's first excavation report is the inclusion of finds from the local population, a feature which continues into later investigations as well as becoming a crucial part of this current research. This research itself utilises locally found artefacts to both ascertain the extent of the occupations and create a sense of community around the site through working with the Petuaria ReVisited group.

Corder's subsequent reports on the following years of excavation further develop the points from the first report, namely the growing scale of the site along with further discoveries that highlight the importance of the site as well as the longevity of its occupation with coins ranging from Emperors Nero to Gratian (Appendix I). This further shows that even at this early stage of research there is the potential for a variable occupation of some three to four centuries. It is also important to acknowledge how Corder's later reports provide more detailed and extensive plans following the excavation of further parts of the site and allow for an even clearer image to be created of the site itself. For example, the Corder reports on seasons 1934-1936 each show a clear development of understanding, as is to be expected with consecutive excavation seasons, and a growing sense of the scale of the site as different trenches are excavated in different parts of the Brough environs. However, as is the issue with many archaeological investigations, Corder's later excavations were to largely corroborate the initial findings of the 1933 excavation and as such some of the judgement

presented may be brought into question due to a possible evidence bias coming from attempts to cement earlier theories (Corder, 1935, 6). Despite the possibility of this, Corder does acknowledge a change in theory for the site's nature and extents following his 1935 excavation, believing the site to "a small fortified town, rather than a fort as was first supposed" (Corder, 1936, 44). In later publications he also acknowledges the changes to theory around certain features as a second gate within Bozzes Field (Corder, 1937, 7). This shows a certain level of reliability in what Corder suggests, and as such should still be regarded going forward as a strong basis of understanding for the site at Brough. The status of Petuaria, or the site at Brough, to be either a fort or town is a common thread throughout the following literature. There is even some argument to be found in the theoretical changes seen within the archaeological discipline as to whether the site is viewed as a town or fort, with Rome's occupation of Britain being alternatively seen as militaristic and political. Furthermore the site itself, its features and location, do not confirm one theory or the other and as such have led to further debate and provide a further goal for this research.

Perhaps the most significant finding of Corder's investigations, outside of the existence of the structural evidence for the fort, is that of the 'theatre' inscription; the epigraphical evidence that ties historical accounts of a settlement named Petuaria to the site located at Brough (Corder & Richmond, 1942, Figure 6). The inscription is key to tying the site located at Brough to that of the ancient place name of Petuaria as the inscription specifies *VICI PETV* or the *vicus* of Petuaria which is believed to describe the settlement of Petuaria as according to Ptolemy's *Geographia*. However, it must be recognised that this inscription follows the suite of other archaeological finds that have been extrapolated to possibly fit a pre-established theory and however, unlikely it is that this is the case, it is still a possibility especially given that only the *PETV* of Petuaria still remains intact on the inscription.

According to Corder at the time of discovery the inscription extended to PETVER which Corder has equated to *Petuerensis*, the reference in the *Notitia Dignitatum* under Derventio as *Numerus superventientium Petueriensium* which is translated to “the company of newcomers/ambushers from Petuaria” (*Notitia Dignitatum* xl.31, 4-5<sup>th</sup> C). Interestingly, and as is discussed further in Chapters 7 and 8, the description of the numerus as *superventientium* is a unique term within the *Notitia* and doesn’t appear elsewhere in other examples of contemporary texts.

In the equating of the *Notitia Dignitatum’s* *Petueriensium* with the site at Brough, one of the earlier suggestions of the site’s role as a port or harbour is suggested, with the ‘newcomers’ or ‘arrivals’ seen as possibly either being mustered from the vicinity of Petuaria or arriving via Petuaria as a point of entry for the region. As military naming convention standard the implication of the *Numerus Petueriensium* is that a garrison maintained at Petuaria was then moved to Derventio, Stamford Bridge, sometime in the later Roman period. The *Notitia Dignitatum* granting a *numerus* title to the garrison from Petuaria is seen by Wachter to imply a strong military presence into the fourth century, the time of the *Notitia Dignitatum’s* production, and as such is used to suggest a dwindling of the site’s civilian capacity in place of a more militarised presence into the later third and fourth centuries, likely lasting until the culmination of the site’s occupation.

The importance of Corder’s work and subsequent theories on the site can be shown in no clearer way than through the discovery and interpretation of this inscription, as it is through this evidence that a solid link between the site of Petuaria and the Roman settlement at Brough can be made through physical evidence. As such it is important to acknowledge the significance of the artefactual evidence presented through Corder’s and other publications



alongside the theories created within these works as the groundwork for later investigations. An important aspect of this literature review and research will be recognizing and evaluating this development of theories and concepts on the site and how they build or deviate from previous theories, whether utilising new archaeological evidence or not. Corder not only is one of the earliest to write on the subject of Petuaria, preceded only by the handful of previously discussed antiquarians and early archaeologists, but he is also in possession of what is arguably one of the clearest visions of what the site is. Undoubtedly helped by his extensive excavation season, Corder is fundamental in his suggestion of theories and hypotheses on Petuaria that prevail to this day. This includes the latter period defensive measures, now further confirmed in later fieldwork, as well as the civil and military occupation that appears throughout other investigations.

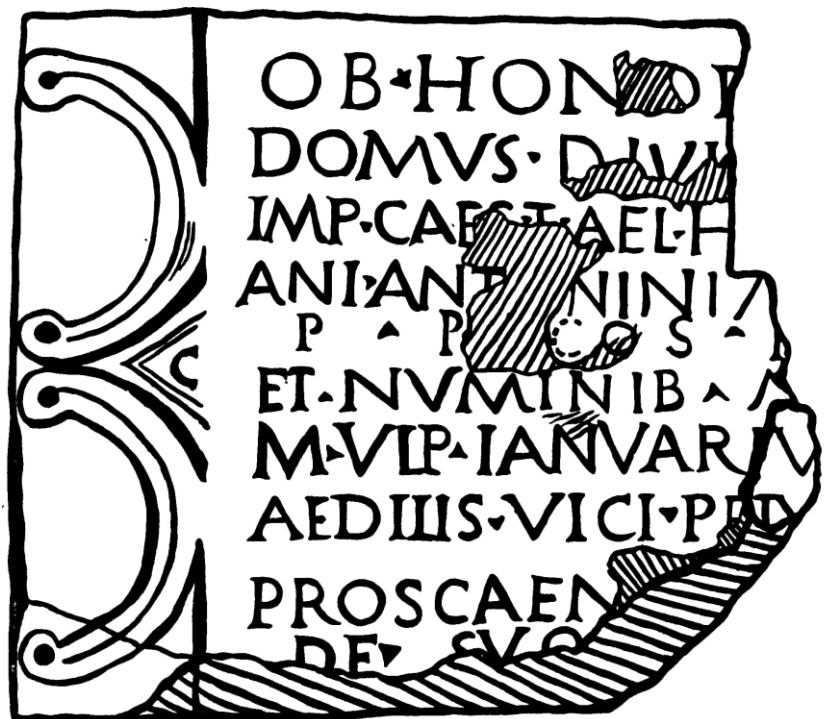


Figure 6 Drawing of RIB 707; "Petuaria's Theatre Inscription" (Wright, 1951)

Furthermore, Corder's work highlights the ongoing issue of naming sites within East Yorkshire with the aforementioned Delgovicia, Derventio, Petuaria, and Praetorio all being

attributed to a variety of sites by a variety of authors. In keeping with the work of John Creighton, later supported by Pete Wilson, the use of these names in this research are as such; Derventio referring to Stamford Bridge, Delgovicia referring to Malton, and Praetorio referring to a hitherto lost site at Bridlington (Creighton et al., 1988; Wilson, 2017). Although contrary opinions do exist and may continue to influence research in the area, for consistency throughout this work these names will be equated to these modern sites.

In terms of the longevity of the site's occupation Corder gives a rough estimate of some 350 years, taking the extent of occupation to sometime in the early to mid-fourth century under the reign of Constantine, of which Corder has records of some nineteen coins and of which a further twenty-four have been recorded in subsequent work (Corder & Romans, 1942; Appendix I). Corder suggests this extent of occupation to be largely continuous, with a theorised abandonment in the early second century for the garrison to help with the reinforcing and development of the site at Malton. It is clear in both Corder and Wachter's investigations that the site underwent a period of reduced or no occupancy in the late first or early second century, presumably around a similar period to the development of sites such as York, Malton, and others to the south, possibly in conjunction with campaigns against the Brigantes and other groups across the country (Corder & Richmond, 1942).

Only a passing reference to the site is made in Pearson's *Roman Yorkshire*, interestingly published contemporaneously with Corder's investigations. As such, it provides an insight into the changing theories of the site's scale, design and occupation, using texts from a combination of antiquarian works and the results of Corder's early investigations (Pearson, 1936). One such curiosity presented by Pearson is the mention of some writers suggesting that Ptolemy's naming of the Humber as *Abus* suggests the site at Brough is possibly that of

Arbeia, now known to be South Shields on the Tyne Estuary (Dore & Gillam, 1979; Milet, 1986; Bidwell & Speak, 1994). A further point of interest in Pearson's work is interpreting the results of Corder's initial investigation where he places the annexe to the south of the fort, between itself and the river (Pearson, 1936, 71). Pearson suggests such an annexe would act as the civilian settlement, presumably a *vicus*, while also suggesting the location of such an annexe was in place of defensive ditches having quoted the Humber as providing "adequate protection against attack" (Pearson, 1936, 71). Subsequent investigations by Corder and others have not only provided further evidence for the naming of the site as Petuaria but also further evidence towards the defences both to the north and south of Corder's initial excavation. Pearson's writing not only provides an example of how much theories on the site develop in a short window, being published during Corder's third year of excavations, but also how prevalent the idea that Petuaria was both a civil and military site is in the archaeological discipline.

Undoubtedly influenced by Corder before him, John Wacher was the next to carry out significant investigations at, and writing on, the site of Brough, and through this work produced a collected volume of excavation reports titled *Excavations at Brough-On-Humber 1958-1961* (Wacher, 1969). Wacher, who excavated at Brough on behalf of the Ministry of Public Buildings and Works, later went on to become somewhat of an authority on certain aspects of Roman Britain having produced a significant collection of books on the topic of Roman towns and occupation in the British Isles (Wacher, 1962, 1966, 1995, 1998). A select few of these later works are explored for their references to Brough and Petuaria and to determine whether new information is presented in later works such as *Roman Britain* (1998) and *The Towns of Roman Britain* (1995). Wacher's contributions to the wider study of Roman Britain also allow for some further comparative work to be carried out in evaluating

the direct links he produces in some of his works and the theories he suggests throughout his publications, allowing a greater breadth of possible links between Petuaria and other sites than those posed by Corder's initial investigations.

Wacher's excavations, much like Corder's, help to solidify not only the believed extent of the site for a modern audience but also highlight the potential significance of the site itself in its historical and archaeological contexts. Wacher's first writings on Petuaria is his aforementioned report titled *Excavations at Brough-on-Humber 1958–61*. Published in 1969 and covering both the excavations and the theories developed by Wacher during this period and includes his narrative of the site's occupation. This timeline built on what had been previously established by discoveries made during Corder's excavations and attempted to produce the first structural understanding of the occupations of Petuaria, whilst also trying to make sense of the site's apparent variations in development and size.

Within this, Wacher sets out a timeline of occupations and abandonments of the site following on from an earlier example set by Corder in his later publications in which Corder sets out the site into three historical periods, each with subphases of occupation (Corder, 1937). In comparison, Wacher's timeline breaks the occupations of the site down into roughly nine distinct periods, the evidence for each of these being drawn from the excavated material and observations made during the three years of excavations in addition to the earlier work and discoveries of Corder (Wacher, 1969, 3-4). The periods are as follows:

Period I: Possible pre-Roman occupational evidence excavated at the Brough House site but lacking any structural evidence outside of pre-conquest ditches containing pre-Roman likely Iron Age pottery. The lack of evidence outside of some native sherds to identify these ditches as pre-conquest is something which can be potentially questioned by a modern

excavation due to advancements in aging practices, however it is also important to recognise the possible context suggested with artefacts discovered at North Ferriby.

Period II: Wachter describes this period of occupation or use to be that of the initial Roman camp established at Brough, possibly after crossing the Humber Estuary from Lincoln to York (Wachter, 1969). Wachter carries this suggestion of Brough acting as a staging point for the Roman conquest in his later publications as well (Wachter, 1995; 1998). This theory is supported by both the suggestion of a pre-Roman ferry crossing located across the Humber with landing points located at Brough and Winteringham as well as the excavated evidence of timber building foundations containing possible Neronian coins from AD 54-68 (Wachter, 1969; 1995).

Period IIB: Following immediately on from Wachter's Period II in which the Roman forces arrive at Brough is Period IIB which Wachter suggests is the first appearance and construction of the military defensive settlement (Wachter, 1969, 8). In Wachter's report he describes this period as that of the "first auxiliary fort" following on from his adaption of Corder's belief to have discovered a fort wall, which Wachter believes to rather be the wall of a fortified annexe to the north of a Flavian fort (Wachter, 1969, 8). This period is the first to contain substantial archaeological evidence and as such provides crucial dating evidence for further research.

Period III: Wachter defines this period as occurring between the reigns of Domitian and Hadrian (AD 80-125), and as such focusses on the wider withdrawal of Roman forces from Britain under Domitian in AD 87-88. This withdrawal was to carry out a campaign to the east in Dacia and has been theorised by Tacitus to have come from jealousy of Agricola's successes in Britain comparatively to the emperor's ongoing Germanic campaign (Tacitus & Mattingly, 2010). The only significant archaeological evidence presented by Wachter to

validate this theory is the apparent dismantling of the gates and buildings established during Period II, while referencing the withdrawal of troops under Domitian. However, in comparison the ramparts and ditches remained intact, something Wachter theorises was rather an effort to “delimit land still held under military control, and which might possibly be required again” (Wacher, 1969, 20). Wachter supports this theory by drawing direct comparisons to Lincoln and Gloucester, both of which were abandoned but left defences intact which subsequently became the foundations of the later *coloniae*.

Period IV: This period is suggested by Wachter to represent the reoccupation of the site by a military detachment following the return of Roman forces under Hadrian around AD 125 (Wacher, 1969, 20). Wachter presents the archaeological evidence in support of this through recut ditches and rebuilt buildings albeit following different lines to the original fort of Period IIB. However, Wachter goes on to theorise that this period of reoccupation was only a relatively brief one, which somewhat fits with the narrative of Hadrian’s swift advancement north to the site of the wall through Britain.

Period V: According to Wachter the fifth distinct period of occupation at the site of Brough is the slow development of the *vicus* until the late Hadrianic or early Antonine period (AD 130-150). Wachter believes this, in conjunction with evidence found by Corder towards the south of Bozzes Field to be the period at which the civilian *vicus* first came to Brough and existed simultaneously as the developing fort of Roman occupation. Wachter also suggests the possibility for this period being the time at which the ‘theatre’ inscription and subsequent stage were created, something possibly relating to the continued use of the site as both settlement as well as a supply depot or naval base. This period is therefore one of the most significant for finding archaeological evidence to support as with that it becomes clear that

the site at Brough held a greater significance than the earlier fort or later possible *civitas* capital combined. The coexistence of Brough as both a fort and civilian settlement is one of the key areas of exploration throughout this research and as such will be evaluated in closer detail in later chapters of this work.

Period VI-VIII: The following Wachter periods, occupying the time from AD 200-370 seem to show the continued and significant development of the site into a more permanent settlement. Period VI allegedly shows the fortress built up again, this time on a different alignment with a new internal building construction and defences closer resembling the turf and timber fortresses of the Antonine period, thus marking a key distinction between Brough and other towns of the same period. Period VII accordingly marks the beginning of the fortress' conversion to stone defences, with the construction or conversion of the first guardroom at the north gate following the start of construction on a curtain wall. However, Wachter also theorises that this period saw a halt to construction works based on the lack of floor laid within the guardhouse (Wachter, 1969). Wachter describes Period VIII as consisting largely of a return to work, seeing the incomplete construction demolished to make way for newer buildings in the form of added towers and guardhouses.

Period IX: Finally, Wachter comes to the believed end of occupation at the fort sometime around AD 370. Wachter references the lack of coinage dating to beyond this period as a clear sign of abandonment, with only one coin of Maximus found (AD 383-388), in addition to a change of 'policy' in Roman occupation (Frere et al., 1987; Snyder, 1996).

As Wachter's excavations are the first since Corder's initial excavations they serve as the first point of comparison or critique, both in terms of theories produced as well as rigour in investigation. For example, as previously mentioned Corder seems to believe the fort was

developed over three primary periods, those being the Trajanic, Antonine and third and fourth century periods which Corder defines as Constantinian (Corder, 1937, 8-12) with acknowledgment made to the existence of some evidence for use prior to the Trajanic period of development sometime around AD 110. Comparatively, Wachter attributes nine periods of development to the site, with one period consisting of two separate parts (Period IIA-IIB). In this case, is Wachter's addition of periods an example of the sheer increase in evidence discovered during his excavations as opposed to that of Corder or is it a case of creating theories from circumstantial evidence instead? At this point it is important to understand the differences in periods at which these authors were producing their work, along with the circumstances under which the work was carried out. Corder's excavations were, as mentioned, carried out under the funding of a vast range of sources while also calling on the help of local researchers and only ever employing a small team of archaeologists to carry out the excavations. In addition to this relatively small and unofficial undertaking, Corder's work was primarily carried out in the earlier days of the archaeological discipline where it can be argued that methods were potentially not the most developed, something Wachter acknowledges within his introduction (Wachter, 1969, 1).

In comparison, the Wachter excavations were carried out as part of a Ministry of Public Buildings and Works project, and as such can be considered more in the field of developer-led archaeology and given the greater extent of the excavation into Manor House garden and Brough House suggests a larger workforce than Corder's initial excavations. In addition to this Wachter's excavations taking place in the late 1950s and early 1960s suggests an even more developed archaeological method than that used by Corder's excavations with further theoretical advancements building on Corder's earlier work.



However, despite the apparent advancements in Wachter's work comparatively to that of Corder, or the easier to approach simplicity of Corder's theories in comparison to Wachter, it is largely apparent that the two works complement each other in developing an understanding of the site of Petuaria. Wachter's introduction, in addition to suggesting a possible outdated interpretational theory by Corder, also goes to great lengths to thank him and even makes mention of Corder's visits to the excavations to lend information or opinions to the ongoing investigation. Therefore, it is important to recognise that despite any potential disagreements with the theories produced by both archaeologists, they do for the most part work in conjunction, and in doing so provide a comparison to the earlier interpretations of either Petuaria or the site of Brough. With the works of Wachter and Corder being the first two to excavate the site they are undoubtedly crucial to understanding the site and both play key roles in attributing the name of Petuaria to the site at Brough. Aside from a few of the earliest references to Petuaria, it is clear that the literature concerning the site operates in a cooperative fashion with each entry aiming to build on the former.

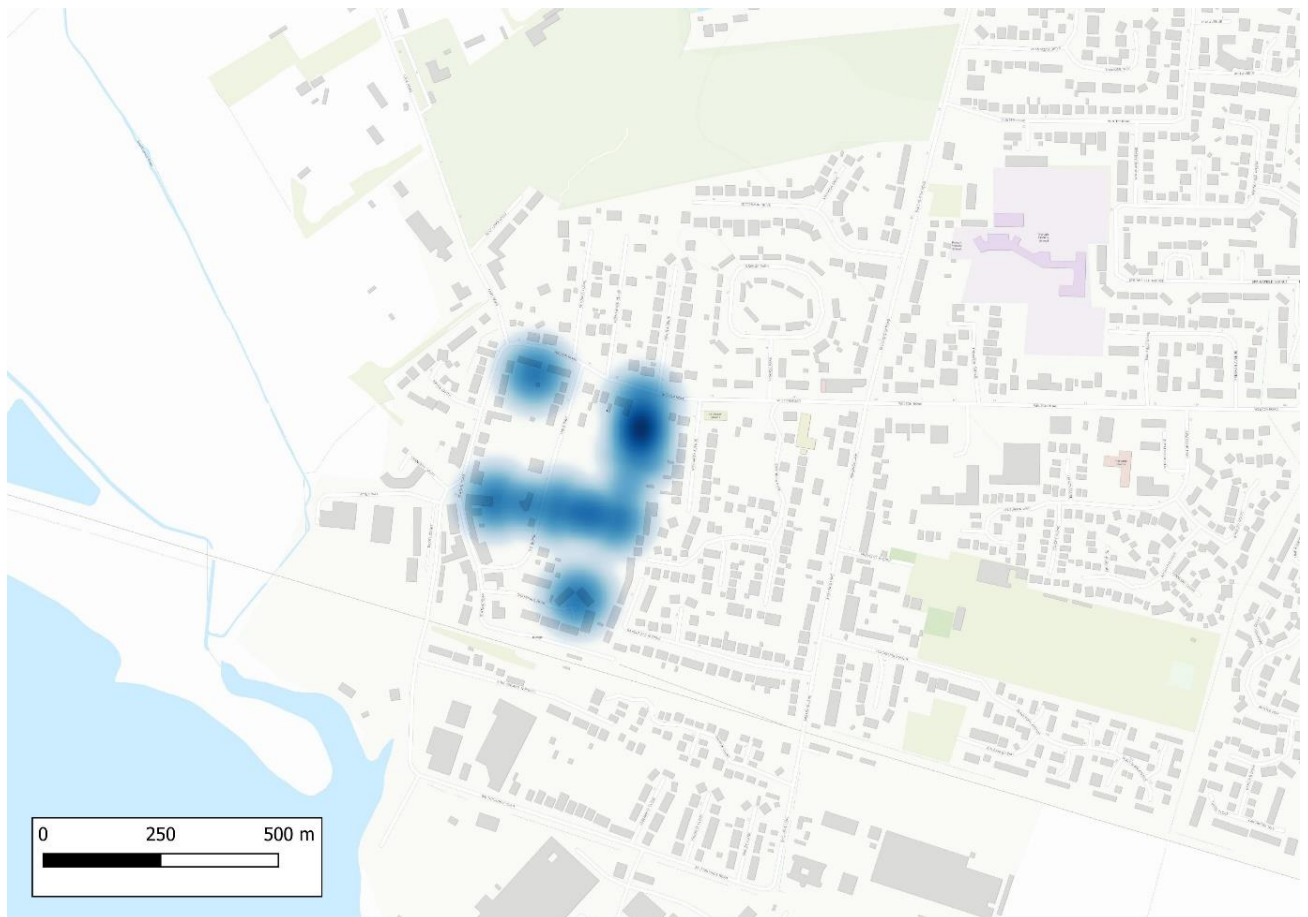
The remainder of Wachter's report is largely focussed on the evidence and so is covered to a greater extent in the following chapter with the primary theoretical work of his being the nine periods of occupation. Wachter goes on to use his work at Brough to incorporate Petuaria into his later written works on Roman Britain as a whole, probably marking these as the most visibility the site gets in the wider archaeological discipline. Wachter's inclusion of Petuaria is especially prominent in *The Towns of Roman Britain* (revised Ed., 1995) where Petuaria's status as a *civitas* is discussed and is the most comprehensive writing on the site to date. Overall Wachter's conclusions on the site are that it is of a military use and not a

*civitas* despite the likely presence of civilian population both within and without the walls, something he continues to state in later works.

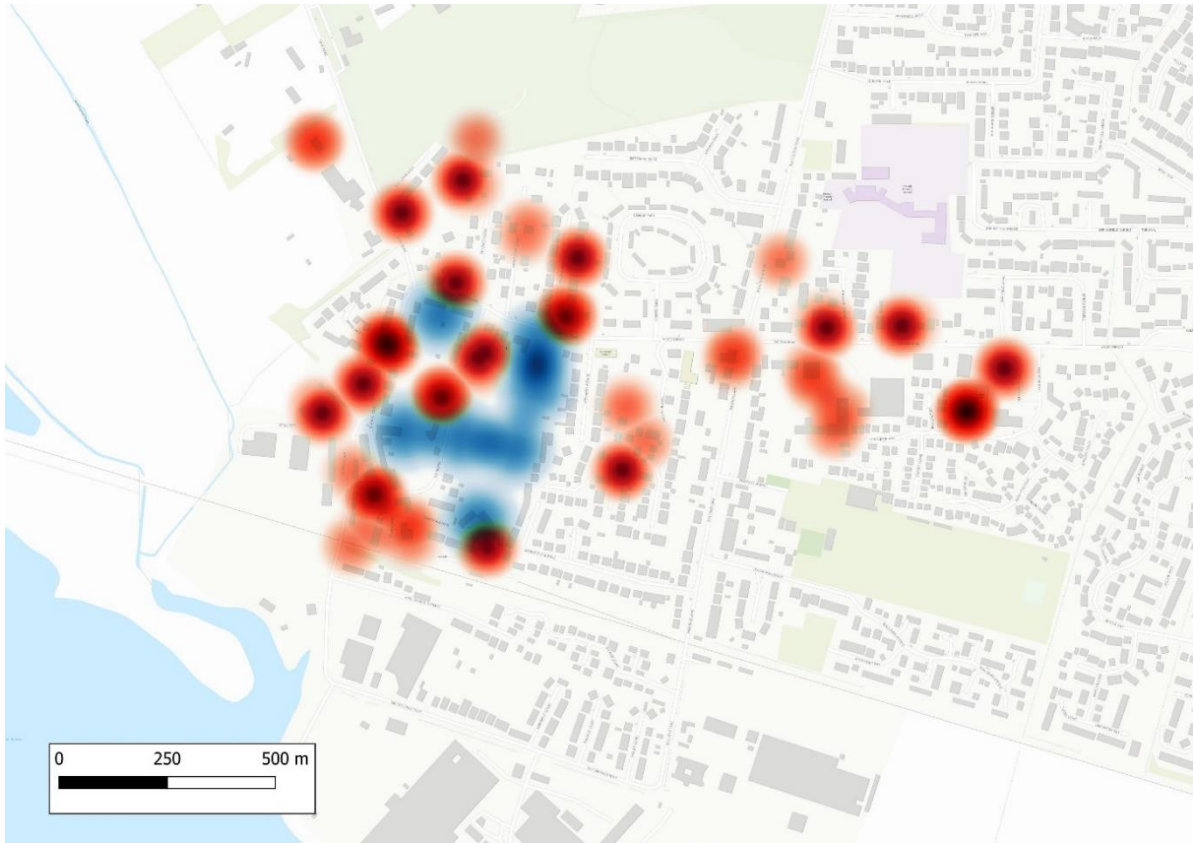
Following on from Wachter's excavations and subsequent reports, the archaeological interest in Brough continued to grow and develop with publications investigating the site increasing in frequency over the following decades. References to Petuaria also increased alongside the actual work carried out at the site, with mentions of the site appearing in significantly higher frequency than before the Wachter excavations. Notably, the site is most often referenced to either prove or disprove a point made about a different Romano-British site in the surrounding area. In an earlier 1958 article for the Yorkshire Archaeological Journal in comparison to Cataractonium, Petuaria is mentioned to be an entirely civil settlement with only a short military occupation during the Flavian period, a theory disputed by both prior works and later publications. In addition to this, it is suggested that Petuaria was left to become a 'backwater' long before AD 400 and following on from the original first century advance north from Lincoln (Hildyard, 1958). Although incorrect in its assertion of military use at the site and longevity of occupation, this article only further highlights the conflicting opinions and theories that are held in regard to Petuaria's use and occupation and continue to appear in later literature following Wachter's investigation.

It is important to acknowledge the archaeological investigations and research carried out by the private sector, with their efforts not being published as literature in the traditional sense and instead existing as site reports and other grey literature. In the case of Brough, as is shared by most urban or developing areas, the majority of archaeological fieldwork carried out in the past three decades has been through commercial means as part of developmental or agricultural projects. This spread of further investigations to those carried out by Corder,

Wacher, ERAS, and other groups as discussed in this and the following chapter, provides a broader image of the occupation, with sites recorded that otherwise would not have been as particularly the case to the east of the walled settlement and the excavations carried out there (Steedman, 1991; Hunter-Mann et al., 2000; Adamson, 2009).



*Figure 7 Areas of investigation under Corder and Wacher (1933-1961)*



*Figure 8 Areas of investigation under Corder, Wachter, developer-funded units, and ERAS (1933-present)*

The work of Humber Field Archaeology is a particularly significant contributor to the overall understanding of Brough and alongside others will provide new information for this research and wider project. However, with the increase in archaeological publications on the site as a result of the implementation of PPG16, the actual theoretical basis for these reports relies quite heavily on the pre-existing conclusions and hypotheses set forth by Wachter and Corder. This period of publications also continues to maintain the debates over Petuaria's location and whether the site flourished or failed following the changes to the Roman empire in the 3<sup>rd</sup> and 4<sup>th</sup> centuries AD (Wachter, 1969). Despite the theoretical repetition of many of these publications, it is important to consider that this increase means further evidence being uncovered, allowing later works to be even more developed and measured in their interpretations of the site.

When considering the literature produced on the site of Roman Brough following the introduction of PPG16 in 1990 the archaeological evidence takes a more prominent role over the theorising of prior works (Darvill et al., 2018). In this regard, the majority of these papers are explored further in the following chapter where the archaeological material is evaluated and separated from the written narrative of the publication. However, despite the factual nature of these publications it is still important to consider the background in which they were produced and any of the potential biases the author may subject the material to as well as the archaeological theories the writing is based on. In addition to theoretical biases, the bias of research present throughout modern works is an interesting point to consider further. In this sense, the previous theories that the authors of developer-funded reports use in their writing will inform on their own written thoughts on the site.

### **3.3 Contextualisation**

Despite the specific production of literature associated with the study of Brough being limited to a few academics and archaeologists, it is important to acknowledge the site's place within wider narratives of Roman Britain and the interpretations of the site found therein. For example, the site is very briefly discussed in *An Imperial Possession: Britain in the Roman Empire* by David Mattingly (2006). Here the site is listed among other potentially important sites that are not entirely confirmed to be a specific site. Mattingly uses the location of Brough to match the historical descriptions of the settlement to the archaeological site that could be Petuaria, following on from the work first started by de la Pryme and culminating in the present day certainty of Petuaria's placement at Brough.

Mattingly attempts to link the site of Petuaria to Brough through a reference made by Vegetius to naval bases located around Europe and the coasts of England. This is supported by the suggestion that a signal station network was utilised from York to the Tyne from AD 350 onward (Mattingly, 2006, 243-244). In addition to the earlier proof suggested by Corder and Wachter through their artefactual and structural evidence, the suggestion of Petuaria and the site at Brough being the same is only strengthened by this wider acknowledgment of it as a likely outcome. Petuaria also appears in broader texts such as the aforementioned work of John Wachter on Roman Britain as well as further works by Martin Millett and Plantagenet Somerset Fry (Somerset Fry, 1984; Burnham & Wachter, 1990; Millett, 1992; Wachter, 1995; Wilson, 2003; Mattingly, 2006). There is a notable lack of reference to the site in *The Oxford Handbook of Roman Britain* with neither reference to Petuaria, Brough-on-Humber or the Humber Estuary itself (Millett, Et al., 2016).

In Wachter's previously mentioned *The Towns of Roman Britain* Petuaria is discussed in full in the debate over its status as one of Britain's *civitates* capitals (Wachter, 1995). Here, as with his investigations in the late 1950s, Wachter provides a comprehensive description of his general thoughts and theories on Petuaria as well as describing the necessity of future investigations to further develop the understanding of the site.

Wachter struggles to attribute the *civitas* moniker to Petuaria due to eight factors. The first of which is that, despite a lack of early sophistication, Petuaria features a number of stone buildings built in relation to the second phase of defensive work following the initial supply depot dated to the Hadrianic-Antonine period. Wachter argues that if Petuaria is to be considered a civilian settlement in this period then it would be the only *civitas* to have new defences constructed in this period. The second issue Wachter lists is the lack of an organised

roadway system within the walls with regular streets and traditional Roman *insulae*, appearing in most of the other *civitates*. As is discussed in Chapter 6, the internal streets of Petuaria provide a point of contention when considered alongside other *civitates* across Britain with evidence for some logic of placement being provided recently by geophysical surveys (Chapter 4.1.8, Figure 24). Wachter's third issue is that the later rampart construction, which he attributes to the late second or early third century, is incomparable to other civil defences seen at this time and instead follows the suit of military installations of the same or earlier periods.

Furthermore, Wachter's fourth issue is the latter period's defensive addition of external towers, which refers to the bastions or U-shaped towers bonded to the walls sometime in the third century or later, and appear throughout this research (Corder & Richmond, 1942; Wachter, 1969). In this Wachter further reiterates how such defences are not seen in other civilian sites in Britain until the century following their supposed construction at Petuaria, however, he also acknowledges the lack of uniformity in such defensive developments (Wachter, 1995, 397). Interestingly, Wachter goes on to provide one of the earliest hesitant links between the architecture of Petuaria and that of the Saxon Shore forts as a tangential thought explaining that Brough's defences are more akin to them than any civil defence (Wachter, 1995). Petuaria's possible connection to the Saxon Shore forts is explored further in Chapter 6.

Wachter's further issues with the status of Petuaria as one of Britain's *civitates* come in the form of additional evidence for the militaristic nature of the site. Wachter uses evidence of metalworking recorded by Herman Ramm to suggest a military or even naval site requiring the consumption of such quantities, despite Ramm's own disagreement with such a

statement (Ramm, 1978; Wachter, 1995). Furthermore, Wachter quotes issues with Petuaria's apparent layout and how despite others' assertions that an irregular walled section cannot be of military origin, there is rather a considerable precedent both in Britain and the wider Roman Empire of such military sites, particularly in later periods. The final two issues Wachter has with denoting Petuaria as a *civitas* are from both the 'theatre' inscription and the classical reference in the *Notitia Dignitatum*. Here Wachter discusses how the 'theatre' inscription may be seen as somewhat of a misleading piece of evidence stating that "a theatre does not make a town, even if a local urban official made a gift" (Wachter, 1995, 397). Wachter suggests that unlike an urban theatre, as seen in many Roman towns on the continent and a handful of the larger Roman settlements in Britain, the theatre in the Petuaria inscription is more likely to be that of a rural work instead accommodating a wider region of interest. The debate surrounding Petuaria's theatre, or rather stage, is a common one following the discovery of the inscription by Corder and one which is brought into dispute when discussing the site as a town. The status and nature of Petuaria's stage are discussed further in Chapter 6 when compared to other sites of *civitates* where a stage or similar public building is recorded.

Wachter's final point is that of the previously mentioned *Numerus superventientium Petueriensium* from the *Notitia Dignitatum*. Here Wachter suggests that should this *numerus* be named after Petuaria, it would be one of the only cases of a unit taking its name from a town across the empire and furthermore unique within Britain (Wachter, 1995, 399).

Although military units taking names from civilian or cultural regions is not unheard of with many auxiliary units bearing the name of their region of origin (Cheesman, 1914; Spaul, 2000). Therefore to name such a unit after a site believed to be a fortified town would be



something of an outlier in the literary records of the Roman military and as such Wachter argues that *Petueriensium* refers to the site as a fort.

Throughout these criticisms, Wachter is very much presenting a binary issue and one that is stating Petuaria to be identified as either a town or a fort. From this, the suggestion of the site possessing a 'dual role' emerges, and is one that is carried forward in both this research and other subsequent work on the site (Halkon & Lyall, 2021). It is clear from Wachter's discussion of the site that he himself deems Petuaria to be of a more militaristic nature by far with little support of the major civil settlement as suggested by others (Millett, 1992; Halkon, 2013). Wachter further reiterates his earlier conclusion on the site as a 'failed' *civitas* capital, a site which may have been recorded as one by Ptolemy but in fact only operated as one for a brief period if any time at all. In this, Wachter likens the site to Chelmsford, another site he deems a failed *civitas* capital (Wachter, 1995).

Petuaria, or rather Brough-on-Humber, receives further reference in the work of Martin Millett, another prominent archaeologist working in the region including leading excavations at Aldborough's *civitas* site as well as other sites across Yorkshire (Millett & Halkon, 1988; Millett, 1992, 2006; Millett & Gowland, 2015). Millett (1992) describes Brough as a crucial element of the transportation network for northern campaigns against the Brigantes and further uses this network to argue that the Parisi were of a non-combative persuasion. With the evidence of most forts within the region lying on supply lines and there being neither archaeological nor classical references to campaigns against the Parisi, Millett argues that the Parisi possibly acted more akin to a client kingdom than a regular tribe under Roman occupation. Furthermore, the general thesis of Millett's book *The Romanization of Britain* is more in favour of arguing for Britain being a Romanized state rather than an occupied

territory. The theoretical difference presented by Britain either being a Romanized state or occupied region informs greatly on interpretations of Petuaria. Should Britain be considered as a controlled territory, then Petuaria's service as a fort and harbour under military operation is a more fitting interpretation. However, if Britain is instead considered to have embraced Roman standards and practices then Petuaria's role as a town with some military presence and a harbour for the transport of civil goods would seem more appropriate.

An important aspect of Millett's writing on the site is the suffix *Parisorium* which is given frequently throughout the work. There is, however, no classical reference to this suffix as it is instead taken from the site Lutetia Parisorium, one of the larger settlements of the Gallic Parisii and the precursor to Paris and it appears to originate here with Millett (Capitan, 1921; de Carbonnières, 1997). Since the suggestion of attributing this suffix to Petuaria it has been used in a number of other publications (Halkon, 1992; Hunter-Mann et al., 2000; Esmonde Cleary, et al., 2019). Despite the acceptance of the suffix, the reasoning behind its use is unclear as unlike the prior incorrect naming of Malton as Derwentio Brigantium, the suffix given to differentiate the site from other Derwentios such as Papcastle in Cumbria, the tribal suffix is seemingly unnecessary for distinguishing Petuaria (Poulson, 1829). Instead, the *Parisorium* suffix is given as a suggestion of the site's role as a *civitas* capital of the Parisi, similar to the use of *Brigantium* at Aldborough, *Icenorum* at Caistor and other examples across the remaining *civitates* and *coloniae* of the Roman Empire (Millett, 1992).

Curiously in later publications, particularly those produced on broader subjects such as Roman Britain as a whole, *Parisorium* is taken as a confirmed part of the name and as such is used to definitively rank Petuaria amongst the *civitates* of Britain. Although the likelihood of Petuaria serving, in some capacity, as the *civitas* capital of the Parisi is not entirely a

confirmed or disproven theory it is something that requires further consideration, as is done in a later chapter of this research. One such work to use *Parisorium* is Guy de la Bédoyère's *Roman Britain: A New History* (2013). In this revised edition de la Bédoyère not only uses the *Parisorium* suffix but also states that Brough's 'theatre' inscription is not only one of the oldest examples of a public works inscription found in Britain but is also the sole example of one to relate to a theatre (de la Bédoyère, 2013). As of yet no other inscription describing the public works of a theatre construction has been found in Britain, nor has one been found describing a public works assigned to a later date than Petuaria's Antonine inscription (Blagg, 1990; de la Bédoyère, 2013). Although an absence of such evidence is not evidence of absence, should Petuaria prove to be unique in both theatre inscription and the dating of said inscription it would only further emphasise the importance of this site within the wider context of Roman Britain.

Peter Halkon's *The Parisi* is the most comprehensive recent work to discuss Petuaria in the wider context of both Iron Age and Roman East Yorkshire. Halkon summarises the theories presented by Wachter, including his disagreement with the site being labelled a *civitas*, as well as further evidence from sites in the surrounding area. Here Halkon creates the image of yet further uncertainty surrounding Petuaria, with more conclusive evidence of the extent of occupations coming from other sites in the region such as the third century coinage records from Shiptonthorpe and Hayton (Halkon, 2013). Halkon also discusses the potential for Petuaria's military aspects, reiterating Wachter's previous theory of the site's naval properties and suggesting a possible link to Carausius and Allectus (Halkon, 2013). The majority of Halkon's writing focusses on the wider context of the region and how the Roman conquest relates to the local Parisi population, an aspect of the site explored in Chapter 7.

### 3.4 Conclusions

As has become apparent throughout this review of the literature produced on and mentioning the site of Petuaria in the context of Brough, several key issues have come to light and inform this research on its primary aims and objectives. Firstly, there is to some lesser extent still a debate on going over where Ptolemy's Petuaria is located in the sense of modern geography. Many sources believe the Roman settlement at Brough to be it, something only further supported by the evidence produced through the 'theatre' inscription uncovered in Corder's 1936 excavation (Corder, 1937; Figure 6). However, aside from the opinions of those that have worked at the site there seems to still be occasional dispute regarding its naming, and further issue with the naming of sites across wider East Yorkshire (Creighton et al., 1988; Wilson, 2017). In fact, a more prevalent dispute seems to be on the placement of the Antonine Itinerary's *Praetorio*, with some recent sources still attributing it to Brough. Secondly, and as is one of the research purposes of this work, there is no true understanding of Petuaria's occupation and use. Whether this is due to archaeological limitations or differentiating opinions on what structural evidence means, it is clear throughout the literature that there are conflicting beliefs by a number of authors. Some authors, like Wachter, argue that any civil use of the site would be small in scale and deemed a "failure". Comparatively however, recent writings by Millett grant the site the tribal suffix of *Parisorium* albeit with some slight hesitation.

Despite these debates, some unity in theory exists in the extent of the occupation, regardless of conflicting opinions on the consistency of such use. Throughout the various excavations and investigations in and around Brough, a general consensus that has been

developed is that the site was initially occupied between AD 70 or 80, following the Roman occupation during the expansionary period of the Flavian Dynasty following the earlier initial conquest and occupation by Claudius. This advancement and the ultimate founding of a site at Brough was most likely under the command of Quintus Petillius Cerialis or his successor Gnaeus Julius Agricola, with the former seeming more likely due to the dating evidence present at the site and his actions against the Brigantes and northern England. It is widely believed that this initial occupation would have been little more than a supply depot or small camp located on the northern shore of the Humber Estuary, marking a landing point for the Iron Age ferry crossing that is believed to have put in at this point on the bank crossing directly from a smaller site identified at Winteringham (Wacher, 1969; 1995). Further reason for this point being occupied by the Romans as they crossed the Humber into East Yorkshire is that the Brough Haven, now sedimented and the Humber receded somewhat, would have formed an ideal inlet point for trade and transport acting as a natural harbour with a similar haven on the south bank at Winteringham (Wacher, 1969) Literary references to a port or similar arrival point in East Yorkshire are seen in a number of sources and as such the use of the Haven as a maritime or even naval site is not out of the question and is explored as a key theme in this research. As to the latter extent of the site's occupation it appears as though there is some agreement in the site existing until the third or fourth century in some capacity, with Wacher suggesting multiple phases of occupation, albeit for brief periods, and Corder suggesting a latter period of redevelopment to the defences. Indeed, an understanding of the construction and developments made to Petuaria is a clear necessity for understanding the site's use. These questions can only be answered with further fieldwork and so use of the developer-led sectors reports, and recent community excavations will be crucial in further understanding this aspect of the site.

For many of the literary references to Petuaria specifically and discussing it within the wider context there is a clear call for further research both theoretical and physical. Corder, Wacher, and others all state the necessity for further work to understand such a complex site. This call, in of itself, provides this research with its purpose in the literature as an effort to compile and assess all of the data present within the site as well as contextualising the site within the wider world of Roman Britain.

## Chapter 4 Background Data Collection and Evaluation

Following on from the review of the theories, hypotheses and interpretations presented in the prior literature, this chapter will focus on collating, reviewing and ultimately critiquing the archaeological data presented by the publications of prior investigations. The level of archaeological investigation presented in the following chapter ranges from the brief mentions of the site in early historical works such as the diary of Abraham de la Pryme, Horsley's *Britannia Romana*, and the work of Poulson and Drake through to the numerous developer-funded investigations following the introduction of PPG16 in 1990 (de la Pryme, 1699; Horsley, 1732; Drake, 1736; Poulson, 1829). Through the centuries of investigations and archaeological writing on the site the discipline's methods and theories have changed many times, with several different schools of thought taking precedence during different periods. As such it has proven important to evaluate the archaeological evidence recorded in these publications separately to the interpretations and theoretical angles constructed in the literature itself. Not only does this "raw" data allow for new interpretations to be made, either corroborating or disagreeing with the previously presented theories, but also allows for a further level of spatial interpretation to be achieved through organising the evidence in the same space as one another and creating an overall image of the different periods of Roman occupation in the site.

As mentioned in chapter 2 (2.1), these sources were selected using an established study area of 2.43 Km<sup>2</sup> which was then applied to a search of the Humber Historic Environment Record, the Archaeology Data Service and a collection of other resources that store and catalogue archaeological investigations not published through traditional means. This search resulted in the collection of forty-one developer-funded investigations carried out within the study

area ranging from watching briefs for the construction of an extension through to large-scale excavations prior to the building of a housing development. Additionally, this search produced a number of other writings on the archaeology of the site that would have otherwise not been collected in the initial literature search, particularly publications where the site of Petuaria or Brough are referenced briefly in the context of other archaeological evidence as supporting or countering evidence, usually quoting evidence from Brough otherwise not formally recorded. These less direct references are often focussed on only a small amount of archaeological evidence which is commonly recorded outside of any sort of large scale or developer-funded investigation and is often part of a personal collection or account of the site. Aside from the clear examples of the aforementioned accounts of de la Pryme and Horsley; a coin of Hadrian shared with de la Pryme and Horsley's visit to the still visible Roman rampart respectively, examples of evidence reported in briefer accounts can be found in later publications such as several volumes of the Yorkshire Archaeological Journal as well as accounted for in the coinage records of Corder's investigations where the author discusses coins submitted to him by the public from their property (Corder & Romans, 1938; Greene & Pearson, 1947; Greene, 1951; Southern, 1955).



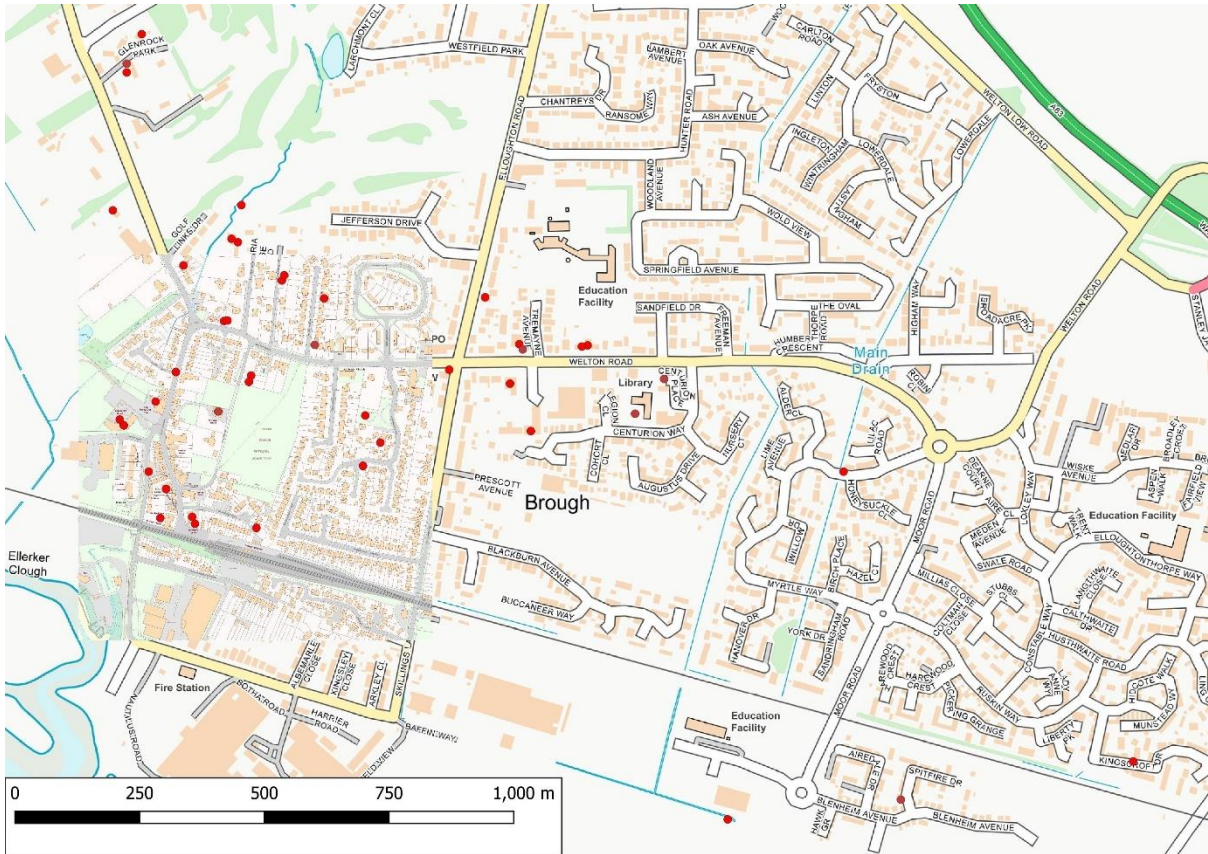


Figure 9 Map showing developer-led investigations across the area of modern Brough and within the research study area.

## 4.1 Timeline of Archaeological Investigations and Writing

### 4.1.1 Early Interest 1699-1732

This period consists of references and visits made to the site by a variety of interested parties and local antiquarians.

Table 1 Publications on or discussing *Petuaria* dating 1699-1732

Date	Title	Author
1699	The Diary of Abraham de la Pryme (pp. 218-219, 1870 ed.)	de la Pryme, A.
1732	Britannia Romana: or the Roman Antiquities of Britain: in three Books	Horsley, J.

These early mentions and discussions of Petuaria largely revolve around Ptolemy's *Geographia*, and the efforts of identifying either the location of Petuaria or the nature of the Roman remains found in Brough, East Yorkshire. Perhaps the earliest known archaeological information produced on the site is found within the diary of Abraham de la Pryme, a local antiquarian writing in the late seventeenth century, who describes the initial occupation of a town under Hadrian during the Roman army's expansion north from Lincolnshire and how a number of routes would have run out from the city toward York, Ripplingham and Patrington via Beverley. De la Pryme also suggests that the site was in use, in some capacity, all the way until the beginning of the supposed military withdrawal in the fifth century "when ye Roman forces were all sent for home, in great hast, about ye year 400, to defend their own country from the barbarous natives that invaded" and that the Romans and soldiers who would have lived in this town "were very rich" and hid their treasure in the area (de la Pryme, 1699, 216). This hypothesis is brought about by the report of a single coin of Hadrian by a local resident, which is then sent to de la Pryme by Robert Mason for examination and identification. Despite the theoretical aspects of this evidence, it is important to recognise that the theory presented by de la Pryme of a site occupied into the late fourth Century AD is in keeping with the evidence recovered from later investigations and that this writing marks what is likely the first piece of archaeological evidence recorded from the site of Petuaria in a published work. Perhaps one of the more interesting aspects of this evidence of a Hadrianic coin is that it is not a common coin recovered in later investigations, with four recovered during the Corder investigations of which only one was recovered from the excavation itself while three were produced by the community for Corder's recording and none recovered during the Wachter investigation with a single further Hadrianic coin recorded from the environs of Brough by a resident at Fairfield Lodge, Cave Road (de la

Pryme, 1699; Corder & Romans, 1938; Southern, 1955). This suggests that development of the site under Hadrian was limited or non-existent, something corroborated by the later findings showing the development of the site during the Flavian period and again under the reign of Antoninus Pius while the site was somewhat abandoned during the period of Hadrianic expansion (Corder & Richmond, 1942; Wachter, 1969). This seems to suggest the buildings, recorded by Corder and Wachter and attributed to a Hadrianic-Antonine date, are likely from later in that period.

Following the initial recording of evidence from Brough by de la Pryme and published thirty-three years later, John Horsley documents another archaeological feature in his third volume of *Britannia Romana; Or the Roman Antiquities of Britain*, as previously addressed in Chapter 3. In this volume, focussing on the geography of Roman Britain, Horsley visits the town of Brough to view the still-visible Roman ramparts and ruins (Horsley, 1732, 374). These are still seen slightly above the surface and seem to suggest a settlement with a small, defended area according to him. Horsley describes how the Humber used to come much further inland and how these walls may be proof of Ptolemy's Petuaria residing at Brough as opposed to any of the other potential sites suggested in other discourse. In this Horsley marks the earliest link in a still existing publication between the Roman settlement and Roman Petuaria as recorded by Ptolemy (Horsley, 1732, 374). The ramparts and ruins as viewed by Horsely are likely what little material remains of the last period of fortified development, likely dating to the later third century, and are found in such a state following centuries of robbing, erosion, and repurposing of the land. The suggestion of scale from Horsley's account, with sections of rampart likely already demolished to make way for buildings in the area, seems to be of a smaller site than Petuaria's current estimates of some nine to twelve acres (3.6-4.8ha).

Overall and considering how early some of the sources are from this period, the evidence recorded in the publications begins to present an interesting image of the site itself. A coin of Hadrian and visible foundations of ramparts and structures present the research with the beginnings of an understanding of the archaeological record present at the site of Petuaria.

#### 4.1.2 Corder Excavations 1934-1942

This period primarily focusses on the excavations of Corder and the concurrent interpretations to these findings.

*Table 2 Publications on or discussing Petuaria dating 1934-1942*

Date	Title	Author(s)
1934	Excavations at The Roman Town of Brough, E. Yorkshire 1933	Corder, P.
1935	Excavations at Brough, E, Yorkshire, Second Interim Report 1934	Corder, P.
1936	Excavations at The Roman Town of Brough, E. Yorkshire 1935	Corder, P.
1937	Excavations at The Roman Town of Brough, E. Yorkshire 1936	Corder, P.
1938	Excavations at the Roman Town of Brough, E. Yorkshire 1937	Corder, P., Romans, T.
1939	The Yorkshire Archaeological Journal, Vol. 34 "Roman Yorkshire, 1937" (pp. 88-103)	Clark, M. K.
1942	Petuaria	Corder, P., Richmond, I.

The excavations led by Philip Corder in the 1930s are arguably some of the most comprehensive and informative investigations carried out on the site until the twenty-first century. Over five seasons substantial amounts of Bozzes Field, now The Burrs, were excavated using Corder's methodology of long narrow trenches, a common practice at the time and in conflict with the more modern methodology of a larger, open area excavation.

These trenches were excavated by hand by a team of local labourers under the supervision of Corder and Bertie Gott, credited with discovering the theatre inscription during the 1937 excavations, with help from Reverend Thomas Romans, Ian Richmond, and Mary Kitson Clark. Over the course of these seasons a number of trenches and features were excavated at various sites of interest across the field, particularly focussing on the fortifications of the eastern edge, the east gate, various bastions, and some of the structures identified within the walled area. Corder's initial excavation in 1933 consisted of nine trenches placed at various points across Bozzes Field with a particular focus on the northeast end near the entrance and in the southeast corner. Kitson Clark goes on to write about the site in the Yorkshire Archaeological journal, discussing the further possibilities of such evidence as the theatre inscription and the evidence of the site it provides (Clark, 1938). Over the course of Corder's excavations, a significant number of structures and features both military and domestic were recorded through the methods of excavation employed by the group (Figure 10). Most commonly, trenches excavated under Corder were long, some up to one hundred feet (30.5m) in length, and narrow with the purpose in mind being to uncover any features and their relationships within the set area, with the potential for trench extensions should the features prove to be of some note. This is the case for a few of the features excavated by Corder with bastions, houses and the east gate being the sites of apparent greatest interest due to the thoroughness of their excavation. This methodology as employed by Corder is one of the many differences between these reports and later investigations in the 20<sup>th</sup> and 21<sup>st</sup> centuries. As opposed to the open area excavation common in today's archaeological discipline where a set area is excavated until features appear and then, if possible, the features are exposed to the full extent of the selected area, Corder's methodology can be

seen to potentially produce false information due to the limited scope of exposed features or the nature of such trenches implying relations where none may exist.

