Buildings L174-199



#### THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY NUMBER **OLD SERIES** RCHME NUMBER N.G.R. L175 37615 01692 NAME/FUNCTION START DATE **END DATE** Firing Control Burning Ground 1963



## CARTOGRAPHIC DEPICTION

1972 1972 WASC 900/102; L175

1976

WASC 900/104; L175

WASC 900/113; L175

## DOCUMENTARY REFERENCES

ERDE List; Firing Control Burning Ground

1991 Mott McDonald survey

1992

RARDE List; Firing Control Burning Ground

## **PHOTOGRAPHY**

HISTORIC

## **PHOTOGRAPHY**

**RCHME** 

1) 206/F/3 From South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L178

## CONDITION

Good

- CONSTRUCTIONAL MATERIAL 1) Breeze Block
- ROOF MATERIALS AND STRUCTURE 2) Flat Concrete slab
- **POWER SOURCE** 3) Electricity
- DIMENSIONS i) L 3.7 ii) W 2.73 iii) HT 2.2 4)
- This single storey building is rectangular in plan. It has a single door on the eastern elevation and armoured 5) windows on the north and west elevations. The south elevation is featureless.

NUMBER

OLD SERIES

RCHME NUMBER

N.G.R.

L176

204

TL 37734 01024

NAME/FUNCTION

**Boiler House** 

Store EFDC/Riggers Shop

START DATE

1857

1958

END DATE 1958







## CARTOGRAPHIC DEPICTION

1861-1868 WASC 900/10A; 73

1865 WASC 900/13; Boiler House 1865 WASC 900/14; Boiler House

1865 WASC 900/38 + SUPP5 975 ; Boiler House

1865 WASC 900/41A; Boiler House

1865 WASC 900/42

1897 WASC 900/53C

c1910 WASC 900/65; Boiler House c1910 WASC 900/79; Boiler House

1917 WASC 900/70 ; Group A Boiler House

1917 WASC 900/72; 204 1919 WASC 900/74; 204

c1920 WASC 900/80; 204

1923 WASC 900/84; 204

>1940 WASC 900/91A; L176 1954 A - B.34; L176

c1960 WASC 900/94 ; L176

c1963 WASC 900/97; L176 1972 WASC 900/102; L176

1972 WASC 900/104; L176 1976 WASC 900/113; L176

## DOCUMENTARY REFERENCES

Plans;

L176 B01,B02; Plans and Elevations 1902 to 1958

1908 RGPF Ledger WASC 1509 + WASC 1764;

**Boiler House** 

c1925 RGPF Ledger WASC 1680 ; Boiler House c1945 RGPF Ledger WASC 1508 ; Boiler House

1972 ERDE List; Store EFDC/Riggers Shop

1991 Mott McDonald survey

1992 RARDE List; Store EFDC/Riggers Shop

1992 FBRC; Storage

1993 RCHME NBR No.91452

#### PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY

## **RCHME**

- 1) 206/J/16 From South West 206/J/19 North wall from North 206/R/19 From South West
- BB92/26143 Interior of Boiler house from North BB92/26079 From North West
- 225/B/22 Interior 225/B/23 Interior 225/B/24 Exterior

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L168, L169, L170a ABUTTED BY: L177

CONDITION

Good

DESCRIPTION
-------------

- 1) CONSTRUCTIONAL MATERIAL Brick
- 2) ROOF MATERIALS AND STRUCTURE Slate over Timber Roof Frame
- 3) POWER SOURCE Formerly Steam, Electricity
- 4) DIMENSIONS i) L 17.6 ii) W 11.0 iii) HT 6.0
- 5) See attached RCHME Threatened Buildings Section report.

## ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

MOD Building No. L176 Boiler House The Royal Gunpowder Factory Waltham Abbey Essex

NBR No: 91452

NGR: TL 37734 01024

Built in c1857 as a Boiler House, this building is single-storeyed with a rectangular plan and is constructed of yellow brick laid in English bond. Originally it had a brick chimney attached at its north side.

In 1902 a Dynamo House was added at the centre of the east elevation. In 1903 a Smith's Shop was built in the re-entrant angle on the south side of the Dynamo House, against the east wall of the Boiler House. The latter addition has since been demolished.

-00000-

NUMBER	OLD SERIES	RCHME NUMBER	N.G.R.
L177	205		TL 37734 01024
NAME/FUNCTION Switch Board Hou Battery Charge Ho		START DATE 1902 1945?	END DATE 1945?



CARTO	CARTOGRAPHIC DEPICTION		MENTARY REFERENCES
c1910 c1910 1917 1917 1919 c1920 1923 > 1940	WASC 900/65; Switch Board House WASC 900/79; Switch Board House WASC 900/70 WASC 900/72; 205 WASC 900/74 WASC 900/80; 205 WASC 900/84; 205 WASC 900/91A; L177	Plan; L177 1908 c1925 c1945	B01 - 7/3/1902; Dynamo House  RGPF Ledger WASC 1509 + WASC 1764; Switch Board House RGPF Ledger WASC 1680; Switch Board House RGPF Ledger WASC 1508; Switch Board
1954 c1960 c1963 1972 1972 1976	A - B.34; L177 WASC 900/94; L177 WASC 900/97; L177 WASC 900/102; L177 WASC 900/104; L177 WASC 900/113; L177	1972 1991 1992	House  ERDE List; Paint Spraying/Barttery Charging Mott McDonald survey RARDE List; Battery Charging House

**PHOTOGRAPHY** HISTORIC

PHOTOGRAPHY **RCHME** 

- 1) 206/J/20 From North 3) 225/B/30 Exterior

RELATIONSHIPS WITH OTHER MONUMENTS

ABUTTS:L176

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick
- 2) ROOF MATERIALS AND STRUCTURE Slate over timber boards supported purlins on Iron frames with glass roof lights.
- 3) POWER SOURCE Steam, Electricity
- 4) DIMENSIONS i) L 8.1 ii) W 5.2 iii) HT 6.0
- 5) A date stone on the north elevation reads '1902-3'. The building is a single storey and has a rectangular plan, the roof is a single gable. The building has two windows on the east elevation and two windows and a double door on the northern elevation.

