

**FORMER XYLONITE FACTORY,
FACTORY LANE, BRANTHAM,
SUFFOLK, CO11 1NH**

HISTORIC BUILDING RECORDING

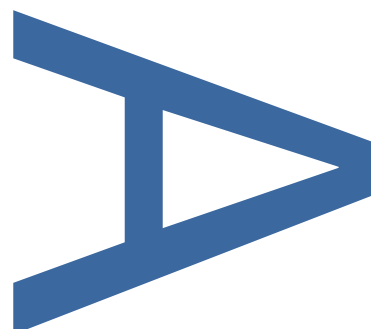
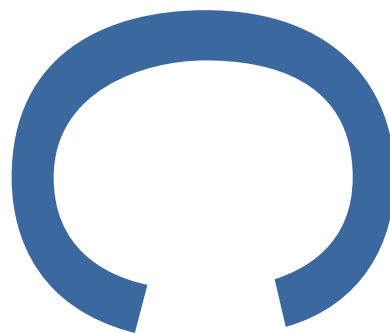
**LOCAL PLANNING AUTHORITY:
BABERGH DISTRICT COUNCIL**

**PLANNING APPLICATION NUMBER:
B/15/00263**

PCA REPORT NO: 12763

SITE CODE: ESF25133

JANUARY 2017



PRE-CONSTRUCT ARCHAEOLOGY

Former Xylonite Factory, Factory Lane, Brantham, Suffolk : Historic Building Recording

Local Planning Authority: Babergh District Council

Planning Reference: B/15/00263

Central National Grid Reference: TM 1073 3306

Parish Code: BNT 071
Event No. ESF25133

Written and researched by: Taleyna Fletcher and Adam Garwood

Project Manager: Taleyna Fletcher

Commissioning Client: St Francis Group

Contractor: Pre-Construct Archaeology Ltd
Central Office
The Granary
Rectory Farm
Brewery Road
Pampisford
Cambridgeshire
CB22 3EN

Tel: 01223 845522
E-mail: mhinman@pre-construct.com
Website: www.pre-construct.com

©Pre-Construct Archaeology Ltd

January 2017

The material contained herein is and remains the sole property of Pre-Construct Archaeology Ltd and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Ltd cannot be held responsible for errors or inaccuracies herein contained.

© The material contained herein is and remains the sole property of Pre-Construct Archaeology Limited and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Limited cannot be held responsible for errors or inaccuracies herein contained.

CONTENTS

CONTENTS	2
1 INTRODUCTION	6
2 PLANNING BACKGROUND	8
3 METHODOLOGY	11
4 HISTORIC BACKGROUND	13
5 BUILDING DESCRIPTIONS	19
6 DISCUSSION	29
7 ACKNOWLEDGEMENTS	31
8 BIBLIOGRAPHY	32

FIGURES

- Figure 1 Site Location
Figure 2 Detailed Site Location showing Development Area
Figure 3 Buildings 1-18 showing external plate locations
Figure 4 Detail of Buildings 1-4 showing External Plate Locations
Figure 5 Detail of War Memorial showing Plate Locations
Figure 6 First Edition OS Map of 1887
Figure 7 Second Edition OS of 1904 showing detail of Brantham Factory Site
Figure 8 Second Edition OS Map of 1904
Figure 9 Ordnance Survey Map 1973

APPENDICES

- 1 Plates
- 2 Graffiti
- 3 OASIS form

PLATES

(Plates of Historic Documents and Images are shown in Blue text below)

- Plate 1 : New Brantham Village c. 1900 (SRO Ref HC 410/J1/1)
Plate 2 : New Village c. 1914 (SRO Ref Ref HC 410/J1/2)
Plate 3 : Brantham Village, date unknown (SRO Ref HC 410/J1/1)
Plate 4 : Brantham Village taken from bottom of Brantham Hill, 1900 (SRO Ref HC 410/J2/1)
Plate 5 : Brooklands Road, Brantham taken December 2016
Plate 6 : Brantham Memorial Hall, 1927 (Ref HC 410/J2/1)
Plate 7: Photograph of Merriams Granddaughter, 1906 with factory in background (to the south) (SRO Ref HC 410/J2/2)

- Plate 8: Aerial Photograph of Brantham Factory, 1924 (SRO Ref Ref HC 410/J2/2)
- Plate 9: Plan of Brantham Works, 1905 (SRO Ref. HC 410/A7/8)
- Plate 10: Plan of Brantham Works, north of railway line, 1905 (SRO Ref. HC 410/A7/8)
- Plate 11: Plan of Brantham Works, south of railway line, 1905 (SRO Ref. HC 410/A7/8)
- Plate 12 : Finishing toothbrush handles (SRO Ref. HC 410/J1/2)
- Plate 13: Bristle Making (SRO Ref. HC 410/J1/2)
- Plate 14: Polishing (SRO Ref. HC 410/J1/2)
- Plate 15: Polishing (SRO Ref. HC 410/J1/2)
- Plate 16: Untitled (SRO Ref. HC 410/J1/2)
- Plate 17: Untitled (SRO Ref. HC 410/J1/2)
- Plate 18: Polishing (SRO Ref. HC 410/J1/2)
- Plate 19: Moulding Toothbrush Handles (SRO Ref. HC 410/J1/2)
- Plate 20: British Xylonite Exhibition Stand, undated (SRO Ref. HC 410/J1/2)
- Plate 21: Sizing Department and Turbines at Brantham, undated (from "The Xylonite Group 1877-1952)
- Plate 22: Industrial Processing at Brantham, undated (from "The Xylonite Group 1877-1952)
- Plate 23: New Boiler House at Brantham (from "The Xylonite Group 1877-1952)
- Plate 24: Roller Room, Brantham, 1932 (SRO Ref. HC 410/J1/2)
- Plate 25: Mixing Shop, Brantham, 1932 (SRO Ref. HC 410/J1/2)
- Plate 26: Filter Shop, Brantham, 1931 (SRO Ref. HC 410/J1/2)
- Plate 27: Polishing Shop, Brantham, 1933 (SRO Ref. HC 410/J1/2)
- Plate 28: Polishing Shop, Brantham, 1931 (SRO Ref. HC 410/J1/2)
- Plate 29: Slicing Shop, Brantham, 1931 (SRO Ref. HC 410/J1/2)
- Plate 30: Dehydration Room, Brantham, 1931 (SRO Ref. HC 410/J1/2)
- Plate 31: Plan of Cloakroom Accommodation, 1947 (SRO Ref. HC410/A7/7)
- Plate 32: Detail from Plan of Cloakroom Accommodation, south of railway line, 1947 (SRO Ref. HC410/A7/7)
- Plate 33: Photograph following explosions, 1951 (SRO Ref Ref HC 410/J2/2)
- Plate 34: Plan of Brantham Factory Site, 1955 (SRO Ref. HC 410/G58)
- Plate 35: View of railway line and factory buildings as viewed from north
- Plate 36: Tunnel beneath railway line as viewed from the south side
- Plate 37: Building 1, south-west facing elevation
- Plate 38: Building 1, as viewed from railway embankment
- Plate 39: Building 1, north-east facing elevation
- Plate 40: Building 1, as viewed from south-west
- Plate 41: Photograph of Laboratory Building, undated (SRO Ref. HC 410/J2/2)
- Plate 42: Photograph of Laboratory interior, undated (SRO Ref. HC 410/J2/2)
- Plate 43: Aerial Photograph of Brantham Factory, 1921 (SRO Ref Ref HC 410/J2/2)
- Plate 44: Northernmost phase of Building 2 as viewed from south-west
- Plate 45: Building 2 as viewed from north-west
-

Plate 46: Building 2 as viewed from south

Plate 47: Building 2 as viewed from north-east

Plate 48: Building 2 as viewed from north-east

Plate 49: Building 2 as viewed from north-east

Plate 50: Building 2 interior

Plate 51: [Photograph of the interior of Building 2, Fitters Shop from Promotional Brochure, 1953 \(SRO Ref. HC 410/G57\)](#)

Plate 52: Building 3, viewed from south-east

Plate 53: Building 3, viewed from south

Plate 54: Building 3, viewed from south-west

Plate 55: Building 3, viewed from south-west

Plate 56: Building 3, detail of stack base

Plate 57: Building 3, detail of stack base interior

Plate 58: Building 4, viewed from south-west

Plate 59: Building 4, viewed from south-east

Plate 60: Building 6, viewed from south-east

Plate 61: Building 6, viewed from south

Plate 62: Building 6, viewed from south-west

Plate 63: Building 6, viewed from north-west

Plate 64: Building 6, interior view, ground floor

Plate 65: Building 7, viewed from south-west

Plate 66: Building 7, interior view

Plate 67: Building 8, viewed from south-east

Plate 68: Building 9, viewed from south-west

Plate 69: Building 9, viewed from north-east

Plate 70: Building 9, interior view

Plate 71: Building 10, viewed from south-east

Plate 72: Building 10, viewed from south-west

Plate 73: Building 11, viewed from south-west

Plate 74: Building 11, viewed from south-east

Plate 75: Building 11, interior view

Plate 76: Building 11, interior view

Plate 77: Building 12

Plate 78: Building 13, viewed from south-west

Plate 79: Building 13, viewed from south-east

Plate 80: Building 13, interior view

Plate 81: Building 13, interior, first floor

Plate 82: Building 14, viewed from south-west

Plate 83: Building 14, viewed from south-east

Plate 84: Building 14, viewed from north-east

Plate 85: Building 14, interior

Plate 86: Building 14, interior

Plate 87: Building 15, viewed from north-west

Plate 88: Building 15, interior view

Plate 89: Building 16, viewed from south-west

Plate 90: Building 16 interior view

Plate 91: Building 17, viewed from north

Plate 92: Building 18, viewed from south-west

Plate 93: Building 18, interior view

[Plate 94: Photograph of East side of Factory, 1956 \(SRO Ref. HC 410/G57\)](#)

Plate 95: War Memorial, viewed from north-east

Plate 96: War Memorial, viewed from south-west

Plate 97: Detail of War Memorial base

Plate 98: Detail of War Memorial plaque (courtesy of Brantham Parish Council)

Plate 99: Detail of War Memorial plaque (courtesy of Brantham Parish Council)

Plate 100: Jetty

Plate 101: Jetty

Plate 102: Pond/Reservoir

Plate 103: Evidence of tramway between Buildings 2 and 3

Plate 104: Former route of tramway

1 INTRODUCTION

1.1 Background

1.1.1 Pre-Construct Archaeology Ltd were commissioned by the St Francis Group to carry out a historic building survey focused upon the undesignated redundant and derelict factory buildings and structures at the former Xylonite Factory Site, Brantham, Suffolk, CO11 1NH.

1.1.2 The survey works were carried out prior the proposed regeneration of the former Xylonite Factory Site and adjoining land (approved under Hybrid planning App No. B/15/00263) and undertaken in accordance with a Written Scheme of Investigation (Fletcher, 2016), agreed in advance of works, on behalf of the Local Planning Authority, by Kate Batt, Heritage Officer at Suffolk County Councils Archaeological Service and Conservation Team (SCCAS/CT).

1.1.3 A pre-commencement site meeting established that most of the derelict factory buildings were in a poor structural condition and unsafe to enter. Accordingly it was agreed that an external photographic survey of the buildings supported by architectural description, equivalent to a Historic England Level 1-2 survey, would be appropriate to 'preserve by record' these non-designated heritage assets supported by a thorough and well researched historic background. The survey works accord with guidance published by Historic England in English Heritage 2016; Understanding Historic Buildings: A guide to good recording practice and standards set out in the ClfA guidance for the archaeological investigation and recording of standing buildings or structures (CIFA 2014).

1.1.4 The proposed Hybrid development entails the demolition of the derelict former factory buildings and structures on site and the regeneration of this former brown field site to provide a mixed use development

1.1.5 The aim of the survey work is to produce a permanent record of the site and the former Xylonite factory buildings (south of the railway) in their present condition. This will ultimately form part of an ordered archive and report that will 'record' the buildings and structures affected by the proposals and thereby, in part, mitigate their loss.

1.2 Site Location and Description (Figures 1 and 2)

1.2.1 The proposed development is centred at Ordnance Survey National Grid Reference TM 1073 3306 and comprises a former light industrial manufacturing site and areas of derelict reclaimed land extending for c.63ha to the south of Factory Lane, Brantham, Suffolk (Figures 1 and 2).

1.2.2 The site lies along the northern side of the Stour estuary and toward riverside. The northern boundary is situated at around 23m AOD falling away to the south and down to the edge of the floodplain at 8m AOD. The southern part of the site, particularly that

south of the railway comprises a peninsular of reclaimed land, bordered by a seawall and salt marsh on the edge of the Stour channel.

1.2.3 The factory buildings and subject of the survey all lie to the south of and reached via a tunnel passing beneath the railway. Whilst some buildings retained their roofs and were relative intact, most were in a poor structural condition, partially collapsed or affected by fire or weather damage. To the north, the majority of the former industrial units and offices had been cleared.

1.2.4 The Stour Valley Historic Landscape Study identifies the area of Cattawade and Brantham as being part of the Rolling Valley Farmlands landscape character type (Brooks 2013). This includes gentle valley sides with a largely organic pattern of fields, originating from 18th century enclosure of former Medieval strips, together with later more regular fields. The site also includes the valley floor with meadowland for grazing and features such as sea-walls associated with wetland landscape management.

2 PLANNING BACKGROUND

2.1 Introduction

2.1.1 National legislation and guidance relating to the protection of historic buildings and structures within planning regulations is defined by the provisions of the Town and Country Planning Act 1990. In addition, local planning authorities are responsible for the protection of the historic environment within the planning system and policies for the historic environment are included in relevant regional and local plans.

2.2 Legislation and Planning Guidance

2.2.1 Statutory protection for historically important buildings and structures is derived from the Planning (Listed and Conservation Areas) Act 1990. Guidance on the approach of the planning authorities to development and historic buildings, conservation areas, historic parks and gardens and other elements of the historic environment is provided by the National Planning Policy Framework (NPPF), which was adopted on 27 March 2012 and which supersedes the Planning Policy Statements (PPSs).