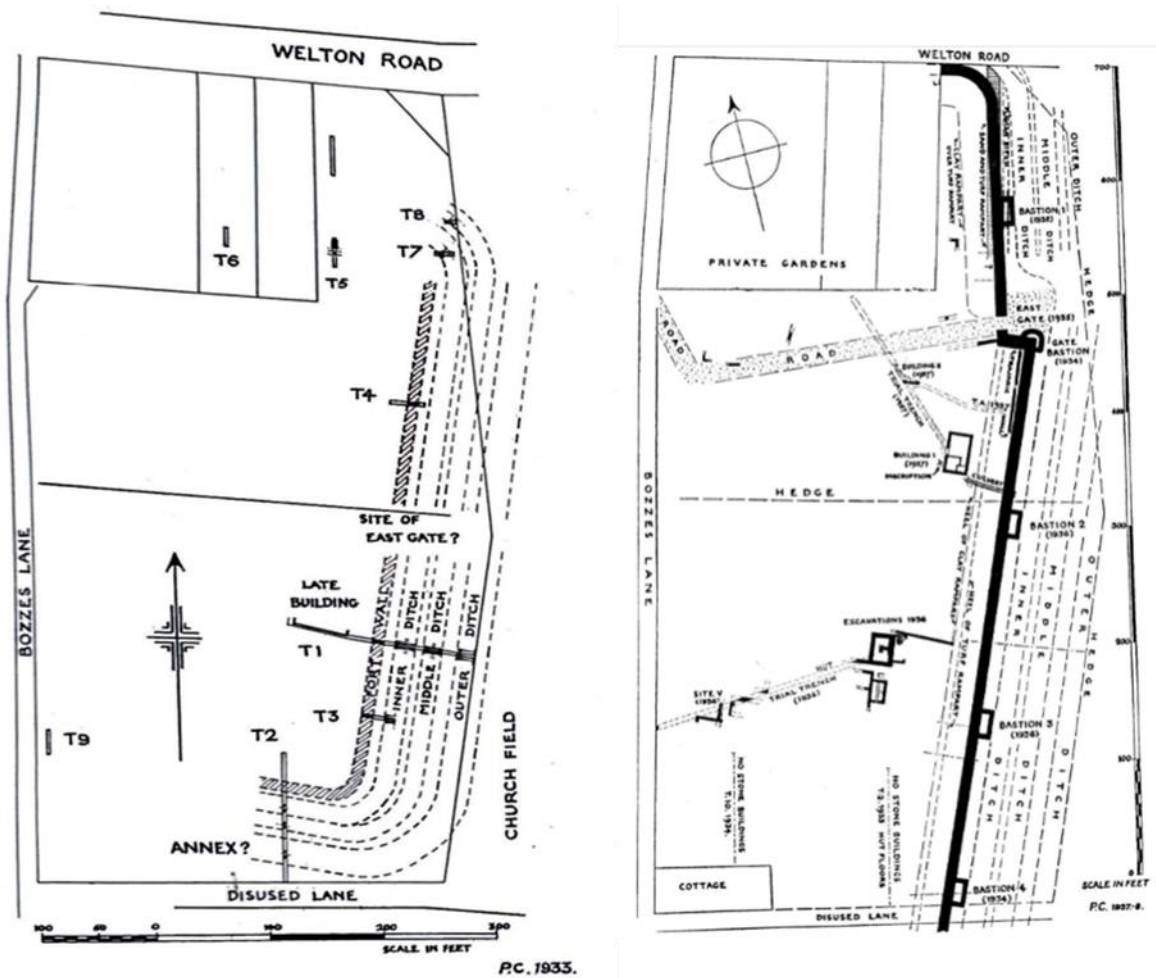


Figure 10 Plans showing the change in Corder's excavations and theorised layout between 1933-37 (Corder, 1933; Corder & Richmond, 1942)

The final report published on the Corder led excavations was produced in 1942 and was simply titled "Petuaria". This publication essentially collated the data found on the site during the previous decade's excavations (1933-1937) and aimed to provide readers and researchers with a comprehensive narrative of the site so far. Corder explain within the introduction that the site is inherently complex featuring multiple layers of occupation with various features and developments complicating the timeline. Corder also uses this concluding report to indicate the unknown extent of the site, suggesting limitations that

have been proven true by both Wachter and recent investigations (Figure 11). Corder's theoretical southern extent is potentially related to the feature recorded by Wachter's Grassdale excavations to the south of The Burrs field, while also providing the site's western extent with a seemingly continuous wall running the length of the field. Corder also uses this opportunity to propose a possible area of the site of 12.4 acres (5ha) with the area currently believed to be between nine to twelve acres (3.6-4.8ha). It is in this report that Corder also begins to suggest the reasoning for the Roman choice of Brough, building on ideas from his prior reports as well as the previous work of antiquarians such as Horsley and de la Pryme, relying on not only the existence of the seventeenth century ferry from Winteringham to Brough but also the lay of the land to the north of Petuaria. Corder posits that the placement of Petuaria provides Ermine Street with a high ground route north from the Humber, avoiding valleys and allowing to split in the road at South Newbald, with one route joining the road to York and the other to Delgovicia in the north of the region. The placement of this road and the development of sites along it is explored further in Chapter 7.

Corder also goes to some lengths to attempt to explain the interrupted nature of construction seen in the archaeological evidence uncovered at Petuaria. Drawing parallels to sites like Vinconium (Wroxeter) with its unfinished bathhouses and the far closer Malton fort which shows a clear delineation between an attempted period of construction and one following closely after.



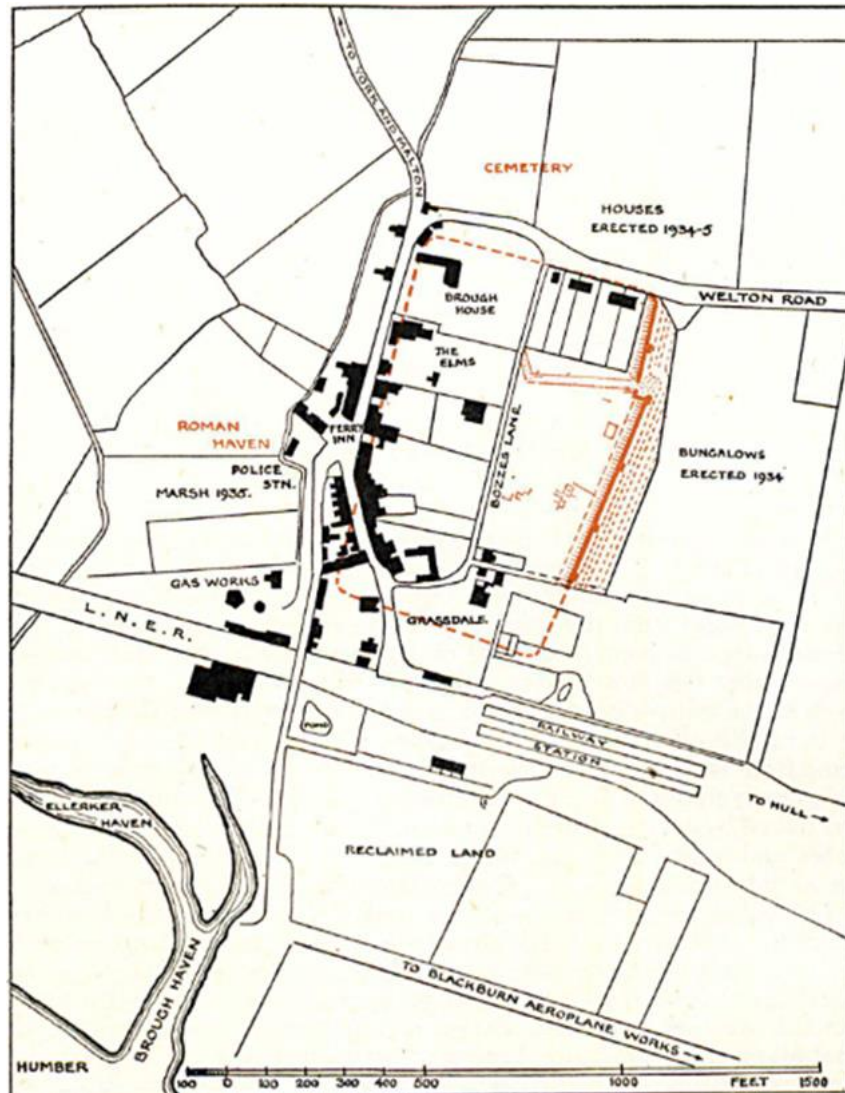


Figure 11 Corder's final plan of Petuaria in the context of Brough, with noted similarities to later depictions by John Wacher and others.

The structures recorded by Corder, whether fully excavated or extrapolated from features encountered in their trenches, show a clear and significant presence in the Burrs playing field not only identifying a section of the perimeter wall but also multiple phases of defensive structures, the eastern gate and possibly the road exiting it as well as several presumably domestic or public structures within the walled area. The earliest features excavated during Corder's seasons of work were the remains of Iron Age roundhouses, which thanks to their proximity to the first Roman site and the lack of evidence of their destruction or burning may suggest the local Parisi posed no threat to the Roman forces and



further supports the theory of the wider Parisi acting as peaceful residents during the Roman rule of the region (Corder & Richmond, 1942, 8). This cohabitation could be seen as the beginnings of the *vicus* by which Petuaria would be later described in the theatre inscription (RIB 707, Figure 6) with the site possibly developing into a larger settlement or even the potential *civitas* capital following the period in which the inscription was made. During the period of Corder's investigation the Parisi were largely seen as peaceful, with only more recent discoveries suggesting anything to the contrary (Johnson et al., 1978; O'Connor, 2013). The suggestion of a potential peaceful occupation in the region during the Roman era is explored further in Chapter 7.

Despite this apparently peaceful cohabitation in the region, following standard Roman defensive construction, Corder's evidence for the earliest period of Roman occupation at the site is the eastern rampart and ditch developed during the Flavian period and cut by later Antonine developments of the town wall and surrounding ditch (Corder & Richmond, 1942, 5-7). Corder also "confidently" associates this period of development with the Brigantian campaigns under Petilius Cerialis and as such provides the site with a likely date of first contact around AD 71 (Corder & Richmond, 1942, 8). This date is in keeping with the findings of the coins from both Corder and Wachter's investigations with twelve coins of Vespasian and Domitian recorded between them (Corder & Romans, 1938; Wachter, 1969). The only coins recorded earlier than these are a single coin of Alexander the Great, only being seen and not discovered under Corder, and four of Nero of which only two of the four recorded were excavated during Corder's seasons (Corder, 1934; Corder & Romans, 1938; Wachter, 1969; Halkon, 1980).

Aside from the earlier outliers of two coins of Nero excavated by Corder, the coinage coincides with Corder's theory for the initial occupation of the site under Roman rule and helps to understand the later developments encountered above and truncate these Flavian features. One such feature is the following stage of development attributed to the Trajanic reign in which Corder believes the town to have begun a period of Romanisation, with the exposed sand levelling layer placed to cover prior huts and act as a preparation for Romanised developments (Corder & Richmond, 1942, 8). This period of late first-century development is not part of Wachter's nine phase theory for the site's occupations, instead taking place between Wachter's periods IIb and III, following the suggested evacuation of the early fort in AD 80 leading to a period of abandonment prior to the fort's reoccupation and civilian developments around AD 125 (Wachter, 1969). Corder goes on to acknowledge that the following walls and superstructure developed on the foundations established in the Trajanic sand layer were built over some time and construction may have been greatly disrupted for long periods of time (Corder & Richmond, 1942, 8-9). It is possible that due to the length of time taken to build foundations on Corder's Trajanic sand layer that it is more likely the features identified by Corder to be of Trajanic origin are instead of a later Hadrianic-Antonine period. Interestingly numismatic records do not show a clear indication in this era, with coins of Trajan accounting for a higher percentage than either Hadrian or Antoninus Pius, the latter of which ruled during a clear period of occupation due to the theatre inscription (Appendix I).

With further ceramic evidence recovered from beneath these features dating to no later than the first decade of the second century, Corder establishes that the site potentially may have had a significant pause in this period of Romanisation due to either economic or militaristic limitations. Corder again quotes other sites with periods of delayed, prolonged,

or otherwise halted development during this period such as Silchester, Wroxeter, and St Albans, all identified *civitates*, stating that it is possible the resources of Parisi territory may not have sufficed to construct these structures at a reasonable pace given the apparent order under Agricola for Britons to build temples and *fora* (Atkinson, 1942; Tacitus & Mattingly, 2010).

This theory is somewhat plausible as the natural resources of Parisi territory, although existent, are not as abundant as they are in some areas of the country with some seams of Oolitic limestone found towards South Cave along with a few other sites of geological diversity such as sandstone and Oxford clay (Whitam & Boylan, 1968). Another possible theory suggested by Corder is the threat from the northern frontier and Petuaria's potential involvement in any military actions in response to it. Here it is mentioned that prior to the completion of Hadrian's Wall in the AD 120s the site of Petuaria would have still lain relatively close to the frontier by ways of Eboracum, and it is possible that any developments planned to be made to the site would have been halted or postponed by the garrison based at Petuaria being kept in the field. This theory is only further supported by the allegedly peaceful coexistence the Romans had established with the local Parisi, possibly providing them with the confidence in advancing further north before fully securing the site of Petuaria. Interestingly it appears the fort at Hayton, a short distance north of Petuaria, was occupied during this period of abandonment, suggesting any military presence required in the region would be smaller than the garrison of Petuaria.

Evidence for this halt in construction in the Parisi territory can also be seen at the fort of Roman Malton (Delgovicia) where a red clay foundation for a stone gateway had been uncovered beneath the blue clay foundation of the later fort implying a broken period in

which initial plans had been to develop the fort with stone defences, and again to some extent with the brevity of occupation of the fort at Hayton (Corder & Richmond, 1942; Johnson et al., 1978; Halkon, Millett & Woodhouse, 2015). The existence of this broken horizon of development at both Brough and Malton further supports the argument for peaceful Parisi coexistence and allows for the garrisons of Petuaria and Derwentio to be utilised in campaigns against the Brigantes under Agricola instead of further developing and defending the early settlements. Both the sites of Malton and Hayton, taken to be Roman Delgovicia and Derwentio respectively, are explored further in Chapter 7 alongside a broader assessment of the peaceful or military nature of the Roman occupation of eastern Yorkshire.

Perhaps the most substantial of Corder's excavated features is the evidence recovered from the eastern ramparts containing the northeast angle, east gate and the significant rampart to the east all being verified through excavation. Corder's suggested chronology of these defensive developments following the break in construction previously discussed is an early turf rampart laid upon a bottoming of flat stones with a heel secured by a three-course stone revetment (Corder & Richmond, 1942, 11). Corder then goes to describe the front of this early rampart being cut away to allow for the insertion of the substantial Roman wall, itself built upon a footing of stone approximated to be ten feet (3m) wide with a further eleven-foot (3.3m) area separating the wall from the near-side lip of the inner ditch of the defences. Corder hypothesises that the original turf rampart may have extended to the lip of the inner ditch and thus been between sixteen and thirty feet wide (4.8-9m) (Corder & Richmond, 1942, 11). Thanks to recent excavations similar relationships between features have been observed on the defences to the north and as such Corder's theories of the extent and size of these structures are presumably somewhat accurate (Halkon & Lyall, 2021b). Furthermore, Corder's excavations also exposed the defensive ditches cut into the

natural sand and it is from here that he theorised their filling during the Roman occupation as a way of dealing with standing water which would have caused some collapse in their sandy banks (Figure 12). The evidence given for this theory is of the material that filled the outer ditch, a black matter that was proven to comprise of leaves and other organic materials instead of the previously suspected peat (Corder & Richmond, 1942, 12).

Corder supposes that this ditch filling would have occurred prior to the addition of stone defences as the pottery recorded from these fills dated no later than the Antonine period (Corder & Richmond, 1942, 12). Similarly, dateable evidence recovered from the rampart to the north of the gate suggested a primarily Trajanic presence with some potential for Trajanic-Hadrian overlap in context with apparent evidence for tumbled turf features (Corder & Richmond, 1942). This again further supports the suggestion of some level of degradation and disrepair occurring at the site during its early occupations and potentially acting as the cause for the stonework reconstruction during the Antonine period.

Throughout the Corder excavations it is increasingly apparent that the structures present on site undergo a variety of changes throughout the Roman occupation, with the scope for later construction periods to either follow or completely disregard earlier structures. It is this change in alignment to which Corder attributes the east gate and the angle of the road running through it.

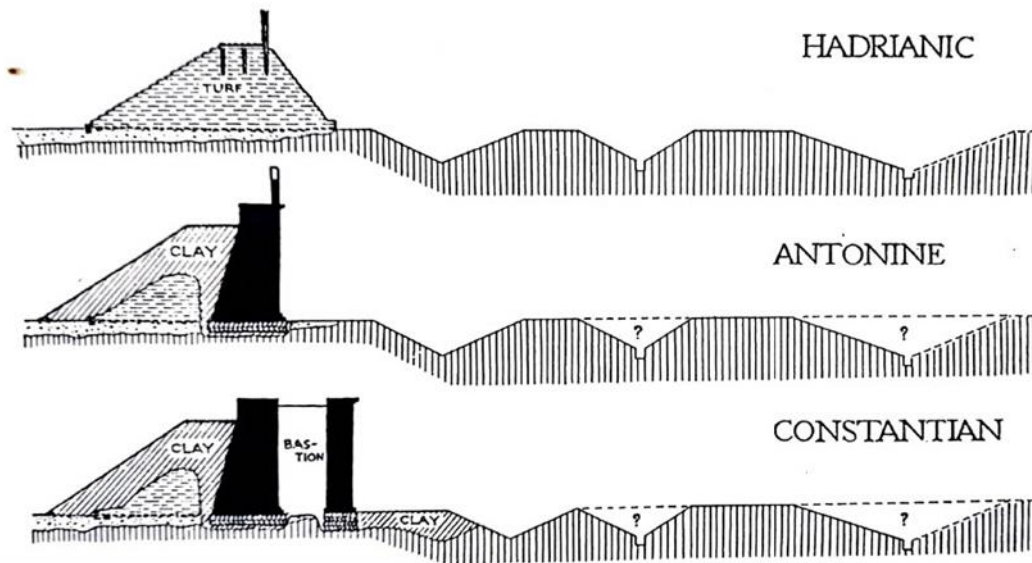


Figure 12 Corder's three stages of defensive developments on the ramparts showing filled outer ditches following the Hadrianic period and into the development of stone defences (Corder & Richmond, 1940)

Corder's final statement on the ramparts is that following the Antonine development of a stone footing, three metres wide, and wall backed by a red clay rampart some seven metres wide. There is little evidence recoverable to indicate further development prior to the construction of the bastions and gate-tower, in what he states to be the early fourth century under Constantine at latest, as a result of the significant campaign of robbing that has been undertaken at the site. It is reasonable to suggest that this destruction of the wall over the following centuries would allow for little evidence to remain of structural change, redevelopment, or refurbishment along the walls between their initial construction and the addition of bastions and other features towards the end of the site's occupation. It is therefore possible that Petuaria had well maintained defences throughout the third century and therefore bringing into dispute the period of decline as suggested by Wachter (1969).

From the evidence excavated and interpreted by Corder it is suggested that the eastern rampart changes direction and overlaps at the site of the gate (Figure 13, Corder & Richmond, 1942, 13). More specifically, there is both a break and deflection with the line of the rampart which Corder attributes to the possibility that the earliest Flavian defences survived to influence the following layouts of the defences in that area and necessitated a change in angle when a later stone gateway was constructed. In keeping with the rampart around it the gate and its related road both appear to have undergone several stages of development and reuse throughout the Roman period, with Corder attributing features of both to a few different periods. Corder states that not only are three different road surfaces visible in the record (as shown in his plan of the feature, Figure 13) but that these different periods of use would have overlapped, with an Antonine jamb supposedly in context with a Constantinian gate-tower with no apparent signs of later work on the former (Figure 13, Corder & Richmond, 1942, 16). The arch of the gateway itself brought further questions to Corder as the lack of evidence for any pivot-hole or posthole for timber structure could be recovered and the footing courses of the Antonine jamb laying in a staggered offset making the hanging of a door against the feature seem impossible (Corder & Richmond, 1942, 16). However, following the suggestion of Dr Wheeler that it is possible the door would instead have been hung from the inner side of the wall and when opened would have backed onto the rampart. Further evidence for the likelihood of this internal structure was recorded in the line of a small stone wall running parallel to the wall south of the gate, where no rampart had been discovered, and was hypothesised to have been part of a guard room for the gateway. The need for an internal guardroom during the settlement's development during the Antonine period is further supported by the lack of a contemporary gate-tower on either side, with the route of the road following the northern wall and lying

perpendicular to a stretch of the southern wall negating the need for any defensive tower (Figure 13, Corder & Richmond, 1942).

Corder believes that this east gate would have been the primary point of egress to the settlement and as such states the significance of the uniqueness of a main gate with this orientation, however following the excavations of John Wachter (1969) it is more likely that the northern gate opening onto the Stamford Bridge road would be the main gate in use, with the eastern gate heading towards the coast or further along the Humber estuary.

Despite the evidence produced by subsequent excavations disproving this theory, Corder's reference to the postern gate at Cirencester (Corinium) following a similar position on the town wall provides an interesting parallel with Petuaria, as the Corinium gate leads to the site's amphitheatre it is possible that Petuaria's postern gate might lead to its own *prosennum* as mentioned in the theatre inscription (RIB 707).

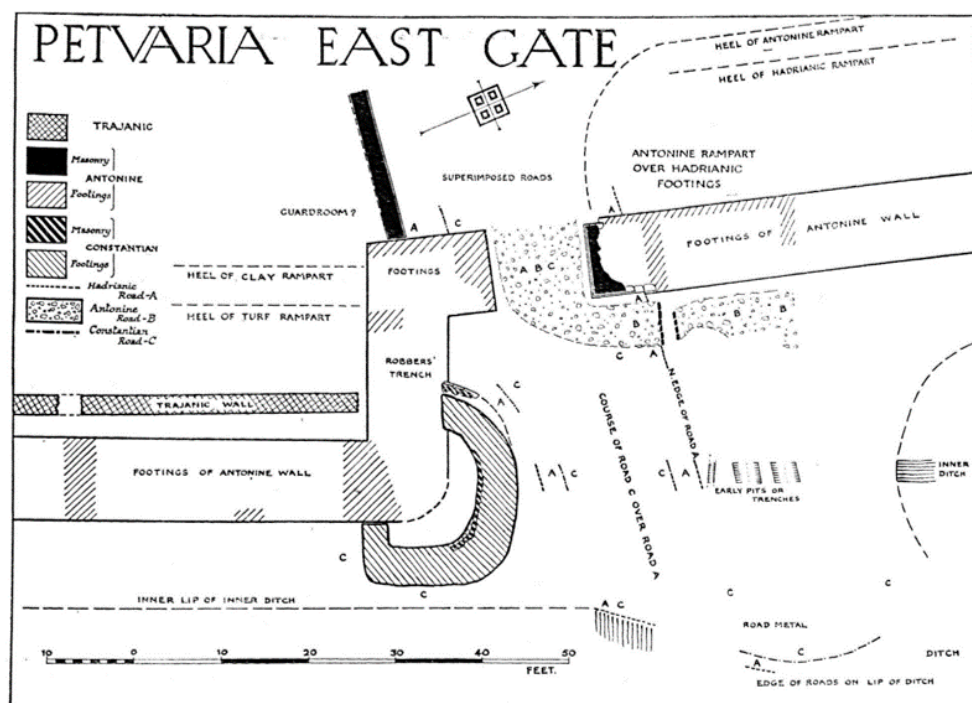


Figure 13 Corder's Plans of Petuaria's East Gate, showing relationships between a variety of features and periods as well as the unusual angle the defences take around the gate (Corder & Richmond, 1942)



In addition to Corder's work on the eastern defences of Petuaria, over the course of his investigations at the site a number of buildings within the footprint of the walls were excavated, further providing the site with not only more evidence of multiple construction phases but also a civil aspect. Of these buildings the most extensively excavated was building IV measuring 5.2 metres by 5.8 metres and located roughly thirty metres west of the eastern defences (Corder & Romans, 1937; Corder & Richmond, 1942). This building not only provides an idea of the construction methods employed at the site, but also with the first evidence of a hypocaust system showing clear signs of some importance at the settlement. Evidence recovered from the context of the walls such as pottery sherds and the same yellow mortar used in the construction of the earliest stone walls suggest that this building was of Antonine origin and was constructed later than building III to the north, a structure summarily dated to be Hadrianic and therefore likely to have been constructed either in the interim period of abandonment at the site or during the early stages of redevelopment in the early second century (Corder & Richmond, 1942). Further evidence of the repurposing of prior construction can be seen again here, as the east wall of the alleged Hadrianic building is said to have been incorporated into the west wall of building IV and continues the now well-established precedent of a clear period of interrupted development at Petuaria.

Perhaps the most unique aspect of building IV is that of a hypocaust, a structural feature present only in one other excavated structure at the site, that of the building excavated during the Petuaria ReVisited 2020-2021 season and is the only of the two currently to have been fully excavated. The construction of the hypocaust and the materials excavated indicate large areas of heated surface with the flooring showing "signs of considerable heat" (Corder & Richmond, 1942, 19). It is hypothesised by Corder that this building of somewhat small dimensions with a well built and well used hypocaust would possibly have served as a

drying-floor for produce farmed from the area, however Corder also does not rule out the possibility of the structure being residential. There is potential for this structure to, should it be described as a drying-floor, relate to the trade network that is presumed to have run through Petuaria by providing a structure for which locally produced goods may be prepared for travel or export. When this possibility is considered along with the structure's date of production as well as the overall Antonine period's effect on Petuaria through signs of reinvigoration at the settlement, an argument may be made that during this period the trade or production of goods was intrinsic to Petuaria's success going forward. It is important to note that subsequent non-invasive investigations using geophysical surveys of both magnetometry and Ground Penetrating Radar both show these structures to instead be rooms attached to a much larger building. This conflict of evidence between Corder's partially excavated building and the later geophysical survey further highlights the importance of achieving as complete an investigation as possible, a similar issue seen in a number of the later developer-funded reports and projects.

Further buildings were partially excavated at a number of small sites across the Burrs usually only consisting of the partial remains of wall footings. Corder states that despite a few of the excavated structures appearing to be in alignment with the eastern wall south of the gateway, there seems to be no traditional Roman town structure occurring at the site, with the buildings taking on different angles and sizes with the majority being smaller rectangular structures (Corder & Richmond, 1942). It is possible that this irregular layout, further corroborated by modern ground penetrating radar, is rather the function of the walled settlement as a point of trade and commerce, with the buildings seemingly focussed on the internal avenues running between east and north gateways. Furthermore, the lack of a traditional Roman *insula* layout could be the influence of the local Parisi on the provincial

magistrates responsible for the construction of this site, with Marcus Ulpus Januarius, *aedile* of Petuaria, incorrectly suggested to be local by Corder (Corder & Richmond, 1942, 21). Unfortunately, Corder's excavation methodology meant that only a small number of the buildings located within the Burrs playing field were excavated even partially, with not enough structural evidence recorded to indicate either a specific use or nature of the structures.

The dates of all these partially excavated structures were attributed by Corder to be that of no later than the second century, bringing into question the nature of the site into the third and fourth centuries especially as there is significant evidence in the defensive structures and coinage for occupation of the site well into those centuries. Perhaps the most significant structural evidence recorded by Corder of this latter period of occupation are the defensive additions to the Antonine walls consisting of bastions and 'towers' as excavated at various points throughout Corder's time at the site (Corder & Richmond, 1942). These features, of which four bastions and a single possible tower were recorded, were described by Corder to be of fairly substantial strength and, with no way of determining whether they reached above the height of the rampart at that time, theorised their potential use as artillery points along the wall. Corder suggests that the tower developed externally at the east gate was possibly introduced to allow for the east road to continue its original route rather than the Antonine shift to follow the outside of the wall (Corder & Richmond, 1942). Corder acknowledges that the pottery recovered during his excavations does not show clear signs of any major occupation during the period of this Constantinian development however the coinage recorded over the course of his investigation, as well as those recorded in the years since, show the potential for some extensive presence at the site in the third and early fourth century (Appendix I). Additionally, the ceramic record from subsequent investigations

including developer-funded projects and the Petuaria ReVisited project show significant quantities of third and fourth century ceramics present at the site. Corder debates briefly the possibility that these developments are tied to either the civil wars of the third century or the later Pictish and foreign conflicts, however the evidence recovered during his investigations does not allow him to draw such conclusions. Interestingly, and as discussed in both Chapter 6 and 8, later evidence seems to suggest the possibility that these defences are of a third century date, potentially under the Gallic Empire or as part of the Saxon Shore.

The evidence recorded by Corder and his team show several stages of development, both civil and military, and begin to create a narrative of the site’s occupation. Despite some limitations of excavation, methodology, and theory the evidence recorded by Corder is presented in a clear and well explained manner allowing for modern interpretation of the findings in the context of more recent discoveries. The structures excavated over the course of these seasons show a brief Flavian occupation followed by further, larger, re-occupation in the Hadrian-Antonine period followed by either a steady stagnation until the Constantinian period or the abandonment of significant Roman presence in the area.

#### **4.1.3 Wachter and Wider Interest 1941-1969**

Over this period the discussion of Petuaria’s origins and the wider context of the site continued, alongside the excavations of John Wachter marking the second full archaeological investigation into the site.

*Table 3 Publications on or discussing Petuaria dating 1941-1969*

Date	Title	Author
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1941	The Yorkshire Archaeological Journal Vol. 35 "Roman Yorkshire 1940"	Clark, M.K.,
1947	The Yorkshire Archaeological Journal Vol. 36 "Roman Yorkshire", "Review of <i>Petuaria</i> "	Greene, D. and Pearson, R.; Fay, J. B. and Crowley, T. E.
1951	The Yorkshire Archaeological Journal Vol. 37 "Roman Yorkshire"	Greene, D. edit. Fay, J. B.
1955	The Yorkshire Archaeological Journal Vol. 38 "Roman Yorkshire- Two Romano-British vessels from Brough, E. Yorks."	Southern, W.H.
1958	The Yorkshire Archaeological Journal Vol. 39 "Parisian Ware"	Corder, P.
1960	<i>Petuaria</i> . New Evidence for the Roman Town and Its Earlier Fort, The Antiquaries Journal Vol. 40	Wacher, J.S.
1969	Excavations at Brough-on-Humber	Wacher, J.S.

Following on from the 1930s and the Corder investigations, archaeological material recorded from Brough continues to be discussed and written on over the following three decades until the publication of the complete report of John Wacher's investigations into three sites around Brough for the construction of a sewage system (Wacher 1969). The evidence covered in these publications ranges from new data such as that described by Fay and Crowley, Greene and Southern in their respective publications in the Yorkshire Archaeological Journal Volumes 36, 37 and 38 as well as re-evaluations of prior discoveries,

as is the case with the entries from Mary Kitson Clark and Philip Corder in the Yorkshire Archaeological Journal Volumes 35 and 39 (Clark, 1941; Greene & Pearson, 1947; Greene, 1951; Southern, 1955; Corder, 1958). The combination of new data and a re-evaluation of prior data becomes a common theme in the publications on Petuaria over the following decades as archaeological interest in the site grows and investigations, prior to PPG16, lessen in scale and depth. Although the evidence discussed in these publications reviewing previously explored information is not new to the research, the different interpretations offer some point of interest for understanding how archaeological evidence is used in understanding a site. In addition, many of the publications that are structured around previously examined evidence tend to develop the understanding of the data rather than contend with what was previously theorised. For example, Philip Corder's paper "Parisian Ware" is structured around creating the argument for locally produced ceramic wares following the evidence recovered and discussed in the investigations carried out by his team in the decade prior (Corder, 1958). As such, although this chapter is focussed on an evaluation of the evidence itself produced by these investigations, these examples of further exploration of previously discussed data will help enhance the overall understanding of the evidence recorded from the site of Petuaria.

As previously mentioned, Mary Kitson Clark produced an editorial piece on Roman Yorkshire in 1940 and in this the lead pigs found at Brough are referenced, this time in connection to a lead pig found at South Cave with similar origins to those found in Brough. Clark suggests that the existence of these Derbyshire lead pigs found in Brough and South Cave suggest they were shipped up the Humber and brought ashore at Brough for use in the East Riding. Clark also suggests that the South Cave findings cement this hypothetical route as, if they were transported North by road, they would bypass South Cave for York (Clark, 1941).

Following this, the publication of "Roman Yorkshire" by Fay and Crowley in the Yorkshire Archaeological Journal discusses findings from Grange Farm, Elloughton Road, near Brough. This publication is a brief report of the findings of a land requisition claim by Blackburn Aircraft Company of six acres (2.4ha) in 1944. Over the course of this requisition three floors, suspected to be Roman, were uncovered of depths between one to three feet (0.3-0.9m) made of beaten material and dressed sandstone of many sizes along with numerous sherds of pottery, iron working and animal bones. Most interestingly however were the human remains discovered in what was deemed a proper burial consisting of two skulls, arm, rib and leg bones. It is believed that the third floor surface is the same context as the level at which lead pigs were uncovered in Haven Avenue twelve yards away (Greene & Pearson, 1947).

Four years later the next publication featuring evidence of Roman Brough is recorded in the "Roman Yorkshire" section of the 37<sup>th</sup> volume of the Yorkshire Archaeological Journal. In this publication findings at Fairfield Lodge, Cave Road are recorded including a coin of Faustina I, wife of Antoninus Pius, as well as two coins of Claudius Gothicus and Hadrian recovered by the neighbouring resident of Fairfield Lodge. In addition to these residentially sourced finds, some evidence of a bone pot decorator and an iron bracelet were recorded by the Welton school excavations of a Roman rampart at Brough House, a site later excavated as part of Wachter's investigations in the area (Greene, 1951; Wachter, 1969). Again, in the following volume of the Yorkshire Archaeological Journal further finds were recorded from Grange Farm consisting of two small domestic vessels recovered from the east of Petuaria's wall, both appearing to be made of Greyware but with no visible wheelwork remaining (Southern, 1955). Perhaps the most interesting aspect of these finds is that at the time of recording no matching types were found at the Mortimer Museum records. These discoveries continue

the trend of material being recovered and recorded by locally interested parties, something that is not only common in today's Brough but is also a crucial aspect of this research's data collection.

In the previously mentioned "Parisian Ware", Corder discusses the small portion of "Parisian" ware pottery sherds found during the 1935 excavation and correlates these with examples found at other sites across Yorkshire such as Rudston and York. Specifically, these examples differ from late southern wares and the "Romano-Saxon" ware as Corder describes. The examples from Brough are described as unstratified and are believed to be from the first or second centuries before AD 120. The suggestion of locally produced greyware for the Parisi people has subsequently been linked to the pottery kilns uncovered at Holme-On-Spalding Moor, although some recent developer-funded excavations in Brough have also identified other potential Greyware production centres across the Humber in North Lincolnshire.

*Table 4 Wacher's key periods of occupation and development at Petuaria (Wacher, 1969)*

Wacher's Period	Timeframe	Description and Evidence
<b>Period I</b>	before AD 70	Native occupation at Brough House.
<b>Period IIa</b>	c.AD 70	First Roman occupation: a temporary camp of unknown size.
<b>Period IIb</b>	c.AD 70-80	Permanent auxiliary fort replaces temporary camp, supervising store-depot which probably lies to the south. The fort was evacuated c.AD 80.
<b>Period III</b>	c.AD 80-125	The store-depot is maintained although the fort is no longer occupied.
<b>Period IV</b>	c.AD 125	A brief reoccupation of the fort: the defences are refurbished, and some internal buildings are constructed.



<b>Period V</b>	c.AD 125-200	The gradual development of the <i>vicus</i> . This is a slow process until the later Hadrianic or early Antonine period. The settlement is surrounded by bank and a ditch. The theatre may have been built at this time. The site may still be acting as a supply depot or a base for a naval detachment, as well as acting as a civilian centre, possibly the <i>civitas</i> capital of the Parisi.
<b>Period VI</b>	c.AD 200-70	The second phase of turf and timber fortification, on a different line from the first, with much internal building construction. These fortifications are more similar to military defences than to other contemporary urban defences.
<b>Period VII</b>	c.AD 270-90	The fortifications are converted to stone in a series of stages. The work may have been interrupted.
<b>Period VIII</b>	c.AD 290-370?	Work is resumed on the defences, adding bastions and gate-towers and rebuilding some Period VII defences.
<b>Period IX</b>	c.AD 370	Latest period of occupation at site. The ceramic evidence suggests a shrinkage of occupation towards the south-west corner of the town. The latest coin dates to Magnus Maximus.

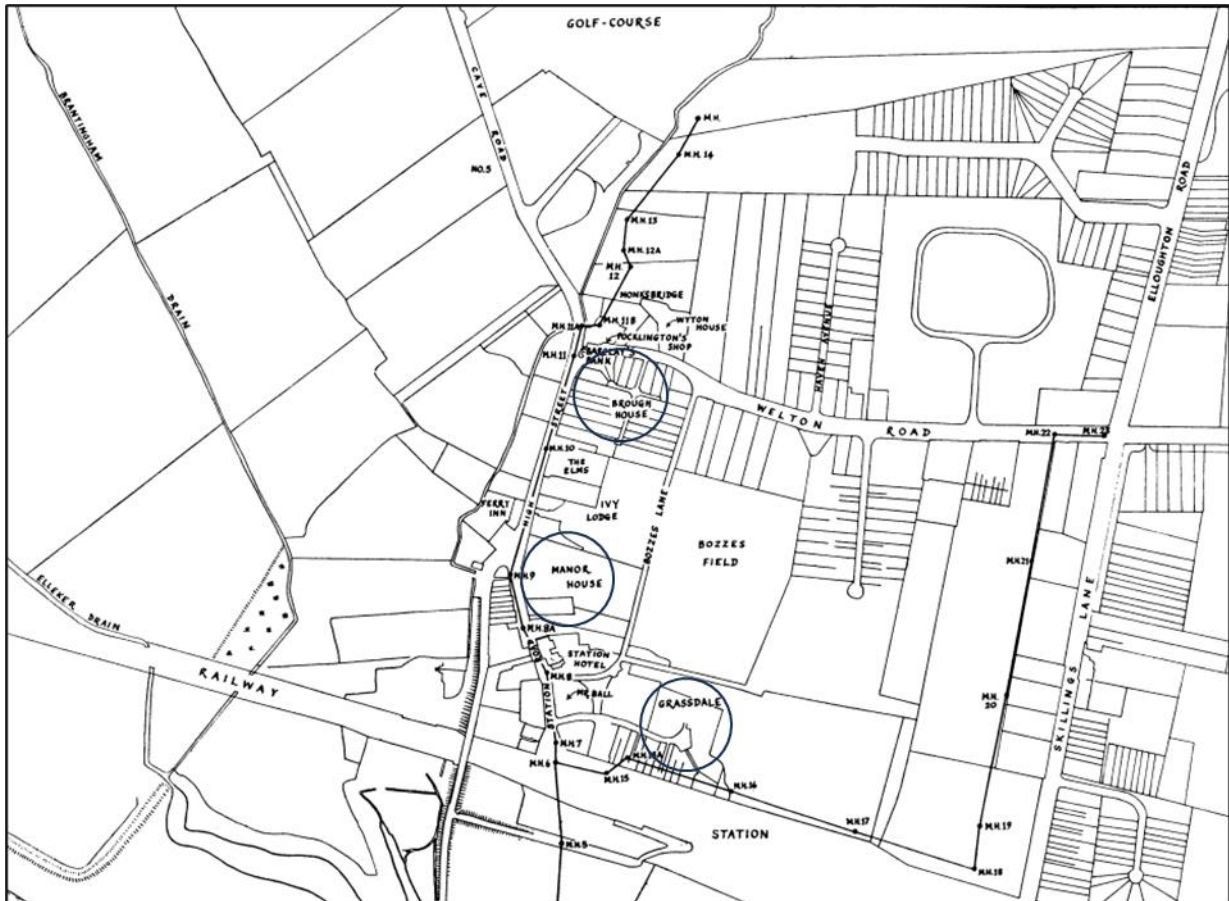
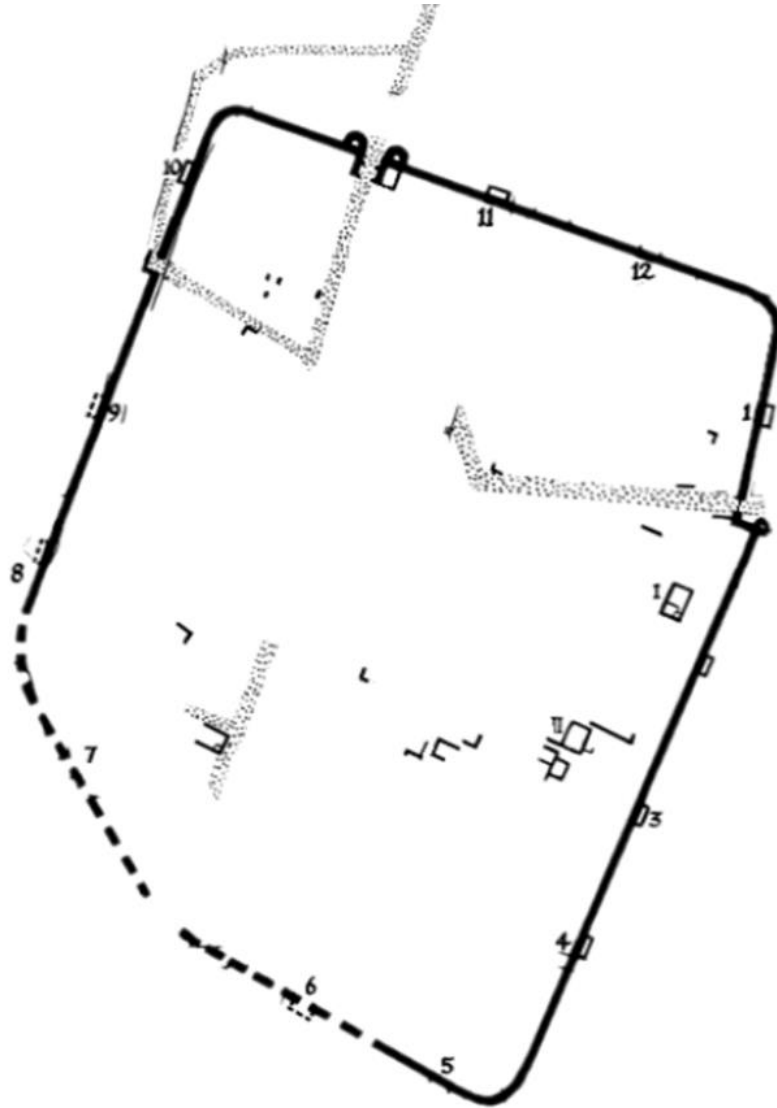


Figure 14 Sites of Wacher's investigations at Brough House, Manor House, and Grassdale (Wacher, 1969)

These prior publications are then followed by the continued work of John Wacher's investigations at Brough as part of the drainage project in the area. Wacher's contributions consist of a brief report of findings from an initial two-month excavation at Brough House, of which specifics are further covered in the following larger publication of Wacher's *Excavations at Brough on Humber 1958-1961* (Wacher, 1969). Over the course of these excavations Wacher found further structural evidence of the walled town and fort at Brough with ramparts, walls, gates, and buildings uncovered across the various sites of his excavations. This structural evidence alongside that found by Corder in the 1930s makes up a large majority of the large-scale evidence uncovered in Brough, with later investigations discovering further smaller structures and further confirming the defensive structures as excavated by Corder and Wacher. The evidence of structures discovered during Wacher's

investigations also helps to complete the hypothetical footprint of the site first suggested by Corder, with the walls and defensive structures aligning with those recovered by Corder (Figure 15). With Wachter's investigation split over three sites; Brough House, Manor House and Grassdale and divided into the periods of occupation he appoints, the data of these investigations forms one of the more comprehensive explorations into the site's usage, with the evidence recorded chronologically in the publication (Figure 14; Wachter, 1969, 3, 5-71). Wachter's investigations on the grounds of Brough House provide not only a wider understanding of the site with strong evidence of Roman multi-period development but also allow for a link to be made between the findings of both this investigation and Corder's earlier discoveries. The uncovering of both northern and western gates alongside ramparts, ditches, structures, and a road at Brough House provides the settlement with a north-west extremity and the line of the western defences in addition to a clear suggestion of the course of two of the roads leading out of the settlement (Wachter, 1969, 21). In conjunction with the findings of Corder's curved rampart to the north of Bozzes Field and the possible east gate referenced in the defensive outline suggested in 1935 several key points of the walled portion of the site are established in context with one another, allowing for a possible outline of the latter occupations defences to be theorised (Figure 15) while also providing this research with a clear indication as to the possible proximity of evidence to Roman structures when recovered in later investigations. The potential outline of the later period defences is further developed by the evidence uncovered in Wachter's other sites of Manor House and Grassdale with the former consisting of four buildings and two streets and the latter consisting of eight trenches excavated over the curved line of the south-eastern rampart corner (Wachter, 1969, 35). Both sites continued to uncover evidence of multiple periods of occupation both supporting the developed narrative of the site as a settlement

used in a variety of ways over the first to fourth centuries but also of a site of complex stratigraphy both overlaying and cutting between periods. Often the delineation between periods is marked by slight changes in flooring surfaces excavated and earlier cuts and features are repurposed, with the only significant dateable evidence often coming from either the style of military defences, pottery sherds or coinage. Despite the expansiveness of the structural evidence recorded over the two years of investigation, Wachter's findings often present similar questions to those posed by Corder around the development of the civilian settlement outside of the defensive occupations.



*Figure 15 Wachter's hypothetical defensive footprint of Petuaria from his Period VI-VIII, also shown are the defences as excavated by Philip Corder including the east gate, wall, and bastions 1-4. It is possible the footings excavated by HFA are bastion 6 or 7 (Wacher, 1969)*

Aside from the significant structural evidence uncovered across the three excavation sites as part of the Department of Works project in Brough, Wachter records a substantial number of small finds and artefacts that add to the narrative being formed of the site, despite his own disagreement with Corder's prior hypothesis of the site as an ongoing and successful site of occupation (Wacher, 1969, 5-23). Ceramics are, as is the case with most of the archaeological investigations into Brough, the most common of the small finds to be recorded with examples being produced from the three sites of a wide variety of Roman and

Romano-British wares (Wacher, 1969, 107-205). Much like Corder's prior investigations, a significant number of examples of decorated *terra sigillata* wares are recorded from the sites, with examples ranging from Vespasian to Antoninus Pius, both matching the wider period of use for *terra sigillata* wares in the British Isles up to the cessation of imports from mainland Europe in the third century as well as the argument for Petuaria's period of occupation between the late first and mid second century (Corder & Richmond, 1942; Oswald, 1964; Wacher, 1969; Wallace, 2006). These examples of stamped *terra sigillata* wares also match the period and origin of those uncovered during the Corder investigations and further show the extent of Roman occupation in the site. In addition, the potter's marks show similar sites of origin to those recorded by Corder in particular La Graufesenque, Lubié, Lezoux and Montans (Corder, 1935; 1937).

The coins recovered during the Wacher excavations numbered forty-six and dated between AD 69-355 with the most common examples being those of Claudius II, Victorinus and GLORIA EXERCITVS, all which date between AD 268-341 suggesting a substantial Roman presence during this period. The latest examples of coinage recorded by Wacher are one example of VICTORIAE DD AVGG Q NN dated to AD 341-348 and two examples of an irregular Fel Temp Reparatio (Fallen Horseman) dated to AD 353 and traditionally attributed to the reign of Constantius II (Wacher, 1969, 82-87). When comparing the count of these examples to those recorded in Corder's prior investigations there is clear evidence for a substantially later period of civil occupation than is suggested in the Wacher report, with twenty-nine coins recorded from the reign of Constantius II onwards and a further four coins of that period recorded in other later investigations (Appendix I). Although coinage is not the most reliable method for dating a site with coins being a key component in trade which, under the Romans, was extensive in the empire, the existence of such quantities of later

period coins do suggest at least somewhat of a continued Roman presence at the site, continuing even after the possible silting up and disuse of the haven and tidal inlet that would have been an initial draw to the area (Wacher, 1969; Halkon, 2013).

What are perhaps some of the more unique examples of the evidence recorded during this investigation are the human remains, all four of which are infant burials and were recovered across the sites of the investigation (Wacher, 1969, 233). Little information is provided of these remains, other than a short mention in the excavation report and a more detailed passage by Rosemary Powers and Don Brothwell of the British Museum providing the analytical evaluation of the remains. From this, the remains were all dated to have been around birth age or younger with one example, BII, being deemed “undoubtedly a foetus” (Wacher, 1969, 233). These human remains examples mark some of the very few remains to be uncovered in the area of Roman Brough with other examples recovered from Grange Farm, Welton Road and on the road north out of Brough (Corder & Richmond, 1942; Greene & Pearson, 1947; Hunter-Mann et al., 2000). Infant burials have also been excavated from the Roman site of Hayton roughly sixteen miles (25.7 km) north on the Roman road from Brough to Stamford Bridge as well as Shiptonthorpe and Malton, all sites of Roman occupation within possible Parisi territory (Corder, 1930; Margary, 1973; Millett, 2006; Halkon, 2013; Halkon, Millett & Woodhouse, 2015). One interesting, shared aspect between these cases of infant burials is the age at which the individuals died, with many of them being around the age of birth (Halkon, 2013, 221-222). This is the case at Brough, Hayton and Malton with Shiptonthorpe being the site of fifteen infants buried in deliberately careful fashion, all at full term (Halkon, 2013, 221). This matches findings of other Roman sites in Britain and further supports the suggestion of Millett and Gowland that, particularly in East Yorkshire under the Romans, there were specific burial rites reserved for infants of different

age groups and in this case peri or neonatal (Smith & Kahila, 1992; Halkon, 2013; Millett & Gowland, 2015). Placing Petuaria's occupants into such a context through these specific burial rites suggests strong cultural ties across the regions, something not unexpected due to the scale of the region and the nature of its occupation, however it can be seen to infer that the civil populations present at Petuaria, Hayton, Malton and Shiptonthorpe were all observing of the same if not similar cultural practices.

Aside from the infant burials as recorded by Wachter, the "priest" burial of Corder and the select few other inhumations recorded by developer-led investigations (Corder & Richmond 1938; Wachter, 1969; Hunter-Mann et al., 2000) this research's study area produced no other burials. It is possible that the lack of recorded human remains recorded in the study area stems from one of two possible reasons; either the investigations have taken place in areas where burials would not have been carried out by either the local Parisi or Romans due to their own cultural traditions, or that areas where Romans were more likely to have buried their dead were excavated and destroyed outside of archaeological investigations, particularly by housing, agricultural and infrastructural developments to the north and east of Brough. This is arguably due to the Roman funerary traditions of burying their dead alongside roads or outside the ritual boundaries of towns and settlements (Carroll, 2006). However, it is also just as plausible that a limitation of the study area and methods used for this research have led to a lack of burials being recognised within the study area. Firstly, the Roman practice of roadside burials being known, it is clear from the evidence presented in this chapter that the study area chosen for this research encompasses the extent of the occupied area and not much further, along either northern or eastern roads, and therefore is likely to not include roadside cemeteries further along these routes. Secondly, the methods by which resources such as the PAS were used may have led to a confirmation bias, or lack



thereof, as small finds often attributed to burials and inhumations were not included when collating the data for this research due to the quantity of other materials, such as coinage and ceramics with non-coin or ceramic finds registered as Roman and from Brough on the Pas numbering nine and comprising of six broaches, a finger ring, nail, and a strap fitting. It is therefore possible that the cemeteries of Petuaria lie along the northern route to South Cave of RR2e or the eastern route of RR290, however due to the extent of developments along these routes means that a complete site is unlikely to be recovered.

The roads and gates as uncovered by Corder and Wachter provide the layout of Petuaria with a number of potential links to other sites within the region. As previously mentioned, the road with the most proven route is that of the northbound road leading to Stamford Bridge and York identified now as RR2e by Margary and the Roman Roads Research Association (RRA) (Margary, 1973). This road would most likely have been a key transport link between Brough and the Humber and York and the heart of Parisi territory during the period and as such is a confidently placed route by a number of archaeologists and historians (Horsley, 1732; Maule Cole, 1900; Margary, 1973). Additionally, three other potential streets were uncovered by the investigations of Corder and Wachter with varying degrees of veracity attributed to them. The second most likely route is that of an eastern road leaving the walled settlement at Corder's eastern gate and eventually being found heading east-northeast through Welton in both aerial photography and in excavations by the Humber Archaeology Partnership in 1996 (Tibbles, 1996). A few theories as to the purpose of this road are discussed by the RRA including that it leads to a site west of Kingston Upon Hull, that it cuts further north to Bridlington or that it carries on north-northeast avoiding the marshlands where Hull now lies and then down to Spurn Point (Warburton, 1720; Figure 16, Haken,

2018). The routes and connections of Roman roads in the region related to Petuaria is explored further in Chapter 7.

However, aside from the roads in the region Petuaria likely has strong connections with other sites via the Humber Estuary. Recent archaeological works at Skeffling, near Patrington, have found a Roman site with potential links to Roman Brough through oyster trade and as such could be another possible destination for the eastern road out of Petuaria (*pers comm.*; Howard et al., 2019). The final two routes identified out of the walled settlement are less certain, with the western gate uncovered by Wachter in his Brough House excavations more likely leading to a harbour front or similar trade area due to the relative proximity of the uncovered possible harbour structures at Cave Road and foreshore surfaces at the Magistrates Court as well as the known tidal inlet to the west of Brough (Armstrong, 1981; Fraser, 2001). Additionally, the suspected southern road from the walled settlement, the only evidence of which being a partially excavated gravel surface during Wachter's investigation, is also likely to lead directly to a foreshore or similar waterfront area due to the southwestern corner of the walled area's proximity to the historical extent of the Humber estuary and the neighbouring tidal inlet (Wachter, 1969; Halkon, 2013). Despite the evidence of these road surfaces uncovered during the investigations of Corder and Wachter, they provide later research with somewhat of an indication of the direction in which road surfaces may be uncovered and, in some cases, have been subsequently confirmed to exist by later investigations (Tibbles, 1996). Interestingly the road surfaces also provide the local public with an idea of whether their property may hold some archaeological import, with two residents having approached the researcher and the wider Petuaria ReVisited project to share about their suspected stretch of Roman road uncovered beneath their property, one of which lies in close proximity to Corder's suggested eastern gate. Although this information

is yet to be corroborated by an archaeological investigation, it highlights a key link between the previously discovered evidence and the modern research efforts into uncovering the archaeological background of Roman Brough.



