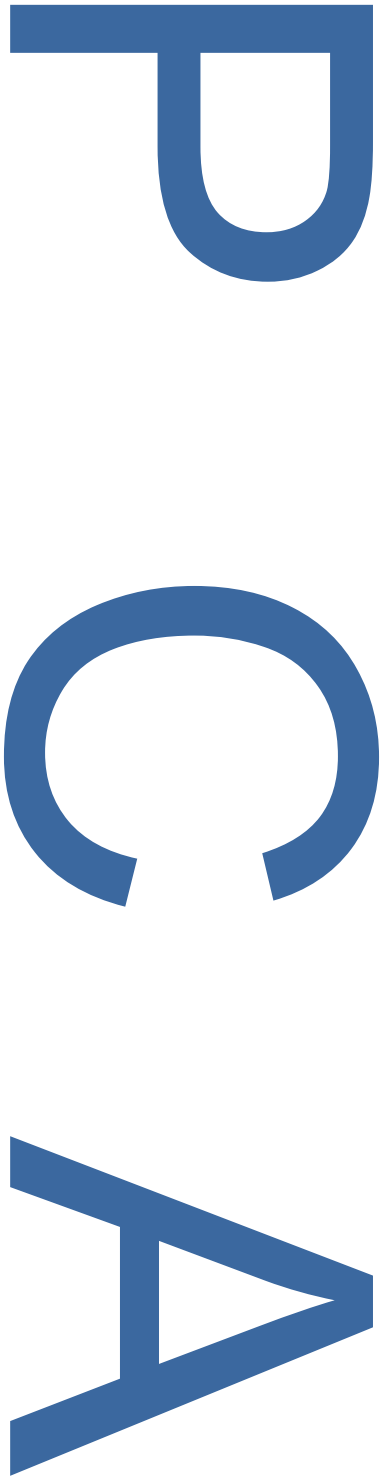
BUILDING RECORDING OF THE COMPUTER CENTRE BUILDING, BATA FACTORY (THAMES INDUSTRIAL PARK), PRINCESS MARGARET ROAD, EAST TILBURY, ESSEX, RM18 8RH



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PRE-CONSTRUCT ARCHAEOLOGY

Building Recording of the Computer Centre Building, Bata Factory (Thames Industrial Park), Princess Margaret Road, East Tilbury, Essex, RM18 8RH

Report compiled by Adam Garwood

Site Code: THTH17

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DOCUMENT VERIFICATION

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Bata Factory (Thames Industrial Park),
Princess Margaret Road,
East Tilbury,
Essex,
RM18 8RH

Type of project

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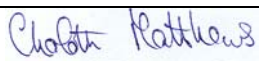
Project Manager Sign-off:	Charlotte Matthews		25/04/2017

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1 NON TECHNICAL SUMMARY

1.1 Pre-Construct Archaeology Limited was commissioned by Silver DCC Limited on behalf of Thames Industrial Estate Limited to undertake a programme of building recording of the Computer Centre Building at the former Bata Factory, East Tilbury, Essex. The recording was completed prior to its demolition in response to condition 31 of the extant planning permission 13/01163/FUL.

1.2 The former British Bata shoe factory site forms part of a designed model workers settlement and factory complex. The factory and settlement (now the Thames Industrial Park) were laid out in a grid iron plan in 1933 and were designated as a Conservation Area in 1993. The model settlement of some 352 houses (affectionately known as Bata-ville) was laid out in a 'garden village' style setting. The factory incorporates 13 principal factory buildings, which range between 1 and 5 storeys in height. The Conservation Area includes the former Computer Centre Building.

1.3 The 13 principal factory buildings were built between 1933 and the late 1950s. The standardised modern movement style of architecture, design and proportions of the 5 storey buildings and rigid grid iron plan are dominant features of the factory complex. Four of the buildings are listed. The former Leather factory (Trafalgar House) of 1933 is designated Grade II and is located immediately north of the Computer Centre Building.

1.4 From modest origins, the Bata Company grew during the inter-war years to become one of the world's largest shoe manufacturers and retailers, co-ordinating its global activities from the headquarters at Zlinin in the Czech Republic. It expanded its manufacturing sites globally including factories in Holland, India and East Tilbury. By the early 1930s, Bata's architects F L Gahura and his student V Karfik, both of whom had trained with Le Corbusier and in Karfik's case, also worked with Frank Lloyd Wright, had developed a consistent architectural design in the International Modern Movement style for Bata sites across the globe. The East Tilbury plant both produced and distributed Bata products, mainly rubber and leather footwear. The first factory buildings were constructed between 1933-1934. Although World War Two slowed development, the site continued to expand in the 1950s. Bata was at its peak during the 1950s and 1960s, but from the late 1970s onwards its workforce gradually decreased until the business finally shut down in 2005.

