1896 Nitroglycerine Factory

E1-16



THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY NUMBER **OLD SERIES** RCHME NUMBER N.G.R. TL 37488 02176 E1 NAME/FUNCTION START DATE END DATE 1981? Acid house 1961-2



CARTOGRAPHIC DEPICTION

c1960 - WASC 900/94; E1 c1963 - WASC 900/97; E1 1972 - WASC 900/102; E1 1972 - WASC 900/104; E1 1976 - WASC 900/113; E1

DOCUMENTARY REFERENCES

E01 B01 - 22/11/1961; New Acid Mixing House B02 -; New Acid Mixing House (2ft to 1in) 5/1962; New Acid Mixing House B04 - 14/8/1962; Steam pipes, Extractor Vents B05 - 14/6/1962; Steam Mains B06 - 27/6/1962; Electrical Services (4ft & 8ft to 1in)

B07 - 3/4/1962; New Acid House Base

ERDE list 1972 - Acid house 1964 RARDE list 1992 - Acid house

PHOTOGRAPHY

HISTORIC

WASC 1054/16 Barrel & Weighing house 1981

PHOTOGRAPHY

RCHME

1) 206/L/14 09 Mar 1993 From South standing on E2

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E2

CONDITION

Demolished

- **POWER SOURCE** 3) Electricity
- DIMENSIONS i) L 8.3m ii) W 7.2m 4)
- The building was demolished, probably in 1981 see WASC 1054/16. The concrete floor slab remains with wall 5) foundations indicating three former rooms.

NUMBER

OLD SERIES

RCHME NUMBER

N.G.R.

E2

43

TL 37514 02172

NAME/FUNCTION

Nitrating House No.3 Nitrating House No.1 START DATE 1895-6

1908

END DATE 1908? 1981?







CARTOGRAPHIC DEPICTION

1897 - WASC 900/53C; Nitrating House No.3

c1910 - WASC 900/65; Nitrating House No.1

c1910 - WASC 900/79; Nitrating House No.1

1917 - WASC 900/70 ; Nitrating House No.1

1917 - WASC 900/72; Nitrating House No.1 1919 - WASC 900/74; Nitrating House No.1

c1920 - WASC 900/80: 43

1923 - WASC 900/84; 43 Nitrating House No.1

1932 - WASC 900/87; 43 Nitrating House No.1

> 1940 - WASC 900/91A; 43

1954 - A - B.34 ; 43

c1960 - WASC 900/94 ; E2

c1963 - WASC 900/97 ; E2

1972 - WASC 900/102 ; E2

1972 - WASC 900/104 ; E2 1976 - WASC 900/113 ; E2 DOCUMENTARY REFERENCES

1908 RGPF Ledger WASC 1509 + WASC 1764;

Nitrating House & pit

c1925 RGPF Ledger WASC 1680; Nitrating House &

pit

c1945 RGPF Ledger WASC 1508; Nitrating House &

pit

Plans: E02

B01 - B09; Plans and Elevations no date

ERDE list 1972 - Nitration plant 1964 RARDE list 1992 - Nitration plant

PHOTOGRAPHY

HISTORIC

WASC 1024 Old Nitrating house drowning tank during demolition 2.2.1981

- E2 WASC 1054/10 Entrance 1981
- E2 WASC 1054/11 Looking N/W 1981
- E2 WASC 1054/12-14 Views of roof structure 1981
- E2 WASC 1054/15 Exterior 1981
- E2 WASC 1054/17 Approach to E2 E3 & E5 1981

PHOTOGRAPHY

RCHME

- 206/L/13 09 Mar 1993 Nitrator from North 206/L/15 09 Mar 1993 Hole for Drowning Tank 206/L/27 09 Mar 1993 From on top of E3
- BB92/26267 E2 Nitrator view from West.
 BB92/26268 E2 Nitrator view from North West top of mound showing entrance, Drowning Tank Pit and Nitroglycerine exit tunnel.