Figure 16 A Map of Yorkshire showing a Roman road leaving Brough on a north-northeast heading, supposedly to avoid marshy ground, which then cuts southeast towards Spurn Point (Warburton, 1720).

#### 4.1.4 Local ERAS Investigations 1977-1980

Table 5 Publications on or discussing Petuaria dating 1977-1980

Date	Title	Author
1977-78	ERAS Excavations at Cave Road, Brough, under Peter Armstrong	Armstrong, P.
1980	ERAS Excavations at Petuaria Close, Brough	Halkon, P.

Following the publication of Wachter’s findings in 1969, archaeological interest in the site continues to develop with two significant excavations undertaken by the East Riding Archaeological Society (ERAS) in 1977-78 and again in 1980. Perhaps one of the most crucial

areas for archaeological investigation in Brough is that of the Cave Road excavation carried out by ERAS over two seasons (1977-78) with only a handful of personal accounts and even fewer written references. The site itself is located on the western side of Cave Road consisted of a large area of excavation and the recording of structural walls as well as a significant amount of pottery estimated to have filled some eighty boxes currently being sorted by the Petuaria ReVisited community volunteer group. Aside from the personal accounts two written pieces exist on the site, both published in the East Riding Archaeological Society's newsletter and are as follows:

Firstly "Excavations at Brough", written by the author of the first newsletter Peter Armstrong himself who directed the Cave Road excavation, published as an update in the inaugural newsletter *ERAS News 1* (ERAS, 1979):

Something of a tease this section I'm afraid. Sadly it is not possible to continue the Cave Road site for a third season because of a change of land ownership and all that goes with it. This is a great disappointment, particularly as the potential of the site is so great however I have little doubt that we shall return in due course . . . But there is more to Brough than Cave Road alone, and another site North of Welton Road may be available for at least a trial excavation – negotiations are in hand and something this year may be possible. As with the Cave Road site, the exact nature of the area is unclear, but inhumation burials and the five pigs of lead (the latter on show in Hull Museums) have come from hereabouts.

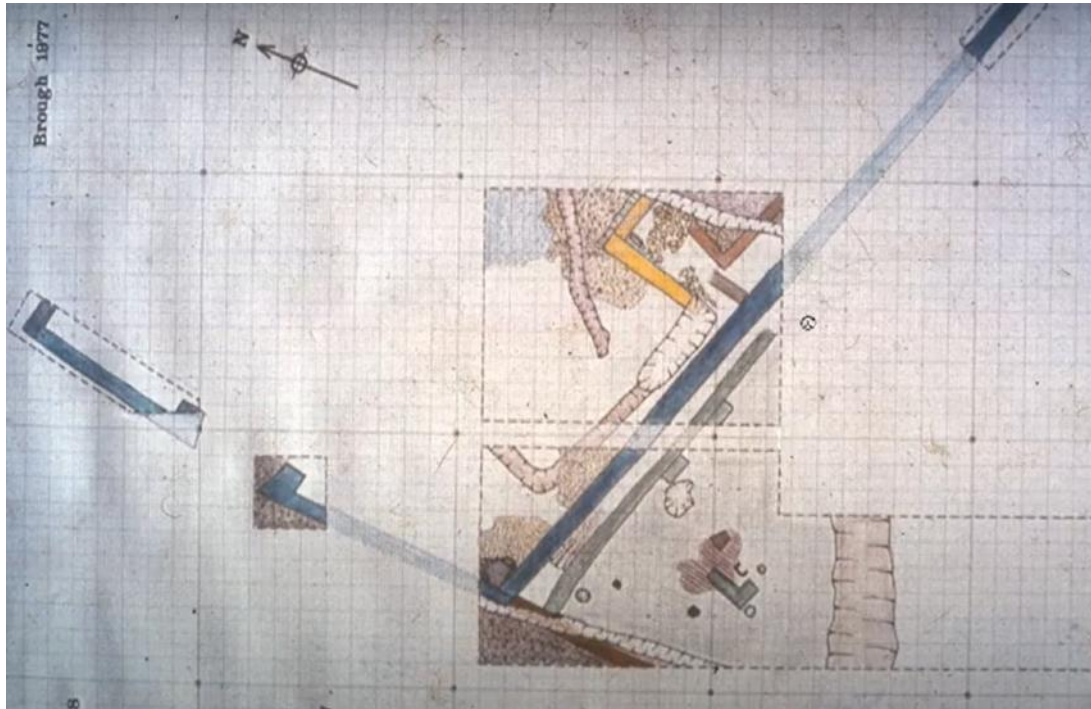
As clearly stated in this update the site at Cave Road is of some significance to the Roman occupation of Brough, it's location both on the northern road leaving the settlement (RR2e) as well as reaching towards the former lay of the Haven itself suggests a site of potential

economic significance, further supported by the substantial amount of pottery recovered over the course of the two seasons. This initial comment is followed twenty-two years later by a note written by Ray Ketch in the 50<sup>th</sup> issue of *ERAS News* published in March 2001 (Ketch, 2001):

Peter Armstrong organised a dig at Brough, on a site at the west side of Cave Road, the site was Roman and blessed with sandy soil, ideal for digging. The foundations of several large buildings were found, extending towards a drop in the surface, which we thought could indicate the edge of Brough Haven.

Despite the brevity of this note, it is one of if not the only accessible written source on the evidence recorded at the Cave Road site and continues to further emphasise the importance of these features. The implication of large buildings extending towards what was possibly once the lay of the Brough Haven is that they may have been warehouses or other maritime adjacent structures. In keeping with the findings of other sites in the area, particularly those on the western edge of the Roman occupation at the Magistrates Court, an image of the Brough Haven serving as a functioning natural harbour with warehouses and at least one quay begins to form (Fraser, 2002). It is possible this natural harbour functioned in a way similar to the one at Lympne's fort utilising the inlet in the area now known as Romney Marsh (Philp, 1982).

Unfortunately, the Cave Road site was cut short its third season due to a change in land ownership and as of now has had no further archaeological excavation and only one investigation in the form of a magnetometry survey carried out by James Lyall which shows the site to follow the plans of the 1977-78 excavation as well as the continuation of walls (Figure 17).



*Figure 17 Plan of ERAS 1977 Cave Road excavation by Peter Armstrong*

The evidence recorded in the initial excavations however is under further evaluation through pottery sorting from a team of local volunteers organised by Petuaria ReVisited and in the outright goal to produce a compiled list for Martin Millett, who is going to be re-evaluating the Cave Road site. It is possible to infer from this account by Ketch (2001) as well as the site drawing procured from Peter Armstrong's collection and James Lyall's magnetometry survey that these large structures are likely to be related in some way to the maritime use of the site and as such provides a further scope of research for exploring the changing nature of Petuaria throughout the Roman occupation, as well as providing somewhat of an explanation towards the variety of coinage and ceramic seen in the archaeological record.

As mentioned in *ERAS News 1* an ERAS excavation was to be undertaken north of Welton Road, at Petuaria Close, and found substantial evidence for the use of the site in the earliest period of occupation as what was believed to be the annexe of the first fort was uncovered,

with the evidence comprising of a military oven and the remains of structures (Halkon, 1980; Halkon, *pers. comm.*, Armstrong, 1981). A somewhat secure date was able to be affixed to this period of use due to the discovery of coins of both Domitian (AD 81-96) and Nerva (AD 96-98) in the context of the suspected military oven, and as such provides the understanding of the site with a clear date for the development of an annexe during the construction of the earlier fort. Unfortunately, as with the Cave Road site the Petuaria Close site is yet to be formally published with information primarily coming from a few short-form sources written as letters or updates in ERAS newsletters or from spoken reports from those in attendance of the excavation. However, it is clear to see that both sites of Cave Road and Petuaria Close are located in areas of key Roman development during the period of occupation, providing evidence for both the site's early years, Petuaria Close's annexe of the fort, as well as what is possibly the economic hub of the settlement in Cave Road's buildings possibly linking to the harbour-like development to the west of the walled area.

#### 4.1.5 The Introduction and Early Days of PPG16 1990-1998

*Table 6 Publications on or discussing Petuaria dating 1990-1998*

1991a	A Watching Brief at the Ferry Inn, Brough	HFA
1991b	A Watching Brief at No.4 Petuaria Close, Brough	HFA
1991	Trial Excavations at Welton Road, Brough	Steedman, K.
1992a	An Archaeological Watching Brief at 16 Grassdale Park, Brough	Tibbles, J.
1992b	An Archaeological Watching Brief at Glenrock Park, Brough	Tibbles, J.
1992	An Archaeological Watching Brief at 14 Haven Avenue, Brough	Atkinson, D.
1993	An Archaeological Watching Brief at Station Road, Brough	Atkinson, D.
1994	An Archaeological Watching Brief at 3 The Burrs, Brough	Steedman, K.
1994	An Archaeological Watching Brief at 7 Welton Road, Brough	Atkinson, D.

1994	An Archaeological Watching Brief at no.4 Glenrock Park, Brough	Tibbles, J.
1996	Trial Excavations at Welton Low Road, March 1996	Tibbles, J.
1997	12 Cave Road, Brough-on-Humber, East Yorkshire: archaeological watching brief	Mackey, R.
1998	Romano-British Occupation 83-87 Welton Road	Unknown

With the introduction of PPG16 in 1990, the number of archaeological investigations around Brough increase drastically as now any project that requires the use of excavation equipment was required to involve an archaeological assessment of the site beforehand. This meant that extensions, conservatories, new builds, drains and many more now produced archaeological resources if applicable. These resources, despite being numerous, are not usually available in traditional ways through publications and as such the involvement of the Archaeology Data Service and Humber Historic Environment Record are crucial in the collection and review of these reports and their respective data. The first investigation to take place post-PPG16 was a watching brief carried out at the Ferry Inn, Brough located in close proximity to the suspected outline of the latter stage fort boundaries (Wacher, 1969). During the course of this watching brief a deposit of roughly hewn limestone blocks were found beneath a layer of modern rubble which were believed to have been redeposited to act as a ground levelling layer since their original displacement (HFA, 1991a). The type, size and location of these blocks suggests a possible link to the fortifications developed during the latter periods of occupation, possibly the suspected Carausian fort in the late third century. If this is the case for these limestone blocks it indicated the extent or possible location of the southwestern corner of the larger fort



developed during Petuaria's occupation, matching the material and scale of the wall recovered elsewhere in the site (Corder & Richmond, 1942).

Two further investigations were carried out by Humber Field Archaeology in 1991 at No. 4 Petuaria Close and Welton Road, the former being the same as the area excavated eleven years prior by ERAS and the latter being the first of many investigations to be carried out along the main road through Brough (HFA, 1991b; Steedman, 1991). The investigation at 4 Petuaria Close took place following the halting of an extension due to the discovery of sewer mains excavated in 1959 that had cut archaeology which had not been recorded (HFA, 1991b). Despite this, finds from the resulting backfill included a possible Nene Valley beaker sherd, red colour coated sherd, possible Swanpool ware, seven 2<sup>nd</sup>-early 3<sup>rd</sup> century body sherds of greyware, three sherds of coarse greyware, one rim sherd of *terra sigillata* and one sherd of a Holme on Spalding Moor copy of Dalesware rim dated to between the 3<sup>rd</sup>-4<sup>th</sup> century. The composition of these sherds, as with most of the other sherds recovered from the site, show a continued occupation through a number of different periods of production ranging from *terra sigillata* to copies of Dalesware dating into the 4<sup>th</sup> century. However, the origin of this evidence from a backfill leaves it without an appropriate context for accurate stratigraphic dating, however locally found evidence from a nearby research participant matches a similar distribution and allows for one possible solution to be that the area of Petuaria Close, the location of the annexe to the first fort, could have acted as a waste ceramics site. This theory will be discussed further when exploring the evidence submitted by research participants in a later chapter.

The first extensive excavations to be carried out in Brough following the introduction of PPG16 are trial excavations for a developer funded project to the rear of 40-52 Welton Road

(Steedman, 1991). During which, a roadside Romano-British settlement was discovered, and several features and finds were recorded indicating a site of some importance. The features recorded during this work include traces of buildings, yard surfaces and pits within property delineated by boundary ditches which are dated to be from between the early second and early fourth century (Steedman, 1991). In addition to these features suggesting a somewhat developed settlement to the east of the fortified centre of Roman Brough is a significant assemblage of ceramics that match the period of the second to fourth century, which also predominantly consist of fine tablewares (Steedman, 1991, 28). Additionally, there is seemingly no trace of coarse wares, such as cooking and storage vessels, typical of rubbish tips such as the one excavated during this project. This posits an interesting question regarding the nature of this settlement both individually and in the wider context of Roman Brough. Perhaps most important is the specific nature of the pottery recorded by HFA and how the assemblage includes an example of a "*cantharos*" vessel, an example believed to be the first of its kind found in the region although unfortunately no image or drawing of the item appears in the report (Steedman, 1991, 28). This pottery assemblage has had its importance verified at the time of publication by Valerie Rigby of the British Museum and as such the statements about the assemblage can be deemed as accurate as possible considering their recording at the very beginning of the PPG16 period of archaeological investigations. In addition to the recording of the *kantharos* and other fine wares, the existence of wasters present in the archaeological record suggests the likelihood of a nearby centre of pottery production, the location of which is most either the supposed kiln as exposed in the YAT excavations on the other side of Welton Road, or the kilns excavated at North Cave by HFA (Hunter-Mann et al., 2000).

In addition to the unique nature of the pottery assemblage recorded during these trial excavations is the identified fabrics of the vessels which indicate origins from only two production centres. The first fabric type is identified as a Gaulish, or replicated Gaulish, style that can be identified through associated decorative motifs that are present within several the vessels recovered. This fabric also appears in a number of wasters uncovered within the fill of the boundary ditch and potential suggests that these faux-Gaulish wares are being produced at a local kiln possibly even within the confines of Roman Brough itself (Steedman, 1991). The second form recorded amongst the assemblage seems to point to an origin within the Rhineland however this is seen as a brief addendum onto the potential importance of the first and more common form. Germanic wares seem to appear throughout the archaeological record at Brough with a fair quantity of imported German White Ware recorded by Participant 1 in Chapter 7.

The remaining data collected and assessed within this report consists of animal bone, metalwork, and other smaller groups of artefacts such as stone and fired clay. The main takeaway from the animal bone evidence is the number of cattle bones, comprising 50% of the total assemblage, found during the excavation. There is little to be inferred from this evidence as it is similar to the types of animal bones recorded at other sites of similar occupation. It is possible that the bovine assemblages are indicators of external villas producing livestock for the site with Welton to the northeast noted for its agricultural factors.

Regarding the metalwork recorded at this site, there are a number of iron and copper alloy finds of little significance, with a find of particular interest being that of a silver denarius of the early third century identified to be possibly of Elagabalus (AD 218-22) and marking one

of only three recorded on the site attributed to them (Appendix I). Finally, several small sherds of identified Roman glass were uncovered alongside some flint flakes from topsoil as well as various brick and other ceramic buildings material (CBM) evidence as is typical of archaeological sites of this type. The conclusions drawn by Steedman are that the site is a possible extra-mural suburb of a walled town, or a civilian settlement attached to a military fort due to its proximity to the known defences to the west of Brough and its position bordering the Roman road that follows a similar line to the modern Welton Road.

Steedman identifies the site as most likely being first developed in the early second century and with a later development in the late second or early third century with a possible period of deterioration or abandonment towards the later third century (Steedman, 1991, p.40).

This development followed by an abandonment and demolition follows a similar timeline as theorised in other publications on Roman Brough and can usually be seen quite clearly in the archaeological record, there are some outliers giving the site a far later date of “abandonment”, such as the evidence uncovered in recent excavations and work with the public showing occupation until the later fourth century, suggesting that certain parts of the Roman settlement were abandoned before others and potentially repurposed. This is in keeping with the current hypothesis that during the third century the Roman settlement at Brough was reformed into a more militaristic site, prompting both the exit of residents from within the walls and phases of repurposing to develop the external bastions.

Over the course of 1992 a further three investigations were carried out by HFA and reports for two were produced by John Tibbles on their findings, with David Atkinson producing the third. Despite the location of some of these investigations implying a likely existence of archaeological materials due to their proximity to other confirmed or hypothetical features

(Tibbles, 1992b) with the Glenrock Park site lying slightly east of the suspected Stamford Bridge Road, they begin to instead show the issues faced by some of these post-PPG16 reports and how the nature of such investigations can be limiting in the evidence they produce. As developer-led archaeology takes on investigations with the method of suiting the investigation to the work required, there is an argument that certain amounts of evidence may be lost or never found to begin with, particularly when considering the wider nature of the site of Roman Brough. For example, where a project may only call for a watching brief to be carried out excavating to a depth of between one to two metres, there is the proven possibility of archaeological material existing at a depth greater than that explored, such as the case on the Burrs where current trenches excavated by the Petuaria Revisited project are yet to reach the natural layer despite reaching a depth of well over 1.5 metres (Halkon & Lyall, 2021). Another possible issue faced by developer-funded investigations is the brevity of the publications and their subsequent accessibility. Several of the following reports explored in this chapter are, even the original records kept at the Humber HER, not full reports of investigations instead offering brief summaries of any key finds with little to no context provided. Additionally, to this the dating processes available to developer-funded projects, particularly within the first decade of post-PPG16 investigations, would most likely be limited, costly, or simply unpublished and as such dating is most commonly determined by pottery typology and coins should they be recovered from the site (Phillips & Bradley, 2005). Despite these issues the data recorded in these following reports, when evidence was recovered, do continue to provide further evidence for the nature and extent of the site's occupation and in some cases highlight areas of potential future interest.

The first of these 1992 investigations was a watching brief carried out on land adjacent to the south-eastern corner of the fortified section of Roman Brough at 16 Grassdale Park

(Tibbles, 1992a). Over the course of this watching brief the only archaeological evidence uncovered was identified as a levelling layer of sandy loam laid down during the construction of housing within the area. This is possibly similar to the sandy deposits covering the archaeological material on The Burrs, covering the black loam of the old ground surface and used as a levelling and protective measure sometime in the mid-20<sup>th</sup> century after the Wachter excavations (Tibbles, 1992a). The second investigation reported in 1992 is the aforementioned watching brief at Glenrock Park, Brough (Tibbles, 1992b). Despite the project area for this watching brief lying 500m north-west of the walled section of Roman Brough and 100m to the west of the Roman road to Stamford Bridge via South Cave no archaeological deposits, Roman or otherwise, were recorded (Tibbles, 1992b). A further issue of developer-led projects recording only to the extent that the project requires means that an element of false negatives may begin to affect the archaeological record.

Another useful aspect of developer funded investigations is the potential for further investigations at the same site. This can either be through a multiple year-long project resulting in several reports being produced from the findings, or sites of frequent development as is the case in more urban areas such as residential streets. This is the case with the 1994 site visit during groundworks being carried out at Glenrock Park during the construction of an extension in an area to the northeast of the walled settlement along Cave Road and the suspected Roman road to Stamford Bridge (Tibbles, 1992b, 1994).

Unfortunately, this second investigation again resulted in the recording of no Roman material during this visit, and neither was any other material of archaeological interest recorded (Tibbles, 1994). This lack of evidence in such an area suggests what is arguably a clear limitation to the extent of Roman Brough and as such is important when considering the final overall area of the settlement to be suggested by this research. These reports show

how an archaeological investigation with no data can still provide useful information for the consideration of the whole landscape by providing a theoretical limiting factor with no Romano-British development in the area. The third 1992 investigation was the first to produce Roman material in the form of unstratified pottery sherds at 14 Haven Avenue (Atkinson, 1992). Prior to the construction of a conservatory on land to the north of the walled section of Roman Brough a watching brief was carried out by the Humber Field Archaeology unit under David Atkinson. Although no archaeological features were recorded an assemblage of ten sherds were recovered from a sand layer topping a layer of firm sandy gravel. These sherds were identified to have come from eight vessels and were dated to the Romano-British period (Atkinson, 1992). This information provides little additional data to the understanding of Petuaria, however when considered in the context of the site and the material recorded at other investigations it is apparent there is a clear presence of pottery in the archaeological record with the potential for a site or sites of local production increasing. The previously mentioned issue of depth of investigations occurs again here in 1993 during a watching brief survey at Station Road. Due to this watching brief taking place within the scheduled monument area a depth limit of one metre was in place to any excavating that took place, as such the only archaeological material found was a single sherd of Humberware dating from the thirteenth to fifteenth Century, suggesting that Roman material, as is seen in other sites, is in excess of a metre below the surface (Atkinson, 1993). Archaeological evidence along Station Road appears to vary dramatically depending on the specific location of the investigation and depth to which it is explored, some cases of investigations at Station Road provide the site with evidence of a Roman waterfront to the south of the walled enclosure while others, as seen with this 1993 investigation, produce little evidence of Roman occupation due to the limitations set upon them. The depth

limitations imposed by the scheduled area also provide an interesting point of contention, with the purpose of such limitations to preserve the destruction or exposure of known archaeological material, while also not allowing the investigation to reach the known depth of archaeological material, with evidence from a number of sites and investigations in the area showing a Roman archaeological threshold of at least a metre's depth (Corder & Richmond, 1942; Halkon & Lyall, 2021).

The next example of evidence of a Roman occupation was excavated during a watching brief survey carried out prior to the commencement of groundwork excavations for a garage extension to a house located within the scheduled monument of the Roman walled settlement. During this investigation, a possible yard surface was uncovered with a believed Roman origin (Steedman, 1994). Due to the location of this property on The Burrs, a street running parallel to the Burrs playing field and within the boundary of the walled settlement, it is possible that this yard or road like surface was related to the Roman features excavated during the Wacher dig of the north gatehouse at Brough House (Wacher, 1969). The surface excavated may relate to the structure excavated by Wacher in his Brough House site C however that investigation consisted of only two trenches and as such a full structural layout would be impossible to determine (Wacher, 1969, 10). Similarly, during groundworks prior to the construction of a conservatory to the north of the walled section of Roman Brough, a watching brief was able to record a patch of gravel hypothesised to be the remnants of a road or previous building work in the area (Atkinson, 1994). It is unclear as to what depth this evidence was found however the lack of a theorised Roman relationship suggests that it was not at the depth of other Roman material excavated in the area. The site does however lie directly north of the gatehouse uncovered during the Wacher excavations Site A and so if any relationship to the Roman settlement could be found then it is likely that this material





Further evidence towards the longevity of the site's occupation was recovered from a site along Welton Low Road which lies to the northern extremity of both the town of Brough as well as the study area used for this research's data collection. Trial trenches were carried out at the former site of Elloughton Road Nurseries, located to the northeast of Petuaria and potentially near the hypothesised Roman road heading north-northeast out of the settlement (Warburton, 1720; Tibbles, 1996, Figure 18, Figure 19). Over the course of this investigation twenty-five sherds of Romano-British pottery were discovered, ranging from a variety of contexts and subsequently suggested a disturbed or truncated site. The dating of these sherds was achieved through recognition of the greyware fabric as coming from North Lincolnshire kilns that supplied the region prior to the development of the kilns at Holme on Spalding Moor of which only four vessels were diagnostic enough for period identification. The form of these diagnostic sherds consists of Antonine or Hadrianic forms giving a second century date, with one vessel suggesting any date from the second century through to the end of the Roman occupation (Tibbles, 1996). The identification of these ceramics suggesting a definite second century occupation with potential use through to the fourth century adds to the wider conclusions being drawn on the site from various other features and evidence uncovered in the area.

Nearby structural evidence was later excavated during a watching brief project at 12 Cave Road carried out by Northern Archaeological Associates. This investigation is one of the few to uncover substantial structural evidence outside the footprint of the walled enclosure (Mackey, 1997). During this watching brief, several walls of stone construction were uncovered and were found to be part of a large, multi-room structure with no evidence of constructed floors and as such was believed to have not been a residential structure (Mackey, 1997, 4). In addition to the significant structural features, ceramic finds provide the

research with yet another identifiable site with evidence of multiple or long-lasting Roman occupation with sherds ranging from Gaulish plain *terra sigillata* dated to the latter half of the second century, to the rim of a Huntcliff jar dated to the mid-fourth to early fifth centuries (Mackey, 1997, 5). Similarly, a small excavation at 85A Welton Road recovered examples of pottery dating to a variety of periods and within the possible context of a previously robbed out or destroyed structure. Examples of the pottery and dates recorded consist of possibly third or fourth century Dalesware, a rouletted and highly burnished example of Greyware possibly from the early fourth century and a sherd of *terra sigillata* which, depending on its point of production, could be dated between AD 160-250 (Unknown, 1998).

From the evidence recorded in this period, and in addition to the evidence recorded prior, the Roman settlement of Petuaria is evidently the site of both extensive structural developments outside of the previously established walled footprint and a long-lasting site of Roman and Romano-British use as seen in the ceramic records and other archaeological finds recovered. There is also much to be gained from the reports produced in this period that record no archaeological evidence as they act effectively as limiting factors when creating an outline for the wider footprint of the Roman presence in the area. Finally, this period also clearly shows the usefulness of developer funded investigations and the results of the introduction of PPG16 and the wider changes to planning legislation.

#### **4.1.6 Post-millennium 2000-2005**

Following on from the developer funded boom of the 90s, the early 2000s continues the trend of a vast quantity of investigations carried out in and around Brough.

Table 7 Publications on or discussing *Petuaria* dating 2000-2005

Date	Title	Author
2000	Excavations at a Roman Extra-Mural Site at Brough on Humber, East Riding of Yorkshire, UK	Hunter-Mann, K., Darling, M.J., Cool, H.E.M
2000	Trial Excavations on Land to the South of Welton Road, Brough	Tibbles, J.
2001a	17 Cave Road, Brough	Duggan, N.
2001b	West of Safeways, Brough	Duggan, N.
2001	Archaeological Evaluation at Common Lane, Brough, East Yorkshire	George, R.
2001	Trial Excavations at The Magistrates Court, Brough	Fraser, J.
2002	12 Elloughton Road, Brough	Duggan, R., Fraser, J.
2002	The Magistrates Court, Brough	Fraser, J.
2004a	An Archaeological Evaluation on Land at 66 Station Road, Brough	Fraser, J.
2004b	An Archaeological Evaluation on Land at 5 The Burrs, Brough	Fraser, J.
2004c	An Archaeological Evaluation of Land at 49 Station Road, Brough	Fraser, J.
2004	Archaeological Observation Investigation and Recording at 51 Station Road, Brough	Jobling, D.J.
2005	Archaeological Observation, Investigation and Recording at 58 Welton Road, Brough	Rawson, D.P.
2005a	Archaeological Observation, Investigation and Recording at 23 Welton Road, Brough	Jobling, D.J.
2005b	Archaeological Observation, Investigation and Recording at The Red Hawk, Welton Road, Brough	Jobling, D.J.

2005c	Archaeological Observation, Investigation and Recording on Land adjacent to 8 Station Road, Brough	Jobling, D.J.
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Perhaps marking one of the largest investigations carried out in the site of Brough outside of the Corder, Wacher and Petuaria Revisited excavations is the project carried out by the York Archaeological Trust in 1994 and published in 2000 as part of a housing development on Welton Road's south side, slightly east of the walled site of Petuaria (Hunter-Mann et al., 2000). This investigation consisted of the excavation of a number of trenches across the site and borrowed theoretical developments from Wacher's previous work to start to place Petuaria within the context of Roman East Yorkshire. The report also provides the research with a clear impression of the general understanding of the site, with the introduction quoting Wacher's theory of a site abandoned in AD 125 and later replaced by a strongly defended settlement sometime during the late third into fourth Century (Hunter-Mann et al., 2000). Also mentioned is the debate regarding Petuaria's status as a *civitas* capital, referring to the supposed lack of civic buildings in the area and the specific naming of the site as a *vicus* in the inscription (RIB 707), despite the same inscription's reference to an *aedile*, a position more commonly associated with further developed settlements such as *civitas* (Hunter-Mann et al., 2000).

The site investigated in this report comprised of four watching brief areas, fifteen evaluation trenches and a further four excavation trenches over the course of the investigation (Figure 20). Through these investigations a variety of evidence was recorded including the remains of five buildings and a substantial amount of pottery and other small finds all of which, as with most investigations into Roman settlements around Brough, provide evidence for a

number of different interpretations. The evidence recorded over the years of this investigation, much like those recorded by Wachter and Corder imply a site that could either be simply a *vicus* attached to a military presence, a *civitas* capital in the region or a port of economic importance in the region (Corder & Richmond, 1938; Wachter, 1969; Hunter-Mann et al., 2000). Perhaps the most significant features recorded in this investigation is the route of the eastern road and the structures laid out alongside it, suggestive of either small houses or shopfronts lining the road.

Evidence recovered from the site shows clear signs of foodstuffs trading or transportation, with the animal bone evidence suggesting that carcasses were butchered offsite and then brought to this site (Hunter-Mann et al., 2000). A few theories for this are produced in the report, with the potential for the site's nature as the *civitas* capital's extra-mural settlement implying the production of meat for Petuaria itself or that it is a site in the *vicus* of the fort and the meat was used for military supplying either in the fort or for transportation to Roman sites along the coast (Hunter-Mann et al., 2000). In addition to this, the discovery of a T-shaped drying kiln during the investigation suggests that this may be a site either importing agricultural produce from the surrounding countryside or a small farmstead itself drying cereals produced at the site (Hunter-Mann, 2000).

Throughout this investigation, further evidence was recovered which supports the potential of the walled settlement to either be a large civilian or military settlement including the agricultural areas along with the remnants of a field system and roadside strip buildings along the road headed east-northeast out of Petuaria (Hunter-Mann et al., 2000). These features are yet again, difficult to identify the nature of and as such could be easily attributed to any of the potential site explanations, which is only exacerbated by the

potential for these sites to have been completely unrelated in either period or nature despite their proximity (Hunter-Mann et al., 2000).

In addition to the structures, 300 small finds were recorded at the site with a further 652 sherds of *terra sigillata*, 86 sherds of mortaria, 48 sherds of Amphorae and 12,818 sherds of local or other production (Hunter-Mann et al., 2000). It is from this density of potentially locally produced wares, with 16.62% identified as Brough wares that the suggestion for local pottery production is virtually confirmed as (Hunter-Mann et al., 2000) the potential for a site of local pottery production not only implies a site of trade but also helps to identify the origin of sherds from a number of other sites in the area, in particular the quantity of wasters recorded from the other side of Welton Road (Steedman, 1991).

Additionally, the identification of *terra sigillata* wares follows the trend established in the findings of Corder and Wachter with a significant majority of these sherds being produced in Lezoux (Hunter-Mann et al., 2000). Perhaps the strangest aspect of this Welton Road site is the lack of substantial coinage from the Roman period with only three recovered. Two coins of Titus under Vespasian were recovered alongside a third coin of Elagabalus, not only do the periods of these coins vary greatly between the first and third centuries, a coin of Elagabalus has only been found twice previously during the Corder investigations and a prior HFA project (Corder & Romans, 1937; Steedman, 1991; Hunter-Mann et al., 2000). Overall, the presence of this extra-mural site in the vicinity of the Roman walled settlement provides evidence for a number of possibilities, and as such is an incredibly useful site in the creation of a new understanding of the nature and development of Petuaria.

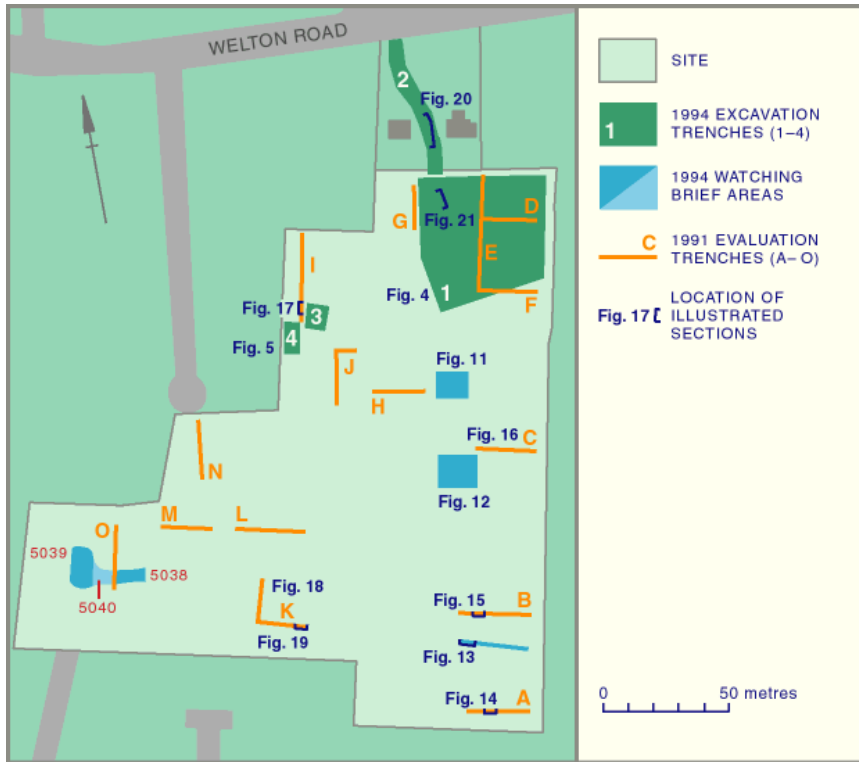


Figure 20 Investigation Area and trenches excavated as part of a Welton Road housing development (Hunter-Mann et al., 2000)

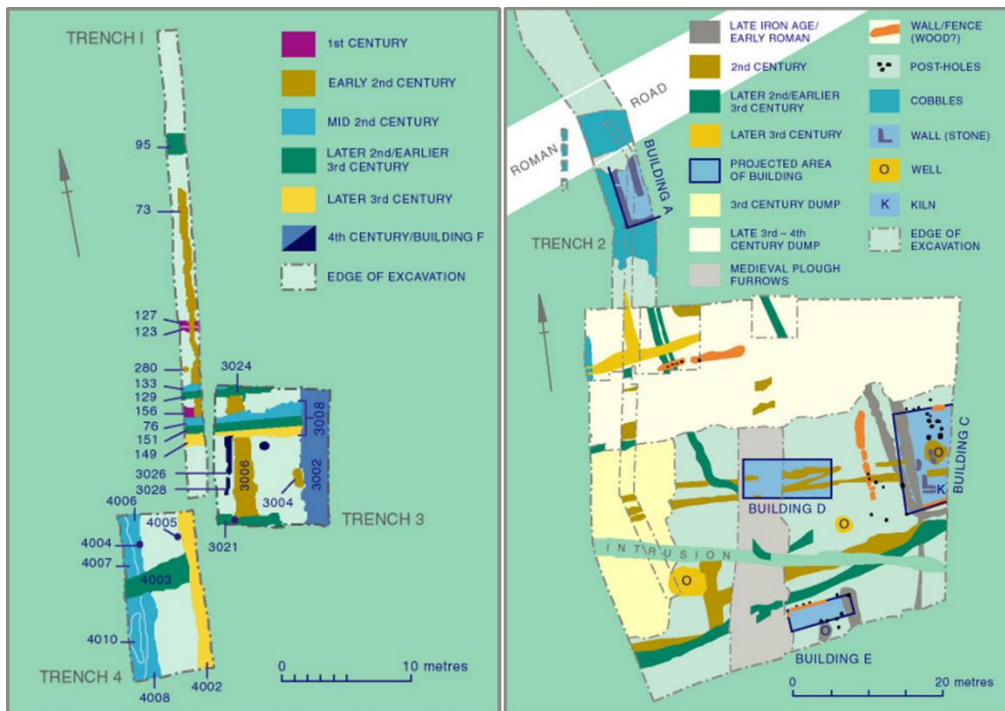


Figure 21 Plan of trenches 1-4 (Hunter-Mann et al., 2000)



Several investigations carried out during developer funded projects in the early 2000s continue the trend of uncovering no material where, over four investigations ranging from watching briefs to excavations, the only Roman material recovered was two sherds of Greyware from topsoil, and archaeological evidence from a medieval to modern phase of occupation (Tibbles, 2000; Duggan, 2001a, 2001b; George, 2001). The most interesting of these investigations is arguably the excavations carried out in 2001 at Common Lane (George, 2001). Throughout the investigation, several trenches were excavated in an area near known sites of archaeological material on Common Lane, with a further recent WYAS excavation taking place a short distance away to the east-southeast (Moon et al., 2020). Despite this, no archaeological evidence of Roman occupation or earlier was recovered, contrasting to the Roman and Iron Age evidence recovered from the nearby WYAS site. However, despite the issue of no evidence of interest to this research being recovered, and no evidence earlier than a possibly medieval phase of occupation, the site as with those sites investigated at Glenrock Park may be seen as acting as a clear limiting point for likely Roman occupation. This is especially the case with the Common Lane site as even with extensive excavations of trenches no substantial material was recovered and as such can be more confidently assessed to have no Roman occupation unlike sites where investigation was limited to surface methods (Tibbles, 1992b, 1994; George, 2001).

In addition to the publication of the Welton Road project carried out by YAT, the period of 2001-2004 also included the production of a number of reports all identifying a further important feature of Roman Brough and highlight the southwestern section of the site as benefitting from further investigation. Over the course of four investigations taking place at the Magistrates Court, 49 and 66 Station Road evidence of Roman foreshore development was recorded suggesting the possibility of a site of trade or import similar to the larger site

excavated on Cave Road by ERAS (Armstrong, 1981; Fraser, 2001, 2002, 2004c, 2004a). structural evidence was recorded at both the Magistrates Court and 49 Station Road sites that indicate a large or prolonged use of the area during the Roman occupation, with stonework from both sites suggesting possible links to the “missing” section of the large Roman wall as recorded by Corder and Wachter.

The Magistrates Court site towards the west of the southern edge of the walled settlement consisted of metalled surfaces recorded from beneath later Medieval features and indicating a possible Roman wharf or area for landing boats (Fraser, 2001). It is possible that this surface, if correctly identified as Roman, provides a clear edge of Roman occupation towards the tidal inlet to the west or the placement of the Brough Haven during the Roman period of occupation. No dateable evidence was recovered during this investigation and as such these metalled surfaces may reasonably relate to any of the known periods of Roman occupation ranging from the initial supply depot through to the possible third or fourth century occupation. The evidence of Roman foreshore activity at the magistrates Court site is further supported by a later investigation which records further wharf evidence through sandstone and limestone remnants as well as a toppled Roman wall (Fraser, 2002). The location of this site in relation to the Brough Haven, the suspected tidal inlet and the Cave Road site suggest the potential for multiple sites of access from the estuary, a harbour and wharf system running the length of the western edge of Roman occupation or that Roman landing areas changed reflecting the changing sands of the Humber estuary and tidal inlet. It is possible that the site recorded at the Magistrates Court is in fact from the earliest period of occupation and the site further north on Cave Road is developed during the later periods as the settlement becomes more established. A supporting argument for this comes from the ceramic records of both sites, with pottery being apparently unrecorded at the Magistrates

Court whereas substantial pottery deposits were recovered from the Cave Road site (Armstrong, 1981; Fraser, 2002).

Two investigations to the east of the Magistrates Court at 49 and 66 Station Road recovered further evidence of the possible Roman foreshore with both sites being roughly within 100m of Wachter's recorded Roman features in Grassdale Park (Fraser, 2004b; 2004a). The closer site to the Magistrates Court, 66 Station Road, consisted of alluvial deposits believed to be from the Roman period of occupation, suggesting that either the Brough Haven or the Humber estuary itself reached as far north as Station Road and subsequently further supporting the possible wharf or landing surfaces recorded at the magistrates Court. The second Station Road site, Number 49, found more evidence with three trenches uncovering Roman deposits and footings believed to relate to the foreshore and defences within this area, the defences most likely belonging to part of the "missing" south-west corner of the walled enclosure. It is worth also noting that these features were dated to the late third century (AD 270-290) and were believed to have replaced timber defences of the early third century. Another possible explanation for the footings is that they belong to a late third or early fourth century rectangular bastion, similar to those recorded by Corder in Bozzes Field (Evans & Atkinson, 2009). This section of the wall was later robbed before the end of the Roman period, and presumably within the fourth century as a coin of Constantine I (330-5) provides the feature with a terminus post quem for the final fill. Interestingly these features were then topped by layers of a levelling clay surface including stonework presumably originating in the destruction of the Roman settlement sometime in the mid fourth century, dated as such by the discovery of a coin of AD 347-8 although suggested to have taken place later in the century (Evans & Atkinson, 2009). This suggests that the construction of this

bastion dates it to the third century and possibly as part of the Saxon Shore-like coastal defences established across Britain.

Curiously an investigation carried out nearby on a site adjacent to 49 Station Road recovered no evidence of Roman occupation despite its proximity to the alluvial deposits recorded previously, this is most likely due to the difference in investigation with one involving excavation and the other a watching brief, however this difference in results does show a clear problem with investigations not being carried out to the fullest extent due to various limitations (Jobling, 2004). Furthermore, an additional site excavated at 51 Station Road in 2002, again by Jim Fraser for Humber Field Archaeology, uncovered further alluvial deposits to the southwest of the assumed line of Roman defences. Unlike other sites at 49 and 66 Station Road, as well as the magistrates Court a short distance away, no presence of Roman activity was recorded at the site suggesting that the alluvial deposits present here are as a result of erosion following the Roman period and prior to the regressing of water levels and possible land reclamation efforts (Evans & Atkinson, 2009).

Further significant evidence of the Roman occupation was recorded in an investigation of 5 The Burrs, in which a single trench provided evidence for a sequence of Roman deposits and cut features. These features comprise of a ditch and deposits possibly related to the initial temporary camp and the late first to early second century auxiliary fort predating the civilian settlement's development (Fraser, 2004b). Overlying these were a series of levelling layers, floors and a hearth presumably associated to a building constructed next to one of the Roman streets as recorded by Wachter at the Brough House Site (Wacher, 1969). The later floors were also found to be associated with a substantial masonry wall foundation which had been subsequently robbed before being sealed by a layer of dark earth in the early to

mid-fourth century with no further activity following this feature (Fraser, 2004b). The evidence recovered from this site follows suite with other evidence recorded in the area, particularly the Petuaria ReVisited excavation to the southeast, by showing signs of repeated developments, robbing, and overlaying throughout the Roman period (Halkon & Lyall, 2021a, 2021b) This is potentially in alignment with Wachter's interpretation of the chronology but regardless, clearly shows multiple distinct periods of occupation within the period of the late first to late third-early fourth centuries. Similarly, an investigation carried out at 23 Welton Road recovered Romano-British wall footings with a sherd of second to early third century greyware recorded in context suggesting the wall to be of a similar or slightly later period alongside known third-fourth century evidence recorded nearby (Jobling, 2005). The site at 23 Welton Road itself is near to both possible walls and defences constructed during the Roman period and as such may related to the fort's defences as they existed following the construction of the stage and prior to the repurposing or developments of the late third century (Jobling, 2005a).

Ultimately, as is the case with the periods of investigation following PPG16 there are a further four investigations with little to no archaeological evidence recorded taking place at 12 Elloughton Road, 58 Welton Road, 8 Station Road and the Red Hawk (Duggen and Fraser, 2002; Rawson, 2005; Jobling, 2005c, 2005b). Of these sites the only archaeological material recorded was a small assemblage of non-contextual Romano-British pottery at 12 Elloughton Road, with the investigations at 8 Station Road and 58 Welton Road both being strange for their lack of evidence despite their proximity to sites of archaeological interest.

#### **4.1.7 Recent Investigations 2006-2020**

Table 8 Publications on or discussing *Petuaria* dating 2006-2020

Year	Title	Author
2006	Archaeological Observation Investigation and Recording at Land north of Centurion Way Brough	Jobling, D.J.
2006	Archaeological Observation, Investigation and Recording at 37 Welton Road, Brough	Rawson, D.P.
2006	Archaeological Observation, Investigation and Recording at Waltham House, 26 The Burrs, Brough 37	Rawson, D.P.
2006	Archaeological Observation, Investigation and Recording at Land to the north of Centurion Way, Brough	Jobling, D.J. , Rawson, D.P.
2006	Archaeological Observation, Investigation and Recording on Land Adjacent to 8 Station Road, Brough	Jobling, D.J.
2007	Archaeological Observation, Investigation and Recording at 92 and 94 Welton Road, Brough	Jobling, D.J.
2007	Watching Brief at 40 Glenrock Park Road, Brough	Rawson, D.P.
2009	An archaeological evaluation at Lavender House, Welton Road, Brough	Adamson, N. G.
2014	Three Recent Excavations in Yorkshire by AOC Archaeology “Brough Relief Road, East Riding of Yorkshire”	Pollington, M., Potten, S.
2016	Brough Relief Road, Brough, East Riding of Yorkshire. Archaeological Strip, Map and Sample Excavation. AOC Archaeology Project No. 51222	Potten, S.
2020	Iron Age and Roman Settlement at Brough South, East Riding of Yorkshire	Moon, K., Richardson, J., Wrathmell, S.

The 2006-2020 period features yet more developer funded investigations in and around the town, alongside some key mentions in wider textbooks such as “An Imperial Possession: Britain in the Roman Empire” and “The Parisi” (Mattingly, 2006; Halkon, 2013). This period also includes the some of the site’s most comprehensive investigations since the YAT Welton Road report with the 2020 publication of the work by Moon, Richardson, Wrathmell and associates in “Iron Age and Roman Settlement at Brough South, East Riding of Yorkshire” as well as the production of interim reports from the ongoing Petuaria ReVisited project in and around the Burrs playing field (Halkon & Lyall, 2021a, 2021b, 2023, forthcoming). Of the archaeological investigations carried out by developer-funded units in this period only five recorded any archaeological evidence with no features or archaeological evidence recorded at sites north of Centurion Way, 26 The Burrs, 37 Welton Road, and 8 Station Road (Jobling, 2006; Rawson, 2006a, 2006b; Jobling and Rawson, 2006). This is particularly interesting when regarding the location of these sites, with the investigation at Waltham House (26 The Burrs) and 37 Welton Road both lying near known Roman sites and within a short distance from either the early Roman fort or the later walled enclosure development (Fraser, 2004b). Of the remaining reports to have recorded archaeological evidence the features predominantly comprise of Romano-British surfaces and boundary ditches, further providing evidence for the expansion of occupation in the area and the potential development of the site from *vicus* to a possible *civitas*. The following sites cover areas of further interest both to the north and south of the known walled settlement, serving to further fill gaps in the overall coverage of archaeological investigations in Brough. The investigations carried out at 92-94 Welton Road and 40 Glenrock Park both recovered only small amounts of Roman evidence, with the surfaces recorded at 92-94 Welton Road being significantly truncated by later medieval and post-medieval features while 40 Glenrock Park only produced a single

sherd of Romano-British pottery (Jobling, 2007; Rawson, 2007). Glenrock Park continues to be an area of some interest with most investigations recovering no evidence until the single sherd of pottery recovered during the 2007 watching brief, it is possible therefore that this sherd may be either from a feature not yet investigated or is circumstantial and out of context in the area of the watching brief.

Following these investigations, a 2009 excavation carried out by HFA took place at Lavender House, Welton Road, lying just to the north of the suspected route of the eastern Roman road leaving Petuaria by Corder's east gate. A useful site due to its location on the northern side of Welton Road, the trenches excavated at the Lavender House site uncovered a small number of features and artefacts dating to different periods of Roman occupation. In the first trench a feature of mid-late Romano-British occupation truncated an earlier feature which was therefore believed to be a first or second century Roman feature; however, this trench recovered no archaeological material so a certain date could not be attributed. The second trench however uncovered a Roman floor surface that was dated to be of third or mid-fourth century origin due to the pottery recovered in situ (Adamson, 2009, 23). This surface was theorised at the time to be an eastern road leading out of the site of Petuaria lying to the southwest of Lavender House however this would follow a different line to the road's original hypothesis and so this surface was instead attributed to being either a secondary track or yard surface (Adamson, 2009,23). This site is theorised to have been a farmyard, possibly acting as one of the production points for the settlement to the southwest and is presumed to have been abandoned at a similar point to the larger settlement. Adamson also suggests an early-mid fourth century occupation on the site which is more in keeping with evidence found in the wider record and suggests the site continued



to have some civilian occupation contrary to some of Wachter's failed *civitas* suggestion (Wacher, 1969; 1995)

This period of investigation also includes one of the only archaeological investigations of note to be carried out significantly further south than the walled settlement at an area towards the outskirts of modern Brough. A site measuring approximately 1.08 hectares in area was investigated over a two-month period in 2017 by members of WYAS. This site was located towards the south of the Leeds-Hull trainline through Brough and west of the former airfield with Pool Beck marking the eastern boundary of the site (Moon et al., 2020). This settlement is therefore approximately 1.3km away from the proposed south-eastern edge of the Petuaria fortifications as suggested by Corder and implied by his excavation of bastion four in 1934, and approximately 1.4km from the potential site of the Flavian landing point prior to Roman development at Brough Haven (Corder, 1934; 1937). This suggests that this Iron Age and Roman settlement is potentially part of the larger site of the *vicus* surrounding Petuaria, possibly forming one of the outskirt developments like those seen on Welton and Cave Road outside of the more built-up centralised area of the site closer to the Burrs Playing Field (Steedman, 1991; Tibbles, 1992; Jobling, 2005; 2007; Adamson, 2009). Of the archaeological evidence uncovered during this investigation, only some features relate to a Roman use of the site with those being trackways and boundary ditches, themselves with probable pre-Roman origins (Moon et al., 2020, 5). In addition to these features, a small collection of pottery sherds was recovered from the site comprising of a number of unidentified late Iron Age or early Roman sherds, a few shale-gritted local sherds believed to have been produced between the first and second centuries AD and a *terra sigillata* dish fragment dated to AD 70-110. Much like most of the investigations carried out across the Brough area a small amount of Roman era brick and tile fragments were recovered from the

site but seemingly unrelated to any features in the area, possibly originating from the supposed Roman trackways as a waste product of transit across the site (Moon et al., 2020, 13-18). Within this report there is also prior works referenced from the Brough Relief Road project taking place in 2014 on a site between this Iron Age settlement and the walled area of Petuaria (Pollington & Potten, 2014; Potten, 2016). The subsequent open-area excavation revealed intense activity during the second century AD which probably extended into the first half of the third century. While first or early second-century activity might have been indicated, no pre-Roman remains were noted. The archaeology encountered highlighted boundaries and enclosures but no definitive evidence of settlement although high status Roman artefacts such as *terra sigillata*, mortaria and amphorae as well as a copper alloy bar and vessel glass suggest a settlement close by (Potten, 2016).

#### 4.1.8 Petuaria ReVisited

*Table 9 Literature discussing Petuaria produced in conjunction with the Petuaria ReVisited excavations*

Year	Title	Author
2021	Petuaria ReVisited: Looking for a Lost Roman Theatre. Interim Report on the 2020 Excavation	Halkon, P. & Lyall, J.
2021	Petuaria ReVisited: Looking For a Lost Roman Theatre. Interim Report on the 2021 Excavation	Halkon, P. & Lyall, J.
2023	Petuaria ReVisited: Interim Report on the 2022 Excavations	Halkon, P. & Lyall, J.
<i>forthcoming</i>	Petuaria ReVisited: Interim Report on the 2023 Excavations	Halkon, P. & Lyall, J.

Over the course of this PhD research period four seasons of excavations have been carried out by the Petuaria ReVisited community group, directed by Peter Halkon and James Lyall. These investigations, as is implied by the titles of the first two publications, sought to find the eponymous stage of Petuaria’s namegiving inscription. These initial excavations of 2020-

2021 focussed on the western edge of the Burrs Playing Field, near a site of prior investigation by Corder, and a short distance east from Wachter’s Manor House investigation (Corder, 1935; Wacher, 1969; Halkon & Lyall, 2021a, 2021b). Trench 1 (Figure 22), located within the scheduled area of Petuaria as defined by Historic England, extends across the centre of the supposed “d-shaped” enclosure as identified by the GPR survey carried out by David Staveley, and interpreted to be the dimensions or layout of a possible theatre or its related *cavea* (Figure 23, Figure 24).



Figure 22 Map of Petuaria ReVisited trenches 2020-2023

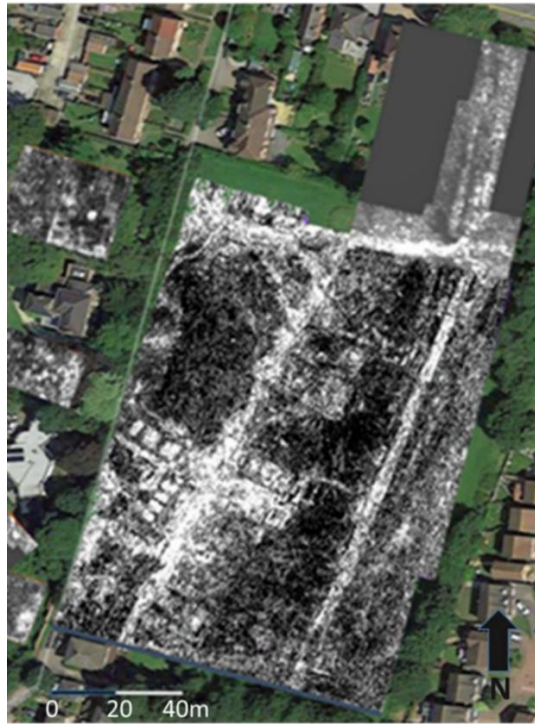


Figure 23 GPR Survey of the Burrs Playing Field, carried out by David Staveley across 2018-2019 (Halkon & Lyall, 2021a)

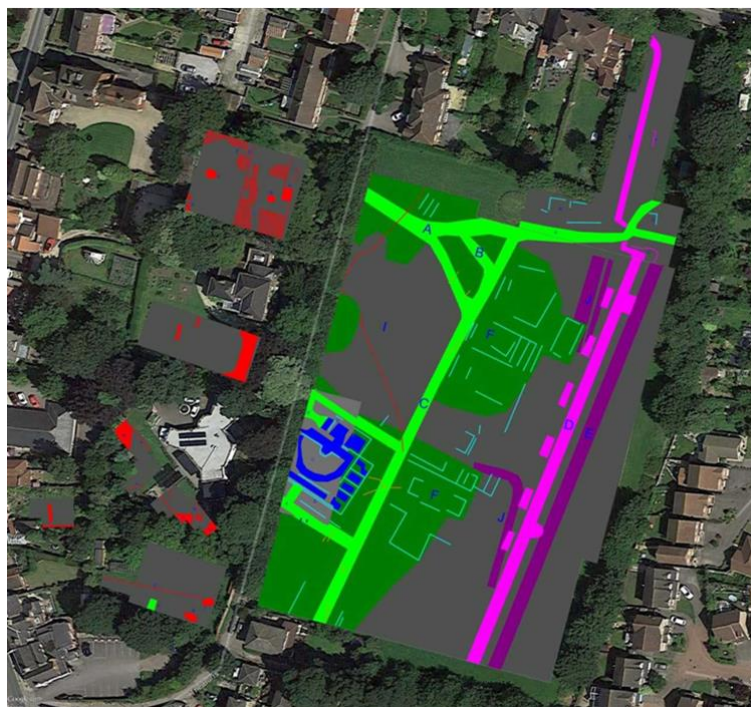


Figure 24 Highlighted interpretation of Staveley's GPR survey by Staveley, Halkon, and Lyall

Over the two seasons of excavations carried out at trench 1, significant quantities of material were recovered indicating a domestic site of multiple periods of occupations, particularly into the later periods of the Roman occupation of the region (Halkon & Lyall, 2021a; 2021b).