2.2.2 The requirement for archaeological work is in accordance with NPPF Paragraph 141. The purpose of the work is to complete an appropriate level of historic building recording of the affected structures and their setting. This will pay specific attention to those elements where demolition/conversion and/or alteration are proposed. The work should be undertaken to a standard that will allow the future interpretation of the buildings within the context for which they were originally designed as well as later uses. An archive and report will be created as a result of the survey.

2.3 Local Policy

2.3.1 The local plan framework is provided by the Babergh Core Strategy and Policies (Adopted 28th February 2011). This contains (under Section 3.3.6) a strategy for the conservation and enjoyment of the historic environment and includes the following:

2.3.2 v) (The Council will) Provide support and guidance to ensure that the design of any development which may effect historic assets is of high quality, and ensure new development makes a positive contribution to local character and distinctiveness.

2.4 Planning Reference: B/15/00263

Brantham Industrial Estate and land to the north and the peninsula (part of), Factory Lane, Brantham, MANNINGTREE, CO11 1NL

2.4.1 Hybrid application for regeneration of existing industrial estate and development of adjoining land. Outline: Mixed use development to comprise approximately 320 dwellings; approximately 44,123 sqm of Class B1, B2 and B8 employment uses; approximately 720sqm of Class A1, A3, A4 and A5 retail uses and Class D1 community uses; provision of public open space and new playing pitches (Class D2). Full: Proposed new access from Brooklands Road; improvements to Factory Lane; new on site road network and structural landscaping; and foul and storm water drainage

infrastructure (As amplified by Transport Assessment (Rev B dated April 2015) received on 7 May 2015).

2.4.2 Two archaeological conditions (43 & 44) attached to the approval read:

Condition 43

ACTION REQUIRED PRIOR TO DEMOLITION OF THE BRITISH XYLONITE FACTORY BUILDINGS: HISTORIC RECORDING

2.4.3 Prior to the demolition of the derelict remains of the former British Xylonite Factory to the south of the railway line on the peninsular, a programme of historic recording and analysis where safe to do so shall be secured in accordance with a Written Scheme of Investigation (WSI) which has been submitted and approved by the Local Planning Authority unless otherwise agreed in writing with the Local Planning Authority the Written Scheme of Investigation shall include:

- a. The programme and methodology of site investigation and recording
- b. The programme for post investigation assessment
- c. Provision to be made for analysis of the site investigation and recording
- d. Provision to be made for publication and dissemination of the analysis and records of the site investigation
- e. Provision to be made for archive deposition of the analysis and records of the site investigation
- f. Nomination of a competent person or persons/ organisation to undertake the works set out within the Written Scheme of Investigation
- g. The site investigation shall be completed prior to development, or in such other phased arrangement, as agreed and approved in writing by the Local Planning Authority

Reason - To allow proper investigation and recording of the site that is potentially of archaeological and historic significance. This condition is required to be agreed prior to the commencement of any development to ensure matters of archaeological importance are preserved and secured early to ensure avoidance of damage or loss due to the development and/or its construction. If agreement was sought at any later stage there is an unacceptable risk of loss and/damage to archaeological and historic assets.

Condition 44

ACTION REQUIRED PRIOR TO COMPLETION OF THE DEMOLITION OF THE BRITISH XYLONITE FACTORY BUILDINGS: ARCHAEOLOGY IN ACCORDANCE WITH THE WRITTEN SCHEME OF INVESTIGATION

Prior to the completion of the demolition of the derelict remains of the former British Xylonite Factory to the south of the railway line on the peninsular the site investigation (where safe to do so) and post investigation assessment shall have been completed, submitted to and approved in writing by the Local Planning Authority, in accordance with the programme set out in the Written Scheme of Investigation approved under

Condition 43 and the provision made for analysis, publication and dissemination of results and archive deposition.

Reason - To safeguard the recording of archaeological assets within the approved development boundary from impacts relating to any groundworks associated with the development scheme and to ensure the proper and timely investigation, recording, reporting and presentation of archaeological assets affected by this development.

3 METHODOLOGY

3.1 Aims and Objectives

- 3.1.1 The aim of the building recording as set out in the Written Scheme of Investigation (Fletcher, 2016) is to provide a low level record of the Xylonite factory buildings and associated structures site prior to their demolition. The aim of the work is to produce a permanent record of the buildings and landscape in its present condition, meeting nationally recognised standards as set out in Understanding Historic Buildings: A Guide to Good Recording Practice (2016).
- 3.1.2 The historic building survey was undertaken to a standard allowing the future understanding and interpretation of the site setting.

3.2 On-Site Recording

- 3.2.1 The on-site survey was carried out during the week ending 16/12/2016 by Taleyna Fletcher and Adam Garwood. A photographic survey comprising high resolution digital photography was completed recording all external elevations, and where safety allowed some principal interior spaces and key features, fixtures or fittings. General shots of the site, placing the buildings in context with their surroundings were also completed. A selection of the images has been included in this report and Figures 3-5 shows the location and direction of these photographs.
- 3.2.2 Due to the presence of asbestos and the dereliction of the structures access was not permitted and therefore descriptions in this report have been made from external inspection and some internal observations which were possible through windows and door openings.
- 3.2.3 The historic building recording broadly accords with a level 1-2 survey as set out in the English Heritage guidelines Understanding Historic Buildings: A Guide to Good Recording Practice (2016). A Level 1 survey is principally a full visual record (photographic) supplemented by very basic descriptive information. This survey is a slightly advanced Level 1 (1-2) which also includes a detailed site historic background and broad building descriptions.
- 3.2.4 At the request of SCCAT/CT, a photographic survey of the modern graffiti was also made. These images have been included in Appendix 2, however no analysis, interpretation or discussion has been attempted.

3.3 Project Archive

- 3.3.1 A full and ordered archive that including any written, drawn and photographic records relating to this survey was completed as defined in Brown (2008); Taylor & Brown (2009) and UKIC and ADS guidelines for the preparation of archaeological archives for

long term storage, and “Archaeological Archives: A Guide to Best Practice in creation, compilation, transfer and curation” (AAF 2007).

3.3.2 The archive will be provisionally stored in Pre-Construct Archaeology’s Cambridge Office in Pampisford, before its deposition with Suffolk County Council Archive Stores.

3.4 Guidance

3.4.1 All works were undertaken in accordance with standards set out in:

- Association of Local Government Archaeological Officers: Analysis and Recording for the Conservation and Control of Works to Historic Buildings (1997)
- British Archaeologists and Developers Liaison Group: *Code of Practice* (1986)
- British Standards Institution: *Guide to the Principles of the Conservation of Historic Buildings (BS 7913)* (1998)
- English Heritage: *Guidance Paper 98: GLAAS: Guidance Paper 3-Standards and Practices in Archaeological Fieldwork in London*
- English Heritage (Clark K): *Informed Conservation* (2001)
- English Heritage: *The Presentation of Historic Building Survey in CAD* (2000)
- CIFA: *Standards and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (2014)

4 HISTORIC BACKGROUND

4.1 Summary of Documents Held at Suffolk Records Office (SRO), Ipswich

- 4.1.1 The Ipswich branch of the Suffolk Records Office (SRO) holds a vast collection of archives from the British Xylonite Company Ltd (Accession Nos 6070, 6076, 6339, 6372, 8010, 8357, 8324 and 8559). The records in this collection are a substantial element of the total archive of this multi-site (and ultimately multi-national) concern originating at Homerton in the present London Borough of Hackney in 1877.
- 4.1.2 The corporate records of the company are mostly held at the Hackney Archives Dept, though a microfilm of the Board minutes 1877-1923 is available at Suffolk Records Office, Ipswich. Further records of the company and other constituents of the Bakelite Xylonite Group are held at the Science Museum in South Kensington, London
- 4.1.3 The collection at Ipswich primarily consists of records of the British Xylonite Company Ltd from 1877 and B.X. Plastics Ltd from 1939, accumulated at the Brantham site including plant records 1740-1970, administrative records 1883-1941, directors working papers 1878-1972, production records 1869-1967, technical and laboratory records 1882-1970, staff, wages, work study and welfare records 1877-post 1966, material concerning the history of Xylonite 1865-1981, publications 1922-1970, photographic material 1870s-1977 and miscellanea 1905-1945.
- 4.1.4 This following background section of this report has been drawn from the documents held at SRO in Ipswich.

4.2 History of the Brantham Site from documents at SRO and Cartographic Evidence

- 4.2.1 The First Edition Ordnance Survey Map dated 1887 (Figure 6) shows the site as it existed prior to the construction of the Xylonite factory site. The current proposed development site occupies land on the northern and southern sides of the railway line and the buildings which were recorded for this report located to the immediate south. The area on the southern side of the railway on this map is occupied by fields south of the railway and saltmarshes and mudbanks on the southern tip.
- 4.2.2 The British Xylonite Company Ltd. was founded in 1877 by L.P. Merriam; it was the first company in England to make what some 50 years later became known as plastic. The product which was made initially for the first 45 years was Xylonite or celluloid, a material derived from combining nitrocellulose with camphor. It is a "thermoplastic" that is re-hardened without change in its chemical nature.
- 4.2.3 The original works were at Homerton in the East End of London and by the end of the first ten years the company was looking to expand. Merriam looked for a site with clean air, access to a useful port and land at agricultural prices. Land at Brooklands Farm at

Brantham was purchased, comprising 130 acres including saltings and by 1887 a new factory was under construction.

- 4.2.4 The area had been entirely agricultural, however there were road and rail connections to London and a barge contact with Harwich. Workers who were brought in to establish the factory were settled initially in Ipswich, but after 1888 the housing estate of “New Brantham Village” comprising 56 houses was built and occupied (Plates 1 – 4). Gradually local labour was recruited and trained and by 1890 the Brantham factory roll comprised 200 workers. Football and cricket teams provided a point of contact with the local community and the company also put aside three fields for allotments. These allotments and the rows of semi-detached workers houses can be seen on the 1904 edition Ordnance Survey Map (Figure 8) and still survive today (Plate 5). In addition to houses and recreational facilities a village hall was built sometime prior to 1914 in memory of L.P.Merriam, also still in use today (right on Plate 6).
- 4.2.5 Although initially relying on steam power, by the turn of the century, the company was able to generate its own electricity and the first generator acquired in 1899 was a belt-driven dynamo used for lighting. A private railway siding was building adjacent to the railway in 1887 and a jetty on the Stour in 1903.
- 4.2.6 The Ordnance Survey Map of 1904 (Figures 7 and 8) shows the first development of the site in the form of the Brantham Xylonite works. This map shows the laying out of the site on either side of the Great Eastern Railway with buildings laid out uniformly on a parallel alignment to the railway line. A tree-lined avenue leads from the road (now Factory Lane) to the group of buildings on the north side of the railway. An image showing L.P.Merriams granddaughter dated 1906 (Plate 7) shows her standing on the avenue with the factory site behind, to the south. A cluster of buildings are located on the south side of the railway – these are the buildings which were the subject of this phase of recording and reporting.
- 4.2.7 Internal transport was originally by means of tram-lines on which trucks were man-handled, 4 or 5 men to a truck. This internal network is clearly shown on the 1904 Map in operation on either side of the railway line and leading down to the jetty for loading/unloading. The last tram was retired in the early 1920s when petrol-driven trucks were introduced, but the old tramlines were not removed for some time and some sections still survived in the factory landscape at the time of the survey.
- 4.2.8 The acid required for the nitration process and later the turpentine for the camphor plant, were brought into the site at favourable rates by barge. Aerial photographs of the site taken in the early 1920s depict the barges in use via Cattawade Creek (Plate 8).
- 4.2.9 L.P. Merriam died in 1889 and was succeeded by his son under whom the company flourished and by 1914 exports represented more than 60% of the company’s business.

4.2.10 A plan of the site from 1905 lists the functions of the buildings in existence at that time (Plates 9-11). The table below lists the buildings on each side of the railway line. (Those buildings on the south were subject to this phase of investigation and recording).

Buildings on North Side of Railway	Buildings on South Side of Railway
British Xylonite Co.	Smiths Shop
Laboratory	Power House
Solution Shop	Boiler House
Still House	Paper Store
Spirit Mixing	Naptha Store
Rubbing Up Shop	Carboy and Drum Shed
Cutting Up Shop	Acid Shop
Bleach Shop	
Model Plant	
Pot Shop	
Whizzing Shop	
Paper Pot Store	
Rolls	
Pots	
Press Shop	
Flattening Shop	
Stoves	
Tube Shop	
Slicing Shop	
Main Office	
Polishing Shop	
Pump House	
General Stores	
Scrap Stores	
Sheet Cleaning	

Scrap Shop
Carpenters Shop
Booking Office
General Stores
British Paper Drying Co.
Changing Room
Mining Shop
Paper Drying Stoves

4.2.11 The scope of the factory did not change to any significant extent until after the end of the First World War. During the war, the supply of German synthetic camphor (an essential ingredient in nitrocellulose) was cut off and the price was hugely inflated. The management of the plant decided to start producing their own camphor and by 1927 it went into full operation.

4.2.12 The next development at Brantham saw the production of “Bexoid” – a cellulose acetate which was marketed in the early 1930s. Experiments were also carried out on the production of film.

4.2.13 In 1938 a reorganisation of the British Xylonite Company took place. The Brantham Works and the Larkswood factory were split off as BX Plastics Ltd and in 1939 50% interest in BX Plastics was sold to the Distillers Co Ltd. The object of this deal was to partly strengthen the position of the Xylonite group by alliance, and partly to secure finances for further development.

4.2.14 The British Xylonite Company produced plastics and materials for a wide variety of household and everyday items including toys, spectacle frames, combs, toothbrush handles, raincoats and buttons. Undated photographs found in the factory’s archives shows some of these products in production (Plates 12-19). The clothing worn would suggest these images were taken during the 1920s-40s. The company was keen to market its goods and thrived on both exports and domestic sales and documents held within the archive show how the company was proud to exhibit its products at exhibitions and trade fairs (Plate 20).

4.2.15 Images within the archive also show the large scale production of plastics at the Brantham factory and give an insight into the types of machinery used on the site and the scale of the plant involved. Although the images included in Plates 21-30 are all thought to have been taken at Brantham, it is most likely the buildings featured were amongst those located north of the railway line.