See attached RCHME Threatened Buildings Section report

NUMBER **OLD SERIES** RCHME NUMBER L178 TL 37625 01691 NAME/FUNCTION START DATE END DATE **Burning Ground Solvent Store** 1963?



## CARTOGRAPHIC DEPICTION

WASC 900/102; L178

1972 1976

1972

WASC 900/113; L178

WASC 900/104; L178

## DOCUMENTARY REFERENCES

1972

ERDE List; Burning Ground Solvent Store

1991 Mott McDonald survey

RARDE List; Burning Ground Solvent Store 1992

## **PHOTOGRAPHY**

HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/F/2 From South

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L176

## CONDITION

Good

- 1) CONSTRUCTIONAL MATERIAL Brick
- ROOF MATERIALS AND STRUCTURE 2) Corrugated Asbestos over wooden frame
- DIMENSIONS i) L 2.45 ii) W 1.85 iii) HT 2.65 4)
- The building is isngle storeted with a rectangular ground plan, it has gabled ends to the north and south. On the 5) southern elevation is a single metal grill door.

NUMBER

**OLD SERIES** 

RCHME NUMBER

N.G.R.

L179

NAME/FUNCTION

Store

START DATE 196?

**END DATE** 

TL 37672 01458



## CARTOGRAPHIC DEPICTION

c1960

WASC 900/94; L179

c1963 1972

WASC 900/97; L179 WASC 900/102; L179

1972

WASC 900/104; L179

1976

WASC 900/113; L179

## **DOCUMENTARY REFERENCES**

Plan;

L179

B02 - no date; Building to Convert to Acid

Store

1972

ERDE List; Blacksmith Shop

1991 1992

Mott McDonald survey RARDE List; Blacksmiths Shop

**PHOTOGRAPHY** 

HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/D/36 From East

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L134

#### CONDITION

Good

- CONSTRUCTIONAL MATERIAL 1) Corrugated Iron and Fibre Glass
- 2) ROOF MATERIALS AND STRUCTURE Corrugated Iron
- 3) POWER SOURCE Electricity
- DIMENSIONS i) L 3.65 ii) W 3.6 iii) HT 2.3 4)
- The building is single storeyed with arectangular ground plan. It is constructed on a timber frame covered by 5) corrugated iron and asbestos. There is a single wooden door on the east side.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER L180	OLD SERIES 208	RCHME NUMBER	N.G.R. TL 37770 01038	
NAME/FUNCTION Pipe Fitters Shop & Store Paint Spraying/Welding Shop		START DATE 1902 194?	END DATE 194?	

## NO PHOTOGRAPHY AVAILABLE

CARTOGRAPHIC DEPICTION		DOCU	MENTARY REFERENCES		
c1910 c1910 1917 1917 1919 c1920 1923 > 1940 1954 c1960 c1963 1972 1972	WASC 900/65; Pipe Fitters Shop & Store WASC 900/79; Pipe Fitters Shop & Store WASC 900/70; Pipe Fitters Shop & Store WASC 900/72; 208 WASC 900/74; 208 WASC 900/84; 208 WASC 900/84; 208 WASC 900/91A; L180 A - B.34; ; L180 WASC 900/97; L180 WASC 900/97; L180 WASC 900/104; L180 WASC 900/104; L180 WASC 900/104; L180 WASC 900/104; L180 WASC 900/113; L180	Plan; L180 1908 c1925 c1945 1972 1991 1992	B01 - 18/10/1904; Painter shop  RGPF Ledger WASC 1509 + WASC 1764; Pipe Fitters Shop & Store RGPF Ledger WASC 1680; Pipe Fitters Shop & Store RGPF Ledger WASC 1508; Pipe Fitters Shop & Store  ERDE List; Paint Spraying and Welding Shop Mott McDonald survey RARDE List; Paint Spraying and Welding Shop		
PHOTOGRAPHY HISTORIC		PHOTO RCHM	OGRAPHY E		
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH:					
CONDIT	CONDITION Fair				

- 1) CONSTRUCTIONAL MATERIAL Brick
- ROOF MATERIALS AND STRUCTURE Slate over boards supported on timber purlins.
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 10.10 ii) W 10.0 iii) HT 6.0
- 5) The building is single storeyed with a rectangular ground plans, it has gabled ends to the east and west. The northern elevation has two single doors, the southern elevation has single door in the west side is a modern double door. The west and east elevations each have three windows. Internally the building is divided into two rooms.

NUMBER

OLD SERIES

RCHME NUMBER

N.G.R. TL 37757 01029

L181

NAME/FUNCTION

Sub Station

START DATE 1941?