BB92/26269 E2 Nitrator view from North West, detail of entrance and Nitroglycerine exit tunnel BB92/26347 E2 Drawing E.02.B.02 Proposed Alteration to Nitrating House (MOD Chessington)

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E1, E3, E5, E6, E15

CONDITION

Good

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick in English bond and earthwork
- 2) ROOF MATERIALS AND STRUCTURE
- 3) POWER SOURCE Electricity, steam heat and compressed air
- 4) DIMENSIONS iii) HT 5.7m iv)DIA 9.47m
- 5) The Nitrator was housed within a circular revetment wall surrounded by a high earthwork traverse. The 3 building in the centre was entered along a brick tunnel from the south closed by a red wooden slatted gate. The tunnel originally joined to the central building by a porch. On the northern side of the mound steps lead upto a platform supported on RSJs that probably formerly carried acid tanks. A series of small bore pipes lagged in cork and a metal gutter (RCHME 273) ran up the western side of the mound carrying control wires form E6, compressed air and possibly other liquids. Also entering from the western side is a cast iron flanged pipe with a bore of 10.6cm. This may connect to one of the two cast iron flanged pipes that emerge at the base of the revetment wall on the west side. Both these pipes are set within earthenware pipes with bores of 7.5cm and 11cm, the latter being lead lined. Above these pipes is a blocked arched brick opening, height 1.55m width 0.79m. Opposite to this tunnel on the eastern side is an arched brick tunnel, height 1.55m width 1.62m. The precense of bolts along either side of the tunnel indicate that gutters ran along both sides carrying nitroglycerine to wash houses E3 and E5. Around the wall are a series of holes that formerly contained small horizontal joists that acted on the exterior of the building. Some pipework and electric pumps relating to tha last phase of operation remains attached to the wall.

The building covering the nitrating equipment differed in form to the other roundhouse in that the southern part was curved while the northern part was facetted. The building had a diameter of 7m and was timber framed set on a low sill wall. In the centre of the building is an oval brick lined pit. The pit measures 5.85m in length, 4.35m in width and is 1.15m in depth. On the base of the pit the positions of five beams may be discerned that formerly supported the lead drowning tank. The building has been fired probably during in 1981.

NUMBER E3	OLD SERIES 45	RCHME NUMBER	N.G.R. TL 37568 02162
NAME /ELINCTION		CTART DATE	END DAME

NAME/FUNCTION
Washing House No.3
Washing House No.1

 START DATE
 END DATE

 1895-6
 1908?

 1908
 1981?



CARTOGRAPHIC DEPICTION

1897 - WASC 900/53C; Washing House No.3 c1910 - WASC 900/65; 45 Washing House No.1 c1910 - WASC 900/79; 45 Washing House No.1 1917 - WASC 900/70; 45 Washing House No.1 1917 - WASC 900/72; 45 Washing House No.1 1919 - WASC 900/74; 45 Washing House No.1 c1920 - WASC 900/80; Washing House No.1 1923 - WASC 900/84; 45 Washing House No.1 1932 - WASC 900/87; 45 Washing House No.1

>1940 - WASC 900/91A; 45

1954 - A - B.34 ; 45 c1960 - WASC 900/94 ; 45

c1963 - WASC 900/97; E3

1972 - WASC 900/102 ; E3

1972 - WASC 900/104; E3

1976 - WASC 900/113; E3

DOCUMENTARY REFERENCES

1908 RGPF Ledger WASC 1509 + WASC 1764;

Washing House

c1925 RGPF Ledger WASC 1680; Washing House

c1945 RGPF Ledger WASC 1508; Washing House

Plans; E03

B01 3/6/1940; Tunnel to No.2 Pouring on House

ERDE list 1972 - NG wash house 1964 RARDE list 1992 - NG wash house

PHOTOGRAPHY

HISTORIC

Proc. of Court of Enquirey on explosion at RGPF 20-Apr-1940 figs.17, 18, 19

- E3 WASC 1054/5 Interior of roof 1981
- E3 WASC 1054/6 Exterior of roof 1981
- E3 WASC 1054/7 E3 entrance 1981
- E3 WASC 1054/8 Interior with steps 1981

PHOTOGRAPHY

RCHME

1) 206/L/16 09 Mar 1993 Washing house from West on top of E2

206/L/23 09 Mar 1993 Mound from South showing Exit tunnels

206/L/24 09 Mar 1993 Exit tunnel to South

206/L/25 09 Mar 1993 N/G tunnel to 46R

206/L/26 09 Mar 1993 Interior from South

206/L/28 09 mar 1993 Interior showing N/G tunnel to 46R

206/L/29 Waste

2) BB92/26270 E5 and E3 Nitroglycerine Washing House view from South West.