4.2.16 The outbreak of the Second World War was a critical period for the plastics industry – materials were developed with difficulty and in small amounts under stress of war

conditions. During the war various materials were handled and new products made on a larger scale, following this, it was decided after the war that the company would move into the market for new synthetic polymers. A research centre was established at Lawford Place, 2 miles from Brantham Factory site. Here, for the first time scientific staff had access to equipment to experiment and develop new materials.

4.2.17 A plan of the site from 1947 drawn to show the location of the cloakroom and washing facilities shows the expansion of the site with additional buildings on both sides of the railway line (Plates 31 and 32). On the south side, which was the focus of this phase of investigation, there was a significant increase in the number of buildings since the 1905 plan. New buildings including some which relate to the production of camphor labelled as “New Syn-Cam Factory Area”.

4.2.18 In 1951 development works on Cellulose finally ceased and the company’s future developments concentrated on synthetic polymer. In that same year there was an explosion at the factory. Although little information about this was found in the archives, a photograph shows the impact on one building (Plate 33) – the building was no longer in existence at the time of the survey.

4.2.19 The company’s original houses in New Brantham Village were sold in 1951 to the sitting tenants, as it had become uneconomic to keep the properties in repair. By this time large numbers of employees began to travel in daily by bus, train or bike.

4.2.20 In 1952 a part BX and part-government owned factory in Dundee which had been equipped to produce vinyl and acetate ran into problems due to difficult administration and partly due to its remote location. It was decided that all plant and staff who were able and willing should be moved to Brantham and also to invest in production of new large flexible sheet. This resulted in the building of a huge new double-ended unit at Brantham on what had previously been a marsh, barrel yard and gardens. As steel continued in short supply, the central brick tower was flanked by two large blister hangers, with Meccano-like framework and corrugated aluminium roof. Soon after, a second large building was built to house new machinery for making rigid plastic PVC sheet.

4.2.21 The next significant development for the company was the movement into production of Polystyrene and production was underway by 1953.

4.2.22 Another significant development made at the Brantham factory was their production of photographic film for photographic and X-ray purposes which had previously had to be imported from the United States. In conjunction with Ilford Ltd subsidiary company was formed called Bexford Ltd to manufacture film which went on to be highly successful.

4.2.23 Following the Second World War, the increased tonnage of materials manufactured at Brantham called for a large programme of building works. Much of the old factory was re-erected on modern lines, new main roads were constructed and a significant water

main was installed. Two large office buildings were completed including a new main office to house a conference room, reception and executive offices.

4.2.24 A plan of the Brantham works site showing the factory in 1955 (Plate 34) shows a significant expansion by this time, particularly on the north side of the railway. Now clearly labelled "B.X.Plastics Ltd", there has been an increase in the construction of building between the railway line and the main road (now Factory Lane). A new site entrance has been created alongside the main office with a gate house and a separate entrance for goods was located along the western side of the factory site. The different aspects of the business are also reflected in the plan with "Bexford Ltd" located on the eastern area of the site.

4.2.25 The Brantham site had been sold in 1966 to British Industrial Plastics, a subsidiary of Turner & Newall, who were in turn acquired Storey Brothers of Lancaster in 1977.

4.2.26 The Ordnance Survey Map of 1973 (Figure 9) depicts an expansion of the land associated with factory site at the southern tip with what appears to be an additional sea wall enclosing an area with two large ponds and drains. The tram lines and routes are still visible although the sheds have been removed. There are still a number of buildings on either side of the railway line as indicated on the site plan of 1955, although functions are not clear from this later map. On the northern side of the railway line the war memorial is shown at the site entrance.

4.2.27 The company became Wardle Storeys in 1984 and the site finally closed in 2007.

5 BUILDING DESCRIPTIONS

For ease of reference each building or structure within the agreed survey area was attributed its own individual number (1-18). Each building has been described from external inspection only and where possible a summary of its historical context will follow. The location of each building and plate used in the report is illustrated on Figures 3-5)

The buildings surviving buildings which were surveyed were located on the south side of the railway line and accessed by passing under the railway line through an arched tunnel (Plates 35 and 36).

5.1 Building 1: Main Laboratory (Plates 37-40)

Building Description

5.1.1 Building 1 is the first building encountered to the south of the railway line. It is a relatively large building, raised over two storeys and with a lower contemporary adjoining range to the east side. The laboratory had lost its roof structure and most of the windows were either missing or lost. In architectural terms it was built to be appreciated, clad in an outer skin of concrete, rustic ashlar blocks, an eaves cornice and simple parapet wall. The roof line to the more visible northern elevation (to the railway) was embellished with symmetrical gable-ended dormers, one still retaining a ball finial at the foot of the gable parapet. The arrangement of fenestration was symmetrical, the window openings to both floors flat headed with exposed lintels (concrete), plain sills and a dentil eaves band above the first floor openings. The latter were fitted with large wrought iron-framed fixed windows of either 4 x 4 or 6 x 4 lights (some examples with a central-pivoting ventilator) and smaller windows to the less visible elevations. The main entrance was situated within a slightly forward set central bay within the western elevation and whilst the door was lost a four-light glazed door light remained.

5.1.2 Closer inspection showed that this building was a robust construction built around a concrete superstructure, with internal floor structures, mainly concrete but also incorporating timber floors, built off heavy scantling steel joists supported by stanchions. The stair wells were concrete and the roof structures to the first floor, similarly supported by steel joists, mainly flat but incorporating a central pitched light lantern (along the line of the gable dormers).

Historical Context

5.1.3 Plans found within the archives indicate this building was the main laboratory. Undated photographs held at Suffolk Records Office show the exterior and internal images of the building when it was in use (Plate 41 and 42). Cartographic evidence shows a building in this location on the 1904 Ordnance Survey Map (Figures 7 and 8), however

it appears to be a smaller structure than the current building suggesting it was extended later – this fits with the site observations. Unusually however, there is no evidence of a building in this location on the 1905 factory sketch plan (Plate 11). The earliest photographic evidence of the building exists in an aerial photograph of the site taken in the 1920s (Plate 43). This is considered to be one of the earliest buildings associated with the construction of the factory site and therefore the first phase is thought to date to between 1887 and 1904.

5.2 Building 2: Fitters Shop (Plates 44-50)

Building Description

5.2.1 Building (2) was an aggregation of three main structures, a small gable ended single storey brick built range to the north-side, a large full height fitters shop built with a north-light roof to the south and a small two storey addition to the latter built with an over-sailing first floor, at its western end.

5.2.2 The smaller gable ended range was built in yellow stock ornamented with contrasting red brick used for banding, voussiors and eaves detail. Whilst the building was in a poor condition having lost most of its roof structure through fire and collapse, the king post trusses and a few examples of iron-framed casements (similar to those in 1) still remained. The large fitters shop was built using similar brick treatments with contrasting red and yellow stocks to three elevations, but much plainer brickwork to a later, lower extension, also built with a three-light, north-light roof, to the east. The flank elevations to the earlier taller range were built in pier and panel, with visible external pilasters at bay intervals (supporting the roof trusses). A series of single storey accretions were added along the southern wall, most of which had partially collapsed and a gable ended range built onto the north wall of the later north-light extension. The latter still contained plant used to heat treat/bake materials.

5.2.3 Limited internal access within the main building showed that the western, earlier bays were built full height with steel north-light trusses, fabricated from riveted L shaped steel sections braced at the junctions using gusset plates. The lower north-light roof to the extension was similar but a simpler construction. The floors within this later extension were laid with hard wood block, while those within the earlier range were covered in ceramic tiles. All of the lower walls were decorated with graffiti.

5.2.4 Historical Context

5.2.5 Plans found within the archives indicate this building was the fitters shop (Plate 16). Undated photographs held at Suffolk Records Office show the interior of the building when it was in use (Plate 51). Cartographic evidence suggests it was not one of the earlier buildings associated with the Xylonite Factory as it does not appear on the 1904 Ordnance Survey map or the 1905 site plan however it does appear on an aerial

photograph of the site taken in 1921 (Plate 43) narrowing down its date of construction to between 1905 and 1921.

5.3 Building 3: Power House (Plates 52-57)

Building Description

- 5.3.1 Building 3, comprised three principal elements, a single storey range aligned north-south, to the west of and fronting onto the central thoroughfare through the site (which 1 and 2 also respected), a full height perpendicular range aligned east-west, adjoining to the south and the base of a former industrial stack, located at the junction of the above.
- 5.3.2 The full height east-west range, though shorter in length, built over 6 bays, was almost identical in its construction and materials as the north-light building (2). Its elevations were built using yellow stocks, with contrasting red brick used for string courses, eaves detail, window voussoirs, both segmental and circular. The north-light roof was hidden from view from the central thoroughfare (east) by a tall end wall parapet, a feature also used in (2). Fenestration to the east side employed tall timber casements, while a large iron-framed multi-light window lit the building from the west side. The upper walls of the west elevation were covered in corrugated sheeting, enclosing an open steel frame, otherwise the elevations were brick built. A section of brickwork removed from the south-eastern angle revealed a heavy plated wrought iron or steel stanchion, which comprised part of the buildings robust structural in-wall frame supporting the roof structure. The adjoining single storey range to the north was clearly a contemporary construction built using the same style of brickwork. The roofs, built off pilasters, were simply pitched, incorporating a raised ridge-line lantern over the southernmost bays. The western elevations were much altered. Electrical control panels associated with its continued use as a power facility, partly survived within the southern bays.
- 5.3.3 The brick-built base of a former industrial chimney stack was located at the junction of these buildings and to the north of the north-light. Typical of the period the base was built as a plinth, with recessed panels to the visible walls and an over-sailing brick cornice and entablature. The outer brickwork was of good quality red brick laid in English bond in lime mortar. It contrasted with the inner lining which used cheaper yellow stocks. Following the removal of the stack, the base was capped with a shallow roof structure.

Historical Context

- 5.3.4 Plans found within the archives indicate this building was part of the original the power house (Plate 10). Cartographic evidence suggests it was one of the earlier buildings associated with the Xylonite Factory appearing on the factory plan dated 1905 and on the 1904 Ordnance Survey map. On these historic maps the power house sat between two chimneys, easily identified on several historic images and plans (Plates 7, 8 and

43). This building appeared to be linked into the internal tram network on its western side as depicted on the 1904 Ordnance Survey Map. Some surviving elements are considered to be part of the earliest phase of buildings associated with the construction of the factory in 1887.

5.4 Building 4: Smiths Shop (Plates 58 and 59)

Building Description

5.4.1 Building (4) was located immediately to the south of (2) and was a small brick-built and gable ended range presenting its long elevations to the north and south. The building was in a poor condition due to extensive fire damage and had lost all evidence of fenestration. The original openings seen in the western end wall were built with rough on-edge brick voussoirs, while those openings to the flank walls were plainer and larger. A taking-in door central to the gable over the main entrance gave access to attic storage, possible by the use of a queen post truss, burnt examples of which, still retaining their back purlins, remained.

Historical Context

5.4.2 Plans found within the archives indicate this building was the Smiths Shop in 1905 (Plate 10). Cartographic evidence suggests it may have been one of the earlier buildings associated with the Xylonite Factory appearing on the factory plan dated 1905, however it is not depicted on the 1904 Ordnance Survey map.

5.5 Building 5: Demolished

5.6 Building 6: Camphor Works (Plates 60-64)

Building Description

5.6.1 Building (6) is situated at a distance to the west of the main group of buildings and close to the sea wall and jetty. It is a tall, free-standing structure built with an asymmetrical roofline and a long catslide to the north. The upper storeys of the building, across all four elevations, are clad with corrugated sheeting fixed onto an internal steel framework. This overlays a heavy structural steel frame, which supports the building, predominantly infilled around the circuit of the external walls by brick walling. A small two storey contemporary office with brick infill elevations, projects out from its eastern elevation and adjacent to a wide storey high door opening. Fenestration present in the north elevation adopts the typical wrought-iron multi-light casements. Internally the building is open to the roof, vertical access up through the building possible by interconnecting straight flights and gantries with cast-iron open-work floor sections. The ground floor is a forest of vertical stanchions which support an equally complex array of horizontal beams, providing both lateral support and the basis for the gantry floors. These gantries also accommodated a range of specialist equipment which appear to have been fed by gravity, while a centrally located elevator provided the necessary conduit to move materials vertically through the building.

Historical Context

5.6.2 Plans found within the archives indicate this building was part of the camphor works in 1955 (Plate 34). The historic background research revealed that camphor production began at Brantham after the First World War limited its availability and the factory was in full production by 1927. The first cartographic evidence of the buildings existence is the 1947 plan of the site where it is in part of the "New Syn Cam Area" (Plate 32) and it can also be seen in the background of the photograph taken of the building which was damaged by a gas explosion in 1951, easily identified by its recognisable arrangement of ventilation shafts (?) along the roofline (Plate 33).

5.7 Building 7: Electrical Sub-station (Plates 65 and 66)

Building Description

5.7.1 Building (7) was a small concrete framed building with a slab concrete roof and Fletton brick elevations located to the north of (6). Fenced off for security reasons, the bank of electrical control panels were located on the first floor, reached only by an external fixed iron ladder. The control panels varied in their age.

Historical Context

5.7.2 Cartographic evidence suggests this building was constructed sometime between 1955 and 1973.

5.8 Building 8: (Plate 67)

Building Description

5.8.1 Building (8) was a long rectangular external tank-like structure built with low concrete walls and protected from the elements by a crude mono-pitch canopy constructed out of corrugated sheeting. It clearly is purpose built for a particular industrial process and may be used as a cooling pond, many of which were annotated on map extracts.

Historical Context

5.8.2 Cartographic evidence suggests this building was constructed sometime between 1955 and 1973.

5.9 Building 9: (Plates 68-70)

Building Description

5.9.1 Building (9) lies at a relatively short distance to the east of (6) and is a single storey manufactory unit built with a tall and distinctive twin north-light roof. The elevations are a composite of exposed light steel stanchions and Fletton brick panels. The fenestration conforms which much of that already described, being functional multi-light iron-framed casements set into openings with plain concrete lintels and sills. Together these windows and the twin north-light provide high levels of natural internal light to the working floor. The roof is also characteristic of the roofs in general, built using L shaped steel sections bolted (not riveted) together and braced with gussets. Internally the building had been divided into two, using a modern block wall, along the line of the roof valley, while it appears to have been enlarged with the addition of an aisle onto the

south side. A large redundant static production apparatus remained within the eastern bays.

