FORTH STREET NEWCASTLE UPON TYNE

ARCHAEOLOGICAL WATCHING BRIEF

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FORTH STREET ARCHES NEWCASTLE UPON TYNE

REPORT ON AN ARCHAEOLOGICAL WATCHING BRIEF

Prepared by:

The Archaeological Practice Ltd.



Frontispiece: South facing view of the surviving portion of the town wall at the Orchard Street/Forth Street junction.

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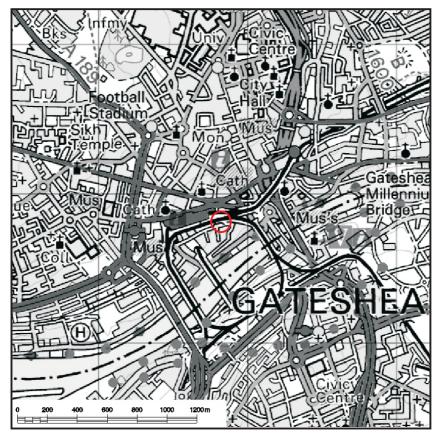
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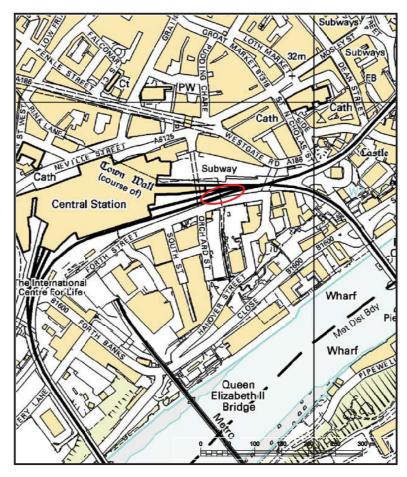
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Illus. 02: The location of the watching brief site (circled in red) on the north side of Forth Street, Newcastle upon Tyne

PURPOSE OF THE WATCHING BRIEF

An archaeological watching brief was requested by the Tyne and Wear Archaeology Officer, acting on behalf of Newcastle City Council, the planning authority, to be carried out at Forth Street railway arches, in the centre of Newcastle upon Tyne, in order to monitor the excavation of a trench for a new electric cable to supply arches 1-15, undertaken by A J Loveland Ltd on behalf of NEDL.

The arches and railway viaduct are Grade II listed structures and are situated in an area of high archaeological potential. The site lies within the circuit of the medieval town walls, and the precinct of the medieval Carmelite Friary. It also lies close to the Roman Fort of *Pons Aelius* and is almost certainly within its civilian settlement (the *Vicus*). Accordingly a watching brief was undertaken as a mitigation strategy to record any features or deposits of archaeological significance revealed during the groundworks associated with the scheme.

CULTURAL HERITAGE BACKGROUND

2.1 The Site

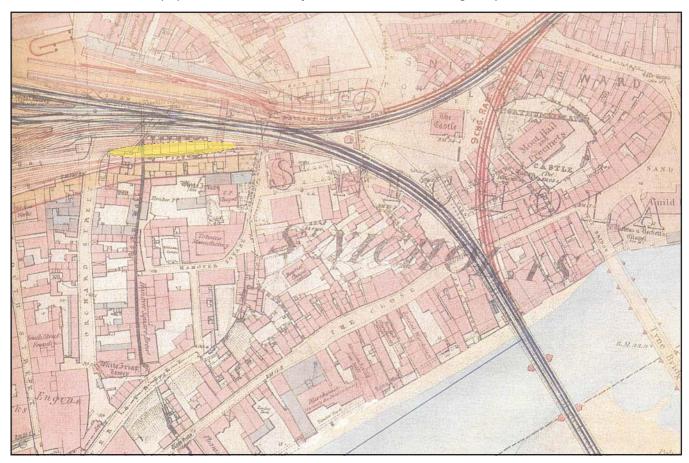
The arches are located on the north side of Forth Street and form part of a row of 15 such structures which make up the substructure for the raised trackbed of the railway lines at the eastern approaches to Newcastle Central Station. The arches were constructed as part of the enlargement of the station carried out between 1888 and 1894 (Addyman & Fawcett 1999, 105-6). This work entailed repositioning Forth Street onto the more southerly alignment which it now occupies. The North Eastern Railway marked up these works on an office copy of the 1st edition Ordnance Survey, retained as a key map, with the new Forth Street shown in orange-brown (see *Illus. 4*). The earlier line of Forth Street in relation to the original area of Central Station can be seen clearly on the copy of Thomas Oliver's 1830 map of Newcastle, held in Gateshead Central Library, which has the outline of the lands taken for the Central Station, High Level Bridge and approaches superimposed on it (see *Illus 3*).