Despite not resulting in the discovery of Petuaria's eponymous theatre, the d-shaped feature appears to be a gravel path or *opus signinum* surface outside a larger courtyarded building, possibly sharing some similarities to structures found at similar forts across the country in Chapter 6 (Halkon & Lyall, 2021b).

Other features recorded in trench 1 appears to indicate a later period domicile with higher status features, such as painted wall plaster and a hypocaust, along with a spread of charcoal material possibly in relation to some similar feature recorded by Corder, and dated to a later third century period, possibly during the site's redevelopments or occupation during the crises of the third century as discussed in Chapter 6 (Corder & Romans, 1937; Halkon & Lyall, 2021b). Specific small finds and smaller features recorded at this trench include significant quantities of ceramic and oyster shell, likely related to use of the Humber Estuary or the Walling Fen inlet to the west, alongside a selection of metal finds such as tweezers and a fob-dangler (Figure 25).



*Figure 25 Metal tweezers and fob-dangler as recorded from trench 1 (Halkon & Lyall, 2021b)*

The second season of excavation in 2021 also included the opening of further trenches to the south and north of the Burrs Playing Field, which were intended to record the surrounding defences of the walled area including the defensive ditches as recorded by



Corder (trenches 2-4). The trenches to the northeast and south of the site (trench 2-3) proved problematic, with the northeast trench being largely disturbed by 20<sup>th</sup> century intrusions including a large brick structure, and the southern trench intruded by a sewage pipe and land drain (Halkon & Lyall, 2021b). Despite modern disturbances, both trenches seemed to record the features they were expected to, with trench 3 at the northeast recording the edge of a Roman era ditch, and the interpretation of trench 2 being that the sewage pipe was likely laid in the Roman ditch.

The third trench opened in 2021 continued to be excavated over the following two seasons in 2022 and 2023, and recorded a number of key features relating to the present interpretation of the site. These included earlier period ramparts, the Antonine era walls and herringbone footings, and the later period bastions (Figure 26, Figure 47).



*Figure 26 Corder's Antonine herringbone footings (L) and Petuaria ReVisited's herringbone footings (Corder & Richmond, 1942; Halkon & Lyall, 2023)*

Due to these features Petuaria ReVisited's trench 4 has proven the most interesting area of investigation over the project, not only recording the various stages of development and redevelopment as first suggested by Corder some ninety years earlier, but also providing the project with a number of small finds such as a ring, a strap fitting, and a large quantity of stamped Samian (Halkon & Lyall, 2023).

Further trenches opened in 2022 and 2023 to the east of Corder's supposed wall and eastern gate intended to record the eastward Roman road (Halkon & Lyall, 2022; *forthcoming*). Trench 5, opened in 2022 and continued in 2023, had to reach a significant depth before Roman material began to appear due to the heavy deposition of modern detritus on the site, sharing this issue with trenches 2 and 6. Despite this, in the 2023 season waterlogged material was able to be recovered and sent away for professional analysis however the results of this have not yet been published. Further material recorded in trench 5 includes fragments of Roman and Romano-British ceramics and the possible cut of a roadside ditch, although the location of this feature in the area of excavatable land made it difficult to confirm or extend, although plans for the 2024 season will attempt to excavate the feature from the other side of the obstruction.

Trench 6, opened in 2023, comprised of a small trench at the foot of a garden bordering onto the Burrs Playing Field. The location of the site was intended to record the road itself heading east out of the walled settlement, attempting to either prove or disprove Corder's theorised lay of the road exiting his eastern gate at a sharp angle, as is discussed earlier in this chapter. Eventually the trench recorded Roman material at a substantial depth due to further modern intrusions and appeared as though the beginnings of a road surface had been found, although this has yet to be written up or published (Halkon & Lyall, *forthcoming*). Overall the Petuaria ReVisited investigations taken place between 2020 and 2023 produced substantial quantities of material, mostly ceramic and oyster shell, with some quantities of metal finds and coins. Alongside these, a number of features previously recorded by Corder were found in further extents such as the defences and possibly the road exiting the settlement's eastern gate. Similarly the site excavated in trench 1 was likely related to structures found by Corder to the west of the playing field. The material and

features recorded during these investigations further illustrate the longevity of the site, material in trench 1 primarily dating to the later phases of occupation, while also reinforcing the stages of defensive development as seen at trench 4 and the addition of a small bastion on the large stone wall (Corder & Richmond, 1942; Halkon & Lyall, 2021a; 2021b; 2023).

## **4.2 Summary**

Over the course of exploring of this evidence it has become apparent that the Roman era occupation of the site extends far beyond the boundaries of sites excavated by Corder and Wachter around the Burrs Playing Field and to the west, instead extending substantial distances both north and east of this central area. As shown by the data recorded over the past century of investigations the Roman occupation outside of the walled settlement extends along both Cave and Welton roads in close alignment to the Roman roads present in the archaeological record, along with some evidence for a harbour-like use of the Brough Haven to the west as well as the civilian developments of the likely *vicus* to the east and north of the walled site. In addition to these sites of Roman occupation and development, there are also a number of sites showing both pre-Roman and Romano-British occupation in the ceramic record further supporting the theory that the site of Petuaria was likely developed from a pre-existing settlement, probably linked to Winteringham or South Ferriby to the south, or Redcliff and North Ferriby on the north bank.

## **4.3 Structural Evidence**

Structural evidence is perhaps the least commonly excavated evidence in Brough, with the main evidence for the Roman fort and walled settlement still found in the initial Corder investigations and Wachter's further work in the mid-20<sup>th</sup> century. However, what structural evidence is recorded in the other investigations provides the research with a great deal of



information as to the extent and nature of the site, with structures excavated from both outside and inside of the previously determined walled enclosure showing further varied periods of occupation and development. Perhaps the most interesting of this evidence is that of the larger structures along Cave Road, the foreshore, quayside, as well as the possible farmstead and building with yards for workshop space (Steedman, 1991; Mackey, 1997; Ketch, 2001; Fraser, 2002; Adamson, 2009). The existence of such structural evidence relating to either a quay or foreshore provides further credence to the theories of Petuaria acting as a harbour of some kind for the Roman Empire in northern Britain, possibly intended to supply settlements such as York, Aldborough, Lincoln, and Catterick. This would also support the arguments that the walled settlement or earlier forts could have been related to the *Classis Britannica* and as such housed a naval detachment alongside the fort in the harbour to the west. It is also possible that any naval involvement at the site could be its use as a defensive base from which vessels could patrol the North Sea or at least the Holderness Coast and Humber, a role later partially taken up by the signal stations built in the later fourth century. In fact, this possible replacement with signal stations could relate to the potential silting of the Brough Haven towards the end of the Roman occupation as it would be difficult to continue to keep a naval presence on the Humber without the ready use of such a harbour.

In addition to this possible naval link, evidence for the maritime use of the site is provided through the grey literature reports produced in the years since the last significant publication, that of Wachter 1969, and as such can be argued to have changed large amounts of the interpretation of the site. For example, the recording of a quay structure during excavations at the magistrate's court provides solid proof of some form of maritime development at the site and suggests the potential for the site to have at some point

featured a harbour at the sheltered western edge utilising the natural haven (Fraser, 2001, 2002). It is possible therefore that the existence of further harbour and waterfront structures may be recorded along the western extremity, including those recorded at the Cave Road project carried out by ERAS. This may in turn suggest that the reason for Petuaria's internal layout not following a traditional structure is due to the site's use as a depot, harbour, or trading point possibly even as a staging ground for goods to be transferred to vessels with shallower drafts to contend with the Trent and Ouse to the west. Furthermore, this harbourfront layout to the west may explain the layout of the possible east gate as recorded by Wachter, suggesting a smaller entrance to the fortified walls with the harbour in such close proximity.

This potential trade use of the site can also be seen in the possible drying building as excavated by Corder on the Burrs Playing Field. Alongside this the quantity of imported ceramic wares, especially the Greek style *kantharos* suggests a site of cross-channel import. This may go so far as to explain the layout of civil settlements along the road north to Stamford Bridge in particular. Aside from the potential of maritime use of the site, as highlighted through some of the excavated structures the civilian aspect of the site outside of the walls likely the *vicus* as named in the theatre inscription has continued to develop throughout the investigations carried out at Brough. Structural evidence has been recorded for some distance north and east, with a few smaller cases of pre-Roman settlement recorded towards the south. This evidence provides a clearer picture of how far the occupation would have spread at Petuaria, quickly outgrowing the previous estimations set by the known walled settlement.

Despite being the least commonly recorded evidence throughout archaeological investigations at Brough, the structural evidence that has been excavated provides an idea for the potential scale of the site outside of the walled settlement, showing a site much larger than may be expected with Roman occupations extending throughout the area of modern Brough. The evidence also indicates the economic potential of the site with possible storefronts, warehouses, drying storerooms, and a harbour all suggesting a substantial presence of trade at the site. This also helps provide the site some much needed context for its perceived role within the wider Roman occupation of the region. If Brough was used at some point as a harbour settlement it would not only provide economic benefits to the local area, particularly the villa sites to the north, but also provide York with a site of import within a reasonable distance from the settlement by way of the Ouse. This can be seen also in the gathering point aspect of Stamford Bridge to the north via RR2e, suggesting that shipments of goods would travel north to Stamford Bridge before either being taken west to York or northeast to Malton, Staxton, Elmswell or other Roman sites in the north of the region.

Perhaps the most informative structural evidence recorded by the developer-led investigations is the supposed bastion footing recorded by HFA (Evans & Atkinson, 2009). This is not only a further example of the several bastions, both rectangular and rounded, discovered around the walls of Petuaria but is also one of the only ones to suggest a firm period of manufacture and destruction. Through the evidence presented it appears as though this bastion was initially constructed to replace early third century timber defences prior to a levelling layer after it's robbing out sometime in the mid fourth century (Evans & Atkinson, 2009). This evidence is crucial in attempting to understand the phasing of

Petuarria's defences as well as indicating the potential for the site's relationship with third century events, such as the Saxon Shore forts, the Gallic Empire, or Carausius' Revolt.

#### 4.4 Ceramics

The ceramic evidence recovered from Brough provides, much like the coinage, an overall image of the length of occupation seen at the site with recorded examples ranging from pre-Roman Iron Age sherds through to 4<sup>th</sup> Century colour coated and black burnished wares.

Ceramics are also often some of the more unreliably placed finds recorded throughout these investigations, with several cases of an individual or small number of sherds being recovered from a site. In this instance, is the site dated to the sherds recorded or are they simply debris from another site nearby?. Often the sherds themselves provide little further information other than the type of ware they are as non-diagnostic sherds are most commonly found in these investigations.

However certain ceramics can provide further insight into the people occupying Brough rather than the site itself, with cooking and storage vessels all indicating the diet and lifestyle present in Petuarria. One of the most unique examples of ceramic evidence recorded at Brough indicating the life of the occupants is that of the previously mentioned *kantharos* vessel, a presumably Roman ceramic derivation of a Classical Mediterranean metal drinking vessel (Steedman, 1991). This object remains one of if not the only example of its type found in the region and was found in a ditch fill alongside thousands of other sherds which almost entirely consisted of fine table wares (Steedman, 1991, 27). This context as well as the rarity of the *kantharos* can be seen to imply a presence of wealth or affluence, or at least place the ditch in proximity to a site of some importance. Similarly, the recording of amphorae sherds

throughout the spread of occupation implies Roman import of goods particularly in amphorae produced in Spain as is common among Roman sites. Further imported wares, particularly German White Wares and other possible Rhineland vessels further suggests the presence of international trade at Petuaria and is discussed further in following chapters.

The types of ceramic recorded at Brough also further illustrates the length of occupation through different periods with evidence of Roman, Romano-British and local wares from the first to fourth centuries present across the site. Most commonly the ceramics recorded at Brough from the first century are *terra sigillata* ware sherds with several examples of maker's marks indicating where they were produced. A significant number of the *terra sigillata* sherds with identifiable stamps are marked from Lezoux as well as the wider production region of Central Gaul, with a number of these examples recorded over the course of Corder's excavations (Corder & Romans, 1938). The existence of early period *terra sigillata* in the context of the site is in keeping with the Romans' first arrival in the late first century and begins a nearly continuous presence of Romano-British ceramic types found in the archaeological record. Further ceramic evidence is considered in Chapter 5 following the participation of Brough residents to share their own finds.

#### **4.5 Coins**

Aside from ceramic material, coins make up much of the archaeological evidence recorded through these investigations which not only provides the research with somewhat of an understanding of the nature of the site's occupation, but also some key dateable periods of use and development. For example, the coinage recorded by Corder in the final interim report published in 1938 shows a substantial number of coins attributed to fourth century

rulers and imagery with 85 of the 258 coins originating from AD 300-383 (Corder & Romans, 1938, Appendix I). This evidence alone provides the research with a clear argument for occupation well into the fourth century, showing the site's possible occupation in some way or another for almost the entire length of Roman occupation of Britain. Comparatively, the coinage recorded during the Wachter investigation shows a far less significant number of fourth century examples, also coming from a much smaller dataset with only forty-six coins recorded fully during the course of the investigations (Wacher, 1969; Appendix I). The difference in counts between these two investigations alone prompts questions about the nature of the material recovered from the site of Petuaria such as whether the sites of Corder's investigations were simply occupied for longer than Wachter's sites of interest to the west, north, and south or whether the methods by which coins were recorded and identified may vary so much that misattribution creates a considerable margin for error. Additionally, some critique may be levelled at the recorded numbers over the course of the Corder investigations regarding the evidence recorded by Corder from local parties and not during the actual excavations. At least eighty-five of the coins recorded by Corder were produced from local sources and collections and, despite the likelihood of an accurate verification from Corder and his team, there is a slight possibility that these examples may have originated from sites outside of Brough itself. Some coins produced by local sources for Corder that suggest a reason for caution include one coin of Alexander the Great and a small selection of later period coins that are either only produced by local sources and prior recordings (Allen, 1841; Corder, 1934). Further discussion of Petuaria's coinage can be found in Chapter 6 where the density of third century coins is considered in relation to possible periods of occupation and development at the site, alongside the coinage list found in Appendix I.

## 4.6 Conclusion

As discussed throughout, one of the most significant issues with relying on data provided by prior investigations, particularly those in the developer funded period, is the limitations that may have been in place during the investigation. Such issues include understaffing, the size of the study area, the length of the investigation and the level of investigation either allowed or needed due to external factors such as the scheduled monument area or the nature of the project itself. These limitations become apparent when exploring the level at which data and evidence is researched to in the investigations with some examples unable to date or identify the period of features or finds. Aside from these factors however, the prior investigations as detailed in this chapter provide valuable insight into the extent and nature of Roman development and provide further evidence for the longevity of the site's occupation through the archaeological record.

In terms of data produced and recorded a number of key questions persist that will be explored over the following chapters, both in comparison to sites across the country as well as in contextualising the site within both the Humber region and eastern Yorkshire. These largely comprise of Petuaria's status as a *civitas*, the later stage military developments, the site's role within an estuarine context, and the economic and military presence Petuaria holds within the surrounding area.

Of the initial research questions for this thesis, one has already been answered regarding the scale of the site. Although a somewhat restrictive study area was applied to the research for this chapter, a clear density of occupation exists beyond the surroundings of the walled site and extending throughout the boundaries of modern Brough-on-Humber, suggesting the Roman occupation of Brough was expansive and plausibly quite prosperous.

# Chapter 5 Community Research and Engagement

## 5.1 Introduction

As mentioned in chapters 1 and 2, a further key element of this research is the involvement and engagement of Brough residents in data collecting. The aim of this was to gather a greater, broader sense of the archaeological material present at Brough in the hopes of further developing the understanding of both Petuaria's extent and use. As discussed in Chapter 2, the process by which residents were invited to participate consisted of operating a "pop-up" museum during the Petuaria ReVisited excavations and providing them with the opportunity to either come and share their material with the researcher in person or to provide images and descriptions via email in the following months, both information sheet and consent forms are attached in Appendix II. Participant engagement took place in years 2021 and 2022 of the Petuaria ReVisited excavations and a total number of ten residents agreed to take part in the project, a further seven of which went on to share evidence with the researcher. Although not making a particularly significant number of participants compared to Brough's total population, the variety of evidence and even the variety of participant provides an interesting insight into furthering Roman Brough.

## 5.2 Aims of Community Research and Engagement

Aside from recording data held in personal collections by Brough residents, a further focus of this work was to engage with them at various events, most commonly the Petuaria ReVisited excavations, and share with them the previous and developing theories of the site beneath their homes. This was framed as a way of not only disseminating information from difficult



to access sources such as historical texts like Horsley and Poulson, but also to be able to contextualise what was being excavated within the wider archaeological record, both as published and unpublished literature. Furthermore, a driving force behind the wider Petuaria ReVisited project is to create a sense of community identity around the site of Petuaria within modern Brough and as such this outreach sought to offer an aspect of that in the sharing of information with residents.

In addition to sharing information with the residents of Brough, an aspect of this engagement was an attempt to use local information to further develop an understanding of the site. Although not recorded in a formal capacity, the information shared helped to develop a further community relationship with the archaeology of the site, in particular through discussing certain features that were reported from residents' memories. An important part of any archaeological engagement or public communication is the interpretation and understanding of the stories and information presented to the researcher. This is no less the case in Brough where the community image of Petuaria is already strong throughout a number of generations and is prevalent in the public image of the town.

### **5.3 Data Recorded in Community Research**

As previously mentioned, of the ten interested participants among the Brough community, seven produced material for recording. This material came from a variety of locations and methods around Brough and its surroundings ranging from casual discoveries when planting in the garden, to metal detecting, clearing debris, or a concerted effort put into excavating areas on their property. As per the consent form, participants were anonymised and will only have the general location of their property discussed in its relation to the wider Roman

context of Brough. When referring to specific participants in image captions, the text, and tables they have been assigned a number from 1 to 7, with Participants 2 and 3 referring to two separate sites recorded by a single resident. A margin for error has been considered for a few participants given their own confusion over where or when something was found, and in further cases such as Participants 5, 6 and 7 have recorded information from a spread of sites across the entirety of Brough meaning that only Participants 1-4 have reliable locations (Figure 27).



*Figure 27 General findspots for Participants 1-4 in relation to the extent of the walled area.*

Of the seven participants a significant quantity of material was produced, the largest of which came from a property on Welton Road close to the possible northern annexe as recorded by ERAS in 1980, and north of the northern wall of the larger enclosure (Halkon, 1980; Armstrong, 1981). Further examples came from Tremayne Avenue and Welton Road to

the northeast and west respectively of the structure recorded at Lavender House, itself interpreted to be related to a farmstead or suburban villa complex (Adamson, 2009). A further density of sherds is recorded further to the east parallel to the suspected line of the northern defences, near previous sites of investigation along Welton Road and The Burrs. The remaining evidence is scattered across Brough and the surrounding area. This is either due to the participant collecting evidence from multiple sites or losing track of the specific location in which material was found. As such this further evidence cannot be used to determine any spatial relationship with any known Roman features in Brough but will instead inform on the wider context, such as the longevity of the coinage record present at the site.

*Table 10 Showing Participants and their respective count of sherds and coins as shown to the researcher. Further tesserae are reported, albeit not confirmed, by Participant 5 which is discussed in Chapter 5. (\*these are not the complete extent of material shown or recorded, rather an estimation due to time limitations).*

Participant	Pottery Sherd (shown)	Coins (shown)	Tesserae	Total
1	235*	1	1	237
2	167	0	0	167
3	210	0	0	210
4	7	0	0	7
5	50*	0	0	50*
6	0	7	0	7
7	82*	3	0	85

Of the material observed the majority comprise of pottery sherds, with multiple participants reporting considerable numbers of sherds and in the cases of Participants 1, 5, and 7 the pottery recovered by the resident was too large a quantity to effectively record in the time given (Table 10). Coins are a far less common occurrence in the privately recorded information at Brough with only 11 shown to the researcher and many in an unidentifiable

state, such as several of those recorded by Participant 6 due to the state in which they were preserved.

Of the coins found in a suitable state for identification efforts have been made by either the resident or the researcher to identify them, with the examples from Participants 1 and 7 all allowing for a degree of certainty in their attribution (Figure 28-31).



*Figure 28 Coin of Postumus recorded by Participant 7, note the barbarous radiate crown common in the usurpers of the third century.*



*Figure 29 Coin of Constantine recorded by Participant 7.*



*Figure 30 Coin of Tetricus I, recorded in 1975 by Participant 7, featuring a further barbarous radiate.*



*Figure 31 Coin of Constantine (330-5) identified by researcher, recorded by Participant 1.*

Of the coins recorded and identified, all belong to the third and fourth century produced under either the Gallic Empire or Constantine between 259 and 335. The dating of these seems to continue the pattern seen in other recorded coinages at the site of a clear weighting towards the third and fourth centuries, again particularly under the Gallic Empire and the House of Constantine (Appendix I). The preponderance of issues from the House of Constantine was expected, due to Constantine I's monetary reforms, but it may also relate to possible redevelopment at this time in the early theories of the defensive additions at Petuaria (Bagnall & Bransbourg, 2019; Corder & Richmond, 1942). Although these coins have been considered in Appendix I there are still a further three coins of Postumus, thirty coins

of Tetricus I and fifty-one coins attributable Constantine that have been recorded in other investigations showing a further density of coins from these periods. The single coin of Constantine (Figure 31) recorded by Participant 1 is an example of a commemorative *URBS ROMA*, minted in Rome to celebrate the founding of Constantinople. An interesting aspect of this coin is the apparent depiction of hair beneath the helmet, particularly at the nape of the neck, suggesting that it is of a later production under the sons of Constantine rather than an earlier mint (Bruun, 1966, 283). This find suggests a possible *terminus post quem* to the use of features at the property of Participant 1, however this is impossible to determine without a stratigraphic recording of both the feature and the coin. Interestingly a further nine examples of *URBS ROMA* coins are recorded by Corder from the site in addition to the remaining forty-three coins attributed to Constantine specifically (Appendix I).

In addition to the coins, the ceramics recorded by these participants informs further on the periods of occupation and use seen at Petuaria. Of the sherds shown to the researcher, in excess of 750 across all participants, a significant proportion were *terra sigillata* examples particularly from Participant 1 located towards the possible annexe under Petuaria Close. This density to the northern part of the walled section is somewhat in keeping with previous theories of that area being an annexe or even the early period fort itself for the first or second occupation under the Flavian or Hadrianic-Antonine dynasties following the establishment of a supply depot. The lack of coinage evidence from this site, excepting the single coin of Constantine (Figure 31) provides little in the way of numismatic context for this *terra sigillata* deposit. In addition to this the nature by which this material was recorded, over the course of many years as soil was disturbed for various gardening projects, makes it difficult to date this site to an earlier period solely due to the existence of notable quantities of *terra sigillata* sherds. Interestingly the most common examples of *terra sigillata* recorded

during Corder's investigations all date to earlier periods from Claudian to Antonine, suggesting that should these sherds prove contemporary it would support the earlier occupation theories. Alternatively, it is possible the *terra sigillata* sherds from Participant 1 relate instead to its use as fine table wares into the second and third centuries under Eastern Gaulish production, however without further assessment of the material this is difficult to prove. A single piece of stamped *terra sigillata* was recorded however the stamp is as of yet to be identified and does not appear to match any of the other examples as recorded in previous excavations by Corder, almost all of which are identified to be of early production. Further *terra sigillata* was recorded by Participant 2 consisting of six *terra sigillata* or *terra sigillata*-like sherds with at least eleven more sherds recorded by Participant 7 (Figure 32). Participant 2's location between the northern wall of the main site and towards the possible early period annexe provides further possible credence to the early occupation of the site occurring on or north of Welton Road, either as an early fort on a separate alignment to the later defences or as the aforementioned annexe during the construction of a ramparted enclosure. Further evidence recorded by Participant 2 shows a lack of later period wares such as Crambeck and Dalesware implying this site is of use in the early phases of occupation and does not continue into the latter periods. In this there is a margin of uncertainty due to the pottery recorded by description by the Participant and as such no identifications outside of *terra sigillata* sherds has been made. Interestingly when considering this record in context with the findings of Participant 1 to the northwest alongside further investigations to the west and north of Participant 2's property there is some argument to be made for the site being of an early occupation, possibly in context with the annexe to the north, or even that this area of Brough lies within the boundaries of the Flavian fort itself. The report of a Roman era gravel surface only a short distance to the



west, deemed to be either a road or deposition following early phase construction, possibly further supports this and suggests either the presence of a road parallel to the later rampart and wall or that the ephemerality of this gravel feature suggests it is possibly a trackway within the boundaries of the Flavian fort rather than an external road surface (Atkinson, 1994).



*Figure 32 Examples of terra sigillata ware pottery recorded by Participant 7.*

The material recorded by Participant 1 provides further interest in the quantity of amphorae sherds recovered, with one almost complete example restored by the Participant. Although not a particularly rare discovery across Roman Britain the inclusion of an almost complete example does shed further light on the site suggesting again that this may be within the extent of either early period fort or annexe or that Petuaria did in fact serve as a trading and transportation hub for the rest of Yorkshire. A recorded sherd of amphorae type Dressel 20 (Figure 33), the most common example recorded in the western empire, provides little in the way of dating evidence due to the form's use from the late first to mid third centuries



however further shows the potential for Petuaria's role in the wider Romano-British landscape.



Figure 33 Example of Dressel 20 type amphorae sherd recorded by Participant 1.

One possible explanation that can be suggested for the site of Participant 1's property is that it is a midden for the fort or town. This is possibly shown in the extensive material recovered from the site dating to a number of periods, with aforementioned sherds of *terra sigillata* found in close proximity to Huntcliff and Dalesware, suggesting a possible date of the third or fourth century (Laing, 2003). There is an almost complete chronology shown in this archaeological record of Roman material, chiefly ceramics, spanning from what could be the first arrival through until the eventual retreat of the military and abandonment of the site prior to the occupation of the region by Angle settlers. As such it would seem possible the site would be that of a midden rather than of an active military or suburban occupation. The location of the site, near the suspected annexe north of the walled settlement and the site itself sloping towards a stream, also further supports this theory somewhat with most material found unstratified towards the summit of the slope and some in the bed of the stream suggesting a period of dumping and subsidence over time however without excavating Participant 1's property this is largely conjecture. Additionally, the nature of the

site's unstratified material may also be the result of modern construction in and around the site, as opposed to a subsiding midden deposition.



*Figure 34 A selection of sherds from Participant 1; clockwise from top left: Nene Valley colour coated, North Cave Parisian ware, rusticated ware, and a possible sherd of Iron Age material.*



*Figure 35 examples of the quantities of pottery recorded by Participant 1 including examples of imported, colour coated, grey, and black burnished wares.*

A further possible explanation for the quantities of material recorded by this Participant comes from a geophysical survey carried out during the 2023 Petuaria ReVisited excavations. Although significantly truncated by the modern placement of a water main pipe through the garden some structural evidence appears in the survey, suggested to potentially be the western wall of a building now located beneath the property itself. It is possible that this structure is a further suburban site, as seen some five hundred metres east at the Lavender House investigation (Adamson, 2009). Alternatively, this structure may be the western extent of the suspected annexe at Petuaria Close, however without further investigations to determine the extent of either feature would be required, something impossible now due to the level of development in the area. Interestingly an investigation carried out close to the property of Participant 1 some time prior to their moving to the area found further evidence of the same extent of material. In this instance pottery sherds dating from the first to the

fourth century were recovered in context with building materials in addition to an *As* of Vespasian (Frere et al., 1986).

It is possible therefore that, should Participant 1's property and the property investigated in 1985 share a context, the structural material recorded in both sites is part of a structure used in some capacity for the duration of the Roman presence at Brough. Due to the interpretation of other buildings across the site it is possible that this occupation may be part of the early phase of buildings, as recorded by Corder to be Hadrianic-Antonine and used by Wacher to dispute the settlement's status as a *civitas* capital (Corder & Richmond, 1942; Wacher, 1995). Furthermore, it is then possible that this early external structure to the walled settlement was later repurposed either as a later building or as a midden following the robbing of its structural stone. The contrasting paucity of structural evidence and density of multiple periods of pottery further suggest a possible midden, with the recording of coins of Vespasian and Constantine found in such close proximity in an area of otherwise sterile coinage. Alternatively, it is possible the structural evidence present here is similar to that found elsewhere across Brough and would have comprised of timber buildings, however the confirmation of these is all but impossible without excavation.

Aside from the coins of Postumus, Tetricus, and Constantine and the sherds of *terra sigillata*, Participant 7 also provided information for a select few other types of pottery recorded during their time living in Brough. This included colour coated wares and Throlam ware now identified as Holme-on-Spalding Moor ware, indicating a further presence in both the latter period of occupation as well as a further prevalence for locally made ceramics in use at the site. Interestingly in addition to ceramics and coins Participant 7 also presented a small assemblage of identified Roman glass (Figure 36), the only Participants of this research to

present any at the time of documentation. From this assemblage there is little information to discern other than that it comprises of at least three different bottles and a number of other glass items. It is possible that these were from a residential property or a military building at the site, however due to the present lack of area identification this is impossible to determine.



*Figure 36 Assemblage of Roman glass as recorded and identified by Participant 7.*

In comparison to the evidence of Participant 1 being potentially related to an unknown structure, the evidence provided by Participant 4 may relate to a known site of some significance. The aforementioned site recorded at Lavender House, now known as Lola's House Residential Care Home, was identified by HFA to be either a farmstead or part of a suburban villa complex through structural evidence of a yard surface and some trace remnants of structural features (Adamson, 2009). Furthermore, the site was attributed to a mid to late Roman occupation between the mid second and fourth centuries, determined by the pottery assemblage recorded although this evidence was not fully comprehensive (Adamson, 2009, 13). The dateable sherds all drew results from the late second to fourth



centuries with notable examples being that of an amphorae sherd, *terra sigillata*, Dalesware, and Nene Valley ware. None of these diagnostic types are matched in the record presented by Participant 4, instead with their recorded ceramics being primarily of greyware with a single fragment of miscellaneous tile (Figure 37). It is possible some of the material recorded by Participant 4 is of an imported white German ware, as seen in Participant 1's record, however due to the nature and timeframe in which this evidence was recorded this is in no way a confirmed identification.



Figure 37 Selection of finds shared with researcher by Participant 4.

Similarly close to the Lola's House site, except towards the west of the excavated features, a locally reported find provides an interesting point in regards to the use of publicly recorded evidence. Due to the selection of material, described by Participant 5 as being a large quantity of *tesserae*, further investigation of this site would prove extremely useful. However, despite this no evidence has been physically or even visually shared with either the researcher or the Petuaria ReVisited project. At this point it is worth considering how far you may take someone's word, especially when dealing with what would prove a useful

dataset being, if proven, the largest quantity of *tesserae* recorded at the entire site of Petuaria. Indeed, one of the pitfalls faced by the use of publicly recorded information is the lack of overall verification, with a further two of the recorded participants in this research submitting written reports with no visual data. The reports produced by Participants 2 and 3, as previously stated to be the same resident however recording at two separate sites, are rigorous in nature and include extensive detail when describing the found sherds and other objects. Despite this there is still a margin for error with a number of the sherds identified to be simply of Romano-British origin, with only sherds of greyware and *terra sigillata* defined separately from this. Of course, it is unreasonable to expect a comprehensive pottery assemblage analysis from members of the public, however it does still require an element of hesitancy when trying to interpret what has been recorded. Furthermore, this is the case in regards to stratigraphic sequence when considering the entire selection of participants, with only the records of Participants 2 and 3 including any element of recorded depths or stratigraphy.

## **5.5 Oral Histories**

In addition to images and descriptions of finds in personal possession further light was shed on the site of Brough through less quantifiable information such as stories of Roman features. Although impossible to verify without further excavations, often needing to be carried out in locations no longer accessible, there is still some value to these stories and remembered histories. One such example is the previously mentioned wall or footings uncovered while digging a drainage ditch some years ago in a garden to the southwest of the Burrs Playing Field. Although no confirmed evidence was presented to accompany the story,

the discussion of depth, material and alignment of the exposed footing can be seen to match the alignment of footings discovered elsewhere, such as those recorded by Wachter to the north and Humber Field Archaeology to the east (Wachter, 1969; Fraser, 2004).

A further common story is that of the mosaic within the Burrs Playing Field. This has been mentioned by a number of residents almost as an urban legend of the town, with many reporting to have found handfuls of *tesserae* while playing on the field. One issue with this is the dating and location of such a hypothetical feature. The way it is described the mosaic lay exposed, or at least close to the surface, in recent living memory. This is complicated somewhat by Corder's first investigation now taking place ninety years ago, and as such is most likely prior to the living memory of most, if not all, current residents. Furthermore, had a mosaic been known or even visible at the time of Corder's visit it is a rather extreme oversight for him to neither excavate it nor even so much as comment on it. In addition to this the reported placement of such a mosaic brings some questions up, namely the common placement of it in the bottom right corner of the Burrs Playing Field, towards the southeast corner of the wall as recorded in Grassdale Park (Wachter, 1969). It is possible that a mosaic could be found here, as buildings recorded nearby by Corder, Wachter, and the Petuaria ReVisited excavation. All of these buildings featured painted wall plaster and have been dated to sometime in the third century and suggest some economic presence therefore such a mosaic is possible. However, if the site is considered to be of more of a militaristic purpose, the placement of a mosaic towards the southeast corner and not clearly defined as being internal to any of the larger buildings is somewhat problematic.

There are two possible explanations for this in addition to the idea of their simply being a mosaic somewhere on or near the Burrs Playing Field. One is that the memories of mosaics



and *tesserae* are instead associated with the two mosaics excavated and exposed at Brantingham villa to the north by only a short distance. Further covered in the previous contextualisation chapter, the Brantingham mosaics would fit the time period for living memory having been discovered in 1942, reburied and then re-exposed to be lifted in 1948 where one was stolen (Slack, 1951; Ling, 1991). It is likely the return to expose and lift the mosaics and record the structural evidence of the villa itself would have caused some commotion amongst the neighbouring towns, as evidenced by further recollections of the laying of the rubble protective layer on the Burrs Playing Field as a prominent event in the town's memory. A further possible explanation is tied to the theory of a Parisian mosaic school as identified by similarities in construction in mosaics at Brantingham, Winterton, and Horkstow (Ling, 1997). It is suggested that, should such a school exist, it would likely be based at Petuaria with it being the largest identified site of Roman construction in Parisi territory with a possibly primary civilian occupation. Should such a workshop exist at Petuaria, and if the theory of the walls acting as an enclosed *civitas*, it is likely that such a site would produce vast quantities of waste *tesserae* and other mosaic adjacent materials. This is especially likely when considering the scale of the mosaics affiliated to the Parisian school, all eight of which are regarded as large, requiring the production of vast quantities of *tesserae*. Furthermore, the dating of these villas, all recorded as constructed in the fourth century, would provide further context for Petuaria's developments and use, something considered in the previous chapter.

An additional piece of information from the public could help to further answer this query in a bag of *tesserae* allegedly recovered from the southern end of Elloughton Road, near the substantial site recorded at Lola's House (Adamson, 2009). Although unverified by the researcher the existence of a significant quantity of *tesserae* found in close proximity to a

structure identified as either a farmstead or suburban villa does further suggest the possible presence of a mosaic within Brough, an aspect that would prove extremely enlightening should further evidence be secured and recorded. Due to the quantity, described as a 'bag full', and the location of the find site as being near to other sites of known occupation along Welton Road it is possible to suggest that, should they exist, they either relate to a building or are possibly trace evidence for the suspected mosaic workshop of the Parisian style (Smith, 1984). Due to this material not being shown to the researcher however it is a dangerous theory to posit, and as such will require a full verification of the *tesserae* before it is considered within the archaeological record of Petuaria, despite providing further possible explanation for the story of the Brough mosaic.

Other such 'folk tales' include the discoveries of both a Roman well and Roman arch (Figure 38) in gardens, however at least the latter of these have been identified by the researcher as of modern construction, most likely following the excavations of John Wachter to the west of the structure's location. The argument for this arch not being of Roman construction is due to its existence both above, or at least penetrating, the modern topsoil by a significant extent in addition to the method of construction using modern concrete. It is possible however that this arch, and the well reported from another garden, although not Roman in origin are Roman in material through the repurposing of Roman stone to build them. A final folk tale of interest is that of the Roman road leading east by northeast out of the east gate located on the Burrs Playing Field and excavated by Corder. Initial reports of this road were not in keeping with usually recorded Roman roads as pointed out by Mike Haken of the Roman Roads Research Association. This was pointed out due to the description of the "road" being one of large stone slabs, more in common with a modern or pre-modern urban pavement. Instead during the most recent season of excavations carried out by Petuaria

Revisited a more likely candidate for the Roman road was uncovered in a nearby garden, slightly north of the reported "road" (Halkon & Lyall, *forthcoming*). In this light it is possible to argue that this paved surface, having only had a small amount exposed, is potentially instead related to a building surface, yard, or avenue constructed outside the walled area but meeting the path of the Roman road.



*Figure 38 the purported "Roman" arch located in the grounds of a large house running between the Burrs Playing Field and The Burrs. Note not only modern brickwork completing the feature but the presence of modern mortar throughout, despite this there is possibly some argument that the stone itself is of Roman cut as the site lies within the boundary of the walled enclosure with any structure at this point likely to be truncated by the digging of foundations for the house.*

The final story of which there is perhaps the least possible evidence, is the existence of a Roman road crossing the Humber estuary. This is an unlikely feature due to two main reasons, one being the difficulty, breadth, and uncertainty presented by the Humber and the other being Roman military practice when crossing large rivers. The building of a road, or rather bridge, across such a breadth of water would be an exceptionally difficult feat in the best circumstances, with the Humber presenting a number of further unique challenges to

earn its place as one of the most treacherous waterways in the world. Not only would the theoretical Roman bridge need to span the width of the estuary, a distance of over two miles when considering Roman water levels, but also negotiate both the changing sandbanks and bed of the estuary some six and a half metres deep on average by modern measurement (Edwards & Winn, 2003; Humber Nature Partnership). Of course, it is likely the estuary acted differently during the Roman occupation, suggested by the use and navigation of it both as a crossing from Winterton but also as a possible naval base for the northeast suggesting the nature of the Humber's sandbanks would pose less of an issue during the Roman period. Furthermore there is recorded instances of the Humber estuary being walkable, a fact which residents claiming the Roman road across the Humber use to support their argument (Campbell, 2018). However, this would still not prove inviting for the Roman construction of a roadway, causeway, or bridge. Additionally, the construction of such large bridges is not an aspect of the recorded Roman strategy when crossing large rivers, instead preferring the construction of pontoon bridges, as written by Vegetius (Book 3.7), or crossing the river in vessels with the suggestion of wading only if the river is shallow enough (Vegetius & Clarke, 1767).

However, as with the mosaic, arch, and well there is some possible explanations to this theory. Given the report of some residents that they themselves have seen the Roman road leading into the Humber it is possible that instead they have seen some man-made structure projecting into the Humber, such as the Roman road on South Ferriby's foreshore.

Furthermore, it is possible that this could be of Roman origin and be the remnants of a jetty relating to the maritime or naval occupation of the site. Despite the unlikely nature of this, not only is the shoreline vastly different at current from the Roman period but the depth at which Roman material has been found it is unlikely anything would remain at the surface, it

is possible this has again been misconstrued from a different excavated feature. In this case it is possible the stone structures recorded in Wachter's Grassdale sites (1969) or other investigations to the south of the town may be misinterpreted to be a road surface. Additionally it is possible the uncovering of a metalled surface and foreshore at the Magistrates Court could again be misinterpreted to be a track towards the estuary (Fraser, 2001).

Although not as comprehensive as physical evidence the use of such public information, no matter how fanciful or incorrect, is still a crucial part in developing the community engagement aspect of this research. If future efforts can be made to both incorporate and understand this local information on a wider scale it could prove fruitful for both the archaeological record as well as the public identity and association with the site of Petuaria.

## **5.6 Findings**

Although the number of participants in this research only comprise of a small percentage of the total population of Brough, a few key features begin to appear through their shared data. Firstly, the extent of pottery types shown across the six participants to record evidence shows a clear span of periods, ranging from potentially Iron Age evidence through to later Roman occupation and even potentially some medieval evidence. Densities within these records include *terra sigillata* and colour coated wares in addition to the greyware, a fabric that is to be expected at such a site as this. The density of colour coated wares found by Participants 1 and 7 in particular, with some scope for evidence in Participants' 2 and 3 records however this is as of yet unverified, suggest a mid-second to fourth century occupation. Additionally, it is important to consider any potential bias in these recorded

finds, with the argument being that coloured ceramics are more aesthetically interesting and are easier to identify as an item of interest than grey or darker wares.

It appears as though, alongside a few of the investigated features to the north of Welton Road, there is the suggestion of a number of sites along the road primarily belonging to a second or third century period. It is possible that these structures would relate to the Antonine occupation of the site, and as such form part of the civil population at the time of the theatre inscription of Marcus Ulpius Januarius. Indeed, in searching for evidence of a civil occupation it may prove more successful to consider a *vicus*-like settlement pattern external to the walled area, rather than within as is seen in many *civitates* capitals.

Furthermore, this suggestion of numerous external occupations is supported by the archaeological record from developer-led investigations, particularly along Welton Road, and as such continue to emphasise the importance of investigations and further evidence recording along that road.

## **5.7 Issues Faced in Community Research and Engagement**

The majority of issues faced in this aspect of research and engagement were the previously mentioned COVID-19 pandemic and the subsequent restrictions along with resident participation numbers. It is also important to note the potential bias shown in this evidence, with an absence of Participants from certain areas of Brough not denoting a lack of evidence therewithin. Of the eight participants to produce evidence only five of which were able to provide a location for this evidence, with the other three participants collecting evidence from a number of sites across the town. Although not an issue in regard to part of the purpose of this outreach, as although unattributed the evidence still provides insight into

the archaeological record of the town as a whole, it has made finding supporting evidence for this material difficult. In addition to this a further issue was encountered regarding the amount of time in which the material could be recorded and documented. In the case of Participant 1's significant collection this was negated through multiple visits to the property and bringing a scale and black background for photographs. However, of the remaining participants only the evidence presented by Participants 4 and 5 were able to be photographed by the researcher, both without time to allow for proper identification as this interaction took place on site during the Petuaria ReVisited excavations.

Furthermore, there is the possibility of a confirmation bias present within this material that would skew the interpretation of this data in relation to both specific periods as well as the wider Roman occupation. In the cases of several Participants the finds shared were described as the 'best' pieces, with the aforementioned time pressure not allowing for a comprehensive recording of the remaining material. In the case of Participant 7, who has some substantial archaeological experience, these were selected based on their diagnostic properties and the state in which they were recorded. For example, all of the presented images from Participant 7 were photographed by themselves and show the finds in a clear and clean state. In contrast the records made by Participant 6 were photographed while in the field having been freshly discovered, as such the coins are often muddy and are unable to be identified at present, although may prove useful in future endeavours as with most material recorded by the Portable Antiquities Scheme. However, it is important to counter this potential bias with the reality that this material is collected often haphazardly by local residents with, excepting the case of Participant 7, little prior archaeological experience. As such this bias of finds in of itself shows that the residents of Brough are already aware of

what makes for an interesting or useful find, often with presented objects being diagnostic without the participant necessarily understanding the archaeological need for this.

Finally, there is a clear presence of archaeological material throughout the properties of Brough, with many residents collecting it beyond those who agreed to take part in this research. It is of the opinion of the researcher that a key focus for ongoing investigations within the town should be to incorporate the publicly collected data as, in addition to the developer led projects ongoing throughout the town, this will be a primary source for new archaeological information on the site of Petuaria.



## Chapter 6 Comparisons to other Sites

### 6.1 Introduction

As a major part of this research is to find Petuaria's place within Roman Britain, some element of contextualisation and comparison to other sites is important for forming final conclusions on the nature of the site itself. To create a collection of sites with which to compare Petuaria five factors were used to identify potential candidates for comparable archaeological features. These criteria are as follows: sites developed during the same initial period of expansion under Agricola and the Flavian Dynasty, sites within a similar geographical region, *civitas* capitals, sites with significant third century defensive developments similar to that seen at Petuaria, and finally sites with possible or confirmed ties to naval use and the *Classis Britannica*. The reasoning behind these criteria being used in this research is that they each encapsulate a key aspect of the development, use or occupation of the site of Roman Brough as theorised by previous work and as extrapolated from the pre-existing archaeological record.

The longevity of the site's occupation with finds dating between the late first century through to the mid-late fourth century suggests a place of some significance either economically, politically, or strategically and as such sites with similar longevity, ranging from the late first to fourth century, could help inform the interpretation of use and development at Petuaria. A comparison to other sites occupied to a similar extent may also help to inform on the intramural structure of the fort as large areas of the internal footprint have yet to be other than through the strip trenches of Corder's 1930s investigations (Corder & Richmond,

1942). Additionally, should sites of a comparable 'lifespan' as Petuaria exhibit a similar *vicus/civitas* element it may help to further shed light on the nature of Petuaria in the transition to post-Roman Britain. Alternatively, the site is also believed to have been abandoned for a short period following initial construction phases in the early second century and unlike many other sites occupied over the duration of the Roman conquest Petuaria features no substantial Anglo-Saxon, medieval or post-medieval occupation and development in the archaeological record. Instead, the archaeology of Brough appears surprisingly sterile in the areas investigated by archaeological projects, often with the latest archaeological evidence to be uncovered to be that of Roman origin. This is in part likely due to the development of other settlements in the region during the post-Roman period, as well as the supposed build up of sediment in the haven and into the Walling Fen, most likely making the peninsula upon which Petuaria was developed less attractive than other sites along the Humber or further inland. This can be seen in the development of post-Roman settlements on the north and south banks of the Humber, as well as further inland and along the coast (Richards, 2000; Geake & Kenny, 2000).

Petuaria's origins under the Flavian Dynasty provide the site with a key link to a number of other developments across the Empire, especially within Roman Britain, as it was during this period that Roman forces under Agricola undertook substantial manoeuvres across the country, in particular advancing and developing the frontier in the north of Britain (Tacitus & Mattingly, 2010). This led to a wide scale period of establishing auxiliary forts at important sites along the Romans' route, with at least one hundred and six auxiliary forts established under the Flavian Dynasty (Mazurek, 2008; Wachter, 2017). Many of these sites saw little further development into the second century, often abandoned as forces progressed or consolidated into other nearby forts and settlements, while others show similar periods of

reuse and redevelopment as seen at Petuaria, with the development of extramural settlements often occurring at these reoccupied sites. Throughout comparisons to other Flavian forts, it may be possible to hypothesise that the development of a civilian population external to the walled settlement is what allows a site to continue to exist throughout the centuries and retain a place of importance within the Roman Empire.

Building on the development of an extramural settlement at Brough, despite the theatre inscription naming the site as a *vicus*, multiple arguments exist for the site of Petuaria serving as the *civitas* capital of the Parisi people in East Yorkshire. One of the most common arguments being that of the site's scale and location, along with the lack of any other potential *civitas*-scale sites being discovered within the extent of the Parisi territory.

Furthermore, it is possible that the longevity of developments seen at Petuaria may be in some way attributed to a sustained existence as a *civitas* capital between periods of Roman abandonment, should Wachter's theory of multiple periods of occupation be believed (Wacher, 1969). Therefore, in comparing Petuaria to other known *civitas* settlements particularly those in northern regions such as Aldborough and Carlisle, similar features and developments may become apparent helping to further shed light on certain aspects of Petuaria's development and use. It is also possible that although never contemporarily recorded as a *civitas*, the site functioned as the unofficial capital for the Parisi regardless of the level of Roman involvement with some theories suggesting that the Parisi were non-hostile to the Romans prior to the establishment of a permanent Roman presence in the area.

As the region surrounding Petuaria is arguably one of its defining features as a Roman settlement, sites within a similar landscape would provide a context from which possible

theories of Petuaria's purpose in the region could be drawn. The regional factors that are especially prevalent are the proximity to the Humber estuary, the extent of wetlands to the west and similar water-logged land to the east prior to the draining of the area by the monks of Meaux Abbey in their alterations to the River Hull (Evans, 2017).



*Figure 39 Petuaria's location in relation to the topography of the surrounding region. Petuaria is located at the foot of Welton Wold, with the low ground of the Vale of York beyond the Walling Fen to the west and Holderness to the east.*

In addition to the presence of the Humber, Wallingfen, and eastern marsh, the site is located to the south of Welton Wold upon a large and gently sloping stretch of land between the high ground and the estuary (Figure 39). Although there is the potential for at least one hillfort on the Wold, at Mount Airy Farm, the site has only been investigated through aerial photography and geophysics, with the evidence amounting little more to that of a broad enclosure ditch with a northern entrance (Martin, 2003). Not only do these factors make the plateau upon which Petuaria was developed an easily defensible point, perhaps one of the

main reasons for the existence of a site there, but also a viable location for trade and transportation coming into Roman Britain. In Ptolemy's *Geographica* the area of land north of the Humber, east of Goole and south of Bridlington is referred to as the *Opportunum Sinus* or "Gulf of Advantage", in which several known or possible Roman sites lie such as Faxfleet, Brough, North Ferriby and Skeffling among others which will be explored further in Chapter 7.

The site's proximity to major Roman settlements at York and Lincoln as well as the ease of access from the North Sea makes Petuaria's potential as a focal point of import and export of goods, troops, and civilians an attractive prospect in the landscape. To add to this several investigations have shown the existence of features indicating a natural harbour or wharf in the south-west and western extents of the settlement and as such imply frequent use of the Humber and the now less navigable haven for commerce or transport as discussed in Chapters 4, 7 and 8 (Fraser, 2004). In addition to the economic and political aspects relating to sites located in similar environments, a comparison between these sites may also be able to shed light on the possibility of the supposed naval attachment at Petuaria, and whether estuary sites are commonly used as such bases of operation. Researchers at the University of Reading theorised that the forts and supply depots of the east coast formed a network among themselves, developed and maintained in the late second and third centuries, with ties to both Roman imperial trading as well as the revolt of Carausius (Allen & Fulford, 1999). If Petuaria is regarded as an element of this network a comparison to other sites within this network, as well as the forts of the *Classis Britannica* would shed some light on the potential for Petuaria's use by the navy and whether the changing nature of the Haven and Humber affected the naval use of the site.

Petuarria's potential ties to the conflicts and crises of the third and fourth centuries, whether it is Carausius' Revolt, the Gallic Empire or continental raiding is a relatively recent hypothesis having only been developed and evidenced to a significant extent during the recent Petuarria ReVisited investigations on the Burrs playing field in 2020, 2021 and 2022 as well as in the research carried out on coinage distribution in the region (Ellis & Crowther, 1990; Sitch, 1998; Halkon & Lyall, 2021a, 2021b, 2023, *forthcoming*). This data has expanded upon the findings of previous excavations under Philip Corder where the eastern defences were thought to have had fourth century bastions added, and later corroborated by John Wachter's findings at the western end of the site alongside further examples to the south (Corder & Richmond, 1942; Wachter, 1969; Evans & Atkinson, 2009).

These fortifications when considered alongside the dates of objects recovered from the recent Burrs playing field excavations do suggest a mid-late Romano-British development and are therefore the potential link to a number of significant events taking place into the third and fourth centuries. In addition to the dates provided from evidence recovered from the Burrs playing field, a likely correlation is also suggested by the coins recovered from sites in the town with 84% of the total coins recovered from investigations in Brough dating to the third and fourth centuries, with a further 18% of the total attributed to the rulers of the Gallic Empire (Appendix I). The comparison to sites with involvement and development in these periods, particularly under the reign of the Gallic Empire, provides a point of interest around the repurposing or development upon pre-existing settlements as opposed to the construction of an entirely new fortification.

As discussed by both Corder and Wachter as well as multiple later authors producing reports for developer funded investigations, the site of Petuarria has undergone several different

development and construction periods with the majority of the structural evidence recovered from the Burrs showing the stratigraphy of repeated development. In both Corder and Wachter's investigations structures were found to have also been unfinished and then developed upon in a different alignment to the original foundations, marking not only multiple phases of development but also disruptions to those construction periods (Corder & Richmond, 1942; Wachter, 1969). In this a few cases emerge that compare to multiple of the criteria used in this chapter, with coastal sites often the most common examples of multiple phases of development similar to Petuaria and to a greater extent those occupied by both the Gallic Empire and Carausian forces.

## **6.2 Sites established under Agricola and Flavian Expansion**

During the reigns of the Flavian Dynasty (AD 69-96) a vast number of Roman forts were established across Britain, with a significant concentration of which being in Wales and the north of England most notably in Cumbria, Yorkshire, Scotland, and Northumberland. This is largely attributed to policy at the time, under the governors Cerialis and Agricola and their campaigns throughout the country. Similar to what is seen at Petuaria, these forts' initial construction under the Flavian Dynasty is that of a timber structure reinforced by turf ramparts as a temporary measure to secure a strategic position on what would have been the Roman frontier at the time. Some of the best known and researched forts of Roman Britain appear to have been first established in this period such as Vindolanda (est. AD 85), Luguvalium (est. AD 72), and Vinovia (est. AD 79) which, like Petuaria, feature multiple phases of later development and structural evolution (McCarthy, 2003; Ferris, 2011; Birley & Birley, 2012). However, many of the Flavian auxiliary forts did not receive further developments and in many cases were abandoned following the shifting imperial policies of

the later first and early to mid-second century under the Antonine Dynasty, depending on the needs of the military occupation or campaigns in the region (Maxfield, 1986; Burnham & Davies, 2010). Whether this abandonment was due to a shifting frontier, a lack of need or the development of a larger fort or settlement within the vicinity varies from site to site, with many featuring a similar apparent reason to that of Petuaria with an abandonment of the fort occurring due to the Roman forces advancing further into the territory in question.

Several key aspects are important to recognise about Flavian forts, in particular how they are often a somewhat temporary measure made to secure a key strategic route or area during a phase of advancement into the otherwise occupied territory of local British tribes. This can be seen in their placement within the landscapes of Britain, often at river confluences, on higher ground, or on the lines of subsequent roadways (Burham & Davies, 2010; Burnett, 2022). In addition to this quick nature of construction, Flavian forts are traditionally established and manned by the empire's *auxilia* troops, soldiers not originating from Rome who have likely recently been recruited themselves, which is often recorded in inscriptions found either at the sites themselves or at a nearby settlement, with some examples coming from other non-contemporary records such as Ptolemy's *Geographia*.

