

ARCHAEOLOGICAL REPORT SUMMARY

Background.

The Waltham Abbey Royal Gunpowder Factory is an extremely complex site.

Physically the North Site comprises 190 acres of low lying flood plain containing waterways, earthworks, buried and standing structures, machinery, barges, bridges, aqueducts, locks and not to mention over 100 acres of woodland. When you assume, due to the sites history, that all the above are possibly hazardous and finally add to this a liberal sprinkling of protective legislation and the difficulties of dealing with such a site can begin to be appreciated.

Explosives factories in general, but North Site in particular, are unlike normal factories which are designed around production flow lines. Process buildings on explosives factories tend to be separated one from the other for safety reasons so no clear path of production can be observed. The site has a long history of explosives production stretching back almost three hundred years and as new buildings were constructed, filling in the gaps between the older process buildings, this further complicated the flow pattern.

Fortunately the site was surveyed and "decoded" by the RCHME (Royal Commission on the Historical Monuments of England), principally the research was carried out by Mr. Wayne Cocroft and the combined efforts of the Keele, Cambridge and Swindon offices of the Commission.

As a result of their work English Heritage decided that the recently vacated RARDE site should be protected under scheduling and listing laws. Two areas of the site were designated Scheduled Ancient Monuments and 21 buildings were listed, both becoming law in December 1993.

At that point the site was already protected from indiscriminate development by the restrictions of green belt and conservation area status. A large portion of the site was and still is a Site of Special Scientific Interest (SSSI).

The complexity of this overlapping legislation equals that of the physical components already described.

Faced with the dilemma of decontaminating the site with the eventual aim of disposing of the property into the public sector, but trying to achieve this within the new legislative frame work, the Ministry of Defence commissioned an archaeological advisor to compliment the ecological advisor already employed.

SUMMARY OF WORKS AND METHOD.

- A Outline of Responsibilities (as outlined in MoD commissioning letter but prepared by English Heritage).
- 1, Advise the MoD and their contractors on the likely archaeological impact of decontamination works.
 - 2, To undertake assessment and evaluation of decontamination proposals in relation to buried archaeology and standing structures.
 - 3, To maintain a general archaeological watching brief.
 - 4, To advise the on site representative of WS Atkins on the need for further archaeological recording action in association with decontamination.
 - 5, To coordinate and supervise further archaeological recording action.
 - 6, To liaise with English Heritage, the local authorities and other conservation interests regarding archaeological recording and other conservation matters.
 - 7, To make input to the condition survey and management plans for the site.

B Discussion of Responsibilities.

Essentially the responsibilities layed out above can be put under the umbrella of full time archaeological advisor.

My main responsibility was the preservation of the historical/archaeological components on site. Armed with the knowledge of the site and its history accrued during the seven months working with the RCHME, I was able to advise WSA and RO when necessary.

One of the main reasons for my employment was to help the decontamination project, an extremely costly exercise, to proceed without delay and without incident. Incident being, inadvertent damage to the listed buildings or to the Scheduled Ancient Monument. Through understanding and teamwork between WSA, RO and myself we were able to achieve this aim with very few exceptions.

Below I shall attempt to cover most of scenario types encountered over the last 18 months and explain the method and rationale of dealing with them.

For ease this section will be divided into five main headings.

Scheduled Ancient Monument (SAM).

Any works within the SAM need written consent from the Department of National Heritage. The processing time can be anything from four to ten weeks so it was essential that I received works proposals from WSA/RO at least two and a half months in advance of the required start date.

My initial role was to advise WSA/RO on the likely response to an application ie. whether it would be accepted or rejected. If I thought it would fail we would then reappraise the proposal and readjust it to ensure a favourable result.

Although this meant more time was spent on planning the works it did mean

that the SMC applications were better prepared and we had no stoppages due to rejections.

I was also able to advise on selected works which could be carried out within the SAM which did not need consent. No attempt was made to assume the role of the HBMC (Historic Buildings and Monuments Commission) and they were kept informed at all times of the new works.

Once the proposal was accepted by DNH, I ensured that the work was carried out as described in the application. All jobs were either supervised throughout the works or periodically observed. Again the cooperation between the on site foreman, RO and myself was extremely important. Often with so many different jobs going on at any one time over the site it was impossible to devote a whole day to one exercise.

Listed Buildings.

As with the SAM no works were carried out without the knowledge of EH. Strictly speaking all works on any of the 21 listed buildings needed Listed Building Consent, but unofficial approval was given to internal or external work as long as the resident archaeologist was aware of the proposals before work commenced.

It was my decision and judgement therefore to approve works after seeking advice from EH first.

A pragmatic approach to these decisions was adopted. A buildings life is extended if occupied. The stability of the actual fabric of the building is improved and of course the usefulness of a building affects the standard of maintenance.

Most of the listed buildings on site were historically used to produce or experiment with explosives. The risk of contamination was high in many of these structures.

Decontamination was the only way to ensure continued occupation once

turned over to the public sector. There is no doubt that the decontamination exercise was damaging to the buildings. So, unusually, limited damage equals preservation.