Historical Context

5.9.2 Plans found within the archives indicate this building may have been part of the camphor works in 1955 (Plate 16). The first cartographic evidence of the buildings existence is the 1947 plan of the site (Plate 32). Camphor production began at Brantham after the First World War and the factory was in full production by 1927. The first cartographic evidence of the buildings existence is the 1947 plan of the site where it is in part of the "New Syn Cam Area" (Plate 32).

5.10 Building 10: (Plates 71 and 72)

Building Description

5.10.1 Building (10) is represented by the remains of a brick-built formerly flat roofed structure. During the site visit with the client there were suggestions that this was once used as a dedicated smokers room. The interior was lit, to the south side, by a band continuous glazing located high in the wall and below the eaves line. The southern wall had also been in part rebuilt in recent years using yellow brickwork and an symmetrical pattern of prominent blue brick headers. The building was in a very poor condition having lost its roof structure. Interesting graffiti was noted on the exterior (see Appendix 2).

Historical Context

5.10.2 Cartographic evidence suggests this building was constructed sometime between 1955 and 1973.

5.11 Building 11: (Plates 73-76)

Building Description

5.11.1 Building (11) is a large gable-ended brick and steel framed shed aligned with its long elevations facing north and south and gable ends east and west. The external walls, constructed using Fletton brickwork are mainly built blind, internal illumination courtesy of a series of transparent fibre-glass panels set into the covering roof structure. The latter is supported by a series of wide triangulating steel trusses which span, unsupported, the entire width of the building and are built off an internal steel framework of stanchions, set at bay intervals along the flank walls. Production apparatus and extraction ducting above remained within part of the building.

Historical Context

5.11.2 Cartographic evidence suggests this building was constructed sometime between 1947 and 1955, although its exact function is unknown.

5.12 Building 12: (Plate 77)

Building Description

5.12.1 Building (12), similar to (8), is a square external tank-like structure, located immediately north of (11), built with low concrete walls and an internal array of concrete plinth structures. The tank is sheltered from the elements by a crude canopy constructed from corrugated sheeting. It clearly is purpose built and may have been used as a cooling pond, of which many were annotated on historic map extracts.

Historical Context

5.12.2 Cartographic evidence suggests this building was constructed sometime between 1955 and 1973.

5.13 Building 13: Store (Plates 78-81)

Building Description

5.13.1 Building (13) is a large gable-ended brick-built shed aligned with its long elevations facing north and south and gable ends east and west. It comprises a 10 bay full height range, used as stores over two floors, and a later two storey office-block built onto the western end of the stores. The former is predominantly built blind and with Fletton brick elevations, while the office block, an in-line continuation of the stores, was fenestrated using off-the-peg Crittal style windows. External access into the stores was from the eastern gable elevation and via a full height sliding door (removed). It lay adjacent to a large window opening with a iron-framed window built with marginal lights. Internally much of the building was given over to small parts storage, with ranks of shelving arranged over two levels. Typically the roof structure comprised light steel trusses of a king post design and covered by asbestos cement sheeting, interrupted by in-pitch clear plastic/fibre glass roof lights.

5.13.2 A fenced yard area to the east of shed (13) contained a large hoist, presumably used for loading and unloading flat bed trucks/trailers while an area to the south of (13) was set aside as a compound for storage tanks and silos. Whilst two tanks and a silo remained, many circular concrete bases of former storage units were also present.

Historical Context

5.13.3 Cartographic evidence suggests this building was constructed sometime between 1955 and 1973. Although there is no evidence from the historic documents consulted regarding the use of the building, internal inspection suggests this building comprised offices, toilets and a large parts store.

5.14 Building 14: (Plates 82-86)

5.14.1 Building (14) is a 6 bay, single-storey brick built range with gable ends to the east and west and a pitched in-line roof. Each bay incorporates a large rectangular window opening, built with concrete lintels and sills, and a typical multi-light (5 x 2 or 5 x 3) iron-

framed casement with central hopper. The brickwork to the walls comprised smooth faced reds laid in stretcher courses and to a minimal 1 brick (9 inch) thickness. Internally the building was mainly open plan apart from a small office range built into the north western bay. The floors were covered with red ceramic quarry tiles while the walls were plastered. The roof structure comprised light triangulating steel trusses comprised of L shaped extrusions, strengthened by plate gussets. The trusses were additionally supported by intermediate stanchions. Ducting for air extraction apparatus remained within the roof space (above tie level).

5.14.2 A large free standing cast-iron tank was located close by and to the north of (14).

Historical Context

5.14.3 Plans found within the archives indicate this building was constructed by 1947 (although there its precise location on the sketch plan is questionable) (Plate 32), however it is not visible on the 1921 aerial photograph (Plate 43). This gives a construction date range of between 1921 and 1947. The plan showing the factory site in 1955 (Plate 34) suggests that this building was within the “textile area” at that time.

5.15 Building 15: Store (Plates 87 and 88)

Building Description

5.15.1 Building (15) is located immediately north of (13) and is a open-sided shelter probably used for storage of materials. It is constructed using both brick and blockwork for its flank elevations and has a pitched two bay roof with a central triangulating steel truss. This truss was very similar to those present in (14).

Historical Context

5.15.2 Cartographic evidence suggests this building was constructed sometime between 1955 and 1973.

5.16 Building 16: Store (Plates 89 and 90)

Building Description

5.16.1 Building (16) is a 6 bay, single-storey, gable-ended range aligned east-west and built with a side aisle to the north under a catslide. The building is constructed around a steel frame and clad in corrugated sheeting. Access into the unit was via a large full height sliding door built central to the western end wall. The fenestration was set into rectangular openings and comprised typical iron-framed fixed casements. The building had latterly been used as a store with free standing units and built-in shelving (for palletted goods). The floor was interrupted by a line of stanchions which supported the northern end of the king-post steel truss roof structure and delineated the aisle (a contemporary feature) to the north.

Historical Context

5.16.2 Cartographic evidence suggests this building was constructed sometime between 1947 and 1955, although its exact function is unknown.

5.17 Building 17: WC (Plate 91)

Building Description

5.17.1 A small brick built structure with a concrete slab roof and high strip glazing to upper walls. Latterly in use as a workers toilet block.

Historical Context

5.17.2 Cartographic evidence suggests this building was constructed sometime between 1947 and 1955, although its exact function is unknown.

5.18 Building 18: (Plates 92 and 93)

Building Description

5.18.1 A large 'blister' type pre-fabricated range, aligned with its long elevations east-west and located toward the eastern site boundary. The building, a shallow arched structure built using a series of box section 'ribs' tied together by lateral joists (purlins) and diagonal braces is by clad in modern corrugated steel. It has few windows and accordingly is murky inside with natural light originating from either the end walls or a few large in-roof lights. As this pre-fabricated building was designed to be an open adaptable space, free standing units, independent of the main structure, had been constructed within.

Historical Context

5.18.2 Cartographic evidence suggests this building was constructed sometime between 1947 and 1955, although its exact function is unknown. It can be seen on an aerial photograph of the site from 1956 (Plate 94). It initially it appears to have been two separate structures with a small structure linking or between them. This may have been the structure described in section 4.2.19 which was built to house new machinery for making rigid plastic PVC sheet following the closure of the Dundee factory in 1952.

5.19 British Xylonite War Memorial (Plates 95-97)

Description

5.19.1 The war memorial was situated within the northern half of the site to the north of the railway and at a short distance from Factory Lane. It was a needle type memorial with a Portland stone plinth set onto a circular base. The memorial was relatively subdued in its decoration, with subtle foliate band with corner scrolls at the base of a tapering square section shaft. The dedications had been removed.

Historical Context

5.19.2 In 1914, 425 workers from the Hale End, Hackney factory signed up to fight and many women were recruited to carry out the work left by absent male workers. Forty men did not return and a war memorial was erected in the grounds to honour their memory. After the Second World War, a further seven names were added to the memorial. When the Hale End factory was closed in 1971 the memorial was sent to Brantham. (<http://www.walthamstowmemories.net/pdfs/Bill%20Bayliss%20-%20Xylonite.pdf>).

5.19.3 With the kind assistance of Brantham Parish Council, photographs of these dedications were made and sent to the authors and have been included with the plates of this report (Plates 98 and 99).

5.19.4 The earliest cartographic evidence of the war memorial at Brantham is the 1973 Ordnance Survey Map (Figure 9).

5.20 Other Buildings

Jetty (Plates 100 and 101)

5.20.1 The jetty to the west of building (6) projects into the Cattawade Creek. It is a modern construction built using a series of concrete posts supporting a sectional concrete bed and a low iron hand rail.

Reservoir (Plate 102)

5.20.2 To the south of the subject buildings and toward the southern end of the central former tramway was a large lined reservoir (Plate 102) and a small sheltered 'pump house' linked to the reservoir and via a series of large section pipes, to the estuary. It appears to be involved in water management, dispersal and extraction for use on site. This would have been the location of the "acid shops" and the "carboy and drum shed" as depicted on the 1904 map and 1905 sketch plans, although no evidence of these structures survived at the time of the survey. These buildings were linked by the tram network at the factory, the route of which is still evident on the site today.

Tram Network (Plates 103 and 104)

5.20.3 Evidence of the tram network on the south side of the railway line was noted during the survey along the route leading from under the railway leading southwards where the track was still visible embedded in the road (Plate 103). Further southwards the route of the track was still visible within the vegetation leading towards the location of the buildings described above (Plate 104).

6 DISCUSSION

- 6.1.1 Pre-Construct Archaeology Ltd were commissioned to carry out a primarily photographic, Level 1, built heritage survey targeting a group of surviving buildings associated with the former British Xylonite Factory in Brantham, Suffolk. A key focus of the investigation was to incorporate a comprehensive development of the site from the holdings of the Suffolk Records Office in Ipswich.
- 6.1.2 The investigation revealed a number of structures in very poor condition and so neglected and damaged that interior inspection was not possible. However, the buildings which survived at the time of the survey were adequately recorded to meet the requirements of the Brief set and the requirements set out for a Level 1 survey as defined by Historic England.
- 6.1.3 When considered alongside the wider context of the British Xylonite Factory site, the buildings which were surveyed and recorded made up a small percentage of the structures which were present in the height of the factory's production during the mid to late 20th century. The use of plans and sketches held in the archives made it possible to identify the use and function of a number of buildings in the factory from the early to the mid 20th century. Some functions and uses were ascribed to the buildings surveyed from these documents, however, the main production processes and those which were considered worthy of capturing in photographic record by the factory's owners were more of those located on the north side of the railway where the polishing, flattening. Rolling and mixing were taking place.
- 6.1.4 The buildings on the south side of the Railway line (subject of this survey) appear to have been more associated with powering the plant and with heavy, possibly unpleasant smelling or very noisy processes i.e., the nitration laboratory, boiler house, power house, and camphor production. This may be why the site was split into two areas of activity, separated by the railway line. It should be considered that there were a significant number more buildings on this side of the line than survived by the time of the survey – these are well illustrated on the 1955 plan of the site (Plate 34).
- 6.1.5 The buildings surviving, although now beyond salvage or re-use represent what remains of a successful production company with a well documented history. The company chose the location of the Brantham plant with a setting in a rural area with good access to roads, rail and water for transportation and deliveries. The establishment of a small but well served village brought in workers and facilities and social events soon established a thriving community centred around the factory. The way in which the factory adapted to the circumstances of the day by manufacturing its own camphor and later producing new materials whilst creating and experimenting in its own laboratory attributes to its success. The history of the factory represents the growth and decline of British Industry in general during the early 19th through to the
-

late 20th century and although the buildings and the factory are now gone, the legacy of the company lives on within a number of buildings established by the factory within the local community.

7 ACKNOWLEDGEMENTS

7.1.1 Pre-Construct Archaeology Limited would like to thank St Francis Group for commissioning the project. The project was managed for Pre-Construct Archaeology Limited by Taleyna Fletcher who also undertook the background research. The photographic survey was carried out by Taleyna Fletcher and Adam Garwood. The Illustrations were prepared by PCAs CAD Department. Thanks are extended to Sarah Keys and the Brantham Parish Council who kindly provided the photos of the plaques which had been removed from the War Memorial.

