

Ipswich Historic Core: Excavation archive (Phase 2) Dissemination

5746 Updated Project Design

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Summary

The consolidated archive of the internationally significant excavations in Ipswich town centre between 1974 and 1990 will be used to provide a web-based resource for future research proposals and linked to a published report on key aspects of the sites. Production of a website based on both a mapped and a database interface will require some upgrading and rationalisation of the existing databases and digitisation of the excavation plans, plus selection and organisation of supplementary research archive materials.

In a subsequent phase of work the publication, intended for an East Anglian Archaeology volume, will use the same materials to give a summary of the excavations and as a basis for a discussion about what has been learnt about the Anglo-Saxon and medieval town, and the opportunities the data offers for further research

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1 Background

1.1 Excavations and knowledge up to 1990

The town of Ipswich is located in south-east Suffolk, 12 miles inland at the lowest bridging point of the River Gipping, at the point where the tidal channel of the river widens out into the Orwell Estuary. The town is centred at Ordnance Survey grid point TM 1590 4060. Administratively the historic town is within Ipswich Borough Council, at present a district council within the county of Suffolk

The modern town centre of Ipswich lies on the site of its Middle Saxon predecessor. Pottery and artefacts recovered over the past two centuries from within the historic core of the town have been accessed into the collections of the Borough Museum, and their location recorded on a card index. Investigation of the Museum's collections by John Hurst and Stanley West¹ in the late 1950s led not only to the identification of Ipswich ware as Middle Saxon (c. 650 – c. 850 AD) pottery, but also to the conclusion that it was being produced in quantity within the town, and being traded over much of eastern England during that period. Despite this recognition of the town's early foundation, little opportunity was taken to undertake archaeological excavation within the historic core of the town. While a number of developments were monitored by officers of the Borough Museum during the 1960s and early 70s², the only archaeological excavations carried out since Nina Layard's investigations of the late 19th- early 20th centuries³ were by Stanley West, then employed by the Borough Museum.⁴

The recognition during the 1970s of Ipswich as one of only a handful of trading settlements, displaying urban characteristics (emporia), found to exist in western Europe during this period, elevated the town's archaeological status to one of international importance.

In 1974, the Suffolk Archaeological Unit was created, under the management of the Scole Committee for East Anglian Archaeology. The Unit aimed to provide a countywide rescue archaeological service, and was to create the post of urban archaeologist to monitor development in all the urban centres of Suffolk, although the post-holder would have special reference to Ipswich, which had previously been identified by the Scole Committee as a town under serious threat from a potential development boom.⁵ The incumbent, Keith Wade, was established at the offices of the County Planning Department in Ipswich, and for the first time in the town's history an archaeologist was appointed whose specific brief was to excavate and record, where possible, archaeological sites threatened with destruction from new development proposals.

Funding for this work came originally from archaeological grants from funds provided by the Department of Environment, Inspectorate of Ancient Monuments, and latterly from Manpower Service schemes, utilising school leavers (Youth Opportunities Programme) and, later, unemployed young adults (Community Programme). From 1987, some three years before the introduction of Planning Policy Guideline (PPG) 16, limited developer funding became more available to supplement Central Government and Manpower Service scheme money.

Planning Policy Guideline (PPG) 16 was introduced at a time when large scale excavations in Ipswich ceased, and its introduction had severe ramifications on the post-excavation

¹ Hurst & West, 1957

² Owles & Smedley, 1963

³ Layard, 1898, 1907

⁴ West, 1963

⁵ *Ipswich – The Archaeological Implications of Development*, Scole Committee, 1973

programme. Problems over inadequate financial resources available for post-excavation analysis were suddenly exacerbated by the original project staff's jobs being changed, making them no longer available to spend time on the publication of the sites.

The distribution of excavated sites within the historic core of the town is shown in Fig. 1. With the exception of West's two excavations between 1958 - 59 (Fig. 1, sites 1 and 2) and Owles and Smedley's kiln site (Fig. 1, site 3) none of these excavation sites has been fully published to date.

A total of 36 major archaeological interventions (on 34 IAS reference sites) took place between 1974 and 1990 (fig.1, 5-40). These sites all lie within the historic core of the town; 27 within the Anglo-Saxon and medieval defences, and nine within the medieval suburbs. Publication has thus far been limited to short summaries contained in the annual *Archaeology in Suffolk* section of the Suffolk Institute of Archaeology and History proceedings and short reports in *East Anglian Archaeology* (Dunmore *et al* 1975; Dunmore *et al* 1976). Synthetic works have also been produced.⁶

1.2 Published results and archive content

In 2009 the first phase of Anglo-Saxon activity at the Buttermarket (Fig 1 nos 34 and 35), a seventh-century cemetery, was published along with the Boss Hall cemetery that lies 3km north-west of the town centre (Scull 2009). The Buttermarket cemetery consists of 71 certain inhumation graves lying to the north of the earliest settlement area, and included examples of individuals likely to be from the Merovingian Continent. Overlying settlement activity begins with 8th-9th century streets, post-built structures and an Ipswich Ware pottery kiln (Scull 2009, 133).

Site narratives, identifying the main site sequences, have been written for the major sites and some of the smaller excavations. Some site sequences have been dated (against pottery analysis and stratigraphic data only). In several specialist areas analysis is almost complete. Publication of summary results on the Anglo-Saxon animal bone assemblage is pending (Crabtree forthcoming) with a fuller report in archive. A publication in *East Anglian Archaeology* of the worked bone and antler is nearing completion (Riddler in preparation).

The archive consolidation phase of the current project was begun in April 2009 and completed in August 2011 with funding from English Heritage (HEEP project 5746, phase 1).

The material archive was re-packaged and re-labelled to appropriate museum standards. Ownership of the material from all 36 interventions has been transferred to Ipswich Museum and the bulk has been removed to the Colchester and Ipswich Museum Service store at Heckworth Close, Colchester. A total 7,430 boxes of bulk finds and 275 boxes of small finds have been processed.

Prior to transfer the small finds, other than iron which is in very poor condition, were checked for presence/absence against the digital finds tables and the existing drawings. All copper alloy was given an identifier term in the digital data tables and much of this and other key items were digitally photographed.

