

## Outline

The objects at Waltham Abbey show a history spanning more than two hundred years of explosives manufacture. Buildings on the site were variously powered by water, steam and electricity. The site finds demonstrate this varied history. ↴

The extensive map and plan archive, a relic of government ownership, enables a fascinating insight into the history of the factory. Historical photographs also add to the understanding of a complicated industrial landscape.

Recently a better understanding of the survival of explosives process machinery around the country has allowed the surviving buildings at the RGPF to be considered in relation to their previous manufacturing and research contexts.

In short the information and the objects in this report form a rich and diverse record that represents the developments and innovations which were made on this important site.

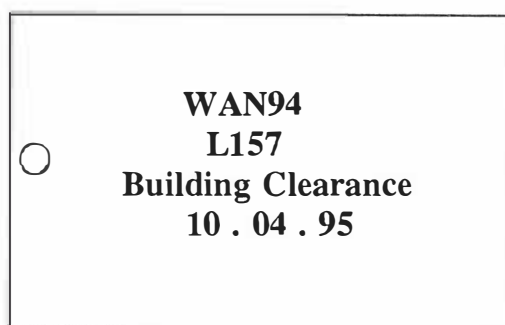
## SITE FINDS

### Object Recording Strategy.

In line with the watching brief cover provided during decontamination groundworks on the Waltham Abbey site, a standard for recording site finds has been drawn up. Maintaining a standard ensures a common set of data and enables further documentation tasks to be carried out at a later date. Due to the scale of operations at Waltham Abbey the following was noted in respect of each site find:

#### EXAMPLE:

Site Code and Year  
Location Context  
Excavated Context  
Date of Recording



It is proposed to store all items, labelled as above, until resources are made available to enable further documentation and research.

Part of the site collections have been recorded on a pro forma record sheet and stored in a secure store area. A copy of this pro forma sheet can be found at Appendix C titled 'Object 1'. Number designation facilitates retrieval of the object from the store and a paper based search can eliminate time consuming searches through boxes. Boxes are labelled with the sheet at Appendix C titled 'Box 1'.

It is intended to design a database within a computer to receive the information recorded on the pro forma sheets. If funds are available it would be possible to include data relating to the extensive photographic and paper based archive in a manner that would allow cross-referencing of associated data swiftly and efficiently.

To date the decontamination work on the former RARDE North Site, Waltham Abbey, has resulted in the collection of c. 2,500 objects, 1,500 of which have undergone primary recording.

#### i) Rescued Objects.

These are the sort of items which were considered to be mundane, unimportant or unsuitable for the Waltham Abbey Special Collection Archive. Left in situ on site, some suffered from the phase of strip out before scheduling and listing took place.

This type of object is a fitting or fixture of a building which, being fitted to the wall, is more difficult to remove.

- : Signboards
- : Light fittings
- : Electrical ducting
- : Radiators
- : Door latches/bolts
- : Mugs
- : Workwear, shoes
- : Shelves, cupboards

Although in reasonable condition, the rescued objects represent only 25% of the total site finds.

## ii) Excavated Objects.

During decontamination a huge amount of objects have been uncovered. It has recently come to light that the canals were sometimes filled up with waste material from outside the site (flydumping). However it was thought necessary to try to save all artifacts uncovered in order to rationalise at a later date.

Typically the objects uncovered are in a reasonably stable condition. The excavated objects comprise 75% of the artifact collection. A list follows:

	<u>Estimated numbers</u>
Bottles/other glassware	600
Shoes/boots	400
Tools - Explosives processes	300
- General mechanical	400
Miscellaneous (metal objects)	500
Ceramic acidware	300

## Large Items on Site.

During decontamination of the canals and pools on site, a collection of large and heavy items have come to light. These fall broadly into two separate groups, watercraft and masonry fragments.

### Watercraft.

The collection of inland working craft which have been partly surveyed by the Nautical Archaeology Society. There are substantial amounts of wet wood artifacts

relating to these barges as well as copper fittings. Two barges remain buried in a filled canal at present. The other known barge from the North Site is at present located at Fort Halstead - it is reconditioned and moves have been made to secure its return to Waltham Abbey. An updated list, including location and type of action required is included at Appendix C.

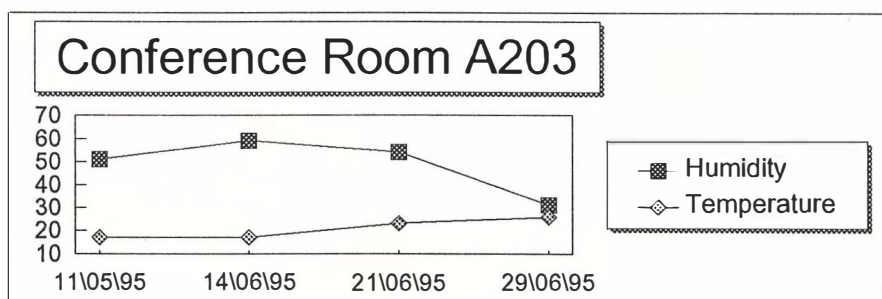
### Masonry Fragments

Millstones, whole or fragmentary, bedstones and chimney tops are located around the southern area of the site.

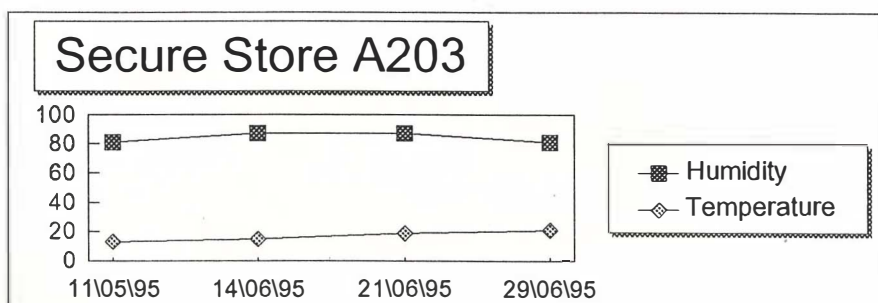
Item	Type		No.
Millstones	Edgerunners	WHOLE	10
		FRAGMENTS	24
	Bedstones	FRAGMENTS	1
Chimney Tops			20

### Storage Conditions.

Two of the storage areas on site are being monitored with digital thermohygrometers. The collection of maps and plans are being stored in a set of plan chests, the recent record for this room is given as follows:



The secure store is also being monitored and the recent record for this room is as follows:



Although these records are not seen as ideal conditions for the storage of paper archives and objects, they serve as valuable information on which to base any conservation efforts, or to alter the prevailing conditions in either area.

### **WALTHAM ABBEY SPECIAL COLLECTION**

The majority of artifacts relating to Waltham Abbey, RGPF, are contained in the collection known as the 'Waltham Abbey Special Collection' (WASC). This was amalgamated by Malcolm McLaren, once librarian at the RARDE. It is a substantial collection that is relatively well listed and its breadth does much to commend it. It is particularly strong in historic photographs - usually of work on site, or of the aftermath of an explosion. A full list of WASC is supplied separately.

After the closure of the site in 1991, the centralised archive relating to the site was suddenly left without a home. It was inevitable that it should fragment to some degree and most of the component parts can still be traced.

The majority of items were transferred to the custody of Kate Carver and Epping Forest District Museum in Sun Street, Waltham Abbey. A significant amount of plans and maps were handed over to the Public Record Office (PRO), where only a portion has been accessioned into the reference collection at Kew. The remainder of the PRO collection is held at Hayes in secure storage.

The RARDE team moved in 1991 to Fort Halstead, near Sevenoaks, and there are some unlisted items, as well as various more modern photographs of the site, being kept by enthusiastic RARDE employees. (See Fort Halstead at Appendix A)

Another Ministry of Defence establishment, at Chessington, holds eight plan chests of architectural and service drawings as well as some maps. The majority of maps and plans, which are indexed by building or area number, are stored in plan chests on site and have been used extensively in compiling the RCHME report as well as in the decontamination exercise itself. Temperature and humidity are being recorded in this room and can be examined under 'Storage Conditions' .

### Objects at Other Sites.

The RGPF ceased to manufacture explosives on a large scale in 1943 as a result of the increased range of enemy aircraft. At the same time the machinery from RGPF and other south eastern explosives factories was moved westwards and northwards, to enable production to continue without the constant threat of bombing. Consequentially there is a reasonable survival of machinery and other items relating to the explosives manufacturing processes in explosives factories in Wales and Scotland.

Visits to two sites have proved this theory and lists of the items at Cooke's Works, North Wales and Powfoot, Scotland, are included at Appendix B.

Mr. Roger Neal was commissioned to undertake a survey on the artifacts surviving at those factories presently owned by Royal Ordnance Plc. A copy of this report is included at Appendix B.

Some items have already been collected and are now in temporary storage in building P708 on Waltham Abbey's South Site, owned by Royal Ordnance Plc. The items in this building can be conveniently described as those listed under 'Powfoot' in Mr. Neal's report as well as some smaller items collected from all the Royal Ordnance sites.

**WALTHAM ABBEY ROYAL GUNPOWDER MILLS**

**Inland Working Craft Survey at RGPF, WA 1994/5**

<b>RCHM N°</b>	<b>POSITION</b>	<b>ACTION</b>
101	By Building 76 in RCHM107	MBD
104	By BR26 in RCHM289	MBD
121	By BR4 swim ended	Hand Clean
125	By BR2 swim ended	Hand Clean
157, 158, 159, 160	In Clean Canal RCHM156. Documented by NAS (12.94). Associated Finds in L168	CONS
169	To West of Buildings 107/108 in RCHM294	MBD
279	Fort Halstead Reconditioned Barge	Acquire ?
337	Lifted From Millhead Stream and Relocated in Clean Canal RCHM300	CONS
556	Discovered in Canal Interface 21 RCHM288 at TL 37386 01972. Excavated and relocated in RCHM300	CONS
557	Lifted From RCHM179 Behind L136. Relocated in Clean Canal RCHM300 Icebreaker	CONS
558	Discovered in Canal Intersection 26. Excavated and relocated in Clean Canal RCHM300	CONS

WALTHAM ABBEY ROYAL GUNPOWDER MILLS

Inland Working Craft Survey at RGPF, WA 1994/5

RCHM N <sup>o</sup>	POSITION	ACTION
101	By Building 76 in RCHM107	<del>MBD</del> NONE
104	By BR26 in RCHM289 - <i>BURNT 27.5.95</i>	<del>MBD</del> NONE
121	By BR4 swim ended - <i>Moved to A214. South face.</i>	<del>Hand Clean</del> None
125	By BR2 swim ended - <i>---</i>	<del>Hand Clean</del> None
157, 158, 159, 160	In Clean Canal RCHM156. Documented by NAS (12.94). Associated Finds in L168	CONS
169	To West of Buildings 107/108 in RCHM294	MBD
279	Fort Halstead Reconditioned Barge	Acquire ?
337	Lifted From Millhead Stream and Relocated in Clean Canal RCHM300	CONS
556	Discovered in Canal Interface 21 RCHM288 at TL 37386 01972. Excavated and relocated in RCHM300	CONS -
557	Lifted From RCHM179 Behind L136. Relocated in Clean Canal RCHM300 Icebreaker	CONS
558	Discovered in Canal Intersection 26. Excavated and relocated in Clean Canal RCHM300	CONS

559. *Discovered in Canal Intersection 27. Excavated and backfilled.*

560 *Disc. in Can. Int. 27. Backfilled. Prob. located in brethouse south of Bldg 26.*



# OBJECT 1

WALTHAM ABBEY ROYAL GUNPOWDER FACTORY				
ARTIFACT PRIMARY RECORD SHEET				
DATE RECORDED	RECORDER	SITE REF.	ARTIFACT NUMBER	BOX NUMBER
	KMB/ADF	WANS94		
EST. DATE OF EXCAVATION		CONTEXT OR ASSOCIATED FEATURES (S)		
RECOVERED DURING / BY		ANY ASSOCIATED ARTIFACTS		
ARTIFACT DESCRIPTION		INITIAL IDENTIFICATION		
		MATERIAL		
		DIMENSIONS		
		LTH:	DTH:	
CONDITION		INSCRIPTIONS, MAKERS MARKS ETC.		
PHOTOGRAPHS		PHOTO NUMBERS		
		REFERENCE USE		
		OBJECT LABELLED ?		
		OBJECT WASHED ?		
		PHOTOGRAPHED ?		
		ARCHIVED/STORED ?		
		SIGNED :		
		DATE :		
		CHECKED :		
		DATE :		



**WALTHAM ABBEY ROYAL  
GUNPOWDER MILLS  
OPTION STUDY FOR THE  
RELOCATION OF ARTEFACTS  
SEPTEMBER 1998**

Comnmissioned by: Robert Saunders  
For: WARGM Co Ltd  
Author: Andrew Passmore  
Checked by: Steven Chaddock

Date of Issue: September 1998

# **WALTHAM ABBEY ROYAL GUNPOWDER MILLS OPTION STUDY FOR THE RELOCATION OF ARTEFACTS SEPTEMBER 1998**

## **Summary**

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An assessment of the artefacts stored at WARGM was carried out during the summer of 1998, and the results are presented in this document. The document contains a list of the locations of artefacts stored at WARGM and a catalogue of artefacts held at these locations. Also presented is an assessment of the medium to long term storage requirements of these artefacts and the recommendation that buildings L168, S13 and 83b should be used to store the artefacts, with an outside pound near building 83b to store the weatherproof artefacts.

## **Introduction**

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Following a request from the Chief Executive to explore the possibility of relocating all items from the interior of A210 in order to present an open space for marketing and corporate sponsorship, a low-level options appraisal was carried out to test the viability of storing the artefacts elsewhere on the site.