2.2 Previous Investigation

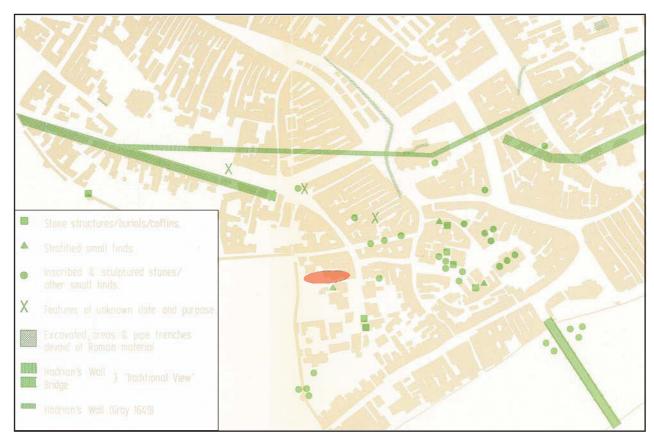
Intrusive investigations adjacent to the present site - notably by Harbottle (1968), Nolan (1993) and T&WM (1997) - have resulted in a significant amount of information with regard to the archaeological potential and cultural heritage significance of this area. Several previous archaeological desk-top studies (Geoquest Associates 1997; Northern Archaeological Associates 1997; Headland Archaeology 2002) have been undertaken in connection with proposed re-development of Clavering Place (west) and Hanover Square (north), immediately to the south of Forth Street. These have summarised the established and potential significance of the area using evidence derived from these investigations and consideration of Scheduled Ancient Monuments, Listed Buildings and Historic Environment Record (HER) evidence. A photographic record of the buildings associated with the former BEMCO electrical works south of the Forth Street arches, on the west side of Clavering Place and north side of Hanover Square, was also undertaken by the Archaeological Practice Ltd in 2003 (Archaeological Practice 2003). These included the former Clavering Place Presbyterian Chapel of the United Secession Church, erected in the early 19th century, and the early 18th-century Hanover Square Chapel of the Church of the Divine Unity which survived substantially intact, encapsulated within the warehouse complex of the later 19thcentury Tobacco Manufactory, later converted into the BEMCO works. Recent watching briefs undertaken by The Archaeological Practice in the area include the Forth Street Arches during arch strengthening works and an area behind the Casino on Forth Street both in 2007. However, neither of these watching briefs yielded any finds of archaeological significance.



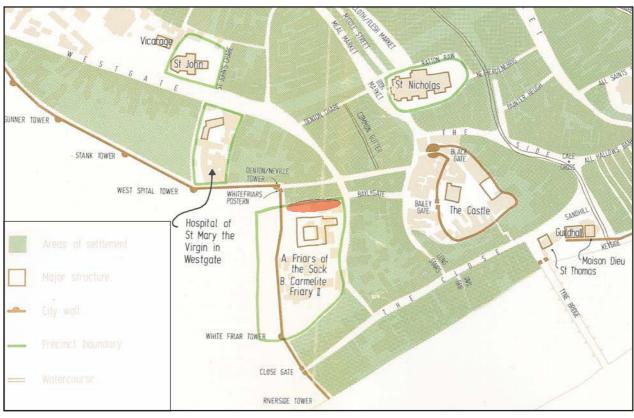
Illus 03: Extract from Thomas Oliver's plan of 1830 with the outline of land taken for Central Station etc, area of watching brief ringed in yellow, (reproduced from Addyman & Fawcett 1999, fig. 1.3)