⁶ Keith Wade, 1988a, 1988b, 1993, 2001



- | | |
|---|---|
| 1. Cox Lane, 1958 (IAS 3503) | 23. Greyfriars Road, 1982 (IAS 5201) |
| 2. Shire Hall Yard, 1959 (IAS 6901) | 24. St. Peter's Street / Greyfriars Road, 1982 (IAS 5202) |
| 3. Cox Lane, 1961 (IAS 3502) | 25. Shire Hall Yard, 1982 (IAS 6904) |
| 4. Star Lane Extension, 1974 (IAS 5301) | 26. Fore Street, 1982 (IAS 5902) |
| 5. Vernon Street / Gt. Whip Street, 1974 (IAS 7501) | 27. St. Nicholas Street, 1983 (IAS 4201) |
| 6. Cecilia Street, 1974 (IAS 5001) | 28. St. George's Street, 1983 (IAS 9802) |
| 7. Old Foundry Road, 1974 (IAS 1501) | 29. St. Helen's Street 1983 (IAS 8804) |
| 8. Elm Street, 1975 (IAS 3902) | 30. School Street / Foundation Street, 1983-85 (IAS 4801) |
| 9. Gt. Whip Street, 1975 (IAS 7501) | 31. Smart Street / Foundation Street, 1984 (IAS 5701) |
| 10. St. Helen's Street, 1975 (IAS 3601) | 32. Wingfield Street / Foundation Street, 1985 (IAS 4601) |
| 11. Vernon Street, 1975 (IAS 7402) | 33. Greyfriars Road, 1986 (IAS 5203) |
| 12. Lower Brook Street, 1975 (IAS 5502) | 34. St. Stephen's Lane, 1987-88 (IAS 3104) |
| 13. Turret Lane, 1978 (IAS 4302) | 35. Buttermarket, 1987-88 (IAS 3201) |
| 14. School Street, 1979 (IAS 4801) | 36. Lower Brook Street / Foundation Street, 1988 (IAS 5505) |
| 15. Foundation Street / Star Lane, 1979 (IAS 5801) | 37. Neptune Quay, 1989 (IAS 6601) |
| 16. Arcade Street, 1979 (IAS 1804) | 38. Greyfriars Road, 1989 (IAS 5204) |
| 17. Tower Ramparts, 1979/81 (IAS 0802) | 39. Franciscan Way, 1990 (IAS 5003) |
| 18. Lt. Whip Street, 1980-81 (IAS 7404) | 40. 85-87 Fore Street, 1990 (IAS 6106) |
| 19. Tacket Street, 1980-81 (IAS 3410) | 41. Northgate Street Library, 1993 (IAS 1002) |
| 20. Bridge Street, 1981 (IAS 6202) | 42. Crown and Anchor, Westgate Street, 1993 (IAS 0703) |
| 21. Key Street, 1981 (IAS 5901) | 43. 24-26 Westgate Street, 1995 (IAS 0602) |
| 22. St. Stephen's Church, 1982 (IAS 3203) | |

Fig 1 Excavations in Ipswich

The paper archive was assembled, catalogued and stored appropriately in the SCCAS archive store at Bury St Edmunds. Most of it is in 136 numbered archive boxes, plus three hanging cabinets which contain plans of all kinds. The material could be transferred in the future, for example to the county Record Office stores, with minimal effort as the catalogues specify the contents of each numbered box.

The digital archive (most of which is secondary rather than primary 'born digital' material) was re-organised, cleaned for cross-site compatibility and catalogued. It was also enlarged, for example by the addition of scanned typescripts, including all complete or final draft specialist reports, scans of finds drawings and finds photographs.

2 Research Aims and Objectives

As described above the 1974-1990 backlog excavation archive contains almost all the recorded information relating to the development of Ipswich from Middle Anglo-Saxon emporium to medieval town, including the period of Danish occupation. This data is crucial to understanding and managing the historic town now and in the future.

The aims of the project in phase 2 are:

- To present the archaeology of Ipswich and make the initial results of the excavations available to the widest possible audience. The specific research questions that this data should address are detailed in Appendix 4.
- To allow users an easy way to access sufficient primary data from the archaeological excavations to establish the potential for ongoing research, without having to examine the sometimes fragile physical archive in detail.
- To provide clear signposting from the online data to the original material for the purposes of detailed research.
- To provide a case study in methods for dealing with large urban excavation backlogs
- To provide a basis for the future development of an Ipswich urban archaeological database within the Suffolk HER in order to advise future planning and management of the town

3 Business case and project interfaces

3.1 English Heritage priorities

The project addresses the problems of managing and disseminating the results of a variety of scale of excavation projects in advance of development, including some very large areas, carried out during the 1970's and 1980's in a single urban area. The data is key to future understanding of the town, but has been virtually inaccessible since fieldwork was completed. It falls within NHPP Activity 8A5, Offsetting unavoidable loss through knowledge which supports wide public dissemination of the results of significant projects.

The project is also an important step towards providing enhanced protection of the urban archaeological resource of Ipswich, addressing priorities in the English Heritage National Heritage Protection Plan (NHPP) measure 4 (Understanding: assessment of character and significance), specifically activity 4A1.204 where Ipswich is identified as one of the remaining major historic towns without an Urban Archaeological Database.

It also addresses the current English Heritage objective SHAPE *Sub-Programme 43213.110: Community Archive Enhancements*, to provide an innovative and effective system of digital access to urban excavation data. The documentation of the methodology of the project will provide a case study for other urban backlog projects.

More specifically the draft Thematic Research Strategy for the Urban Historic Environment (April 2010) identifies the provision of syntheses of past archaeological investigations as a priority, stating that:

“Such syntheses should aim to provide new insights into the evolution and character of the urban historic environment. These insights will then inform the better understanding of significance and the future conservation and management of historic towns (including the design of future development-led work and the protection of specific assets). Crucially they can also feed in to the work of local and regional museums, education programmes and popular publication reinforcing the public value of developer-led intervention.”

3.2 Regional priorities

Access to the results of the Ipswich excavations has been identified as of critical importance, and publication as a priority, in the regional research framework (Brian Ayers in Brown and Glazebrook 2000, 28 and re-iterated in Medleycott 2011, 56, 58). (see also Appendix 4)

3.3 Current opportunities

Of the two key personnel involved throughout the excavations one (Tom Loader) has taken early retirement and is currently available as a freelance consultant and the second (Keith Wade) is eligible to take retirement. It is highly important to progress this project while this expertise is available to SCC.

There has long been a recognition that the Ipswich material as a whole has the potential to deliver more interesting and insightful results than might be realised by traditional individual site publications – for example study of the bone- and antler-working across the town and through time is already well advanced. A background is now in place with the publication of the two early Anglo-Saxon cemeteries containing 7th century material at Boss Hall and Buttermarket (Scull 2009).

The rapid developments in digital accessibility, particularly via the internet and using mapping systems, now offer exciting scope for an innovative approach to making this internationally important archive widely available. Potential audiences include:

- Academic researchers: SCCAS regularly receives requests for access to Ipswich data and the primary archive from Britain and abroad.
- Local research and education: the University Campus Suffolk has a strong interest in local history and heritage, as has the new 6th form academy, Suffolk One in south-west Ipswich; both have already worked with SCCAS staff.
- Museums: in particular the Colchester and Ipswich Museum Service now has a large archive of finds relating to Ipswich and could develop exhibition and education resources around this.
- Planners, archaeological consultants, archaeological curators involved in development proposals in the urban core.