In addition, there is a need to store large items from South Site presently located on the slab L169 to an undercover location. There has also been a request from WARGM Co Ltd directors to ensure secure storage of large portable artefacts, such as whole millstones.

New buildings will be needed to provide storage space and therefore those with adequate area and height clearance were selected. In addition, some thought was given to selecting buildings that required little attention in order to make them suitable for artefact storage.

This is seen as being a one-off medium to long term relocation; no particular emphasis was given to the geographical location of proposed buildings within the site.

## **Present Storage Locations**

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This section presents a list of locations within the North Site where historically important artefacts are stored, as well as a catalogue of artefacts at these locations. Not included in this list are building materials which are being catalogued separately by Rex Charlesworth. His list of building material includes items such as unlabelled doors and windows and recovered bricks and slates that may be of use in Phase 1 building works. A summary of these building materials, which are to be assessed for their suitability for reuse by Thomas Ford and Partners, is presented in Appendix 1.

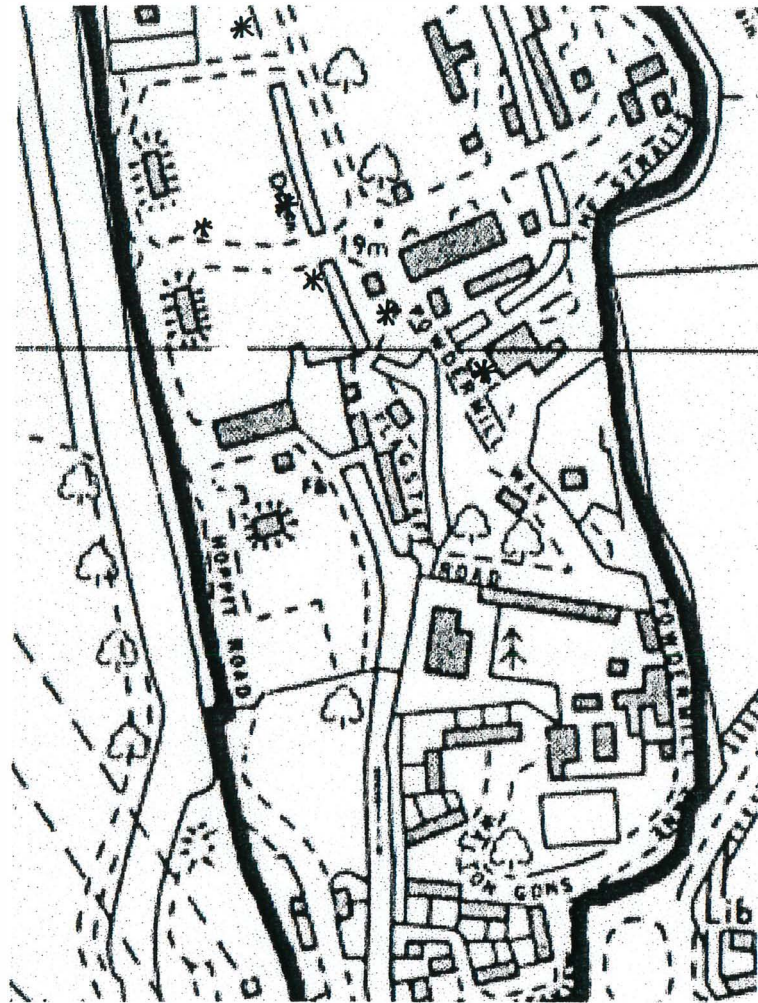


Figure 1. Positions of millstones (stars)

## Catalogue of Artefacts

### Interior of A210

#### *Eastern (rear) Section*

- Assorted timbers, c230 pieces, max individual size 1x0.25x7.6m
- 7 assorted timbers – various sizes, max individual size 0.5x0.3x4.5m (? Part of a walkway)
- Timber framing for a building, 66 pieces, various sizes

#### *Western (front) Section*

- Building 486 from South Site, consisting of 19 pallets of timber framing, max load size 1.5x0.5x4.5m
- Building N544 from South Site, consisting of 16 pallets of timber framing, max load size 1.5x0.5x4.5m, this includes two barrels on pallets, heights 1.2m
- Assorted roof timbers, c75 pieces, covers an area of 8x2.5x1.5m
- 16 roof trusses, each measuring 0.2x7.85x2.8m
- Timber framing for a building, c200 pieces, max individual size 0.15x0.5x4.5m
- 10 aluminium windows from H10
- 1 pallet of various unmarked timber frames for a building
- 8 wooden explosives boxes (without lids)
- 1 pile of metal roof supports and other timbers from a building, covers an area of 6x1.5x1.3m
- 1 pile of metal framing for a building (? a roof) but identification not clear as covered under a pile of rubbish and chestnut paling fencing.
- 1 piece of water pipe
- 3 streetlight heads
- 1 road sign
- 1 saluting stand
- 1 pile of metal sheeting from L189
- 5 pallets of various sluice machinery and other artefacts from Millhead Stream area
- 1 pallet of architectural fragments from Millhead Stream
- 1 pile of various metalwork (including sluice machinery)

### Exterior of A210

#### *North and West Sides*

- 20 stone chimney tops on (generally unsound) pallets – max individual size 2.25 sq.m
- 7 complete egderunners and 1 complete bedstone
- 15 fragments of egderunners  
(the edgerunners require a minimum of 2x2 sq.m each)
- 2 cogstones
- 11 graphite blocks – each require 0.25 sq.m
- 5 pieces of stonework – each measure 0.25 sq.m
- 6 pieces of metalwork from sluices and a waterwheel – max individual size 0.3x0.4x2m
- 2 railway points systems – max individual size 0.3x0.4x2m
- 1 pallet of stonework
- 1 pallet of metalwork

- various stonework and metalwork in undergrowth (max size 4 sq.m)
- other metalwork – max size 3 sq.m

#### *East Side*

- 2 barges – each measures 2.3x7m

#### **L169 (slab of concrete next to L168)**

- Currently used to store large artefacts as well as 2 dismantled buildings – total area occupied is 12x20m

#### **Behind L149**

- 22 timber revetments from a canal bank – total area 2.4x3.4m

#### **Behind S13**

- 32 timber revetments from a canal bank – total area 3.5x4m

#### **Container near L168**

- Container measuring 2.5x4.5m holding wooden artefacts including canal revetment timbers

#### **L168**

- Medium-term store for small artefacts from the North and South Sites; also a potential open store following opening of Phase 1. (Also see below.)

#### **Other Millstone Fragments**

- In addition to the millstones outside A210, there are a further 5 complete millstones and 10 fragments of millstone around the site – their locations are presented on Figure 1.

#### **Total Area Required**

To summarise, the artefacts listed above take up an approximate area of 1040 sq.m.

### **Suggested Buildings to be used for Long-Term Storage**

This section presents details of buildings that could be brought into use as artefact stores.

It should be noted that the descriptions of works to be carried out to the suggested new store buildings are from the Archaeological Department's visual survey, and that an architect's view should be sought for a more informed opinion and associated costs. This information should be available when Thomas Ford and Partners have completed their work for Turner and Townsend. Decontamination report sheets for these buildings are presented in Appendix 2.

Where necessary, information on internal access space in the building has been included, and area required recorded. This has been taken into account when looking at overall volumes of storage area.

## L168

This building is currently used for medium-term storage of small artefacts from the North and South Sites. At present, 23.94 sq.m of artefacts are stored in boxes in this building. With the existing metal shelving in the building and in A203, a further 200 sq.m of small artefacts can be stored in boxes. Whilst metal shelving increases the useable space in the building, it is only suitable for artefacts that are small enough to fit onto the shelves. At present there is an estimated minimum 45 sq.m of small artefacts still to be catalogued in the building; these should be catalogued and boxed in shelves by December 1998. Once this has taken place, there will be further space within L168 for a number of the larger (medium-sized) artefacts to be stored in an organised manner under cover.

Works to this building can be summarised as follows:

- Repairs to the roof (leaking at present)
- Replace 16 panes of glass in the windows and doors
- Devegetate around the southern side of the building
- Devegetate and repair gutters and drainpipes (gutters not visible above parapet) – c86m in length
- Power for light and equipment as part of Stage I
- This building is categorised as Low Risk in Royal Ordnance report 9449/2130/2

<b>L168</b>				
	<b>Description</b>	<b>Length (metres)</b>	<b>Width (metres)</b>	<b>Height (metres)</b>
<b>Building Type</b>	Machinery workshop			
<b>Building Size</b>		22.45	19.5	6
<b>Main Door Type</b>	2 sliding doors			
<b>Main Door Size</b>		3.5	n/a	4.3
<b>Access Route</b>		n/a	n/a	n/a
<b>Building Works</b>				
<i>Repairs to roof</i>	Repair known leaks			
<i>Replace glass</i>	Replace 16 panes of glass in windows and doors			
<i>Devegetation</i>	Devegetate outside the southern wall of the building (around the doors)			
<i>Gutter works</i>	Devegetate and repair gutters and drainpipes – c86m in length			

### **Building 83b (beside the Long Walk to the south of the Acid Factory)**

This is a former Warehouse, which could be used as a store for artefacts. It is 21x9.7m in size with a height of 4.85m to the roof. This could comfortably be used to store large artefacts, with the exception of the roof trusses. These measure 0.20x7.50x2.80m although the door into the warehouse only measures 2.52x2.40m.

Works to this building can be summarised as follows:

- Repairs to the roof
- Devegetate and repair gutters and drainpipes (gutters not visible) – c63m in length
- Replace north door and provide lock/padlock



- Replace south door and provide lock/padlock
- Power for lighting (? potential use of solar power)
- This building is categorised as Low Risk in Royal Ordnance report 9449/2130/2

83b				
	Description	Length (metres)	Width (metres)	Height (metres)
<b>Building Type</b>	Warehouse			
<b>Building Size</b>		21	9.7	4.85
<b>Main Door Type</b>	Not known			
<b>Main Door Size</b>		2.52	n/a	2.40
<b>Access Route</b>	Central route and side walk at right angle (includes existing steps) – c7m <sup>2</sup>			
<b>Building Works</b>				
<i>Repairs to roof</i>	Repair leaks (see Carden & Godfrey report)			
<i>Replace Doors</i>	Replace and secure north and south doors			
<i>Gutter works</i>	Devegetate and repair gutters and drainpipes – c63m in length			

### Building S13 (New Hill)

This building was another former store, which could be used to hold artefacts; it was last used as a secure machine park in 1995 during the decontamination process. The building measures 8.33x5.2m and has a large roller shutter. This building could be used to store the roof trusses that do not fit into 83B, as well as other artefacts as necessary (perhaps wheeled wagons, etc), although it is not large enough to hold all the artefacts. The building is fitted with an old crane (not in working condition).

Works to this building can be summarised as follows:

- Repairs to the roof – 1 leak visible
- Devegetate and repair gutters and drainpipes (gutters not visible) – c27m in length
- Repair and secure door
- Overhaul and secure roller shutter
- This building is categorised as Low Risk in Royal Ordnance 9449/2130/2

S13				
	Description	Length	Width	Height
<b>Building Type</b>	Warehouse			
<b>Building Size</b>		8.33	5.2	5
<b>Main Door Type</b>	Roller shutter			
<b>Main Door Size</b>		3.2	n/a	3.8
<b>Access Route</b>	N/A if used for storing large roof trusses			
<b>Building Works</b>				
<i>Repairs to roof</i>	On architect's advice			
<i>Replace doors</i>	Repair and secure standard door and bring roller shutter into use			
<i>Gutter works</i>	Devegetate and repair gutters and drainpipes – c27m in length			

## **Secure Outside Pound**

In addition, a secure outside pound should be set up for the storage of weatherproof artefacts (millstones and chimney tops). To hold all the weatherproof artefacts and the two dry barges the pound would need to cover 15sq.m (225m<sup>2</sup>). Suitable hardstanding exists on the old acid factory south of building 83b, although vegetation clearance is necessary before it could be used. Following the construction of a wall by Wimpey Homes along Powdermill Lane, the existing wire fence could be used to create the pound. The laying of geotextile matting in the pound would stop the regrowth of vegetation.

## **Summary of Suggested Storage**

Buildings 83b and S13 would give a combined total floorspace of 247m<sup>2</sup> that could be used to store large artefacts and building timbers. If these were brought into use as stores and were used with L168, which will be able to hold 225 sq.m of boxed small artefacts as well as a number of medium-sized artefacts, and a pound for weatherproof artefacts (covering 225m<sup>2</sup>), then these would cover the needs outlined above. In addition, better use can be made of the proposed new spaces, than of current storage arrangements. Long timbers can be stacked upright if the headroom allows, and other timbers can be stacked on top of each other. However, fragile, thin timbers must be laid flat to ensure survival.

## **Relocation Requirements**

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The relocation of the artefacts would need to be carried out using heavy lifting gear. Some of the individual artefacts weigh upto six tons each. Very heavy items will require a crane to lift them. To move the artefacts a large flatbed lorry fitted with a Hiaab crane would be necessary, and a forklift truck would also be required in order to transport the dismantled buildings, chimney fragments and some of the millstones that rest on pallets. Around thirty pallets, or other form of support, are needed for the millstones and chimney tops, which currently do not rest on existing pallets or sit on unsound pallets. The movement of artefacts should be undertaken under the supervision of the Archaeology Department.

The distances in transporting the artefacts as follows:

A210 to L168 = 0.1km

A210 to 83b = 0.95km

A210 to S13 via site (through the Scheduled Ancient Monument) = 1.55km

A210 to S13 via Crooked Mile (out of site and not through the Scheduled Ancient Monument) = 2.7km

Once stored in these locations there would be no immediate plans, from the Archaeological Department, to relocate the artefacts again. However, other consultants such as Event Communications and Stuart Pearson may want to remove some of these items to elsewhere on site as part of their interpreted landscape/buildings for Stage I Development.