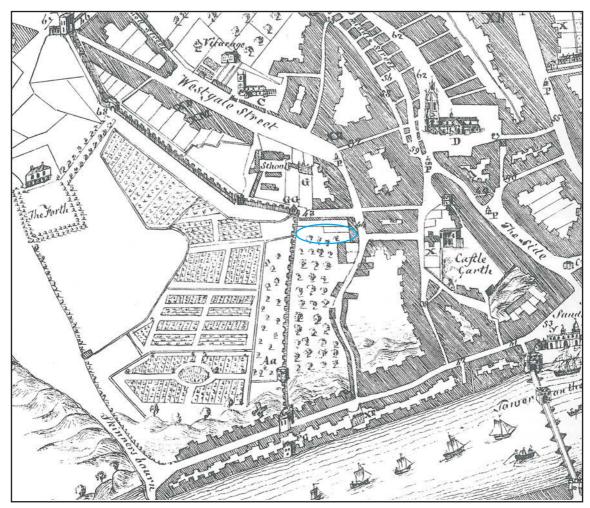
Illus 04: The NER office copy of the First Edition Ordnance Survey, 1857, used by the railway company as a key map to show later development. The post 1893 line of Forth Street is shown in orange brown (with site of watching brief shown in yellow), (reproduced from Addyman & Fawcett 1999, plate 3).



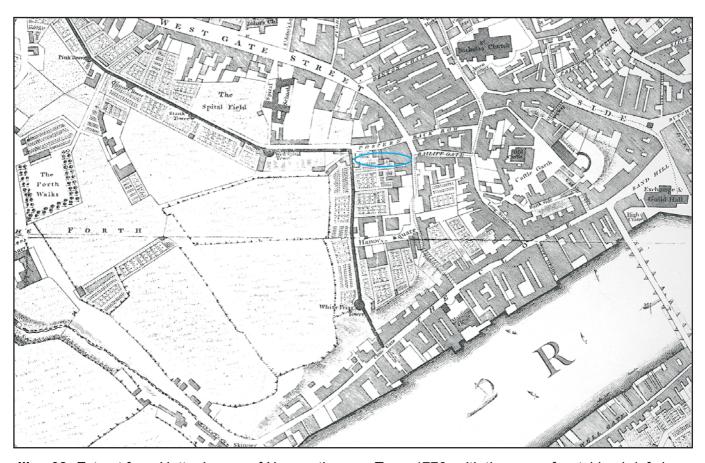
Illus 05: Roman Newcastle overlaid on Oliver's map of 1830, with the location of the watching brief marked in red, (reproduced from Clack & Gosling 1976, fig.16)



Illus 06: Later Medieval Newcastle overlaid on Oliver's map of 1830, with the location of the watching brief marked in red, (reproduced from Clack & Gosling 1976, fig.17)



Illus 07: Extract from Corbridge's map of Newcastle upon Tyne, 1723, with the area of watching brief shown in blue



Illus 08: Extract from Hutton's map of Newcastle upon Tyne, 1770, with the area of watching brief shown in blue

2.3 History of the site

The early history of the site, specifically its Roman and medieval development, has been dealt with in previous reports and publications (Harbottle 1968; Nolan 1993; Northern Archaeological Associates 1997; Geoquest 1997; Headland 2002).