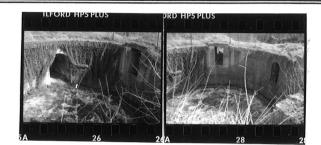
BB92/262⁷2 E3 Detail of wooden gully support in service tunnel.

BB92/26273 E3 Nitroclycerine Washing House view from South East.

BB92/26276 E3 Interior of Nitroglycerine Washing House.

NUMBER

CONTINUATION SHEET



RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E2, E5, 46, 46a, 52

CONDITION

Good

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick in English bond
- ROOF MATERIALS AND STRUCTURE Probably roofing felt over timber boards
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS iii0 HT 3.75m iv)DIA 9.1m
- The wash house was enclosed within a circular brick revetment wall surrounded by an earthwork traverse. The wash house was entered through a curved brick tunnel from the north side protected by a red wooden slat gate. By this gate a stone plaque records the date '1896-7', also by the entrance are the modern fuse and switch boxes. The original form of the revetment wall consisted a curved brick depression on the eastern side leading towards mixing house 46 and a brick arched service tunnel, height 1.72m width 0.77m, leading to the wash water settling house 52. The wooden gutter support shelf for the gutter remaining insitu along the eastern wall. At the base of the revetment wall on the west side an earthenware pipe enters with a cast iron flanged pipe set within it. The pipe has abore of 11cm and is sealed by a circular plate.

Within the circular brick revetment formerly stood a timber framed round house measuring 7.6m in diameter. This building was set on a low brick sill wall over a slate damp proof course. The upper part of this building was braced against the revetment wall by a number of small horizontal joists the holes for which are visible in the brickwork. Also set on a stone bed in the brick work were two large horizontal timbers that formerly supported a raised platform roughly at head height within the building.

In common with E2 and E5 the wash house has been modified on a number of ocassions. The timber round house was extensively damaged when Mixing house 46 blow up on 20th april 1940, although it is unclear whether or not the brick work suffered any damage at this date. Evidence for more substantial modifications to the structure are represented by concrete additions to the late nineteenth century brick structure. Concrete has been added to raise height of the portal. On the western side a concrete channel has been cut through the mound and the revetment wall. On the eastern side the curved depression has been filled with concrete and a rectangular service tunnel, height 1.66m width 0.76m.

RCHME NUMBER N.G.R. **OLD SERIES** NUMBER TL 37585 02110 52 E4

NAME/FUNCTION Wash Water Settling House START DATE 1895-6

END DATE 1981?



CARTOGRAPHIC DEPICTION

1897 - WASC 900/53C; Wash water Settling House

c1910 - WASC 900/65; 52 Wash Water Settling House

c1910 - WASC 900/79; Wash Water Settling House

1917 - WASC 900/70; 52 Wash Water Settling House 1917 - WASC 900/72; 52 Wash Water Settling House

1919 - WASC 900/74; 52 Wash Water Settling House

c1920 - WASC 900/80; 52

1923 - WASC 900/84; 52 Wash Water Settling House

1932 - WASC 900/87 ; 52 Wash Water Settling House

> 1940 - WASC 900/91A; 52

1954 - A - B.34 ; 52

c1960 - WASC 900/94; E4

c1963 - WASC 900/97; E4

1972 - WASC 900/102; E4

1972 - WASC 900/104; E4 1976 - WASC 900/113; E4

DOCUMENTARY REFERENCES

RGPF Ledger WASC 1509 + WASC 1764; 1908

Wash Water Settling House

c1925 RGPF Ledger WASC 1680; Wash Water

Settling House

c1945 RGPF Ledger WASC 1508; Wash Water

Settling House

No Plans

ERDE list 1972 - Wash water settling house 1964 RARDE list 1992 - Wash water settling house