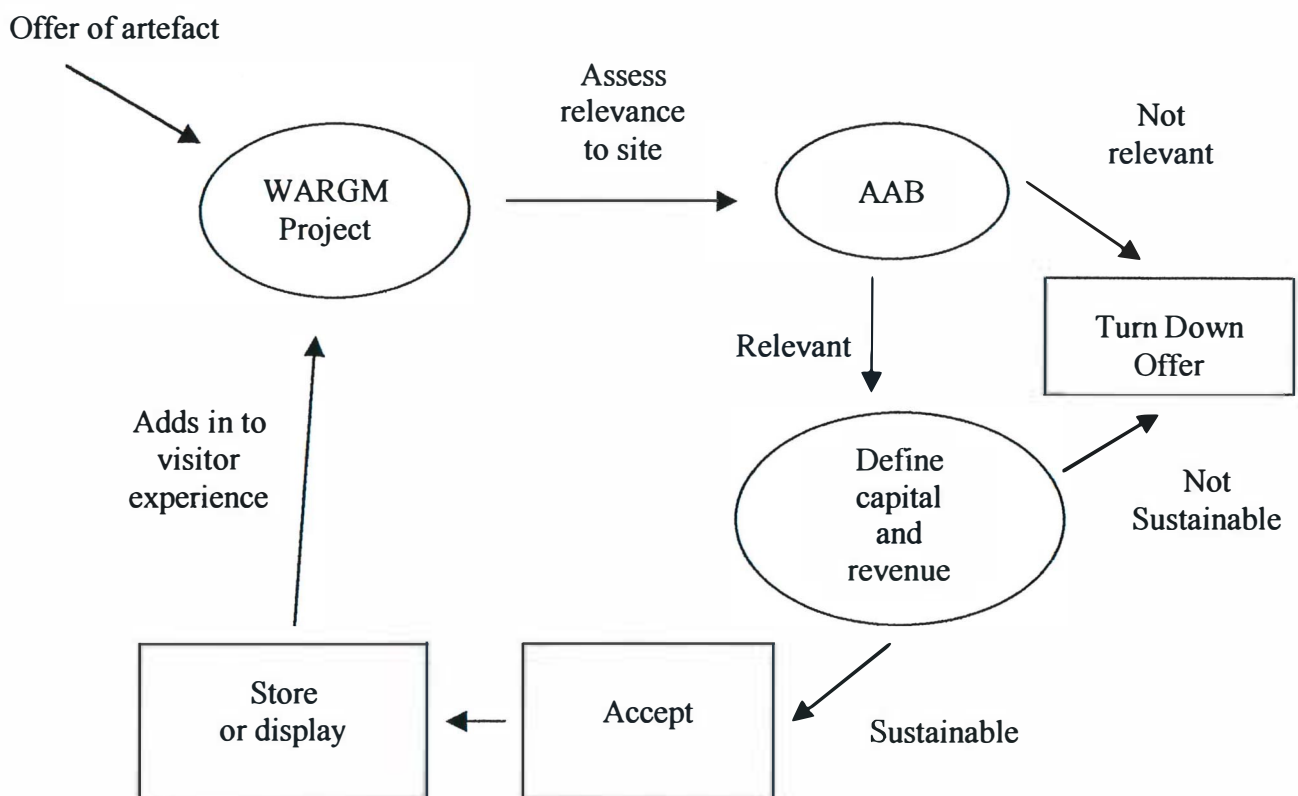
## Recommendation

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It is recommended that buildings S13 and 83b are made suitable for the medium to long term storage of artefacts on site. These would hold the artefacts currently stored in A210, as well as provide a safe and waterproof store for those artefacts presently stored outside which require indoor storage.

It is recommended that an outdoor pound is established on the hardstanding to the south of 83b for the storage of larger artefacts which are less sensitive to the effects of weathering.

It is accepted that the storage and/or display of artefacts represents a cost to the project. Further additions to the collection of artefacts at Waltham Abbey should initially be considered in the light of the requirements needed to provide adequate care. All further items offered to the WARGM project will be referred to the academic board in order to assess the relevant contribution they make to the understanding of the site.



**Appendix 1 – Summary List of Building Materials in A210**

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## Summary List of Building Materials in A210

### *Front Section*

Concrete pipe – 1030x140mm – 43no

#### Slates

190x350mm – 248no

200x400mm – 8628no

350x200mm (shaped) – 918no

300x400mm – 2000no

350x250mm – 2000no

300x260mm – 2000no

600x300mm – 1000no

500x260mm – 1000no

470x300mm – 2000no

520x260mm - 2000no

460x300mm – 2000no

36 pallets of bricks – 240x110x65mm @ 441 bricks per pallet = 15,876 bricks

#### Manhole Cover

Metal plates – 150x150x25mm – 176no

Assorted doors – 11no

Chestnut paling fencing – large quantity

### *Rear Section*

Doors – 2055x810x45mm – 13no

#### Moulded architrave

100x75x3800mm – 16no

90x28x1920mm – 7no

44 pallets of yellow hand-made bricks – 230x110x64mm @ 480 bricks per pallet = 21,120 bricks

Red bricks – 222x112x50mm – 100no

2 pallets of brick setts – 200x100x80mm @ 630 setts per pallet = 1260 setts

Concrete blocks – 650x300x150mm – 9no

Concrete paving – 460x460x50mm – 26no

10 pallets of random stone c300x100mm @70 stone per pallet = 700 stones

26 pieces of assorted poor quality timber

2 metal gates with 50mm metal tube frame - each 2950x1600mm

Kerbstones – 250x125x910mm – 24no

Metal pipes – various sizes – 4no

Manholes covers and frames – various sizes – 8no


## **Appendix 2 - Decontamination Report Sheets**

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# BUILDING REMEDIATION

9449/2130/A

## STATUS REPORT

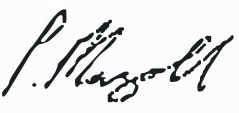
<b>BUILDING DESCRIPTION:</b>	<i>STORES/MACHINE SHOP STORE</i>
<b>BUILDING NUMBER:</b>	<i>L168</i>
<b>DRAWING NUMBER:</b>	<i>WA/SS/19</i>
<b>EXPLOSIVE HAZARD CATEGORY:</b>	<i>Low Risk</i>
<b>CONSTRUCTION:</b>	<i>Brick, slate over iron frame roof, concrete floor slab.</i>
<b>ITEM</b>	<b>STATUS</b>
BULK EXPLOSIVES & CHEMICALS CLEARED	<i>Not Applicable</i>
SERVICES DISCONNECTED	<i>Complete</i>
FOUL/CHEMICAL DRAINS	<i>Not Remediated</i>
RAIN WATER DRAINS	<i>Not Remediated</i>
BUILDING CLEAN OUT	<i>Complete</i>
CEMENT-BONDED ASBESTOS	<i>None Identified</i>
FIBROUS ASBESTOS	<i>Removed</i>
STAGE 1 STRIP OUT	<i>Not Required</i>
WALL COATINGS	<i>Paint Remains</i>
STEELWORK	<i>No Treatment Required</i>
FLOOR COVERINGS	<i>None</i>
FLOOR SLAB/CONCRETE FLOORS	<i>Not Removed</i>
WOODEN FLOORS	<i>None Existing</i>
ABOVE GROUND STRUCTURE	<i>Intact</i>
ROOF	<i>Intact</i>
TEMPORARY WORKS/SAFETY WORKS	<i>Not Required</i>
RECOMMENDED RESTRICTIONS	<i>Not Suitable for Occupation</i>
APPROVED BY:  Peter Mayell Site Remediation Project Manager	DATE: <i>01/11/95</i>

**STATUS REPORT**

<b>BUILDING DESCRIPTION:</b>	<i>LARGE BRICK WAREHOUSE</i>
<b>BUILDING NUMBER:</b>	<i>83b</i>
<b>DRAWING NUMBER:</b>	<i>83b/WAN/465A-B</i>
<b>EXPLOSIVE HAZARD CATEGORY:</b>	<i>Low Risk</i>
<b>CONSTRUCTION:</b>	<i>Brick, concrete roof slab, concrete floor slab.</i>
<b>ITEM</b>	<b>STATUS</b>
BULK EXPLOSIVES & CHEMICALS CLEARED	<i>Not Applicable</i>
SERVICES DISCONNECTED	<i>Complete</i>
FOUL/CHEMICAL DRAINS	<i>Not Applicable</i>
RAIN WATER DRAINS	<i>Not Remediated</i>
BUILDING CLEAN OUT	<i>Complete</i>
CEMENT-BONDED ASBESTOS	<i>None Identified</i>
FIBROUS ASBESTOS	<i>Removed</i>
STAGE 1 STRIP OUT	<i>Not Required</i>
WALL COATINGS	<i>None</i>
STEELWORK	<i>No Treatment Required</i>
FLOOR COVERINGS	<i>None</i>
FLOOR SLAB/CONCRETE FLOORS	<i>Not Removed</i>
WOODEN FLOORS	<i>None Existing</i>
ABOVE GROUND STRUCTURE	<i>Intact</i>
ROOF	<i>Intact</i>
TEMPORARY WORKS/SAFETY WORKS	<i>Not Required to Date</i>
RECOMMENDED RESTRICTIONS (Based on Potential Explosive Contamination Only)	<i>Not Suitable for Occupation</i>
<p>Note that the building may present physical and/or chemical contaminative hazards.</p>	
<p>APPROVED BY </p> <p>Peter Mayell Site Remediation Project Manager</p>	<p>DATE: <i>01/11/95</i></p>



**STATUS REPORT**

<b>BUILDING DESCRIPTION:</b>	<i>STORE</i>
<b>BUILDING NUMBER:</b>	<i>S13</i>
<b>DRAWING NUMBER:</b>	<i>S13/WAN/310</i>
<b>EXPLOSIVE HAZARD CATEGORY:</b>	<i>Low Risk</i>
<b>CONSTRUCTION:</b>	<i>Brick, flat concrete roof on steel beams, concrete floor slab with parquee finish, roller shutter door.</i>
<b>ITEM</b>	<b>STATUS</b>
BULK EXPLOSIVES & CHEMICALS CLEARED	<i>Not Applicable</i>
SERVICES DISCONNECTED	<i>Complete</i>
FOUL/CHEMICAL DRAINS	<i>Not Applicable</i>
RAIN WATER DRAINS	<i>Not Applicable</i>
BUILDING CLEAN OUT	<i>Complete</i>
CEMENT-BONDED ASBESTOS	<i>None Identified</i>
FIBROUS ASBESTOS	<i>None Identified</i>
STAGE 1 STRIP OUT	<i>Not Applicable</i>
WALL COATINGS	<i>Paint Remains</i>
STEELWORK	<i>No Treatment Required</i>
FLOOR COVERINGS	<i>Removed</i>
FLOOR SLAB/CONCRETE FLOORS	<i>Intact</i>
WOODEN FLOORS	<i>Not Applicable</i>
ABOVE GROUND STRUCTURE	<i>Intact</i>
ROOF	<i>Intact</i>
TEMPORARY WORKS/SAFETY WORKS	<i>Not Required to Date</i>
RECOMMENDED RESTRICTIONS (Based on Potential Explosive Contamination Only)	<i>None</i>
<p>Note that the building may present physical and/or chemical contaminative hazards.</p>	
<p>APPROVED B </p> <p>Peter Mayell Site Remediation Project Manager</p>	<p>DATE: <i>01/11/95</i></p>

0076



From: Dr Geoff Hooper,  
Head of CM(PERS)2  
MINISTRY OF DEFENCE  
Pinesgate, Lower Bristol Road, Bath. BA1 5AB.

Telephone 01225 449125  
Switchboard 01225 844844 Ext 49125  
Fax 01225 449670

R Saunders  
Chief Executive WARGM Co  
Powdermill Lane  
Waltham Abbey  
Essex

Your Reference  
Our Reference  
Date 7<sup>th</sup> August 1998

*Rob*

**ARTEFACTS**

I thought that it would be useful for you to have a retention copy of the old MOD file that dealt with the loan of Waltham Abbey artefact to EFDC Museum. The key player, Malcolm McLaren is still "on the circuit"; he lives in Chingford, and would be worth talking to when you have a free moment.

Best wishes

GEOFF HOOPER

WARGM Co.	
Date Rec'd	26 AUG 1998
File	
Action	Copy

THIS DEED OF GIFT is made the 2<sup>nd</sup> day of NOVEMBER 1981

BETWEEN KENNETH NORMAN BASCOMBE of 25 Monkwood Avenue  
Waltham Abbey DINAH ESTHER PATRICIA DEAN of 316 Roundhills

Waltham Abbey and RONALD CHARLES GRAY of 64 Honey Lane Waltham  
Abbey (hereinafter called "the Donors") and EPPING FOREST

DISTRICT COUNCIL of 323 High Street Epping Essex (hereinafter  
called "the Donee") acting as the Museum Authority for the  
District of Epping Forest for itself its successors and assigns

WITNESSETH as follows:

1. The Donors are duly appointed by the Waltham Abbey  
Historical Society by resolution of that Society dated the  
tenth day of August 1981 to enter into this Deed on behalf  
of the Members of the Society.

2. The Donors are also vested with all the appropriate  
powers as Trustees of the Waltham Abbey Archaeological Fund and  
where the context of this Deed requires the Donors confirm that  
in their capacity as such Trustees property subject to the  
Trust is included within this Deed of Gift.