A useful source for being able to evaluate the longevity of a site's occupation within this military context, in addition to excavation records, is whether the site appears in the latter produced historical sources such as the *Notitia Dignitatum*, Antonine Itinerary, or the Ravenna Cosmography. All three sources are produced some time after the end of the Flavian Dynasty with the Antonine Itinerary containing records from over two centuries of the Roman occupation of Britain, between AD 107-284, the *Notitia Dignitatum* estimated to be accurate in the western empire at AD 420, while the Ravenna Cosmography is attributed



to a production date of at least three centuries after the Roman occupation of Britain ends (Rivet & Jackson, 1970; Reed, 1978). Arguably the reason for many of the Flavian era sites being referenced in these later sources is due to their continued development or a civilian population occupying the site for the centuries following the Roman military leaving the post. As discussed Petuaria is disputed to have appeared in the Antonine Itinerary alongside the *praetorio* title regarding an official residence at the site (Rivet & Smith, 1979).

Furthermore, Petuaria appears again in some capacity within the *Notitia Dignitatum* in reference to troops stationed to the fort of Derventio at Stamford Bridge as is discussed further in Chapters 7 and 8.

Similarly, the sites of Flavian origin at Chester-le-Street and Caernarfon, Concangis and Segontium respectively, are referenced in these latter works with both featuring phases of military and civil occupations within the archaeological record. Segontium further provides an interesting comparison to Petuaria through its theorised use as an administrative centre for the Roman occupation of north Wales, as well as the site's location at the confluence of the Menai Strait and the Afon Seiont, similar to Petuaria's location on the Humber Estuary and its possible role as a *civitas* capital for the Parisi.

Furthermore, the site of Concangis at Chester-le-Street, referenced in both the *Notitia Dignitatum* and Ravenna Cosmography, appears to comprise of a similar timeline of occupations to that seen in some parts of the Petuaria site, with two initial fort phases in the Flavian and later Antonine periods with signs of redevelopment well into the third century thanks to active stone-mason workshops, and the potential for further fourth century occupation and use (Wilson & Wright, 1970; Rainbird, 1971; Kewley, 1974). Additionally, Chester-le-Street seems to also comprise of a *vicus* surrounding the fort, with Roman finds

spanning an area several times greater than the footprint of the fort itself, however much like Petuaria there is no dateable evidence found in formal excavations that would indicate a continued occupation by the local populace into the fifth century, with the site instead seemingly being turned over for agricultural use until the construction of a Saxon site in 883 following the granting of the site to the Lindisfarne community by Guthred, King of York (Godlove, 2023).

Segontium at Caernarfon was established under Agricola as a way of commanding the Menai Strait and allowing for a secured seizure of the island of Anglesey following an earlier conflict in the region following the initial occupation of Wales in the AD 40s. In AD 60 Roman forces under General Gaius Suetonius Paulinus marched into North Wales in an attempt to quell the warlike Ordovices and storm Anglesey in the hopes of exterminating the Druidic cult that operated in the area and was believed to be influencing the Welsh tribes towards conflict with the Roman occupiers (Nash-Williams, 1969; Burnham & Davies, 2010; Breeze & Guest, 2022). This campaign was ultimately halted due to the Boudiccan Revolt in the east of England causing the Romans to withdraw from the region and Anglesey itself. Following this disrupted and unsuccessful attempt at seizing the island the Ordovices carried out an uprising against the Roman forces stationed in the region to the extent that, on his arrival in Britain, Agricola immediately ordered troops into the region to put an end to these attacks. This followed the successful campaigns under Agricola's predecessor, Frontinus, against other Welsh tribes. Under Agricola the fort of Segontium was developed, both as a way of securing the Roman military presence in the region, as with almost all Flavian forts, but also to gain control of the Menai Strait which ultimately allowed for the successful seizure of Anglesey following a surprise attack from Roman forces in AD 78-79 (Breeze & Guest, 2022).

As with other Flavian era forts, Segontium comprised of an initial timber palisade that was demolished via burning sometime during the reign of Trajan in the early second century before being rebuilt shortly afterwards as a stone-walled fort. Evidence recovered through a number of excavations indicate the site's occupation lasted until well into the fourth century, with the latest coin recorded from the *principia* being of Emperor Gratian (367-383), a longevity similar to the coinage recorded at Petuaria with the latest identifiable coin being that of Magnus Maximus, Gratian's usurper (Appendix I).

A further possible comparison that can be drawn between Segontium and Petuaria is the existence of a large courtyarded building within the walled area. For Segontium this has been identified as a possible *principia* in part due to the discovery of an incomplete bathhouse contemporary to the structure (Wheeler, 1924; Casey, et al., 1993). A similar structure can be seen within the GPR survey carried out at Petuaria, originally thought to be the possible theatre but now, following Petuaria ReVisited excavations in 2020-2021, is now identified be a larger courtyarded building. For the case of the site at Segontium this building has also been theorised to be that of a regionally important office responsible for mineral extraction (Casey et al., 1993).

Similarly, Petuaria and Segontium also hold these large courtyarded buildings in common with Piercebridge (possibly Morbium), South Shields (Arbeia), and several other forts and fortified settlements. Despite interpretations for these buildings varying from site to site and ranging between merchant residences, commander's quarters, and offices, each interpretation can be used to help understand the structure at Petuaria and what its possible purpose is within the context of the wider site. For example, if Petuaria is thought to be a major trading point and harbour in the north of Britain the building may be used as a

harbour office for monitoring and regulating trade in the area and on the Humber, similar to the hypothesised role of Segontium's building. Petuaria's ties to sites along the banks of the Humber, as discussed in Chapter 7, may suggest an administrative office's presence at the site with cargo being monitored or transferred for shipment inland or seaward.

Alternatively, if Petuaria is seen to be a much more militaristic site, a supply depot similar to that of Arbeia, then the courtyarded building is more likely to be that of a *principia* and responsible for the military management of the Humber region. Indeed, as is explored in Chapter 7 it is possible that from a military perspective Petuaria was responsible for the management and command of a large part of eastern Yorkshire and the entirety of the Humber. Furthermore the *Notitia Dignitatum's numerus superventientium Petueriensium* makes reference to a *Praefectus* implying some extent of military leadership within the region.

Unlike some of these courtyarded building Petuaria's building has no recorded bathhouse at present, however there is evidence for a hypocaust within the building as well as painted wall plaster. The wall plaster recorded at Petuaria features a number of colours suggesting a fairly complex design, this can therefore be speculated to show the structure being of some importance with some significant value placed on the decoration of the internal walls.

Another Flavian fort worth considering in comparison to the site at Petuaria is that of Danum at Doncaster, an auxiliary fort developed to the north of the earlier vexillation fort at Rossington Bridge (Buckland et al., 2001; Daniel, 2019). Not only is it a much closer example to Petuaria, some forty-five kilometres by land or navigable via the Humber and Trent onto the River Don, but the site itself is located at the border of Brigantes and Corieltauvi tribes on the River Don and was likely to have been of key strategic importance within the region,

as well as relating to transshipment sites along the Don and Trent feeding from the Humber (Van de Noort, 2004).

The *vicus* that develops at Danum is likely in part due to the site's location at both the border of two cultural groups, allowing for a community of the provincial Corieltauvi to develop, as well as lying on both key routes by land and the river. The site of Danum is referenced several times in the classical geographies as both a site on the River Don in the Ravenna Cosmography and as part of the London – Carlisle and York – London *itineraria* in the Antonine Itinerary (Richmond & Crawford, 1949; Rivet & Jackson, 1970). The site is also noted in the *Notitia Dignitatum* for its garrisoned unit of “*Praefectus equitum Crispianorum*” or the Crispian Auxiliary Cavalry Unit, from which it is possible to infer that Danum retained some significance as a military site due to the recording of such an occupation in a later period record such as the *Notitia* (*Notitia Dignitatum*, xl.20).

Perhaps the most contextually interesting comparison that can be drawn between Danum and Petuaria is that both exist on major roads into the north of England, with both positioned on direct routes from Lincoln to York. The key difference between these two sites in this regard is that Petuaria requires the crossing of the Humber Estuary, a relatively dangerous and difficult route, while instead travelling through Danum circumnavigates the Humber in favour of a likely longer but more reliable route. As such, the roadways recorded in and around Danum appear to date from a variety of periods, with the earliest potentially originating sometime in the mid-first century prior to the development of Danum as a fort under Agricola later in the century (Wilson et al., 1971, 253). It is possible therefore that Danum acted as a precursor, and even possible successor, to Petuaria's status as a fort and settlement on the Lincoln-York route. This comparison to Petuaria is furthered by the

existence of a second fort developed at the site during the Trajan-Hadrianic period following an early second century period of abandonment of the former fort. The Flavian era fort, although largely robbed out and destroyed by later developments and buildings, is thought to have been twice the size of the later fort, itself measuring some 4 ½ acres (1.8ha) in area. It is possible that this secondary fort was constructed at a similar time to the larger fort's construction at Petuaria during the early to mid-second century and for a similar potential reason of establishing more secured and manned routes across the country. This secondary fort also seems to be chronologically contemporary to the second road developed at the site sometime in the second century or later, as dated through early second century ceramic evidence in the lower filling of the road surface indicating a later date of construction (Wilson & Wright, 1970; Wilson et al., 1971).

Interestingly it is unclear as to which fort the recorded unit in the *Notitia Dignitatum* was garrisoned at. Should it be the earlier Flavian fort, the unit's nature as an auxiliary Crispian *equitum* would fit with the auxiliary's role in the construction of this type of fort. However, the existence of the reference in the later produced *Notitia Dignitatum* suggests the possibility that these troops were garrisoned at a later period, likely at the Trajan-Hadrianic fort and possibly occupying the site for a longer period of time. Additionally, the cavalry nature of the unit is somewhat in keeping with the troops stationed at the nearby Rossington Bridge vexillation fort, where it is believed a combined unit of legionnaires and auxiliary cohorts were stationed for quick actions against the Brigantes to the north (Webster, 2019).

Throughout comparing Petuaria to other sites of Flavian forts it becomes apparent that, for a substantial number of them, any later developments don't tend to alter the original

footprint much with the latter stone defences built on top of or parallel to the original earthwork ramparts with a few cases of the latter forts being constructed in a different location entirely. This provides an interesting consideration for Petuaria where the latter defences have been recorded to have a somewhat substantial footprint namely extending from Welton Road to Station Road, and similarly the Ferry Inn or Magistrates Court through to the eastern side of the Burrs playing field and potentially beyond into the gardens of Wrygarth Avenue. In comparison the estimated footprint of the earlier period fort is much smaller, with some estimates at less than half the size of the later footprint. The excavated extents of the defences provide the walled area of Petuaria with an estimated area of some nine to twelve acres (3.6-4.8ha), significantly larger than the second century forts at Danum, Segontium, Arbeia, and Concangis while also being half the size of the Rossington Bridge vexillation fortress and a similar size to the fort at Peircebridge (Figure 40).

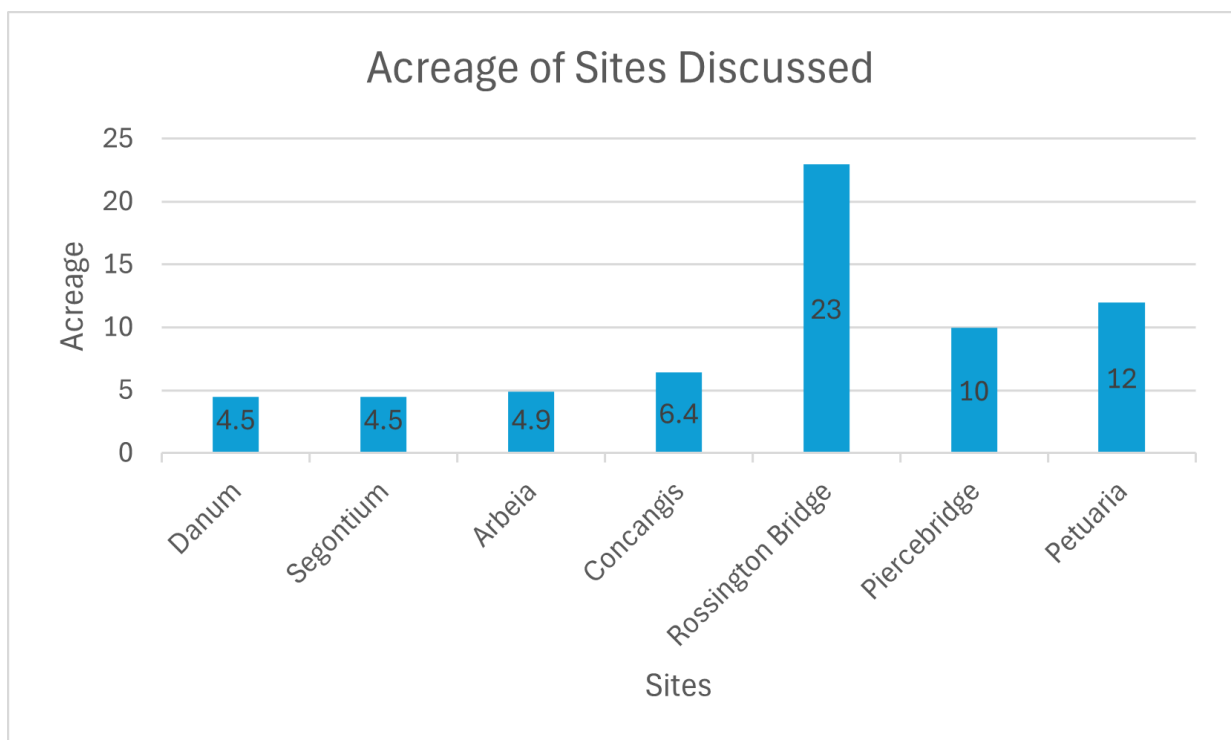


Figure 40 Chart showing the relative acreages of sites discussed in section 6.2. As with other charts in this thesis, where a site is of a potential range of sizes the larger of the extents has been used.

When comparing the scale of Petuaria and Danum's forts in regard to the recorded garrison of troops, it is possible to suggest that the soldiers stationed at Petuaria would have been of a similar type to those at Danum, potentially with a larger group or multiple units. Indeed, it is possible to argue that a fort at this scale housing more than one unit would support the argument of Petuaria's twofold military use, with a naval presence and the later *superventientium* unit, being contemporary to one another however this is a very difficult to prove theory at present and remains largely hypothetical.

Wacher and others have suggested that the fort's initial phase is a much smaller and more traditional "playing card" design in the northern section of the Burrs, with the later stone construction laid upon the north-eastern corner and possibly the north-western corner as well. Interestingly there is no clear indication in either Corder's excavations or the GPR carried out by David Staveley in 2018 to show the southern rampart of an earlier, smaller fort within the Burrs playing field. It is possible that this lack of evidence is either due to the latter Roman redevelopments erasing any sign of a rampart or that the southern extremity of the hypothetical fort is further north, under the gardens of Welton Road and therefore unlikely to have been recorded during an archaeological investigation on the field.

Additionally, more recent excavations tend to follow the outline as suggested by Corder with a larger wall and ditch defensive structure running along the eastern edge of the field, itself sharing earlier ramparts and metalled clay surfaces with earlier stages of development, this is shown in part in the recent Petuaria ReVisited excavations in the north of the Burrs (Corder & Richmond, 1942). With evidence recorded from the vicinity of Petuaria Close it is apparent that there is some military presence to the north of Welton Road, believed to be an annexe to one of the phases of the fort or walled settlement. However, it is possible that this potential annexe is instead related to the Flavian fort and as such the later stone



defences, built either for a fort or a walled settlement, do not follow the layout of the Flavian era defences and may instead be seen as a different construction. In recent excavations part of the line of early defences were excavated, estimated to be of the Hadrianic period due to the discovery of a coin of Hadrian in the sand rampart, with the likely Flavian defences found on the same alignment lower in the stratigraphy (Halkon & Lyall, forthcoming).

One of the current debates among archaeologists excavating in Brough is the true northern extent of the walled area, with Wachter believing it to lie either under or slightly south of Welton Road, yet there is the evidence of the annexe to the north that suggests a possible extended reach of the wall across Welton Road. Unfortunately, most of this theorising is dependent on non-invasive methods and surveying the archaeological record in both developer-funded and residential investigations and therefore until it is possible to carry out a geophysical survey, or acquire permission from the landowners, there is very little possibility of confirming the extent of the wall on the northern side of Welton Road. Unfortunately, there is no recorded evidence from the construction of the road due to it being a historic route itself and therefore its construction took place prior to the widespread adoption of recording practices when excavating archaeological material. This is further proven by the excavation of a modern brick structure in the north-eastern corner of the Burrs Playing Field in line with one of the Roman defensive ditches. This structure was not recorded on any prior map and so shows the potential for a lack of comprehensive recording available for structures built or excavated during the modern period. Similarly, little to nothing has been recorded from properties immediately to the north or south of Welton Road opposite the Burrs playing field and known lie of the Roman walls. It is possible to infer from Wachter's excavations and the 2023 Petuaria ReVisited excavations that the northern

extent of the wall does lie to the south of the road, however until further investigations can be carried out between those two points it is impossible to tell for certain.

### **6.3 Regionally similar sites alongside large rivers, estuaries, and wetlands**

Petuaria's place on the Humber estuary is perhaps one of the most important features of the site, not only providing a reason for the site's existence but also providing a point of trade, transport, and the potential for naval involvement from the *Classis Britannica*. The use of the estuary as well as the haven and wetlands would provide reasonable grounds on which to attribute some form of natural harbour or waterfront to the site, a theory further supported by the evidence recovered from excavations along the southern and eastern extremities of the site at Cave Road, The Magistrates Court, and Station Road (Armstrong, 1977-78; Fraser, 2004b; 2004c). The lifespan of the site may also be attributed somewhat to the estuary and haven, given that one possible theory for the site's abandonment involves the haven and the waterfront built there becoming no longer usable due to changing water levels. The changing nature of the Humber's sands and sediment is still a common issue in the estuary to through to modern day, with it being regarded as one of the most dangerous and difficult to navigate waterways in the world (Woodward, 2000; Edwards & Winn, 2003). Therefore, through comparing the site to others in the country with a similar relationship to an estuary or large tidal waterway some further light may be shed on the nature of Petuaria and potential features to expect from the site moving forward, as well as how closely the sites may be in similarity to one another.

Furthermore, due to Petuaria's location and the evidence recovered from sites at the Magistrate's Court it is likely that any maritime development seen at the site would be closer

in appearance and function to a harbour than a port as suggested by the presence of what is likely to be a waterfront with a quay as opposed to the larger terminus of a port. The likelihood of a harbour development is further supported by the location of the quay on the western side of the Roman occupation area as opposed to projecting south into the estuary itself, implying the use of the Brough haven as a sheltered harbour to the west of Petuaria itself. There is further potential for more harbour-like structures to be found along the Roman era bank of the Humber as alluvial deposits are recorded through to Station Road, however no structures have been recorded as part of any archaeological investigations in that area (Fraser, 2002, 2004b, 2004a).

The maritime history of Roman Britain is a facet of the empire that has been explored in several regions throughout Britain, with clearly identified sites of Roman development along the east and southern coasts throughout the period of occupation (Pearson, 2003; Fields, 2006; Rippon, 2008). However, perhaps the most significant issue facing this study is the erosion-based scarcity of maritime sites meaning that much of the archaeological evidence for Roman maritime use is often found at sites further inland such as those on estuaries, bays, and rivers or those that are found on higher ground such as the previously mentioned signal stations and Saxon Shore forts (Collingwood, 1925; Hornsby & Laverick, 1932; Bell, 1998; Pearson, 2003; Fields, 2006). As such the number of known and investigated Roman harbours and ports are somewhat limited, with only a handful being the subject of prolonged or in-depth investigations. This also means that the overall layout and structures present at such sites is not as well established as those found in towns or forts, the internal layouts of which Petuaria already appears to be not conforming to (Corder & Richmond, 1942). This limited number of known Roman harbour sites however will be able to provide some semblance of comparison to Petuaria through both the types of building excavated as

well as the material culture present, of which Petuaria currently is a site of no identified maritime artefacts.

Examples of known Roman harbours in Britain are given in the Roman section of a recently created research framework *A Maritime Archaeological Research Agenda for England* where discussion is framed around the similarities and differences possibly present between coastal, estuarine, and riverine sites and how investigative methods can be employed to assess them depending on their location. Sites of known Roman maritime development in an estuarine context are as follows; London, Chester, and Sudbrook with the most similar site to Petuaria being that of Sudbrook as it is believed to have been a garrison established to defend a ferry crossing point in close proximity to a site with coinage spanning three centuries of Roman occupation (Walsh et al., 2021). The extent of the coinage is similar to that found at Petuaria, AD 54-356, as well as the potentially existent route of a ferry crossing point between Winteringham and Brough, or more likely South Ferriby and Redcliff. For the cases of many of the estuarine sites, apart from the sites attributed to Saxon Shore developments at Richborough, Reculver, Caister and Burgh, a reliance on a natural harbour appears common as is the case with Sudbrook's camp, utilising a sea cliff as part of its defences with Lympne providing further evidence of a natural harbour (Philp, 1982).

Despite the technicality of Petuaria lying on an estuary, much like with the sites of London and Chester, an argument can be made that the settlement closer resembles that of a riverine site with developments more likely extending along the length of a foreshore on a bank with links to the opposite side, rather than existing purely as a single point in the landscape. Furthermore, the evidence of harbours and waterfronts on estuarine and coastal sites are so frequently lost to erosion that riverine sites form the only basis of comparison

apart from the substantial sites at Dover and Portchester. Therefore the documented sites of riverine foreshores and wharfs should be considered in addition to those on estuaries, with significant examples being found at sites such as Lincoln and Worcester along with sites along the Thames, Severn, Tyne, and Trent (Walsh et al., 2021).

It is also important to note that when considering sites located on the Trent and Ouse, such as the anchorage strews at Horkstow and York, that passage through the Humber and therefore via Petuaria would have been unavoidable and as such ties them into a closer context with the site (Duckham, 1967; Briden, 1997). Furthermore, it is possible that the site of Petuaria, located where it is some eight kilometres from the mouths of both the rivers Trent and Ouse, acted as a point of transfer for haulage from the North Sea into the inland riverways allowing for a change of vessel to accommodate for the change in draft depth and narrower nature of the waterways. It is possible that this vessel transfer could account for the tidal changes at sites excavated in York, which had previously been believed to have been navigated using the high tide period only (Briden, 1997). Petuaria's relationship with the Humber and sites along the Humber is explored further in Chapter 7.

A common feature found throughout these estuarine sites of harbours and waterfronts is that of a changing water level resulting in the rebuilding or repurposing of pre-existing structures as well as the overall potential for lost features in the extent of reclaimed land between the modern riverbank and the Roman site in question. For example London's maritime use consists of successive quays developed throughout the first to fourth centuries with each being laid further into the river level than its predecessor, suggesting a drop in water level by as much as 1.5m during the extent of the Roman occupation (Milne, 1985, 1995, 2017). A clear connection may be made here to this trend of an identifiably changing

waterfront and the evidence recorded at Petuaria with the extent of alluvial deposits along Station Road, the metalled quay at the Magistrates Court and the possible harbour buildings located along Cave Road to the north (ERAS, 1979; Ketch, 2001; Fraser, 2001, 2002, 2004a, 2004b). Additionally, Brough features a strongly suspected case of sedimentation from flooding in the form of the Brough Haven, suggesting that changing water levels impacted Petuaria to a similar extent as seen in London. These features imply a site subject to changing water levels over the Roman period, which may further possibly explain the fluctuations in development and intensity of occupation as recorded in the archaeological record. For example, it is possible that the development seen in the second century may be a result of prolonged use of the waterfront in conjunction with the period of development south of the Hadrianic and Antonine frontier, allowing for further economic and civic growth and providing further reasoning for the construction of a stage during the reign of Antoninus Pius (RIB 707). It is important to consider the potential role that Petuaria's waterfront and maritime usage may have had in the development of such a stage and the economic implications carried with it, in fact the economic potential of such a feature would greatly influence the understanding of the site going forward.

One of the first substantial sources to link the potential for harbour use at Petuaria comes from Henry Cleere, who writes on the potential location of the Roman harbour relating to York (Cleere, 1978). Cleere suggests the possibility of either York or Brough as the military harbour presence for the region while also stating that Wachter attributes the site to an abandonment of AD 80 and reoccupation as late as the mid to late third century, something disproven by both prior and later investigation. Following evidence recorded in later investigations and as addressed in Chapter 4 (4.1.5-4.1.7) it is the opinion of the researcher that it should be taken as fact that the Roman use of Brough was, for a considerable amount

of time, a maritime site with the potential for either military or civilian use or both. As also stated by Cleere, one school of thought from the time of production is that a “rule of thumb” can be in use for determining the difference between civil and military Roman use with the line of the Severn and Humber estuaries acting as such.

This would place Petuaria at a point theoretically both civil and military, with the *coloniae* of Lincoln to the south and York and the frontier to the north. Furthermore, Cleere’s mention of Filey’s signal station lying at a natural harbour point provides a further consideration for the status of Brough as the primary harbour for the Parisi area. The signal station at Filey, southernmost of the five stretching south from Huntcliff, was most likely constructed and occupied into the fourth century as a precautionary defence against raiders from across the North Sea (Hull, 1932). It is believed that this site was in use from 375-410, meaning that its use as a potential harbour for the Roman settlements at York, Malton, Stamford Bridge and Shiptonthorpe would have been most likely after the decline in maritime use at Brough due to the changing water level of the haven or even the movement of troops from Petuaria to Derventio (Ottaway et al., 2000; Fraser, 2002). Although not disproving Cleere’s claims of Filey acting as a harbour for the Roman settlements of Yorkshire, Brough’s potential role as the main maritime site of import for the first three centuries does give credence to the theory that the changing of the Haven played a role in the site’s gradual decline, however the current lack of dateable evidence from any of the sites featuring these maritime structures makes it an unclear claim to make.

A useful comparison made by Cleere is that of Brough and the sites of Brancaster (Branodunum) and Reculver (Regulbium), stated as sharing the dual roles of harbour and guard point for a major British waterway. Branodunum, located on the southern edge of the

Wash and near the Norfolk village of Brancaster, was a Roman fort constructed around AD 230 and as part of the Saxon Shore network. The fort constructed in the third century follows a traditional *castrum* layout with the northern wall having previously existed on the shoreline and as such has been theorised to have acted as a harbourfront for the site (Johnston, 1977). The fort at Brancaster is of a similar construction to that of Petuaria with large stone walls, a significant internal earthen rampart and a ditch system external to the walls. Both sites appear to be somewhat in keeping with the standard Roman fort construction methodology however at significantly varying scales as Branodunum is believed to have an area of six acres (2.4ha) as opposed to the larger area of Petuaria's walled section of nine to twelve acres (3.6-4.8ha) (Johnston, 1977; Allen, Et al., 2001).

Again, further similarities exist in the form of a significant civilian presence around the fort with evidence of a *vicus* to both the north and east of the third century defences as well as the presence of conflicting internal layouts in both *vicus* and fort suggesting the possibility of an earlier timber fort at the site from which the *vicus* would have been previously aligned. Unlike Petuaria, where archaeological evidence for earlier periods of occupation have been recorded and exist within a known context, the fortifications constructed prior to the AD 230 stone defences have not been recorded at Branodunum suggesting the possibility that the site was sacked during the Iceni revolt as it is in the north of the Iceni territories (Lamb, 2018).

Little evidence exists for the site of Branodunum acting as a harbour, however its location along the southern shore of The Wash and north of a number of Roman settlements in Norfolk suggest it as a possible site of import over the English Channel from mainland Europe. The site's location between Roman roads 33b and 39 gives further credence for the



possible similarities to Petuaria as a point of import and distribution. However, unlike Petuaria and other comparable sites there is no apparent major Roman settlement in the vicinity that may require such a network of distribution from the coast, or any presence of an inland waterway such as the Ouse or Trent at Petuaria or the Trym and Avon at Abonae. Road 33b, known as Peddars Way, does run from near Branodunum to a site at Saham Toney, however the Roman presence at Saham Toney is apparently little more than a marching or temporary camp with some military and local civilian presence seen in the archaeological record from fieldwalking, and as such is likely to not be a site requiring a direct link to a harbour at Branodunum (Brown, 1986; Bates et al., 2000). Comparatively the course of the River Yure between Caistor St Edmunds, identified as the *civitas* Venta Icenorum, and the two estuarine forts of Caistor-on-Sea and Burgh Castle is a much clearer and more direct link within the region.

The other fort mentioned by Cleere with a comparable dual role is that of Regulbium on the Northern Kentish coast where the Thames Estuary meets the Wantsun Channel, a further Saxon Shore fort constructed in the third century. Although less evidence has been recorded of Regulbium than either Petuaria or Branodunum the northern extremity of the site, much like Branodunum, is believed to have reached the shoreline prior to subsequent loss to erosion. It is possible therefore that this northern edge of the site would have served as a harbourfront to the fort itself, much like what has been theorised at Branodunum. However, Regulbium offers little further insight in its comparison to Petuaria, instead existing predominantly as a small defensive fort with little in the way of archaeological investigation, with most instead focussing on the seventh century church built within the outline of the Roman fort (Richmond, 1961; Philp, 1986; Allen & Fulford, 1999; Pearson, 2002).

Leading on from this, perhaps the confirmed maritime site with the closest features to those found at Petuaria is that of Abonae (Sea Mills) near modern day Bristol. A riverine site of a harbour located a short distance from the Severn Estuary off the River Avon, Abonae's history may prove to be informative of features to be expected at Petuaria. Both sites are located at geographically sheltered areas located off a major waterway, with the western quay and structures at Petuaria lying off of the main course of the Humber and Abonae at the confluence of rivers Avon and Trym (Ellis, 1987). This places both sites at a similar proximity to the sea, both featuring a similar makeup of archaeological material suggesting signs of the sites as a point of trade or import.

In terms of features, little has been excavated of Abonae apart from a few limestone walls, a metalled road surface as well as a few small buildings however what has been recovered provides an idea of the type of site it was. In the publication of the 1960s excavations at the site, it is theorised that Abonae's initial occupation was a military one with a likely date of the AD 50s despite the features and evidence recorded in the two sites excavated suggesting an occupation of not much earlier than the AD 60s (Ellis, 1987). This initial occupation is then followed by a sudden departure around AD 80, matching the period at which a number of the other sites explored in this research also faced periods of abandonment, in particular during the reign of the Flavian Dynasty and Agricola's governorship of Britannia. The features exposed at Sea Mills seem to be largely focussed on the road heading away from the river, and structures are found to have been built on either side with usually narrow fronts facing said street. These are theorised to be shopfronts and could provide some idea as to what the narrow buildings are at Petuaria on the southern side of the east road (Ellis, 1987; Steedman, 1991).

A further similarity between the two sites is the use of a smaller inlet for the port or harbour as opposed to the larger waterway nearby. In the case of Abonae this is the river Trym as the site lies at the confluence of Avon and Trym, providing a smaller and more sheltered waterway for a waterfront development with the archaeological evidence suggesting a waterfront found on the western bank of the Trym (Ellis, 1987). In this way the Trym's use as a more sheltered and inland area for use as a port is similar to the use of the haven at Brough, providing Roman vessels with a waterfront away from the tidal influence of the estuary itself while also providing the settlement with a larger field of view of the navigable areas. Both settlements' proximity to the sea, Brough lying roughly fifty-six kilometres from the North Sea and Sea Mills some forty kilometres to the mouth of the Severn and the start of the Bristol Channel, suggests the possibility that the use of these inland waterways for harbours would allow for a better flow of traffic as both the Avon and the tributaries of the Humber, the Ouse and Trent, housed further Roman settlements and potential harbours further inland. It is possible that these two sites acted more like supply depots, as is Petuaria's origin, allowing for the transfer of goods to smaller vessels to continue further inland. This theory is arguably further supported by the current lack of confirmed evidence for warehouses and other harbour-like structures at either site within the walled settlements which suggests the possibility that these sites were not the intended destination of any transported goods. Alternatively, it is also possible these sites may have instead served solely as civil or military transport hubs, connecting inland sites to the sea and again serving the dual role of civil and military as suggested by Cleere.

Another comparable site is that of Arbeia, in modern day South Shields, which similarly to Brough is located much farther north than the majority of known Roman harbour or port sites. Additionally, following the Cleere description of a Severn-Humber divide, Arbeia is

located entirely within the military portion of harbour sites with the site itself located in close proximity to the eastern extent of Hadrian's Wall. It is this position within the frontier that provides Arbeia with its purpose as it would not only serve as a defensive element for the Tyne crossing to the east of Segedunum, but also allow for a point of trade and transportation import to the wall and frontier via its estuarine seaport.

First constructed under the reign of Hadrian in AD 129 and as part of the construction of the defended frontier, Arbeia went through a number of changes of purpose and layout over the following centuries of use and occupation. Such changes including the conversion of the site to a supply depot in the early third century, the destruction of a dividing wall to make way for a larger *principia* and then a destruction and reconstruction period due to a fire in the late third or early fourth century (Dore & Gillam, 1979; Milet, 1986; Bidwell & Speak, 1994). It is possible that a similar level of reconstruction and repurposing can be seen at Petuaria in addition to the theorised civilian usage of the site as a *civitas* capital. For example, the major redevelopments recorded at Petuaria in the archaeological record is that of the changes and additions made to the defences. The most significant of these being the addition of bastions in the late third or fourth centuries, theorised by Corder to have been used as platforms for artillery defences. Additionally, the placement of such external bastions allows for further fields of overlapping fire when defending the site implying a shift to a more militaristic purpose, a change that is possibly not in keeping with the civil populace and potential theatre at the site.

Unlike other forts explored in this section such as Brancaster and Reculver, Arbeia's harbour element is separate to the main construction of the fort itself. Whereas these other forts had jetties or wharfs presumably running alongside a wall parallel to the waterfront, Arbeia is a

separate entity and as such provides an interesting consideration when comparing the site to Petuaria. A possibility arises that the harbourfront aspect of Petuaria's development is a separate area to that of the walled enclosure, indicating a higher likelihood that the haven served as the harbour site rather than the southern walls of the fort. Furthermore this provides further possible explanation for the large structures recorded to the west of Cave Road as they may well form part of the structural development of a separate harbour to the walled settlement and fort (Armstrong, 1981). However, it is also possible that the necessity for a separate seaport at Arbeia is more closely linked to the site's proximity to the sea and the frontier itself. Not only is Arbeia much closer to the open sea than Petuaria or Abonae, the fort's proximity to an active and often disruptive frontier suggests the possibility that the fort and harbour were separate entities to allow for a stronger defence of the fort. This further suggests that due to the relatively peaceful nature of the environs of Petuaria, that a separate harbour would not have been a defensive concern and as such the harbour elements of the site may be similar in aspect to those seen at Abonae, Reculver and even the inland jetties as recorded at York (Briden, 1997).

Of the maritime sites of Roman Britain certain similarities can be seen between Petuaria and a number of the more militaristic sites such as Arbeia and Sudbrook. Although similarities exist between what evidence has been recovered from Petuaria and domestic waterfronts, the location and fortified nature of what has been found at Petuaria suggest that any maritime use of the site is more likely to be that of a military use than a civilian use.

Although the large buildings recorded at Cave Road have the potential to be related to civil use of the site, particularly as storage warehouses, that is yet unproven. Instead, the arrangement at Arbeia, with separate harbour and fort and at Sudbrook, with the maritime fort lying five kilometres from the *civitas* capital at Caerwent, follows a similar footprint to

that seen at Petuaria with harbour developments external to the walled area. Whether this is due in part to the sites' regional location on an estuary or river, or instead due to the wider context of 'frontier' space, it is nonetheless a similarity held between these military settlements. Additionally, it is possible that the two-part nature of these sites is more a result of the scale of civilian occupation, being much smaller than that of a *coloniae*.

Petuaria's harbour and relationship to the surrounding area, both militaristic and civil, is explored further in Chapter 7.

#### **6.4 *Civitas* capitals and Petuaria**

One aspect of the site of Petuaria that has come under the most continued discussion is that of its status as a site outside of the established military occupation. A number of sources writing on the site grant it the title of *vicus* or *civitas* depending largely on the evidence explored in the proceedings, with the civilian presence recorded at Petuaria seemingly not clearly fitting one description or the other (Millett, 1992; Halkon, 2013). The main difference that can be seen between *vicus* and *civitas* sites is their political position, with *civitates* usually interpreted as being the tribal capital for the region as opposed to the more satellite *vici*. The most direct evidence for the extent of the civil settlement at Petuaria can be found in the theatre inscription where the site is described as a *vicus* with Marcus Ulpius Januarius serving as its *aedile*. Traditionally *vicus* wouldn't have maintained stations higher than *magistri*, with *aedile* being a position normally attached to larger towns and municipal regions (Hunter-Mann et al., 2000). The interpretation of the site existing as more of a developed *civitas* capital settlement tends to come from its theorised position as the major settlement of the Parisi people, therefore granting the site a higher political status than a *vicus* would usually have. Furthermore, as the site of Petuaria is the most extensively

developed Roman site in the Parisi territory of East Yorkshire it is possible that Petuaria served as a *civitas* capital despite not being formally named one in any documented writings.

Alternatively, as reiterated by Wachter, the gifting of a stage does not necessarily make Petuaria a town (Wachter, 1995). Although urban theatres are the most common example, rural theatres not attached to any specific large legal settlement do exist in some measure on the continent in Gaul suggesting the possibility for Petuaria's stage to have been a more general gifting to the region than one specific settlement (Wachter, 1995). In addition to this the definition of a *civitas* itself has been the point of some debate, particularly in its use as a general term throughout the Empire. In particular Frere debates whether the naming of a site as a *civitas* would be a recognisable definition between modern interpretation and Roman meaning, arguing for the term to be of a much less decisive nature than first thought (Frere, 1961). Wachter who worked extensively on the nature of Roman towns in Britain attributes believed British *civitates* belonged to four periods, those being early settlements, client kingdoms, Flavian sites, and later Hadrianic. It is this last period that Caerwent, Carmarthen and Aldborough are attributed to alongside Petuaria due to their occupations beginning under the reign of Hadrian. Interestingly each of these sites provide a further comparable aspect to Petuaria; Caerwent in its proximity to the maritime site at Sudbrook, Carmarthen for its theatre, and Aldborough for its regional proximity being *civitas* capital of the Brigantes.

The layout of the site and the extent of the archaeological evidence around the walled settlement does lend some credence to a further developed civil population than may be seen in a traditional *vicus*. The civil developments extending north, east and south of the

walled settlement feature a number of sites of substance including possible shopfronts, workshops and courtyards. The most useful areas to be investigated that would aid in the understanding of the site as a *vicus* or *civitas* would therefore be inside the walled area. Already comprising of an area larger than most forts of a similar period and style at nine to twelve acres (3.6-4.8ha), the likelihood for civilian occupation within Petuaria's walls is not non-existent. Of the recently excavated material the most information regarding the internal occupation of the site comes from the previously mentioned courtyarded building on the Burrs playing field, excavated 2020-2021 by Petuaria ReVisited. This structure is of an as yet unconfirmed purpose, with this research suggesting possibilities of a *principia*, municipal office or even a private residence. Additionally recorded in both geophysics and the excavations of Philip Corder a small number of buildings are known to exist within the lay of the walled area, however it is as of yet unclear what period or these buildings may be accurately attributed to, either as a *civitas* capital, fort or other administrative centre.

Despite extensive archaeological material being recovered from the courtyarded structure alongside recorded features showing multiple phases of construction and redevelopment, little in the way of definitive evidence has been found to determine the site's purpose within Petuaria. Two features recorded in the excavation, the previously mentioned hypocaust and painted wall plaster, may be suggestive of any of the three possible uses. In turn, each of these three possible uses would not be an outlier within a *civitas* capital, especially with the presumably persistent, if reduced, military presence at the site due to its strategic importance both regionally and nationally.

The archaeological evidence recorded outside of the walled area does suggest a somewhat stable civil population, and Wachter theorises that the final phase of the site is its use as a



settlement in its ruined state following the Roman legions departing Britannia (Wacher, 1969). Incidentally Wacher also is the one to theorise that the site is somewhat of a “failed” *civitas*, with this argument being used to explain the state of decline and ruin seen in the archaeological record in certain sections of his Brough House and Manor House sites. To regard Petuaria as a *civitas* capital, necessary comparisons should be explored with other sites of known *civitas* capitals, in particular through the military phases of occupation, locations with potentially major trade routes and sites of significant defensive structures.

#### **6.4.1 *Civitas* Capitals of the North**

The known *civitas* capital closest to Petuaria is that of Isurium Brigantum, Aldborough, located some fifty kilometres north of Petuaria with Eboracum roughly halfway between the two sites. Isurium Brigantum, as shown in its name, is attributed to the Brigantes tribe who occupied northeast England with the exceptions of south-east Yorkshire and Cumbria due to their occupation by the Parisi and Carvetii respectively. In fact in the 1406 translation of Ptolemy’s *Geographia* by Jacapo d’Angelo a number of sites are attributed to be Urbs of the Brigantes, Petuaria being one of them (Ptolemy and d’Angelo, 1478). The settlement at Aldborough is estimated to encompass some fifty-five acres (22.2ha) within a walled town, defended by towers, with some walls reaching three metres in height, a similar height to that estimated by Philip Corder at Petuaria. Thanks to extensive excavations historically, and in recent years under the direction of Rose Ferraby and Martin Millett at the site, a number of key features have been recorded within the walled area including several residences with mosaiced floors, a feature rumoured to have existed at Petuaria in local lore yet with only a few tesserae ever recovered from the site as is discussed in Chapter 5.

Isurium Brigantum was established in AD 74 at a similar period to the Roman crossing of the Humber at Brough. The town was presumably formed near the site of two first century fort in the region, constructed at crossings of the River Ure between Eboracum and the northern frontier following the believed destruction of the Brigantes' previous capital at Stanwick. Further conflicts with the Brigantes persisted into the later first century and is what has been previously theorised to have led to Petuaria's period of abandonment following the establishment of an early site.

The town of Isurium Brigantum provides a number of interesting aspects through which comparisons to Petuaria can be explored. Not only is the scale of the site an important consideration between the two, Isurium Brigantum being nearly five times the size of Petuaria, but also the internal layout and structures of the town shed further light on understanding Petuaria. Excavations and geophysics on the site show a clear number of buildings, structures, roadways and yards across the walled area, something that is not so much the case at Petuaria (Halkon & Lyall, 2021a, 2021b, 2023, *forthcoming*). It is possible that the significant difference in internal layout between these two sites comes rather from the recording methods implemented and the location itself. For example, Isurium Brigantum has been excavated a number of times in the antiquarian period through to the twentieth and twenty-first centuries. Additionally, the site of Isurium Brigantum itself is in a much less disturbed area than Petuaria, with the latter having not only been subjected to various developments and building projects but also the spread of protective rubble in the mid-twentieth century muddying geophysical results further. It is possible therefore that Petuaria may still have a comparable number of internal structures for its size, however at present the number and scale of excavated buildings within the walled area is significantly lesser than seen at Isurium Brigantum and many other *civitates* in England, even with accounting

for the difference in scale. As such, an inferred status as a *civitas* capital is possible at the site for the previously stated reasons, however the archaeological evidence is not as forthcoming in this regard as can be seen at other *civitates* across the country.

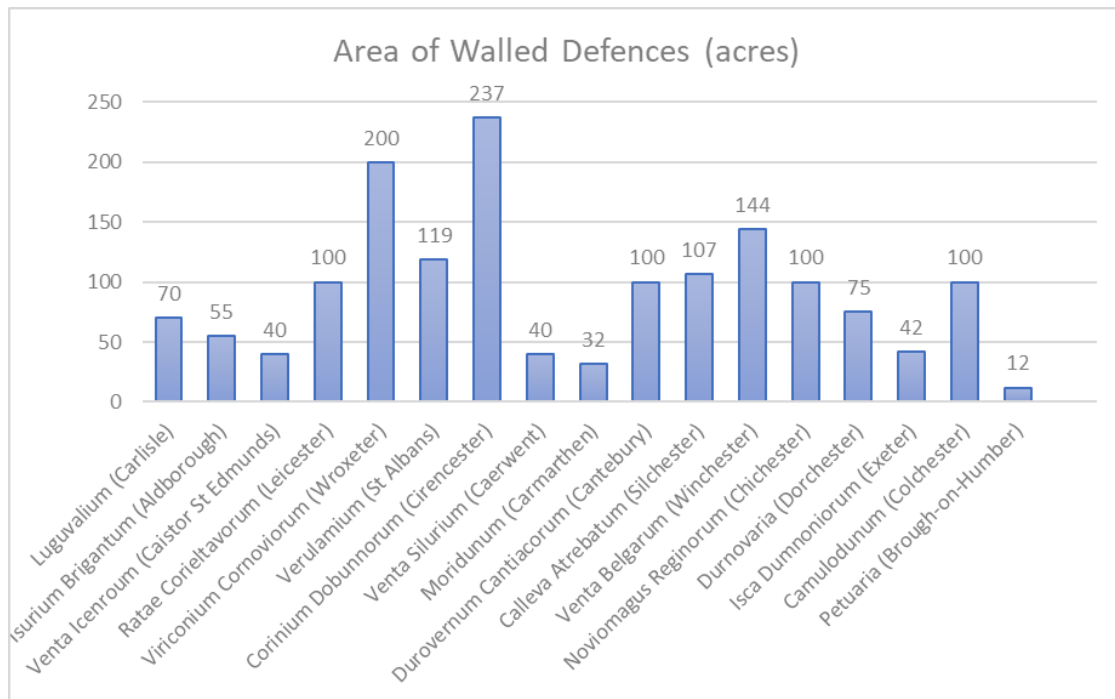


Figure 41 Britain's 16 identified *civitas* capitals alongside *Petuaria* as measured by the acreage of their respective walled areas. For sites with a margin of scale, such as *Petuaria* and *Durnovaria*, the larger value has been used.

Furthermore, when compared to the known *civitates* across England it becomes clear that *Petuaria* is significantly smaller than almost every other site (Figure 41). The average area encompassed by walls at *civitates* across the country is some ninety acres (36.4ha), ten times the size of *Petuaria*, with others bordering on the size of a *coloniae* instead. In this light what defines a *civitas* capital is an important consideration in understanding *Petuaria*'s status as one. As previously stated, it is possible that *Petuaria* holds this station largely due to its existence within the region of the *Parisi* and being one of if not the largest sites of Roman and Romano-British developments. One possible explanation for *Petuaria*'s scale in this regard is the needs of the local population. If the *Parisi* are in need of a *civitas* capital for administrative and governing needs, it is entirely possible that *Petuaria* fulfilled this role

while not remaining and a substantially occupied settlement or town as seen at other examples. Another possible explanation is that the number of local inhabitants is far less than seen in other British regions, potentially due in part to the terrain of the surrounding environs with marshes to the east where Hull is later situated and the expansive wetlands to the west. Furthermore, the existence of a number of known Parisi settlements within the region suggest the possibility that they continued to live elsewhere, rather than relocate to the Roman-governed *civitas* capital. This topic is further explored in the contextualisation of Petuaria within its local area in Chapter 7, however it is an important topic to regard when considering Petuaria's status as a *civitas* capital, and whether this appointment is almost one of convenience. It is likely with the number of Parisi-related sites in East Yorkshire that the possible 'client kingdom' operated on their own terms, with only occasional interactions with the Roman occupiers. If this is believed to be the case then a possible explanation can be given for the *vicus*-like sites developed on the roads leading north and east out of the walled area, that despite acting as a *civitas* capital, Petuaria was little more structurally than a walled military site with an attached *vicus*.

Another of the *civitates* attributed by Wachter to the Hadrianic period is Carmarthen in Wales, known contemporarily as Moridunum. The site is located on the River Towy roughly fifteen kilometres from its mouth on the Carmarthen Bay by the modern course of the river. There are various similarities between Moridunum and Petuaria including the geographical location along a waterway, despite the River Towy being a much narrower and winding waterway than the Humber Estuary, as well as the era of their prior fort's establishment during the Flavian Dynasty. Furthermore the original timber fort appears to have been replaced by a stone-walled fort before finally the site is thought to have been overtaken by

the surrounding *vicus* around AD 120, a similar time to Petuaria's reoccupation during the Hadrianic-Antonine period (James, 1992; 2003).

Interestingly despite its supposed military abandonment in place of a *civitas* capital for the local Demetae, the site appears in Ptolemy's *Geographia*, the Antonine Itinerary and the Ravenna Cosmography, marking the site as having held some geographic or strategic importance both as a location on the Antonine *iters* but also as a political state, with Ptolemy making the site known as one of two towns of the Demetae. It is possible that, in considering the nature of Moridunum in comparison to Petuaria, a further explanation arises for Petuaria's status as a *vicus* or *civitas* capital, with Moridunum originally beginning as a *vicus* before ultimately occupying the defended area of the Hadrianic fort at the site. It is possible that in the case of Petuaria the known surrounding *vicus* went on to occupy the walled site following a supposed Roman abandonment. Whether this abandonment is in the early phases of the fort, with the Roman forces presumably being ordered north by Petillius Cerialis or Agricola to aid in the construction of Malton or fight the Brigantes, or it comes at a later date alongside the military abandonment of Petuaria in the fourth century remains to be seen. Unlike Petuaria however, Moridunum features little to no recorded military developments into the third or fourth centuries, contrary to what is seen in Petuaria's archaeological record. Therefore, it is possible to infer that a *civitas* capital occupation of Petuaria, if similar to that of Moridunum, would have ended or been returned to a *vicus*-like settlement pattern around these developments, suggesting that any *civitas* capital level of occupation would be limited to any of the interim periods between phases of military development and occupation of the site.

However, this would only be the case if Petuaria's status as a *civitas* capital is regarded to be closer in nature to that of Isirium Brigantum or Moridunum, rather than the temporary or ceremonial capital as previously suggested. Further evidence for Petuaria's status as a *civitas* capital can also be seen in the theatre inscription recovered by Philip Corder. The presence of a stage, amphitheatre, or other such public building can be seen throughout *civitates* in Britain, with Moridunum having a closely related amphitheatre itself (Wilmott, 2008). In fact, eight of the *civitates* of Britain have at least some evidence towards an amphitheatre in close proximity to them, and with the case of Venta Silurum, Caerwent, there is a second likely example ten kilometres to the west at Isca Silurum and its associated legionary fortress (Figure 42; Gardner & Guest, 2008). Several of these amphitheatre structures only exist as earthworks suggesting that it is possible that Petuaria's alleged stage would be of a similar construction and therefore harder to determine its location due to the lack of stone remains. It is also possible that Petuaria's stage was of wooden construction and was either lost or repurposed during the site's occupation.

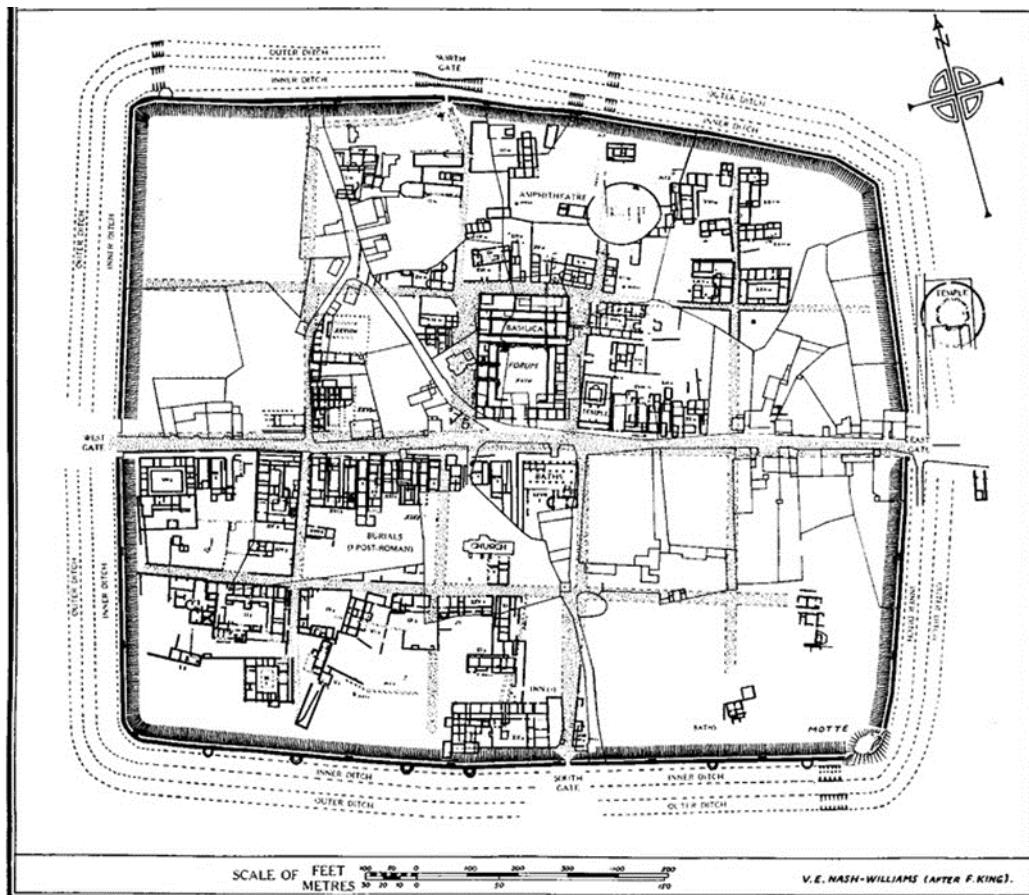


Figure 42 Plan of Caerwent showing the Amphitheatre within the town (Nash-Williams, 1952)

A further comparable feature of the public buildings of Petuaria and Moridunum can be seen in their scale and location in relation to the local populace. The amphitheatre at Moridunum is regarded as being of too large a scale for the population living at the site and as such likely acts as a central hub of entertainment for the surrounding area, a similar logic as suggested for Petuaria’s rural theatre (Wacher, 1995). Should this be taken as an explanation for Petuaria’s stage or theatre, it would help further support the argument of the site acting as an administrative or ceremonial *civitas* capital as opposed to one fully occupied as seen at others.

Additionally, many of these sites have well documented and investigated internal structures and layouts, often following the Roman style of insula which is as of yet to be recorded at Petuaria, with instead the internal layout of the area following along the Y-shaped roadways

recorded in the geophysics and leading from the north-west gate, east gate and south of the walled area. Through geophysical surveys it is clear to see that there is a number of structures internal to the walled area, as corroborated by Corder's excavations, but they do not appear to be of a similar scale to that seen elsewhere. Whether this is due to the size of the site or the number of occupants will remain to be seen in further excavation, with modern excavations concerned largely with the outer extremities and the single internal courtyarded building, previously thought to be the theatre.