3.4 Interfaces

Within the current phase of the project the key organisational relationship is with the Archaeological Data Service (ADS) who will work with SCCAS to ensure data standards

are met and that the web output fulfils the project objectives. They comment on the significance of the project from their perspective as follows:

While the ADS holds other resources pertaining to individual urban sites and excavations, much of this data is delivered as adjuncts to a publication (i.e. a set of digital appendices to a larger monograph) and, of course, stands alone often geographically isolated. The Ipswich digital archive is currently unique in two respects; firstly it offers researchers the full depth of available archives, some as yet to be fully analysed, offering great opportunities for new research questions to be considered on fresh data rather than a more traditional re interpretation of results. Secondly research opportunities are hugely enhanced by the close geographical nature of the sites and their archives allowing research to either focus on the individual site or, perhaps more excitingly, consider the archaeological questions based on the rich archive of a whole town. Certainly finding this richness of resource may only currently be compared to the Channel Tunnel Rail Link archive, which fails to encompass the intimate geographical aspect that the Ipswich archive offers.

As noted above there are several key individuals whose input will maximise the research benefits of the project – Keith Wade and Tom Loader as former site directors /managers /researchers and Paul Blinkhorn on the pottery. There will be close contact with the current publication work by Ian Riddler on the worked bone and antler as his volume will draw on the current project for background data and his digital data can be incorporated into the web pages.

The first phase of the project, consolidating the archive, involved a regular practical relationship with Colchester & Ipswich Museums Service as ownership of the 34 material archives was transferred. The current phase will not directly impact on their holdings, but information needs to be made available to them regularly.

Although the current backlog includes the most important interventions in the historic core of Ipswich this has to be seen in the context of earlier work (summarised in 1.1 above), small scale works such as 'watching briefs' during 1974-1990 and all works since 1990. Most of the small scale 1974-90 documentary material has been catalogued as part of phase 1 but none has been referenced out to the HER and the digital elements will not be included in the phase 2 dissemination products. Many of the small scale interventions in central Ipswich since 1990 have been completed in the form of grey literature reports, a complete set of which is available to the Suffolk HER and the data is recorded on OASIS at ADS since 2004 (and copies of reports since 2006) for wider access. However there have been a series of major excavation interventions in the waterfront area of the urban core between 2000 and 2008, since which time every developer has gone into liquidation resulting in a total cessation of post-excavation analysis; this material was the subject of a project proposal for synthesis under NHPP topic 3A5.201 submitted to EH in December 2011 as being complementary to project 5746. Currently a decision on this proposal is postponed, pending consideration of its relationship to the current PD.

The relationship of this project to the Suffolk HER and a future UAD is ongoing. The digital output for the 34 sites in this project will be incorporated as event and monument updates in the HER (currently the data is held as a series of monuments with minimal data and poorly mapped outlines) – this will clarify the approach to be used in a future UAD and will provide data for many of the key large event areas.

4 Methods statement

4.1 Digital data – the existing resource

The digital element of the archive is crucial to achieving maximum dissemination.

The primary documentary archive for the individual 34 sites is mostly paper-based rather than digital, reflecting available methods in the period 1974-1990. However much of the key data (context lists, quantities of finds, registered/small finds, pottery analysis) also exists in digital format with versions in MS Access (derived from dBase originals) currently being used and updated as research tools. Details of the process of collation and combination of the data tables in phase 1 were recorded as part of the archive record.

Security scanning was done in c.2002 of the A4 section drawing sheets from most of the sites (mainly .gif and a few .jpg files, 1717 sheets) and of site drawings of skeletons (all.gif files) from IAS 4801 (345 drawings), and IAS 4601 (4 drawings). Archive standard .tif files were not included because of local constraints at the time.

In addition there is a more variable amount of 'research archive' relating to some or all of the 34 sites, much of which was created digitally or was digitised before or during the first phase of this project. For most sites there is at least a short summary of the excavation results (as published in the annual Proc Suffolk Institute Archaeology 'Archaeology in Suffolk 19XX') and for some a longer account of the basic site phasing. Finds information forms the bulk of the research data, and is very variable. Individual aspects of the human remains have been published and copies and bibliographic details are included in the archive catalogue. Two aspects are pending publication – comparative results of work on the animal bone assemblage (Crabtree describing Middle Anglo-Saxon Husbandry in Suffolk, based on the full Ipswich animal bone report held in the archive) and the worked bone and antler (Ian Riddler). Various aspects have been assessed or reported on at some time, and new data continues to arrive, for example the Anglo-Saxon and medieval coin catalogue (received late 2011) and analysis (pending) from Marion Archibald.

Some useful digital data, most notably the animal bone analysis, no longer exists in digital form (last recorded as being on paper tape backups, location now unknown). The data are available in print-out, currently held at SCC, the majority as microfiche (and a set of printouts is held by Pamela Crabtree). The records indicate that 90,000 items were catalogued; 58 microfiche negs (ie 2030 pages of A3 printout) are identified as relating to individual sites, another 46 hold 'All Ipswich' information. This material has been used by Pam Crabtree in her report – all her texts, tables etc will be made available on the web pages for download, as well as the research conclusions being available in Crabtree forthcoming. Any reconstruction of the primary digital data would be a major task and would not be justified given the level of summary data that will be available. Researchers could currently access the data for individual sites by establishing total quantities per context in the site data tables and checking the report tables (or the box catalogue) as to whether the specific group was analysed (all of which stages will be possible using the online data) but will then need to examine microfiche or extant paper printout for further detail.

Various other datasets produced by specialists exist as lists or tables within MS Word documents - plant remains, fishbones, architectural stone, querns for example. To partially offset the imbalance in the proposed online searchable interfaces the existence of plant remains, fish bone and animal bone data will be recorded in the bulk finds context records.

4.2 Digital data – modifications and upgrading (products 2, 5, 6, 7)

The MS Access tables for the 34 sites will be copied, improved and combined to provide the data to underpin both a website and future research for a publication. Data standards will follow recommendations from ADS.

(Task 1, 2, 3, 5) Gaps in the context lists in existing site tables will be filled from the paper records – realistically the detail cannot be 100% checked for completeness and some checking of the paper originals will always be advisable in future research. The objective of the project is to have complete lists of contexts (OP and context groups) by site with site relationships. To make the site data searchable (internally by site and across all 34 sites) new fields will be required, specifically a context identifier (following standard SCCAS wordlist, based on NMR thesauri), and a verified period/phase term based on the existing Ipswich system (see Appendix 3 for current terms lists). Verification of the period terms will require cross checking with other data tables (see Task 11).

(Task 8) For the bulk finds the post-excavation tables of quantities per context provide a baseline for each site, and the combined tables will indicate overall presence across the town. These tables will be enhanced by the addition of true/false fields to indicate whether animal bone was examined at EH, whether data exists about plant remains and whether fish bones were identified.