1.5 The Computer Centre Building was built *c*.1967 and is shown on the 1977 Ordnance Survey map. The 1970s saw the introduction of computerisation into the factory units. Despite the amount of material published on the development of this exceptional model industrial settlement at East Tilbury, very little information is published or available in local or national archives relating to the Computer Centre Building. This paucity of evidence was further compounded by the extent of the internal 'soft-stripping' which had removed almost all evidence of its former spatial layout and of any contemporary fixtures and fittings. The building was built around a steel portal frame with Fletton brick elevations concealed by better quality brick cladding. The roof line was very slightly pitched, and with a parapet wall remained sympathetic with the form of the International Modern Movement buildings. Bands of fenestration to the long elevations provided high levels of natural light into the centre, while scarring in the walls and floor demonstrate a building internally divided into two halves. The western bays appear to have accommodated offices and a staff toilet, while the eastern bays included an isolated switch or server room. Later alterations to the building were mainly improvements in its thermal insulation. The original roof covering had also been replaced.

1.6 The survey has shown that the Computer Centre Building was added as part of the final stages of the development of the Bata model factory with an external appearance broadly commensurate with the International Modern Movement, although not of the same quality and design as the original 1930s buildings.

2 INTRODUCTION

2.1 Background

2.1.1 Pre-Construct Archaeology Limited was commissioned by Silver DCC Limited on behalf of Thames Industrial Estate Limited to undertake a programme of historic building recording focused upon the Computer Centre Building at the former Bata Factory, East Tilbury, Essex, RM18 8RH (**Figures 1** and **2**). The building recording was completed prior to proposed demolition of the Computer Centre building as part of a wider scheme to provide 50 new dwellings on previously developed land towards the southern boundary of the Thames Industrial Estate and in response to condition (31) attached to planning permission (13/01163/FUL).

2.1.2 The survey was undertaken in response to an archaeological brief for building recording, archaeological trial trenching and excavation produced by Richard Havis, Historic Environment Advisor at Place Services, Essex County Council. It was carried out in accordance with a Level 2 survey as defined in Historic England *Understanding Historic Buildings: A guide to good recording practice* and the Chartered Institute for Archaeologists (CIFA) *Standard and guidance for the archaeological investigation and recording of standing buildings or structures* (revised 2014).

2.1.3 The aim of the building recording was to produce a permanent record of the former Computer Centre Building in its present condition and character, prior to its demolition. The results of this work will form part of an ordered archive and report that will mitigate the impacts of the works through 'preservation by record'.

2.2 Site Location and Description

2.2.1 The former British Bata shoe factory site forms part of an extensive designed model settlement and factory complex lying to the south of Linford and to the north of historic East Tilbury (Coalhouse Fort) at Ordnance Survey National Grid Reference TQ 68013 78244 (**Figures 1** and **2**). The Bata Shoe factory site lies immediately south-west of the model workers settlement laid out to a grid iron plan in 1933 and to the west of Princess Margaret Road (or East Tilbury Road).

2.2.2 Both the model settlement and the factory site (now renamed the Thames Industrial Park) were designated as a discrete Conservation Area in 1993 (**Figure 3**). The conservation area comprises the model workers settlement of some 352 houses (affectionately known as Bata-ville) laid out in a 'garden village' style setting and incorporates all 13 of the principal factory buildings within the Thames Industrial Estate, and includes the former Computer Centre, whose southern, rear elevation coincides with the southernmost line of the Conservation Area boundary.

2.2.3 The factory site comprises 13 large buildings ranging between 1 and 5 storeys in height (and other smaller associated buildings and structures) built between 1933 and the late 1950s. The standardised modern movement style of architecture, design and proportions of the 5 storey buildings and rigid grid iron plan are dominant features of the factory complex. The gatehouse, clock, barriers and the boiler house of 1956 are notable buildings within the factory complex.