This part of Forth Street is situated to the south of the likely course of Hadrian's Wall (which followed the line of Westgate Road, cf. Breeze 2006, 149) and west of the Fort of *Pons Aelius* (on the site of the medieval castle). It probably lay within the area of the Roman civil settlement, or *vicus*, attached to the fort. Roman material, including 2nd- and early 3rd-century pottery and cobbling, but no burials, were found on the south side of Forth Street, opposite the arches, during excavation of the medieval Carmelite Friary in 1965/7 (Harbottle 1968, 178-9). The full extent of the *vicus* is not known, but finds thus far have concentrated around the fort, the bridgehead and on Clavering Place (two stone coffins on the east side - immediately to the west and south-west of the Forth Street arches), with a further cluster of carved and inscribed stonework on Hanover Street, around the site of White Friar Tower (see Fig 6; cf. Harbottle 1968, 165; Harbottle & Clack 1976, 117).

The site lies just inside the medieval town walls within the northern part of the precinct of the 14th-century Carmelite Friary (originally held by the Friars of the Sack) which was investigated by Harbottle in 1965 and 1967 (Harbottle 1968). The arches are just north of a section of the town wall and ditch, which is a Scheduled Ancient Monument (SAM 32752), at the junction of Forth Street and Orchard Street.

The earliest maps of Newcastle, such as Speed's map of 1611, show that the area inside the town walls in the south-west part of the town was occupied by wasteland or orchards, with no built structures north of the Close until the Postern gate. The only buildings visible on Corbridge's plan of 1723 in the vicinity of Hanover Square, then under construction, are those along the north-south extension of Westgate Street, which subsequently became Clavering Place and Hanover Square. It is possible that one or more of these buildings may represent the remains of the east range of the Carmelite friary, reconstructed in the seventeenth century as a private house, but Harbottle considers it more likely that they were houses of medieval origin outside the friary precinct (Harbottle 1968, 174-5).

During the course of the 18th century, Clavering Place and Hanover Square saw increasing residential development. This part of town was considered an attractive area to live in and the houses erected were concomitantly substantial, as can be gauged from those buildings of this period which still survive on Clavering Place. Two Presbyterian chapels were constructed in this area, the Unitarian chapel on Hanover Square in 1726 and the United Secessionist (!) chapel further north on the west side of Clavering Place in the early 19th century.

The construction of Central Station and the High Level Bridge in the mid-19th century led to a drastic alteration in the character of the area. The railway infrastructure cut the area off from the heart of the city centre, which led to a decline in its social and economic status. Having been a focus of prestige residential developments in the 18th and the early part of the 19th century, the area had become occupied by slum housing and manufacturing by the latter stages of the 19th century. One councillor remarked in 1883 of the remodelling of the area associated with the proposed enlargement of Central Station that 'if nothing more was done than the removal of that rookery of immorality and the large number of thieves and vagabonds who live in the neighbourhood ... it would be a great advantage'. The Medical Officer for Health for Newcastle reported in 1889 that 103 houses with a population of 1024 people had been demolished as part of the Central Station extension and neighbouring

works to extend the Head Post Office on St Nicholas Square. Manufacturing also moved into the area (Addyman & Fawcett 1999, 104). Thus the Hanover Square had closed by the middle of the century and the building absorbed within a tobacco manufactory (Archaeological Practice 2003).

In the 20th century the area assumed a predominantly commercial and industrial character. The British Electrical Manufacturing Company took over the buildings of the Tobacco Manufactory, for example. Decline of manufacturing in the later 20th century has seen recent re-development focusing once more on higher status residential accommodation as well as offices and leisure activities such as the casino.

The conclusion derived from previous studies carried out on the cultural heritage of this area, summarised above, is that significant Roman, Medieval or Post Medieval remains could be present upon and immediately adjacent to the site of the Forth Street Railway Arches.

WATCHING BRIEF

The aims of the watching brief were to identify and determine the character of any remains uncovered during groundwork on the site, and to make an appropriate record of such finds by photographic and other means. Accordingly attendance by an archaeologist was required during the excavations.

The work was carried out between the 17th and 18th of April 2008 and consisted of excavation by a small machine. One trench at 90m in length by 0.40m wide by 0.3m deep was observed (see *Illus. 09-17*).