(Tasks 6, 7) A key data set is the pottery as it is fundamental to the dating of the site phases. The paper record of pottery analysis exists for all 34 sites and the majority is in digital format; missing records (c.250) will need adding to the tables. An extracted and merged version of the pottery tables (with standard terms linked in to update the existing numeric codes) will form part of the site/context interface on the website.

(Tasks 9, 10) The registered/small finds per site lists have been updated and are mostly also merged (by material/class across site) though some significant gaps have been identified (most notably that some of the ironwork is completely missing, and the existing lists of iron lack an object type field). The worked bone/antler also needs checking and updating from lists currently maintained by Ian Riddler. Registered finds are linked to site and to context; following rationalisation and further combining of the tables they will also form part of the searchable online interface.

(Task 23) Scanned drawings (910) and digital photos (950) are now available for many finds categories (such as copper alloy, coins, stone, organics) and will be linked to the individual finds records on the website. File naming is already based on site and object identifiers.

(Task 19) There is a serious concern about the iron objects which are in very poor physical condition, variably recorded in the data tables and best accessed from the X-rays. The current condition of the X-rays is good, having been stored previously in light resistant envelopes and rarely used. During phase 1 of the project the X-rays were transferred to clear polyester pockets stored in controlled conditions which will allow some future handling by specialists with minimal risk. No deterioration of the film was noted during the re-packaging. To make the X-ray record available more widely, and in case of future deterioration, they will be scanned to provide both an archive copy (high res .tif file) for security and a smaller .jpg file for web access. This work will be carried out at Bradford University under the supervision of Dr Sonia O'Connor – a similar X-ray digitisation project for the RAF Lakenheath project at SCCAS has proved that the quality of the digital product is close to the original and immensely useful for researchers.

(Task 22) Existing finds assessments and reports will be viewable from site specific web pages and also accessed from a central resource page. Authors will be contacted and told how the information will be made available; the descriptions of these files will include clear date-stamping of when reports were produced as updating does not form part of the current project. The only exception to this will be a few days specialist input by Paul Blinkhorn to select the correct version of the existing pottery reports and to identify key drawings and undrawn examples for future illustration.

(Task 23) Data from the finds and documentary box catalogues will also be integrated to provide a complete link from online data to the material archives in Ipswich, Colchester and Bury St Edmunds.

(Task 23) All new data tables and other research and image files will require metadata records before transfer to ADS to their approved standards.

4.3 Preparation of geospatial data (product 1)

Locational data, mainly site plans, exist solely in non-digital form at present. Inked copies exist of all (except one, IAS 5505) site originals and many (21 sites) have also been photographically reduced to 1:100 scale negatives or positives. Site location information is generally held on paper copies of 1:1250 OS maps.

Standard SCCAS graphics procedures use AutoCAD for digitising detailed site data and output from this to MapInfo for use in landscape scale mapping, ie in this case for web mapping and for the HER. The AutoCAD data is also retained for use (with Adobe Illustrator) in the preparation of publication standard plans.

(Tasks 12-17) Each site grid and outline will be geo-referenced to the Ordnance Survey. The site plans will be scanned and traced into AutoCAD, each closed entity (feature/context) identified by Site and Context reference. Fields from the MS Access data table will provide context type and period data for each entity, allowing separation by phase into layers.

This will provide a single cross-site map of the archaeological features and site extents based on the OS which will be exported for web use to MapInfo.

(Task 27) The MapInfo layer will also be used to provide accurate Event polygons for the county Historic Environment Record, crucial for efficient planning-related decisions and the core of a future HER-based Urban Archaeological Database.

The combination of digitised site plans and the core data table will form the basis of the searchable web interfaces to be produced and hosted by ADS.

4.4 Collation and creation of the descriptive elements for dissemination (product 3)

Most of the 34 sites already have either a short summary or a more detailed account of the basic stratigraphy/phasing; (one (5201) has neither and at least nine sites only have a short summary).

(Task 21) The existing site summaries will be reviewed and standardised, for example to include more quantification (the context identifiers added to the site data tables will facilitate this), and checked for obvious gaps and misinterpretations. These will be dual-function documents providing the introduction to the site page on the website and identifying key

points about each site for the future publication. Tom Loader will provide essential personal knowledge of the sites, reading and commenting on the drafts prepared in-house. The summaries will also be used to update the HER records (Task 27).

| Name | Year | IAS Number | No of Contexts | Plan sheets |
|------------------------------------|---------------|-------------------|-----------------------|--------------------|
| Stage 1 | | | | |
| Old Foundry Road | 1974 | 1501 | ?70 | 1 |
| Cecilia Street | 1974 | 5001 | ?158 | 1 |
| Greyfriars Road | 1982 | 5201 | ?20 | 1 |
| Lower Brook St/Foundation Street | 1988 | 5505 | ?50 | 1 |
| Wingfield Street/Foundation Street | 1985 | 4601 | 1181 | 24 |
| Tower Ramparts | 1979/81 | 0802 | 163 | 4 |
| Arcade Street | 1979 | 1804 | 57 | 2 |
| St Stephen's Church | 1982 | 3203 | 81 | 5 |
| Tacket Street | 1980-81 | 3410 | 68 | 1 |
| St Helen's Street | 1975 | 3601 | 69 | 1 |
| Elm Street | 1975 | 3902 | 508 | 5 |
| <i>11 sites</i> | | | <i>2425 contexts</i> | <i>46 plan</i> |
| Stage 2 | | | | |
| St Nicholas Street | 1983 | 4201 | 84 | 2 |
| Turret Lane | 1978 | 4302 | 83 | 1 |
| School Street/Foundation Street | 1979; 1983-85 | 4801 | 3048 | 41 |
| Franciscan Way | 1990 | 5003 | 1040 | 9 |
| St Peter's Street/Greyfriars Road | 1982 | 5202 | 13 | 1 |
| Greyfriars Road | 1986 | 5203 | 856 | 10 |
| Greyfriars Road | 1989 | 5204 | 325 | 3 |
| Lower Brook Street | 1975 | 5502 | 736 | 5 |
| Smart Street/Foundation Street | 1984 | 5701 | 254 | 2 |
| Foundation Street/Star Lane | 1979 | 5801 | 92 | 1 |
| Key Street | 1981 | 5901 | 356 | 1 |
| Fore Street | 1982 | 5902 | 191 | 4 |
| <i>12 sites</i> | | | <i>7078 contexts</i> | <i>80 plan</i> |
| Stage 3 | | | | |
| 85-87 Fore Street | 1990 | 6106 | 85 | 1 |
| Bridge Street | 1981 | 6202 | 626 | 5 |
| Neptune Quay | 1989 | 6601 | 152 | 1 |
| Shire Hall Yard | 1982 | 6904 | 73 | 1 |
| Vernon Street | 1975 | 7402 | 389 | 3 |
| Lt Whip Street | 1980-81 | 7404 | 120 | 1 |
| Vernon Street/Gt. Whip Street | 1974/1975 | 7501 | 105 | 3 |
| St Helen's Street | 1983 | 8804 | 133 | 1 |
| St George's Street | 1983 | 9802 | 46 | 1 |
| St Stephen's Lane | 1987-88 | 3104 | 5112 | 34 |
| Buttermarket | 1987-88 | 3201 | 453 | 3 |
| <i>11 sites</i> | | | <i>7294 contexts</i> | <i>54 plan</i> |

Table 1 Sites listed in order for work programme

4.5 Data accession to ADS and website creation

(Task 24.2) ADS will accession the data into the archive on its receipt; this activity, common to all their archives, includes data checking and validation, migration to acceptable archival formats where necessary, checking and or creation of some metadata, ingesting the data and administration data into the collections management system. They also create versions of the data to be held in a deep storage preservation server at the UK Data Archive in Essex and arrange its secure transfer.