8 BIBLIOGRAPHY

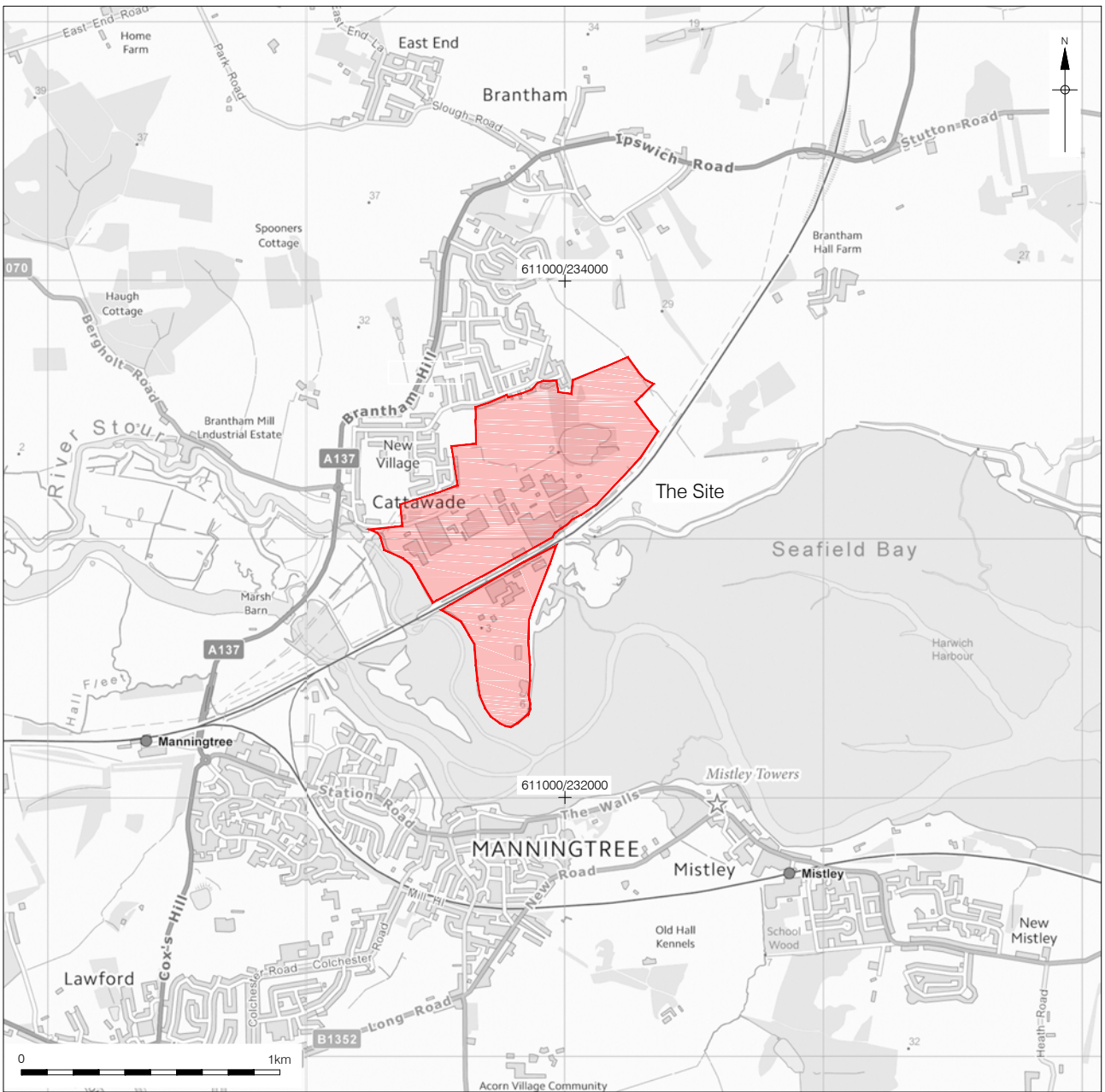
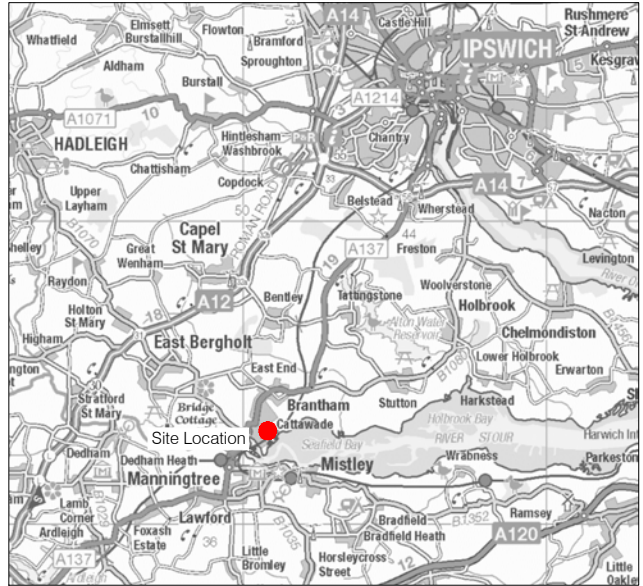
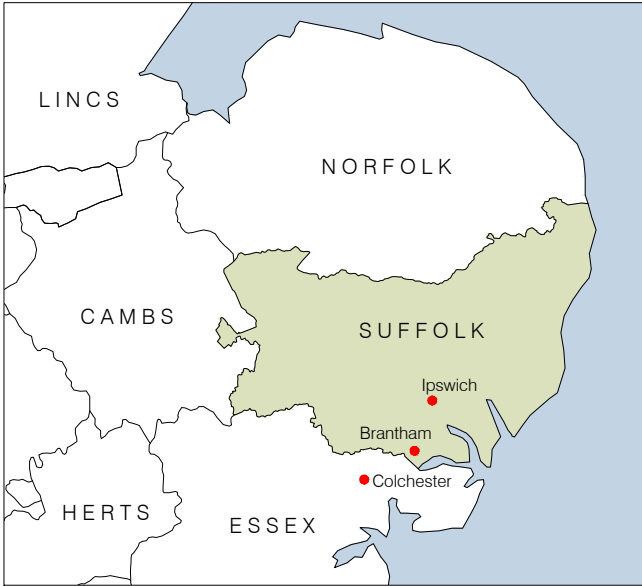
Brown, D., 2008. Standard and Guidance for the Preparation of Archaeological Archives. Institute for Archaeologists

ClfA 2014. Standards and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures

English Heritage, 2016. Understanding Historic Buildings: A guide to good recording practice.

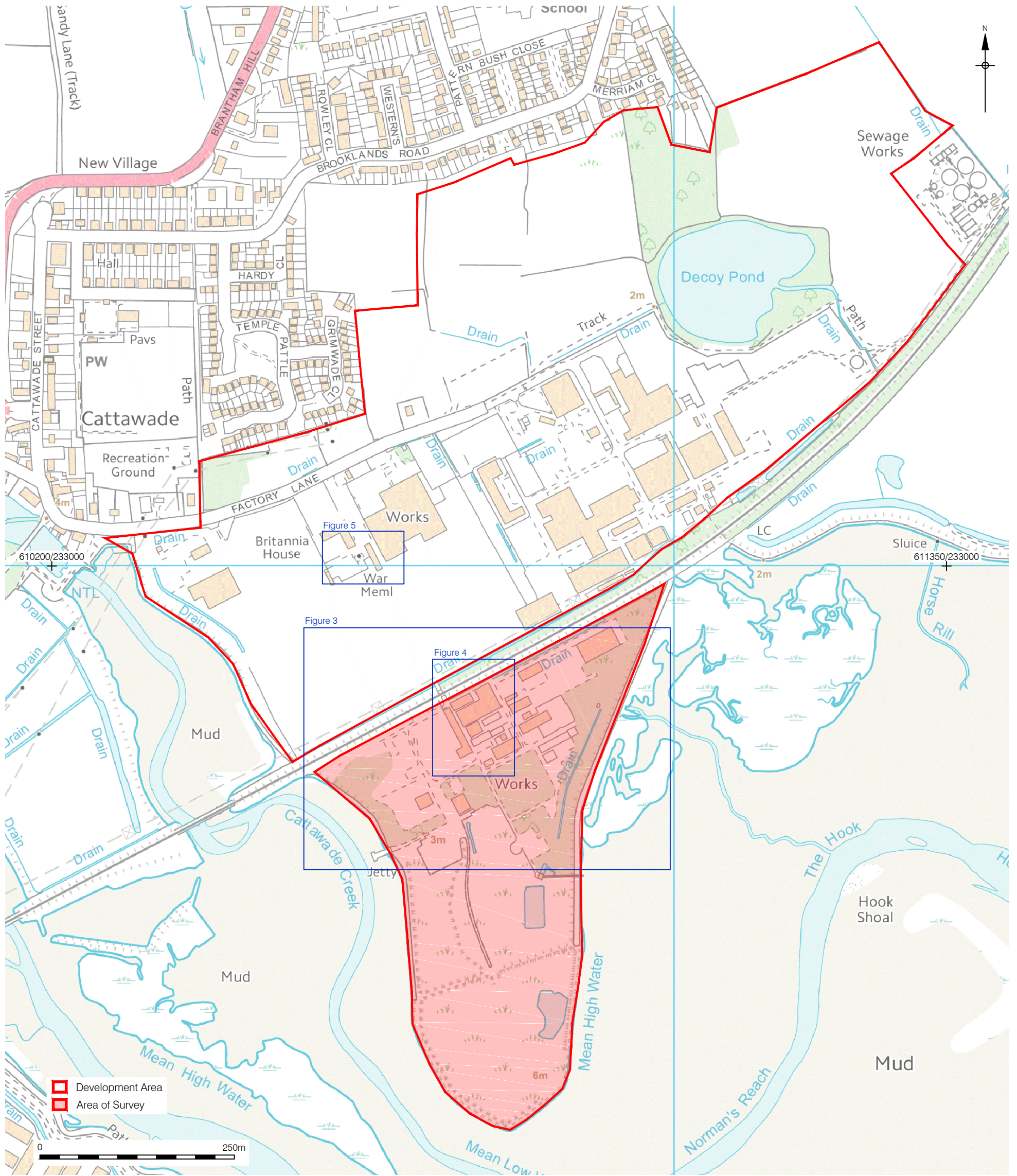
Fletcher, T. 2016 Written Scheme of Investigation for Historic Building Recording at former Xylonite Factory, Factory Lane, Brantham, Suffolk, CO11 1NH

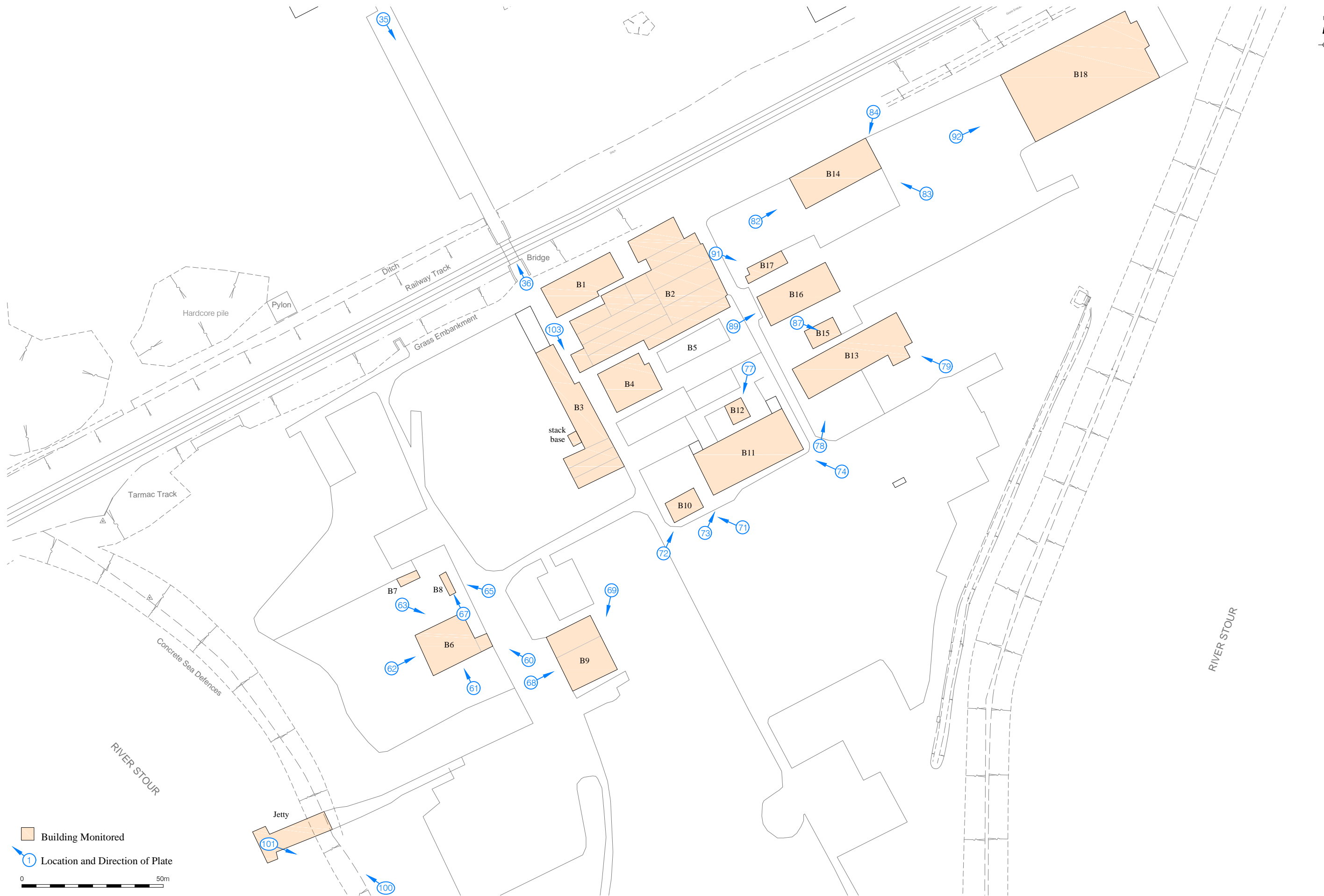
Taylor. J & Brown. G., 2009. Fieldwork Induction Manual: Operations Manual I. Pre-Construct Archaeology.