PHOTOGRAPHY HISTORIC

1) WASC 499 Explosion damage 18-Jan-1940, photo 7

2) Proc Court Inquirey explosion 20-Apr-1940, photos 9 and 10

PHOTOGRAPHY RCHME

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E3, E5, RCHME 212

CONDITION

Fair

- 1) CONSTRUCTIONAL MATERIAL
 Brick foundations formerly with timber superstructure
- 2) ROOF MATERIALS AND STRUCTURE Formerly angle irons with timber board over
- 3) POWER SOURCE Steam heating
- 4) DIMENSIONS i) L 13.4m ii) W 9.8m
- The wash water settling house sat within a concrete cellar 1m in depth. The former timber framed building was a free standing building within this cellar placed on brick foundations 11m x 6.1m, depth 1m. A small timber bridge on the north east side bridged the gap between the two constructions. The building formerly housed a large circular stave tank to receive the spent washing water from washing houses E3 and E5. This was brought to the building along lead lined gutters supported on trestles and over the old river lee on bridges RCHME 212 and RCHME.

NUMBER

OLD SERIES

RCHME NUMBER

E₅

49

TL 37534 02112

NAME/FUNCTION

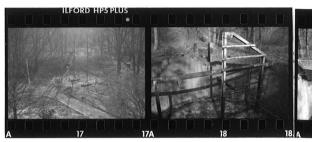
Washing House No.2

Schmidt Plant

START DATE 1895-6 1964

END DATE

1981?





RGPF Ledger WASC 1509 + WASC 1764;

RGPF Ledger WASC 1680; Washing House

RGPF Ledger WASC 1508; Washing House

CARTOGRAPHIC DEPICTION

1897 - WASC 900/53C; Washing House No.2 c1910 - WASC 900/65; 49 Washing House No.2

c1910 - WASC 900/79 ; Washing House No.2 1917 - WASC 900/70 ; 49 Washing House No.2 1917 - WASC 900/72 ; 49 Washing House No.2

1919 - WASC 900/74; 49 Washing House No.2

c1920 - WASC 900/80; 49

1923 - WASC 900/84; 49 Washing House No.2 1932 - WASC 900/87; 49 Washing House No.2

>1940 - WASC 900/91A; 49

1954 - A - B.34; 49

c1960 - WASC 900/94; 49

c1963 - WASC 900/97; E5

1972 - WASC 900/102; E5

1972 - WASC 900/104; E5 1976 - WASC 900/113; E5

No Plans

1908

c1925

c1945

ERDE list 1972 - Schmidt house 1964 RARDE list 1992 - NG Wash house

DOCUMENTARY REFERENCES

Washing House

PHOTOGRAPHY

HISTORIC

WASC 1054/9 Entrance wall with date 1896-7 1981

WASC 1054/18 Entrance 1981 E₅

E5 WASC 1054/19 Interior of tunnel to E5 1981

WASC 1054/20 Gen view 1981 E5

E5 WASC 1054/21 Old scales found in E5 1981

PHOTOGRAPHY

RCHME

1) 206/L/17 09 Mar 1993 Washing house from North on top of E2

206/L/18 09 Mar 1993 Interior from South looking towards E2

206/L/19 09 Mar 1993 Interior from West 206/L/20 09 Mar 1993 Entrance from West 206/L/21 09 Mar 1993 Showing N/G service tunnel

2) BB92/26270 E5 and E3 Nitroglycerine Washing House view from South West.

BB92/26271 E5 Washing House entrance view from West.

BB92/26274 E5 Interior of Nitroglycerine Washing House.

BB92/26275 E5 Interior of Nitroglycerine Washing House.

NUMBER

CONTINUATION SHEET



RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E2, E3, 52

CONDITION

Good

DESCRIPTION

- CONSTRUCTIONAL MATERIAL Brick in English bond and earthwork
- 2) ROOF MATERIALS AND STRUCTURE
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS iii) HT 3.8m iv)DIA 9.1m
- The remains of the Nitroglycerine wash house consist of an internal circular brick revetment wall in English bond 9.1m in diameter and 3.8m in height. This is surrounded by an earthwork bank. In the centre of this feature stood a timber framed roundhouse, probably fired and demolished in 1981 (WASC 1054/9). The roundhouse was entered from the north through a curving brick tunnel sealed by a red slatted wooden gate. By the gate a stone plaque records the date '1896-7'. The roundhouse was 7.7m in diameter and was separated from the revetting wall by a gulley 0.75m in width and 0.47m in width. The wash house was originally serviced by a brick arched tunnel, height 1.71m width0.76m leading towards the wash water settling house 52. A curved depression in the southern side of the revetment wall may have carried further pipes away from the building. Set into the base of the revetment wall on the west side is an earthenware pipe with a lead pipe and copper conductor passing through it.