3. The Donors hereby transfer assign and release to the  
Donees absolutely save as hereinafter mentioned the chattels  
briefly described in the schedule hereto and known as Waltham  
Abbey Historical Society Collection

4. The parties hereby agree that the said Collection shall  
be so transferred assigned and released in accordance with the  
categories and timetable set out in the said schedule.

5. The Donee hereby covenants with the Donors that with  
regard to those parts of the said Collection briefly described  
in Parts 1 and 2 of the said schedule no item shall be alienated  
without the consent of the Donors or such other persons as the  
Waltham Abbey Historical Society may appoint for the purpose of

exercising power of consent or in the event that the said Society has been dissolved then the Donee hereby covenants that no such part of the said Collection shall be alienated without the consent of the Official Custodian of Charities or such other person or persons as the Official Custodian of Charities may appoint for the purposes of exercising the power of consent

6. The Donee hereby agrees that henceforth reasonable access by any member of the public will be afforded for inspection of any part of the said Collection for the purpose of research provided that the Donee may require such access to be arranged by prior written appointment and the research purpose to be verified by a professional person or body of recognised standing

7. If Epping Forest District Council ceases to be the Museum Authority for Waltham Abbey the rights and obligations contained in this Deed will inure to such body which constitutes the Museum Authority for the town of Waltham Abbey

IN WITNESSETH WHEREOF the Donors have hereunto set their respective hands and seals and the Donee has hereunto caused its Common Seal to be affixed the day and year first above written

#### SCHEDULE - THE WALTHAM ABBEY HISTORICAL SOCIETY COLLECTION

The Waltham Abbey Collection consists of those items of historical interest within the categories specified below which are subject to this Agreement and accepted by the Donee as forming part of the Collection before the 31 day of March 1983

PART I

Being the archaeological archive and provenanced materials of importance requiring no conservation which shall be donated absolutely and which shall be entered in the Accessions Register of the Donee before the 29 day of September 1982

PART II

Provenanced material of importance which requires conservation and shall be donated absolutely which material shall be entered in to the Accessions Register of the Donee before the 31 day of March 1983

PART III

Other items forming part of the Collection of the Society before the date of this Deed which are accepted by the Donee being generally unprovenanced to form a non-accessioned handling Collection

SIGNED SEALED AND DELIVERED  
by the said KENNETH NORMAN  
BASCOMBE in the presence of

50, CROOKED HILL  
WALTHAM ABBEY

)  
)  
)  
) X *K N Bascombe*  
*[Signature]*

SIGNED SEALED AND DELIVERED  
by the said DINAH ESTHER  
PATRICIA DEAN in the presence of

320 Roundhills  
Waltham Abbey  
Essex

)  
)  
) *[Signature]*  
) *P. Dean*  
) *J. E. Webb*

SIGNED SEALED AND DELIVERED  
by the said RONALD CHARLES GRAY  
in the presence of:

THE VICARAGE  
WALTHAM ABBEY  
ESSEX.

)  
)  
) *[Signature]*  
) *R. C. Gray*  
) X *[Signature]*  
*Thurville*

s  
by  
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s

This file transferred to

Dr. G. Hooper.

Room 110

Princesgate East

BATH.

U. Hooper 27/7/98

M10Hd/RARDE(CWA)/M

Please see E24 the background to which is given in Es 21, 19, 17, 16, 13 and 10.

Now that we know that the Epping Forest District Museum Service can accommodate the collection, are we able to come to a decision on its future, please?

Kate Carter stressed, during her visit here on 6.9.90, that her committee\* would be more reluctant to commit funding to store/display someone else's collection made available to them on a loan basis only.

As the EFD Museum can operate through their committee system only with in-built delays brought about by the meetings' timetables, an early response is to be recommended.

Mhcf. 18.9.90  


\* The next meeting of the committee is 11 October.



Requires. Pers return to Hd/WA alt 26.11.90

M7

Hd/RARDE(WA)

Please see E17.

Mhcf. 18.12.89

M8

Hd/RARDE(WA) ~~500~~

Mr Jonathon Foster, a teacher at King Hassid School, has approached me again to reiterate his request to borrow some of our historical prints and negatives for a forthcoming school project. Please see E10: 3rd and 4th paras and E13: para 2.

The original specific request has become caught up in the more general question of the future of the entire WA Special Collection (E16: last para and E17: first para).

Would it be possible, please, to deal with it, on a loan basis, as a separate issue? Access, also on a loan basis would be required to our WASC catalogue to identify the material required.

TA/Hd/WA

(179)

Mhcf 18.4.90

MAC,

Yes, of course, Mr Foster will be most welcome to visit WA & have a look through the catalogue to see what he wants, and then either take the material on loan or we can generate copies. Please let me know when you

Scott/12/1/90



M1

Mr McHaren Please see E's 5+6  
YA 19/8/88

M2

Library

Pl. photocopy E6 (both sides).

lnh of 19.8.88

M3

Note

E6 despatched 19.8.88.

lnh of 19.8.88

M4

Mr McHaren Please see E7  
YA 17/3/89

M5

Registry

Pl. despatch top copy of outgoing  
letters - copy for file enclosed.

lnh of 17.3.89

Discussed  
7.8.89

M6

Registry - Please see M5 and the indication  
of act. on on M5 on front cover

Is there any reason please, why the top copy  
of my letter to the Tower of London was not despatched  
I found it lying inside the file on 31.7.89. Action  
was taken on the file copy to make it E8. lnh of 2.8.89  
[Do not despatch the letter now.]

Mr Philip Reed  
Department of Documents  
Imperial War Museum  
Lambeth Road  
London SE1 6HZ

Your Reference:

Our Reference: RWA/7/10/01

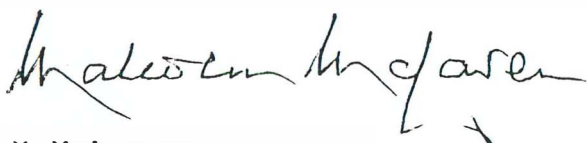
Date: 11 June 1991

Dear Mr Reed

EARLY GERMAN DOCUMENTS ON ROCKETRY

As promised during my conversation with your Department earlier today I am enclosing two folders of papers for your retention.

Yours sincerely



M McLaren



RARDE  
Powdermill Lane  
Waltham Abbey  
Essex EN9 1AX  
Telephone (0992) 713030 Ext 413  
Fax (0992) 713030 Ext 298

Ms K Carver  
Museum Officer  
Epping Forest District Museum  
39-41 Sun Street  
WALTHAM ABBEY  
Essex EN9 1EL

REF: RWA/7/10/01

6 June 1991

Dear Miss Carver,

It is with great pleasure that I am able to hand over to your care and custody the part of the Waltham Abbey Special Collection which most appropriately belongs to the town of Waltham Abbey. A formal letter of permanent loan is attached.

I know that with your experience and excellent Museum Management the people of Waltham Abbey will benefit from a new accessibility to this unique collection.

We are extremely grateful for your co-operation and interest in our site over the years and it is with much regret that our association with the town of Waltham Abbey is at an end. For this reason we are particularly pleased that you are able to take over the responsibility for this Special Collection and to ensure its proper place in the local history.

Yours sincerely,

*GH*  
*pp* Dr G Hooper  
Head RARDE WA

Ms K Carver  
Museum Officer  
Epping Forest District Museum  
39-41 Sun Street  
WALTHAM ABBEY  
Essex EN9 1EL

REF: RWA/7/10/01

6 June 1991

Dear Miss Carver

WALTHAM ABBEY SPECIAL COLLECTION

1. The items detailed in the attached catalogue are hereby issued to you on permanent loan.
2. You will be responsible for the condition and safe keeping of the items whilst they are in your custody.
3. The DRA reserves the right to have access to the items of the collection in your care for use for displays etc.
4. You should afford all reasonable access to the collection by reputable academics and institutions.
5. The remainder of the Waltham Abbey Special Collection will be housed at DRA Military Division Fort Halstead and you are free to request temporary loan of any of those items for special purposes.

Any queries on the permanent loan of items which you hold, or requests for temporary loans for items held at Fort Halstead should in the first instance be addressed to Dr G Hooper, Hd/ET, Building A11, DRA Military Division, Fort Halstead, Sevenoaks, Kent.

Yours sincerely,



H J Brown, (Mrs)

Mr Graham Thompson  
MOD Press Office

7217 82906 / Agreed 5/6/91.

Mrs E Peace  
Company Secretary  
DRA HQ Pyestock

Our ref: RWA/7/10/01

0252 372434 X 4016

4 June 1991

Agreed 5/6/91.

DRAFT PRESS RELEASE

1. The attached draft has been approved by Secretary of the DRA Military Division which is currently occupying the MOD Waltham Abbey North Site until 30 June 1991.
2. May I have your confirmation that this may be released to Local Press this week.

*H J Brown*

H J BROWN (Mrs)  
HEO/WA

Copy: Mr D Packer - Secretary  
Dr G Hooper - H/ET

LOCAL WALTHAM ABBEY AREA NEWSPAPERS

WEST ESSEX GAZETTE

EPPING (0378-)72285

FAX No. ✓

081-527-3696

CHESHUNT & WALTHAM TELEGRAPH

081-367-2345

081-366-4013 ✓

LEA VALLEY MERCURY

0992-444455

0992 442786 .  
~~handwritten of book.~~

FREE PAPER - WIDE CIRCULATION

STAR

FAX No.  
0279

HARLOW (0279)-454332 ←

444 018 -

PRESS RELEASE

WALTHAM ABBEY SPECIAL COLLECTION

The Defence Research Agency Military Division RARDE Waltham Abbey is to hand over the Waltham Abbey Special Collection on permanent loan to the Epping Forest District Council Museum when the Waltham Abbey Site closes on 30 June 1991. The Waltham Abbey Special Collection is a unique collection consisting of some 1800 items of historical interest relating to the Waltham Abbey site and its activities. The items are of a varied nature, for example artefacts, sets of related photographs, maps and building drawings. The collection has been gathered over many years and has safeguarded material which would otherwise have been lost.

The Defence Research Agency considers it appropriate that the collection is available to the public and that it remains in the local area.

Dr Hooper Head of RARDE Waltham Abbey will hand over the collection at a formal ceremony to be held on 6 June at King Harold School Waltham Abbey 7.30 pm.

Above for your information.

Hilary Brown  
(HILARY BROWN).



€ Epping Forest District Museum Museum Officer Kate Carver  
39-41 Sun Street  
Waltham Abbey  
Essex EN9 1EL  
Tel: Lea Valley (0992) 716882

Mr M McLaren  
RARDE Waltham Abbey  
Powdermill Lane  
Waltham Abbey  
Essex

30th May 1991

Dear Mac

Waltham Abbey Special Collection

Jonathan Foster telephoned me on Wednesday and told me he wanted to borrow the WASC objects currently on loan to the Museum.

I was quite surprised at this, as although you had mentioned that Jonathan was to have the screens I did not recall discussing the objects. Jonathan assured me that you had approved the loan so I agreed. I hope this meets with your approval.

I enclose details of all the objects/additional material loaned. Perhaps you could telephone me on your return from leave.

All good wishes

Yours sincerely

Kate Carver  
Museum Officer

Encl.



EPPING FOREST DISTRICT MUSEUM  
39-41, SUN STREET  
WALTHAM ABBEY

Institution: exit number  
EFDMS: 12

ESSEX

REMOVAL	remover MARTIN STEPHENS	phone number
	address FOR EPPING FOREST DISTRICT MUSEUM	0992 716882
	recipient Jonathan Foster	phone number 0992
	address FOR King Harold School, Broomslieghall Rd, Waltham Abbey Essex.	

ITEMS	identity number	brief description	condition	insurance valuation
		Objects, being part of the Waltham Abbey special collection from R.A.R.D. E		

- 1 Sample of Alderwood & 2 Alderwood Charcoal. } Gunpowder ingredients.
- 3 " " Dogwood & 4 Dogwood Charcoal. }
- 5 Charcoal excavated from Smeatons Mill.
- 6 Sample of Saltpetre & 7 Sample of Sulphur.
- 8 i-iv, 4 jars of Simulated Gunpowder.
- 9 i-iv, 4 Prisms of simulated moulded Gunpowder.
- 10 Tinder box containing flint & strikes.
- 11 Lead container for Sulphur matches. 12 i-xvii 17 Sulphur matches.
- 13 Model of powder boat. 14 i-iii 3 Sand timers for gun cotton processing.
- 15 Lead Nitroglycerine Burette. 16 Nathan & Robertson report on cordite.
- 17 i-vi 6 jars of cordite samples. 18 Elephant tude workbench.
- 19 Gunpowder Barrell. 20 i-ii Pair safety over boots.

EXIT	method or reason loan.	insurance valuation	return required? yes.	agreed return date w/b. 6/6/91.
------	---------------------------	---------------------	--------------------------	------------------------------------

Note: Objects are NOT property of EFDM but are on loan from RARDE W.A. as agreed by J. Foster (KHS) & Mr Mahanen (RARDE).

museum: I agree that the information given on this form is correct:	signed R.G. Carner	date 30/5/91.
remover: I acknowledge receipt of the item(s) described above	signed	date

recipient: I acknowledge receipt of the items and accept the conditions overleaf:	group number	signed	date
---	--------------	--------	------

ACTION	third part of form passed to file:	signed	date
--------	------------------------------------	--------	------

	second part of form returned and passed to file:	signed	date
--	--	--------	------

Note item 13 - also contains 2 poles, loose in bottom of boat, packed in polythene bag. Combined on Exit form 13.

returned items: I acknowledge the return of the item(s) described above, in satisfactory condition:	signed	date
---	--------	------

EPPING FOREST DISTRICT MUSEUM

Institution: exit number

EPPMS: 13

39-41 SUN STREET, WALTHAM ABBEY,  
ESSEX EN9 1EA.