Contains Ordnance Survey data © Crown copyright and database right 2016
 © Pre-Construct Archaeology Ltd 2017
 16/01/17 CF

Figure 1
 Site Location
 1:2,000,000, 1:250,000 & 1:25,000 at A4





Based on survey drawing supplied the client
 © Pre-Construct Archaeology Ltd 2017
 16/01/17 CF & HB

Figure 3
 Buildings 1-18 showing external plate locations
 1:1,250 at A3



Building Monitored
 ① Location and Direction of Plate
 0 20m

Figure 4
 Detail of Buildings 1-4 showing External Plate Locations
 1:400 at A3

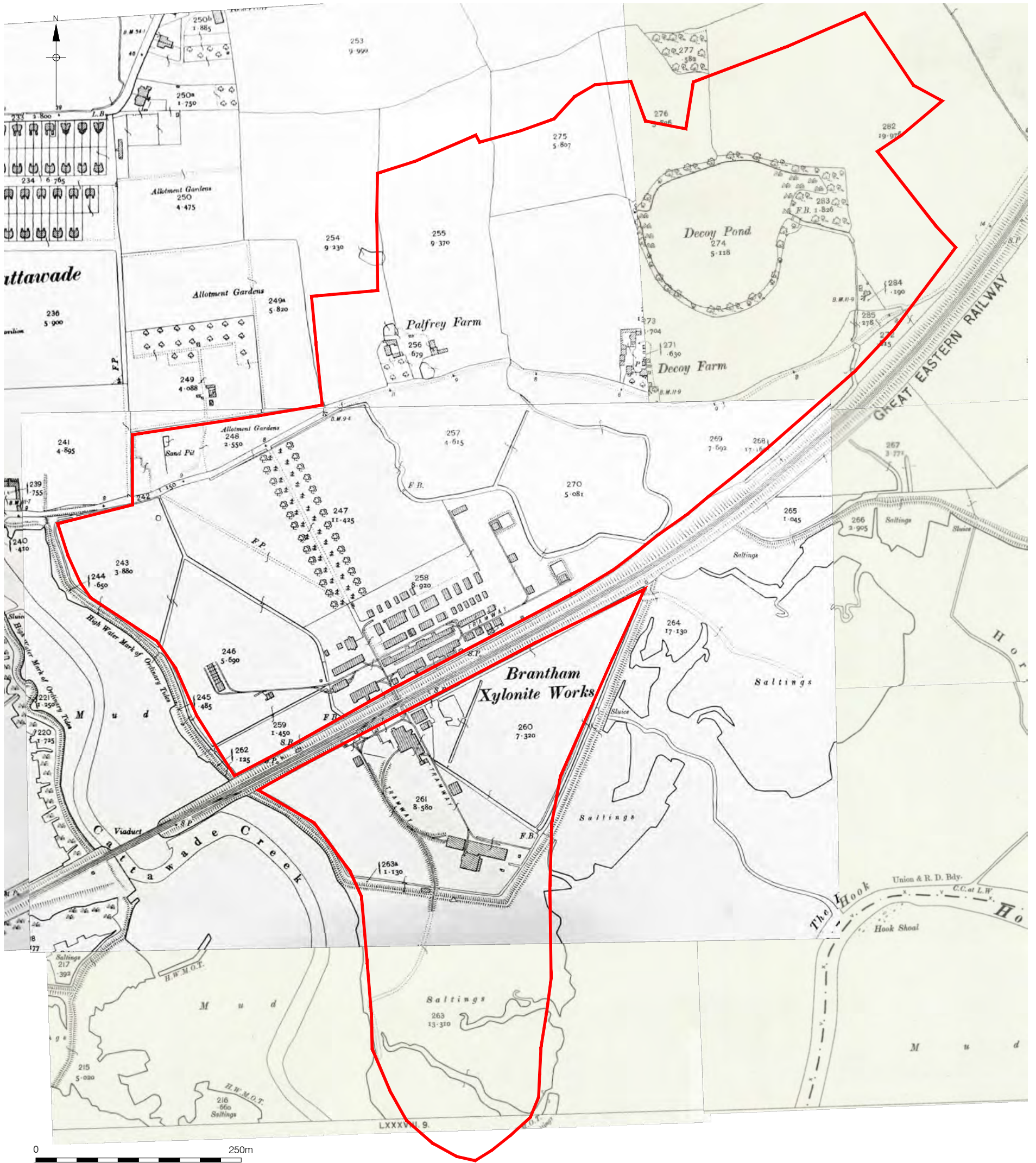


Based on survey drawing supplied the client
 © Pre-Construct Archaeology Ltd 2017
 16/01/17 CF & HB

Figure 5
 Detail of War Memorial showing Plate Locations
 1:400 at A4







© Pre-Construct Archaeology Ltd 2017
 16/01/17 CF

Figure 8
 Second Edition OS Map of 1904
 1:5,000 at A3



Figure 9
 Ordnance Survey Map 1973
 1:5,000 at A3

APPENDICES 1-3

APPENDIX 1 PLATES



Plate 1 : New Brantham Village c. 1900 (SRO Ref HC 410/J1/1)



Plate 2 : New Village c. 1914 (SRO Ref Ref HC 410/J1/2)



Plate 3 : Brantham Village, date unknown (SRO Ref HC 410/J1/1)



Plate 4 : Brantham Village taken from bottom of Brantham Hill, 1900 (SRO Ref HC 410/J2/1)



Plate 5 : Brooklands Road, Brantham taken December 2016



Plate 6 : Brantham Memorial Hall, 1927 (Ref HC 410/J2/1)



Plate 7: Photograph of Merriams Granddaughter, 1906 with factory in background (to the south) (SRO Ref HC 410/J2/2)

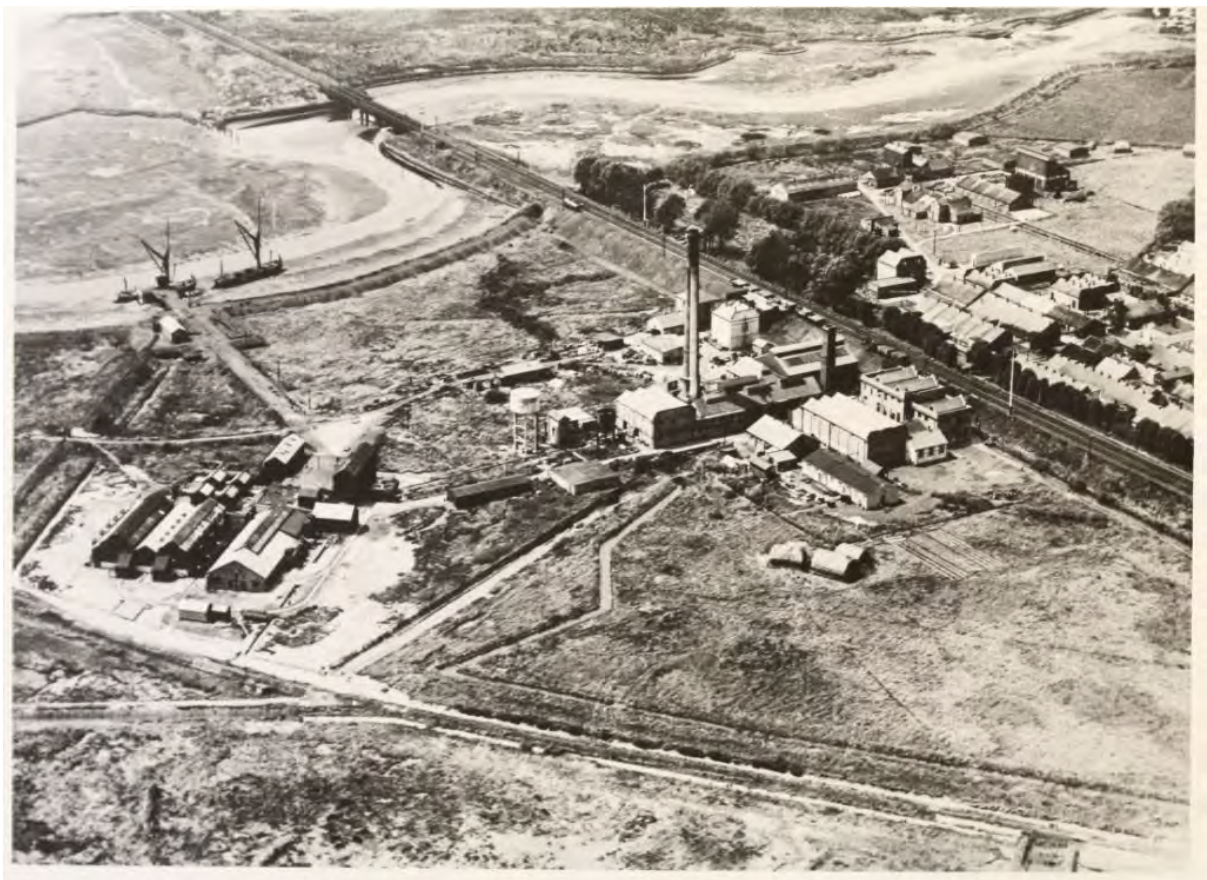


Plate 8: Aerial Photograph of Brantham Factory, 1924 (SRO Ref Ref HC 410/J2/2)

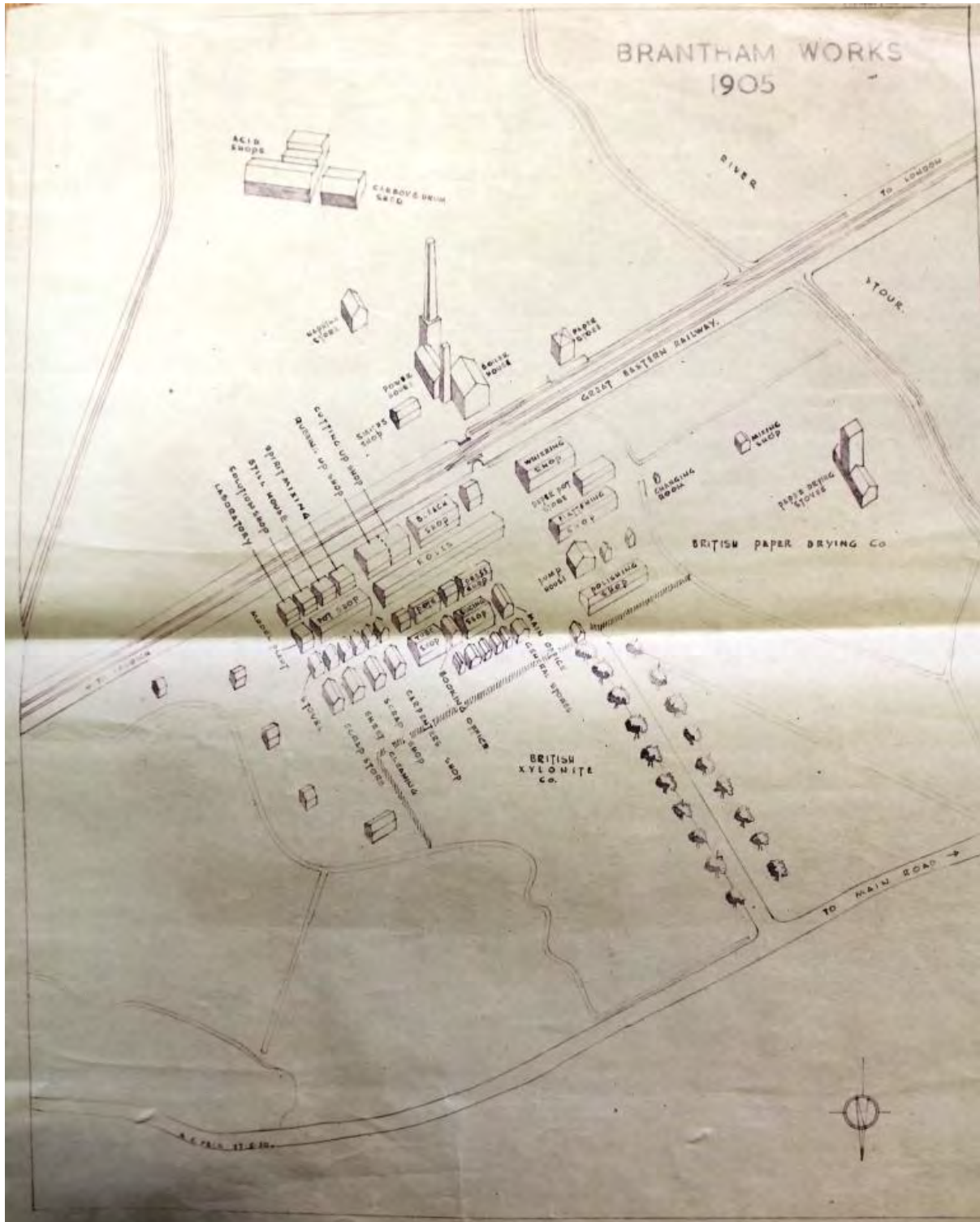


Plate 9: Plan of Brantham Works, 1905 (SRO Ref. HC 410/A7/8)



Plate 10: Plan of Brantham Works, north of railway line, 1905 (SRO Ref. HC 410/A7/8)

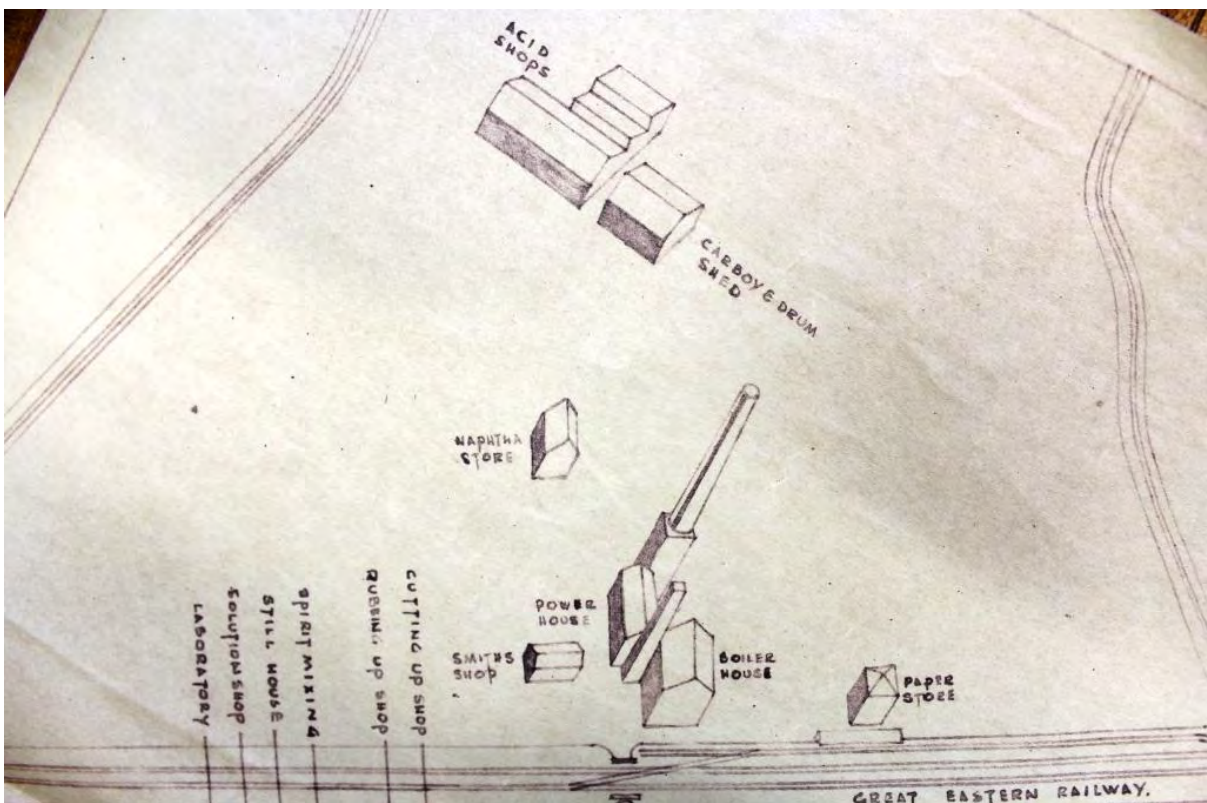


Plate 11: Plan of Brantham Works, south of railway line, 1905 (SRO Ref. HC 410/A7/8)