4. RESULTS

A shallow and narrow trench was excavated on an east-west alignment, positioned at the west end of Forth Street on the southern side of the road, immediately north of the railway viaduct. The excavated contents of the trench consisted of a very disturbed modern industrial deposit, dark grey-brown in colour, silty in composition with mixed gravels, smashed pieces of brick and sandstone fragments.

A rusting gas pipe was observed at a depth of 0.3m running throughout most of the trench, and at least twelve other service cables, including old water and electric cables, crossed the trench at regular intervals.

The projected line of the medieval town walls of Newcastle were estimated to enter the trench at 69-71m along its course from west to east. However, no sign of the town walls or any other archaeological remains was visible at the depth of maximum disturbance (0.3m). Although several medium sized sandstone blocks were observed from 73-75m along the trench, these were Victorian (or possibly more recent) machine-cut stones, which were placed in loose spoil upon a rusting gas pipe and formed no pattern or structure. It is most likely that these stones are associated with the construction or a later phase of alteration to the railway viaduct.



Illus. 09: Metres 0-10 of the trench beginning at the east end, facing east.



Illus. 10: Metres 10-20, facing east.



Illus. 11: Metres 20-30, facing east.



Illus. 12: Metres 30-40, facing east.



Illus. 13: Metres 40-50 of the trench from the east end, facing east.



Illus. 14: Metres 50-60, facing east.



Illus. 15: Metres 60-70, facing east.



Illus. 16: Metres 70-80, facing east.



Illus. 17: The final 80-90 metres of the trench from the east end, facing east.

5. CONCLUSIONS AND RECOMMENDATIONS

The excavations encountered and removed the remains of modern mixed fill deposits excavated from a shallow trench. No structures, deposits or finds of archaeological significance were encountered.

It is concluded that no archaeological remains (notably including the medieval town walls) are present within the surface deposits to a depth of 0.3m on the south-west side of Forth Street, Newcastle upon Tyne. It is likely that any remains of significance which might have existed in these areas at such a shallow depth wee destroyed by the original construction of the arches as part of the enlargement of Central Station in 1893, and/or by modern services.

The excavations had no negative impact upon the cultural heritage of the city.

No further archaeological work is required in connection with the present scheme.

6. REFERENCES

- Addyman J, and Fawcett B, 1999, *The High Level Bridge and Newcastle Central Station: 150 Years across the Tyne*. North Eastern Railway Association for the High Level Bridge and Central Station 150 Committee.
- The Archaeological Practice Ltd, 2003, 1-5 Hanover Square and 7-13 Clavering Place Newcastle upon Tyne; Photographic Recording.
- Geoquest Associates, 1997, An Archaeological Desk-based Assessment of a Proposed Redevelopment at Clavering Place, Newcastle upon Tyne (Tyne and Wear HER Report No. 1997/41).
- Harbottle B, 1968, Excavations at the Carmelite Friary, Newcastle upon Tyne, 1965 and 1967. *Arch. Ael.* XLVI, 161-223.
- Harbottle, B, & Clack, P A G, 'Newcastle upon Tyne: Archaeology and Development' in Clack, P A G and Gosling, P F, 1976, *Archaeology in the North,* Northern Archaeological Survey: Newcastle upon Tyne, 111-128.
- Headland Archaeology, 2002, Clavering Place, Newcastle upon Tyne; an archaeological desk-based assessment (Tyne and Wear HER Report No. 2002/).
- Nolan J, 1993, The Town Wall, Newcastle upon Tyne, Excavations at Orchard Street and Croft Street 1987-89. *Arch. Ael.* XXI.
- Northern Archaeological Associates, 1997, Clavering Place (west) and Hanover Square (north), Newcastle upon Tyne; an archaeological assessment (Tyne and Wear HER Report No. 1997/42).