A further point of contrast to Petuaria in regard to its status as a *civitas* capital comes from Luguvalium, Carlisle, which formed the third of the northern English *civitates* alongside Petuaria and Isurium Brigantum. Luguvalium provides a contrast in the aspect that its occupation as a capital is believed to have not started until the third century, following the site's existence and use as a military settlement since its initial construction in AD 72-73. This is potentially due to the site's proximity to the frontier and Hadrian's Wall, with the site acting as part of the Tyne-Solway frontier initially before being incorporated into the Hadrianic frontier. Evidence towards Luguvalium's presence as a *civitas* capital comes largely from the *Historia Brittonum*, often attributed to Nennius where Luguvalium, or Caer Liguallid, is marked as one of the twenty-eight cities of Britain (Breeze, 2016). A further six of these twenty-eight cities are also attributed to sites of *civitates*, suggesting that it is probable that *civitas* capitals go on to become medieval settlements on a significant scale. Similarly to Petuaria, Luguvalium exists alongside the significant inland waterway of the River Eden. The Eden's course flows in from the Solway Firth and south into Cumbria, with sites of development attributed to Luguvalium located on either bank. In particular, military baths were excavated on the northern bank, with the majority of the first century fort recovered from the southern bank (McCarthy, 2017). Luguvalium's supposed third century use as a



*civitas* capital provides an interesting comparison to Petuaria, and potentially informs on the latter's use further. In this case it is possible that Petuaria's *civitas* capital occupation took place in a later period, possibly following the Antonine developments and prior to the third or fourth century reinforcing of the walls with bastions. This somewhat contradicts the reasoning of the site's *civitas* capital status relating to the *prosenum* inscription, however it is possible that the site was just a *vicus* at that point but developed into a *civitas* in the following century before the refortifications took place. Indeed the period of time between the inscription in AD 140-4 and the earliest possible date for the refortifications being around AD 250 the site may have acted as a *civitas* capital for over a century, lending credence to Wachter's "failed *civitas*" suggestion.

Through comparing Petuaria to these initial few *civitates* it becomes clear that the site is lacking a number of key attributes that can be seen as crucial towards the designation of *civitas* capital. Firstly the presence of structured occupation within the walled area, a feature seemingly lacking in the geophysical survey and stated to be largely non-existent at the site by Wachter (1995). Furthermore, it is apparent that Petuaria is lacking in specific buildings that would help further cement the site's position as a regional capital. Namely these buildings are public works such as bathhouses, a feature further lacking in the site's militaristic developments in juxtaposition to that seen at Carlisle. The only substantial similarities currently held by Petuaria with other *civitates* are its walls and the epigraphical evidence of a *prosenum* with public works such as these being a staple of a number of *civitates*. A brief summary of the remaining *civitates* will further inform of any possible similarities held by Petuaria and are as follows.

#### **6.4.2 Further *Civitates***

Caistor St Edmunds, known as Venta Icenorum contemporarily, was the largest town in Roman East Anglia and the capital of the Iceni. The site provides an interesting comparison to Petuaria in both its developmental cycle as well as its presence within the region of Saxon Shore defences, despite itself lying some distance from the coast. Believed to have been initially established following the infamous Boudiccan revolt, Venta Icenorum comprised of a rudimentary town in comparison to many others, with gravel streets not being recorded until the Hadrianic period. Wachter suggests that this, similarly to Caerwent's status of developments, is due to the local tribes sustained hostilities with Rome in the first century. Both Iceni and Silures, the tribe related to Caerwent, carried out prolonged conflict with Rome to variably if ultimately futile success. As such both populaces experienced significant reductions in numbers through death and other results of the conflict, an aspect which Wachter suggests to have resulted in a lack of Flavian developments (1995). Comparably if the Parisi are believed to have been a peaceful people, if only in interactions with Rome, it may suggest a reasoning behind Petuaria's relatively steady developments under the Flavian period and again during the Hadrianic-Antonine period.

Despite the rudimentary origins of occupation at Caistor, several common features of a town have been identified that as of yet do not exist within Petuaria, those being a bathhouse and forum, the latter of which seemingly being the central point of the third century walled enclosure (Frere, 1971; Wachter, 1995). Petuaria's lack of recorded civic buildings such as these are a significant factor in issues attributing the *civitas* capital title to the site and as with a variety of other aspects of the site will hopefully be answered following further investigations.

Other *civitas* capitals have already been considered in relation to Petuaria to some extent by Corder, who when excavating the site compared features he recorded to those recorded at Wroxeter, St Albas, Cirencester, and Silchester, predominantly in terms of exhibiting a period of halted development or in the case of Cirencester, possessing a similarly structured gate (Corder & Richmond, 1942). In comparing the plans of other *civitas* capitals, the level of Romanised development becomes much clearer, especially in comparison to the stark layout of streets as recorded in geophysical surveys at Petuaria (Figure 24, Figure 43, Figure 44, Figure 45, Figure 46).

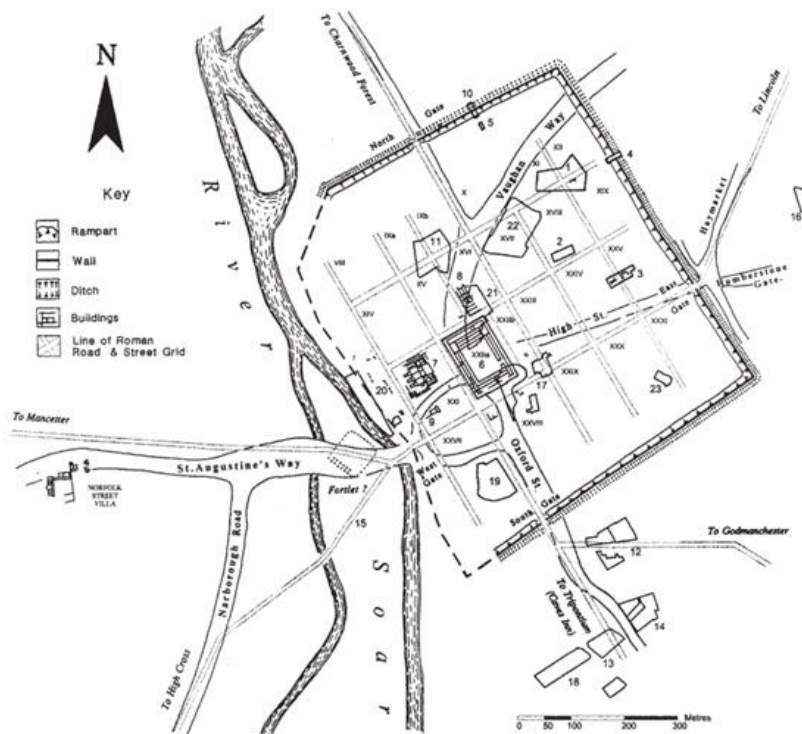


Figure 43 Plan of Ratae Corieltavorum (Leicester) (Cooper & Buckley, 2004)

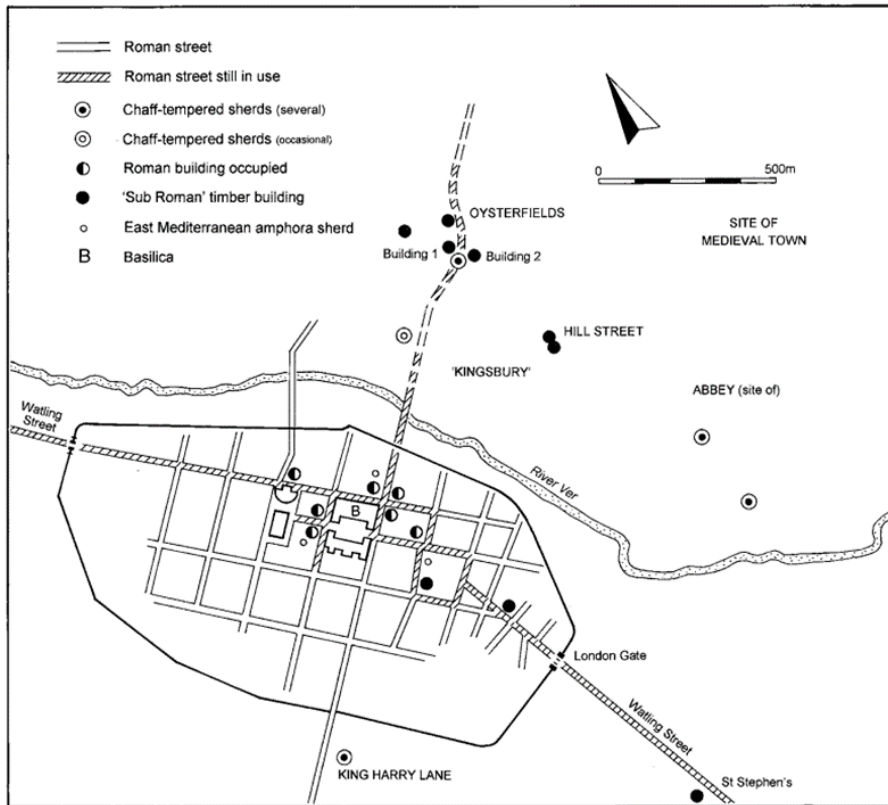


Figure 44 Plan of Verulamium (Wroxeter) (Niblett et al., 2006)

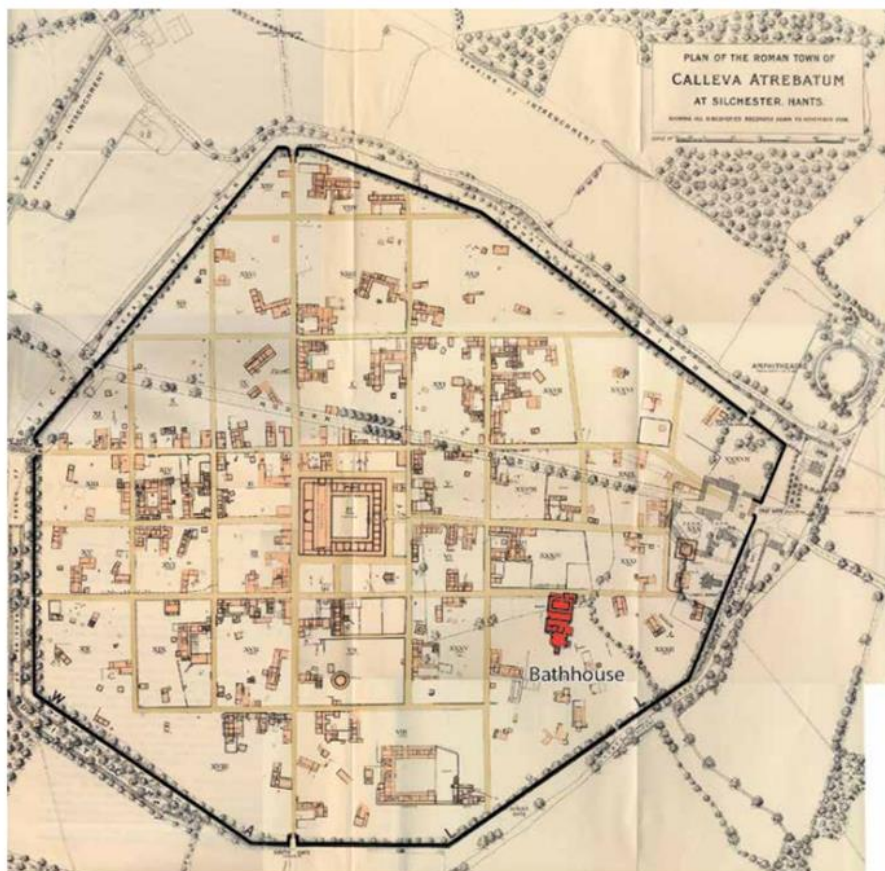


Figure 45 Plan of Calleva Atrebatum (Silchester) with Bathhouse highlighted (Fulford, et al., 2018)



Figure 46 Plan of Venta Belgarum (Winchester) (Thorn Warren, 1914)

As shown in the plans of Leicester, Wroxeter, Silchester, and Winchester there is a clear difference in the internal structure of these towns and that recorded at Petuaria. Of course, there is a clear potential bias in the drawing of these plans, as none of these examples have undergone a full-scale excavation, so the layouts presented in these plans are somewhat hypothetical. Despite this, through various excavations undertaken at these and other *civitas* capitals, clear structural remains appear for public buildings and infrastructure that are as of yet not apparent within Petuaria. One example is the location of theatres, in the case of Canterbury, St Albans, and Colchester the theatre structures are located within the walls, whereas Petuaria's *proseum* is now deemed to be external to the walls following the excavations of Petuaria ReVisited (Halkon & Lyall, 2021a, 2021b). The placing of public buildings external to the walled area is not uncommon however among British *civitas*

capitals, with many of the towns' amphitheatres located a short distance from the walls such as at Cirencester and Winchester (Thorn Warren, 1914; Fulford et al., 2018).

In terms of developments, many of the other *civitas* capitals share similarities to Petuaria and other capitals mentioned, as most are initially developed as a military occupation at either a strategic point along waterways or on the site of a prior Iron Age settlement (Wacher, 1966, 1995). Similarly, as seen at Petuaria, the walls of these settlements begin as earthwork defences before being later adapted into stone defences, usually around the mid-second or third centuries with some examples exhibiting a similar addition of bastions in the later third and fourth centuries (Niblett, 2001; Cooper & Buckley, 2004).

#### **6.4.3 *Civitas* Conclusion**

Petuaria presents an interesting example when compared to the other *civitates* of Britain in regards to the scale of the site, with the walled area being significantly smaller than any other identified *civitas* capitals. Of course, the definition of a *civitas* capital is not determined on the extent of its walled area and so Petuaria's size is not a conclusive verdict on the site's status. It is more likely however that due to the scale of the walled area Petuaria is, again as suggested by Wacher, a more militaristic site with some civil occupation at different periods, rather than ever being a comprehensive town in the Roman world. Perhaps the best comparison for this theory is Portchester, or Portus Adurini, named as a Saxon Shore fort with evidence for some small civilian occupation within its walls. With a similar scale of walled enclosure it is possible that Petuaria operated similarly with a primarily militaristic function within the walls but some civilian settlement alongside it.

Additionally, as discussed, a number of the *civitates* of Britain have origins in early period forts, often with a *vicus* developing to the point of occupying or requiring reconstruction efforts to accommodate the larger civil population. Therefore, it is entirely possible that Petuaria follow suite as previously suggested in part by Wachter and a *civitas* capital occupation develops at the site following a decrease in military presence. This is particularly helped by the case of Moridunum where the fort is occupied as a civil settlement sometime in the early second century during the reign of Hadrian. Furthermore, only a few of these *civitates* did not develop to become medieval settlements, something again shared by Petuaria through its lack of significant medieval material found in the archaeological record. It appears as though Petuaria, like a few other *civitates* was subject to a brief period of use with not enough of a significant civilian occupation developing to maintain the town into the following centuries. If Wachter is to be followed this can be explained by his theorised “failed” *civitas* and then reoccupation of the site following the Roman retreat from Britain. It is possible instead that this change in civil occupation is less of a failing of the *civitas* and more to do with the site’s return to military occupation into the third century and how any civil population that may have developed in the second century was moved on. This may possibly explain the development of a number of villas and other rural sites in the second and third centuries suggesting possibly the re-militarisation of Petuaria, in the building of bastions, was cause for any population to return to the external *vicus* or find accommodation elsewhere in the landscape as is discussed in Chapter 7.

## 6.5 Sites with Third Century Defensive Developments

Through comparing Petuaria to sites of forts with harbour presences on waterways, a clear comparison has emerged between Petuaria and sites involved the latter half of third century Roman unrest including the Gallic Empire, the usurpation of Carausius, the defensive developments of Saxon Shore fortifications and the fourth century consolidation of defences in Britain. The evidence in support of later imperial development at the site comes primarily from two factors; the bastions and tower excavated by Corder and recent excavations, recorded as late third century and possibly even into the fourth century under Constantine, as well as the coinage recorded at the site and the overall environs of Brough (Corder & Richmond, 1942, Appendix I). The evidence of substantial defensive renovations and additions at Petuaria could be seen to indicate the site's potential involvement in a number of different crises in the late third century, with the site possibly acting as a defensive measure against foreign raiders or the imperial forces of Rome itself. Unfortunately, the structure of the south wall closest to the Humber Estuary is yet to be excavated or recorded in full, outside of a few defensive structures at 49 Station Road, and as such would most likely provide the most insight into the purposes of adding such structures to the pre-existing defences. Although lacking somewhat in reliability or accuracy, the concentration of coins recorded at the site may give some insight into the longevity or significance of a period of occupation.

In the case of Petuaria, the coinage indicates a level of occupation well into the later stages of the Roman occupation of Britain with some 84% of the total coinage recorded belonging to the period of AD 200-400, providing a stark comparison to the 14% of the coinage belonging to the first two centuries of the millennia while the final 2% remain undatable



(Appendix I). In addition to this concentration of coinage into the fourth century, specific dynasties and rulers contribute far greater proportions of the coins than others with notable examples being Tetricus I, Claudius Gothicus and Constantine I. These three rulers contribute 105 of the 446 coins recorded over the years at Brough despite only reigning for a combined thirty-eight years, the majority of which is the reign of Constantine I (43 coins) with Tetricus I (31 coins) ruling for three years of the Gallic Empire and Claudius Gothicus (31 coins) reigning for two years (Appendix I). The significant proportion of coinage related to both Claudius Gothicus and Tetricus I, along with the remaining rulers of the Gallic Empire, of which a further thirty-nine coins may be attributed from the study area, implies at least some presence at the site during this period, with the coinage of both Central and Gallic Empires seemingly existent at the site simultaneously. This is in keeping with the work of Richard Bourne who notes that Central Imperial coinage is often recorded in sites and hordes within the Gallic Empire, while the inverse is far less common. Additionally Bourne's research shows that the Tetrici, Tetricus I and his *Caesar* and son Tetricus II, produce substantial amounts of coins at both mints operated by the Gallic Empire providing a reasonable explanation as to the proportion of coins recorded at Brough being attributed to the Tetrici and the Gallic Empire (Bourne, 2000).

When considering the coinage records as well as the general evidence recorded following the Corder-led investigations further possible ties to the unrest of the third century become apparent. For example, the recorded coinage of Petuaria regarding the rulers of the Gallic Empire; Postumus, Marius, Victorinus in addition Tetricus I and his son Tetricus II, consist of some 70 coins and 16% of the total recorded coins from the site (Appendix I). Additionally, the coinage of Carausius and his betrayer and successor, Allectus, comprise of 4% of the total coinage recorded at the site. This suggests the possibility that these latter

developments and use of the walled settlement is closer to either the Gallic Empire or Constantine than Carausius and Allectus, with Allectus' significant coinage production within Britain not being similarly evident within the record (Burnett, 1984). Interestingly prior research by Bryan Sitch to calculate coinage loss results from a number of sites in the region suggests a higher portion of Carausian coins at Petuaria, however this does not reflect in the present research with the coins used for this prior study apparently largely coming from private collections and metal detectorists, neither of which remain in the record to this day (Sitch, 1998).

It is important to also recognise the nature of coin minting during these crises, and crises throughout the Roman era as a whole. Historically during periods of turmoil, unrest or division in Imperial leadership the production of coinage is often a key method by which individuals seek to legitimise their claim. This is particularly evident in the case of Tetricus I who is of note for producing quantities of an increasingly debased currency during his reign from his two inherited mints in Trier and Cologne. The coins of Tetricus faced such a shortage of resources that to accommodate for the failing currency coins were produced with as little as 1% silver content, causing their discernability from barbarous radiates to diminish substantially. Therefore, it is necessary to consider this when regarding the numbers of coins recorded from these periods of unrest, as although showing a clear influence within the economy of the site, the number of coins does not directly correlate to a direct occupation, but instead suggests a presence at the site with some ties to the reign of either group or individual.

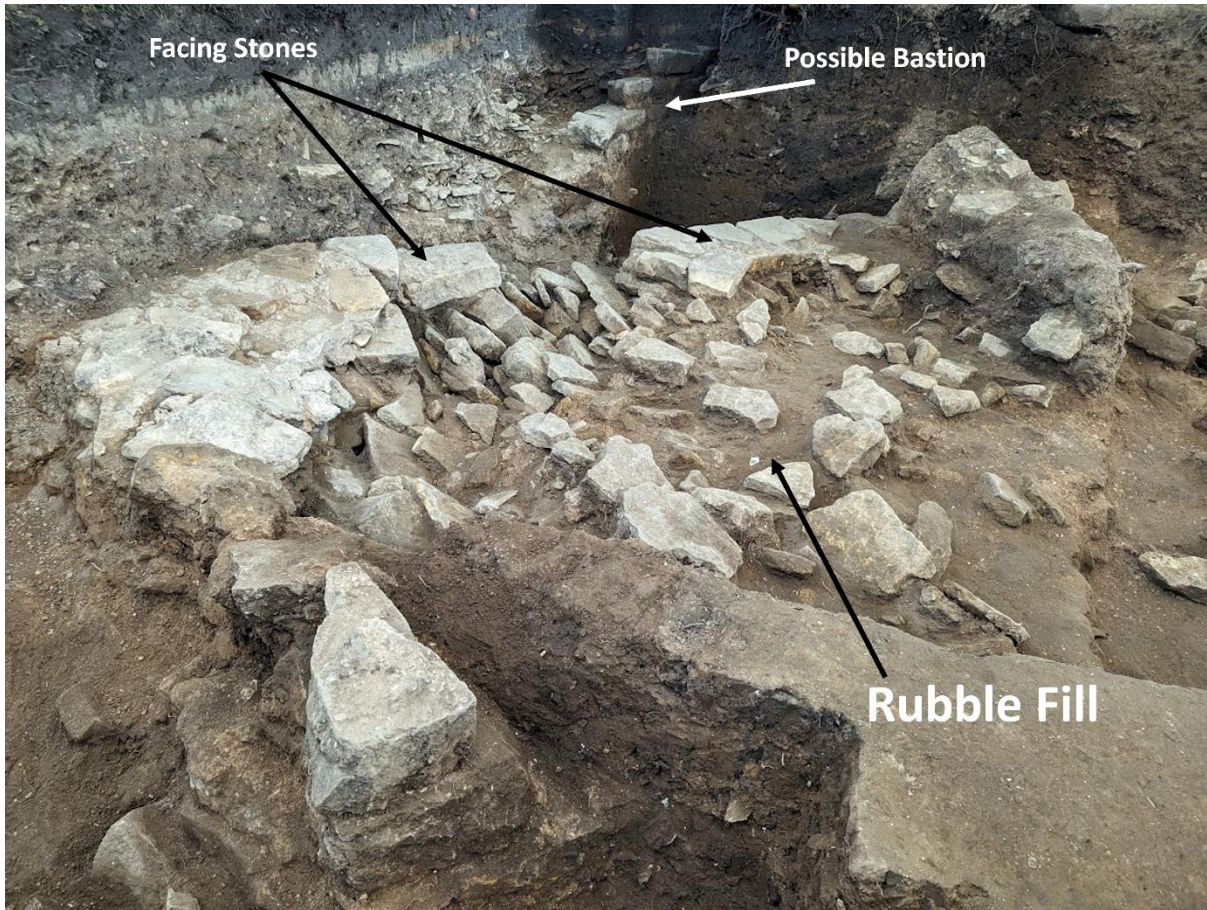
In addition to the coinage record, Carausius' service in and use of the *Classis Britannica* could possibly link to the naval or maritime element of Petuaria with one theory of the site's

occupation involving the stationing of a naval detachment on the Humber. This would mean that it is possible that Petuaria's role as a hybrid fort and maritime hub would have been especially useful to the Carausian revolt, particularly in its key defensive location guarding the inland waterways to both York and Lincoln as well as providing a clear point of egress onto the North Sea for defensive measures by naval detachments. As discussed in Corder's final summary of his time at Petuaria, some significant defensive amendments and additions are shown to have been made to the site's fortifications into the third century in the form of bastions and a gate tower (Corder & Richmond, 1942). Within this discussion Corder attributes these developments to the Constantinian period however the evidence is somewhat lacking. Corder does go on to mention the possibility for these defences to be part of the third century clashes and rebellions or are a preventative measure regarding Pict and foreign attackers, however he concludes that the evidence recorded within his investigations do not provide him with a strong enough foundation for that argument (Corder & Richmond, 1942).

With the recent discovery of a further bastion at the site in the northeast corner the theory of late second or third century developments gains further credence (Figure 47). The bastion excavated in the recent Petuaria ReVisited excavations comprises of a much narrower wall, only a few stones wide at the extent of excavation, next to the pre-existing and larger wall of the northern corner. Unfortunately, the point at which these two walls meet has been previously robbed out, most likely by Corder in one of his 1930s trenches, so the immediate relationship between the two is impossible to record. Interestingly if these bastions are seen to have been of a similar intent to the bastions constructed at Burgh Castle, a Saxon Shore fort, they may have only been bonded into the walls at some height, with the examples at Burgh some seven or eight feet (2.1-2.4m) above the ground (Allen & Fulford, 1999).

However, due to the evidence recorded by Corder and his later theories it is likely that this bastion is the same or similar period to the further rectangular bastions recorded further south along the eastern wall. The existence of such bastions, dated to the period that they are, indicate a concerted effort to further defend the site which is an aspect seen in many of the Saxon Shore and related coastal defences.

Finally, it is important to note that Petuaria's status as either a military or civil site is a crucial factor in developing an understanding of these late-stage developments. If Petuaria is considered to be a civil site either as a walled town or *civitas* capital with a residential population then these later stage developments are more in keeping with the measures carried out in the fourth century under the house of Constantine of additional structures added to pre-existing defences. However, should Petuaria be attributed to a more militaristic occupation then the later phase developments are more akin to what is carried out at military sites in the northwest empire prior to the fourth century, in particular as part of works carried out under either the Gallic Empire or Carausius.



*Figure 47 Northeast corner of wall, showing possible bastion, rubble core and facing stones, image by author.*

### **6.5.1 The Gallic Empire**

As mentioned, the coinage evidence recorded from Petuaria shows somewhat of a peak in data around the period of the Gallic Empire, in particular into the reigns of Victorinus and Tetricus I with further examples of Gallienus who was ruling the Central Empire during the Gallic reign of Postumus until his death in AD 268 and a significant number of coins of his successor Claudius Gothicus. Gallienus' death in AD 268 shares the year with the beginning of Victorinus' reign of the Gallic Empire implying possibly that this peak of coinage, in comparison to the significantly smaller number of coins recorded from Gallienus' father Valerian, and Victorinus' predecessors Postumus and Marius, could be the result of an active

occupation during this period towards the AD 270s. Only nine coins have been recorded between the four previous emperors of the third century between Elgabalus and Valerian, with a further two coins attributed to Julia Mæsa and Otacilia Severa (Appendix I). Indeed, the presence of coins of Claudius Gothicus and his successor Quintillus in similar quantities further cements the likelihood of an occupation between AD 268 and into the AD 270s.

Due to the brevity of the Gallic Empire's reign, only being fourteen years in addition to their regional focus more towards continental Europe and Gaul, an argument for architectural developments and site occupations is largely determined by the presence of such coins.

Further attribution of sites to the Gallic Empire was made by Drinkwater where a potential connection between Saxon Shore sites of Brancaster, Reculver, Burgh Castle, and Richborough are made to the Gallic Empire. These are the same sites that continue to appear in comparison to Petuaria in both architectural and occupational similarities. In the case of Gallic involvement this is largely attributed to the earlier developments of Burgh Castle and Richborough, possibly as part of a contemporary effort of defence across the Gallic Empire seeing similar forts developed at Aardenburg and Oudenburg, with later developments into the shore fort proper belonging to that of the British Empire under Carausius and Allectus (Drinkwater, 1987, 2023). The similarity in fort layouts can be seen in Petuaria with all of the forts involving bastions along both curved and straight sections of wall, suggesting a homogeneity in style across these sites.

It is a prevailing opinion of scholars of the Gallic Empire that the majority of the defensive works constructed, if any are truly attributable, under the fourteen years of reign their purpose is to secure the British, Gallic and Germanic trade routes through the Cologne-Boulogne highway prior to the development of the *Limes Belgicus*. Although Petuaria is

some significant distance from the primary points of import for this trade route on the southeast coast, the Humber as a trade inlet for the northern extent of the empire may lend some credence to the site's development as part of this defensive effort.

### 6.5.2 The Saxon Shore

During and following the crises of the third century a number of forts are constructed and developed along the east, southeast and south coasts of Britain. These become known in part as the Saxon Shore forts due to either their construction as defences against 'Saxons' and Continental raiders, or because a number of them are listed in the *Notitia Dignitatum* as being under the command of the "Count of the Saxon Shore", similar to Danum and Derventio's references under the command of the *Dux Britanniarum*. These definitions are both flawed in a number of ways, either due to their attribution to defences against the 'Saxon' threat, at the time most likely Frankish, Pictish, or Germanic, and their classical reference in the *Notitia Dignitatum* of which accurate naming is questionable due to the nature of production.

The possible comparisons between Petuaria and the forts of the Saxon Shore largely comes from the longevity of the occupation of the site, its situation along an estuary and the evidence of third or fourth century additions such as the recorded bastions. With the later Roman occupation of Britain developing into a period where defensive networks were a necessary precaution against continental European threats as well as coastal raiding from Picts.

One possible interpretation of Petuaria's ongoing use and development is that it comprises of the northernmost of these Saxon Shore forts, a position usually held by Branodunum (Brancaaster) on the southern shore of The Wash and a site previously explored in this chapter. Indeed, many of the other forts regarded as part of the Saxon Shore lie at the mouths of strategic estuaries along the British coast. In particular the sites of Rutupiae (Richborough) and Regulbium (Reculver) at the ends of the Wantsum Channel, Caistor and Burgh Castle (either identified as Gariannonum) at the Great Estuary at Yarmouth and Portus Aderni (Portchester) at Portchester Harbour (Historic England, 2018). Further sites are occasionally considered to be potential Saxon Shore era developments at Pevensey, Cardiff, the Isle of Wight, Bradwell-on-Sea, and Lancaster however in the case of the Isle of Wight little evidence exists outside of an antiquarian summary and the existence of a small number of villas on the island, with most contemporary references concerned with the Roman landings on the mainland across from the island (Sherwin, 1927). Further defended shore forts are recorded at other sites across Britain, including Maryport in Cumbria and Caer Gybi in Anglesey, both recorded to feature bastions and relate to fourth century occupations (Jones & Mattingly, 1990). Caer Gybi offers little in the way of comparable features, being a fortlet and one of Europe's only three-walled Roman sites however its ties to Segontium, Cardiff, and Lancaster provide a further context through which to understand the defensive coastline constructed on the Western coast of Britain and Wales. This coastline of defence arguably mirrors that seen at the 'traditional' Saxon Shore and as such provides further support for Petuaria's role as a defended third century coastal site in the wider context of all British shores. The placement of Caer Gybi, Segontium and others implies the practice of frequent maritime defences along coastlines. Due to an ongoing lack of recorded military sites to the immediate north and south of the Humber, likely lost to erosion, it is plausible that



Petuaria's placement some short distance into that estuary would mark it as a candidate for such a practice in the region.

Of the less conventionally considered Saxon Shore forts, namely due to their location being on the opposite side of the country in the case of Cardiff and Lancaster, the remainder are often attributed to a broader period of production and in the case of Pevensey and Bradwell-on-Sea are specifically noted as being constructed under the reign of Carausius and Allectus. The fort at Lancaster provides a number of comparable aspects to what is seen at Petuaria namely in its periods of development and believed use in the landscape. Lancaster was the site of multiple phases of forts originating under Agricola and believed to have been established to protect a crossing point on the River Lune to the north, with an albeit unproven but theorised role as a small harbour or supply depot at the site (Shotter, 2007). Furthermore Lancaster is described to be akin to the Saxon Shore forts, particularly Portchester, in its purpose not as a traditional fort housing a patrolling garrison for the region, but instead as a key defensive site for a 'strong-point' with more in common to later medieval castles than earlier military forts (Shotter, 2007). This theoretical purpose of some shore forts can be seen to explain the function of Petuaria, particularly in the addition of bastions to provide further fields of fire should the site be involved in a conflict.

Petuaria's placement both on the Humber and as the crossing point for Ermine Street suggests it is entirely possible that the defensive developments at Petuaria were closer to this 'strong-point' practice than a traditional fort. Indeed, it is possible that this could be a case for a type of *burgus* or *burgi* as seen elsewhere in the Midlands and the wider empire. The development of these *burgi*, small defended fortlets placed along important trade routes, are mainly seen on the continent in modern day Germany and appear in epigraphical

evidence from the late second century onwards (*CIL*. III; Cagnat & Besnier, 1911; Darvill, 2008). Although Petuaria and Lancaster are much larger than traditional *burgi*, usually little more than a fortified watchtower, the shared role of defending a specifically useful point in the second and third centuries may provide an explanation as to Petuaria's defensive developments and military function following the initial conquest.

Of the conventional southeastern Saxon Shore forts a differentiation between two different styles of structure has been made, with one group being regarded as earlier forts redeveloped in the period, and the other group purpose built in the period (Allen & Fulford, 1999; Historic England, 2018, 3). The main difference noted between early Saxon Shore forts and the later examples is the stylistic differences between a Romano-British fort, with the later examples following more of the design common in the mainland territories and unrepresented within Britain. Of these forts both the previously discussed Brancaster and Reculver are categorised, alongside Caistor, to be of an earlier phase of development from the early third century and as such following the layout of other Roman forts within Britain (Allen & Fulford, 1999; Historic England, 2018). The structural development of these forts initially seems closer in comparison to that of Petuaria, with the recorded walls being of some two to three metres in width with a large earthwork rampart. However, these early Saxon Shore forts are of a traditional rectangular layout, something that is not the case with Petuaria.

The later developed Saxon Shore forts instead comprise of more irregular shapes and thicker walls, with a characteristic addition of semi-circular bastions to the external faces of said walls, again a feature arguably seen in Petuaria's added bastions similar to Burgh Castle. Furthermore it is a prevailing theory that some latter stage forts are attributed to the reign

of Carausius and Allectus with dendrochronological studies at Pevensey Castle attributing timber piles to construction during the reigns of Carausius and Allectus, with some having origins under the Gallic Empire such as Burgh Castle (Tyers, 1995; Drinkwater, 2023).

Throughout both designs of forts it is important to note their layout of internal towers along the walls, something hitherto unseen at Petuaria in the archaeological record or in the geophysical surveys carried out at the Burrs Playing Field outside of the gatehouse towers reported by Corder and Wachter. A further point of note is that the recorded bastions of the later forts, particularly those at Burgh Castle, Bradwell-on-Sea and Pevensey are of a solid construction, something also unseen in the archaeological record at Petuaria. Instead, the bastions recorded at Petuaria, both the rectangular features on the straight of the wall and the curving wall recovered on the northeast corner, are of an apparently hollow construction suggesting that the workable surface above them would have been little more than a wooden floor. This is more in keeping with the described nature of some of the coastal sites in Britain, with defences requiring changing or altering at a reasonably frequent interval to defend against invaders as well as the stone defensive additions made to a number of walled sites on the mainland.

Petuaria's features of both an irregular footprint, likely owing in no small part to the angle at which the east road leaves the site, and the addition of third century bastions suggests the possibility that the site is more of a temporary part of this defensive network. Although there is a current lack of conclusive evidence towards these bastions and developments on the southern wall of the fortified area, this does not mean they did not exist. If the defensive structure recorded at 49 Station Road, identified as either a wall or bastion's footings, is relating to a bastion it would provide crucial information for understanding the defences

along the south of the site (Fraser, 2004b). As explored in the previous chapter, these footings were thought to have either replaced a timber defence sometime in the third century or be part of a fourth century bastion, with either hypothesis supporting the argument for Petuaria operating as a military site into the third and fourth centuries. It is possible that the timber defences constructed prior to these stone structures would have acted as estuary-facing positions while the site acted as either a fort, harbour, or naval base in the third century. Furthermore, the possibility that these structures are of a fourth century origin and are of a similar period and intent to the bastions recorded elsewhere, provides a further argument for the site's significant repurposing in the fourth century as part of a Constantinian defence on the Humber.

Should Petuaria be regarded in the same context as the other known Saxon Shore forts an interesting query begins to form in what would the defensive extent of these sites really be?. For the network of sites along the coasts of Suffolk, Essex, Kent, and Sussex (Figure 48) a clear link between Britain's coast and the Channel crossing can be seen. If Petuaria is attributed to this network of defence it is a significant outlier being some eighty miles north of Brancaster by sea, leaving the entire coast of Lincolnshire seemingly undefended in this network outside of a possible site at Skegness, itself as of yet unproven (Lane, 2017; Robinson, 1981). Similarly, if the next northernmost site with any real presence of maritime Roman defences is Arbeia at South Shields that leaves a further one hundred and sixty miles of undefended coastline during this period. It then becomes a question of whether logic dictates that Petuaria must remain, in some capacity, a military maritime presence during this period prior to the signal stations developed on the North Sea and whether Petuaria's defences, including the bastions, are rather an effort throughout the duration of the third century to defend from mainland raiders as opposed to being attributed to any specific event.

Furthermore it is believed that a number of the third century coastal defences of both Britannia and the mainland were intended to negate the threat of coastal raiding rather than seaborne raiding (Drinkwater, 2023). There is little in the archaeological record for such sites of raiders to indicate especially sea-worthy vessels, in addition to the extended Saxon Shore network spanning continental shores, and it is apparent that a significant threat to these sites would be from the same mainland rather than across the Channel. As previously mentioned this provides a further context for Petuaria in that the site is more appropriately positioned to defend against coastal raiders from the north rather than those crossing from the continent. To be able to truly determine the relationship between Petuaria and the wider third century coastal developments, further dating information is needed to understand the phases of construction seen in the walls and bastions. The specific dating of other coastal defences is from a wider range than simply one period, with evidence for Gallic Imperial, Carausian, and Constantinian construction seen at a number of sites considered to be Saxon Shore fortifications. Petuaria as of yet remains possibly tied to any one of these periods but there is a clear link between the site and an adaptation of pre-existing defences as opposed to purpose built forts, something more akin to that seen in the fourth century with the walling of towns within Britain and Gaul and the addition of external towers to pre-existing defences (Salway, 2015).

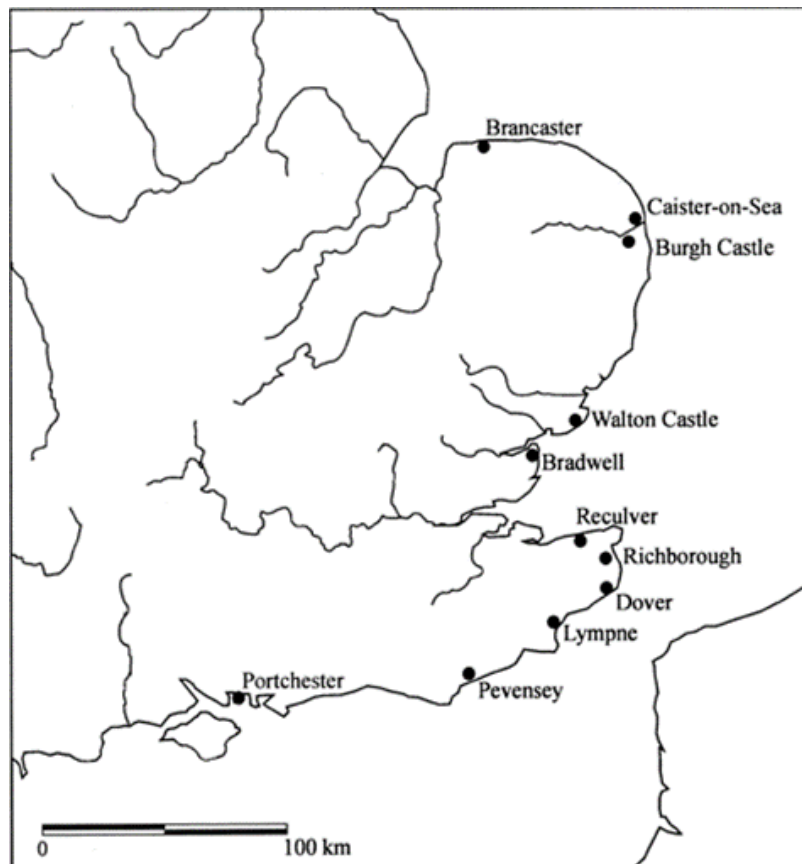


Figure 48 Map of known Saxon Shore Forts from Historic England's "Saxon Shore Forts" (Historic England, 2018)

### 6.5.3 The Carausian Revolt

As noted at sites such as Pevensey, Richborough, Cardiff and Bradwell-on-Sea and other second wave forts of the third century, ties in both construction phases and numismatics indicate a connection to the usurpation empire of Carausius and Allectus. Through numismatic ties there is somewhat of a connection between Petuaria and these developments, however as previously stated the coinage records from Petuaria specifically do not show a particular peak in coins of Carausius and Allectus (Appendix I). Unfortunately, Petuaria's bastions and defensive structures are also missing any surviving woodwork, thereby not allowing for the dendrochronological dating seen at Pevensey to be tested here. Additionally there is a shown reuse of materials in the construction phases at Petuaria, arguably shown in the positioning of the theatre inscription, therefore any woodwork that

survived would be of questionable accuracy in terms of dating (Corder & Richmond, 1942).

None of the coins of either Carausius or Allectus are recorded to have shown a *terminus post quem* instead one of the only recorded examples of such a coin placement is from the defensive feature recorded at 49 Station Road where a coin of Constantine dated a robbing fill to 330-335 (Fraser, 2004b; Evans & Atkinson, 2009).

## **6.6 The *Classis Britannica***

To recognise Petuaria as a further case of the Saxon Shore network would require also contextualising it on the coastline and attributing a certain region for its remit of defence. An effective defence of the British coast from mainland raiders would almost certainly require the involvement of some naval detachments, especially in areas such as the undefended coastlines of Lincolnshire and Yorkshire prior to the development of the signal station network.

Should Petuaria therefore be considered part of this defensive network and, alongside other examples of Saxon Shore forts be also used as an inlet for trade and transportation, it is possible that this naval relationship functioned other ways than simply defence.

Furthermore, some researchers theorise that Petuaria was part of a network of coastal settlements maintained as a trading network along the east coast alongside other sites such as South Shields, Brancaster, Reculver and others along the Wash and Thames estuary, as seen in examples from the Saxon Shore (Allen & Fulford, 1999). It is then suggested that without involvement from the *Classis Britannica* there would likely have been little to no reason for these sites to appear as connected in any way. Evidence for such a network exists in the building materials used in southern sites seemingly originating from northern sources

and having been transported by way of the sea rather than over land (Allen & Fulford, 1999). Alternatively, many of the southern sites of forts and supply depots in this network that are involved in the Carausian usurpation show signs of building material no longer coming from farther afield but rather much more locally, implying a break down in naval activity by the time of the late third century, in keeping with contemporary and latter sources (Cleere, 1977). This is a common theme seen throughout the third century crises as the means of production are often disrupted or supply chains broken due to either the internal Roman conflict or external factors. This can be seen further in the Gallic Imperial defences constructed along the Cologne-Boulogne highway as previously discussed.

As discussed previously in regard to estuarine sites and the Saxon Shore forts, coastal maritime archaeology of the Roman era faces a difficult challenge when working around erosion. Many sites have been lost to this including Walton Castle of the Saxon Shore and as such a definitive idea of what constitutes as a site with ties to the *Classis Britannica* is difficult to create to an even greater extent than estuarine and coastal forts, evidence is therefore required from the inland remnants of the sites.

The site with perhaps the most substantial investigations carried out and with known links to the *Classis Britannica* is that of Dover, another of the Saxon Shore forts. Dover's primary evidence towards being part of the *Classis Britannica*'s naval base system is the recovery of tiles stamped with the markings of the navy, evidence which is as of yet unfound in significant numbers at the other suspected sites of naval bases along the southern and western coasts of Britain; Lympne, Richborough and Portchester. Other sites that have recorded examples of *Classis Britannica* tiles are more inland and are suspected to be linked to iron manufacture and timber supply to the navy at sites such as Bardown, Bodian and



Beauport Park. Aside from the existence of *Classis Britannica* tiles in the archaeological record, it appears that most sites are attributed to the navy through their location and presence on a river or waterway, suggesting the possibility of Petuaria acting as a base for the northeast coast for at least some time.

Further archaeological evidence recorded at Dover comprises of a significant harbour, presumably the largest in Britain at the time, and significant structural evidence including two *Pharos* or lighthouses. It is thought that Dubris harbour would have served as a launching and landing point for the *Classis Britannica* for both transportation of goods and the strategic defence of other coastal sites. The harbour basing of a naval detachment is something that has been theorised to have existed at Brough, should the land to the west of the Magistrates Court prove to be a continued maritime area with wharfs and quays (Fraser, 2001, 2002). With the possible purpose of a naval detachment at Petuaria being one of security for both the estuary and surrounding regions of eastern Yorkshire and North Lincolnshire alongside a suspected transport network between sites along the Humber.

In addition to, as of yet, lacking the telltale tiles of the navy Petuaria's recorded structures as well as its place within the geographical landscape are significantly different to that of Dubris. Arguably there is little need for lighthouses on the Humber, the waterway instead requiring skilled navigators and pilots as seen to potentially link to the river pilot inscription from York (RIB 653).

Perhaps the most compelling evidence indicating the potential for Petuaria's role within the placement of the *Classis Britannica* is the lead and metalworking found across sites in the immediate area. Although not definitive evidence towards the presence of a naval

detachment the quantities of such material may suggest the presence of a small number of vessels as is discussed further in Chapters 7 and 8.

## 6.7 Conclusion

When comparing the evidence from Petuaria to other sites across Britain that feature similarities in both size, purpose and period, it becomes apparent that the site is not one single thing. As has always been theorised since the investigations of Corder, the site of Petuaria could fulfil a number of roles depending on when the site is occupied and what the wider political and militaristic context is for the region. It is possible that Petuaria is all of the above settlement types, both a *civitas* capital and a naval base, but at different periods of occupation. Unfortunately, Petuaria does not share a majority of characteristics with any single type of the presented criteria, being significantly smaller than all of the other identified *civitates* as well as many of the sites of third century defensive developments. Furthermore, in spite of the admirable amount of evidence recorded and recovered from Petuaria there are still a number of what would be key identifiers missing from the archaeological record. The lack of a conclusively identified *principia*, civil or military amenities such as bathhouses, public buildings such as forums or temples, and further defensive measures to the southern and western extents of the area it is extremely difficult to attribute Petuaria to any one of the possible uses explored in this chapter.

Despite these issues, there is clearly a presence of both civil and military developments seen at the site. It is likely that the civil population remained external to the walls, with potentially some internal occupation in the second century, while the walled area remained a primarily military or commerce site. The existence of a harbour is all but confirmed suggesting

Petuarria would fulfil a major role in the surrounding landscape, both as a point of import and export but also potentially providing the region with the basis for a naval detachment.

In terms of the third century additions and changes seen at the site debate continues between the emperor or emperors responsible. It would appear that a likely candidate is the Gallic Empire noted for not only their significant coinage found at the site, the highest portion outside of the Constantinian Dynasty, but also similarities in constructions at Burgh Castle and Richborough in Britain and Aardenburg and Oudenburg on the continent. Should further evidence prove informative on the Gallic occupation of Petuarria it seems probable that these defences are of their construction. Additionally the presence of a naval detachment now seems likely at the site especially when considering Petuarria's potential role within the wider Humber landscape as is explored in Chapter 7.

## Chapter 7 Context and Connectivity

### 7.1 Introduction

To further develop upon the theories presented throughout this thesis it is important to contextualise the site within its own local area. This is especially important when trying to discern its *civitas* capital status and what role it may have held as a harbour or similar maritime site. Furthermore, an exploration of the surrounding sites may shed further light on the extent of occupation within the area, especially Roman sites such as the villa at Brantingham and other sites in a similar vicinity. Finally contextualising the site within the remit of the Parisi tribe will help to develop a further understanding of the relationship the local population had with the Roman occupiers. Therefore, a twofold approach to a study area was applied for this chapter exploring both Petuaria in an immediate context, this being the banks of the Humber on both southern East Yorkshire and bordering further into Lincolnshire, and then in the wider context of the Parisi territory spanning north to Malton and Staxton across the remainder of eastern Yorkshire.

In this regard, and developing from previous literature, a number of sites are considered across the extent of East Yorkshire and the Humber region of North Lincolnshire. These sites are all determined to be of a Roman or Romano-British nature and constitute some significance as a site within the region, either in development or in relationship to Petuaria. From prior writings such as Halkon's *The Parisi* and the work of Wilson, Millett, and others on military, Roman, and Romano-British sites in the county alongside further works on Iron Age and Roman East Yorkshire there is clearly a substantial amount of evidence from the period across the region. Therefore, as the focus of this research is specifically on Petuaria

and its place in Roman Britain some restrictions need to be made to this research, and as such the sites considered are of either a significant size, a military presence, or a point of specific interest within the landscape. In this regard the sites considered are as follows and are categorised between the Humber region and Eastern Yorkshire specifically alongside type of primary occupation. Due to the successive political and geographical descriptions associated to both terms, for this research the Humber region is defined as sites on or close to the course of the Humber, with exceptions made for sites at Drax and Swine, and eastern Yorkshire will refer to sites on the higher ground surrounding the lower wetlands to the east with some mention of the rural settlements that appear throughout this eastern region.

In addition to the regional selection of these sites a further consideration of interconnectivity and networks of use and communication will be considered in their relationship to Petuaria both by known Roman roads, the waterways, and over land. Furthermore, the periods of occupation and nature of these sites, be it military, civil, Roman, or Iron Age will provide further clarity when compared to occupations at Petuaria and will inform on the possible changes to use and purpose seen within the settlement.

Table 11 List of sites considered in Chapter 7, defined by their primary evidence or feature (\*Buttercrambe comprises of a small marching camp while Swine consists of a coin hoard)

Place	Settlement	Villa	Fort	Other*
<b>Alkborough</b> - Humber	X			
<b>Buttercrambe</b> – E Yorkshire				X
<b>Dragonby</b> - Humber	X			
<b>Drax</b> - Humber	X	X		
<b>Elmswell</b> – E Yorkshire	X	X		
<b>Faxfleet</b> - Humber	X			
<b>Hayton</b> – E Yorkshire	X		X	
<b>Horkstow</b> - Humber		X		
<b>Kirmington</b> – Humber	X		X	
<b>Malton</b> – E Yorkshire	X		X	
<b>Millington</b> – E Yorkshire	X	X		
<b>North Cave</b> - Humber		X		
<b>North Newbald</b> – E Yorkshire		X		
<b>Redcliff</b> - Humber	X			
<b>Rudston</b> – E Yorkshire		X		
<b>Shiptonthorpe</b> – E Yorkshire	X			
<b>Skeffling</b> - Humber	X			
<b>South Ferriby</b> – Humber	X			
<b>Stamford Bridge</b> – E Yorkshire	X			
<b>Staxton</b> – E Yorkshire			X	
<b>Swine</b> - Humber				X
<b>Welton</b> - Welton		X		
<b>Winteringham</b> - Humber	X			
<b>Adlingfleet</b> - Humber	X			
<b>Winterton</b> - Humber	X			



Figure 49 Map of sites considered within this chapter.

Of the sites considered exhibiting significant or substantial Roman or Romano-British development, a bias appears towards the higher ground of the region with further, smaller sites appearing throughout the lower Humber wetlands and Holderness Valley as recorded by the Humber Wetlands Project (Van de Noort, 2004; Figure 50). Along this higher ground is the primary concentration of sites of Roman military development with forts like Malton, Hayton and Staxton with earlier encampments at Malton and marching camp Buttercrambe all suggesting a network of defence across the borders of the Riding from as early as Petillius Cerialis' first excursion against the Brigantes. Furthermore, traditional interpretations of pre-Roman boundaries normally show the Parisi territory extending to little more than the region east of York and south of Scarborough and Malton with the North York Moors often delineating the territory of Brigantes and Parisi, similar to York's position in the west.

In this large, flat region between the wolds and the sea is allegedly Ptolemy's *opportunum sinus*, the geographical feature most often used historically to locate Petuaria as it is the direct reference given in the *Geographia*. Indeed, in this regard there is an interesting paucity of significant settlements and structures recorded in the archaeological record that have been attributed to Roman periods of occupation. Despite this, smaller Iron Age and rural Romano-British settlements do occur throughout this region and are often only identified through non-invasive methods such as aerial photography or geophysics. In this, there is little by way of excavated or interpreted material through which to date the settlements with only a few being the subject of larger scale excavations such as Shiptonthorpe and Hayton due primarily to their position along the major northern road in the region (Millett, 2006; Halkon, Millett and Woodhouse, 2015). It is possible that the explanation for Ptolemy's *opportunum sinus* lies in the agricultural rural settlements of the region, possibly acting as something of a 'bread basket' for northern Britannia. Many of these sites do show signs of agricultural practices however the scale at which these sites have been recorded offers little in the way of evidence to suggest a point of regional production or simple subsidy, suggesting possibly that the affluence of such sites may be a better indicator of the possible economic advantages of producing grain for other settlements.



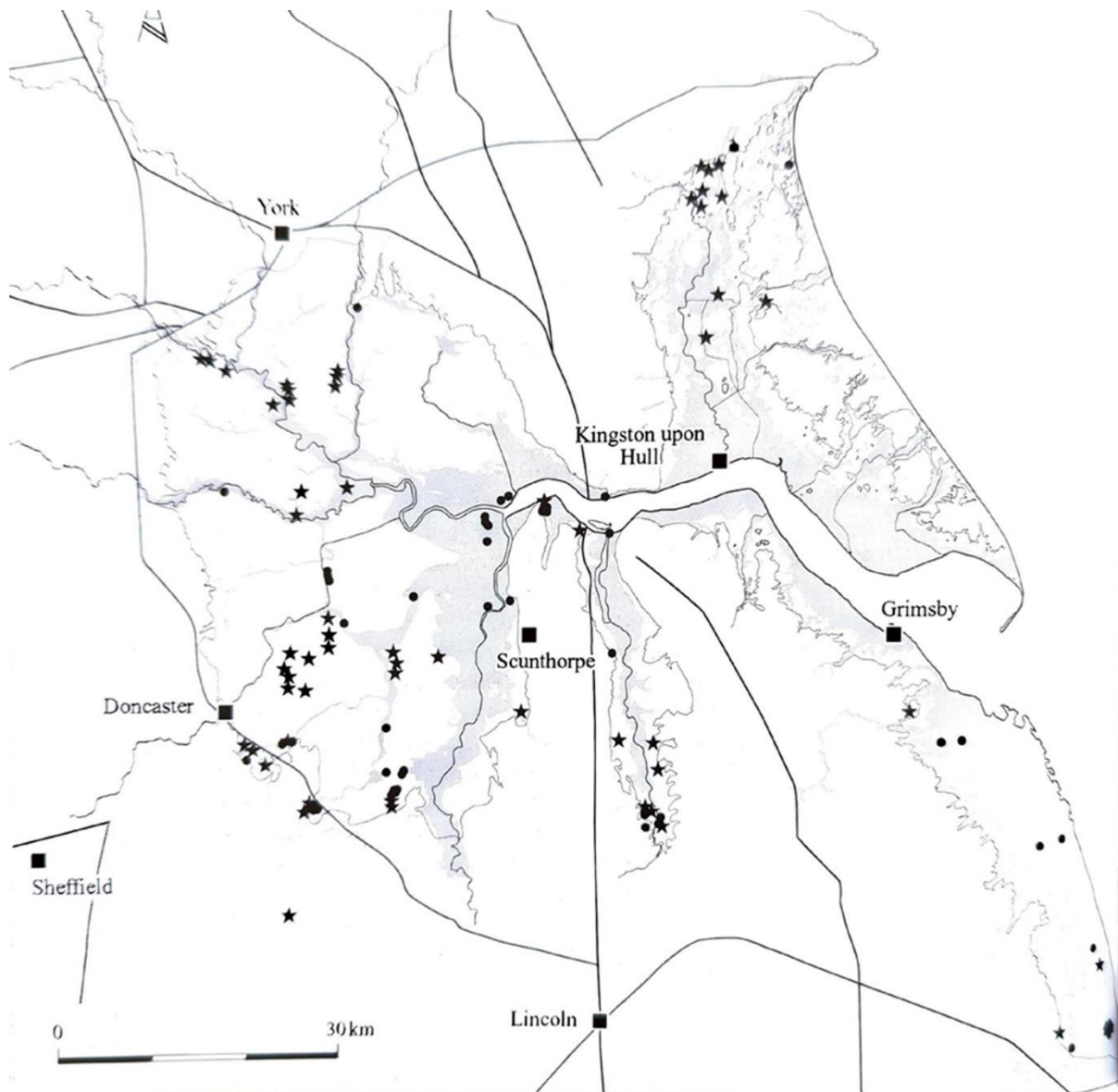


Figure 50 Map of Roman sites identified under the Humber Wetlands Project (Van de Noort, 2004, 108)

Despite the overarching rurality of most settlements there is somewhat of a noticeable similarity between these sites and the later Romanised sites as well. The majority of these Romano-British settlements exhibit clear geographical advantages to their placement, often lying along waterways or on higher ground throughout the landscape, with military emplacements normally situated near dry routes in the landscape (Halkon, 2013). This is seen further afield into the Humber wetlands and onto the Trent, Aire, Don, and Ouse where further sites and settlements have been recorded along these distributaries (Van de Noort,

2004). Furthermore, with the addition of substantial roadways under the Romans, there is the potential for a further geographical ideal in the placement of settlements, particularly the route north from Brough to York, the eastern road from York to Praetorio, and the east by northeast road leaving Brough and potentially directed towards lost coastal sites or the sparse remaining rural sites towards the coast in Holderness. In this there is a noticeable trend of sites that exist along such roadways benefiting greatly from the Roman presence and expanding and developing throughout the period of occupation, with prominent examples at Shiptonthorpe and the *vicus* at Malton.