REMOVAL

remover	Martin Stephens	phone number	0992 716882
address	For EFD M		
recipient	Jonathan Foster	phone number	
address	For King Harold School, Boonstich Hall Lane Waltham Abbey		
identity number	brief description	condition	insurance valuation

Continued from Exit form EPPMS : 12.

- 21 i-iv, Safety implements being hammer, piners, brace, chisel.
- 22 Copper Nail used in powder boat construction. 23 leather tool box.
- 24 leather workers Tool. 25 Bronze Piners. WASC 1746.
- 26 Cordite Balance
- 27 Hand book of Gun Cotton Powder & Gun Cotton. WH Wardell 1888.
- 28 Congress Treatise on the Rocket system WASC 115 (Modern Publication)
- 29 Photcopy of Congress letter relating to purchase of powdermills 18.10.1787.
- 30 Photcopy of Taylors Treatise on Gunpowder c 1830
- 31 Photcopy of Congress letter 19/10/1787 to Mr Newton.
- 31 Illustration Entering a Danger Building (Mounted) + label.
- 32 Illustrations from Illustrated London News 8/6/1861 re explosions at WA.
- 33 Cutting extract from journal Chem. Soc 1950 p. 436

EXIT

method or reason	insurance valuation	return required?	agreed return date
WAN		Yes	w/b 6/6/91.
note	Also Council - packet labels - packet of proper grandstands.		
museum: I agree that the information given on this form is correct:		signed	date
		R G Carrus	30/5/91.
remover: I acknowledge receipt of the item(s) described above		signed	date
recipient: I acknowledge receipt of the items and accept the conditions overleaf:		signed	date
third part of form passed to file:		signed	date
second part of form returned and passed to file:		signed	date
note			
returned items: I acknowledge the return of the item(s) described above, in satisfactory condition:		signed	date

Ms K Carver  
Museum Officer  
Epping Forest District Museum  
39-41 Sun Street  
WALTHAM ABBEY  
Essex EN9 1EL

Our ref: RWA/7/10/01

7 May 1991

Dear Miss Carver

WALTHAM ABBEY SPECIAL COLLECTION

I attach a draft of the letter which we propose to send to you when handing over the Special Collection.

Would you be good enough to confirm that you are able to accept this letter.

Yours sincerely



H J BROWN (Mrs)

DRAFT

Ms K Carver  
Museum Officer  
Epping Forest District Museum  
39-41 Sun Street  
WALTHAM ABBEY  
Essex EN9 1EL

Our ref: RWA/7/10/01

~~2 May 1991~~

Dear Miss Carver

WALTHAM ABBEY SPECIAL COLLECTION

1. The items detailed in the attached catalogue are hereby issued to you on permanent loan.
2. You will be responsible for the condition and safe keeping of the items whilst they are in your custody.
3. The DRA reserves the right to have access to the items of the collection in your care for use for displays etc.
4. You should afford all reasonable access to the collection by reputable academics and institutions.
5. The remainder of the Waltham Abbey Special Collection will be housed at DRA Military Division Fort Halstead and you are free to request temporary loan of any of those items for special purposes.

Any queries on the permanent loan of items which you hold, or requests for temporary loans for items held at Fort Halstead should in the first instance be addressed to Dr G Hooper, H/ET, Building A11, DRA Military Division, Fort Halstead, Sevenoaks, Kent.

Yours sincerely

H J BROWN (Mrs)

<u>ITEM</u>	<u>LOCATION</u>
1. Powder Boat	Quinton Way, <u>South Site</u> Right hand side (from Quinton Gate) on brickwork support.
2. Two Millstones	Quinton Way, <u>South Site</u> Right hand side, near Powder Boat.
3. Millbed	Junction of Flagstaff Road and Powdermill Way.
4. Millstone	In front of Building A200, where it is being used as the base of John Walton's sundial.
5. John Walton's Sundial	In front of Building A 200
6. Eight 12-inch Solid Shot	In front of Building A200.
7. Cast Iron Water Tank with an integrally-cast Board of Ordnance Coat of arms	In front of Building A200.
8. Two Cannon	West side of Building; A200
9. Explosives Truck and short length of narrow gauge railway track	South side of Building A200
10. Waterway Footbridge - Semi-circular	West side of L169.
11. Flat-bottomed Punt	North West end of Bailey Bridge. <i>Empty punt</i>

# MEMORANDUM

from

**Dr G Hooper**

Head of Energetic Materials  
& Terminal Effects

Fort Halstead  
Sevenoaks  
Kent

Royal Armament Research and  
Development Establishment

Tel. Knockholt 32222  
Ext. 2966

---

Mr A Walker  
Finance Director

HET/3/3/2

Copy: HEO/WA

## WALTHAM ABBEY SPECIAL COLLECTION

Thank you very much for your most useful memorandum setting out the ground rules for gifts of public property. I have passed this memo on to Hilary Brown who will look after the administration aspects of this proposal. I think that you will find that Hilary is aware of the guidelines because we have already bequeathed some surplus Waltham Abbey equipment to the Canterbury Archaeological Trust of which Dr Frank Panton, formerly Director RARDE, is a member.

I agree with you that it will simplify matters greatly if the notional value of the goods is under £1,000. In reality, I think that that would also be an honest assessment. Items of value we would, in any case, wish to retain within RARDE and the DRA.



3 January 1991

**G HOOPER**

MR. HOOPER.

MEMORANDUM  
from

2931/12/90.

Mr A C WALKER  
Finance Director

HEO/WA

Royal Armament Research and  
Development Establishment

Fort Halstead  
Sevenoaks  
Kent TN14 7BP

Tel: (0959) 32222  
Ext: 2089

FD/101/94

11th December 1990

RPB

H/NP

WALTHAM ABBEY SPECIAL COLLECTION

Reference A. HD/NPWA 287.11 dated 13 November 1990.

1. I have just seen the correspondence on the Waltham Abbey Special Collection, and this memo deals with the financial aspects of any proposed gifts to local Museums, etc.
2. Gifts of public property have to be treated carefully, as the MOD's annual Appropriation Account which is presented to Parliament has to be noted with the value of all gifts. Gifts of MOD property (including long-term loans) have to be approved in advance by GFI, or someone to whom they have delegated authority. This is normally the vote manager who would have received the proceeds from any sale. In our case it might be ERI for small amounts under £1000, or Disposal Supply Secretariat (Defence Sales) for larger amounts.
3. It looks as though the items we might gift to the local museum would only have a notional value, and it would simplify matters if this were under £1000. The procedure then would be for us to list the items we propose to gift, assign a notional value, and clear the transaction with ERI before we make any firm commitment to the recipient.
4. As far as a deed of covenant is concerned, we don't need to sign one unless we wish to put special conditions on the gift. For example the deed attached to Reference A prevents the recipient selling off the items without the consent of the donor, and grants access rights. I imagine Epping Forest District Council would be happy to take our gift without any conditions being attached if we wanted to do this. If we do wish to make any conditions we ought to check out the wording of any deed with PL(LS) before we sign it.



MEMORANDUM

from  
**DR G HOOPER**  
Hd/NP

Royal Armament Research and  
Development Establishment

Powdermill Lane  
Waltham Abbey  
Essex EN9 1AX

Tel: 0992-713030  
ext 413

REF:HD/NPWA 287.11

Dr R Warren  
Managing Director

**WALTHAM ABBEY SPECIAL COLLECTION**

I have mentioned to you previously my ideas as to what we should do with the numerous historical records and artefacts that Malcolm McLaren has acquired at Waltham Abbey, in particular what if anything should stay with the town of Waltham Abbey in the care and custody of the local museum, and what should come to Fort Halstead as part of the history of RARDE. The purpose of this memorandum is to amplify somewhat on these proposals and to seek your endorsement of a proposed way ahead.

The Waltham Abbey Special Collection comprises some two thousand items, such as historical artefact, books, records, maps etc, catalogued by means of a card index held in the Library. The collection includes a few large items such as mill-stones used in the powdermills, a railway wagon used to transport gunpowder, cannon purchased by Congreve, a powder barge, etc.

Since I have been Head of Waltham Abbey and the site closure has become imminent there has been a steady lobby from the local community that at least some this collection should remain in the district as part of the heritage of Waltham Abbey. Until the last few months, however, this lobbying has not been matched by a capability to manage and store the material in a way that will ensure its long-term survival. That situation has now changed, and the local Museum Officer Kate Carver now has the storage capacity to house the collection, with the exception of the large outdoor items.

My proposal is that the collection be split between Fort Halstead and the Epping Forest District Council museum by dividing it into the following categories.

a. **Technical Records**

This is a collection, albeit mainly duplicated material, which is of national importance insofar that nowhere else has the material been brought together. Descriptions of the site's activities, manufacturing processes and research work come into this category. The technical records lend



themselves to the "scientifically minded student" rather than the casual museum visitor, including as they do such items as Sir Robert Robertson's own copy of his DSc thesis. These items would most logically come to Fort Halstead.

b. **Parochial Records**

This is material with a basically Waltham Abbey - only interest, including site records, ownership records, press cuttings, local photographs, group photographs of workers and social aspects of work. Such material would most logically reside in the Waltham Abbey area under the custody of the Epping Forest District Museum.

c. **Artefacts and Display Items**

These range from actual processing equipment (NG burettes, guncotton drying racks) craft implements (leatherworkers and blacksmiths' tools) to the original council road sign for Powdermill Lane. Here the possible division is less clear-cut, but in my view there is more than sufficient to enable a sensible display of town-related matters to be retained in the Waltham Abbey museum and technology - related matters to be held at Fort Halstead. The local museum does not in any case have the facilities to house the larger items, and most of these would be good display material to be placed outside our new buildings at the Fort. or elsewhere on the site as is already done with various historical artefacts.

d. **Public Records**

There is some material destined for the Public Record Office, and this is going ahead in the same way as if the site were continuing operations.

Under the assumption that we do indeed bequeath some of the collection to the Epping Forest (Waltham Abbey) Museum, what are the options for the transfer of the historical items? There seem to be two options.

1 A long-term loan from RARDE to Epping Forest District Council. Perhaps understandably EFDC are more willing to look after, store and manage items given under a deed of gift than under a loan. They would prefer an arrangement whereby the items were bequeathed as a gift to EFDC with MOD/RARDE having free and unfettered access to the collection for use for such displays etc, as we might care to mount at RARDE. In line with this objective Epping Forest District Museum have suggested that a deed of covenant along the lines previously used by the Waltham Abbey Historical Society might, with suitable amendment, be appropriate. This is attached.

There are two decisions, therefore, where I would like your endorsement.

a. The first is the principle of splitting the collection along the lines suggested. I would not ask you to make an instant decision on this; rather I have asked Malcolm McLaren to mark each of the items in the catalogue as to where he would see it go, whereupon perhaps on your next visit to WA you might care to make a "spot check" audit to assure yourself that we are proceeding in a sensible manner.

b. The second is the terms and conditions under which we would

release any of the collection to the local museum. My own view is that a suitably worded Deed of Covenant would be the best compromise between protecting our interests and good public relations with the local community. Perhaps a local press release featuring yourself bequeathing the material to the town?

I look forward to your views on this.

A handwritten signature in cursive script, appearing to read 'G. Hooper', with a horizontal line underneath.

Dr G Hooper  
Hd RARDE WA  
13 November 1990

Memorandum

from

M McLAREN

TA/Hd/RARDE(WA)

Royal Armament Research  
and Development Establishment

Powdermill Lane  
Waltham Abbey  
Essex, EN9 1AX

Tel: Lea Valley (0992) 713030  
Ext 256  
Ref: MS 841

Date: 22 November 1990

Hd/RARDE(WA)

LARGE ITEMS OF HISTORICAL INTEREST

The following, as promised, is a list of those items of historical interest which are considered too large to be included in any transfer to the Epping Forest District Museum and which would require special lifting and transport arrangements for transfer to another RARDE site:

<u>Item</u>	<u>Location</u>
1 Powder Boat	Quinton Way, South Site. Right hand side (from Quinton Gate) on brickwork support.
2 Two Millstones	Quinton Way, South Site. Right hand side, near Powder Boat
3 Millbed	Junction of Flagstaff Road and Powdermill Way
4 Millstone	In front of Building A200, where it is being used as the base of John Walton's Sundial
5 John Walton's Sundial	In front of Building A200
6 Eight 12-inch Solid Shot	In front of Building A200
7 Cast Iron Water Tank with an integrally-cast Board of Ordnance Coat of Arms	In front of Building A200



24

€ Epping Forest District Museum Museum Officer Kate Carver  
39-41 Sun Street  
Waltham Abbey  
Essex EN9 1EL  
Tel: Lea Valley (0992) 716882

Mr M McLaren  
Royal Armament Research  
and Development Establishment  
Powdermill Lane  
Waltham Abbey  
Essex.

13th September 1990

Dear Mr McLaren

Waltham Abbey Special Collection

I found our discussions on September 7th concerning the Waltham Abbey Special Collection extremely helpful. It was useful to view the Special Collection again, a process which has enabled me to assess accurately its current extent.

I am now able to confirm that the Epping Forest District Museum Service has sufficient capacity in its Reserve Collection store to accommodate the Special Collection (excluding the large items as listed in i - x in your memorandum reference RWA/7/10/01 of 12.12.89) should the Ministry of Defence and the Epping Forest District Council come to some agreement regarding the future of the collection.

I am convinced of the historic value of this unique collection, the photographs are a particularly rich resource. I believe that it is extremely important that the collection remain in the area to which it refers and that as much of the collection remain together as is possible.