APPENDIX 1-

SPECIFICATION FOR AN ARCHAEOLOGICAL WATCHING BRIEF DURING THE INSTALLATION OF ELECTRIC CABLE AT FORTH STREET BY THE TYNE AND WEAR SPECIALIST CONSERVATION TEAM

TYNE AND WEAR SPECIALIST CONSERVATION TEAM

Specification for an Archaeological Watching Brief during installation of an electric cable at Forth Street, Newcastle upon Tyne

Introduction

NEDL need to install an electrical cable along the north side of Forth Street alongside the railway viaduct and accommodation arches, which are listed grade 2.

This area is of archaeological potential. It lies close to the Roman Fort of Pons Aelius, and is almost certainly within the vicus (civilian settlement) which surrounded the fort. Roman pottery, roof tiles and animal bone has been found on nearby Westgate Road. In Clavering Place Roman buildings, coffins and human bones hav been found, suggesting that there is also a Roman cemetery here.

Forth Street lies within the circuit of the medieval town walls, indeed there is a Scheduled section of wall and ditch (SAM 32752) on the south side of Forth Street ϵ its junction with Orchard Street. The site also lies within the precinct of the medieval Carmelite Friary. Friary buildings have been archaeologically excavated in the small carpark next to the BEMCO site on the south side of Forth Street.

The work must therefore be monitored by an archaeologist as a Watching Brief, in order that any archaeological remains can be recorded.

The watching brief must be carried out by a suitably qualified and experienced archaeological organisation.

All work must be carried out in compliance with the codes of practice of the Institute of Field Archaeologists and must follow the IFA Standard and Guidance for Watching Briefs (revised 2001).

The work will record, excavate and environmentally sample (if necessary) any archaeological deposits of importance found on the plot. The purpose of this brief is to obtain tenders for this work. The report must be the definitive record for depositior in the Tyne and Wear HER.

A toothless bucket will be used on the plant employed on site where feasible to reduce damage to archaeological remains.

The North-East Regional Research Framework for the Historic Environment (2006) notes the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past allowing commercial contractors to demonstrate how their fieldwork relates to wider regional and national priorities for the study of archaeology and the historic environment. The aim of NERRF is to ensure that all fieldwork is carried out in a secure research context and that commercial contractors ensure that their investigations ask the right questions.

The commissioning client will provide plans indicating the location of the proposed work.

The tasks

A construction timetable has yet to be agreed. Tenders for the Watching Brief should therefore be a cost per day including overheads such as travel costs and equipment. Contingency costs will be provided for environmental sampling and

scientific dating per sample and for finds analysis. Any variation on the agreed timetable will be notified by the client, who will give a minimum of 48 hours notice of a change on the days of site attendance. Close liaison between the parties involved will be needed to co-ordinate this element of the work.

The work involves undertaking a structured watching brief to observe and record any archaeological deposits and finds from this locality. The absence of deposits and finds must be recorded as negative evidence. The Watching Brief will not aim to hinder the construction programme, however should archaeological remains be found, the appointed archaeologist must be allowed sufficient time to fully record (by photograph and scale plan and section), excavate and environmentally sample (if necessary) the archaeological deposits. Within the course of the Watching Brief, it may be possible to record sections through the stratigraphy exposed during the construction work.

Human Remains

Human remains must be treated with care, dignity and respect.

If human remains are found, excavators must comply with the relevant legislation (essentially the Burial Act 1857) and local environmental health concerns. If found, human remains must be left in-situ, covered and protected. The archaeological contractor will be responsible for informing the police, coroner and County Archaeologist. If it is agreed that removal of the remains is essential, the archaeological contractor will apply for a licence from the Home Office and their regulations must be complied with.

Site inspection by a recognised osteologist is desirable for isolated burials and essential for cemeteries. The remains will be recorded in-situ and subsequently lifted, washed in water (without additives). They will be marked and packed to standards compatible with "Excavation and post-excavation treatment of cremated and inhumed human remains", McKinley and Roberts, 1993. After excavation, the remains will be subject to specialist assessment.