2.2.4 Only four examples (Buildings 12, 13, 24 and 34) are listed (**Figure 3**). The former Leather factory (Trafalgar House; UID 1224103) of 1933 is designated Grade II (**Plate 1**) and is located immediately north of and faces south towards the Computer Centre (**Figure 9**). It is described as:

'Factory. 1933, to the designs of Czechoslovakian architect Frantizek L. Gahura. Reinforced concrete frame with painted brick spandrel and metal framed windows; flat roof with shallow projecting cornice. Rectangular plan, three bays by thirteen bays, with thin, full-height pilaster strips articulating each. Left return with centre three bays projecting forward to form circulation spine; centremost bay projects further and is glazed. Utility sheds to roof above. External fire stair to right return of an authentic design. An exceptionally early and complete example of International Style building in

Britain. Listing NGR: TQ6783878480'.

2.2.5 Building 12 (to the north of 13) is also Grade II listed (UID 1393328). Its citation reads:

'Building 12 designed by F L Gahura (1891-1958) and V Karfik (1901-1996) for the Bata Shoe Company of Zlin in the International Modern Movement Style, built 1933. Constructed by main contractors Walsham Ltd, the welding and erection work carried out by the Gravesend Welding and Electrical Engineering Works Ltd.

MATERIALS: Built of welded steel columns and roof trusses, the latter with diagonal struts, with reinforced concrete walls. PLAN: Single storey, 262ft long, 62ft wide with a lower, 5 bay range to the west. EXTERIOR: Building 12 has welded Crittall sash side lights or 12-pane windows and 8 pane windows in the west range and a roof comprised two shallow 'v' shaped sections. On the north elevation, a brick-built porch has been added.'

2.2.6 Buildings 24 and 34 (Victory and Nelson House) are Grade II listed (UID 1393327). Their citation reads:

Buildings 24 (Victory House) and 34 (Nelson House), of the former British Bata site, East Tilbury, designed by F L Gahura (1891-1958) and V Karfik (1901-1996) for the Bata Shoe Company of Zlin in the International Modern Movement style, built between 1934 and 1938.

MATERIALS: Re-inforced concrete frames and columns in modules of 6.15m on a system evolved by architect Gahura and the builder engineer Arnost Sehdel in 1927 for Zlin. PLAN: Both buildings 24 and 34 are five storey blocks conforming to the standard unit of 13 bays by 3 with a projecting circulation and sanitary block of 3 bays by 1 bay in the centre.

EXTERIOR: Both buildings have extensive, original fenestration to all elevations and flat roofs. On the roof of Building 34 is the iconic water tower with the 'Bata' trademark in red lettering. Both facades have three centrally projecting bays which in turn have at the centre projecting bands of rounded glazing above the main entrance. There are later additions to the rear of Victory House, and to the rear and side of Nelson House, as the modular design intended and allowed for.

INTERIOR: All floors have circular columns of reinforced-concrete and uniform diameter to enable travelling steel formwork to be used. The interior is characterised by large spaces between the columns where the processes of leather and rubber manufacturing took place. There is no evidence of the processes which occurred within other than the retention of numerous boot and shoe moulds. Although some modern partitions (reversible) have been put in on some floors, the blocks retain the original stairs with tubular steel handrails and a dividing balustrade to each flight.

3 PLANNING BACKGROUND

3.1 Introduction

3.1.1 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.

3.2 Legislation and Planning Guidance

3.2.1 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.

3.2.2 The requirement for archaeological work is in accordance with NPPF Paragraph 141. The purpose of the work was to complete an appropriate level of historic building recording of the building to be demolished. The work was to be undertaken to a standard that would allow the future interpretation of the building within the context for which they were originally designed as well as later uses. An archive and report were to be created as a result of the survey.

3.2.3 The building recording was carried out in response to a planning condition (31) attached to planning permission (13/01163/FUL) and at the request of Richard Havis, of Essex County Council Place Services, archaeological advisors to Thurrock Council.

3.2.4 The condition reads:

‘No demolition of any kind shall take place within the development area until the applicant has secured and implemented a programme of building recording in accordance with a written scheme of investigation which has been submitted by the applicant, and approved by the planning authority.

Reason: To ensure that investigation and recording of any remains takes place prior to commencement of development in accordance with Policy PMD4 of the adopted Thurrock LDF Core Strategy and Policies for the Management of Development DPD (2011).

3.2.5 The project also accords with local Conservation Area policies BE23 Development affecting Conservation Areas and BE23A Demolition in Conservation Areas, set out in the Thurrock Local Plan.

4 METHODOLOGY

4.1 Aims and Objectives

4.1.1 The aim of the building recording was to provide a detailed record of the building prior to its demolition, meeting nationally recognised standards as set out by Historic England, the Chartered Institute of Archaeologists and ALGOA. The historic building recording was to be undertaken to a standard allowing the future understanding and interpretation of the building and its site. An archive and report was to be created as a result of the project.