END DATE





## CARTOGRAPHIC DEPICTION

c1960

WASC 900/94 ; L181 WASC 900/97 ; L181

c1963

WASC 900/102; L181

1972 1972

WASC 900/104; L181

1976

WASC 900/113; L181

Plans: L181

B01 - B07; Plans and Elevations 1941 to 1986

1972

ERDE List; Sub Station

DOCUMENTARY REFERENCES

1991 1992

Mott McDonald survey RARDE List; Sub Station

**PHOTOGRAPHY** 

HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/R/34 From East

RELATIONSHIPS WITH OTHER MONUMENTS

Part OF: L182

CONDITION Fair

DESCRIPTION

5) **SEE L182** 

NUMBER L182

RCHME NUMBER
N.G.R.
TL 37770 01038

NAME/FUNCTION
Mess Room

START DATE
1942?

END DATE



#### CARTOGRAPHIC DEPICTION

1954 A - B.34; L182 c1960 WASC 900/94; L182 c1963 WASC 900/97; L182 1972 WASC 900/102; L182 1972 WASC 900/104; L182 1976 WASC 900/113; L182

#### **DOCUMENTARY REFERENCES**

Plans;

L182 B01,B02; Plans and Elevations 1942

1972 ERDE List; BWD
1991 Mott McDonald survey
1992 RARDE List; Mess Room

#### PHOTOGRAPHY HISTORIC

PHOTOGRAPHY

**RCHME** 

1) 206/J/22 From South West 206/P/15 From West

## RELATIONSHIPS WITH OTHER MONUMENTS

CONSISTS OF: L181

## CONDITION

Fair

- 1) CONSTRUCTIONAL MATERIAL Brick
- 2) ROOF MATERIALS AND STRUCTURE Flat concrete slab
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 32.5 ii) W 4.7 iii) HT 3.9
- 5) The building is a single storey with a rectangular ground plan. traces of wavy camouflage paint may be discerned on the exterior of the building. Attached to the east end of the building is L181 the west end was used as a gas bottle store.

NUMBER L183

**OLD SERIES** 

RCHME NUMBER

N.G.R. TL 37760 01112

NAME/FUNCTION

Solvent Store

START DATE 1971?

END DATE



CARTOGRAPHIC DEPICTION

1976

WASC 900/113; L183

DOCUMENTARY REFERENCES

Plan;

L183

B01 - 20/11/1971; Solvent Store

1991

Mott McDonald survey

1992

RARDE List; Solvent Store

**PHOTOGRAPHY** 

HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/J/9 Floor slab from south

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION

Demolished

- CONSTRUCTIONAL MATERIAL 1)
- 3) **POWER SOURCE** Electricity
- DIMENSIONS i) L 11.3 ii) W 7.7 4)
- 5) The building rectangular in plan, was demolished in 1992 a concrete floor slab remains.

NUMBER L185 **OLD SERIES** 

RCHME NUMBER

V.G.R.

TL 37600 01334

NAME/FUNCTION

Green Hut /Sport & Social Club /Laboratory

START DATE

1962?

END DATE



## CARTOGRAPHIC DEPICTION

c1960 c1963 WASC 900/94; L185 WASC 900/97; L185

1972

WASC 900/102; L185 WASC 900/104; L185

1972 1976

WASC 900/104; L185 WASC 900/113; L185

Plans; L185

B01 - B03; Plans and Elevations 1949 to 1954

1972

ERDE List; Green Hut/Sports and Social

Club/Laboratory

**DOCUMENTARY REFERENCES** 

1991 1992 Mott McDonald survey

RARDE List; Green Hut/Sports and Social

Club/Laboratory

## **PHOTOGRAPHY**

HISTORIC

WASC 1453 Main Lab from rear

## PHOTOGRAPHY

**RCHME** 

1) 206/F/30 From South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

## CONDITION

Fair

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL
  - Timber frame and Boards
- 2) ROOF MATERIALS AND STRUCTURE

Corrugated Asbestos over timber boards supported by a King post truss with braces.

- 3) POWER SOURCE
  - Steam Electricity
- 4) DIMENSIONS i) L 14.8 ii) W 5.97 iii) HT 4.6
- The building is a single storey, rectangular in plan, with gabled ends to the north and south. It is timber framed and covered by timber boards. On the east elevation are two double and one single windows, to the south is a single window, the west has three double windows a single door and a double door.