In addition to this there is possibly some correlation between the development of a Roman military presence along these routes and the extent of which Roman or Romano-British settlements are able to develop, suggesting that the trade and transport networks between these sites would give the roadside settlements further purpose and allow them to expand and develop to a greater extent than the rural sites to the east. Whether this purpose is economic, as is possibly seen in the supposed shopfronts facing the road east from Brough, or otherwise remains to be seen however these routes are crucial to understanding the development of settlements and sites within the context of *Petuaria* (Hunter-Mann et al., 2000). In the case of Shiptonthorpe a widely accepted narrative is that the settlement served as a gathering point for transported goods between *Petuaria* and York, suggesting that these towns may serve in some way as depots along the Roman-controlled routes (Millet, 2006).

Further sites may be considered along the coastline such as the signal stations and the possible villa at Hornsea, alongside the high-status site recently excavated near Scarborough by MAP Archaeology (Historic England, 2021). These sites, in particular the signal stations of which a fourth century date is most often given, are likely to provide little contextual

evidence in relation to the occupation of Petuaria other than that the wider region remained occupied following the abandonment of Petuaria itself. In Petuaria's military context it also appears as though the signal stations were possibly developed to replace the fort or naval base rather than being used contemporaneously. However, there is some argument for brief homogeneity between the sites due to the sparse evidence of a post-Constantinian occupation of Petuaria, with eleven coins of the Valentinian Dynasty recovered from the site as well as singular coins of both the House of Theodosius and Magnus Maximus, suggesting some occupation until at least the reign of Valens if not further towards the end of the fourth century (Appendix I). Likewise the signal stations of Filey and Huntcliff both show evidence of a mid-late fourth century occupation, usually beginning between AD 360 and 370, contemporary to the rule of Valens (Hull, 1932; Lenski, 2002). Despite this possible homogeneity, the dating evidence presented at Petuaria for a Valentinian dynastic occupation is sparse, and as such the more likely theory of the signal stations developing after or at least briefly contemporaneously to the abandonment of Petuaria still stands.

## **7.2 The Humber Region**

The first region to be considered within a context with Petuaria is that of the surrounding Humber Estuary and its banks, defined in this research to not only include the immediate banks of the estuary but also extend a short distance inland as further settlement patterns and developments will bolster the understanding of Petuaria's connections in the wider contextual region. An immediately, obvious, estuarine link is that of the crossing between Petuaria and the south bank, identified to be a site in or near the Winteringham Haven,

which has been the crux to all theories of the Roman establishment of Petuaria and the creation of a ferry crossing between these sites (Corder & Richmond, 1942; Wachter, 1969).

An expansive settlement has been recorded at this site, with evidence ranging from an early ditch enclosed site through to stone buildings constructed sometime in the second or third centuries, suggesting similarities to the development of stone structures present at Petuaria with the earliest examples identified as Hadrianic-Antonine and others dating into the third or fourth centuries (Stead, 1976). Additionally, nearby at the site of a later villa at Winterton a stone building was recorded and dated to be of Claudian construction suggesting an element of maintained occupation in the early years of the conquest with possible similarities to Redcliff on the north bank (Stead, 1976; Crowther & Didsbury, 1988).

Furthermore, the primary features of note recorded at Winteringham are the lay of the northern end of Ermine Street, described as terminating at a point adjacent to the Humber, with Roman Winteringham extending southwards. It is suggested by some that Ermine Street's terminus at this point would have led travellers and trade to a jetty from which the ferry, or launch, was operated between Winteringham and Petuaria with both sites believed to have begun as supply depots or staging points (Price & Wilson, 1988). The staging point and supply depot nature of these sites is not only widely accepted in both the literature and amongst archaeologists it is also in keeping with Roman strategy as recorded by Vegetius, albeit writing in a later period than the Roman conquest of Britain, where the historian describes the establishment of palisades to defend river crossings (Vegetius & Clarke, 1767, 3.7). Further Roman or Romano-British evidence extends a small distance into the surrounding countryside and particularly along the waterfront, as shown in the record of developer-led investigations, suggesting a similar spread of occupation to what is seen at

Petuaria. Although, much like Petuaria's southern extent, there is little in the way of structural evidence towards the Roman shoreline due in part to later industrial developments as well as the changing banks of the estuary either eroding foundations or making the area uninhabitable.

Other evidence from Winteringham suggests that the initial occupation under Roman rule was that of a military purpose, most likely pre-Flavian and suggested as such through the recording of coins of Claudius to be of the initial invasion or not very soon after. Interestingly, as with Petuaria there is evidence of a pre-Roman Iron Age occupation of the site at Winteringham, suggesting that this coinage evidence may not be as clear in suggesting a military presence as previously thought, with a further explanation being trade between this Corieltauvi site and Roman settlements to the south. The attribution of Winteringham to be of a military site posits an interesting question in regard to its relationship with Petuaria on the north bank; had there been a military presence at Winteringham since the early days of the first century why is it that there is seemingly no effort to establish a base on the opposite bank until some decades later.

Furthermore, in the archaeological record present at Petuaria there is little to no evidence suggesting a Roman occupation earlier than the AD 70s despite the existence of evidence indicating a pre-Roman occupation of the site. It is plausible that Winteringham and Brough shared a pre-Roman connection crossing the Humber, possibly even forming the basis of the Roman route across the channel, or heading west to cross the waterways at more manageable points towards Faxfleet and Adlingfleet, or beyond to Drax. This is shown somewhat in the record of a Corieltauvi gold stater, belonging to the tribe residing in

Lincolnshire and the Midlands, in the environs of Brough with examples most commonly dated to the mid-first century BC (May, 1994).

This possible pre-Roman connection is further shown when considering the number of other Iron Age sites present along the estuary, many of which show signs of similar occupation, however that still brings into question the apparent delay in Roman advancement until the Flavian Dynasty. Furthermore, should there be a pre-existing Iron Age crossing between Winteringham and Brough, there is seemingly no evidence for a continued use of it following the Roman invasion and prior to the Flavian occupation at Petuaria. If there was such a crossing, the unceremonious closure of such a route by the Romans would likely have significant impact on the northern Humber settlements, suggesting rather that pre-Roman interaction would have taken place across the westerly land route or another route across the Humber, possibly between South Ferriby and Redcliff as is discussed later. Additionally had an Iron Age ferry existed between these sites it is likely that the Romans would have made use of this much earlier, seeing a Claudian or Neronian occupation at Brough instead of the later period as seen in the record. Although some coinage recorded from Brough is of this earlier period with four coins of Nero recovered from the site, it is more likely this is material brought during the Flavian expansion or as trade from the west or Redcliff to the east.

Indeed material recovered from a site at Redcliff, directly north of South Ferriby, show signs of a Claudio-Neronian presence but nothing from a later date, suggesting possibly that the prior crossing was between the two sites rather than the later Winteringham – Brough route (Hunter-Mann et al., 2000). In this Redcliff's ties to the Roman occupation have often been theorised to have served as an early conquest-era contact point with the Parisi (Crowther et

al., 1990). In the material evidence present at Redcliff it has been suggested that contact may have even been directly between the site and the continent, rather than crossing the Humber from Lincolnshire particularly through early examples of Spanish amphorae (Crowther et al., 1990, 178). Furthermore, over the course of excavations in the 1980s the ceramics recorded seemed to show a heavy weighting towards imported wares rather than the locally produced coarse wares, suggesting further that this site was a hub of import and transportation in the years prior to the establishment of Petuaria.

To answer the question of delayed advancement two possible explanations may be given, both of which require further contextualisation to determine their accuracy. The first is that Winteringham's position and its possible military presence acted as both a stopgap and frontier for the Humber, dissuading the Parisi from crossing south into Roman territory, the second being Roman policy at the time and the later campaign of Petillius Cerialis. This frontier can arguable be seen in the addition of further forts across North Lincolnshire such as at Kirmington. The Kirmington fort, identified initially through cropmarks (Figure 51), suggests the early beginnings of a military frontier in North Lincolnshire particularly when considering the potential for early, even Claudian, dates of establishment for both sites. Furthermore, when considering the dating evidence present at the two villas in the region possibly associated with mosaic production at Petuaria, Winterton and Horkstow, it appears as though civil development in this region cumulates in the villas' construction in the later Roman period alongside Brantingham, itself dating to the third or fourth century. This is in contrast to the earlier developments recorded at Winteringham, suggesting the Winteringham site is the result of a longer period of occupation beginning at an earlier date.

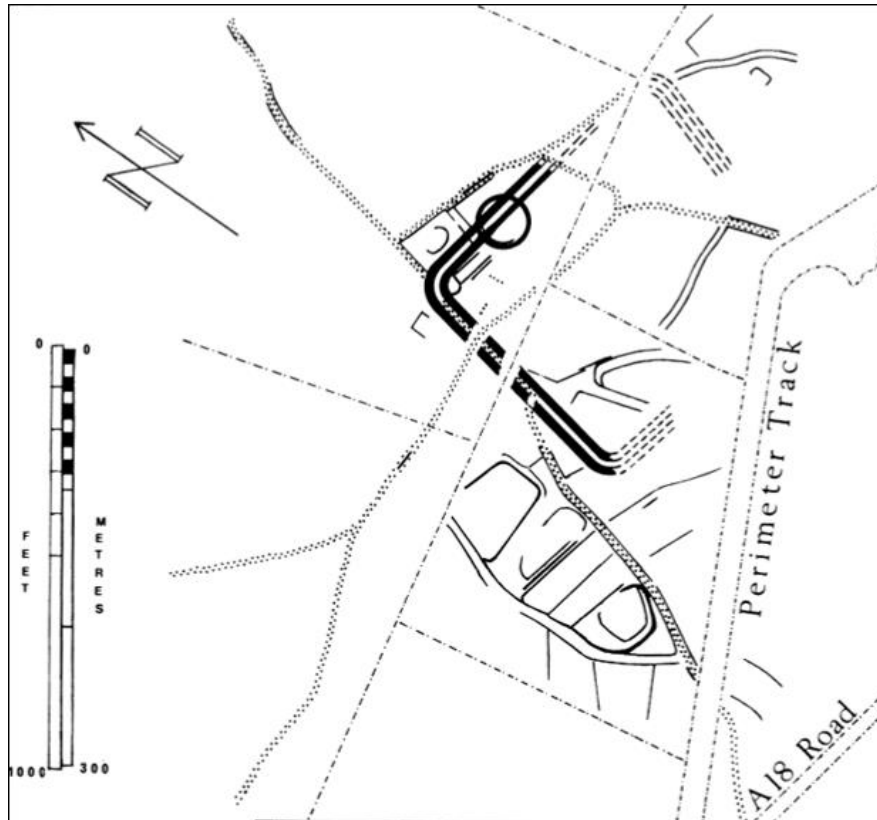


Figure 51 Crop marks interpreted to show the outline of a Roman fort amongst earlier earthwork features with the Humber estuary 10-12 km to the northeast, Kirmington, North Lincolnshire (Riley, 1977)

Additionally, the archaeological record present at Kirmington suggests a further maintained occupation into the later Roman period, similar to what is observed in the coinage recorded at Winteringham with large quantities dating to the later fourth century (Liversidge et al., 1973; Stead, 1976; Riley, 1977; Jones & Whitwell, 1991). A further site near that of Winteringham is South Ferriby, deemed to be a substantial site prior to the Roman conquest and exhibits some sign of occupation into the Roman period particularly through ceramics and coinage records found on the foreshore (Ellis & Crowther, 1990). Interestingly a great number of coins, many times the count of those at Brough, have been recovered from the area of South Ferriby and many of which comprise of significant quantities into the later periods of Roman occupation (Roth & Sheppard, 1906; Roth, 1906; St. J. O'Neil, 1935). Quantities of coins as late as Constantinian and even Theodosian occur throughout these collections, indicating some presence until the late fourth century, markedly after the period



in which Petuaria was thought to be eventually abandoned and reflected in the recording of a single coin of the House of Theodosius from Petuaria (St. J. O'Neil, 1935; Appendix I). Furthermore South Ferriby has also been recorded or theorised by some to have been a pottery kiln during the Roman occupation, however there is seemingly little in the way of conclusive evidence in this regard so far (Roth, 1906; Dudley, 1949; Stead, 1976; Phillips, 1989). Much of the evidence used when making this assessment comes in the form of quantities of ceramic sherds found at the site after being washed from the banks of the Humber.

South Ferriby provides an interesting example when considering the context of the Humber estuary in its theorised position as a large settlement into the Roman period, as estimated by pottery and coinage records from the foreshore, while also lacking substantive evidence of a settlement pattern or internal structures. This is believed to be due to the erosion of the site by the Humber itself leaving only trace remnants of the pottery assemblages and exemplifies not only the changing nature of the estuary but the wider ramifications that the erosion of both banks has on the archaeological record (Ellis & Crowther, 1990). Although South Ferriby's sherd density may indicate a site of production, it is also possible that these ceramics are detritus either washed ashore by the Humber in an earlier period or are material lost during transportation of goods across the waterway as suggested by evidence of a Roman road on the foreshore (RR270). South Ferriby is unique in these Humber region sites for such a density of shoreline ceramics so there are unfortunately no immediately comparable structural features through which further conclusions can be drawn.

Alternatively, Adlingfleet, to the west and located on the River Trent, forms a site of significance without stone structural features, instead being of a primarily wooden construction similar to other sites in the wetland region including those recorded in the Hull area (Van de Noort, 2004). Similarly to South Ferriby, Adlingfleet was initially identified by a spread of ceramic materials, before being further explored by geophysical surveys and excavations (Fenwick et al., 1998). The location of the site at Adlingfleet is ideal for access to both the waterways of the Trent and Don, as well as Yorkshire to the north, Lincolnshire to the east, and Nottinghamshire to the southwest. It is likely that, similarly to Faxfleet, Adlingfleet acted as something of a transshipment point for shipping goods further south along the Trent or Don, possibly towards the forts at Doncaster or Rossington (Van de Noort, 2004). As has been addressed when discussing Petuaria's relationship to the Ouse, the Trent provides a similar issue of navigability, or rather a lack thereof, for shipping goods further south. A unique issue presented by the Trent is the location of Trent Falls, not actual waterfalls but the confluence of the Trent and Ouse where the water flows rapidly at certain times of day in line with a tidal bore, and can prove problematic for moving boats from one waterway to the next should the tides not align between the waterways (Stone, 2005). It is therefore likely that these bankside settlements, either previously existing in the Iron Age or developed under the Roman era, were found to serve as ideal holding points along these waterways, further acting as part of the shipment network that appears to be forming along the banks of the Humber.

The extent by which occupation and settlement occurred on the southern bank in addition to its longevity does bring into question why Petuaria became what is believed to be the primary port for the estuary. Although it is possible other sites exist, such as the small settlement recorded at Faxfleet B to the west (Sitch, 1989), and may even have existed prior

to a subsequent loss as is the case for the medieval sites of Ravenser Odd, Sunthorpe, and Burstall Priory, and to some extent South Ferriby, there is as of yet little to no evidence of a site on the scale or presence of Petuaria recorded along the Humber. It is likely, although impossible to discern, that this choice of the northern bank for the establishment of such a point of military and transport infrastructure was due to the watercourses and sandbanks present within the Humber and may, in turn, suggest the later abandonment of the site in favour of settlements elsewhere following the Roman retreat and the arrival of the Angles to the region. Indeed, there is some evidence for an Anglian presence in the coinage recorded from South Ferriby, with several examples identified to be of 'Anglo-Saxon' make, something not seen in the recorded coinage of Brough in a significant or reliable quantity (Roth & Sheppard, 1906; Corder, 1940; Corder & Hawkes, 1940).

Throughout both the settlements and villas on the south bank coinage records extend to a later period than that seen at Petuaria further into the fourth century. Interestingly one of the closest matching sites with such a density of coinages in the Humber region is found at Swine in East Yorkshire, some eight kilometres from the current course of the Humber and north of Kingston upon Hull. Here a pot containing 3,000 Constantinian coins were found as one of four hoards reported in an area of otherwise Roman and Romano-British archaeological sterility (Robertson, 2000). The presence of this Constantinian hoard, although seemingly unrelated to any yet recorded site or settlement, may provide further context through understanding the purpose of its burial.

Throughout the archaeological record coin hoards provide an interesting point of reference not only for periods of occupation but also indicating potential events and changes to the region. In examples of Roman hoards, two possible explanations are most commonly given

with one being that they are intended to be retrieved and the other that they are a votive offering. Due to the lack of any recorded temple, shrine or other construction warranting the laying of a votive offering in the immediate area of these Swine hoards, the nearest temple seemingly northwest at Millington although that in itself is a debatable site (Scott, 1993), it is more likely they belong to the former theory and were intended to be retrieved at a later date. Interestingly a further three hoards from Wold Newton, Shiptonthorpe, and Langtoft all consist of coins from a similar period of the late third to mid-fourth centuries, with a strong bias towards Constantine specifically. It is possible that if each of these hoards were intended to be retrieved it may suggest a significant upheaval in the region towards the mid-third century and contemporaneously to the supposed abandonment of Petuaria and possibly the scenes of violence at Welton, Huntcliff and Goldsborough, although these are more frequently attributed to a late third or early fourth century date (Hornsby & Stanton, 1912; Hornsby & Laverick, 1932; Mackey, 1999). This element of upheaval may go some way to explaining the end of occupation at Petuaria being in the mid fourth century along with the establishment of the coastal signal stations at a similar time, however without further physical or literary evidence this is a tenuous theory to posit.

Further settlements of note can be found along the Humber at Redcliff, Faxfleet, Drax, Skeffling, Dragonby, and Alkborough, although many of these are yet to be explored through an invasive investigation such as full excavation. Of the remaining south bank sites, Dragonby and Alkborough, both seem to comprise of a prior Iron Age settlement belonging to the Corieltavi which were later further developed into the Roman period particularly with the addition of stone-footed aisled buildings in addition to timber structures (Phillips, 1989; May, 1996). Throughout the archaeological record present at both sites, particularly at Alkborough where further material has been recorded through fieldwalking and personal

collection, both settlements seem to be adjacent to Roman roadways and are of a ribbon, ladder, or linear settlement layout. Furthermore, both Alkborough and Dragonby comprise of pottery assemblage dating through the first to fourth centuries, further showing the extent and longevity of occupation within the southern Humber region and contemporary occupation to what is seen at Petuaria (May, 1996).

Another site of particular interest of the south Humber region is Horkstow, a villa like those at Winterton and Brantingham with an identifiable similarity in mosaic design attributed to a Parisian school, believed to originate in Petuaria, although this theory has come under some recent scrutiny (Smith, 1984; Halkon, 2013). Horkstow is located roughly two kilometres south of the estuary beyond South Ferriby and a further seven to eight kilometres east of Winterton's villa and further illustrates the development of this southern region. Horkstow, like Winterton and Brantingham, was the site of several large mosaics belonging to villas stylistically determined to be of a fourth century construction. The size and grandeur of these mosaics, with Horkstow and Winterton exemplary in their depictions of Orpheus, imply a sustained and at least somewhat financially considerable presence within the region. This suggests that the Humber was a site of continued significance throughout the Roman period and may well have been, as suspected, a crucial point of import and export in Britain as is further shown in the quantities of lead ingots recovered from the surrounding area such as at Faxfleet and Petuaria. Horkstow is unique in its mosaics with one section depicting a chariot race being the only recorded example within Britain, and at a significant distance from the only circus in the country at Colchester (Crummy, 2005). The artistic similarity between the chariot race at Horkstow and the charioteer mosaic from Rudston, discussed later in this chapter, suggests the possibility that chariot racing is something of a cultural

crossover during the Roman occupation, with the Iron Age Arras culture of the region known for their chariot burials (Halkon, 2020).

The villa slightly north of Petuaria, at Brantingham, provides other evidence towards a level of prosperity in the region with yet further examples of the large detailed mosaics recovered from the site following excavations in the early 20<sup>th</sup> century at a site known as Cockle Pits (Slack, 1951; Liversidge et al., 1973). The site comprised of a fourth-century villa overlaying Iron Age sites and contained two large mosaics, one subsequently lost in the late 1940s, and a further mosaiced corridor with its walls robbed out (Liversidge et al., 1973). The dating evidence recorded across excavations in both the 1940s and 1960s relates to a period of construction or use contemporary to the reign of Constantine or a similar fourth-century period through two coins recovered in the fill of a wall and hypocaust ash (Slack, 1951). The proximity of this site located between Brantingham Outgangs and 'Boothferry Road', likely the modern A63 although no historic maps confirm this, roughly two and a half kilometres from the north gate of Petuaria suggests an established relationship between both sites (Slack, 1951; Wacher, 1969). The construction of Brantingham villa sometime in the early fourth century suggests a level of security in the region most likely due to a third century military presence at Petuaria shown in the existence of the bastions. Interestingly the construction of villas at this time could be seen to inform on the nature of the bastions added to Petuaria in the late second or early third century. Although interpretations currently vary between Gallic Imperial influence, Carausian, or Constantinian the construction of wealthy villas contemporary to the bastions, if part of Constantinian reform, may suggest a wider scheme of works in the area rather than an emergency measure had they been constructed during the third-century crises.

A further villa in the region that provides an interesting contrast is the site at North Cave, similarly to Brantingham it was found as part of quarrying however this villa tells a very different story to Brantingham. The North Cave villa comprises of a number of ditches and enclosures with ecological evidence seeming to suggest the produce of this site would be livestock as opposed to agriculture (Dent, 1989). Contrasting to Brantingham, North Cave shows little signs of development or prosperity throughout the period suggesting that the site's location, as well as the quality of the land, imply somewhat of a failed or dwindling villa. Furthermore, the distance between the site and Petuaria itself, by either water or roadway, may have further impeded the failings of the site. The archaeological record further suggests multiple attempts to reorganize the site throughout the occupation however none of these seem to have proven effective, with material culture and structural evidence dwindling into later periods (Dent, 1989), It seems as though this site, either through its distance from the prosperity of Petuaria or the land it tried to manage, was barely able to maintain production to a commercial level and may well have been more focussed on self-sufficiency rather than producing goods for Petuaria.

The existence of this cluster of latter period and clearly wealthy villas in the region suggest somewhat of a secure and prosperous occupation of the Humber area throughout the Roman occupation. Coinciding with the lack of substantially shown military presence, particularly at Petuaria, and the lack of further afield forts there is the slight suggestion that the region retained its civil and possibly peaceful cohabitation between Parisi, Corieltauvi, and Romans. Furthermore, what evidence there may be of possible Parisi hostility primarily comes from further to the north, at South Cave and Hayton, suggesting to some extent that at least the Humber region was peaceful even if the wider region was not. Interestingly, a further villa in the vicinity at Welton, a short distance from South Cave, Brantingham, and

Petuaria tells a very different narrative. The villa at Welton was reported to have been production-focused, with chalk pits and agricultural features found across a large area relating to the property. In addition to this, the occupation of the site extends both into the late Iron Age with a small enclosure, and beyond into the fifth century where the inhabitants meet with what seems to be an unpleasant fate (Mackey, 1999). It is recorded that the villa at Welton came to an end of occupation sometime in the fifth century, following a significant reduction in the spread of the occupation in the fourth century, possibly linked to the abandonment of Petuaria. The main evidence that provides the narrative of a grim occurrence taking place at Welton is the discovery of female remains found having been pushed feet first into the lit flue of a crop drier alongside the deposition of sixty-eight animals in the well at the site (Mackey, 1999, 29). Both of these have had possibly ritualistic explanations attached to them, the deposition of animals in the well the clearer of the two, with the female remains in the flue suggested to possibly being part of a cult of Vulcan operating in the region however these seems to be largely unfounded.

The state of fifth century Welton has been theorised to possibly be the result of the gradual dwindling of military influence in the region allowing the pillaging of raiders to take place, similarly seen at the signal stations of Goldsborough and Huntcliff (Hornsby & Stanton, 1912; Hornsby & Laverick, 1932). A further possible explanation for both this attack and the gradual abandonment of other sites in the vicinity in the previous century could be due to the military withdrawal from Petuaria, either due to the silting of the haven or the moving of a unit to Stamford Bridge as described in the *Notitia Dignitatum*.

Of the northern Humber sites of Redcliff, Faxfleet, Drax, Skeffling, and North Ferriby, many feature evidence of sustained Iron Age and Romano-British occupations. Of particular



interest among these sites is the possible port at Faxfleet alongside the structure noted at Drax, both of which lie to the west of Petuaria and are in some way related to the estuary and its tributaries. In the case of Faxfleet, significant work has been carried out to interpret the data recorded through excavations in the 1960s and has led to the theory that the site acted as a small port or anchorage at the western extent of the Humber close to the mouths of both the Ouse and Trent. The evidence recorded at Faxfleet, specifically at site B located further inland to site A, show signs of a late first to third century occupation through examples of Holme-on-Spalding Moor wares, Dalesware and Nene Valley colour-coated wares (Sitch, 1989). This assemblage of sherds has been taken to indicate a site of regular use and as such is suggested to be a port, despite the lack of further features that would cement this theory such as pilings or discarded material as seen at harbourfronts in London. Furthermore, Faxfleet's positioning near the mouths of both Trent and Ouse would position it at a strategic point for trade both inland and to the sea, theorised by Sitch to serve as one of many staging points along the Humber to help pilots counter the tides of the estuary (Sitch, 1989). In this there is a direct link to Petuaria, with the latter's suspected role as a harbour, and the trade network present between Lincoln, York and the continent.

A further link exists in the similarity of pottery assemblages, both sites feature large counts of Nene Valley, Holme-on-Spalding Moor ware and Dalesware suggesting some level of homogeneity between occupations into the second and third centuries. The geographical relationship between these two sites also bears further consideration, with their marking of the eastern and western extents of the Wallingfen, an area of marshy common land that would have been an inlet during the Roman occupation (Halkon, 1989).

In Faxfleet there is a clear suggestion of a network present that relates Petuaria to the surrounding sites and particularly to those not on the roads heading north into East Yorkshire. With Petuaria theorised to have had at least some maritime capabilities either as a ferry launch, harbour, waterfront, or naval base and Faxfleet acting as a staging point alongside Adlingfleet for the transshipment of goods further inland down the Trent and Ouse there is a plausible consideration that further sites must occupy a similar role within the estuarine relationship. One such possibility is a small Roman site located at Skeffling to the east of Petuaria and a short distance from both the Humber and North Sea by modern extents. Although little by way of structural evidence remains at the site, in the archaeological record there is clear evidence for an occupation of some size in the form of pits, ditches, and dumps close to what may be a Roman era trackway (Howard et al., 2019). An assessment of the alignments and cuts of these features has suggested that these demarcate a collection of enclosures close to the wetlands on the north bank of the Humber.

The material culture as recorded in this investigation indicates a varied occupation with a significant presence of shellfish, particularly oysters, similar to what has been seen at Petuaria to the west and suggests an abundance of oysters in the estuary during this period. In addition to a large collection of shells across a number of the pits, one pit contains an assemblage of several hundred pottery sherds with further pottery assemblages spread across other pits and ditches on the site. All of the sherds that were able to provide dateable evidence show a clear early to mid-second century bias, most likely contemporaneous to the Hadrianic-Antonine reoccupation of Petuaria and the construction of a number of buildings on both banks of the Humber, as well as the eventual construction of Marcus Ulpius Januarius' stage (RIB 707). Further possible evidence recorded at the site is believed to indicate bread production, however analysis of the shell assemblages suggest that only part

of the site would be suitable for arable farming and therefore these enclosures would hold varied purposes depending on their proximity to the foreshore (Howard et al., 2019).

One possible theory, discussed between an archaeologist working on the site and the researcher, is that the pits at Skeffling may be related to oyster farming with the abundance of oyster shell in the pits possibly indicating as such (Amy, *pers. comm.*). Should Skeffling prove to be such a site, alongside further agricultural presence in the vicinity, it may have acted as a production point for the settlements further inland, particularly those with Hadrianic-Antonine developments such as Petuaria and Winteringham. Interestingly it has been recently publicised, with the evidence of oyster farming at Skeffling now being confirmed through the continued archaeological investigation after this personal discussion (BBC, 2024). It is possible that the production seen at Faxfleet may have then been transported either by water or road, although no such route exists in the record at present, inland to either disembark at Petuaria bound for settlements along RR2e or further inland to Faxfleet and the other Humber settlements.

Much further inland, by way of the Ouse, than any of the other sites considered is the Roman site at Drax that seems to comprise of a rural settlement occupied in the third and fourth centuries as indicated by ceramics with a larger villa-type structure in the vicinity. Although some distance from the estuary proper, Drax's positioning along the Ouse heading north to York may help shed some light on the further relationship between Petuaria and sites along the Humber. Little is recorded of the general site, a handful of investigations have taken place in the area revealing a small collection of ceramics from the Roman period alongside ditch and pit cuts, along with further evidence for Iron Age and post-Roman occupations. Ceramic records from Drax particularly in the region of Abbey Farm, a site later

home to a priory, indicate a Romano-British occupation ranging between the second and fourth centuries as identified by diagnostic sherds recovered from the site (Ronan, 1998).

Perhaps the most important, and baffling, feature present in the record at Drax is the large villa-like complex located towards the Ouse, at a farm then known as The Stannels (Wainwright, 1954; Wilson, 1966; Scott, 1973). Excavated in the 1950s and 60s, the complex seems to comprise of a spread of stone buildings constructed to replace earlier timber buildings with at least one courtyard and an external corridor or veranda. Dating evidence recorded during these excavations seems to confirm a second century occupation that dwindled into obscurity into the third and fourth centuries. The site seems to have little evidence of production, with some signs of agricultural use but no querns, and no trace of significant domestic animal presence yet some evidence of shellfish consumption. It has been assumed that this site would therefore likely have simply been a home subsiding on shellfish and some cereals able to be farmed in the surrounding area. The positioning of the site itself is questionable lying roughly 500m from the banks of the Ouse and in an area of wetland between Ouse and Aire the logic of building such a structure seems bizarre. It is possible that the work surfaces of this settlement are yet to be excavated, possibly even as a further depot or gathering point as is seen at Faxfleet to the east, however no such evidence has been recorded. Instead, Roman Drax seems to comprise of a small number of ditched enclosures and one large stone building, suggesting a possible agricultural presence in the second to third century however present evidence seems to suggest this site may even be purely domestic. Interestingly one theory put forward to explain the abandonment of Drax is the presence of alluvial material at the site suggesting a flood may have made the site uninhabitable (Scott, 1973). In fact, the site's location in such a waterlogged and wetland environment seems likely to make the site inhospitable throughout the occupation and may

explain the lack of substantial agricultural presence in the record. It is possible the site was supported by trade along the Ouse to York however there is little current evidence to prove this.

As with many sites in the region the occupation at Drax requires further exploration and investigation, however, should the site be dated to a period of Hadrianic-Antonine and beyond it may yet further suggest a contemporary relationship to a number of other sites along the waterway. Furthermore, the position of a settlement at Drax along the Ouse may mark it as one of the points along the Ouse from which transport boats may be staged to manage the tides as is suggested for Faxfleet to the east (Sitch, 1989).

It is possible to theorise at present that sites at Skeffling, Faxfleet and Drax, alongside southern bank sites at South Ferriby and Winteringham may have all served a united purpose as staging points for shipping goods inland to York and Lincoln. Furthermore, there may be potentially other sites established in the second and third centuries lining the estuary and rivers to serve as further stationing points for transportation that are yet to be recorded, and would create a more comprehensive network of points along the waterways.

Through assessing a number of environmental features both geologically and within the archaeological record an image of the Humber estuary at the time of the Roman occupation begins to form. It is clear that prior to the conquest, the area is home to a number of waterside settlements and is navigable with the aid of the variety of early boats seen throughout the region including the earliest sewn-plank boats in Europe found at Ferriby (Wright & Wright, 1947; Coates, 2005; Wright, 2014). Further small settlements, bordering on the scale of a small town, at Adlingfleet and in the area around Hull consisting of spread timber structures suggest that the area was more populous than barren throughout this era,

and that trade between the European mainland and Britain was not an uncommon occurrence in the estuary (Van de Noort, 2004).

The nature of the Humber prior to industrialisation and the modern era is crucial in understanding the relationship these sites may have had along both banks, as well as allowing for the potential of further sites lost to both the erosion and recession of the waterway. It is clear also that the settlement patterns present in this region were of a primarily rural nature, with further farmsteads and enclosures present across the Wallingfen (Millett & Halkon, 1988; Halkon & Millett, 1999). It is apparent that the only settlements in the East Riding with significant civil development are from further north, at Shiptonthorpe, Malton, and Elmswell in particular, along with further military occupations at Malton, Staxton, and Hayton.

### **7.3 East Yorkshire**

The consolidation of major roads in the county by the Romans, often either using or replacing prior Iron Age routes, provides a clear indication of what networks exist during the occupation. Charting both the north-south and east-west extent of what is believed to be Parisi territory at the time of the Romans, the roads present in the region do as they do elsewhere in the empire and connect military and civil sites alike. For example, of the sites crossed by the road bearing north-northeast from Petuaria, listed by Margary as RR2e, include the Roman settlements at Shiptonthorpe and Stamford Bridge alongside the fort at Hayton. Petuaria's relationship with roads, both confirmed and unconfirmed, suggests a presence of communication and connectivity across the region with Petuaria's status as the most structurally developed site suggesting the role of a hub in the region. It is perhaps in

this aspect that Petuaria has received the most support for its place as the *civitas* capital of the Parisi despite the scale of the site and lack of definitive internal civilian evidence. In this regard Petuaria's relationship with these further sites along the roadways can be considered in both a political and military function, either as an administrative centre for the Romano-Parisi settlements or the primary military presence for the region.

Petuaria's military function within the region can begin to be explored through its relationship with other military sites such as at Hayton, Malton, the camp at Buttercrambe, and Staxton. Alongside these there is further potential for a military site or settlement at Bridlington possibly the Antonine Itinerary's *Praetorio*, however there is as of yet no site recorded or identified with this name (Wilson, 2017). The military occupation of the region follows the line of the high ground and skirts the western and northern edges of the East Riding and likely encloses much of the Parisi territory in the flat and wetter landscape to the south and east towards the Humber and the sea. As previously stated, this region from the high ground to the sea is moderately populated by rural Iron Age and Romano-British settlements however no sites on the scale or development of those constructed along the roads have been recorded as of yet.

Of these roadside sites Shiptonthorpe and Stamford Bridge, the latter identified to potentially be the Antonine Itinerary's *Derventio*, are both largely rural Romano-British sites that extend along a section of the road akin to a linear or ribbon settlement. Shiptonthorpe appears to have been established in the second century, likely following the establishment of Petuaria in its form as a larger Hadrianic-Antonine fort as opposed to the early supply depot or Flavian site. This would seemingly coincide with the creation of the road north to York and the development of such towns to provide for the military and commercial use of such

routes. Evidence recorded from the site indicates a rural settlement occupied for a substantial extent of time and seemingly in direct relation to the wider use of the area by the Romans, with occupation seeming to dwindle somewhat into the fourth century (Millett, 2006). The occupation of such a site for several centuries further implies the regular use of the road between Petuaria and York between at least the second and mid fourth century, contemporary to what the archaeological record at Petuaria indicates.

Shiptonthorpe is somewhat unique amongst the similar sites of the region, with apparently a non-militaristic origin as is seen at Petuaria, Hayton, Malton and to some extent Stamford Bridge (Halkon, 2013). Despite this there is evidence for military materials in the archaeological record suggesting the site was visited by or related somewhat to the military sites either north at Hayton or south at Petuaria. Further material recorded at the site seem to suggest the site acted as both a settlement and a gathering point for produce and goods transported along the road, likely from either the harbour at Petuaria or the production villas in the area, possibly even further along the estuary at Skeffling. Shiptonthorpe appears to be a site largely reliant on the founding and occupation of Petuaria as, despite some evidence for prehistoric occupation present, the town in of itself doesn't develop until Petuaria has become an established presence in the landscape (Millett, 2006).

Further sites along the Petuaria to Derwentio road include the fort and settlement at Hayton along with several further small settlements, such as those recorded at Newbald, before the road joins with the easterly road to Malton and beyond. The sites recorded at North Newbald seem to comprise of domestic settlements established along the northern roadway to York, either RR2e or the less confirmed RR29 (Margary, 1962). These buildings comprise of a villa and the remnants of a thick sandstone wall with chalk and clay floors (NMR 64117,



64153). Only the villa has been dated and that has estimated the occupation to be between AD 220-370 with the coinage records specifying a range between AD 235-324 (Brooks, 1980). It appears most domestic and rural settlements thrive during the Roman occupation and in the case of villas can be seen to show an element of Romanisation present throughout the region in the design of mosaics, particularly those at Rudston (Stead & Barnetson, 1980). In particular the occupation of these settlements often appear to develop in the second and third centuries, presumably following the establishment of a larger site at Petuaria alongside its harbour. It may in fact be that such sites develop to an extent along the corridor following RR2e is due to the establishment of the harbour at Petuaria, allowing for both import and export of goods and providing an income for both the agricultural villas and the settlements alike.

Further north along the road the site at Hayton provides further interesting context for both Petuaria and the Romanisation of the region as it is one of the only other identified Flavian era forts found within in the region alongside Petuaria, Malton, and Staxton (Johnson et al., 1978). The military presence at Hayton seems to be short lived with the occupation of the fort coming to a close in the early second century, again similar to the brief abandonment seen at Petuaria prior to its redevelopment in the second century, however the civilian settlement nearby seems to remain occupied in some form throughout this period and into the fourth century (Halkon et al., 2015). The brief military occupation at Hayton, along with the short-lived abandonment of Petuaria, seems to suggest that a wider military presence in the region was not something worth maintaining with the later military focus following the return of Roman forces seemingly towards the Humber at Petuaria and the north at Malton with both sites showing occupations within the walls until the fourth century. The civilian occupation seen at Hayton, Petuaria, and the *vicus* related to Malton suggests a longevity of

Romano-British presence in the region even with a reduction in military presence across the sites.

Hayton may possibly be seen to operate in a largely domestic capacity, similar to that of Shiptonthorpe, and act as both a settlement and gathering point along the road however recorded materials are much less conclusive in this regard than what is seen at Shiptonthorpe. Following an almost identical occupation pattern the site at Staxton, located east of Malton and roughly thirteen kilometres inland from Scarborough, provides further support to the military dispersal present across the region in the early second century (Wilson, 2017). Both Hayton and Staxton comprise of the same early Flavian auxiliary fort methodology of ditches and ramparts with a presumably wooden palisade subsequently lost to the record, as is seen at Petuaria, however the latter is the only of the three to feature any semblance of a returning military occupation.

Interestingly Petuaria's reoccupation and later developments seen in the Hadrianic and Antonine eras seem to coincide with the military abandonment present at both Hayton and Staxton (Halkon et al., 2015; Wilson, 2017). It is apparent that, at least for the forts at Hayton and Staxton, a military reoccupation was of little to no priority following the construction of Hadrian's Wall and although there is some potential for brief continued occupation, particularly argued by the material present at Staxton, this likely would comprise of little more than a "caretaker garrison" (Wilson, 2017).

The presence of Flavian era forts established at Petuaria, Malton, Staxton and Hayton suggest a homogeneity of the practice carried out across the country under the governorships of both Petillius Cerialis and Agricola and an attempt by the military to establish a quick hold on the region. Although all of these forts are identified as Flavian era,

or at least mid-late first century, there is little evidence suggesting that they were occupied by auxiliary units with the continued lack of inscriptions from the region further complicating this assessment. Indeed, Malton has been suggested to have been a vexillation fort, similar to Rossington Bridge near Doncaster, however this likely would have been a temporary measure lasting only the length of the occupation of the Legio IX before they established the fort at York to the west in the late first to early second century (Ottaway, 2012). It appears as though the fort that was then constructed in the later AD 70s was of a much smaller scale, some 8.4 acres (3.4ha), and similarly to Petuaria comprised of an earthwork and timber construction (Halkon, 2013, 124).

Malton and Petuaria are the only of these four military sites to produce any inscriptions, the latter of which has been extensively discussed in this research and is known to relate to the reign of Antoninus Pius (RIB 707). Therefore, the only remaining inscriptions found across these four military sites all originate in Malton and comprise predominantly of fragments of funerary and structural inscriptions and two dedications to Mars and the *genius loci* (RIB 711, 712). One fragment of an inscription implies the nature of the garrison stationed at Malton through mention of *ala Picentiana*, thought to be the *ala Gallorum Picentiana*, which is identified as a cavalry wing raised in Gaul (Wilson et al., 1971; Halkon, 2013). Interestingly, although this Gallic cavalry unit would suggest an auxiliary use of the fort, it appears the prior timeline of an AD 70s temporary legionary fortress stands as this particular unit are recorded as serving in Upper Germania during this period (Jarrett, 1994; Halkon, 2013). The stationing of a cavalry wing in the region at Malton may help to shed further light on what military presence may have been at Petuaria. One theory posits that the garrison for Petuaria would be comprised of a cavalry or auxiliary unit maintained separately from the possible naval base which is almost entirely determined by the apparent auxiliary nature of

the early site and the finding of a single fragment of *lorica squamata* during the 2020 Petuaria ReVisited excavations (Russell Robinson, 1975; Halkon & Lyall, 2021). Should the garrison at Petuaria prove to be of a cavalry nature it may provide an explanation to the *Notitia Dignitatum's numeri superventientium petueriensium* being instead a mounted unit used in rapid responses to attacks and later moved to Derventio (*Notitia Dignitatum*, XL).

Although none of the further inscriptions mention the nature of garrison present at Malton, with the dedications to Mars and the *genius loci* both found in the *vicus*, there are clear indications of the presence of the Legio IX Hispania through tile stamps all located from within the perimeter of the fort itself (RIB 2426.14, 2426.15, 2462.9). It is likely this presence was part of the campaign under Petillius Cerialis in response to the Brigantes and may possibly suggest the IX having some involvement with the founding of Petuaria, however this is largely conjecture as no literary, epigraphical, or archaeological evidence indicates such a presence and the route likely taken in this campaign would have been through central England via Doncaster. Instead, it may be interpreted that as the only recorded military inscription found in the region relates to the manoeuvres of an entire legion against the northern Brigantes, that a military presence focussed internally was not a priority with instead defensive measures focussed externally of the region.

Malton, or Delgovicia( after Creighton et al., 1988), seems to occupy a similar role within the landscape as Petuaria as a provider to local sites. Whether this is economical or conceptual, such as security, further villas and sites appear in the surroundings of Malton similar to Petuaria (Halkon, 2013). Twenty-one sites defined as villas, under Millett's definition of a rectangular plan site including stone floors among other features, have been identified within a thirty-kilometre radius of Malton. Alongside sites identified across the range of

eastern Yorkshire, the longevity of occupation at both Petuaria and Malton, charting the entire Roman occupation of the region, suggests a level of stability both economically and socially. Malton's evidence of occupation comprises predominantly of a sustained but small military presence within the fort with a wider *vicus* spread on the southern bank of the Derwent, the same river present at Stamford Bridge and the main point of contention in the naming of either site as Derventio (Creighton et al., 1988; Wilson, 2017). Despite this image of second and third century security there are cases, as discussed in Welton and the signal stations at Goldsborough and Huntcliff, for violence in the region however evidence of further violence is not forthcoming. There is an argument for a skull found in a ditch of the Hayton fort being either the decapitation of an opponent or a disturbed prior burial (Johnson et al., 1978; Halkon, 2013), however the record of a prior Iron Age settlement suggests that the latter is a more likely interpretation. Furthermore the existence of a buried weapons cache at South Cave has caused some debate in the region, however whether this was an effort to hide arms from the Romans or prepare for an ambush the material was deliberately buried suggesting the intention of use was short lived (O'Connor, 2013).

The spread of the four identified forts across the southern, western, and northern extents of the high ground surrounding the flats of eastern Yorkshire suggest an effort to defend or contain the territories of the Parisi region. In the stationing of troops at Malton it appears as though the threat most likely came from external sources, most likely a remnant from the Brigantine threat of the first century and into their resurgence during the Hadrianic-Antonine period. The lack of a sustained military occupation and instead the growth of villas and other civilian sites in the region during the second century and beyond suggests that, following the Hadrianic-Antonine disturbances in the north and the construction of the Hadrian and Antonine walls, the region became the site of little disturbance particularly

nothing requiring more than a few hundred troops stationed to the north in Malton and some presence to the south at Petuaria.

As mentioned in Chapter 3, the naming of sites in East Yorkshire continues to cause some confusion. The debates surrounding Derwentio and Delgovicia are the most egregious with the accepted understanding in this research being that Derwentio refers to Stamford Bridge and Delgovicia refers to the combined sites of Malton and Norton following Creighton's interpretation (Creighton et al., 1988). In this it is possible that the movement of military units from Petuaria to Derwentio as described in the *Notitia Dignitatum* is either the billeting of mounted troops at the settlement of Stamford Bridge, of which a number of military fittings have been recorded at a roadside settlement at Reckondales (Lawton, 1999), or the movement of a naval unit to Papcastle in Cumbria, also identified as Derwentio (Creighton et al., 1988).

Interestingly Stamford Bridge, despite noted as containing a fort by Ramm (1978), is yet to produce one within the archaeological record and instead shows a further Romano-British settlement along RR2e. Should the mounted unit from Petuaria be billeted in this civilian town it paints an interesting picture of the area with a hasty placement of troops in a settlement rather than moving them to the former fort at Hayton. Was this to protect the roadway from Petuaria, possibly even captured itself at the time by third century usurpers under the Gallic Empire or Carausius as shown in their coinage densities at the site (Appendix I) or was it the manoeuvring of mounted troops nearer to York into the fourth century to combat the ever increasing threat from the north?. As of now, and without further extensive excavations in the region, it is impossible to tell the nature of this action other than that it probably occurred and was likely to result in the movement of some two

to three hundred men from Petuaria to Stamford Bridge. Interestingly the settlement at Stamford Bridge is another of the many in the area to show signs of a decent quality of life following the discovery of a house with a bath suite containing a hypocaust and painted wall plaster, with only a hypocaust and painted walls discovered at Petuaria so far (Lawton, 2005).

Southeast of Stamford Bridge and roughly seven kilometres northeast of Hayton is the Roman site at Millington, a further case of not only multiple interpretations but also once a candidate for Delgovicia prior to the argument resting on Malton (Creighton et al., 1988; Wilson, 2017). Millington is another of the sites in the region to have been partially investigated a number of times over the past centuries, with the earliest recording of the site in 1745 (Burton & Drake, 1745-1809). Further visits to the site by some notable local archaeologists, including J. Mortimer, seem to conclude the site is Romano-British and comprises of a settlement enclosed by earthworks with a further temple structure with thick walls and columns found during excavation (Burton & Drake, 1745-1809). Interestingly this record also documents discussion with the landowners about the use of Roman material as building supplies, a common part of the lifecycle of Roman stone settlements but rarer to find a case of a written record of it. Millington continues to be investigated over the following centuries and it appears as though the current consensus is that the site is instead that of a villa rather than a temple, marking it as a further case of the Romanised region of east Yorkshire comprising of a spread of villas with a few organised settlements along key routes (Scott, 1993).

A further villa at Rudston, a short distance from the forts at Malton and Staxton, comprises of a later period homestead with multiple detailed mosaics, again as seen at Brantingham,

Horkstow, and Winterton yet not from the theorised Parisian school as they are. Rudston provides a significant example of the adaptive Romanisation seen at such sites, with one mosaic depicting Roman imagery of Venus in a decidedly 'native' style and the other portraying Romano-British imagery of the four seasons surrounding a charioteer (Millett, 1990, 191-193). The Venus mosaic, Rudston's most famous and "one of the most iconographically sophisticated in the country" (Witts, 2005), marks a clear case for the Romanisation of local tastes in the region. The Rudston villa, like others, was constructed no earlier than the third century and appears to have been built upon the site of both a prior Roman structure and an Iron Age settlement. The continued occupation with later period villas being built upon or in close proximity to previous structures suggests one of two theories; one being that the occupiers of said villas were local people adapting to Roman rule, or that this was an annexation of prior settlements by Roman occupiers. It appears as though the former is the more likely theory, with Rudston seemingly supporting the theory that villas are usually local residents attempting to emulate Roman style (Halkon, 2013, 175). If this is the case for Rudston the imagery appearing throughout the recorded mosaics suggests a strong awareness of Roman style as, aside from the charioteer and Venus mosaics, a small section of a further mosaic located in what is believed to be the villa's bathhouse features an aquatic theme with the centrepiece likely a depiction of Neptune or Oceanus (Smith, 2005). Although there are further villas located within the region of the Parisi, particularly those near Malton and Langton, Beadlam, and Hovingham, the villas considered indicate a varied although somewhat uniform occupation. Almost all show clear development in the third century, with only a few surviving far into the fourth or originating earlier in the second century, and individual sites seem to struggle when not able to access resources present along the roadways and at major sites. The difficulties present at both



North Cave and Drax, both relating to the geographical position of the site, suggest that without regular interactions with other settlements the potential for a villa to fail is increased. This may suggest that the overall prosperity of the east Yorkshire region wasn't as great as may be thought, with the villas located near roads or at higher, drier, ground proving to last longer and develop further than those elsewhere.

One interesting case warranting further investigation is the Roman settlement located at Elmswell Farm, some thirteen kilometres west of Rudston and located at the southern edge of the northern wolds in eastern Yorkshire. Elmswell was first investigated by Philip Corder in the late 1930s, following his seasons spent excavating Petuaria, and is currently a DigVentures project site (Corder, 1940; Jackson et al., 2023). Over the course of these investigations an image of a ladder settlement, likely occupied between the first and second centuries, and a later villa settlement occupied in the second and third centuries has emerged. The primary dating evidence for these conclusions come from ceramic sherds recovered during excavation alongside structural evidence of a hypocaust and mosaic at the later villa. The overall image of the Romano-British occupation at Elmswell is regarded as one of a continued, and in many ways prosperous, period with evidence recorded by Corder ranging from the late prehistoric through to Theodosian at the close of the fourth century with further signs of Angle or Saxon occupation nearby (Corder, 1940).

Much like Petuaria, the continued project of excavation has helped to shed further light on the site with DigVentures reporting quantities of *terra sigillata* suggesting the early site was likely provisioned by the legionary presence in the area (Jackson et al., 2023). In the report this is suggested to be from York, however in the mid to late first century the presence of the IX legion at Malton may further explain this *terra sigillata* density as the temporary

fortifications are much nearer to Elmswell than York. Elmswell, Malton, and Redcliff all show clear indications of early Roman interaction implying that a later establishment at Petuaria was more likely than not dependant on the Humber and its changing courses, possibly even shown in the change of landing point from Redcliff to Petuaria if Redcliff's evidence is seen to be suggestive of a Humber crossing rather than cross Channel trade.

## 7.4 Conclusions

Petuaria's place in both the East Riding of Yorkshire and the wider Humber region is clearly one of some importance from a military, economic and social aspect. Not only is it the site of the most extensively developed fort south of Malton, but it is also the only site with a recorded public works project in the theatre dedicated to Antoninus Pius. Furthermore, Petuaria's inscription marks it as the only site with a recorded bureaucratic presence in the region in the *aedile* Marcus Ulpius Januarius. Although as discussed it is possible that Petuaria's status as a *civitas* is one of continued debate the site itself is likely to have served as some manner of administrative headquarters for the region due to its scale, position, and transport connections. This can be particularly seen in the extent of occupations and settlements related to it through both the northern road RR2e and the Humber Estuary with it likely that sites on the northern banks to the west were in close contact to Petuaria through trade and transport. Despite this the continued, and in many ways prosperous, settlements in the rural landscape alongside these Roman settlements suggests that Petuaria may likely have never been a fully occupied town or *civitas* in the traditional sense. There is seemingly no need to move the populace into the walls of Petuaria with sites such as Shiptonthorpe and the *vicus* at Hayton so close by.

Instead, it appears as though Petuaria's role as a military presence is more fitting within the region. The southernmost fort of the area, Petuaria would likely be responsible for guarding both the estuary and a large amount of south and eastern East Yorkshire, with the nearest site at Hayton only occupied for perhaps half the time Petuaria is. It is possible that this occupation was closer to a peacekeeping presence, with a second garrison at Malton, tasked with not only defending the more vulnerable positions of north Yorkshire and the Humber but also maintaining a status quo in the region. Again, this may be interpreted somewhat from the mounted garrison at Malton and the possibility of one at Petuaria before being later relocated to Stamford Bridge.

It is likely that the surroundings of Petuaria, outside of the fortified area, were mostly used for civil and commercial purposes as both a harbour and a wider *vicus* spanning the roads north and east. It is possible that this harbour and settlement would be the primary route for quicker travel to York, as even by modern standards the time taken to chart the Humber and Ouse would not be insignificant compared to the terrestrial journey via RR2e with both routes around eighty kilometres. It is the tides and flow present across the Humber and Ouse that make it a harder route and lends explanation to the staging post at Faxfleet and the potential for further along the river such as at Drax and beyond allowing barges to negate the effects of such tides. Although likely a terminus for trade and import it is also probable that Petuaria served a further role as one such staging post along the estuary, providing a network of points for shipments to navigate the tidal waters.