4.2 On-Site Recording

4.2.1 The building survey was carried out on 23rd March 2017 to record the building prior to the commencement of works. A photographic survey comprising high resolution digital images was maintained throughout the project and a selection of these photographs have been included in this report (**Plates 1** to **20**). **Figures 9** and **10** show the location and direction of the plates.

4.2.2 The historic building recording was undertaken in accordance with Historic England (2006) *Understanding Historic Buildings: A Guide to Good Recording Practice*. This involved a full photographic record, accompanied by a drawn record and descriptive account. A plan of the building was drawn on site by hand on permatrace using a Disto (electronic distance measurer) and hand tapes.

4.3 Project Archive

4.3.1 A full and ordered archive including written, drawn, survey and photographic records will be completed in accordance with guidelines defined in CIfA (2014); Taylor and Brown (2009) and UKIC and ADS guidelines for the preparation of archaeological archives for long term storage. The archive will be provisionally stored in Pre-Construct Archaeology's Cambridge Office in Pampisford before being transferred to the Thurrock Museum.

4.4 Guidance

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

CIfA (2014) *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*

Historic England (2016) *Understanding Historic Buildings: A Guide to Good Recording Practice*

English Heritage (now Historic England) (2005) *The Presentation of Historic Building Survey in CAD*

5 HISTORICAL BACKGROUND

5.1.1 The holdings of the Essex Record Office were consulted and a short sequence of relevant historic 20th century Ordnance Survey maps was compiled to illustrate the development of the site. The documentary research also consulted the catalogue held by the Essex Record Office and the Essex Historic Environment Record. The historic maps have been reproduced in the report as **Figures 4** to **8**.

5.1.2 The planned industrial settlement and shoe factory site at East Tilbury, otherwise affectionately known as Bata-ville was established by Tomas Bata in 1933 as the site for his British branch of the Bata Shoe Company.

5.1.3 Tomas Bata was an early convert to modernism as demonstrated by the 'assembly line' approach used for his factories, adopted following a visit to Henry Ford's vast car plant in the USA. He commissioned modernist architectural gems such as the Bata Store in Prague and was responsible for the transformation of his own home town of Zlin, Moravia into a workers 'utopia' of 45,000 units, based on earlier examples of garden village planning such as the work of Raymond Unwin and Ebenezer Howard in Letchworth, Hertfordshire. Bata employed Czech architects, Jan Kotera, Franisek Gahura and Vladimir Karfik (the latter worked with Le Corbusier and Frank Lloyd Wright) to provide the designs for East Tilbury and whilst Tomas Bata tragically died in a airplane crash in 1933, his brother Jan, took over the company and his brothers visions for British Bata. Work started on the settlement at Tilbury in 1932 to designs by Kotera, Gahura and Karfik and following the Zlin blueprint. The original master plan for the British Bata estate mirrored that of Zlin, although the original plan showed a development many times bigger than the estate today and on a scale that would have constituted a complete new town.

5.1.4 Bata provided all the housing and social needs of the workforce - over 300 houses, a hotel, cinema, college, shops, post office, swimming pool, memorial gardens, orchard, sports facilities, fire station and a 300 acre farm. The town had its own newspaper and there were many social activities and facilities. Unusual for the time Bata residents were provided with modern houses each with an inside bathroom, heating and electricity, although the 'flip side' was the 'social control' in that if you lost your job (through absenteeism, sickness or activism) you also lost your home. The residents were also encouraged to maintain the appearance of the company properties and the neighbourhood in general. The housing was built in stages between 1933 and the mid 1960s, the first housing built in the International Modern Movement Style in Bata Avenue by 1933, followed by three parallel roads (Thomas Bata, King George VI and Queen Elizabeth Avenues) of modernist houses built before and after World War II. These later houses varied slightly according to status, providing different internal layouts and larger executive houses, the latter built with extended frontages and a first floor balcony. Pre-war rents for small houses were 10/- (50p) per week, the larger ones were 25/- (£1.25p) per week. Successive developments along Princess Avenue and Gloucester Avenue in 1959 and 1966 moved away from the flat roofed modern architecture and adopted a more conventional pitched roof design (Crosby et al 2006).