(Task 24.3) As with all ADS archives they will make the data available as downloads so that researchers may take away raw datasets and reuse them on their own computers. This will include the GIS layers and database tables in csv form. This 'work package' therefore involves the preparation of the files in suitable formats, matching them to the correct metadata, creating a range of web pages on which to host the downloads creating introduction and overview pages to the collection and checking data integrity

(Task 24.4) The reason behind the use of a map interface lies primarily with the nature of the data. The datasets are large (numerous) and we therefore have to think of meaningful ways in which a user can navigate the resource. Experience shows that displaying things on a map is one of the most popular and useful ways of doing this. The map interface could therefore be viewed in two ways; as a means of finding the data you're interested in but also as a research tool in its own right. It was agreed that a level of functionality that allowed filtering on period and feature type and some other levels (rather than a full complex GIS) would be enough to enable a refinement of searching at the same time as directing the user towards the relevant files that could then be downloaded if required. Map interface design especially web accessible ones are quite time costly.

(Task 24.5) Dissemination/navigation of the data using a searchable interface to the main database will be necessary especially for more serious researchers to allow them to find the data they want to focus on.

(Task 24.7) A charge for future storage and migration is included.

4.6 Publication

(Task 25) Future publication is proposed as a single volume in the East Anglian Archaeology series via the standard editorial process. As part of the current phase of this project a detailed synopsis will be submitted to EAA. (Task 26) This synopsis and an updated Project Design will be submitted for EH support on conclusion of the current phase of work. The updated PD will address the topic of what research questions cannot be answered in proposed publication as well as those that can.

5. Management, staffing, timetable, tasks

5.1 Stages within the project

Much of the data preparation for the web database interface will not involve site specific queries or problems. However there will need to be careful timetabling and liaison to ensure that the site specific tasks coincide as far as possible to allow problems to be resolved across all aspects (digital data, site plan digitisation, summary accounts) simultaneously. The suggested order for dealing with the sites is shown in Table 1, based on the numeric ordering with adjustments to put those sites with gaps in their digitised data at the beginning, followed by one of the larger sites (IAS 4601) with the two large Buttermarket project sites (IAS 3104, 3201) together in the final stage.

The division into 3 phases provides internal benchmark points and a point at which a first trial dataset can be sent to ADS for testing and comment in June 2012.

Any changes to the order of dealing with sites will need to be agreed by all relevant members of the project team.

5.2 Tasks

See Table 2 (below) for the complete list of tasks and members of the project team involved in each

5.3 Timetable

It is proposed that the project commence in March 2012 and continue for 12 months, spanning two financial years ending at the end of February 2013. Table 4, Gantt chart (below), shows the tasks within this 12 month framework.

5.4 Project review

There will be regular (monthly) meetings of all those staff in SCCAS involved in the project and Tom Loader. The web proposal and progress will be discussed with ADS following the completion of stage 1 (end of June 2012), and updated at the end of stage 2 (end Sept 2012) to confirm timings for final data transfer during Dec 2012), in addition to individual consultation as necessary.

Monitoring by English Heritage with Highlight Reports for them should also relate to the stages – suggested dates are mid-July once the stage 1 products have been trialled by ADS and mid December 2012 when all data should be with ADS; completion report and updated PD to be with EH by end of February 2013..

5.5 Project team

Core staff will include two project officers (PO), one senior graphics assistant (GA), one project manager, Faye Minter (FM) who held this position in the archive consolidation phase of the project. The PO and GA posts will be determined internally or (less likely) advertised externally if appropriate staff are not available.

Overall management and budget control will be by Jude Plouviez (JP), Archaeological Officer and Keith Wade (KW), Archaeological Service Manager.

Input to the understanding and interpretation of the Ipswich sites will be provided by Tom Loader (TL) and Keith Wade (KW) and TL will contribute substantially to the site summaries.

Web pages design and execution will be by ADS (planning carried out so far by Michael Charno) who will also advise on data structure and archival standards throughout, in conjunction with the SCCAS archive and digital data officer, Mike Feider (MF).

Advice on graphics preparation will be from Crane Begg,(CB) Field Projects Team Graphics Officer.

5.6 Health and Safety

The project will be undertaken in line with Suffolk County Council's Health and Safety statement and policies. Policies relating to the workplace such as checking workstation layout will be applicable and no project-specific H&S risks have been identified at this time.

6 Resources

6.1 Non staff and specialist costs

SCCAS will provide office space with standard PC's including MS Office Pro for the project officers and for a graphics officer with AutoCADLite and Adobe Illustrator. An extra licence for MapInfo v.9 will be required for the graphics station – these are currently tightly rationed

by SCC and acquiring another will probably require a purchase. Other minor IT requirements will include portable USB storage devices to transfer scanned data. Total new IT costs of £900 are included.

Large format scanning will be done at one of the local graphics suppliers in Bury or Ipswich already familiar with archaeological archive requirements; quotations average at £4 per scan depending on size giving a total requirement of £1344 for 336 scans

Specialist X-ray scanning at University of Bradford has been quoted at £2828 for 1616 radiograph plates.

Web pages production and hosting and data management advice will be provided by the Archaeology Data Service (ADS) who are the sole national providers of digital archiving for archaeological data and also have good experience of designing mapped interfaces. The quoted price includes allowance for an initial visit to ensure appropriate data management procedures are in place and for using test data at the end of Stage 1 for trial web page.