As I mentioned in my previous letter, I would be willing to raise this matter with the Epping Forest District Council's Libraries, Arts & Museum Sub-Committee (LAMS) and make a case for the acceptance of the collection in the event of the MoD offering it upon acceptable terms and conditions to the District Council. Any decision to accept the Special Collection would rest with the Sub-Committee and its parent committee Leisure Services. Both LAMS and Leisure Services would be more likely to accept the Special Collection as a gift rather than a loan, and my recommendations to the Committees would in turn, be influenced by the terms and conditions upon which it was offered.

You might find the enclosed document helpful at this point. This is a copy of the Deed of Gift drawn up by legal representatives of the Epping Forest District Council and the Waltham Abbey Historical Society upon the donation of the Society's collection of objects to the Epping Forest District Council.

Contd/.....

- |    |   |                                    |
|----|---|------------------------------------|
| 8  | Two Cannon  | West side of Building A200         |
| 9  | Explosives Truck<br>and short length of<br>narrow gauge railway track | South side of Building A200        |
| 10 | Waterway Footbridge -<br>Semi-circular                                | West side of L169                  |
| 11 | Flat-bottomed Punt  | North west end of Bailey<br>bridge |

In response to a recent enquiry from Mr W G White, Stores Officer, Chertsey, about their delivery, I stated that I would be raising the matter with you. My recommendation would be that someone from the Transport Section should visit WA to assess the magnitude of the task.

*Mac*

ED file

THIS DEED OF GIFT is made the 2<sup>nd</sup> day of NOVEMBER 1981  
BETWEEN KENNETH NORMAN BASCOMBE of 25 Monkwood Avenue  
Waltham Abbey DINAH ESTHER PATRICIA DEAN of 316 Roundhills  
Waltham Abbey and RONALD CHARLES GRAY of 64 Honey Lane Waltham  
Abbey (hereinafter called "the Donors") and EPPING FOREST  
DISTRICT COUNCIL of 323 High Street Epping Essex (hereinafter  
called "the Donee") acting as the Museum Authority for the  
District of Epping Forest for itself its successors and assigns  
WITNESSETH as follows:

1. The Donors are duly appointed by the Waltham Abbey  
Historical Society by resolution of that Society dated the  
twelfth day of August 1981 to enter into this Deed on behalf  
of the Members of the Society.
2. The Donors are also vested with all the appropriate  
powers as Trustees of the Waltham Abbey Archaeological Fund and  
where the context of this Deed requires the Donors confirm that  
in their capacity as such Trustees property subject to the  
Trust is included within this Deed of Gift.
3. The Donors hereby transfer assign and release to the  
Donees absolutely save as hereinafter mentioned the chattels  
briefly described in the schedule hereto and known as Waltham  
Abbey Historical Society Collection
4. The parties hereby agree that the said Collection shall  
be so transferred assigned and released in accordance with the  
categories and timetable set out in the said schedule.
5. The Donee hereby covenants with the Donors that with  
regard to those parts of the said Collection briefly described  
in Parts 1 and 2 of the said schedule no item shall be alienated  
without the consent of the Donors or such other persons as the  
Waltham Abbey Historical Society may appoint for the purpose of

KNB

KNB

You will note that certain clauses in the document relate to public access, care and disposal of the collection. A similar document could be negotiated by the MoD and the EFDC if both parties wish to proceed in this manner.

I look forward to receiving your comments on the points raised in this letter.

Yours sincerely,

A handwritten signature in cursive script that reads "Kate Carver". The signature is written in dark ink and has a long, sweeping underline that extends to the right.

Kate Carver  
Museum Officer

cc. Dr K Bascombe WAHS  
Ms S Dalloe, Collections Manager EFDM  
Dr G Hooper, Head of RARDE (Waltham Abbey)



23  
Procurement Executive, Ministry of Defence

**ROYAL ARMAMENT RESEARCH AND  
DEVELOPMENT ESTABLISHMENT**

Powdermill Lane, Waltham Abbey, Essex EN9 1AX  
Telex: 25310 Telephone: Lea Valley 713030 ext:

Miss M Condon  
Map Department  
Ruskin Avenue  
Kew  
Richmond  
Surrey  
TW9 4DU

Your Reference:

Our Reference: RWA/7/10/01

Date: 11 September 1990

Dear Miss Condon

RARDE WALTHAM ABBEY MAP COLLECTION

Further to our conversation earlier today, when it was arranged that you should visit Waltham Abbey on Thursday, 20 September, to see the Waltham Abbey Special Collection Map Collection, I am enclosing a copy of the relevant section of the train time-table.

An Establishment car will be at Waltham Cross Station at 14.10 to meet the 13.43 train from Liverpool Street Station.

Yours sincerely

  
M McLaren



exercising power of consent or in the event that the said Society has been dissolved then the Donee hereby covenants that no such part of the said Collection shall be alienated without the consent of the Official Custodian of Charities or such other person or persons as the Official Custodian of Charities may appoint for the purposes of exercising the power of consent

6. The Donee hereby agrees that henceforth reasonable access by any member of the public will be afforded for inspection of any part of the said Collection for the purpose of research provided that the Donee may require such access to be arranged by prior written appointment and the research purpose to be verified by a professional person or body of recognised standing

7. If Epping Forest District Council ceases to be the Museum Authority for Waltham Abbey the rights and obligations contained in this Deed will inure to such body which constitutes the Museum Authority for the town of Waltham Abbey

IN WITNESSETH WHEREOF the Donors have hereunto set their respective hands and seals and the Donee has hereunto caused its Common Seal to be affixed the day and year first above written

SCHEDULE - THE WALTHAM ABBEY HISTORICAL SOCIETY COLLECTION

The Waltham Abbey Collection consists of those items of historical interest within the categories specified below which are subject to this Agreement and accepted by the Donee as forming part of the Collection before the 31 day of March 1983



€ Epping Forest District Museum Museum Officer Kate Carver  
39-41 Sun Street  
Waltham Abbey  
Essex EN9 1EL  
Tel: Lea Valley (0992) 716882

Mr M. McLaren  
Royal Armament Research  
and Development Establishment  
Powdermill Lane  
Waltham Abbey  
Essex

August 27th 1990

Dear Mr McLaren,

You may recall that I wrote to you on July 7th 1989 concerning the future of the Waltham Abbey Special Collection following the projected closure of R.A.R.D.E. Waltham Abbey.

I now know from Mrs Brown in Administration that the site will close at the end of March 1991 ( the Museum has been requested to vacate its rented stores at R.A.R.D.E. by the end of February 1991 ). Dr. Bascombe has also been kind enough to let me have a copy of your memorandum Reference RWA/7/10/01 entitled Waltham Abbey Special Collection which describes the content of the Special Collection and which gives some indication of the storage space the Special Collection requires.

Dr Bascombe and I have discussed the future of the Special Collection in general terms. Naturally as the Curator of the Epping Forest District Museum I am anxious that this important collection should, if at all possible, remain in the District.

I write therefore to enquire if there is any possibility of the Special Collection coming into this Museum's care and/or ownership. You will appreciate that the District Council prefers to accept additions to its collections as donations rather than as loans, resources are limited hence the necessity of restricting the accession of loan material.

I would be most willing to raise this matter of the future of the Special Collection with my committee ( the Epping Forest District Council's Libraries, Arts, and Museums Sub-Committee ) if you are able to give me some indication of the Establishment's plans for the Special Collection.

Both Dr. Bascombe and I are aware that time is short, March 1991 looms large. Progress of a report on the Special Collection through the EFDC's committee structure would take some months. I am sure that you face similar difficulties with your own administrative and executive structures. I would therefore be grateful for an early reply. I look forward to hearing from you.

Yours sincerely,

Kate Carver. Museum Officer.

c.c. Dr. K. Bascombe

King Harold School,  
Broomstick Hall Road,  
Waltham Abbey,  
Essex, EN9 1LF.

20/11

23rd August 1990

Mr. M. McLaren,  
TA/Hd/RARDE(WA),  
R.A.R.D.E.,  
Powdermill Lane,  
Waltham Abbey,  
Essex, EN9 1AX.

Dear Mr. McLaren,

R.A.R.D.E. WALTHAM ABBEY ARCHIVE.

Thankyou for all the help and time extended by you to us over the last few months,  
whilst we have been exploring your photographs, documents and maps.

Please find attached lists, in chronological order, of the items that we would like to copy.  
We shall contact you in September when we are ready to start copying the archive.

Yours sincerely

J. C. FOSTER

*Jonathan Foster*

R. P. SEARS

*R. P. Sears*

Memorandum

from

**M McLAREN**

**TA/Hd/RARDE(WA)**

Royal Armament Research  
and Development Establishment

Powdermill Lane  
Waltham Abbey  
Essex, EN9 1AX

Tel: Lea Valley (0992) 713030  
Ext 256

Ref:

Date: 20 August 1990

Hd/RARDE(WA)

*Geoff*

TRANSFER FROM WALTHAM ABBEY OF HISTORICAL COLLECTION  
AND OTHER ITEMS

1. Waltham Abbey Special Collection

CE Department staff, including Jim Dearlove, Alan Dentry and Jim Chandler, visited me on Thursday, 16 August, and, after seeing the bulk of the Collection, undertook to make arrangements for the its transfer to Fort Halstead. They understood that these arrangements may be contingency plans should nothing come of local disposal before the WA site closure.

The attached note, giving details of the extent and content of the Collection, was handed to them.

Apparently Jim Dearlove had been asked to prepare a list of any other items of historical interest and I undertook to provide him with a copy of the list which was included in my memo to you dated 12 December 1989.

2. Powder Boat

I spoke to Trevor Soar earlier today and he said that he had been unable to have a word with Peter Glass since I spoke to him about ten days ago concerning their future plans for the removal and renovation of the boat. He will try again today to speak to SMO.

3. Old Documents for transfer to CS(R)1

The packaging and transfer of these records, now held in the A203 strong room, was also discussed with CE staff who undertook to arrange for the work to be carried out and Jim Chandler is to inspect them tomorrow.

*Mac*

R.A.R.D.E. WALTHAM ABBEY ARCHIVE.

PLEASE MAY WE HAVE COPIES / MAKE COPIES OF THE FOLLOWING :-

W.A.S.C. NUMBERS.

0 - 299.	300 - 799.	800 - 1200.	1201 - 1800.
<u>9.</u> 13, 24	307 -322.	800.	1207 ( 1, 2, ).
<u>29.</u> 25	325( 17, 18, 19 ).	807.	1237.
<u>45.</u> 30	346.	813.	1245.
52.	348.	841.	1246.
65.	370/1.	854.	1247.
66.	399.	868 - 870.	1254.
68.	460.	882.	1297.
69.	507.	915.	1298.
70.	512.	925.	1299.
71.	572.	927.	1301.
87.	573.	933.	1302.
<u>88.</u> 100	669.	936 ( 1 - 10 ).	1336.
106.	670 ( 1,2,3,4,6,7 ).	937.	1337.
137.	671 ( 1 ).	938.	1410.
145.	682.	939.	1425.
155.	700.	940.	1426.
158.	704.	941.	1436.
180.	707.	957.	1467.
182.	725.	1052.	1476.
183.	739 ( 3 ).	1056.	1590 ( 1 - 27 ).
189.	740 ( 1 ).	1058.	1592.
295.	743 ( 1, 5, 6 ).	1065.	1593.
	752.	1072.	1600.
	778.	1080.	1602.
		1083.	1615.
		1086.	1616.
		1102.	1617.
		1126.	1627.
		1162.	1628.
		1176.	1629.
			1655 ( 20/1/2 )
			( 34/7 ).
			1678.
			1755.

R.A.R.D.E. WALTHAM ABBEY ARCHIVE.

PLEASE MAY WE HAVE COPIES / MAKE COPIES OF THE FOLLOWING:-

'HN' NUMBERS.

0 - 49.	50 - 99.	100 - 149.	150 - 199.	200 - 249.	250 - 299.	300 - 349.
4.	50.	102.	150.	200.	261.	306.
5.	52.	103.	151.	205.	262.	313A-Z
6.	54.	104.	152.	206.	263.	& AA.
7.	55.	105.	179.	208.	264A-J.	
12.	56.	106.	181.	233.	270.	
13.	58.	107.	188.	234.	271.	
22.	61.	108.	191.	235.	274.	
24.	63.	109.	192.	246.	275.	
25.	64.	111.	193.	247.	276.	
27.	65.	112.	194.		281.	
32A.	66.	115.	195.		282.	
36.	67.	116.	196.		287.	
43.	71.	117.			288.	
44.	72.	119.			289.	
48.	74.	141.			298.	
	75.	142.				
	78.	143.				
	86.	144.				
	89.	145.				
	91.	146.				
	97.	147.				
	98.	148.				
	99.	149.				

*Issued and returned,*

R.A.R.D.E. WALTHAM ABBEY ARCHIVE.

PLEASE MAY WE HAVE COPIES / MAKE COPIES OF THE FOLLOWING:-

MAPS.

- 4.
- 7.
- 12.
- 17.
- 18.
- 20.
- 23.
- 24.
- 31.
- 34.
- 39.
- 41A.
- 43.
- 50.
- 53.
- 53C.
- 54.
- 58.
- 65.
- 88.
- 89.
- 92.
- 93.
- 94A.
- 100A.
- 107A.
- D12.
- D14.
- D18.

*Not issued*

ROYAL ARMAMENT RESEARCH AND DEVELOPMENT ESTABLISHMENT  
WALTHAM ABBEY

WALTHAM ABBEY SPECIAL COLLECTION

The collection of items of historical interest relating to the site of RARDE(WA) and its activities is known as the Waltham Abbey Special Collection, WASC. It comprises some 1800 items, many of which are of a multiple nature, eg sets of related photographs, maps and buildings drawings. As a collection it is unique and of national importance insofar as it has brought together, from many sources, material which otherwise would have remained dispersed and, by being gathered over a number of years, it would now be incapable of being replicated.