5.1.5 The plan and design of the shoe factory site was influenced by the Rational Factory Planning School which emerged in the United States during the first decades of the 20th century. The initial factory buildings were designed at the Bata headquarters as early examples of steel framed and concrete buildings. Works started with the construction of the rubber factory in 1933 followed by the leather factory (now known as Trafalgar House) in 1934, and further rubber and leather factories (Victory House and Nelson House) between 1936-38. A garage for servicing company vehicles was built in 1952, a hosiery factory in 1956, boiler house, in 1958, plastics factory was added (altered 1966-67), in 1958, a fire station and a warehouse were added in 1960, and finally the Computer Centre was built in 1967 (Pastscape).

5.1.6 The Ordnance Survey map of 1915 (**Figure 4**) was surveyed prior to the construction of the Bata site and shows an area of large, regular agricultural fields crossed by the London, Tilbury and Southend branch line. The Ordnance Survey map of 1938 (**Figure**

4) is the first map to depict the Bata factory site and the emerging planned settlement. The shoe factory site comprised five principal factory buildings, mainly rubber and leather works built by 1938, and many smaller utility buildings, of which three, are located close to the site of the computer centre. Bata Avenue, the hotel and the initial grid plan of the estate including Thomas Bata, King George VI and Queen Elizabeth Avenues are clearly established whilst an aerial photograph of the site taken in 1935 shows the early phases of development within the factory site and the modernist houses along Bata Avenue (**Historic Plate 1**).

5.1.7 The Ordnance Survey map of 1958 (**Figure 6**) shows further development within both the factory site and the estate, the regular plan form of the latter fully established by this date. An aerial photograph taken in 1960 (**Historic Plate 2**) shows that the site was more established with trees between the buildings. The Computer Centre Building is not shown on the 6 inch Ordnance Survey map, published in 1967 (TQ67 NE; **Figure 7**), although it may be in planning or the early stages of construction, and it does not appear on an aerial photograph of the Bata site taken *c*.1966, its site occupied by a narrow linear building with a shallow pitched roof, while a large square plan flat roofed building is present immediately to the east (see **Historic Plate 3**). The Computer Centre Building is first depicted on the modern Ordnance Survey map of 1977 (**Figure 8**) to the south-west of an area of car parking and an adjacent building. The hard standing outlining the footprint of this building was still visible at the time of the survey.

6 BUILDING DESCRITIONS

6.1 General Description

6.1.1 The following descriptive text is based upon observations made on site about the Computer Centre Building and its fabric recorded at the time of the survey. Interpretation of spatial function and phasing is based on the information gathered during the fieldwork although the soft stripping of the building had removed almost all evidence relating to the former. As the building now comprises one single space, for ease of reference each bay has been given an identifying number (1-9). The locations of these bays and evidence of former internal walls are shown on **Figure 10**.

6.1.2 The Computer Centre Building is located close to the main entrance into the Thames Industrial Estate from Princess Margaret Way and to the south of and directly opposite the grade II listed former leather factory, Trafalgar House (Now Enterprise House; **Plate 1**). It lies in relative isolation within an area of soft landscaping and is approached from the north and from an internal axial (east-west) roadway, via a concrete slab pathway cum subterranean services conduit. Areas of hard-standing, relating to former service buildings lie immediately to the south and east.

6.2 External Descriptions

6.2.1 The computer centre is a modern, single storey and broadly flat-roofed building, laid out to a regular rectangular ground plan and constructed with brick elevations enclosing a robust steel portal frame (**Figures 9** and **10**).

6.2.2 Its principal elevation faces north towards Trafalgar House and comprises a band of eleven full wall height, continuous fixed glazed panels lighting the eastern half of the building and a continuous band of seven smaller narrow fixed lights, set high in the wall and below the parapet line, in the western half of the building (**Plates 2**, **3** and **8**). The full height windows and the majority of the smaller lights retain their original metal frames, although the glazing is a later replacement of double glazed sealed units. The main entrance lies central to this elevation and is a softwood and glazed central closing two leaf door with a side-light to the west.

6.2.3 The external brickwork includes a full height panel to the east and a much longer stretch below the upper wall lights to the west. It is a single facing course using more expensive pale cream coloured grit-faced bricks laid in half lap stretcher bond and in an pale cement mortar with weather-struck pointing. These bricks face a core wall built using cheaper Fletton bricks (**Plate 17**). A slightly projecting brick wall plinth with a bitumen DPC (Damp Proof Course) (210mm high) is present at the base of the wall. The upper wall and eaves comprise a parapet wall which encloses the entire circuit of the building. It has latterly been refaced using a modern board-like cladding, although in areas where it had been removed, was attached to a lightweight softwood frame of vertical studs and insulated using Celotex style polystyrene boards.