6.2 Budget

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Table 2 Task List

| Task No | Tasks | Staff |
|--|---|--------------|
| <i>Site data and related finds tables (Product 2)</i> | | |
| 1 | Add missing OP's(=context numbers) from paper records (at least 300 from 4 small sites) to standard OP listing. | PS |
| 2 | Insert a feature type field into the OP lists for 34 key sites (16499 records at present, potentially up to 17,000 total) and complete it using the controlled list of terms (App.3.1) | PS |
| 3 | Update from the paper originals any fields crucial to understanding stratigraphy/functions (eg site IAS5003 noted as lacking feature relationships). | PS |
| 4 | Create section sheet table to link site contexts to scanned image sheets | PS |
| 5 | Create a core data table by merging the existing OP lists | PS |
| 6 | Add missing pottery data (c.245 records) to pottery analysis tables. | PS |
| 7 | Create a combined pottery table (c.68,860 records) with link tables to replace number codes with terms. | PS |
| 8 | Combine the 34 general finds tables to a single table linkable by site ref and OP to the core table of the interface – document any problems or gaps created by discrepancies between sites. Add presence/absence fields for environmental data | PS |
| 9 | Complete missing/incomplete SF tables from paper records. Use a standardised version of the finds numbering (eg F or Fe, and separate the find number from the site element). | PS |
| 10 | Combine the SF tables to a single table, linkable by site ref and OP number to the core table, documenting any gaps or problems due to inconsistencies etc. | PS |
| 11 | For each of the 34 sites (in Table 1 order): Compare the existing date fields in the site, pottery and key finds tables, investigate discrepancies and update to a new key date field in the core data table. Where applicable (6 sites) also check against matrices (.xls files) and update these for use as reference files on website. | PS |
| | Advice on existing and proposed changes to phasing sites | TL |
| <i>Site plans (Product 1)</i> | | |
| 12 | Extract large plan sheets (c.30) for the 13 sites lacking photo-reductions and send for external scanning to .jpg files. | GS |
| 13 | For those sites (21 of) having photo-reductions of site plans (c.120 of), scan in-house to .jpg files (naming by site code/grid locations). | GS |
| 14 | For each of the 34 sites (in staged order as Table 1) establish a geo-referenced location plan in AutoCAD and exported to MapInfo. | GS |
| | Check site location with advisor (TL/KW) | TL |
| 15 | Copy features to AutoCAD from .jpgs (created in tasks12,13) for each of 34 sites using georeferencing established in task 14. Associate site codes and feature numbers with plan entities. Staged order as Table 1. | GS |
| 16 | Check site plans against site narratives etc and return problems/corrections for updating. | TL |
| 17 | Import period field and identifier fields from Access tables. Export to MapInfo. (to do at end of each stage in Table 1). | GS |

| Task No | Task | Staff |
|--|--|--------------|
| Other visual material (Products 5, 7) | | |
| 18 | Extract existing phase and other complete/semi-complete plan sheets (c.306) and send for external scanning to .jpg files. Save/name and metadata on return | PS |
| 19 | Extract iron object X-rays from archive and deliver to Bradford for scanning | PS |
| 20 | Check existing scanned sections folders and re-combine large sheets (c.80 of) in Photoshop | GS |
| Site narratives (Products 3, 6) | | |
| 21 | Prepare a descriptive introduction to each site, using the existing summaries as a basis but expanding them to include quantification etc as defined in Product 3. Follow staged site order as Table 1. | PS |
| | Each draft to be checked and edited | TL |
| 22 | Select and collate other specific reports relating to each individual site for inclusion on website and provide a short summary of content, author, date written. (Product 6). Notify specialists/report authors as to plans to include their information on website; accept and incorporate any free updates. | PS |
| | Arrange visit by PB to resolve pottery report issues | PB |
| Web dissemination (Products 8, 11) | | |
| 23 | Collation and delivery of all data files organised as required by ADS with full metadata table, initially after stage 1 and then final product. Provide archive summary | PS |
| 24 | <i>Tasks carried out by ADS:</i> | ADS |
| 24.1 | Advice and guidance | |
| 24.2 | Accessioning and ingest of the datasets into the ADS archive | |
| 24.3 | Preparation of files and creation of webpages for dissemination of the data as downloads | |
| 24.4 | Dissemination/navigation of the data using a map interface | |
| 24.5 | Dissemination/navigation of the data using a searchable interface to the main database | |
| 24.6 | Management and admin | |
| 24.7 | Storage and refreshment fee to cover ongoing migration into the future | |
| Publication (Products 4) | | |
| 25 | Prepare and submit synopsis to EAA editorial committee. Incorporate any feedback into synopsis and definition of Product 9 | PS |
| 26 | Updated project design | PS |
| Historic Environment Record | | |
| 27 | Incorporation of the site mapping and site summaries into new and existing HER records | PS |
| Management, advice, monitoring | | |
| 29 | Project management, collation of highlight and closure reports | FM |
| | Budget control and Project management pre-May 2012 | JP |
| 30 | Database advice & training | MF |
| | Graphics advice & training | CB |

Appendix 1 Products

1.1. Summary List

- 1 Digital map, Ipswich excavations 1974 – 1990
- 2 Core database of Ipswich excavations 1974-1990
- 3 Site summary accounts
- 4 Publication synopsis
- 5 Digitised images of Ipswich ironwork X-rays
- 6 Documents collection for Ipswich website
- 7 Image collection for Ipswich web pages and publication
- 8 Web pages: Ipswich excavations 1974 – 1990
- 9 Publication: Ipswich excavations 1974 – 1990 (postponed to later phase)
- 10 Closure report
- 11 Archive summary

1.2 Products

Product number 1

Product title Digital map, Ipswich excavations 1974-1990

Purpose of the product To provide base data for the website mapping interface

Composition CAD and GIS layers 1. Individual site outlines for 34 sites with site code and name labels 2. Site grid and individual feature entities with site code, feature number, feature identifier and period data.

Derived from Scanned plans (various formats), site location paper records, core database

Format and Presentation AutoCAD working files, exported to MapInfo for website and for HER

Allocated to Graphics assistant

Quality criteria and method ADS specification

Person/group responsible for quality assurance M Charno, ADS

Person/group responsible for approval Project Manager, ADS

Planned completion date Stage 1:Month 3; Stage 2: Month 6; Final Month 9

Product number 2

Product title Core database of Ipswich excavations 1974-1990

Purpose of the product To provide the base data for the web interface and a research tool for the site summaries and other publication accounts

Composition MS tables comprising data from each of the 34 sites. Base tables include site data, finds quantities, registered finds, box lists, section sheet lists, pottery analysis

Derived from Archive MS Access tables (IAS_OPLists.mdb, IAS_FindsSummaries.mdb, IAS_Archive.mdb plus other individual finds groups in same folder) derived in phase 1 from multiple dBase and MS Access data. Additional gap-filling from paper records. Additional key fields context identifier and period to be added throughout.