With this unusual philosophy in mind many of the decisions on decontamination works were made. I'm sure many people would attempt to aim for total preservation eg. in the Incorporating Mills the retention of all the 1950's and 1960's internal features. In an ideal world that would be the right decision but it seems very short sighted to make a decision which would mean that a building was rendered uninhabitable and thus jeopardise its future.

Areas Outside the SAM.

English Heritage had an option to schedule the whole of North Site. This was not taken because it was acknowledged that the sale of two portions of the site namely Powdermill Lane and the Western flank for residential development would raise funds which would help to secure the development of a museum on the rest of the site.

Fortunately the areas in question, with the exception of a number of 1904 cordite buildings, had few historically or architecturally important buildings and little or no buried archaeology.

All standing structures had been recorded by RCHME, some in great detail. Any archaeology, especially in the Powdermill Lane area was recorded to a standard set out by the Institute of Field Archaeologists and as requested by Essex County Councils Archaeology Department.

In other areas, decisions were made when necessary and were supervised within the general site watching brief.

Non Listed Buildings.

Management policies for these buildings have changed a number of times over the past two years, from demolition of all to selective retention of some to the present situation, which is retention of all.

Following this management plan these buildings have been treated as though they are listed, this avoids confusion and also controls the decontamination works, keeping them within the restrictions set out by conservation area regulations under which all buildings on site are covered.

Recording.

i) Photography.

Photographic recording through necessity has been selective.

A photographic archive of all activities on site would have produced an enormous collection of uninformative images. It would also have overlapped with the Royal Ordnance photographic collection. Also the RCHME has a substantial collection of photographs of the buildings and earthworks on site.

The on site archaeological archive was limited to the following subject matters:-

- Decontamination operations which were either:

Removing

Adding to

Destroying

Reinstating

Or building

on the Scheduled Ancient Monument.

- Any archaeological features uncovered by decontamination operations or not covered by RCHME photos.

- Record shots of fixtures, fittings and internal features of listed (or non listed) buildings due to be removed or destroyed.

- Periodic general views of areas during the project, especially areas subjected to extensive ground works.

- Canal Clearance.

- Other subject matter relevant to the historic/archaeological components on the site.

All shots are recorded on colour slide (Fujichrome) and black and white prints (Ilford). All images retained are catalogued with photographic lists held on computer and hard copy.

ii) Finds.

Over two thousand finds have been recorded from the site during the decontamination exercise. It was decided from the beginning to retain all finds irrespective of condition, duplication, relevance or importance. Although this has meant much more work in cleaning, labelling and recording the objects, it will allow the museum to decide its own retention policy and choose an accessioning system accordingly.

No attempt was made to set up a full recording/cataloguing system for the artifacts. A primary record sheet (Figure 1) was drawn up to include all vital information.

At present this is hand written but it is hoped to input this onto computer within the next six months.

Drawings.

Archaeological features were graphically recorded onto Permatrace at suitable scales where necessary.

Reports.

A number of reports have been completed.

Separated up into areas they include a description of works within that area and any archaeological action taken. These are interim reports except the report for Powdermill Lane and are not intended for public circulation. They will be completed at the end of the decontamination project.

Conclusion.

I believe one of the most important functions I have performed is, I hope, to have encouraged understanding and trust between the heritage and conservation lobbies and the developers.

In the past ignorance of each others goals and limitations has led to distrust and conflict. The success of this project was based entirely on the close cooperation between the on site developers and EH and EN. It has been the openness of discussion right from the beginning, the willingness of the landowner and his contractors to see issues other than their own and EH and EN to approach the site with a realistic set of aims which sets this project on its own.

I am sure that the lessons learnt from the Waltham Abbey site, from the site

management and liaison to the methods employed on site will be used to create strategies for coping with other large industrial complexes around the country.

Acknowledgments.

I am extremely grateful to Deborah Priddy, David Stanners, Bob Watts and Graham Vincent for all their support during my time at Waltham Abbey. Also the invaluable assistance of Trevor Wilson, Alan Heath, Paul Morris, Guy Want and all the boys on site is acknowledged with thanks.

I would like to thank Wendy Webb for her patience and expertise in typing all my reports over the last year.

Last but by no means least thanks and good luck to Steve Chaddock the new Consultant Archaeologist on North Site.

Adam Ford

Consultant Archaeologist (former)

January 1995

WALTHAM ABBEY ROYAL GUNPOWDER FACTORY

ARTIFACT PRIMARY RECORD SHEET

DATE RECORDED	RECORDER	SITE REF.	ARTIFACT NUMBER	BOX NUMBER
		WANS94		

EST. DATE OF EXCAVATION	CONTEXT OR ASSOCIATED FEATURES (S)

RECOVERED DURING / BY	ANY ASSOCIATED ARTIFACTS

ARTIFACT DESCRIPTION	INITIAL IDENTIFICATION
	MATERIAL
	DIMENSIONS
	LTH: DTH: WTH: DIA:
CONDITION	INSCRIPTIONS, MAKERS MARKS ETC.

PHOTOGRAPHS	PHOTO NUMBERS	
	REFERENCE USE	
	OBJECT LABELLED ?	
	OBJECT WASHED ?	
	PHOTOGRAPHED ?	
	ARCHIVED/STORED ?	
	SIGNED :	
	DATE :	
	CHECKED :	
	DATE :	