The Collection includes original and duplicated documentary items, negatives and slides, display material, and artefacts.

The documentary items occupy six standard 2-drawer document filing cabinets with a small minority of oversize items, ie those which are larger than A4, held separately.

The historical negative (HN) collection, with its own catalogue and index on cards, was generated to prepare some of the items of the documentary, slide and display material and is stored in two index card filing cabinets. The slide collection of some 600 items, as yet uncatalogued and unindexed, is stored in subject-related groupings in thirty 24-slide viewing panels.

The display material includes framed documents in various sizes, the largest being a framed map, 1720x820 mm, and twelve exhibition panels, 900x900 mm, and one double panel, 900x1800 mm, with the necessary fixtures to form a free-standing display.

The artefacts range from small relics of Royal Gunpowder Factory explosions to an early example of a high speed camera. In store the smaller artefacts occupy 35 metres of shelving, whilst the larger items occupy a floor area of 10 m<sup>2</sup>.

In the past the Establishment museum display area has been 45 m<sup>2</sup> with a separate storage area of 25 m<sup>2</sup>.

The Collection is documented by a 4-volume, loose-leaf, A4-sized catalogue and a subject index on 3" x 5" cards.

The maps and drawings, the majority of which are original, are destined for the Public Record Office.

  
M McLaren  
TA/Hd/RARDE(WA)  
16 August 1990





Procurement Executive, Ministry of Defence  
*ROYAL ARMAMENT RESEARCH AND  
DEVELOPMENT ESTABLISHMENT*  
Powdermill Lane, Waltham Abbey, Essex EN9 1AX  
Telex: 25310 Telephone: Lea Valley 713030 ext: 256

Mr J Foster  
King Harold School  
Broomstick Hall Road  
WALTHAM ABBEY  
Essex  
EN9 1LF

Our ref: RWA/7/10/01

14 May 1990

Dear Mr Foster

RARDE WALTHAM ABBEY HISTORICAL PHOTOGRAPHS

Thank you for your recent telephone call concerning the possible release or loan of photographic material from our historical collection to the School.

You will be most welcome to visit the Establishment to identify the photographs which are of interest to you.

Would you please let me know in advance if you are able to come.

Yours sincerely

M McLAREN  
TA/Hd/RARDE(WA)

Memorandum

from

**M MCLAREN**

**TA/Hd/RARDE(WA)**

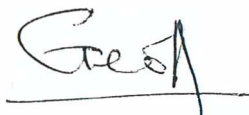
Royal Armament Research  
and Development Establishment

Powdermill Lane  
Waltham Abbey  
Essex, EN9 1AX

Tel: Lea Valley (0992) 713030  
Ext 256  
Ref: RWA/7/10/01

Date: 12 December 1989

Hd/RARDE(WA)



**FUTURE OF THE WALTHAM ABBEY SPECIAL COLLECTION - WASC**

Reference A: My memo, RWA/7/10/01, dated 9 August 1989 E 13  
Reference B: Letter, R/KC/CP, dated 7 July 1989, from Kate Carver,  
Museum Officer, Epping Forest District Museum E 10  
Reference C: Your memo dated 10 October 1989 E 16

As requested I am forwarding a copy of the WASC catalogue which includes 1775 items to date in four volumes. There is a separate subject index on cards which would have to be consulted to use the catalogue effectively, as there is no structured sequence of entries.

I estimate that an area of some 40-50m<sup>2</sup> would be required for a museum display of the material and an area of 25m<sup>2</sup> for the museum store.

There are some items which have not been included in the collection, mostly as they were considered, erroneously in some cases, to be "permanent" structures on site. These include:

- (i) Powder Boat - restored at my request in 1963 and moved to its present home on the South Site in the late 70s.
- (ii) Other derelict Powder Boats located in the dried-up waterways on the North Site.
- (iii) Flat-bottomed Punt - a multi-purpose transporter on the RGPF waterways. Located at the north west end of the North Site Bailey bridge.
- (iv) RGPF Fire Alarms - now dug up from the South Site by RO and thought to be destined for the other RO plc sites.

MEMORANDUM

from  
**DR G HOOPER**  
Hd/NP

Royal Armament Research and  
Development Establishment

Powdermill Lane  
Waltham Abbey  
Essex EN9 1AX

Tel: 0992-713030  
Ext:413

Mr M McLaren  
TA/Hd/WA

Mac,

E13

E10

Thanks for your note on the accompanying note from Kate Carver; I am sorry for the delay in responding. I have spoken to Ken Bascombe about the general issue of what goes where and would make the following observations.

1. There is a strong body of opinion, both in the town of Waltham Abbey and amongst those of the Waltham Abbey staff who will not be going to Fort Halstead, that much of the collection should remain in the area.
2. There is another equally strong body of opinion, including D/RARDE and many of those who will be relocating to the Fort that the collection should form part of a general museum of what is now pan-RARDE, encompassing Woolwich, Langhurst and so on as well as Waltham Abbey.

I am sure that there is room for a compromise here, although not necessarily on exactly the lines that you suggest.

I had previously asked that you provide me with a copy of the collection catalogue along with an assessment of the space that would be required for storage and display; I would like to see this before we issue it to either the Waltham Abbey Museum or the Essex County Archivist.

Please discuss.



Dr G Hooper  
Hd RARDE WA  
10 October 1989

- (v) Explosives Truck - positioned on a short length of track outside the Library Building A203.
- (vi) Millstones - Beds and Edge-runners. Two near the powder boat on the South Site, one near the entrance gate of the North Site and one as the base of John Walton's sundial
- (vii) John Walton's Sundial - undated but earlier than 1787. Located near Building A200.
- (viii) Semi-circular Footbridge - used to cross RGPF waterway but now uprooted and located near Building L176
- (ix) Resuscitation Apparatus for the apparently drowned - a 19th century system of pipes, tubes and bellows together with its own box with the Arms of the Board of Ordnance engraved in brass. It is located in the South Site surgery and was to be disposed of but I have spoken today to the Sister who hopes to bring it with her to the North Site.
- (x) Two drawings of North Site buildings extracted from the drawings collection before being catalogued and framed to hang on Director PERME's office wall in Building A231 but taken to the South Site by Frank Panton when he moved office. I believe that these were included in the inventory of historical items prepared by Chris Evans for Trevor Truman and have now been taken from Building G342.

The estimated display and storage areas given above make no allowance for these extra items.

I still have outstanding actions on Reference B. Do you require any further information before advising, please, on the line to be taken?

*Mac*



ROYAL  
ARMOURIES

ROYAL ARMOURIES RECEIPT

Received from RARDE(WA), Waltham Abbey, the following objects formerly comprising Royal Armouries Loan 196:

1 Flintlock Musket

1 Percussion Musket

Delivered by V. P. Brown  
On behalf of RARDE, Waltham Abbey

Received by John Hendrey  
On behalf of the Royal Armouries

Dated the 17th of August 1989

GOODS

VEHICLE REQUISITION

14

I REQUIREMENT

Name (in BLOCK LETTERS) of Section requiring transport MALCOLM MC LAREN

Department (in full) TA/WA

Address RARDE(WA), WALTHAM ABBEY/ ESSEX Phone No 0992 713030 Extn 256

Date items available for collection ✓ 17/8/89 Time 10-30

Pick-up point BUILDING A203

(CONTACT: V P BROWN / M. MC LAIR)

To proceed to ROYAL ARMOURIES, TOWER OF LONDON  
LONDON EC3N 4AB (CONTACT: TIM HENBREY)

Date delivery required by ✓ 17/8/89 Time 10-30

DESCRIPTION OF LOAD AND SECURITY CLASSIFICATION IF APPLICABLE

For goods of a hazardous nature (eg inflammable, corrosive etc) state accordingly

(Indicate any special requirements and include details if required to be accompanied by Departmental Representative(s))

Please note goods are two firearms  
1 shotlock micro RAT  
1 percussion micro RAT  
Please advise of any additional security measures that need to be taken

No of Packages	Details and Dimensions of Packages	WEIGHT(GROSS)			
		kg	tons	cwt	lb
2	1 shotlock micro RAT 4'9"				
	1 percussion micro RAT 4'9"				

Date 28.7.89 Signature of Requisitioning Officer M. McLaren Rank SSO  
9-8-89

II AUTHORISATION

Date \_\_\_\_\_ Signature of Transport Dept Authorising Officer \_\_\_\_\_  
Rank \_\_\_\_\_

Memorandum

from

**M McLAREN**

**TA/Hd/RARDE(WA)**

Royal Armament Research  
and Development Establishment

Powdermill Lane  
Waltham Abbey  
Essex, EN9 1AX

Tel: Lea Valley (0992) 713030  
Ext 256  
Ref: RWA/7/10/01

Date: 9 August 1989

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Hd/RARDE(WA)

**FUTURE OF THE WALTHAM ABBEY SPECIAL COLLECTION**

Reference A: Letter, R/KC/CP, dated 7 July 1989, from Kate Carver, Museum Officer, Epping Forest District Museum, Sun Street, Waltham Abbey.  
E10

1. Please see Reference A, attached.

2. Since its receipt I have taken action on the fourth paragraph, resulting in a visit by Kate Carver, Jonathan Foster (a teacher at King Harold School) and Ray Sears (a local enthusiast upon whose photographic collection the School's photographic project is based). I see no problem in offering assistance to either (or both) the School or the Museum by way of advice or loan of negatives or prints for copying and indeed I would advocate it. It would be helpful if the Museum could have a copy of my historical collection catalogue to identify the material of interest. May I have your approval, please, for its issue?

3. The first two paragraphs of Reference A encompass a far broader policy matter on which I was intending to write to you at length at a later date with detailed proposals. Briefly, however, my collection comprises material in four main areas:

(i) Public Records - original site-produced material which does not exist elsewhere, eg MOD Archives or Public Record Office. Early site maps and building/structure drawings are examples of these which have been seen in a recent visit by a member of the PRO staff and earmarked for transfer to the PRO.

(ii) Technical Records - a collection, albeit mainly of duplicated material, which is of national importance insofar that nowhere else has the material been brought together. Descriptions of the site's activities, manufacturing processes and research work come into this category.

/JEG

III

Reg d No <u>VKP 667X</u>
Make and type of vehicle <u>Ford MINIBUS.</u>

Time	Speedo Rdg	Jo o
Finish		Serial No
Start		Month
Difference		

IV INSTRUCTIONS TO DRIVER (Not valid unless signed by MT Officer)

Name of Driver Mr J. ABBOTT  
 Pick-up load and proceed by most direct route, as overleaf.

Special Instructions including routing where necessary (if any) \_\_\_\_\_

These instructions must NOT be exceeded without reference to me.

Date \_\_\_\_\_ Signature of MT Officer \_\_\_\_\_

V LOG SHEET (to be completed by Driver)

Date	Time Left	Place and Address		Time Arrived	Miles
		From	To		

VI RECEIPT - TO BE SIGNED BY RECEIVER OF GOODS

I certify that the goods as detailed overleaf have been received.

Date \_\_\_\_\_ Time \_\_\_\_\_ Signature \_\_\_\_\_ Dept \_\_\_\_\_

VII PETROL AND OIL DRAWN

Date	Where drawn	Petrol (galls)	Oil (pints)	Voucher Nos

VIII POSTED BY: \_\_\_\_\_ DATE \_\_\_\_\_ IX SCRUTINISED: \_\_\_\_\_ Signature of Driver \_\_\_\_\_



# ROYAL ORDNANCE

Defence systems. sub-systems and components

12

Major J A Robins, MBIM, M Inst TA, AFPWI  
Museum of Army Transport  
Flemingate  
BEVERLEY  
North Humberside  
HU17 ONG

Royal Ordnance pl

Waltham Abbey  
Sewardstone Road  
Waltham Abbey  
Essex  
EN9 1AY  
England  
Telephone 0992 7130  
Telex 267455  
Fax 0992 713030 Ext

27 July 1989

Dear Major Robins

RE: 002/2/JAR/WS - DATED 17 JULY 1989

Thank you for your letter of the 17 July 1989 concerning cordite paste wagons, which has been passed to me for reply. I am sorry to report that nothing of the kind remains on the South Site at Waltham Abbey which Royal Ordnance now owns. The site will close at the end of the year and we have property developers breathing down our necks.

On the North Site (retained by RARDE - MoD) there is one remaining cordite paste wagon on display outside the library. This is quite literally under the conservational eye of Mr Malcolm McLaren who has made a lifetime study of the history of the Waltham Abbey site going back to the earliest days of gun powder manufacture.

He is extremely knowledgeable and has an extensive collection of artefacts, documents and photographs. I suggest that you contact him - ext 256/233 on above exchange. I have mentioned your letter to him.

If I can help you further, please let me know.

Yours sincerely

*Chris Evans*

C C EVANS  
General Factotum/Historic Items  
Project Closure Team

Copies: Dr D G Tisley SOM/WA  
Mr M McLaren RARDE

A British Aerospace Company

(iii) Parochial Records - material with a basically Waltham Abbey only interest, including site records, ownership records, press cuttings, local photographs, group photographs of workers and social aspects of work.

(iv) Artefacts and Display Items - these range from actual processing equipment (NG burette, guncotton drying rack), craft implements (leatherworkers' and blacksmiths' tools) to the original Council road sign for Powdermill Lane.

4. It is clear that the PRO should take the Public Records after such copying action as may be thought necessary to augment the collection in the other areas or as required for site decontamination studies.