6.2.4 The eastern end elevation follows the same structural characteristics apart from the fenestration (**Plates 3** to **5**). It is built blind and incorporates a pair of door openings; that towards the northern angle is built with a rectangular light (blocked) and a vertical louvered vent to the jamb, and that to the south, a single opening with a full height glazed sidelight. Both openings retained their metal door frames but not doors.

6.2.5 The southern rear elevation is lit by the same style of continuous upper wall glazing as already described (**Plates 5** to **7**). For the most part these windows retain their original metal frames, although all the glazing has been replaced using double glazed sealed units while two examples had been completely replaced with UPVC units.

6.2.6 The western end elevation incorporates a pair of full height, fixed glazed windows in their original frames (**Plates 7** to **10**). The glazing, as seen elsewhere, comprised replacement sealed units, with that to the south a single light (**Plate 13**) and the corresponding window towards the north, a double light.

6.3 Internal Descriptions

6.3.1 At the time of the survey the interior of the Computer Centre Building had been extensively stripped out, removing all of the non-load bearing internal walls, suspended ceilings and evidence of fixtures, fittings and décor (**Plates 9** to **12**). Accordingly, whilst scars of the former internal walls were surveyed and a general layout reconstructed, individual room functions were difficult to interpret. The internal descriptions are therefore biased towards the structure of the building.

6.3.2 The building is laid out over nine bays, seven full bays averaging 3.3m in width and two half bays at 1.3m width at each end (east and west) (**Figure 10**). It is constructed around a steel portal frame, comprising steel stanchions and trusses, with brickwork panels between each stanchion (brick faced externally to hide the steel frame). The portal frame spans the entire width of the building without intermediate support, and provides a large open plan space. The stanchions, to the north and south long elevations, were typically 190mm x 140mm scantling, I-section extrusions and earth-fast, while the trusses (400mm x 140mm) were also I-sections and slightly cambered with a rise to the central ridgeline (**Figure 11**; **Plates 9** to **12**). The stanchions and trusses were bolted together at their junctions, using two vertical tiers of six nuts and bolts (**Plate 14**). The head of the stanchions continued beyond the top of the truss to support the roof structure, while below the trusses, a series of lighter scantling I-section steel joists, bolted into the stanchions and following the line of the flank wall, formed the lintel for the continuous glazing and formed the base of the parapet (**Plate 15**). The lower two thirds of the stanchions, apart for the section of full height glazing (north elevation) were encased in brickwork.

6.3.3 The roof structure simply comprises a series of regular axial steel purlins laid across the backs of the trusses and doubled-up at the ridge. The outer roof bays (outermost purlin to wall and half-bays at each end) were additionally strengthened using diagonal wind (suction) braces (**Plates 15** and **16**). The roof covering is formed from corrugated box-profile steel sheets which are a later re-roofing event.

6.3.4 The solid 300mm brickwork to the external walls comprises Fletton brick in stretcher bond laid in a hard cement mortar. Areas of wall, particularly where internal walls had been removed showed evidence of construction blocks built into the brickwork at three brick course lifts (**Plate 17**). An area of blockwork was also visible in the upper wall of the east elevation and possibly represents a later rebuilding (**Plate 19**). The internal walls were mainly plastered using a modern gypsum thistle-type plaster.

6.3.5 The windows mainly retained their original metal frames, although the glazing and the internal aluminium fixings to the larger openings were later additions. The two door openings in the eastern end wall were similarly built using mild steel frames, possibly a feature used to minimise the risk or spread of fire (**Plates 18** and **19**).

6.3.6 The floors were concrete screed throughout and were divided, either side of a step (250mm) in the floor levels (bay 5), into two main areas (**Figure 10**). The step in the floor levels coincided and aligned with the eastern jamb of the main entrance, whilst a wall scar at this juncture (south wall) appears to have divided the building into two distinct halves. The eastern bays (1-4) were further sub-divided by a series of internal walls isolating the two entrances and a raised area straddling bays 1 and 2. The latter formed a small segregated room built (from observations of scarring in the end wall) with a reinforced concrete slab internal roof which may have once housed an electrical transformer, server or similar (**Plate 19**). Scarring in the walls and floor to the west of the main entrance (bays 5-9) showed that this area formerly comprised an office and a toilet (**Plate 20**) along the north wall and a larger open-plan office space to the south (**Figure 10**). The office spaces were floored using linoleum tiles and the toilet walls and floor with ceramic tiles (**Plate 20**). No evidence in terms of fixtures and fitting remained although clearly the decorative scheme was functional, befitting an operational building.