NUMBER L186

OLD SERIES

RCHME NUMBER

N.G.R. TL37620 01345

NAME/FUNCTION

Locker Magazine

START DATE 1950

END DATE



## CARTOGRAPHIC DEPICTION

A - B.34; L186

1954 c1960 c1963

WASC 900/94; L186 WASC 900/97; L186

1972

WASC 900/102; L186

1972

WASC 900/104; L186

1976

WASC 900/113; L186

## DOCUMENTARY REFERENCES

1972

ERDE List; Locker Magazine

1991

Mott McDonald survey

1992

RARDE List; Locker Magazine

## **PHOTOGRAPHY**

HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/F/31 From South West

#### RELATIONSHIPS WITH OTHER MONUMENTS

## ASSOCIATED WITH:

## CONDITION

- CONSTRUCTIONAL MATERIAL 1) Brick
- 2) ROOF MATERIALS AND STRUCTURE Corrugated Asbestos over timber
- 3) **POWER SOURCE** Electricity
- 4) DIMENSIONS i) L 13.4 ii) W 2.6 iii) HT 2.9
- 5) The locker magazine is a single storey building, rectangular in plan with gabled ends north and south. There are two doors on the west elevation. Within the building are six explosive lockers on the west side. it is thought that the magazine was last used in 1982. The building is earthed by a copper strip attached to the walls.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY					
NUMBER L187	OLD SERIES	RCHME NUMBER	N.G.R. TL 37738 01197		
NAME/FUNCTION Locker Magazine		START DATE 1950	END DATE 1982?		
NO PHOTOGRAPHY AVAILABLE					
CARTOGRAPHIC DE  1954 A - B.34; L c1960 WASC 900/ c1963 WASC 900/ 1972 WASC 900/ 1972 WASC 900/ 1976 WASC 900/	.187 /94 ; L187 /97 ; L187 /102 ; L187 /104 ; L187	DOCUMENTARY REFEREN  1972 ERDE List; Locker 1991 Mott McDonald sun 1992 RARDE List; Locker	Magazine vey		
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS L157, L156, L158, L174					
CONDITION Demolished					
DESCRIPTION  1) CONSTRUC  Brick	TIONAL MATERIAL				
4) DIMENSIONS i) L 11.5 ii) W 3.0					
5) Building demolished concrete slab remains.					

NUMBER L188

**OLD SERIES** 

RCHME NUMBER

N.G.R. TL 37750 01327

NAME/FUNCTION

Locker Magazine

START DATE 1950

END DATE



#### CARTOGRAPHIC DEPICTION

A - B.34; L188

1954 c1960 c1963

WASC 900/94; L188 WASC 900/97; L188

1972

WASC 900/102; L188 WASC 900/104; L188

1972 1976

WASC 900/113; L188

## DOCUMENTARY REFERENCES

1972

ERDE List; Locker Magazine

1991

Mott McDonald survey

1992

RARDE List; Locker Magazine

## **PHOTOGRAPHY** HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/G/34 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L192, L149?

## CONDITION

Good

- CONSTRUCTIONAL MATERIAL 1) Brick in English bond
- ROOF MATERIALS AND STRUCTURE 2) Corrugated Asbestos
- **POWER SOURCE** 3) Steam Electricity
- 4) DIMENSIONS i) L 13.45 ii) W 2.6 iii) HT Gable 2.9
- The building is single storeyed with arectangular ground plan and gabled ends north and south. It has has two red 5) doors on the south elevation. Internally are six metal lockers numbered '21-26', the temperature within the building was maintained by steam and electric heating. On the exterior a lightning conductor is connected to an earth point.

NUMBER L189 **OLD SERIES** 

RCHME NUMBER

N.G.R. TL 37655 01550

NAME/FUNCTION Proof Stand

START DATE **1953-4** 

END DATE 198?



#### CARTOGRAPHIC DEPICTION

1954

A - B.34; L189

c1960

WASC 900/94; L189

c1963

WASC 900/97; L189

1972

WASC 900/102; L189 WASC 900/104; L189

1972 1976

WASC 900/113; L189

## DOCUMENTARY REFERENCES

Plans;

L189

B01 - B38 ; Plans and ELevations 1954 to 1976

1972

ERDE List; Sensitivity

1991 Mott McDonald survey

1992

RARDE List; Proof Stand

## PHOTOGRAPHY

HISTORIC

WASC 1795/1-4 Firing point & damage to roof vents 5-

Aug-1955

## PHOTOGRAPHY RCHME

- 1) 206/B/35 Firing point from South 206/L/11 From North West
- BB92/26131 firing point from East BB92/26132 Interior firing point from South East BB92/26133 Observation chamber West of Firing point from South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L195, L199

CONDITION

Fair

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL
  - Breeze blocks, concrete, steel piles, armour plate, earth
- 2) ROOF MATERIALS AND STRUCTURE
  - Concrete, armour plate
- 3) POWER SOURCE
  - Electricity
- 5) The proof stand comprises of a number of separate features grouped around a central firing point enclosed within an earthwork traverse.

Separated from the proof stand to the west is a single storey building with a square ground plan 3.66m x 3.66m, 2.7m in height constructed in concrete. This building was entered through a single steel door on the west side. Within the rrom a sign reads 'L189 Firing Point Charge limit 5lbs Torpex'. The interior has largely been stripped out although a few wires and gauges remain.

Opposite to this building is the entrance to a chamber built into the earthen mound adjacent to the firing chamber. Within the west wall is an armoured glass window and below a small hole through which a control wire could pass. Although the room has largely been stripped out a few gauages and eletrical fittings remain. There is a similar chmaber on the west side that was used for the taking of photographs of experiments within the chamber. This chamber has an armoured glass window on its east side and a small hole for a control wire. Within the chamber is a teak topped bench and locker.

The central chamber is entered along a staggered passage way lined with steel piles from the north. The firing chamber is constructed from steel girders and is lined with armoured plates, the roof is also of armoured plate. It is rectangular in plan 5.45m x 4.5m. The plates within the chamber exhibit many signs of repair. To the east and west small control wire holes lead to the chambers described above, above these holes are removable armoured plated to protect the observation windows.

On the south wall of the firing chamber a steel firing tube, bore 10cm, connects to a small additional room on the south side of the mound. This chamber is roughly built from breeze block and is connected to the mound by wing walls of cement filled sandbags. It is roofed by a scaffold frame covered by tarpaulins. There are blat scars on the breeze block wall south of the exit from the firing tube. Warnings of test firings was given by klaxons on the east side of the mound.

Historic artefacts - gauges, klaxons, electrical objects fittings

NUMBER L190a,b

**OLD SERIES** 

RCHME NUMBER

N.G.R.