Further support for the status of RR2e being a primary route north from Petuaria can be found in the existence of several burials alongside modern Cave Road, suggesting possibly that a Roman cemetery lay along this alignment. The main burial of interest at Brough is the

'priest's burial' as recorded by Philip Corder and Ian Richmond in the 1930s and identified through grave goods and determined to be of some status (Corder & Richmond, 1938). This burial, alongside others nearby, could be seen to identify individuals under the Roman style as opposed to the Iron Age style burials seen elsewhere (Loughlin & Miller, 1979). In this it could be argued that an effort to maintain a Roman image is made for either the *vicus* or the people travelling north via RR2e. Further burials are recorded to the east however these comprise predominantly of either late cremations or early inhumations, suggesting possibly that the primary cemetery was instead focussed around this northern route, possibly emphasising its importance (Hunter-Mann et al., 2000).

Beyond Petuaria's position and role within eastern Yorkshire, it is important to recognise the site's role within the estuary and its related rivers. The frequency of sites on both banks and into the Trent, Ouse, and beyond suggests that the Humber served as a vital economic and transportation route for goods into and out of the country (Van de Noort, 2004). Sites and settlements that have been recorded at Adlingfleet, Faxfleet, Kingswood, and others suggest that the estuary and both its coastal and inland connections provide the area with income and occupation, not to the same scale as the large riverbank sites in mainland Europe and elsewhere in Britain, such as Londinium, but enough to create a network of trade along both banks and allowing for a level of development and comfort to be achieved across a range of settlements (Van de Noort, 2004). Due to the scale and presence of Petuaria, it is likely that in this estuarine landscape, it would have served as a focal point, again possibly relating to its inland road connections to York and beyond as well as it being the sole military presence on the waterway.

It is clear that Petuaria fulfils multiple roles within the surrounding region of eastern Yorkshire and the Humber, providing both security and a point of civil and economic focus. A less certain element is the role the site may play in the eventual end of Roman occupation in the region, with the main examples of violence and abandonment of settlements occurring after the period in which Petuaria is likely abandoned in the mid to late-fourth century. In this it is possible that the retreat from Petuaria impacted the overall security and organisation of the region, resulting in a more vulnerable spread of settlements entering into the fifth century. Whether a military, political, or economic presence in the region it is apparent that Petuaria's devolvement had a lasting impact on the entire region.

## Chapter 8 Conclusion

### 8.1 Petuaria's Function

Throughout this research it has become clear that Petuaria served multiple roles during its occupations, however, this is not a new assessment of the site. What is new however is the level of certainty to which a maritime use may be applied to Petuaria. Using evidence from developer-led excavations and the as yet unpublished work of ERAS the image of a large, natural harbour to the west of the walled area is increasingly likely. Although maritime related finds, such as a deposition of broken pottery as normally found in harbours and ports, are yet to be recovered this is likely due to the extent of this harbour area actually excavated with hints found on the outskirts at the Magistrates' Court, Station Road and ERAS' Cave Road excavations.

Should all of these sites be indicative of a shoreline and harbour, utilising both metalled surfaces and limestone wharves or hardstandings alongside the larger buildings to the north, it would mark Brough as likely the northernmost surviving Roman harbour on the east coast south of Arbeia. Additionally, it is likely that the harbour of Petuaria utilised the surrounding landscape as a natural harbour, similar to that of Lympne and its use of a natural harbour that is now Romley Marsh (Philp, 1982). Furthermore without the western extent recorded, likely due to the harbour extending into the Wallingfen inlet between Brough and Faxfleet, it is difficult to determine at what scale this harbour existed. In this it is possible that Petuaria functioned as the primary source of import and export for goods in eastern Yorkshire, something that may be seen in the variety of coinage, ceramics, and other finds recorded at the site showing signs of some status.

Whether these higher status items are signs of trade or of a well developed town remain to be seen however what is evident is Petuaria's role within the Humber Estuary. With shoreline sites to both the east and west the suggestion of a network exists, positing that Petuaria's harbour is one of several stopping points for shipments inland. Indeed, it is largely assumed that goods were brought to both York and Lincoln by way of river, however little evaluation seems given to how the goods are arriving at said rivers. The Humber, although a crucial element of import and export in the region, is a treacherous waterway and likely would have been so, albeit to a lesser extent, during the Roman occupation. Therefore a network of posts along both banks of the Humber are likely, with the possibility that Petuaria's natural harbour may have acted as a gathering point or even weigh station along this route, although this is tenuous to posit without further investigations. Furthermore an explanation for the harbour related surfaces but a lack of evidence of large shipments, as is found at London docks (Merrifield, 1987; Rogers, 2011), may be found in Petuaria's possible ties to the navy.

Although no stamped tiles of the *Classis Britannica* have been recovered from the site, as is the case of Dover and other known naval bases, Petuaria serving as some form of a naval base is not entirely impossible. The presence of lead pigs and metalworking in the site and its surroundings has been a topic of debate surrounding Petuaria for some time, with Ramm and Wachter disagreeing on its meaning (Ramm, 1978; Wachter, 1995). Through the presence of such a harbour in the archaeological record it is possible that the lead and metalworking relates to a naval presence, with lead being a primary material used in both the construction and mending of vessels (Rosen & Galili, 2007). The possible structure of this naval detachment may be only a single or small number of ships likely comprising of *liburna*, *navis lusorica*, or possibly *vectoria*, all of which are smaller vessels utilised in in the second to

fourth centuries during the time Petuaria's naval presence would presumably have been active (Pitassi, 2011). A detachment comprising of *liburna* or *navis lusorica* vessels seem the most likely as both are lighter ships used in a more versatile manner than the larger battleships such as *triremes*, with *navis lusorica* noted for their shallow draft and successful use in the rivers of the *Limes Germanicus* (Ammianus, 1862; Höckmann, 1993). Given the changing landscape of the Humber, with expansive wetlands and tidal inlets present during the occupation, there is a strong likelihood the naval presence would require such shallow vessels, particularly when acting as a security measure for the wider region. Unfortunately without the discovery of such a vessel, even in a fragmentary form, in the archaeological record, it is impossible to determine the specific nature of this naval presence aside from the likelihood of it when considering the wider context of the region and Britannia.

The use of the harbour as a naval base may also explain why the walled site and the harbour are separate despite their contemporary usage in the second to fourth centuries. As discussed in Chapter 6, Petuaria holds a number of similarities with other sites of a maritime nature, particularly those along estuaries and rivers. In this, two cases, Arbeia and Abonae, become particularly clear in how their function may help to develop an understanding Petuaria. The two sites both provide points of comparison in their civil or military use and as such may explain the use of Petuaria's harbour to a clearer extent.

Abonae, Sea Mills in modern Bristol, provides a counter point in its predominantly civil or commercial development following the site's establishment during the early western campaigns. Abonae's port leads directly onto a road heading east towards Bath, with the majority of sites appearing alongside or near this in keeping with a linear settlement (Ellis, 1987). This site, widely regarded as a civil harbour, seems to develop very differently to what



is seen at Petuaria with the latter's apparent separation between the walled site and the harbour. Although no wall is currently recorded in the stretch between Station Road and Wacher's excavations at Brough House and Manor House it is possible to infer a complete line of defence through both an evaluation of the currently recorded course of the wall and in the public memory of the area as discussed in Chapter 5.

Therefore, it seems safe to estimate that Petuaria's harbourfront would remain separate from the walled area, occupying the northern bank of the Humber as it leads into the wider haven to the west. This split between settlement and harbour is similarly seen further north at Arbeia, one time believed to be the name of the site at Brough due to Ptolemy's naming the Humber as *Abus*, where the well documented fort lies separate to the harbour (Bidwell & Speak, 1994). As discussed in Chapter 6 it is possible that this was due to either the origins of the site not accommodating the development of a harbour, or the proximity of the site to the northern frontier necessitating a separation between the vulnerable harbour and the defences themselves. Both of these theories may be applied to Petuaria with some success. Although broadly accepted as a peaceful occupation by comparison, the Roman presence at Petuaria may have deemed a separation necessary to protect the estuary and region as a whole. As the perceived threat to the Humber is continental and coastal raiders, most likely northern and Pictish, a separate fort and harbour on the Humber makes significantly more sense than one that is freely accessible from the water. This would allow for a separate presence for the naval detachment, possibly even seeing them barracked outside of the walled area however it still remains most plausible that they would still occupy the fort to the east. This may explain Wacher's west gate as leading directly between walled settlement and harbour.

## 8.2 Longevity of the Town

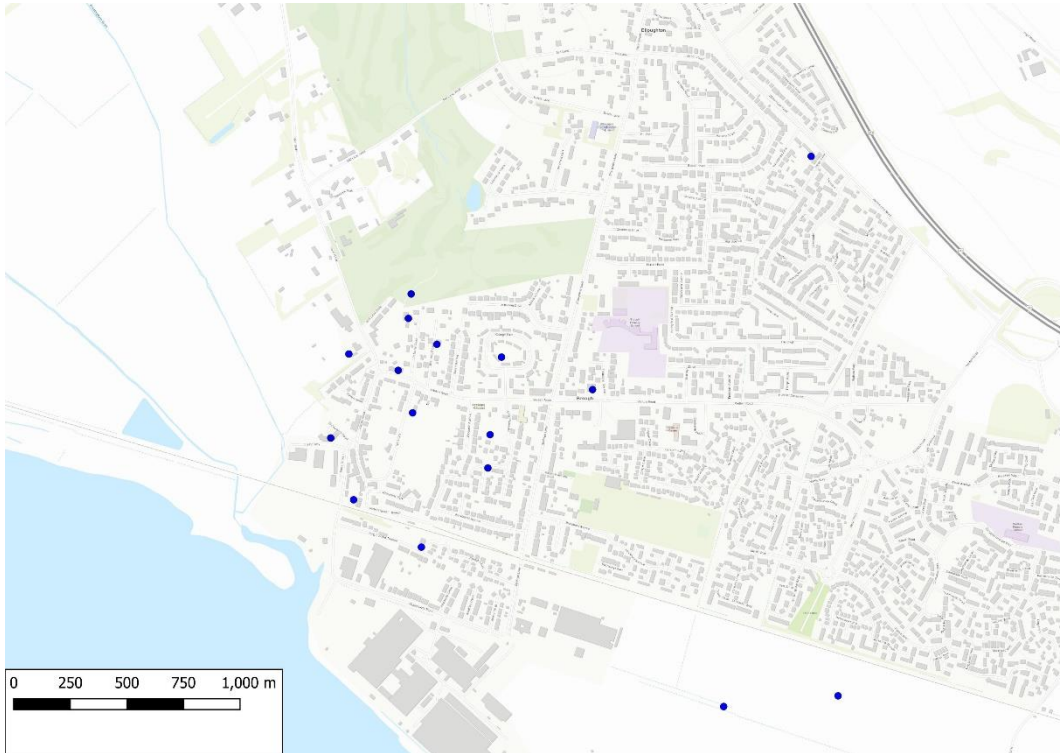
One of the longstanding discussions around Petuaria was the longevity of the site's occupation. Although largely answered during the excavations of Philip Corder and later Jonh Wacher it is important to summarise what present evidence reflects on the site. No earlier date of origin has been established for the site than the previous date of the Flavian Dynasty, likely under orders from Petillius Cerialis on campaign to the north against Brigantes. This was probably first as a supply depot and crossing point on the Humber before being developed into a small auxiliary fort located towards the line of Welton Road (Figure 52).



Figure 52 Sites with First Century Evidence

What follows continues to remain a short period of abandonment, likely between twenty and thirty years, before reoccupation of the site commences in the Hadrianic-Antonine period. This is shown largely in the material recorded, including a suggestion of the site developing rapidly into the Antonine period as possibly shown in the *proscenaeum*

inscription. It is likely during this period that Petuaria's occupation as a town begins, with settlements found outside the walled area as well as some buildings constructed within the walls (Figure 53).



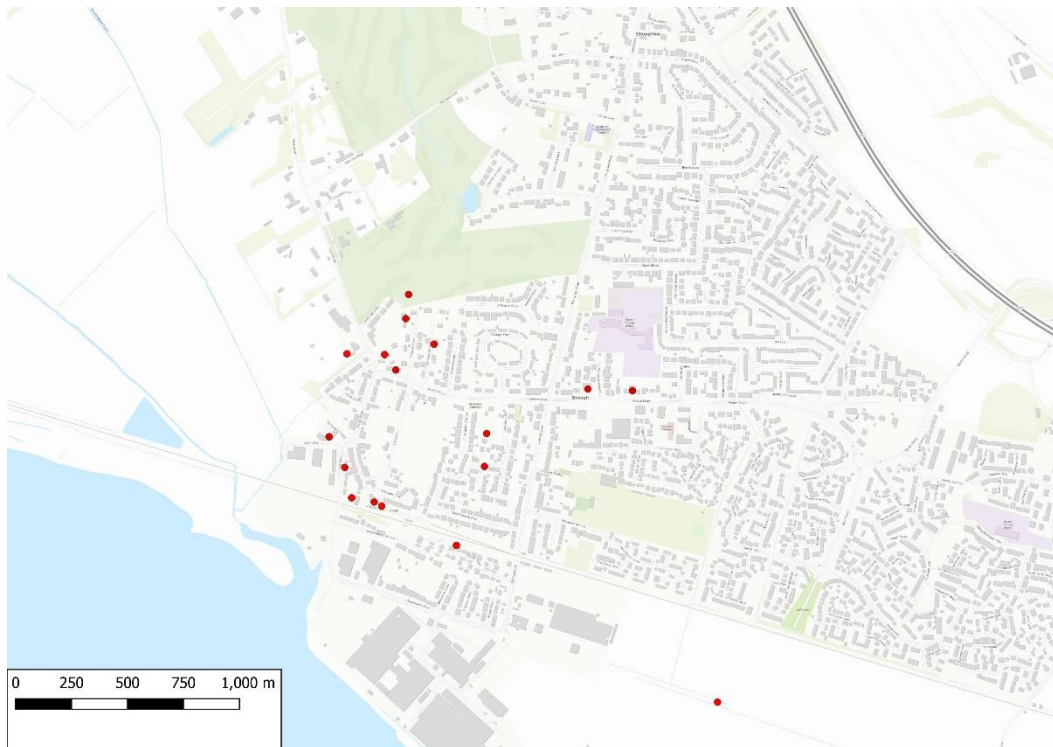
*Figure 53 Sites with Second Century Evidence*

According to Corder this earlier period sees the development of larger ramparts and ditches, something confirmed by recent excavations. It is also likely the site begins to be walled during this period, an aspect Wachter argues shows the site's marginal civilian use due to towns not being fortified as such until the later third and fourth centuries.

It is now apparent that at some point in the third century the site is redeveloped to incorporate bastions around the perimeter of the wall. This is largely attributed to the third century due to the coins recorded in fills by HFA of a southern bastion (Evans & Atkinson, 2009) as well as the results of the comparative study in this research as will be summarised in a later section. One change noticeable in the spread of material recovered is that the site

seems to 'shrink' as it enters the third century, with the occupation seeming to focus more on the walled area and to the north (Figure 54).

This is possibly due to a period of remilitarisation at the site, resulting in the construction of the bastions, or may even be due to flooding from the Humber making the southern part of the settlement uninhabitable. Interestingly the southernmost reports from the site in this period at Station Road all show signs of alluvial deposits towards the southern defences which may further suggest this element of flooding.



*Figure 54 Sites with Third Century Evidence*

Finally, the site as it continues into the fourth century is the point of perhaps the most contention going forward. Often summarised to be a failed site or “backwater” long before the end of the century (Hildyard, 1958) evidence persists at the site showing occupation towards the end of the fourth century (Figure 55).

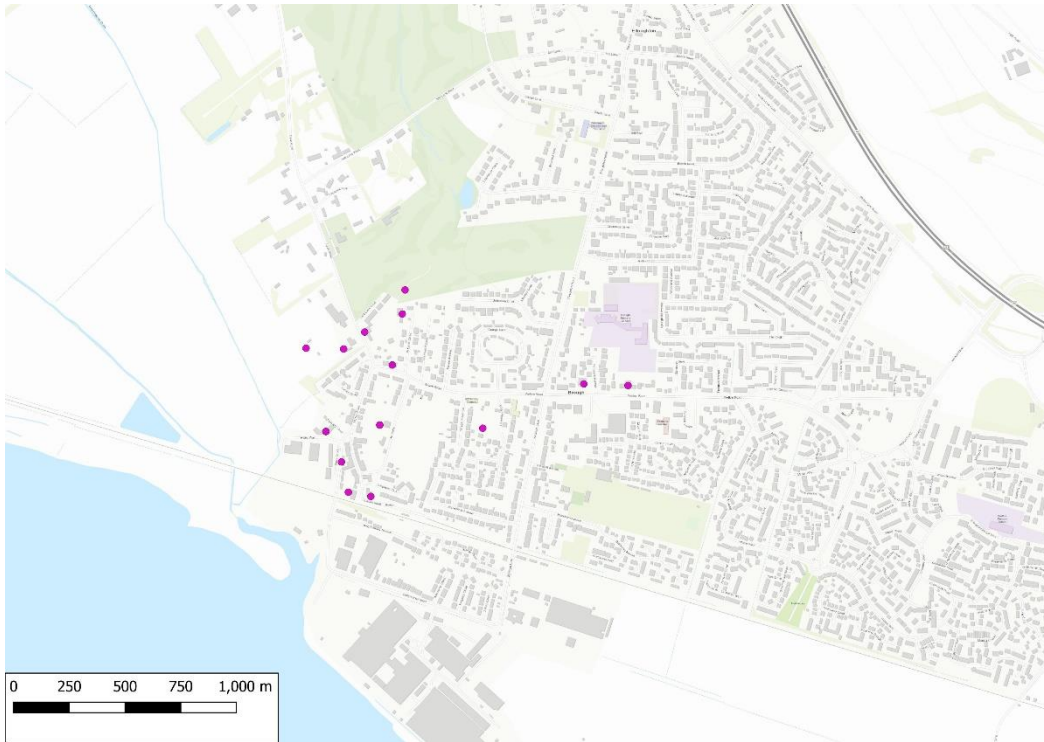


Figure 55 Sites with Fourth Century Evidence

The fourth century occupation seems to again comprise of a reduction of the settlement. Again, this is possibly due to the remilitarisation of the site or even the military presence leaving the site, as suggested in the *Notitia Dignitatum*, resulting in the return of civilian occupation within the walled site. This is probably shown the clearest in the recent investigations by Petuaria ReVisited, where the large courtyarded building in the southwest of the walled area shows signs of multiple occupations spanning into the fourth century. Interestingly both Corder and Petuaria ReVisited recorded some layering of burnt material possibly dating to the fourth century or late third, which may provide another explanation for the site's reduction.

Although it is probably wrong to describe Petuaria as a “backwater” during this time, the eventual end of occupation at the site does occur in this century, with the latest recorded coins belonging to the House of Theodosius and Magnus Maximus (Appendix I).

### 8.3 Petuaria as a *Civitas* Capital

Petuaria as *civitas* capital of the Parisi is perhaps the most prevalent discussion surrounding the site. As discussed in Chapter 6 and again in Chapter 7, Petuaria's role as capital for the Parisi *civitas* is plausible however the site shares very little in the way of structural similarities to other *civitates* capitals across Britain. Furthermore the epigraphical evidence indicating the site as a *civitas* capital, a *C* to the left of the theatre inscription, is somewhat tenuous and has been argued to simply be decorative (Birley, 1986).

In spite of these issues, Petuaria's size and layout not being indicative of a traditional *civitas* capital and the inscription being possibly misinterpreted, Petuaria's place as the capital of the region is not entirely unarguable. Despite the smaller scale of walls as compared to other *civitates* across the country, Petuaria still remains the largest walled site within eastern Yorkshire. As discussed in Chapters 5 and 6 it is possible that Petuaria functioned as a *civitas* capital, providing the local Parisi with a central point of governing, commerce, or other functions while also retaining individual rural settlements across the region. Furthermore, it is entirely possible the *civitas* element of Petuaria functions externally to the walls much like a *vicus*, which the site is described as on the inscription. Although this research argues a more militaristic use of the site, with civilian occupation on a significant scale within the walls occupying only brief periods compared to external settlements, the role of Petuaria as a *civitas* capital remains uncertain, however it is largely evident that it would not be in keeping with other identified *civitates* in the scale of the settlement or the development of public and civilian buildings.

## 8.4 Refortification

A further of the longstanding questions about Petuaria is that of the nature and origin of the external bastions, first recorded by Corder, and what events and policies they may be attributed to. Traditionally, from Corder's writing, these have been most often identified with Constantinian developments, likely the fourth century fortifications seen at towns elsewhere in the country. However, through the developer-led investigations present at Brough and the density of coins it appears as though a further suggestion would be their construction in an earlier period. It seems now that Petuaria's bastions are largely confirmed to have been built sometime in the third century, with the features bonded to the prior walls at key points on both the cornered and straight parts of the defences. Similarities exist between these features and a number of the sites identified as the Saxon Shore, alongside other coastal sites defended in the third century. Particularly strong links, as discussed in Chapter 6, appear between Petuaria's defences and those seen at sites occupied by both the Gallic Empire and Carausius, in particular Burgh Castle and Richborough.

Although from this Carausius would seem a more likely contender, not only as Britain is the primary focus of his empire and his ties to the navy suggesting an awareness of Petuaria prior to his revolt, it is the opinion of this research that the Gallic Empire may be a more fitting perpetrator. The coinage density as recorded in this research shows a much higher concentration Gallic Imperial coins than those of Carausius, however this may be explained by the new mints for each of the four Gallic emperors present in the record as opposed to the two for Carausius and his successor Allectus. Although it would appear that Petuaria would be out of the scope of the Gallic Empire, with most of their developments and conflicts found on the continent, the defensive measures carried out by them to secure a

cross-channel trade route may be seen to support their defence of Petuaria, the site marking the most direct route through which goods could be transported to York.

A further possible explanation is that both parties, the Gallic Empire and Carausius, oversaw developments at Petuaria. This is suggested by the fieldwork carried out by HFA in which a bastion was found to have been developed to replace an earlier third century timber structure, possibly a prior bastion or the framework for one. Multiple stages of development under both groups are seen elsewhere in the country, such as at the previously mentioned Burgh Castle and Richborough, and may suggest that the Gallic Empire began works at Petuaria during their reign in 260-274 which were later finished or repurposed under Carausius in 286-293.

### **8.5 The *Numerus Superventium Petueriensis***

Although it is probable that Petuaria housed a naval detachment of some kind it is likely the *numerus superventium* of the *Notitia Dignitatum* does not refer to this naval detachment. Although it is possible the document refers to the transfer of a rapid response naval unit to Cumbria's Derwentio, a coastal site at modern Papcastle, the moving of a mounted unit to Stamford Bridge's Derwentio seems the more plausible. Indeed, the archaeological record present at Stamford Bridge's roadside site seems to suggest the presence of mounted troops in the area, probably billeted within the roadside town. Indeed, should the movement be of a naval force from Petuaria to Papcastle, which would require a circumnavigation of Scotland, the journey carried out at the time of the *Notitia's* production in the later Roman period would be hazardous if not fatal.



Therefore, it would appear as though the military use of Petuaria is twofold, one aspect being a naval detachment stationed at the harbour to provide the only defence along the estuary and both Yorkshire and Lincolnshire coasts near the channel's mouth, and the other being a mounted unit stationed within the walls to serve as a terrestrial deterrent to raiders. It can be inferred from the possible violent end at Welton that the *Notitia* is correct in accounting for these troops moving to Stamford Bridge as it seems unlikely that any Roman military detachment would allow for such an act to be committed in such close proximity. As such, it is possible that the mounted troops of Petuaria are present at the site at a different time to the naval detachment, possibly as a successor, with the timeline of evidence suggesting that by the time of the *Notitia's* production the haven had silted and become unusable by the naval presence. Similarly, the bastions dated to the third century may be part of this shift to terrestrial defence. In fact, the construction of such defences, allowing for the potential placement of artillery, could be seen as a response to the phasing out of the naval presence at Brough during this period with the introduction of a mounted unit to respond to further incursions.

When considering the spread of other military sites in eastern Yorkshire, particularly the abandonment of forts at Hayton and Staxton, the region appears difficult to defend in a traditional sense, suggesting a further likelihood of mounted troops at both Petuaria and Malton. It is possible that, assuming a period of contemporary occupations between all known forts in the region, the area Petuaria may need to be responsible for as a fort approaches ninety-thousand hectares, suggesting the likelihood that any attempt to maintain security in the region would require mounted units at both north and south extremities with the focus more on the roadside settlements than the rural communities.

Interestingly a further interpretation of *superventientium* is that it refers to new recruits or troops recruited from the surrounding area of Petuaria. Although this interpretation may fit when considering the unit to refer to a naval presence, the local residents of the Humber region would likely be the best equipped to navigate those waters, it fits less effectively when considering a mounted unit. It is clear that the translation and interpretation of the *Notitia's superventientium* warrants further exploration, however without further evidence a definitive answer remains elusive, the closest suggestion of which being the mounted unit *detritus* recorded at Stamford Bridge.

## **8.6 Community Research and the Archaeological Record**

As discussed in Chapter 5, the evidence produced by the community participants shed further, and in some cases new, light on the nature and occupation of Petuaria. The quantities of ceramics recorded by a few participants suggests the presence of yet further sites of occupation external to the walls, cementing further the likelihood of the civilian settlement being a *vicus* in layout. Furthermore, the coinage recorded by participants, albeit sparse, suggests an active presence in the mid third and early fourth centuries with the quality of the Constantinian *Urbs Roma* in particular suggesting a recent minting.

Additionally, the 'urban legends' and oral histories of the town help to provide the all-important air of mystery for the site. Although these may be inaccurate and, in some cases, wrong they retain an importance in the public image of Brough and Petuaria and should be treated with respect in both academic and archaeological circles. It is entirely likely that no site at Brough would have been ever explored without the persistence of public narrative as even the earliest mentions of the site rely on such information.

In terms of the continued community presence of Petuaria and the use of the site as providing a sense of place among the residents, it has only continued to grow. The Petuaria ReVisited project began its fifth season of excavations in the summer of 2024 with another large group of volunteers carrying out further work on the north-eastern defences of the fort in the Burrs Playing Field. In addition to this, the project has also begun to undertake wider geophysical surveys in the area, with the involvement of both Brough residents and the support of the Hull Maritime Project (BBC News, 2024). The importance of Petuaria to the local population is not only apparent in historical accounts of the archaeology of the town, but throughout this research in both its community engagement aspect and as part of the Petuaria ReVisited project and with further events, projects, and excavations planned the local identity of Petuaria remains a clearly influential historical touchstone in the community.

### **8.7 Issues and Limitations**

As discussed in previous chapters the most affecting issue faced by this research was the attempt to carry it out during the coronavirus pandemic. Not only did this severely impact the opportunities to engage with participants and produce public engagement resources, part of the original proposal for this project, but the nature of the lockdowns hindered further research potential with the closing of the university as well as the Humber HER.

Again, as mentioned throughout this research a significant limiting factor was the availability of both archaeological information, with many sites and reports remaining unwritten or unpublished, and the general scope of the archaeological investigations. Although incredibly useful in reassessing Petuaria there remains a number of areas of the town in urgent need of further exploration.

## 8.8 Further Work

It has hopefully become apparent that, despite the already notable quantities of archaeological material recorded from Petuaria, that further investigations are still needed to determine a few key factors. Naturally this is the plight of most archaeological sites with the discipline in many ways finding itself in a perpetual state of needing further excavations and surveying. However, it has become clear that a few select investigations across the environs of Brough would help shed further light on the nature of the site and its occupation without requiring particularly extensive excavations.

The first of which would be coring samples taken from the area east of the walled site and towards the haven. The goal of this would be to further determine the Roman era shoreline and assess the likely extent of the harbour situated at the east of the settlement.

Additionally, the results of these cores would hopefully shed further light on the structures to the north on Cave Road and, alongside the ongoing assessment by Martin Millett, determine the true nature of this section of Brough. Further investigations would be ideally located to the southwest of the scheduled area and wider walled site. These investigations would hopefully reveal the nature of occupation and defences in this area, while also potentially informing more on the section of the site located nearest to both the haven and the historic course of the Humber.

Ideally further excavations or surveys would take place across the scheduled area of the Burrs Playing Field however the nature of the scheduling and the difficulties faced in funding such excavations are a considerable acknowledgment to the limitations of such a project.

Instead, it would be a considerable help to both archaeologists assessing the site of Petuaria

and the residents of Brough itself to produce a record of investigations at the site, particularly those of developer led projects normally constrained to grey literature and the Archaeology Data Service with neither resource particularly prominent in the public's awareness. It is hoped that chapter four of this thesis, covering the details of prior investigations will serve as the basis for this work, however the near constant production of developer led reports it is likely this catalogue will be incomplete within a year or so.

One aspect warranting further research in the region is the variety of burials recorded across the landscape, in particular the styles of inhumation and the number of infant and perinatal burials recorded. As discussed briefly in chapter four, one issue faced by this is the way in which the Petuaria examples are recorded by Wachter, given little more than a few paragraphs (Wachter, 1969). However, with further cases, particularly the fifty-eight infant burials recorded at Rudston Dale, it would warrant further research into the style and reasoning behind such quantities of burials (Millett & Gowland, 2015).

Finally, it is the hope that this research has highlighted the importance of public information and any research into Petuaria, and other sites beneath modern settlements, would be greatly assisted by the recording of such information. As discussed in both chapter seven and this conclusion the timing of this research taking place during the coronavirus pandemic limited the level at which public information could be gathered and recorded despite the keenness of the wider community to take part. However, the small number of participants in this research hopefully highlights the variety and quantities of data present in this public record, the most prevalent example being the nearly complete amphorae recovered by Participant 1 alongside their staggering collection of other sherds spanning the entire Roman occupation.

## 8.9 Summary

As shown in this conclusion of the research there are still a number of questions persisting that require further investigations and assessment of the archaeological record, as is the case for almost all archaeological sites. Despite this the research has at least partially answered the questions it set out to:

- Petuaria's occupation is substantial and extensive. Despite prior theories the site is clearly occupied for several centuries and undergoes a number of changes, including the militarised development of external bastions in the third century.
- Petuaria likely holds multiple roles within a local and national context, with indicators for a harbour, town, fort and even naval base throughout the archaeological record. The two most ephemeral of these; the harbour and naval base, are likely to be answered following further investigations to the west of the site.
- The role of the community in understanding the bounds and nature of occupation at Petuaria has proven crucial in some regards. As stated previously it is the hope of this research that it has highlighted the importance of engaging the public in all future archaeological investigations in the area.

From a theoretical standpoint the research may be able to posit such conclusions as:

- A military presence is likely persistent throughout the occupation of Petuaria. As discussed, this is probably twofold or even threefold with different garrisons present throughout the development of the site. It is possible this consisted of an initial auxiliary force in the late first century, a naval detachment from the second and into

the mid third century, and finally a mounted unit present at the site from the mid-third century up until the point of its redeployment at Derwentio to the north.

- Although unconfirmed, the likelihood of a large natural harbour to the west of the walled settlement is shown in the archaeological record. Whether it extends north to the structures on Cave Road, as posited by this research, remains to be seen however the surfaces recorded at the west of Brough confirm the existence of some maritime development in the area.
- In keeping with Wachter's comments on the topic, it is likely the civilian aspect of Petuaria remained as an external and roadside *vicus* rather than becoming a traditional *civitas* capital within the walls. Although it is evident some civilian occupation occurred within the walled area, with further investigations needed across the site and particularly in the higher status structures on the Burrs Field, it is more plausible for main occupation to largely remain outside the walls due to the size of the internal area and the lack of certain other civilian features. This does not prove definitively that the site is not a *civitas* capital, but rather that further work is needed on investigating structures within the walled area.
- The addition of bastions to the outside faces of the wall is likely a development of the mid to late third century. Whether this is as a part of the Saxon Shore, a *burgus*, or as part of measures carried out by the Gallic Empire remains to be seen however archaeological evidence seems to prove that they are pre-Constantinian in origin with particular similarities seen with sites attributed to either the Gallic Empire or Carausius, possibly with both responsible for phases of redevelopment seen at Petuaria.

## **8.10 Final Comments**

Ninety years on from Corder's first investigations it is clear that a number of aspects of Petuaria continue to allude definitive explanations and may continue to for more time still. However, through the collation and evaluation of the data recorded at the site and the interpretation thereof, the understanding of Petuaria has developed greatly through this research. As stated, it is clear further investigations are needed at a number of key sites across the town, and it is hoped that this research will provide theoretical groundwork for those investigations to come.



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## Appendix I

### Coins and the Third Century

Emperor/Focus	Corder	Wacher	Other <sup>1</sup>	Total	% <sup>2</sup>	Century
Corieltauvi Gold Stater			1	1	0.22	<i>Iron Age</i>
Alexander the Great	1			1	0.22	<b>First Century 30 Total</b>
Nero	4			4	0.90	
Vespasian (F)	6	2	1	9	2.01	
Titus (F)			2	2	0.45	
Domitian (F)	3	1	1	5	1.12	
Nerva (NA)	1		1	2	0.45	
Trajan (NA)	5	2		7	1.57	
Hadrian (NA)	4		2	6	1.35	
Sabina (NA*)	1			1	0.22	<b>Second Century 32 Total</b>
Lucius Aelius (NA*)	1			1	0.22	
Antoninus Pius (NA)	4	1		5	1.12	
Faustina The Elder (NA*)	3		1	4	0.90	
Marcus Aurelius (NA)	4		1	5	1.12	
Faustina The Younger (NA*)	1		1	2	0.45	
Commodus (NA)	1			1	0.22	
Didia Clara	1			1	0.22	
Septimius Severus (S)	1			1	0.22	
Julia Domna (S*)	1		2	3	0.67	
Caracalla (S)	1			1	0.22	
Plautilla (S*)	1			1	0.22	
Elagabalus (S)	1		2	3	0.67	
Severus Alexander (S)		1		1	0.22	
Julia Mæsa (S)	1			1	0.22	
Gordian III (G) **	4			4	0.90	<b>Third Century 182 Total</b>
Otacilia Severa	1			1	0.22	
Valerian (V) **	1			1	0.22	
Gallienus (V) **	11	3	1	15	3.36	
Cornelia Salolina (V)		1	1	2	0.45	
Postumus (GE)	3		1	4	0.90	
Claudius II "Gothicus" (G* CL)	21	5	5	31	6.95	
Victorinus (GE)	13	4	6	23	5.16	
Quintillus (G* CL)	1			1	0.22	
Tetricus I (GE)	26	2	3	31	6.95	
Tetricus II (GE)	9	1	2	12	2.69	
Aurelian **	1			1	0.22	
Severina	1			1	0.22	
Probus **	1			1	0.22	
Diocletian **	3			3	0.67	
Carausius (CA)	7	2	2	11	2.47	

Maximian Herculius **	1			1	0.22	<b>Fourth Century 192 Total</b>
Allectus (CA)	6		2	8	1.79	
Barbarous radiate	4		1	5	1.12	
Illegible radiate	8		8	16	3.59	
Irregular Radiates		4		4	0.90	
Maximinus Daza	1			1	0.22	
Licinius **	2		1	3	0.67	
Constantine I (C) **	19		24	43	9.64	
House of Constantine (C)			21	21	4.70	
Urbs Roma (C)	9		1	10	2.24	
Constantinopolis (C)	4			4	0.90	
Theodora (C*)	1			1	0.22	
Fausta (C)	1			1	0.22	
Constantine II (C)	13		11	24	5.38	
Constans I (C)	7		5	12	2.69	
Magnentius	3		1	4	0.90	
Constans or Constantius II (C)	5			5	1.12	
Constantius II (C) **	6		14	20	4.48	
House of Valentinian (VA)			3	3	0.67	
Valentinian (VA) **	1			1	0.22	
Valens (VA) **	3		2	5	1.12	
Valens or Valentinian I (VA)	1			1	0.22	
[...]Gratian (VA) **	1			1	0.22	
House of Theodosius			1	1	0.22	
Magnus Maximus	1			1	0.22	
VICTORIAE LAETAE		1		1	0.22	
GLORIA EXERCITVS (2 standards)		1	1	2	0.45	
Irregular Wolf and Twins		2		2	0.45	
Victory on Prow		1		1	0.22	
GLORIA EXERCITVS (1 standard)		4		4	0.90	
Irregular GLORIA EXERCITVS		1		1	0.22	
VICTORIAE DD AVGG Q NN		1		1	0.22	
Irregular VICTORIAE DD AVGG Q NN		1		1	0.22	
Irregular Fel Temp Reparatio (fallen horseman)		2		2	0.45	
Fel Temp Reparatio (fallen horseman)			1	1	0.22	
Illegible Fourth Century	8		7	15	3.36	
Illegible Coin			3	3	0.67	
Illegible Fragments	3	3		6	1.35	
<b>Total</b>	<b>257</b>	<b>46</b>	<b>143</b>	<b>446</b>		

<sup>1</sup>Coins recorded in other investigations including historical accounts, developer-funded projects and the Portable Antiquities Scheme as well as private collections and publicly submitted finds. <sup>2</sup>Percentage of total coins recorded in this thesis.

Dynasties and Usurper groups: **F- Flavian NA- Nerva-Antonine G- Gordian V- Valerian GE- Gallic Empire CL- "Claudian" CA- Carausius and Allectus C- Constantinian VA- Valentinian.**

\*Rulers, heirs, spouses, and children who are often not traditionally considered as members of the dynasty. In the case of Claudius Gothicus and his brother Quintillus, Claudius is believed to be an illegitimate son of Gordian II. For the purposes of this thesis Claudius and Quintillus are additionally referred to as a group of their own, the "Claudian" Succession, due in part to their successive reigns and significant portion of recorded coinage.

\*\* A number of emperors in this record are referred to as either Illyrian emperors, with origins in Illyricum in the western Balkans, or barracks emperors who seized power by virtue of their military command. Although many of these emperors go on to found dynasties, Constantine I and Valentinian in particular, many belong to no dynasty such as Aurelian, Diocletian, and Licinius.

### **A Brief Summary of the period 260-296:**

Through exploring the coinage recorded in Brough, clear links to some of the crises and revolts of the third century become apparent. These are primarily the Gallic Empire, Claudius Gothicus, and Carausius and Allectus. Each of these signify a period of unrest and dissent within Britain and to a greater extent the western continent. To compliment the discussion of this thesis each period will be briefly summarised to help the reader understand the wider context of each crisis.

The first period of coin density relating to a crisis is that of the Gallic Empire, a breakaway group of countries comprising of Britannia, Gaul, and Hispania which sought an opportunity to self-govern following the weakening of the Roman Empire in the mid-third century with

the capture of Valentinian and the rule of Gallienus. The leaders of the Gallic Empire consist of the continuous reigns of Postumus, Marius, Victorinus, and the Tetrici between AD 260-274. Of these coins are recorded in Brough under Postumus, Victorinus and the Tetrici with Marius only ruling for a short period of some two to three months as estimated from the recorded coinage minted under him.

Most activity undertaken by the Gallic Empire was focussed on the continent, with Postumus' initial statement being that the division was to defend Gaul as was his command from Gallienus prior to the separation in AD 260. Various conflicts occurred between the Gallic Empire and the Agri Decumates of the north before Gallienus sought to intervene and came into direct conflict with Postumus' forces. This saw the latter besieged until Gallienus received a wound that caused him to call off the siege. What follows this is a period of infighting among the Gallic Empire, with Postumus ultimately put to death by his praetorians after successfully defeating the rebel Laelianus at Moguntiacum. This leads to the proclamation of Marius as emperor in AD 269, ultimately short lived as he is killed two months later.

The mantle of emperor was then taken up by Victorinus, one of Postumus' praetorian guards, and it was at this point that conflict with Rome returns as under the command of Claudius Gothicus central imperial control returns to Hispania and territories are successfully taken east of the Rhône in the Gallic territories in AD 269-70. This marks the beginning of the end of the Gallic Empire as Victorinus' short reign ends with his murder in AD 271 and the proclamation of Tetricus as emperor by Victorinus' mother, Victoria, by spring of that year.

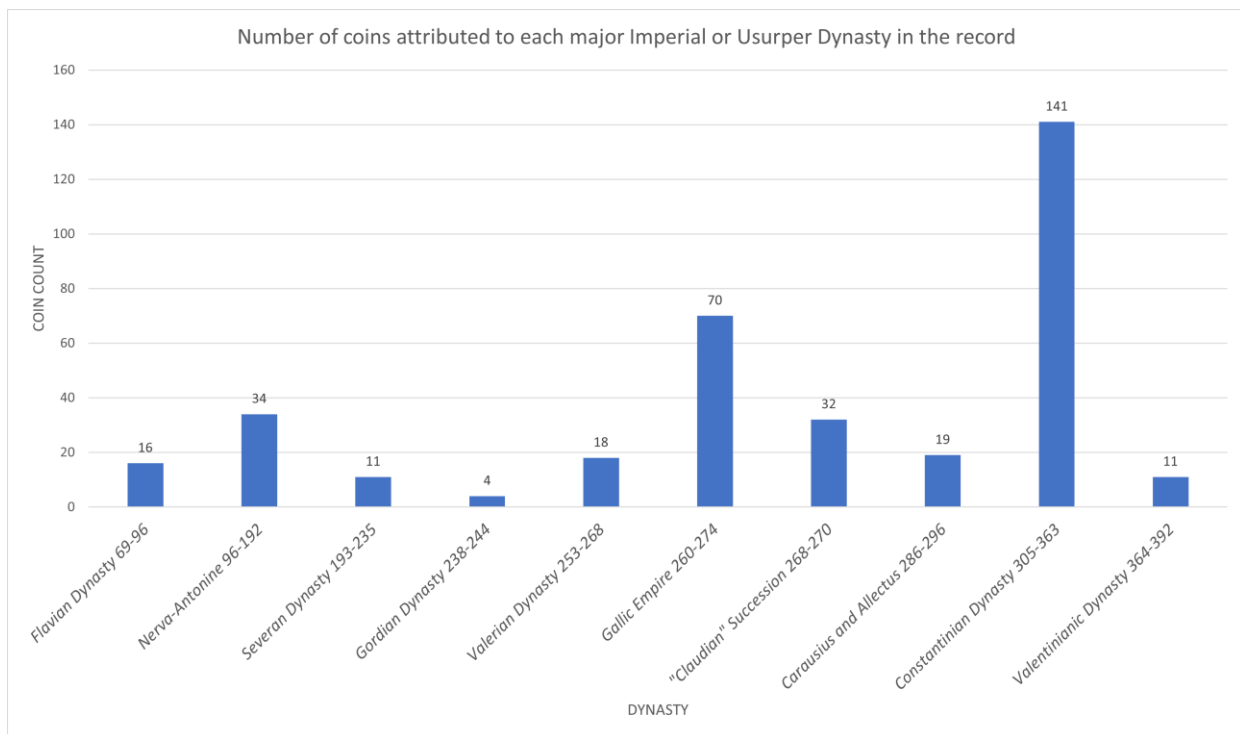
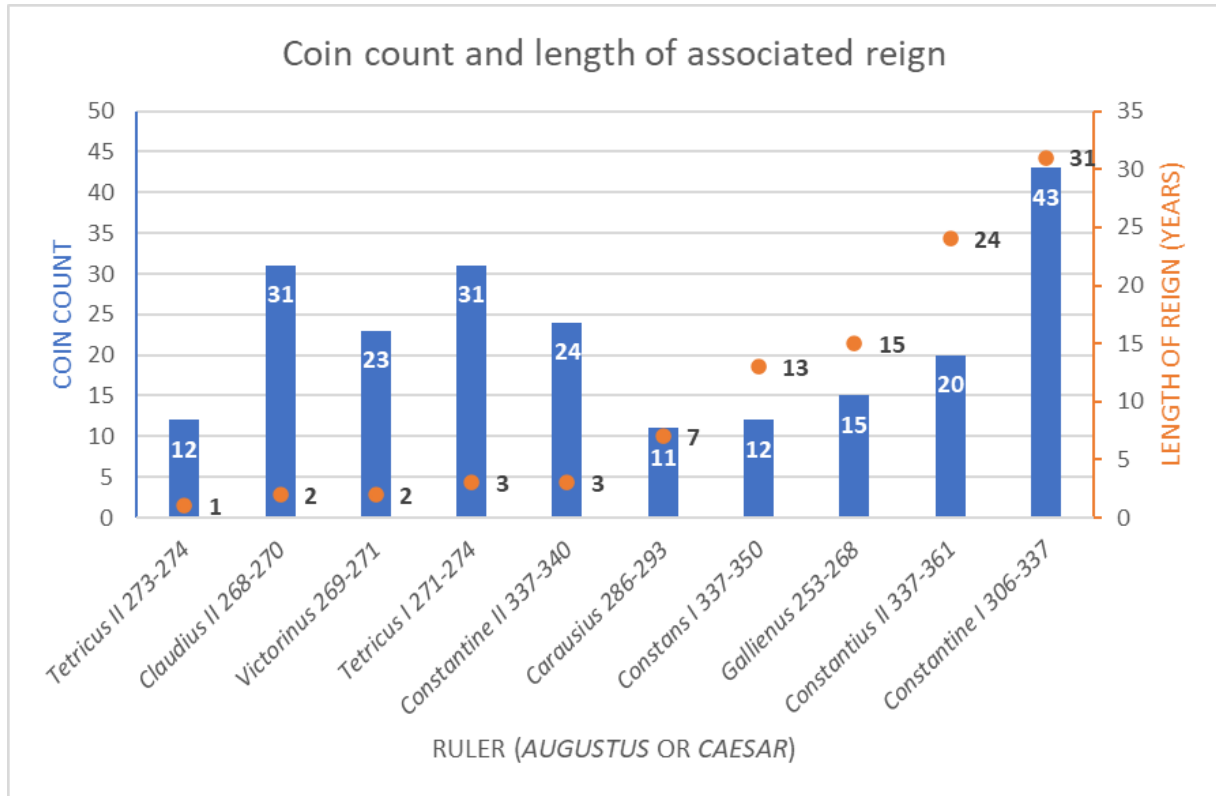
Tetricus' reign is immediately beset by conflict with German tribes, which he successfully defeats between AD 271-2, and in AD 273 he names his son *Caesar* and successor. The Gallic Empire eventually comes to its end in AD 274 when the Central Empire under Aurelian, after retaking the east, engages Tetricus in battle at Châlons-sur-Marne. This battle marks the end of the Gallic Empire and results in Tetricus I being granted governorship of Lucania while his son was given a senatorial position. It has been suggested by some that his generous treatment of the Tetrici by Aurelian is the result of the two leaders arranging the defeat prior to the battle, however this rumour is largely unsubstantiated.

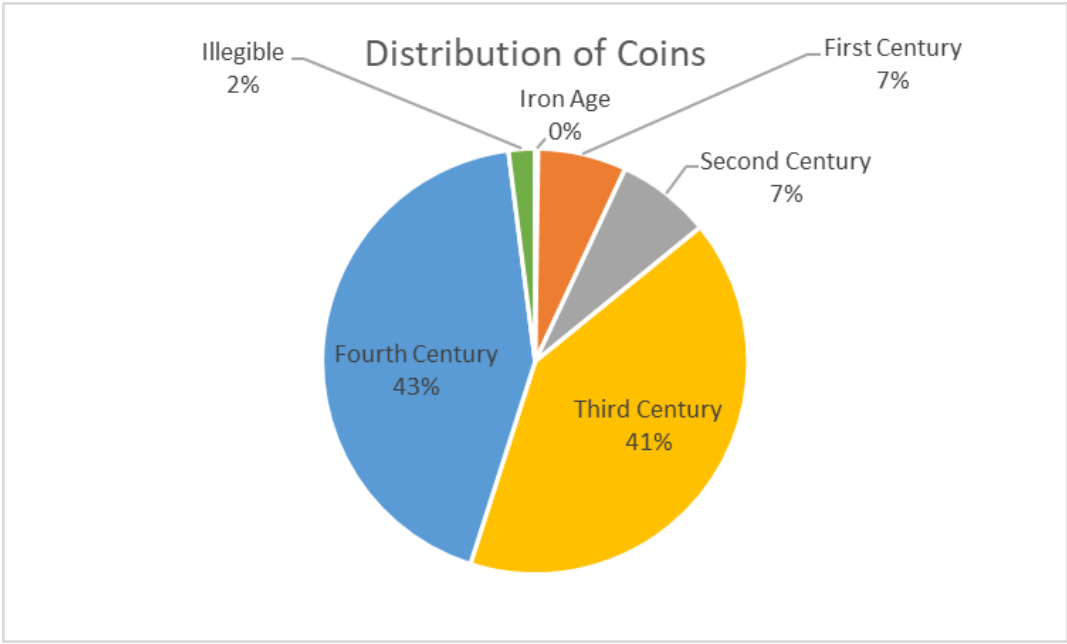
The Carausian Revolt, taking place twelve years later in AD 286 and lasted for ten years before the defeat of Allectus by the forces of Constantius Chlorus in AD 296, saw the creation of what is colloquially known as Britain's first empire. As is discussed in Chapter 6, Carausius was commander of the *Classis Britannica* with orders from Maximian, Diocletian's *Caesar*, to put an end to the cross channel and coastal raiding that was taking place between Britain and the continent. It is widely reported that Carausius took this opportunity to generate vast personal wealth by allowing the raiders to carry out their attacks and confronting them afterwards with Carausius' men seizing the stolen goods. Maximian then demanded Carausius return to the headquarters of the western empire to answer for these crimes at which point Carausius declares himself a third emperor alongside Diocletian and Maximian.

Carausius' reign sees developments at a number of sites across Britain and the mainland with a particular focus on coastal forts, most likely those previously in use by his *Classis Britannica*. After a seven year period Carausius was assassinated by Allectus, his prior financial minister, and the latter maintained the position of 'British Emperor' for three years



before his defeat and the arrival of Constantius Chlorus in Britain, setting the stage for the House of Constantine's emergence as one of the most influential and well known dynasties of the Roman period.





## Appendix II

### Community Research Information Sheet and Consent Form

#### Appendix II a) initial contact sheet

This was provided as a virtual link to the Petuaria ReVisited Facebook group, the google form led to a brief survey that indicated their interest in taking part in the research. This would then lead to them receiving an email with the Project Information Sheet and Consent Form.

“Residents of Brough,

Have you or someone you know found something of archaeological interest on your property or in the Brough area? Do you or someone you know remember previous archaeological investigations in the town?

If so, your help is needed!

Artefact recording visits will be starting up very soon and your evidence may prove crucial in understanding the Roman history of Brough.

As part of a PhD research project based at the University of Hull, the Roman history of Brough is being re-examined under a new light. This includes recording the artefacts and evidence found by residents that may previously have never been acknowledged and will use this data to develop the best possible impression of what Roman Brough may have been like.

If this is something that interests you, or you have previously expressed an interest in having your finds recorded, then please fill out the attached form and a visit can be arranged for a date that suits you. Alternatively, if you or the person you know do not have an email address to submit, consent forms and information sheets will be available at upcoming Petuaria ReVisited events and visits can be arranged in-person there.

<https://forms.gle/VoCZRAqbMra4ZMTr7>”

## **Project Information Sheet**

**Project Title: Petuaria- Discovering Its Place in Roman Britain**

**Researcher: Jonathan Farley**

**Institution: University of Hull**

**Supervisor: Dr Peter Halkon**

**- Petuaria:**

Founded around AD70 during the Roman conquest of Britain, Petuaria began life as a small supply depot and fort constructed on what was the northern end of an Iron Age ferry crossing of the Humber. Useful due to its connections to the Humber, Lincolnshire, York and Malton the site, after a short period of disuse was developed further as a town began to build up around the site of the fort. This is where the name Petuaria is first recorded, on a stone inscription describing “The dedication of a stage by Marcus Ulpius Januarius to the town of Petuaria” made sometime around AD140. This not only gives the site its name, but also gives a sense of the site’s scale, wealth and local importance. Over the next few centuries, the site undergoes further changes and developments, possibly even being partially demolished to construct huge defences to protect the Humber during a time of Imperial upheaval. However, as the Humber began to silt up and the Haven, regarded as a key site to the Romans, silted up further it appears as though the Romans had started to move on by the time of the late 4<sup>th</sup> Century.

Up until 2020 almost all this evidence came from one of two sources, either the 1930’s excavations by Philip Corder, or the 1950’s excavations by John Wachter. This in combination with a small handful of literary sources ranging from one of the earliest geography textbooks (Ptolemy’s *Geographia* written around AD150) to diaries of local historical enthusiasts in the 18<sup>th</sup> Century has so far been the extent of our knowledge of Petuaria and its many lives.

This all changed in 2020 with the cumulation of years of planning when, despite an ongoing global pandemic, the combined effort of the University of Hull and the Petuaria ReVisited group carried out the first research excavation in 59 years on the Burrs, a part of Brough largely untouched for the past 82

years. This excavation completely changed the understanding of the site, pushing the believed end of the Roman occupation back nearly two centuries, thanks to substantial amounts of evidence dating the site to a far later period than previously thought. The following season of excavation in 2021 only continued the development of the site's later history, with the earliest definitively dateable artefact from the recent trenches still being a coin of Julia Domna, wife of Emperor Septimius Severus, minted between AD193-196. This second season also allowed for a far greater level of community involvement in all aspects, particularly regarding local information and discoveries that may not be known about in the archives or records of the site.

- **Project Aims:**

This PhD research will focus on compiling all the data available on the site of Petuaria, located under modern Brough, and will attempt to produce a comprehensive narrative for the site and the history of the site's excavations. This is a heritage-focussed project and is being carried out with the funding of the Heritage Consortium and the help of the Petuaria ReVisited group. As such, a key component of this research will be accessing and recording the archaeological evidence found by Brough residents in their gardens and on their property. This will allow the research to gain a greater understanding of the extent and nature of the site, by showing a broader spectrum of material than what has been uncovered conventionally. In addition to this the involvement of the community's knowledge will be key to this site's understanding and the subsequent development of a narrative.

## **Consent Form for PhD Research**

**Project Title: Petuaria- Finding its Place in Roman Britain**

**Researcher: Jonathan L Farley**

**Contact information: petuariaproject@gmail.com**

**Project Supervisor: Dr Peter Halkon**

**Institution: The University of Hull**

### **Your Data:**

The data that will be recorded as part of this project will comprise of archaeological evidence (pieces of pottery, metal, bone and building materials) that have been found on your property either by yourself or others. The recording process consists of making notes of the amounts and types of the evidence, which will help in developing the understanding of the scale and nature of the site itself. Other data that may be useful is accounts of any materials subsequently lost, such as unrecorded discoveries and sites in previous residencies, however this data will be treated extremely sensitively to avoid producing false information.

Any data collected on your property will remain yours, with no pieces being taken away by the university unless they require further investigation than the visit allows for and only with your consent. To protect your identity and your property there will be no direct reference to any residence within the publicly accessible published or completed sections of this research other than a postcode (which may also be redacted upon request). In addition to this, you will be able to withdraw any information recorded on your property up until the first draft of this PhD is completed, estimated to be sometime around **Winter 2022**.

## Permissions

**Do you consent to the use of data from your property (artefactual/structural) in the carrying out of this project and the production of this thesis? The data will help form the basis for a new narrative of the site of Petuaria and will help further develop the understanding of this region's Roman history.**

**Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_