7 DISCUSSION

7.1 The Bata shoe company identified the historic riverside of East Tilbury as a suitable place for the development of its Shoe Factory and purpose built settlement. From modest origins, the Bata Company grew during the inter-war years to become one of the world's largest shoe manufacturers and retailers, co-ordinating its global activities from the headquarters at Zlin in the Czech Republic. It expanded its manufacturing sites globally including factories in Holland, India and East Tilbury, the latter known as British Bata, established in 1933. By the early 1930s, Bata's architects F L Gahura and his student V Karfik, both of whom had trained with Le Corbusier and in Karfik's case, also worked with Frank Lloyd Wright, had developed a consistent architectural design in the International Modern Movement style for Bata sites across the globe.

7.2 The plant at East Tilbury acted as both producer and distributor of the Bata products, primarily in the manufacture of rubber and leather footwear. The first factory buildings, including a leather factory (Trafalgar House; **Plate 1**) were constructed between 1933-1934 and between 1936 and 1938, a second leather and rubber factory (buildings 24 and 34) as well as a garage and other social facilities were added. Although World War Two slowed development, the site continued to expand with the addition of a hosiery factory in 1956, a boiler house in 1958, a plastics factory (altered 1966-67) in 1958 and a fire station and a warehouse were added in 1960. Bata was at its peak during the 1950s and 1960s, but thereafter its influence slowly declined, the workforce from the late 1970s onwards gradually decreased until the business finally shut down in 2005.

7.3 The Computer Centre Building was built in 1967 or not long after, and certainly by 1977 as it first appears on the Ordnance Survey edition of that date. The 1970s saw the introduction of computerisation into the factory units, and in all fields and tasks the work consequently became more mechanised.

7.4 Despite the amount of material published on Tomas Bata, the development of this exceptional model industrial settlement at East Tilbury, the architects used and the quality of the International Modern Movement style buildings at East Tilbury and elsewhere, very little information is published or available in local or national archives relating to the Computer Centre Building. This paucity of evidence was further compounded by the extent of the internal ‘soft-stripping’ which had removed almost all evidence of its former spatial layout and of any contemporary fixtures and fittings.

7.5 The building’s recent age was confirmed by the design and materials used for its construction, built around a steel portal frame with modern stock (Fletton) brick elevations concealed by a better quality brick cladding. The roof line was very slightly pitched, but by the use of a parapet wall remained sympathetic with the form and dominant styling of the International Modern Movement buildings (**Plate 1**). Bands of fenestration to the long elevations provided high levels of natural light into the centre, while scarring in the walls and floor demonstrate a building internally divided into two halves, about the axis of the main entrance. The western bays appear to have accommodated offices and a staff toilet, while the eastern bays were more utilitarian and included an isolated switch or server room (**Plate 19**). Later alterations to the building were mainly concentrated with improvements in its thermal insulation, with the addition of double glazed sealed units into existing window frames, the replacement of a number of windows with new UPVC units and the insulation of the upper walls to the rear of the parapets using Celotex. The original roof covering had also been replaced.

7.6 The survey has shown that the Computer Centre Building was added as part of the final stages of the development of the Bata model factory with an external appearance broadly commensurate with the International Modern Movement, although not of the same quality and design as the original 1930s buildings.

8 ACKNOWLEDGEMENTS

8.1 Pre-Construct Archaeology Limited would like to thank Silver DCC Limited on behalf of Thames Industrial Estate Limited for commissioning the project.

8.2 The project was managed for Pre-Construct Archaeology Limited by Charlotte Matthews. The historic building recording, research and report writing were completed by Adam Garwood and the illustrations were prepared by Hayley Baxter.

9 BIBLIOGRAPHY

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https://www.thurrock.gov.uk/sites/default/files/assets/documents/east-tilbury-character-appraisal.pdf