TL 37555 01425

NAME/FUNCTION

Climatic Cubicles Cells A & B

START DATE 1951

198?

END DATE



## CARTOGRAPHIC DEPICTION

c1960

WASC 900/94; L190

c1963 1972 WASC 900/97; L190 WASC 900/102; L190

1972

WASC 900/104; L190

1976

WASC 900/104; L190 WASC 900/113; L190

## **DOCUMENTARY REFERENCES**

Plans;

L190

B01 - B08; Plans and Elevations 1951-7

1972

ERDE List; Climatic Cubicles

1991

Mott McDonald survey

1992

RARDE List; Climatic Cubicles

1992

FBRC; Class 1 Explosives

## PHOTOGRAPHY HISTORIC

## **PHOTOGRAPHY**

## **RCHME**

- 1) 206/C/7 From South East 206/C/8 From South East 206/C/9 From South West
- 2) BB92/26203 From South East BB92/26204 From North

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION

Good

## DESCRIPTION

- CONSTRUCTIONAL MATERIAL Brick with reinforced concrete pillars
- 2) ROOF MATERIALS AND STRUCTURE Corrugated Asbestos on concrete rafters
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS See below
- 5) The structure comprises of three separate buildings a central control room and two identical cubicle buildings.

The control room is a single storey building built of brick between the cubicles at their southern end. It is square in plan 4.1m x 4.1m, its height is 2.5m. On the south and north elevations are a single metal framed windows. On the west elevation are two metal framed windows, on the east elevation is a single door and window. An overhead wire insulator attached to the building is dated 1963.

North of the control room are the climatic cubicles separated by a narrow central courtyard. The buildings are a mirror image of one another, only the eastern cubicles L190a are described below. The western cubicles are numbered L190b.

The cubicles are a single storey structure with rectangular ground plan. They have gabled ends to the north and south with a central raised clerestory roof vent. The building has a reinforced concrete prefabricated structure of side pillars and roof supports. The end gable walls and parts of the sides are infilled by brick. Access to the cubicles is along a corridor to either side. The cubicles are brick built, they are numbered 1-8 along the east side and 9-14 along the west side.

The building is protected by a lightning conductor.

NUMBER L191

**OLD SERIES** 

RCHME NUMBER

TL 37640 01348

NAME/FUNCTION

Stability Test Laboratory

START DATE 1949-1952

**END DATE** 



CARTOGR	Δ	PHIC	DEBI	CTION	

c1960 c1963 WASC 900/94; L191 WASC 900/97; L191

1972 1972 1976

WASC 900/102; L191 WASC 900/104; L191

WASC 900/113; L191

## DOCUMENTARY REFERENCES

Plans;

L191

B01 - B13; Plans and Elevations 1949 to 1983

1972

ERDE List; Stability Test Laboratory

Mott McDonald survey 1991

RARDE List; Stability Test Laboratory 1992

1992

FBRC; Ovens and Laboratory for Explosives

## **PHOTOGRAPHY** HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/F/29 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L198

## CONDITION

Good

- CONSTRUCTIONAL MATERIAL 1) **Brick**
- ROOF MATERIALS AND STRUCTURE 2) Flat concrete slab with felt covering
- **POWER SOURCE** 3) Steam Electricity
- 4) DIMENSIONS i) L 11.0 ii) W 6.65 iii) HT 3.3
- The building is single storeyed with a rectangular ground plan. On the east and west elevations are a single door 5) and two metal framed windows and on the north elevation are three metal framed windows. On the south elevation are two single doors and access into a heating maintainance chamber. A lightning conductor is attached to the building.

NUMBER L192	OLD SERIES	RCHME NUMBER	N.G.R. TL 37752 01345
NAME/FUNCTION Locker Magazine		START DATE 1954	END DATE



## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94; L192 c1963 WASC 900/97; L192 WASC 900/102: L193

1972 WASC 900/102; L192 1972 WASC 900/104; L192 1976 WASC 900/113; L192 DOCUMENTARY REFERENCES

Plans;

L192 B01 - B03 ; Plans and Elevations 1954 to 1983

1972 ERDE List ; Locker Magazine 1991 Mott McDonald survey 1992 RARDE List ; Locker Magazine

1992 FBRC; Class 1 Explosives

## PHOTOGRAPHY HISTORIC

PHOTOGRAPHY

**RCHME** 

1) 206/G/33 From South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH L188, L146?

## CONDITION Good

- 1) CONSTRUCTIONAL MATERIAL Brick in English bond
- 2) ROOF MATERIALS AND STRUCTURE Corrugated Asbestos
- 3) POWER SOURCE Steam Electricity
- 4) DIMENSIONS i) L 13.43 ii) W 2.6 iii) HT Gable 2.9
- 5) The locker magazine is a single storey building rectangular in plan with gabled ends west and east. The magazine is entered through two red painted doors on the south elevation. Internally are five metal lockers numbered '7-12', each locker is earthed. A wooden shelf runs along the North wall. The temperature in the magazine was maintained by steam and electric heating.