The internal roundhouse was set on a low brick sill wall over a damp proof course of broken slates. Set into the revetment wall on the northern side are two large horizontal timbers that originally supported a raised platform within the building. A similar arrangement was found on the south site in building 483. Other small joist holes in the wall mark the position of bracing timbers originally set against the outside of the building. Around one of the legs of this framework a section of the lead lined floor remained insitu.

The original form of this building has been modified by alterations carried out in the 1960s and perhaps also in the 1940s. Additions to the structure include the heightening of the entrance in concrete and to the service tunnels bringing the nitroglycerine into the building. On the northern side a concrete channel has been cut into the original brickwork, this leads from E2 and was presumably used to channel nitroglycerine into the building for washing. The tall framework of steel girders was also probably introduced during one of these rebuilding phases. The curved depression on the southern wall has also been filled with concrete and replaced by a rectangular servicr tunnel, height 1.72m width 0.77m. The presence of rusty bolts on the eastern side of the tunnel mark the position of the gutter that formerly carried the notroglycerine to mixing house 62

NUMBER OLD SERIES RCHME NUMBER N.G.R. TL 37463 02142

NAME/FUNCTION START DATE END DATE 1962 1981?



CARTOGRAPHIC DEPICTION

c1960 - WASC 900/94; E6 c1963 - WASC 900/97; E6 1972 - WASC 900/102; E6 1972 - WASC 900/104; E6 1976 - WASC 900/113; E6

DOCUMENTARY REFERENCES

Plans: E06

B01 - 4/8/61; Remote Control Room - N.G.

Area

ERDE list 1972 - Remote control for E2 1962

RARDE list 1992 - Control room

PHOTOGRAPHY HISTORIC

PHOTOGRAPHY

RCHME

1) 206/C/31 02 Feb 1993 From West

2) BB92/26142 E6 Interior of Central Room for Nitrator E2

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E1, E2, E15, RCHME 273

CONDITION

Good

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Breeze block
- 2) ROOF MATERIALS AND STRUCTURE Flat concrete slab
- 3) POWER SOURCE Electricity and steam heat
- 4) DIMENSIONS i) L 3.43m ii) W 3.43m iii) HT 2.3m
- 5) The control room is a single storey building with a rectangular plan. The control room is entered through a steel door on its northern side, that is away from the nitrator E2. There is a single armoured window on the north side also. The interior of the building retains many of its control panels. The cables from this building were carried inside a metal gutter along side pipes (RCHME 273) leading to the top of E2.

Historic artefacts - All remaining control panels and other material within the building.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY N.G.R. NUMBER **OLD SERIES** RCHME NUMBER TL 37438 02156 E7 38A START DATE END DATE NAME/FUNCTION 1961? Office and Lab. 1908 1961? 1992 Nitric Ester House

NO PHOTOGRAPHY AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES
1917 - WASC 900/70; Office and Lab. 1917 - WASC 900/72; Office and Lab. 1919 - WASC 900/74; Office and Lab. c1920 - WASC 900/80; 38A 1923 - WASC 900/84; 38A Office and Lab. 1932 - WASC 900/87; 38A Office and Lab. > 1940 - WASC 900/91A; 38A 1954 - A - B.34; 38A c1960 - WASC 900/94; 38A c1963 - WASC 900/97; E7 1972 - WASC 900/102; E7 1972 - WASC 900/104; E7 1976 - WASC 900/113; E7	c1925 RGPF Ledger WASC 1680; Office, N.G. Area Plans: E07 B01 - B04; Plan and Elevations 1908 to 1962 ERDE list 1972 - Laboratory and office 1964 RARDE list 1992 - Portacabin
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH:	

CONDITION Demolished

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL
- 2) ROOF MATERIALS AND STRUCTURE

iii) HT

- 3) POWER SOURCE
- 4) DIMENSIONS i) L ii) W
- 5) The building has been demolished.

NUMBER

OLD SERIES

RCHME NUMBER

E9/2

NAME/FUNCTION Refrigeration house

START DATE 1969

END DATE

TL 37412 02124

1990?