Plate 12 : Finishing toothbrush handles (SRO Ref. HC 410/J1/2)



Plate 13: Bristle Making (SRO Ref. HC 410/J1/2)



Plate 14: Polishing (SRO Ref. HC 410/J1/2)



Plate 15: Polishing (SRO Ref. HC 410/J1/2)



Plate 16: Untitled (SRO Ref. HC 410/J1/2)



Plate 17: Untitled (SRO Ref. HC 410/J1/2)



Plate 18: Polishing (SRO Ref. HC 410/J1/2)



Plate 19: Moulding Toothbrush Handles (SRO Ref. HC 410/J1/2)



Plate 20: British Xylonite Exhibition Stand, undated (SRO Ref. HC 410/J1/2)

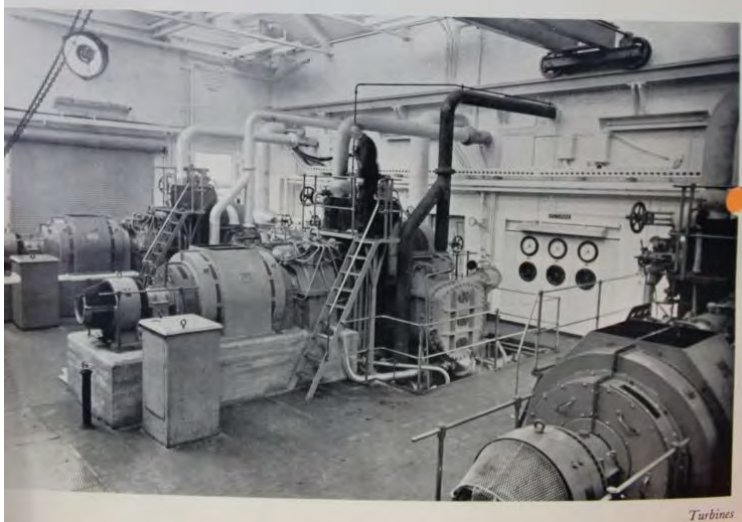


Plate 21: Sizing Department and Turbines at Brantham, undated (from "The Xylonite Group 1877-1952")

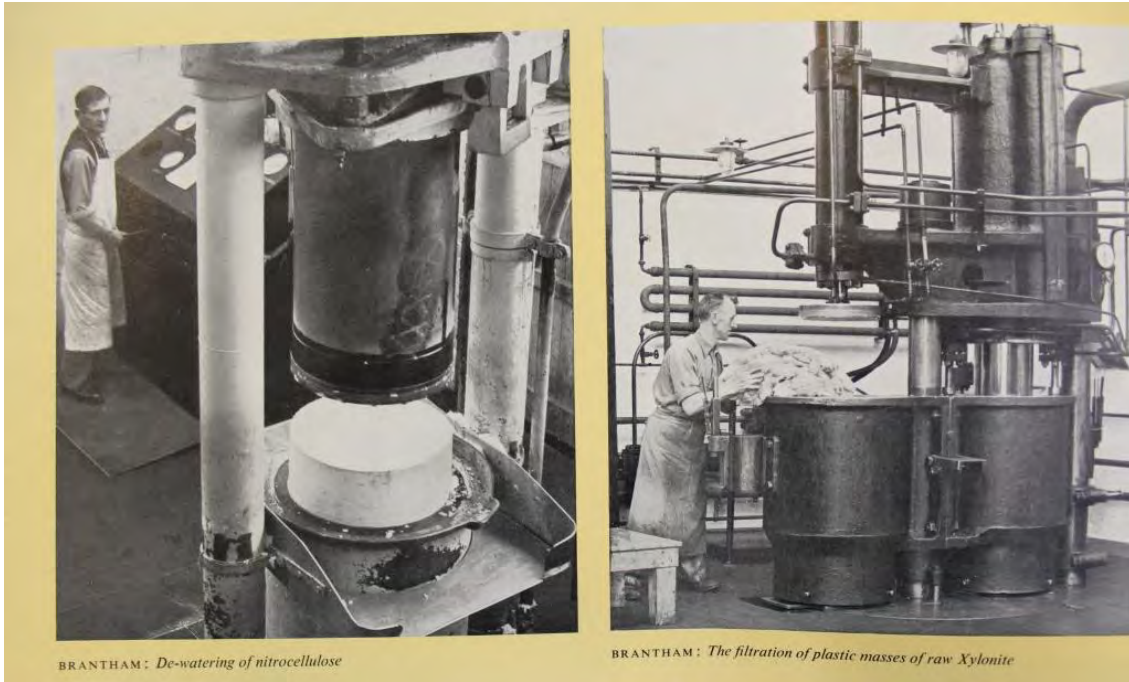


Plate 22: Industrial Processing at Brantham, undated (from "The Xylonite Group 1877-1952)

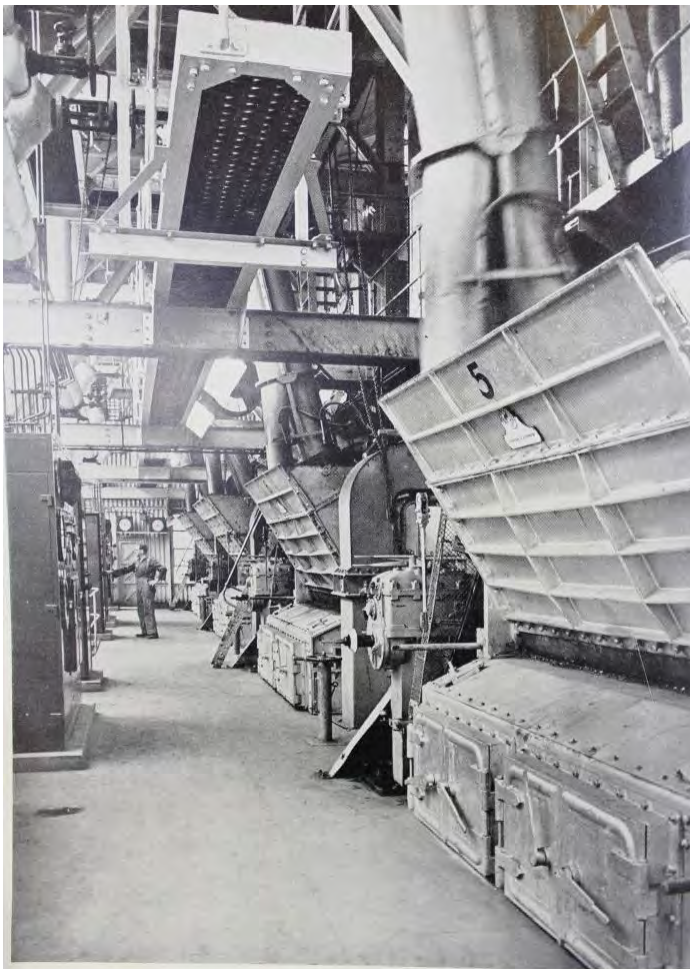


Plate 23: New Boiler House at Brantham (from "The Xylonite Group 1877-1952)



Plate 24: Roller Room, Brantham, 1932 (SRO Ref. HC 410/J1/2)



Plate 25: Mixing Shop, Brantham, 1932 (SRO Ref. HC 410/J1/2)

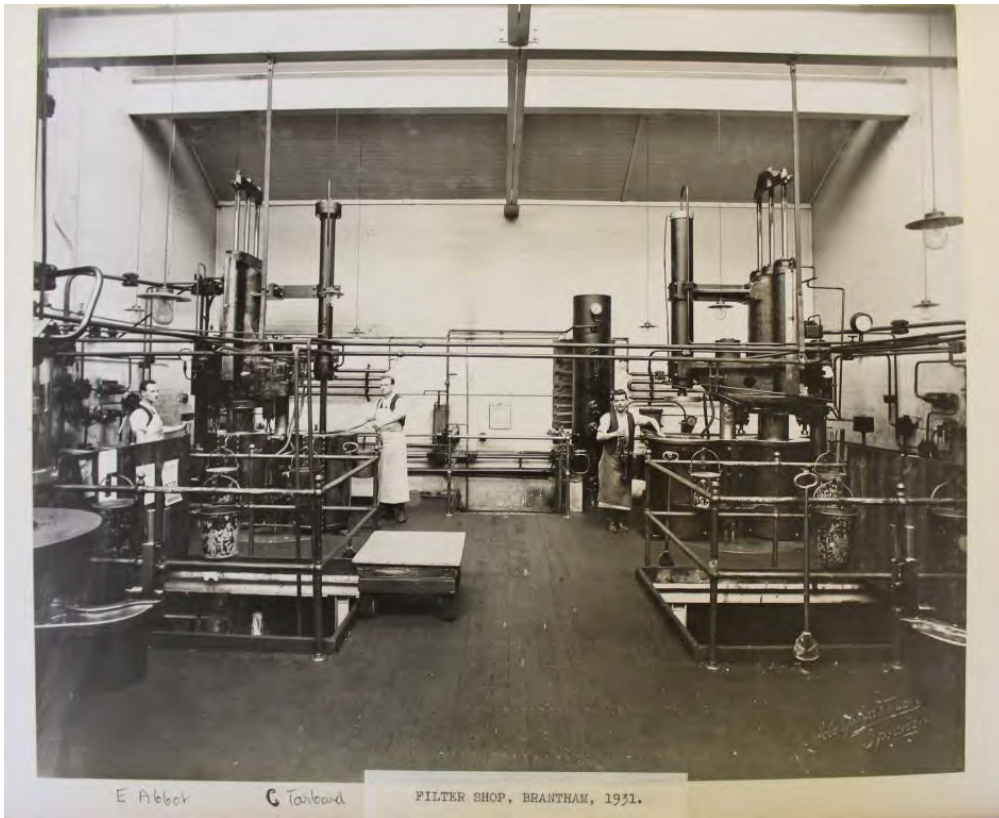


Plate 26: Filter Shop, Brantham, 1931 (SRO Ref. HC 410/J1/2)



Plate 27: Polishing Shop, Brantham, 1933 (SRO Ref. HC 410/J1/2)



Plate 28: Polishing Shop, Brantham, 1931 (SRO Ref. HC 410/J1/2)



Plate 29: Slicing Shop, Brantham, 1931 (SRO Ref. HC 410/J1/2)



Plate 30: Dehydration Room, Brantham, 1931 (SRO Ref. HC 410/J1/2)



Plate 31: Plan of Cloakroom Accommodation, 1947 (SRO Ref. HC410/A7/7)

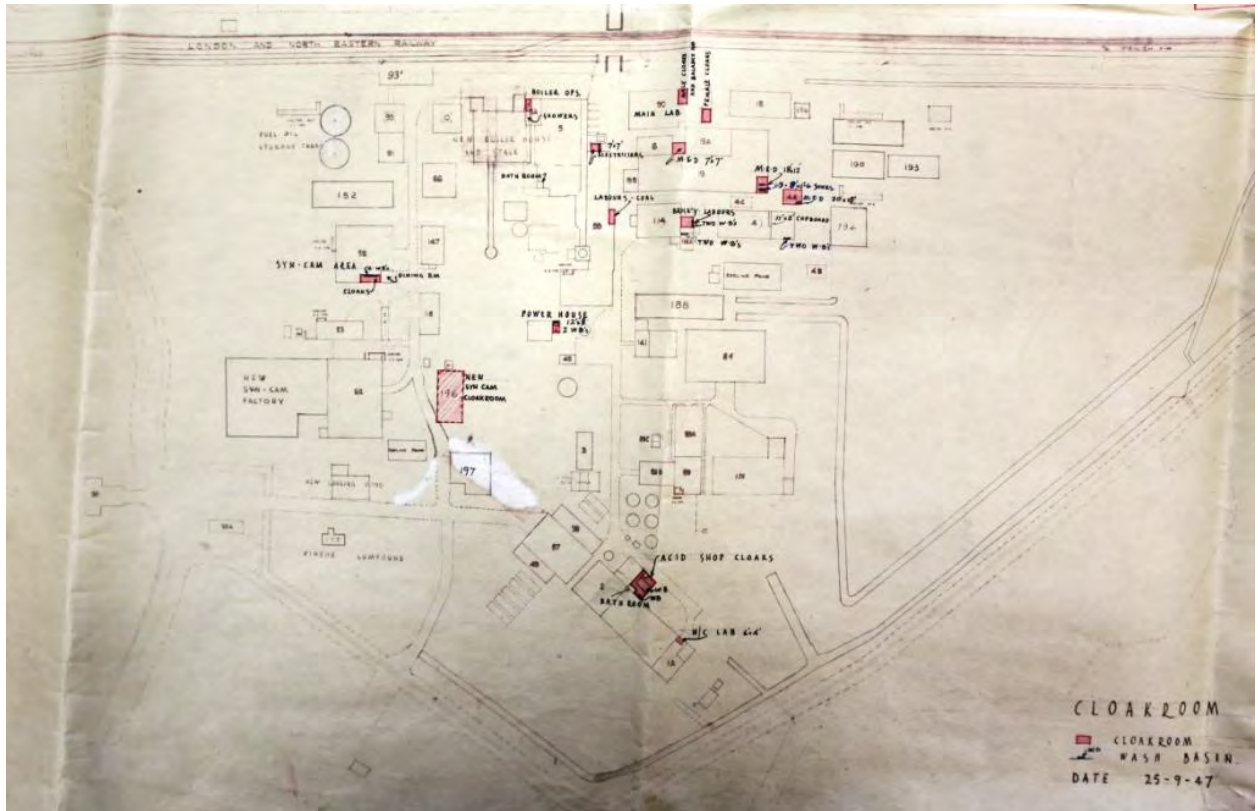


Plate 32: Detail from Plan of Cloakroom Accommodation, south of railway line, 1947 (SRO Ref. HC410/A7/7)