5. The Technical Records lend themselves to a technically/scientific-minded "student" rather than to the casual Waltham Abbey Museum visitor who would not really be interested in reading Sir Robert Robertson's own copy of his DSc thesis. I would suggest that a home at Fort Halstead might be found for these providing that there is a safeguard to prevent their destruction during a future space squeezing exercise. (Would that I could use Samuel Pepys' stratagem to safeguard his collection!)

6. The Parochial Records should, in my opinion, stay at Waltham Abbey in the custody of a responsible organisation with a secure future, such as the Epping Forest District Museum.

7. The Artefacts present a problem insofar as they are the bread and butter of a museum display and that I have not been able to collect two of everything. Those supporting the Parochial Records could be separated and presented, possibly, to the Epping Forest District Museum. Maybe I am being a little naive about the ease of passing Government property to a local Council organisation but I am convinced that, had I not built up the collection, most, if not all of it, would have gone to the scrapheap.

8. Kate Carver is aware that her letter requires more than an "off the cuff" response. I shall await your comments before replying to her.

9. One related, but distinctly separate matter, is that I have been approached by the Essex County Archivist with a request for a copy of the Historical Collection catalogue. May this issue, also, be approved, please?

*Mike Lane*

# MUSEUM of ARMY TRANSPORT



Flemingate, Beverley, North Humberside HU17 0NG Tel. 0482-860445

From: Major J A Robins, MBIM, M Inst TA, AFPWI

Our Ref: 002/2/JAR/WS

The Director  
Royal Ordnance Factory plc  
Waltham Cross  
Herts

11  
17 July 1989

Dear Sir

I am the Railway Consultant at this museum whose status is "in association with the National Army Museum". I enclose a Museum Leaflet to establish my bona fides.

I understand that the site at Waltham Cross may be developed in the nearish future and also that you may have some items on display keeping alive memories of the railway network which used to serve factory. Amongst these, my informant said, that you still have an 18" guage Cordite Paste wagon which might well be of interest to us and for which we could provide a good home.

I should certainly be interested in any details you can afford the time to send so that I may discuss the matter with my Director.

Yours faithfully

*J. A. Robins*

Enc: Museum Leaflet

Council of Management:

2 members nominated by The East Yorkshire Borough of Beverley Borough Council  
3 members nominated by the Committee of Management of the Institution of the Royal Corps of Transport  
and elected members.

A Company Limited by guarantee Registration Number 1702044 Registered Office as above  
Charity Registration Number 512692 UATD 11/81 N 000 1476 55



# Epping Forest District Council

District Recreation Department  
J.W. Burgess, M.L.L.A.M. D.L.C. (HONS)

25 Hemnall Street,  
EPPING, ESSEX.  
CM16 4LX

Telephone : ~~560000~~  
Museum: Lea Valley 716882

If telephoning please ask for.....Kate Carver..... Ext 10

Mr. M. McLaren  
Head of Management Services/Archivist  
R.A.R.D.E.  
Powdermill Lane  
Waltham Abbey  
Essex EN9 1EU

Your Ref:  
Our Ref: R/KC/CP  
Date: 7th July 1989

Dear Mac,

I know that the future of the North Site is to some extent still uncertain, lately however I have heard conflicting rumours that despite earlier plans, R.A.R.D.E. North Site is now unlikely to close in June 1990. I fully appreciate that you may be unable to either confirm or deny these rumours. The purpose of this letter however is to ask you, bearing in mind the possibility of imminent closure, what are your plans for the future of the objects, documents and photographs associated with the North Site Museum?

Naturally, the Epping Forest District Museum would be delighted to offer a permanent home to this collection, thus keeping it in the area to which it refers rather than to see it dispersed to another M.O.D. site which I understand may be a possibility. I would be most interested to receive any comments you feel you are able to offer on this matter.

May I also mention another related matter? King Harold School in Waltham Abbey are planning to perform a community play in Waltham Abbey sometime in 1990 or 1991. I gather that the subject of the play is to be the history of the Powder Mills.

The school is anxious to find any photographic evidence of activities on the site to help authenticate the play. I have been told that an extensive photographic archive does exist and that it is kept at R.A.R.D.E. I would be fascinated to see it. Would it also be possible for teachers from King Harold School to see it?

I hope that you are keeping well.

With best wishes,

Yours sincerely,

Kate Carver  
Museum Officer



ROYAL  
ARMOURIES

25 May 1989

Our Ref: TH/LM

S S O McLaren  
Ministry of Defence  
RARDE (WA)  
Waltham Abbey  
Essex EN9 1BP

*Dear Sir,*

ROYAL ARMOURIES LOAN NUMBER 196

I have a note in your loan file that you wish to return the two muskets comprising the above loan. I wonder if you would be good enough to let us know when you propose to deliver them. I have enclosed our instructions for the return of loan material for your reference.

Thank you for your help in this matter.

*Yours faithfully,*

*Jim Hembrey.*

TIM HEMBREY  
Assistant Loans Officer

*Extension 315  
V.P.B.*

INSTRUCTIONS FOR THE RETURN OF LOAN ITEMS TO THE TOWER

Loan material may be returned any weekday between 0930 hours and 1600 hours. We need the following information at least one week before the date of return:

Date and time of return

Delivery vehicle registration number

Driver's name and the name of any passengers.

All items should be well wrapped and secured to prevent damage during transit (see terms three and four of the loan agreement).



MS 841

Procurement Executive, Ministry of Defence

ROYAL ARMAMENT RESEARCH AND  
DEVELOPMENT ESTABLISHMENT

Powdermill Lane, Waltham Abbey, Essex EN9 1AX

Telex: 25310 Telephone: Lea Valley 713030 ext: 256

Mr T Henbrey  
Assistant Loans Officer  
Royal Armouries  
HM Tower of London  
EC3N 4AB

17 March 1989

Your ref: TH/JS

Our ref: RWA/7/10/01

Dear Mr Henbrey

**INSPECTION OF ROYAL ARMOURIES MATERIAL  
ACQUISITION LOAN NUMBER 186**

Thank you for your letter of 15 March concerning the inspection of the above loan material.

As part of the overall plan for the Establishment to withdraw from its Waltham Abbey site in 1990 my museum display has been confined to a smaller area than before and the two Royal Armouries loan items, 1 flintlock musket and 1 percussion musket, are no longer on display. Accordingly, arrangements were about to be made to return the muskets.

In view of this would you please let me know whether you wish to proceed with your inspection on 4 April or to await their return to you.

Yours sincerely

M McLaren  
TA/Hd/RARDE(WA)



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ROYAL  
ARMOURIES

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15 March 1989

Our Ref: TH/JS

Ministry of Defence  
RARDE (WA)  
Waltham Abbey  
Essex  
EN9 1BP

*Dear Sir,*

INSPECTION OF ROYAL ARMOURIES MATERIAL  
ACQUISITION LOAN NUMBER 196

As part of a programme of five yearly loan inspections, we would like to send members of our staff to inspect all the material which you have on loan from the Royal Armouries.

The proposed date and time for the inspection is Tuesday 4 April, in the afternoon.

The inspecting officers will be Mr David Blackmore and myself.

Could you please confirm that this will be convenient, and give us instructions on how we get to your institution by public transport. Once this has been done, a more precise time of our visit can be arranged.

*Yours faithfully,  
Tim Hembrey*

TIM HEMBREY  
Assistant Loans Officer





**ROYAL  
ARMOURIES**

ANNUAL CHECK OF ROYAL ARMOURIES LOAN NO. 196

Please check all items which you hold on loan from the Royal Armouries against the enclosed inventory list.

If all is in order sign below, sign and date the inventory list and return both to the Royal Armouries Loans Officer within fourteen days.

You are also advised to take into account any increase in the insurance values, and increase your insurance or indemnity cover as appropriate.

Please note that the Royal Armouries Loan Terms are currently being revised and that new loan agreements will be issued shortly.

D J BLACKMORE  
Loans Officer

This is to certify that all <sup>2</sup> items on the attached inventory list have been checked and that they are being kept in accordance with the current Royal Armouries Loan Terms listed over

Signature ..... *M. McLaren* .....

Name (Caps) M. McLAREN .....

Rank SSO .....

Organisation RARDE .....

Date 19.8.88  
POWDERMILL LANE  
WALTHAM ABBEY  
ESSEX EN9 1AX

AMRABK



LOAN: 196

INVENTORY OF ITEMS ON LOAN TO:

Ministry of Defence  
RARDE (WA)  
WALTHAM ABBEY  
Essex EN9 1BP

Insurance Values

- 1 Flintlock musket
- 1 Percussion musket

	19 86	19 88	19	19
£				
Each				
425		450		
365		375		

Total N<sup>o</sup> of items 2

Total Value of items

@ 1988

£ 825

## ROYAL ARMOURIES LOAN TERMS

Loans of items from the Armouries are made subject to the following conditions. In these conditions, the term bailor means the Master of the Armouries, his deputy or any person for the time being duly authorised to act on his behalf, and the term bailee means the person or body to whom the loan is made.

1. The bailee is to maintain the items loaned in good condition at his own expense.
2. The bailee must take all reasonable precautions to protect the items loaned from loss or damage.
3. The bailee must insure in favour of the bailor the items loaned against any loss or damage, however caused, at valuations from time to time specified by the bailor. Such insurance is to include coverage of loss or damage during collection and return of the items and during transit. The bailee shall produce suitable evidence of insurance cover to the bailor before collection of the loan and thereafter within 14 days of a request to do so.
4. The collection and return of the items loaned is the responsibility of the bailee, and he must provide himself with suitable transport and packing.
5. Items on loan must be displayed in secure, locked cases in places regularly patrolled by warding staff, save for large cannon and large mortars which may be displayed as convenient provided adequate measures are taken for their protection.
6. Loss or damage of items on loan must be reported immediately to the bailor and no restoration or repair of items may be undertaken without the consent in writing of the bailor.
7. The bailor shall have access to the items on loan for the purposes of inspection at all reasonable times.
8. The bailee shall not part with possession of any of the items loaned without the prior consent in writing of the bailor.
9. Items on loan must not be removed to any place other than that for which the loan has been made without the prior consent in writing of the bailor.
10. Acknowledgement to the Armouries, HM Tower of London, must be made on descriptive labels and in any publication relating to items loaned.
11. The bailor may terminate the loan at any time by notice in writing. The bailee must in such a case return the items in accordance with paragraphs 3 and 4 above.
12. Special conditions relating to this loan .



Procurement Executive, Ministry of Defence  
ROYAL ARMAMENT RESEARCH AND  
DEVELOPMENT ESTABLISHMENT  
Powdermill Lane Waltham Abbey, Essex EN9 1AX  
Telex: 25310 Telephone: Lea Valley 713030 ext:

Mrs J Bellamy  
The Lodge  
Powdermill Lane  
Waltham Abbey  
Essex EN9 1BN

Your ref:  
Our ref: MS 841  
Date: 25 Sept 1987

Dear Mrs Bellamy

**GUNPOWDER BARREL AND OTHER HISTORICAL ITEMS**

During our recent Open Day we spoke briefly about these items which you kindly suggested might be placed in the Establishment's Historical Collection at Waltham Abbey.

I wonder if I may come to see to see you to discuss this further. I shall be away from the Establishment on 2, 5, 6 and 7 October and I have a meeting here on 9 October but otherwise my diary is clear for the next three weeks.

If next week is convenient perhaps you could telephone, please; my extension is 256.

Yours sincerely

M McLaren  
TA/Hd/RARDE(WA)

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ROYAL  
ARMOURIES

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TO WHOM IT MAY CONCERN

We are circulating the colour poster accompanying this letter to all establishments, museums and art galleries who are currently in receipt of loan items from the Royal Armouries. Its prominent display is of prime importance to our plans to launch a new look for our museum and thereby increase public awareness of Britain's oldest historic collection of arms and armour.

As you may have read in the national press, the Armouries entered its new status as a Trustee museum from 1st April 1984. Then on 1st October this year we announced that Her Majesty the Queen had graciously permitted the Armouries to be re-entitled Royal Armouries.

The poster is intended to increase public awareness of our new status and title, and to advertise the importance and quality of the collections in our care. Your co-operation in this venture is greatly appreciated, and we suggest you select a site for the poster which is either in close proximity to the loan material or in a position where it is conspicuous to the visiting public or may command the attention of whosoever frequents the premises.

*Sarah C. Bevan*

DR SARAH C BEVAN  
Keeper of Edged Weapons  
and Loans Officer



LOAN: 196

INVENTORY OF ITEMS ON LOAN TO:

Ministry of Defence  
RARDE (WA)  
WALTHAM ABBEY  
Essex EN9 1BP

Insurance Values

- 1 Flintlock musket
- 1 Percussion musket

	19 86	19	19	19
£				
Each				
425				
365				



ROYAL  
ARMOURIES

ANNUAL CHECK OF ROYAL ARMOURIES LOANS

Please would you check all items which you hold on loan from the Royal Armouries against the enclosed inventory list.

If all is in order sign below and return together with the inventory list to the Royal Armouries Loans Secretary within fourteen days.

You are also advised to take into account the increase in insurance values for which your indemnity will have to be increased.

Yours Sincerely

*Peter-tomas Gray*  
Peter-tomas Gray  
Loans Secretary

This is to certify that all items on the attached inventory list have been checked and that they are being kept in accordance with the Royal Armouries Loans Terms.

Signed *M. McLaren*

MANAGEMENT SERVICES  
RARDE  
POWDERMILL LANE  
WALTHAM ABBEY  
ESSEX EN9 1AX

Name (Caps) ... M. McLAREN

Rank ... S S O

Date ... 19. 6. 86