CARTOGRAPHIC DEPICTION

c1960 - WASC 900/94 ; E9

c1963 - WASC 900/97; E9

1972 - WASC 900/102; E9 1972 - WASC 900/104; E9

1976 - WASC 900/113; E9

DOCUMENTARY REFERENCES

Plan:

E09

B01 - 22/11/68; Proposed Refridgerator House

ERDE list 1972 - Refrigeration house next to E10 RARDE list 1992 - Refrigeration house next to E10

PHOTOGRAPHY

HISTORIC

PHOTOGRAPHY

RCHME

1)206/C/32 02 Feb 1993 From West

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E2

CONDITION

Fair

- CONSTRUCTIONAL MATERIAL 1) Brick
- ROOF MATERIALS AND STRUCTURE 2) Flat roof covered by roofing felt
- **POWER SOURCE** 3) Electricity and steam heat
- DIMENSIONS i) L 6.6m ii) W 3.5m iii) HT 2.6m 4)
- This building is a single storey with a rectangular ground plan. It is entered through double doors on the 5) north side, it was lit by a single window on the west side.

NUMBER OLD SERIES RCHME NUMBER N.G.R. TL 37470 02058

NAME/FUNCTION START DATE END DATE 1960? 1985?



CARTOGRAPHIC DEPICTION

c1960 - WASC 900/94

c1963 - WASC 900/97; E12

1972 - WASC 900/102 ; E12

1972 - WASC 900/104 ; E12

1976 - WASC 900/113; E12

DOCUMENTARY REFERENCES

Plans:

E12 B01 - B08 ; Plans and Elevations 1961 to 1982

ERDE list 1972 - Shift house and office 1964

RARDE list 1992 - Derelict shift house

PHOTOGRAPHY

HISTORIC

PHOTOGRAPHY

RCHME

1) 206/C/28 02 Feb 1993 From South East

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E13

CONDITION

Poor

- 1) CONSTRUCTIONAL MATERIAL Brick
- ROOF MATERIALS AND STRUCTURE Flat concrete slab with raised roof lights.
- 3) POWER SOURCE Electricity and steam heat
- 4) DIMENSIONS i) L 10.4m ii) W 7.3m iii) HT 2.8m
- The building is single storeyed with arectangular ground plan. The building has been partly fired. To the east is a locker room entered from a door on the south wall, with a shower cubicle and urinal lit by two double metal windows and a roof light. In the centre is a large room entered through another door on the south wall, this is lit by a metal framed window on the south wall and windows along the west wall. To the west of the building are two small rooms. The northern portion of the building has been demolished and remains only as concrete floor slab measuring 12.2m x 7.2m. The positions of three rooms may be discerned.

NUMBER E13 OLD SERIES

RCHME NUMBER

N.G.R.

TL 37485 02030

NAME/FUNCTION

Sewer pump house and filter beds

START DATE 1962

END DATE 198?





CARTOGRAPHIC DEPICTION

c1960 - WASC 900/94 ; E13 c1963 - WASC 900/97 ; E13

1972 - WASC 900/102; E13 1972 - WASC 900/104; E13

1976 - WASC 900/113 ; E13

DOCUMENTARY EVIDENCE

Plan:

E13 B01 - 8/8/1962 ; Detail of Sewage Disposal

Works (2ft to 1in)

ERDE list 1972 - Sewer pump house and filter beds

1964

RARDE list 1992 - Sewer pump house and filter beds

PHOTOGRAPHY HISTORIC **PHOTOGRAPHY**

RCHME

1) 206/C/27 02 Feb 1993 From South West

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E12

CONDITION

Fair

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick
- 2) ROOF MATERIALS AND STRUCTURE Roofing felt over fibre board
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 2.4m ii) W 1.7m iii) HT 2.1m
- The pump house is a small single storey building with a rectangular ground plan. It houses a Bronson plunger pump by Tuke and Bell Lichfield Staffordshire.

Historic artefacts - Instruction notice and makers plate on pump

NUMBER E14 **OLD SERIES**

RCHME NUMBER

N.G.R.

TL 37522 01946

NAME/FUNCTION

Mixing House\Nitric Ester Store

Magazine

START DATE post 1940 1964?

END DATE 1964?