Plate 33: Photograph following explosions, 1951 (SRO Ref Ref HC 410/J2/2)



Plate 34: Plan of Brantham Factory Site, 1955 (SRO Ref. HC 410/G58)



Plate 35: View of railway line and factory buildings as viewed from north



Plate 36: Tunnel beneath railway line as viewed from the south side



Plate 37: Building 1, south-west facing elevation



Plate 38: Building 1, as viewed from railway embankment



Plate 39: Building 1, north-east facing elevation



Plate 40: Building 1, as viewed from south-west



Plate 41: Photograph of Laboratory Building, undated (SRO Ref. HC 410/J2/2)

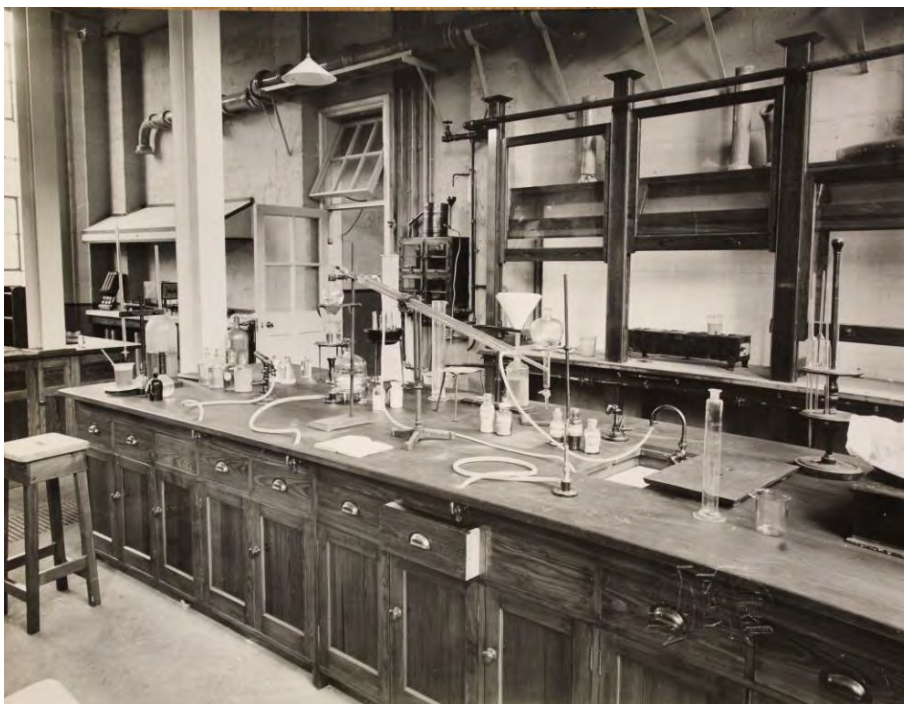


Plate 42: Photograph of Laboratory interior, undated (SRO Ref. HC 410/J2/2)



Plate 43: Aerial Photograph of Brantham Factory, 1921 (SRO Ref Ref HC 410/J2/2)



Plate 44: Northernmost phase of Building 2 as viewed from south-west



Plate 45: Building 2 as viewed from north-west



Plate 46: Building 2 as viewed from south



Plate 47: Building 2 as viewed from north-east



Plate 48: Building 2 as viewed from north-east



Plate 49: Building 2 as viewed from north-east



Plate 50: Building 2 interior



Plate 51: Photograph of the interior of Building 2, Fitters Shop from Promotional Brochure, 1953 (SRO Ref. HC 410/G57)



Plate 52: Building 3, viewed from south-east



Plate 53: Building 3, viewed from south



Plate 54: Building 3, viewed from south-west



Plate 55: Building 3, viewed from south-west



Plate 56: Building 3, detail of stack base



Plate 57: Building 3, detail of stack base interior



Plate 58: Building 4, viewed from south-west



Plate 59: Building 4, viewed from south-east



Plate 60: Building 6, viewed from south-east



Plate 61: Building 6, viewed from south



Plate 62: Building 6, viewed from south-west



Plate 63: Building 6, viewed from north-west

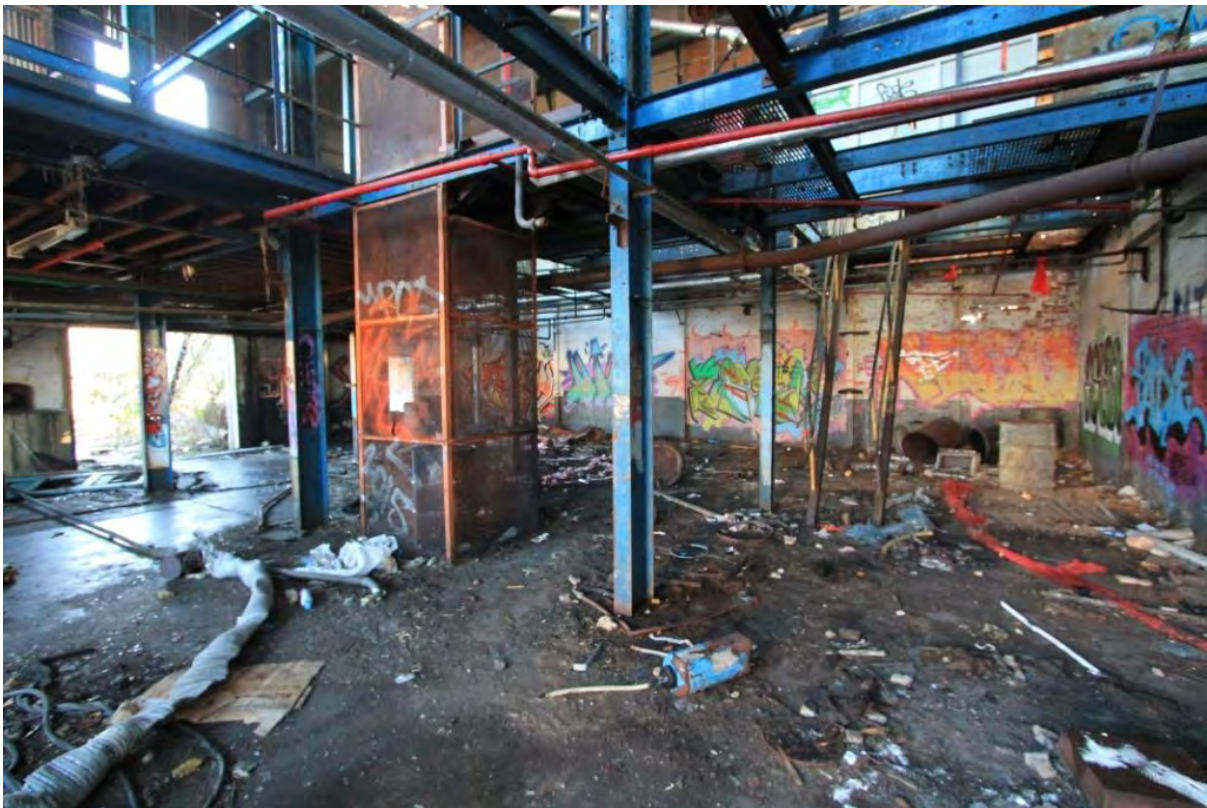


Plate 64: Building 6, interior view, ground floor



Plate 65: Building 7, viewed from south-west



Plate 66: Building 7, interior view



Plate 67: Building 8, viewed from south-east



Plate 68: Building 9, viewed from south-west



Plate 69: Building 9, viewed from north-east



Plate 70: Building 9, interior view



Plate 71: Building 10, viewed from south-east



Plate 72: Building 10, viewed from south-west



Plate 73: Building 11, viewed from south-west



Plate 74: Building 11, viewed from south-east



Plate 75: Building 11, interior view



Plate 76: Building 11, interior view



Plate 77: Building 12



Plate 78: Building 13, viewed from south-west



Plate 79: Building 13, viewed from south-east



Plate 80: Building 13, interior view



Plate 81: Building 13, interior, first floor



Plate 82: Building 14, viewed from south-west



Plate 83: Building 14, viewed from south-east



Plate 84: Building 14, viewed from north-east



Plate 85: Building 14, interior



Plate 86: Building 14, interior



Plate 87: Building 15, viewed from north-west



Plate 88: Building 15, interior view



Plate 89: Building 16, viewed from south-west



Plate 90: Building 16 interior view



Plate 91: Building 17, viewed from north



Plate 92: Building 18, viewed from south-west



Plate 93: Building 18, interior view



Plate 94: Photograph of East side of Factory, 1956 (SRO Ref. HC 410/G57)



Plate 95: War Memorial, viewed from north-east



Plate 96: War Memorial, viewed from south-west



Plate 97: Detail of War Memorial base



Plate 98: Detail of War Memorial plaque (courtesy of Brantham Parish Council)



Plate 99: Detail of War Memorial plaque (courtesy of Brantham Parish Council)



Plate 100: Jetty



Plate 101: Jetty



Plate 102: Pond/Reservoir



Plate 103: Evidence of tramway between Buildings 2 and 3



Plate 104: Former route of tramway

APPENDIX 2 GRAFITTI



Building 1



Building 2



Building 2



Building 2



Building 2



Building 3



Building 3



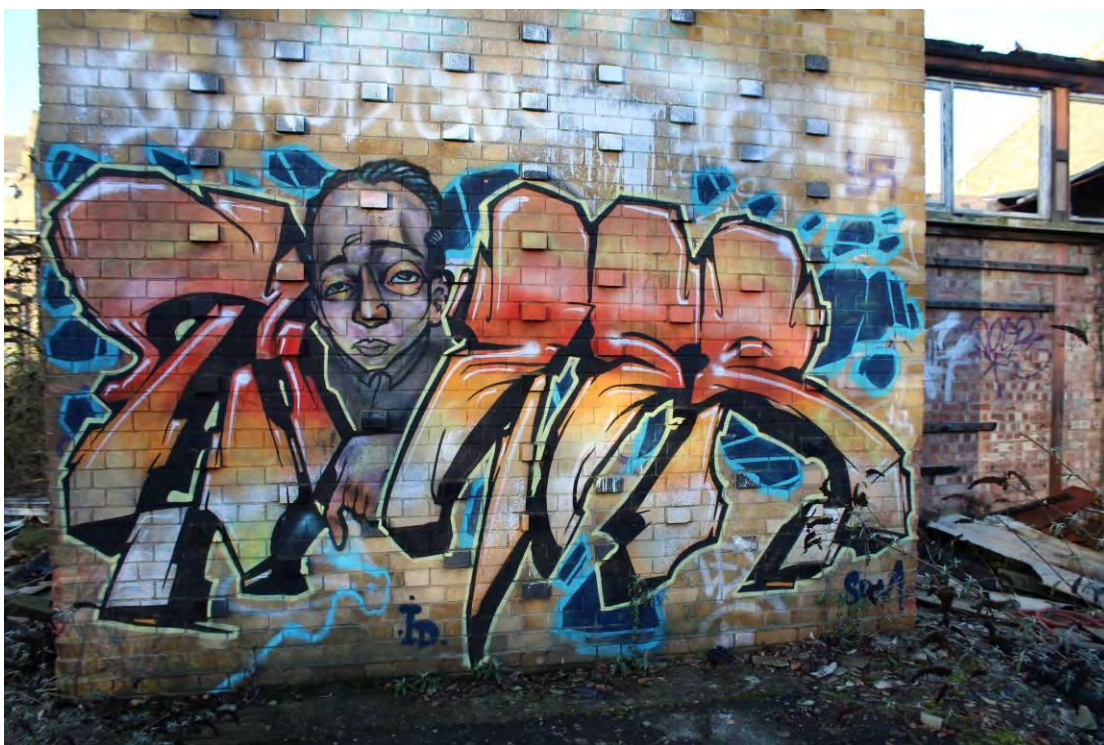
Building 3



Building 7



Building 9



Building 10



Building 11



Building 13



Tanks (South of 13)



Building 14



Building 14

APPENDIX 3 OASIS

OASIS ID: preconst1-270514

Project details

Project name Former Xylonite Factory, Factory Lane,
Brantham, Suffolk

Short description of the project Historic Building Survey of early and mid 20th
century factory buildings.

Project dates Start: 14-12-2016 End: 15-12-2016

Previous/future work No / Not known

Type of project Building Recording

Project location

Country England

Site location SUFFOLK MID SUFFOLK BRAMFORD
Former Xylonite Factory, Factory Lane,
Bramford

Study area 0 Hectares

Site coordinates TM 1074 3281 51.953246138039
1.067211804261 51 57 11 N 001 04 01 E
Point

Entered by Taleyna Fletcher (tfletcher@pre-
construct.com)

Entered on 6 December 2016

PCA

PCA SOUTH

UNIT 54
BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD
BROCKLEY
LONDON SE4 2PD
TEL: 020 7732 3925 / 020 7639 9091
FAX: 020 7639 9588
EMAIL: info@pre-construct.com

PCA NORTH

UNIT 19A
TURSDALE BUSINESS PARK
DURHAM DH6 5PG
TEL: 0191 377 1111
FAX: 0191 377 0101
EMAIL: info.north@pre-construct.com

PCA CENTRAL

THE GRANARY, RECTORY FARM
BREWERY ROAD, PAMPISFORD
CAMBRIDGESHIRE CB22 3EN
TEL: 01223 845 522
FAX: 01223 845 522
EMAIL: info.central@pre-construct.com

PCA WEST

BLOCK 4
CHILCOMB HOUSE
CHILCOMB LANE
WINCHESTER
HAMPSHIRE SO23 8RB
TEL: 01962 849 549
EMAIL: info.west@pre-construct.com

PCA MIDLANDS

17-19 KETTERING RD
LITTLE BOWDEN
MARKET HARBOROUGH
LEICESTERSHIRE LE16 8AN
TEL: 01858 468 333
EMAIL: info.midlands@pre-construct.com