NUMBER L193

**OLD SERIES** 

RCHME NUMBER

N.G.R. TL 37782 01235

NAME/FUNCTION

Locker Magazine

START DATE 1954

END DATE



#### CARTOGRAPHIC DEPICTION

WASC 900/94; L193

c1963 1972

WASC 900/97; L193 WASC 900/102; L193

1972

WASC 900/104; L193

1976

WASC 900/113; L193

DOCUMENTARY REFERENCES

Plan;

L193

B01 - 24/8/1983; Electrical Heating Layout

1972 1991 ERDE List; Locker Magazine Mott McDonald survey

1992

RARDE List; Locker Magazine

**PHOTOGRAPHY** HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/G/27 From South

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L151, L152

CONDITION

Good

- CONSTRUCTIONAL MATERIAL Brick
- ROOF MATERIALS AND STRUCTURE 2) Corrugated Asbestos
- **POWER SOURCE** 3) Steam Electricity
- DIMENSIONS i) L 8.32 ii) W 2.59 iii) HT 3.0
- The magazine is single storeyed and is rectangular in plan. It has gabled ends north and south. It was entered 5) through two doors on the west side. Internally are three metal explosive lockers numbered '28A-C'. There is a wooden shelf along the east wall and below this heating pipes.

NUMBER L194 **OLD SERIES** 

RCHME NUMBER

N.G.R.

TL 37705 01420

NAME/FUNCTION Locker magazine Chemical Store START DATE 1954

END DATE

198?



## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94 ; L194 c1963 WASC 900/97 ; L194 1972 WASC 900/102 ; L194

1972 1976 WASC 900/104; L194 WASC 900/113; L194

## DOCUMENTARY REFERENCES

1972 ERDE List; Locker Magazine 1991 Mott McDonald survey

1992 RARDE List; Chemical Store

1992 FBRC; Chemical Store

#### PHOTOGRAPHY HISTORIC

PHOTOGRAPHY

**RCHME** 

1) 206/G/37 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L134, L137, L166

## CONDITION

Fair

- 1) CONSTRUCTIONAL MATERIAL Brick
- 2) ROOF MATERIALS AND STRUCTURE Corrugated Asbestos and Translucent Plastic
- 3) POWER SOURCE Steam Electricity
- 4) DIMENSIONS i) L 8.33 ii) W 2.6 iii) HT Gable 2.85
- 5) The building is single storeyed with a rectangular ground plan, it has gabled ends north and south. The magazine was entered through two doors to the west. The conversion of the magazine into a store has entailed the removal of the metal lockers and the insertion of a number of translucent roof panels.

NUMBER L195	OLD SERIES	RCHME NUMBER	N.G.R. TL 37670 01550
NAME/FUNCTION		START DATE	END DATE
Locker Magazine		1955	198?



## CARTOGRAPHIC DEPICTION

WASC 900/94; L195

c1960 c1963

WASC 900/97; L195

1972

WASC 900/102; L195

1972 1976 WASC 900/104; L195 WASC 900/113; L195 **DOCUMENTARY REFERENCES** 

Plan;

L195

B01 - 9/8/1955; New single Locker Magazine

1972 1991

ERDE List; Locker Magazine Mott McDonald survey

1992

RARDE List; Locker Magazine

#### **PHOTOGRAPHY** HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1) 206/B/35 From South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L185

#### **CONDITION Fair**

CONSTRUCTIONAL MATERIAL 1)

Brick

ROOF MATERIALS AND STRUCTURE 2)

To the North Corrugated Plastic, to the South Corrugated Asbestos

POWER SOURCE 3)

Electricity

- DIMENSIONS i) L 4.95 ii) W 3.85 iii) HT 2.7 4)
- 5) The magazine is a single storey building with a rectangular ground plan, it has gabled ends east and west. On the eastern elevation is a double louvred door providing access to the southern room. A door on the north wall provovides access onto the north room a sign on the door reads 'Explosives Locker'.

The magazine served firing point L189.

NUMBER L196	OLD SERIES	RCHME NUMBER	N.G.R. TL 37589 01389
NAME/FUNCTION Acid Store/ Locker Magazine		START DATE 1954	END DATE 198?



## CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES

c1960 WASC 900/94; L196 Plan; c1963 WASC 900/97; L196 L196 B01 - 24/12/1954; Acid Store for Main 1972 WASC 900/102; L196 Laboratory 1972 WASC 900/104; L196 WASC 900/113; L196 1976 1972 ERDE List; Acid Store 1991 Mott McDonald survey

1991 Mott McDonald survey 1992 RARDE List; Locker Magazine

PHOTOGRAPHY
HISTORIC

PHOTOGRAPHY
RCHME
1) 206/C/1 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIAT: WITH: L122

CONDITION Good

- 1) CONSTRUCTIONAL MATERIAL Brick in English bond
- 2) ROOF MATERIALS AND STRUCTURE Concrete slab
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 2.75 ii) W 2.44 iii) HT 2.55
- 5) The magazine is a single storeyed and almost square in plan. It was entered from a single door on the west side, there is a single small window on the north elevation. Internally are concrete shelves the floor is tiled.

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY NUMBER OLD SERIES RCHME NUMBER N.G.R. L197 TL 37833 01186 END DATE NAME/FUNCTION START DATE Store /Air Raid Shelter 1942? 198? **NO PHOTOGRAPHY AVAILABLE** CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES WASC 900/91A; L197 Plan; >1940 B01 - 11/12/47; Pipe Trench & Drainage 1954 A - B.34; L197 L197 WASC 900/94; L197 c1960 c1963 WASC 900/97; L197 1972 ERDE List; Store/Air Raid Shelter semi WASC 900/102; L197 cylindrical 1972 1972 WASC 900/104; L197 1991 Mott McDonald survey WASC 900/113; L197 RARDE List; Store/Air Raid Shelter semi 1976 1992 cylindrical **PHOTOGRAPHY PHOTOGRAPHY** HISTORIC **RCHME** RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: CONDITION Demolished CONSTRUCTIONAL MATERIAL 1) Concrete 3) POWER SOURCE Electricity 4) DIMENSIONS i) L 9.12 ii) W 3.8

The building has been demolished a concrete floor slab remains.