CARTOGRAPHIC DEPICTION

>1940 - WASC 900/91A

1954 - A - B.34

c1960 - WASC 900/94

c1963 - WASC 900/97 ; E14

1972 - WASC 900/102; E14 1972 - WASC 900/104: E14

1976 - WASC 900/113 ; E14

DOCUMENTARY REFERENCES

ERDE list 1972 - Magazine 1964

RARDE list 1992 - Mixing house/nitric ester store

PHOTOGRAPHY HISTORIC PHOTOGRAPHY

RCHME

1) 206/I/15 01 Feb 1993 From South West

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: RCHME 107

CONDITION Fair

- CONSTRUCTIONAL MATERIAL
 Timber frame with sheet asbestos over
- 2) ROOF MATERIALS AND STRUCTURE Corrugated asbestos
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 10.35 ii) W 6.5m iii) HT gable 4.75m
- The building is enclosed on three sides by an earthen traverse, this is revetted on the southeast and north east sides by a breeze block wall. The building is a single storey with a rectangular ground plan, it has gabled ends to the north west and south east. It has a single window on the south east elevation and two windows on the south west elevation. The building could be ventilated by the use of removable boards at the top and bottom of the walls, each of the boards has two copper knobs. On the north eastern side is a breeze block lobby and loading area. Within in the lobby is a shoe box, the door fittings are brass. The building was formerly served by canal RCHME 107.

NUMBER

OLD SERIES

RCHME NUMBER

N.G.R.

E15

NAME/FUNCTION Compressor house

Genarator room

START DATE 1964

END DATE 1981?

TL 37410 02116



CARTOGRAPHIC DEPICTION

c1960

WASC 900/94; E15

c1963 1972

WASC 900/97; E15 WASC 900/102; E15

1972 1976 WASC 900/104; E15 WASC 900/113; E15

DOCUMENTARY REFERENCES

Plan;

B01 8/6/1964; Nitric Ester Group New E15

Compressor House

1972

ERDE List; Generator Room Mott McDonald survey (All.2)

1991 1992

RARDE List; Generator Room

PHOTOGRAPHY HISTORIC

PHOTOGRAPHY

RCHME

1) 206/C/30 02 Feb 1993 From West

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: E2, E6

CONDITION

Good

DESCRIPTION

- CONSTRUCTIONAL MATERIAL 1) Brick
- ROOF MATERIALS AND STRUCTURE 2) Roofing felt over flat fibre board
- **POWER SOURCE** 3) Electricity
- 4) DIMENSIONS i) L 2.08m ii) W 2.18m iii) HT 2.2m
- The building is single storeyed and is almost square in plan. It is entered through a door on the west side. 5) It houses a four stroke pump by Broom and Wade Ltd.

Historic artefacts - pump? any makers plates

NUMBER E16	OLD SERIES	RCHME NUMBER	N.G.R. TL 37592 02088
NAME/FUNCTION Tool shed and r		START DATE 196?	END DATE 1992?