Format and Presentation Single Access database with single site/finds/specific finds tables incorporating the 34 sites

Allocated to Project officer

Quality criteria and method as specified by ADS

Person/group responsible for quality assurance M Charno, ADS

Person/group responsible for approval Project manager, ADS

Planned completion date Stage 1: Month 2/3; Stage 2: Month 5; Final: Month 7

Product number 3

Product title Site summary accounts

Purpose of the product Provide key information about each of the 34 excavated sites for use on the website and in the publication

Composition

Each account will include:

Site identifiers – Site reference (IAS), Historic Environment Record (IPS), CIMS Accession number, commonly used Name(s)

Date and circumstances of excavation, funder(s), central NGR,

Extent in sq m (or ha), any areas/trenches, constraints

An account of the stratigraphic sequence by period (and any site specific phasing) represented by excavated features, with quantification of the feature types by period (and unphased).

Activity identified in each phase, including known notable finds

Summary of numbers of features by type (feature identifier per phase and undated - Tabulated (Excel).

Mention of evidence for phases only represented by finds

Brief discussion of any key aspects, significance and potential for further research, including a statement of what material remains unanalysed within the archive

Derived from Existing site summaries and stratigraphic accounts; site data tables, including pottery and small finds; existing phase plans; digitised location and site plans

Format and Presentation MS Word document for each site with appropriate standard file naming. Any references to existing plans of specific aspects (eg buildings) should refer to the digital filename.

Allocated to Project officer and Tom Loader

Quality criteria and method Follow the defined order for sites to correlate with site plan production. Initial drafts by project supervisor will be passed to TL for comment.

Person/group responsible for quality assurance Project manager

Person/group responsible for approval Project team

Planned completion date Stage 1: Month 3; Stage 2: Month 7; Final: Month 8

Product number 4

Product title Publication synopsis

Purpose of the product Establish the outline of proposed publication in the EAA process

Composition Standard EAA synopsis with research basis, summary, proposed chapters, lengths and quantities of visuals

Derived from Project design and research archive

Format and Presentation Word document

Allocated to Project officer

Quality criteria and method EAA requirements

Person/group responsible for quality assurance Tom Loader & Keith Wade

Person/group responsible for approval EAA editorial committee

Planned completion date Month 4

Product number 5

Product title Digitised images of Ipswich ironwork X-rays

Purpose of the product To provide images of iron objects for dissemination and archive

Composition Scanned copies of each of the X-ray plates of iron objects (c.12,000 objects, many now very badly decayed)

Derived from 1616 X-ray plates

Format and Presentation .tif files for archive storage, .jpg files for dissemination

Allocated to Bradford University

Quality criteria and method

Person/group responsible for quality assurance Sonia O'Connor

Person/group responsible for approval Project manager
Planned completion date Month 2

Product number 6

Product title Documents collection for Ipswich website

Purpose of the product To make available existing assessments and reports relating to all or any of the 34 excavations

Composition Selection from the archive of most recent versions of all relevant reports, estimated c. 100 items. Metadata catalogue entry and summary of contents for each. Notification to be sent to each author

Derived from 289 catalogued digital report items (34 sites and general IAS)

Format and Presentation MS Word files and .pdf files. Images to be extracted from MS Word files for archive

Allocated to Project officer

Quality criteria and method Follow site order (Table 1). Consult SCCAS Finds Manager and TL and KW on relevance of content

Person/group responsible for quality assurance Project team

Person/group responsible for approval Project manager

Planned completion date Month 8/9

Product number 7

Product title Image collection for Ipswich website and publication

Purpose of the product Illustrations of excavation and finds data

Composition Site section drawings, skeleton plans, detail plans, complete/near complete publication plans, finds drawings, finds photos and iron X-rays. Copy as stored by site, summary of metadata information/naming conventions.

Derived from existing archive, scanning of existing publication plans and product no 5

Format and Presentation .jpg files

Allocated to Project officer

Quality criteria and method

Person/group responsible for quality assurance

Person/group responsible for approval Project manager

Planned completion date Month 4

Product number 8

Product title Web pages: Ipswich excavations 1974 - 1990

Purpose of the product: Dissemination of research archive for the Ipswich project to enable the public including potential researchers to assess the available data. As well as providing the detail of the 34 excavated sites it should offer information to the less specialist researcher interested in the history of Ipswich, particularly in the Anglo-Saxon period.

Composition

Two linked interfaces will allow entry to the data:

- Mapping interface using GIS layer based on site plans (Product 1). The smallest unit of measurement in the map is the context, which will have filters based on period and on feature type. Links from the mapped features will take users to the same results page as used by the database interface. It will use Google Maps and Open Street Map rather than the OS open access data as the OS API would restrict functionality and either provides an adequate modern context. A historic map view might be provided by the SCC owned OS 1st or 2nd edition 1:2500.

- Database interface using a database made up of the tables in the research archive (Product 2) with defined search fields which will take the user to a search page of results for browsing plus a map to provide geographical context.

The data available to be examined will include a general introduction to the archaeology of Ipswich, early maps, general thematic accounts of aspects of Ipswich, site specific excavation accounts, general and site-specific specialist reports, context, bulk and small finds and pottery data tables, site section drawings, site skeleton plans, plans of individual structures (eg buildings, kilns), pottery and small finds drawings, small finds photos, iron X-radiographs. Tables will include archive lists (finds and documentary) so that the original data can easily be located to a box in Colchester, Ipswich or Bury when necessary. Feedback and query forms will be directed to SCCAS.

Derived from Digital data co-ordinated and cross-referenced at SCC (products 1,2,3,5,6,7)

Format and Presentation Website hosted by ADS with links to/from SCC and Heritage Gateway

Allocated to Archaeology Data Service

Quality criteria and method ADS data archive and management guidelines

Person/group responsible for quality assurance SCC project manager, ADS

Person/group responsible for approval SCC project team

Planned completion date Month 14 (end of project)

Product number 9 (postponed for a subsequent phase of work)

Product title Publication: Ipswich excavations 1974 – 1990

Purpose of the product Print dissemination of a summary of the excavations, discussion of the development of the town and key themes

Composition

Summaries of individual sites with plans arranged in order of excavation

Discussion of: the chronological development of the town,

the layout of plots and streets, the waterfront and the defences, buildings, trade and industry, food, religion and burial

Potential for further work, with reference to material available on website

Derived from Synopsis definition as agreed (product 4), 34 site summaries (Product 3), map of town with sites (Product 1), phase plans (some product 7, some Product 1), existing specialist reports and assessments (product 6), personal knowledge from Tom Loader and Keith Wade

Format and Presentation East Anglian Archaeology, single volume

Allocated to

Quality criteria and method EAA guidelines

Person/group responsible for quality assurance Project manager, TL, KW

Person/group responsible for approval EAA editor and outside reader

Planned completion date

Product number 10

Product title Ipswich excavations 1974-1990: Closure report

Purpose of the product To give an account of the overall progress of the project and to bring together information useful for future projects of similar type

Composition An account by members of the team describing positive and negative aspects of the project programme and individual tasks, particularly experience gained from it that could prove advantageous in other situations