Analysis of the osteological material should take place according to published guidelines "Human Remains from Archaeological Sites, Guidelines for producing assessment documents and analytical reports, English Heritage, 2002.

Some of the potential benefits from the study of human skeletons – demography, growth profiles, patterns of disease, genetic relationships, activity patterns, diet, burial practices, human evolution. New scientific techniques available include DNA and stable isotope analyses.

The final placing of the remains after scientific study and analysis will be agreed beforehand.

Further guidance is available in:

"Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England", The Church of England and English Heritage, 2005 (www.english-heritage.org.uk/upload/pdf/16602 HumanRemains1.pdf) "Church Archaeology: its care and management", Council for the Care of Churches, 1999

The Advisory Panel on the Archaeology of Christian burials in England can provide free well-informed advice with consideration of relevant religious, ethical, legal, archaeological and scientific issues. Panel's website: http://www.britarch.ac.uk/churches/humanremains/index.html or email the secretary simon.mays@english-heritage.org.uk

General Conditions

- 3 All staff employed by the Archaeological Contractor shall be professional field archaeologists with appropriate skills and experience to undertake work to the highest professional standards.
- 4 The Archaeological Contractor must maintain a Site Diary for the benefit of the Client, with full details of Site Staff present, duration of time on site, etc. and contact with third parties.
- 5 The Archaeological Contractor must be able to provide written proof that the necessary levels of Insurance Cover are in place.

The report

- 6 The archaeological contractor will provide a report of archaeological operations, including:
 - a site location plan and grid reference
 - brief description of recording procedures
 - plans and sections of stratigraphy recorded (if practical)
 - report on the finds (if any)
 - environmental report (if relevant)
 - colour photographs of the site and any significant archaeological features/finds
 - · a summary of the results of the work
 - · copy of this specification

The report will form an addition to the *Short Reports* files in the Tyne and Wear Historic Environment Record.

- 7 Two bound and collated paper copies of the report need to be submitted:
- one for the commissioning client
- and one for deposition in the County HER at the address below. A digital copy of the report on CD is also required by the HER, in a plastic case and not attached to the report.

The report and CD for the HER must be sent by the archaeological consultant or their client directly to the address below. If the report is sent via the planning department, every page of the report will be stamped with the planning application number which ruins the illustrations. The HER is also often sent a photocopy instead of a bound colour original which is unacceptable.

Monitoring

8 The Archaeological Contractor will inform the County Archaeologist of the start and end dates of the Watching Brief to enable the County Archaeologist to monitor the work in progress. The Client will give the County Archaeologist reasonable access to the development to undertake monitoring.

OASIS

The Tyne and Wear County Archaeologist supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index/access to the large and growing body of archaeological grey literature, created as a result of developer-funded fieldwork.

The archaeological contractor is therefore required to register with OASIS and to complete the online OASIS form for their watching brief at http://ads.ahds.ac.uk/project/oasis/. Please ensure that tenders for this work takes into account the time needed to complete the form.

Once the OASIS record has been completed and signed off by the HER and NMR the information will be incorporated into the English Heritage Excavation Index, hosted online by the Archaeology Data Service.

The ultimate aim of OASIS is for an online virtual library of grey literature to be built up, linked to the index. The unit therefore has the option of uploading their grey literature report as part of their OASIS record, as a Microsoft Word document, rich text format, pdf or html format. The grey literature report will only be mounted by the ADS if both the unit and the HER give their agreement. The grey literature report will be made available through a library catalogue facility.

Please ensure that you and your client understand this procedure. If you choose to upload your grey literature report please ensure that your client agrees to this in writing to the HER at the address below.

For general enquiries about the OASIS project aims and the use of the form please contact: Mark Barratt at the National Monuments Record (tel. 01793 414600 or oasis@english-heritage.org.uk). For enquiries of a technical nature please contact: Catherine Hardman at the Archaeology Data Service (tel. 01904 433954 or oasis@ads.ahds.ac.uk). Or contact the Tyne and Wear Archaeology Officer at the address below.

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