CARTOGRAPHIC DEPICTION

c1960 WASC 900/94; E16 c1963 WASC 900/97; E16 1972 WASC 900/102; E16 1972 WASC 900/104; E16 1976 WASC 900/113; E16

DOCUMENTARY REFERENCES

1972 ERDE List; Tool Shed and Mud Hut 1991 Mott McDonald survey (All.2) 1992 RARDE List; Remains of Brick Shelter

PHOTOGRAPHY HISTORIC

PHOTOGRAPHY RCHME

1) 206/M/30 4 Mar 1993 From West

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: RCHME 211

CONDITION

Demolished

- 1) CONSTRUCTIONAL MATERIAL Brick sill wall with timber superstructure
- 2) ROOF MATERIALS AND STRUCTURE Roofing felt
- 3) POWER SOURCE Electricity and steam heat
- 4) DIMENSIONS i) L 4.7m ii) W 4.7m
- 5) The superstructure of this building has been demolished leaving a low brick sill wall 0.4m in height. A timber frame was formerly bolted to this sill wall by means of vertical bolts set into the brick work. Internally the positions of two floor joists may be recovered. The building was formerly connected to steam heating pipe RCHME 211.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES	RCHME NUMBER 109	N.G.R. TL37476 01854 TL37455 02045	
NAME/FUNCTION Pipeline	START DATE 1940?	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFEREN	NCES	
PHOTOGRAPHY HISTORIC PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH:			
CONDITION Poor			
DESCRIPTION 5) Row of concrete stanchions that formerly supported a steam pipeline. The posts are cast concrete with iron hoops at the top, 1.7m in height.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER	OLD SERIES	RCHME NUMBER 110	N.G.R.	
NAME/FUNCTION Pipeline	as o	START DATE 1940?	END DATE	
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES			NCES	
PHOTOGRAPHY HISTORIC PHOTOGRAPHY RCHME				
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHME 109, E14				
CONDITION: Poor				
DESCRIPTION 5) Row of concrete stanchions, 45m in length, that forme _{1.7} supported a steam pipeline. The posts are cast concrete with iron hoops at the top, 1.5m in height. Joins main feeder pipeline RCHME 109 to £14.				

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES	RCHME NUMBER 111	N.G.R.	
NAME/FUNCTION Pipeline	START DATE 1940	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES		
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH:			
CONDITION Poor			
DESCRIPTION 5) Row of concrete stanchions that formerly supported a steam pipeline. The posts are cast concrete with iron hoops at the top, 2.5m in height.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER OLD SERIES	RCHME NUMBER 185	N.G.R. TL37498 02035		
NAME/FUNCTION Blast wall	START DATE 1940?	END DATE		
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES				
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: 62, E13				
CONDITION Good	CONDITION Good			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Breeze block 4) DIMENSIONS i) L 19.15m ii) W 1.2m iii) HT 3.5 5) Breeze block blast wall east of E13.	m			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER OLD SERIES	RCHME NUMBER 196	N.G.R.		
NAME/FUNCTION Telegraph line	START DATE 1940s	END DATE		
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES			
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS Associated with E12				
CONDITION Poor				
DESCRIPTION 5) Row of telegraph poles, one post branded inscription	ı 'GPO 24L 47', insulators dated	1940 and 1941.		

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES	RCHME NUMBER 251	N.G.R. TL37597 02126 TL37606 01245	
NAME/FUNCTION Pipeline	START DATE 1941?	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES		
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH: E3, 52 , RCHME 253			
CONDITION Poor			
DESCRIPTION Pipeline carried on reinforced concrete posts the pipe supported by an iron hoop suspended from a bracket. The pipe is straight and is joined by screw and flanged joints, the bore is 4cm. The pipe appears to have carried waste water from the notroglcerine wash house E3 over the Old River Lee across bridge RCHME 253 to the wash water house? 52.			

THE ROYAL GUNPOWDER FACTORY	- WALTHAM ABBEY	7	
NUMBER OLD SERIES	RCHME NUMBER 252	N.G.R. TL37606 02150 TL37625 02137	
NAME/FUNCTION Pipeline	START DATE 1941?	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFEREN	NCES	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: E2, RCHME 253, 46a			
CONDITION Poor			
DESCRIPTION Pipeline carried on reinforced concrete posts, the pipe is supported by an iron hoop suspended from a bracket. The pipe is straight and is joined by screw and flanged joints, the bore is 24mm. The pipe appears to have come from E3 across RCHME 253 it then mounts the traverse of 46a and continued around the eastern side of the structure. It is unclear whether the pipe carried liquids or whether it was used to enclose cabling.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 253	N.G.R. TL37600 02150
NAME/FUNCTION Bridge	van en	START DATE 1940?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH	OTHER MONUMENTS		
ASSOCIATED WITH: EX	3, RCHME 252, RCHME 253		
CONDITION Poor			
DESCRIPTION			

Two brick piers remain on either side of the Old River Lee, capped by concrete slabs with vertical mounting bolts. Within the reiver are the sawn off remains of bridge supports.

The bridge served to carry a nitroglycerine gutter and other services from the Wash house E3 to the mixing house 46a. Additionally it carried pipeline RCHME 251 towards 52.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES	RCHME NUMBER 273	N.G.R.	
NAME/FUNCTION Pipeline	START DATE 1962?	END DATE 1981?	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERE	NCES	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH: E2, E6			
CONDITION Poor			
DESCRIPTION Line of concrete base that formerly carried a steam pipe?. The pipeline was also used to carry control cabling in a metal gutter from E6 to the Nitrator E10.			