Derived from Risk log, archive statement

Format and presentation MS Word re-formatted to .pdf on completion

Allocated to Project team with ADS

Quality criteria and method MORPHE defined

Person/group responsible for quality assurance Project manager
Person/group responsible for approval Project team; English Heritage
Planned completion date Month 14

Product number 11

Product title Archive summary

Purpose of the product To provide a guide to the archive content for general use including as an accompaniment to the online resource

Composition A summary account of the archive composition

Derived from Archive statement, digital data metadata/catalogues

Format and presentation MS Word re-formatted to .pdf on completion

Allocated to Project officer

Quality criteria and method

Person/group responsible for quality assurance Project manager

Person/group responsible for approval Project team

Planned completion date Month 10

Appendix 2 Risk log

| Description | Probability | Likely impact | Countermeasures |
|---|-------------------------|---------------|---|
| Problems with slow running SCC network making data and illustration work 50% slower – and any further IT problems or corporate restrictions on software or hardware | High, reduced to medium | high | Systematic use of PC local drives and backups. Issue largely resolved (Jan 2012) after 10 months of negotiation with SSC and ITS and replacement of key links in the network system |
| Upturn in SCCAS workload with ongoing restrictions on new recruitment make project initiation difficult | medium | high | Early discussion with SCC management and HR to allow new recruitment for commercial work. Current liaison with Field team management about allocation of appropriate existing staff for Ipswich project |
| Quality of locational data for mapping proves less usable than the sample tested for costing | Medium | medium | Needs early identification and adoption of pragmatic approach (ie best fit mapping) to minimise overrunning time |
| Quantity of plan data proves larger than estimated | medium | high | Identify likely problems asap (tasks 12-13 scanning) for impact on times allocated in tasks 14-15 |
| Underestimates of data quantity/complexity/quality impacting on estimated timings for Product 2 (tasks 1-11) | medium | high | Monitor work rate closely. Involve Archive Officer (MF) in designing optimal methods for data handling. |
| Gap in expectation between SCCAS objectives and practicalities of production by ADS of web interfaces | medium | medium | Prior discussions and visits in ph 1; staged submission of data to ADS to provide a test run; definition by SCC project team of 'wish list' prior to test run |
| Refusal of synopsis by EAA editorial committee | low | low | Discuss beforehand with local committee member and EAA editor |
| | | | |

Appendix 3 Key terms

A3.1 List of context identifiers

Animal burial
Barrow mound
Beam slot
Bioturbation
Buried soil
Cistern
Cremation
Ditch
Drain
Fill
Flue
Foundation
Foundation trench
Grave
Gully
Hearth
Kiln
Layer
Midden
Natural
Pit
Pond
Posthole
Post packing
Post pad
Post pipe
Pyre
Quarry
Robber trench
Ring ditch
Skeleton
Slot
Stakehole
Structure
Subsoil
Surface
Surface (external)
Surface (internal)
Topsoil
Wall
Water hole
Well

A3.2 List of period terms used in Ipswich excavations data tables

| Term | Full name | Date ranges?/ defined by |
|-------------|----------------------------|--|
| ES | Early Anglo-Saxon | 6 th -early 7 th century-EAS pot/other finds |
| EMS | Early Middle Saxon | 7 th century(majority of pot is hand made wares with or without Ipswich ware) |
| MS | Middle Saxon | c.700-c.850 :Ipswich ware |
| ELS | Early Late Saxon | Late 9 th century-maybe just into 10 th :Thetford Ware only |
| MLS | Mid Late Saxon | 10 th century: Thetford ware with St Neots Ware |
| LS | Late Saxon | Late 9 th -10 th century-insufficient pottery to pin down to ELS or MLS or even EMED |
| EMED | Early medieval | 11 th -early 12 th century: Early medieval wares present |
| LMED | Late medieval | Late 12 th to mid 15 th century: typical medieval glazed/coarse wares |
| LMT | Late medieval/transitional | Late 15 th -16 th century-type ceramics |
| PMED | Post medieval | 17 th -19 th century-type ceramics |
| CTM | Contaminated | Obvious intrusive material of later date than strat suggests |
| U/S | Unstratified | |

Appendix 4 Research Questions

Keith Wade 17 February 2012

Background

There is no agreed national research framework for the medieval period but the origins and development of towns is clearly one of the top priorities, if not the most significant contribution, that archaeology can make to our understanding of the period.

The regional research frameworks for the East of England (Glazebrook 1997, Brown and Galzebrook 2000 and Medlycott 2011) emphasise the urgent need to publish the evidence from Ipswich excavations as a priority.

The evidence provided by the 1974-1990 excavations in Ipswich demonstrates that Ipswich was one of handful of emporia (*wics*) which were established around the North Sea littoral in the seventh century and grew into substantial towns in the 8th and early 9th centuries. As such, they are the earliest European towns after the hiatus of town life in the 5th-6th centuries.

In England, there appears to have been one such town per Anglo-Saxon Kingdom with convincing evidence from London (*Lundenwic*), Southampton (*Hamwic*), and York (*Eorforwic*). These early towns were both international ports and craft production centres. In the late Saxon period, the market economy developed and towns were established at regular intervals across the country. Ipswich was also a major late Saxon town (with Danish settlement in the late 9th century).

During the medieval period, Ipswich declined in importance but remained a regionally significant port and market town.

The evidence provided by the 1974-90 excavations and the post excavation work already undertaken is a rich source for urban studies.

The major periods of occupation which can be defined by archaeological evidence are:

- Early Middle Saxon (7th century)
- Middle Saxon (8th-early 9th century)
- Late Saxon (late 9th –10th century)
- Early medieval (11th-12th century)
- Late medieval (13th-late 15th century)
- Post medieval (16th -18th century)

Research Questions

What is the evidence for the chronological sequence:

- stratigraphic
- absolute dates (coins, C14, etc)

For each period of occupation, the evidence should be synthesised to answer the following questions:

1. What is the spatial extent of settlement?
2. What is the physical character of the settlement?
 - Is there evidence of central planning?
 - Is there evidence of defences?
 - what evidence is there for quays/waterfront structures?
 - what building types are present?
 - can the functions of buildings be determined?
 - how do the buildings compare with those from the rural hinterland
 - can tenements/burgage plots be identified?
 - what activities were carried out on identifiable tenements?
3. How was the town provisioned?

- was it a consumer or producer of food?
 - where did the provisions come from?
4. What was the nature of craft production?
 - was it concentrated in any particular locations in the town?
 - on what scale was it practiced (domestic/industrial)?
 - is there evidence of foreign artisans?
 5. What can we deduce about the nature of the population?
 - sex ratios
 - life expectancy
 - diseases prevalent
 - immigration
 6. What evidence of religious practice?
 - foundation of churches
 - nature of burial practice
 7. What is the evidence for trade?
 - what goods were imported and from where?
 - what goods were exported and to where?
 - 8.. How does Ipswich compare with contemporary towns in England and North-West Europe?

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