5)

	NUMBER L198	OLD SERIES	RCHME NUMBER	N.G.R. TL 37644 01334
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START DATE

1956



## CARTOGRAPHIC DEPICTION

NAME/FUNCTION

Stability Laboratory

c1960 WASC 900/94; L198 c1963 WASC 900/97; L198 1972 WASC 900/102; L198 1972 WASC 900/104; L198 1976 WASC 900/113; L198

## DOCUMENTARY REFERENCES

Plans;

L198 B01 - B17 ; Plans and Elevations 1956 to 1982

END DATE

198?

1972 ERDE List ; Laboratory 1991 Mott McDonald survey 1992 RARDE List ; Laboratory

1992 FBRC; Class 1 Explosives

PHOTOGRAPHY HISTORIC PHOTOGRAPHY

**RCHME** 

1) 206/F/28 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L191

#### CONDITION

Good

- 1) CONSTRUCTIONAL MATERIAL
- ROOF MATERIALS AND STRUCTURE
  Flat concrete with felt covering and raised roof lights
- 3) POWER SOURCE Steam Electricity
- 4) DIMENSIONS i) L 9.2 ii) W 10.7 iii) HT 2.95
- 5) The building is a single storey with a rectangular plan. The east and west elevations of the building are featureless in the north elevation is a single door. To the south are double glass doors giving access into a central court surrounded by laboratory benches lit by raised roof lights. Attached to the east and west walls of the building are two tall poles of a lightning conductor connected by wire at their tops.

NUMBER L199 **OLD SERIES** 

RCHME NUMBER

N.G.R.

TL 37664 01592

NAME/FUNCTION

**Proof Stand** 

START DATE 1959

END DATE 198?



## CARTOGRAPHIC DEPICTION

c1960 c1963 WASC 900/94; L199 WASC 900/97; L199

1972 1972 WASC 900/102; L199 WASC 900/104; L199

1972

WASC 900/104; L199 WASC 900/113; L199 DOCUMENTARY REFERENCES

Plans; L199

B01 - B10; Plans and Elevations 1956 to 1975

1972

ERDE List; Small Sensitivity

1991 1992 Mott McDonald survey RARDE List; Proof Stand

1992

FBRC; Firing Chamber

## PHOTOGRAPHY

HISTORIC

**PHOTOGRAPHY** 

**RCHME** 

1)206/L/12 From South

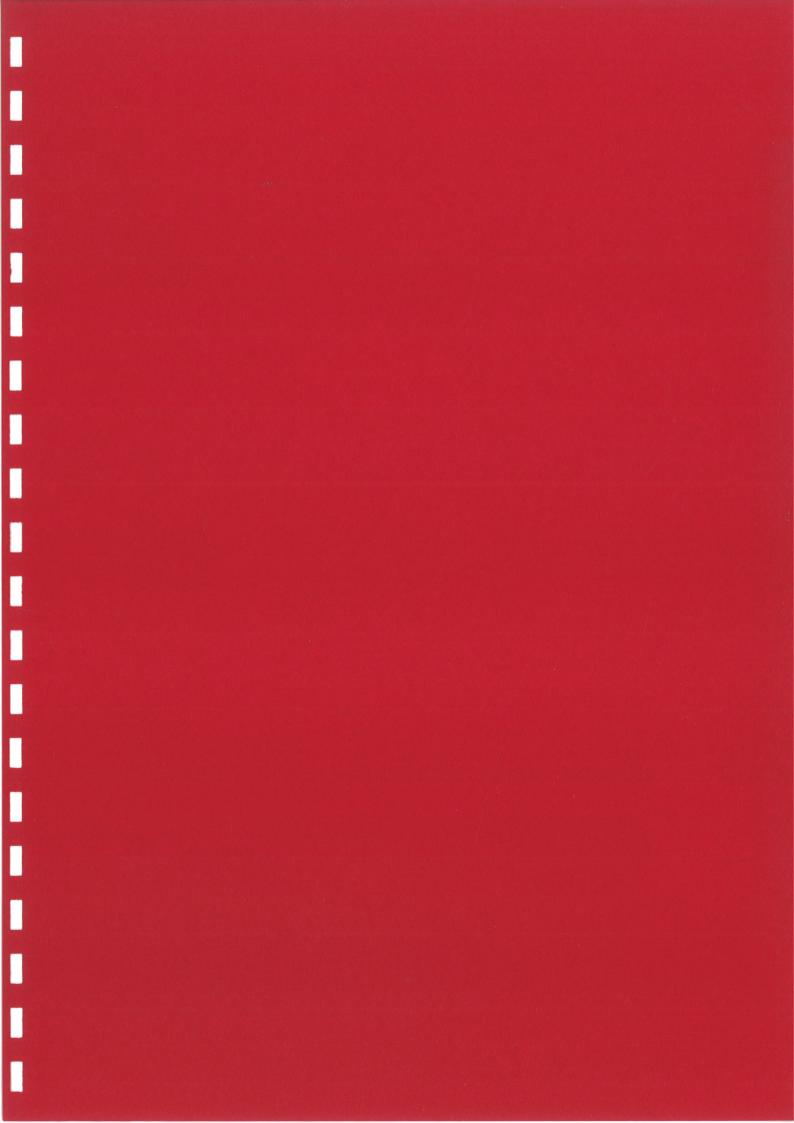
## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: L189, L195

## CONDITION

Fair

- CONSTRUCTIONAL MATERIAL Concrete, steel girders, corrugated iron
- 2) ROOF MATERIALS AND STRUCTURE
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L
- ii) W
- iii) HT
- 5) The proof stand is a single storeyed structure almost square in plan although with protruding walls. The southern elevation of the stand is of concrete and has a single staggered entrance. The central firing chamber is a constructed from steel girders and plates and corrugated iron.





## ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

MOD Building No. L176 Boiler House The Royal Gunpowder Factory Waltham Abbey Essex

NBR No: 91452 NGR: TL 37734 01024

Built in c1857 as a Boiler House for the earliest of the incorporating mills buildings (L168) on the Gunpowder Factory site, this building is single-storeyed with a rectangular plan and is constructed of yellow brick laid in English bond. Originally it had a brick chimney attached at its north side.

In 1902 a Dynamo House was added at the centre of the east elevation. In 1903 a Smith's Shop was built in the re-entrant angle on the south side of the Dynamo House, against the east wall of the Boiler House. The latter addition has since been demolished.

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Building L168 was built in c1857 as a Boiler House.<sup>1</sup> It is situated approximately 10 metres north of the western fork of the main canal and approximately 15 metres south of a contemporary Engine House and Mechanics Shop building (no. L168).<sup>2</sup> In conjunction with the latter building, it powered Group A Incorporating Mills (L176, now demolished) which adjoined the east side of L168.

It has a rectangular plan, of six bays by three bays<sup>3</sup> (17.6 x 11 m), which is aligned north to south.<sup>4</sup> It is single-storeyed and rises to height of approximately six metres.

Although the building is shown on a map of 1821, it is likely that such a representation is part of an updating of the map in the 1850s-60s, "A Survey of the Lands and Buildings, the Property of the Ordnance, at the Royal Powder Works, Waltham Abbey, made in compliance with the Master General and Boards Order 6th June 1821" (PRO, Hayes Repository). A drawing of the plan has alterations which are dated 1856 and 1857 (PRO, Hayes Repository). The Ledger of c1908 dates the building to 1857, cat. WASC 1509 (PRO, Hayes Repository)

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

The bays are described with reference to the number of windows (ie six by three), although pilasters divide the sides into three main bays by a single main bay.

The building is aligned north-north-west to south-south-east but for the clarity of this report it is described as if it was aligned north to south.

Originally it had an octagonal chimney on its north side and a coal yard on the east side.

Constructed of yellow brick laid in English bond, the building has a chamfered brick plinth and a brick dentil cornice. There are brick pilasters at the corners of the building on each side as well as an evenly-spaced pair of pilasters on each of the west and east elevations. The windows have cambered heads of rubbed red-brick. Originally the windows were sash and each had a rectangular blind panel below.<sup>5</sup> There were three windows on the north elevation and windows flanking a central door on the south elevation. In pairs between the pilasters, there are six windows on the west elevation and six blind windows on the east elevation. The blind windows on the north side appear to be an original feature, as they are shown as such in a drawing of the building of 1856-7.<sup>6</sup>

The floor was of stone.<sup>7</sup> The roof truss is of iron and incorporates decorative cast iron compression members. The roof is hipped and has slate coverings and a central skylight. The chimney was brick-built.

In 1902 new boilers were installed in building no. L176 and a Dynamo House with a lean-to roof was built at the centre of the east elevation. Constructed of brick, with a concrete floor and slate roof, it had two dynamos and an accumulator shelf. Also known as the Switchboard House, this addition points to a change in the building from steam power to electric power at this time and may coincide with a conversion in building no. L169 from gunpowder incorporating to cordite reeling.

Undated elevation drawing, cat. LE179/1 (PRO, Hayes Repository).

<sup>&</sup>lt;sup>6</sup> Drawing of plan with alterations dated 1856 and 1857 (PRO, Hayes Repository).

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

Uncatalogued ink drawing showing Dynamo House and seating plan for new boilers (with a pit to suit footplates) Group A, (?old cat. no. 827), and Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

In the OS County Series 1:2500 maps, 2nd ed. 1897 (surveyed 1865, revised 1895), sheet refs XLIX.14, XLI.8.12, XLII.5.9) Building L169 is labelled as Reeling Houses Group A.

In the following year, 1903, a Smith's Shop was built in the south-east angle between the Boiler House and Dynamo House.<sup>10</sup> Of a similar size as the Dynamo House, it also had a lean-to roof and was constructed of brick, with a concrete floor and corrugated iron roof.

The building has undergone several other alterations. The windows on the west elevation were enlarged by replacing the sashes with taller windows which extend to incorporate the former blind rectangular panels below. One of the blind windows on the east elevation was opened up and the open windows on the north elevation were made blind. A wide doorway was inserted at the centre of the north elevation. The Smith's Shop has been demolished some time after 1923. By 1958 the Boiler House was used as a Store and a Riggers Shop.

Surveyed March 1993 Report by R L Burgess

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

The building is shown as the Smith's Shop in a 1:2500 site plan of the Royal Gunpowder Factory at Waltham Abbey, revised March 1923, cat. WASC 900/84.