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APPENDIX 1: OASIS FORM

OASIS ID: preconst1-281642

Project details	
Project name	Computer Centre Building, Bata Factory, East Tilbury, Essex
Short description of the project	Pre-Construct Archaeology Limited was commissioned to undertake a programme of building recording focused upon the Computer Centre at the former Bata Factory, East Tilbury, Essex prior to its demolition. The Bata factory at East Tilbury acted as both producer and distributor of the Bata products, primarily in the manufacture of rubber and leather footwear. The first factory buildings, were constructed in January 1933. In 1934, a leather factory (Trafalgar house) was built and between 1936 and 1938, a second leather and rubber factory (buildings 24 and 34) as well as a garage and social facilities. Although WWII slowed development, the site continued to expand with the addition of a hosiery factory in 1956, a boiler house, in 1958, plastics factory (altered 1966-67), in 1958, a fire station and a warehouse was added in 1960. The Computer Centre Building was built c.1967 or not long after, and certainly by 1977 as it first appears on the Ordnance Survey map edition of that date. It is a simple building constructed around a steel portal frame and adopts an appearance that is broadly sympathetic with the Modern Movement styling of the main factory buildings.
Project dates	Start: 22-03-2017 End: 22-03-2017
Previous/future work	No / No
Any associated project reference codes	THTH17 - Sitecode
Any associated project reference codes	13/01163/FUL - Planning Application No.
Type of project	Building Recording
Site status	Conservation Area
Monument type	COMPUTER CENTRE Modern
Methods & techniques	'"Measured Survey"',"'Photographic Survey"',"'Survey/Recording Of Fabric/Structure"'
Prompt	Planning condition
Project location	
Country	England
Site location	ESSEX THURROCK EAST TILBURY Computer Centre Building, Bata Factory, Thames Industrial Park, Princess Margaret Road, East Tilbury, Essex,
Postcode	RM18 8RH
Site coordinates	TQ 68013 78244 51.477640715332 0.419704884149 51 28 39 N 000 25 10 E Point
Project creators	
Name of Organisation	Pre-Construct Archaeology Limited

Project brief originator	Richard Havis
Project design originator	Charlotte Matthews
Project director/manager	Charlotte Matthews
Project supervisor	Adam Garwood
Type of sponsor/funding body	Private company
Name of sponsor/funding body	Thames Industrial Estate Ltd

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Thurrock Museum
Digital Media available	"Images raster / digital photography"
Paper Archive recipient	Thurrock Museum
Paper Media available	"Microfilm"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Building Recording of the Computer Centre Building, Bata Factory (Thames Industrial Park), Princess Margaret Road, East Tilbury, Essex, RM18 8RH
Author(s)/Editor(s)	Garwood, A
Other bibliographic details	PCA Report No. R12859
Date	2017
Issuer or publisher	Pre-Construct Archaeology Limited
Place of issue or publication	London Office
Description	A4 PDF

Entered by	Charlotte Matthews (cmatthews@pre-construct.com)
Entered on	25 April 2017

APPENDIX 2 ESSEX HISTORIC ENVIRONMENT RECORD/ESSEX ARCHAEOLOGY AND HISTORY SUMMARY SHEET

Site name/Address: The Computer Centre Building, Bata Factory, Thames Industrial Park, Princess Margaret Road, East Tilbury, Essex, RM18 8RH	
Parish: East Tilbury	District: Thurrock Council
NGR: TQ 68013 78244	Site Code: THTH17
Type of Work: Historic Building Recording	Site Director/Team: Adam Garwood
Date of Work: 22nd March 2017	Size of Area Investigated:
Location of Finds/Curating Museum: Thurrock Museum	Funding source: Thames Industrial Estate Limited
Further Seasons Anticipated?: No	Related EHER Nos. EHER 15138
Final Report: Yes	
Periods Represented: Modern	
Summary of Fieldwork Results: Pre-Construct Archaeology Limited was commissioned to undertake a programme of building recording focused upon the Computer Centre Building at the former Bata Factory, East Tilbury, prior to its demolition. The Bata factory at East Tilbury acted as both producer and distributor of the Bata products, primarily in the manufacture of rubber and leather footwear. The first factory buildings, were constructed in January 1933, in 1934, a leather factory (Trafalgar house) was built and between 1936 and 1938, a second leather and rubber factory (buildings 24 and 34) as well as a garage and social facilities. Although WWII slowed development, the site continued to expand with the addition of a hosiery factory in 1956, a boiler house, in 1958, plastics factory (altered 1966-67), in 1958, a fire station and a warehouse were added in 1960. The computer centre was built in 1967 or not long after, and certainly by 1977 as it first appears on the Ordnance Survey edition of that date. It is a simple building constructed around a steel portal frame and adopts an appearance that is broadly sympathetic with the Modern Movement styling of the main factory buildings.	
Previous Summaries/Reports: NA	
Author of Summary: Adam Garwood	Date of Summary: 06-04-2017

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19/04/17 HB

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

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Topographical Survey supplied by the client
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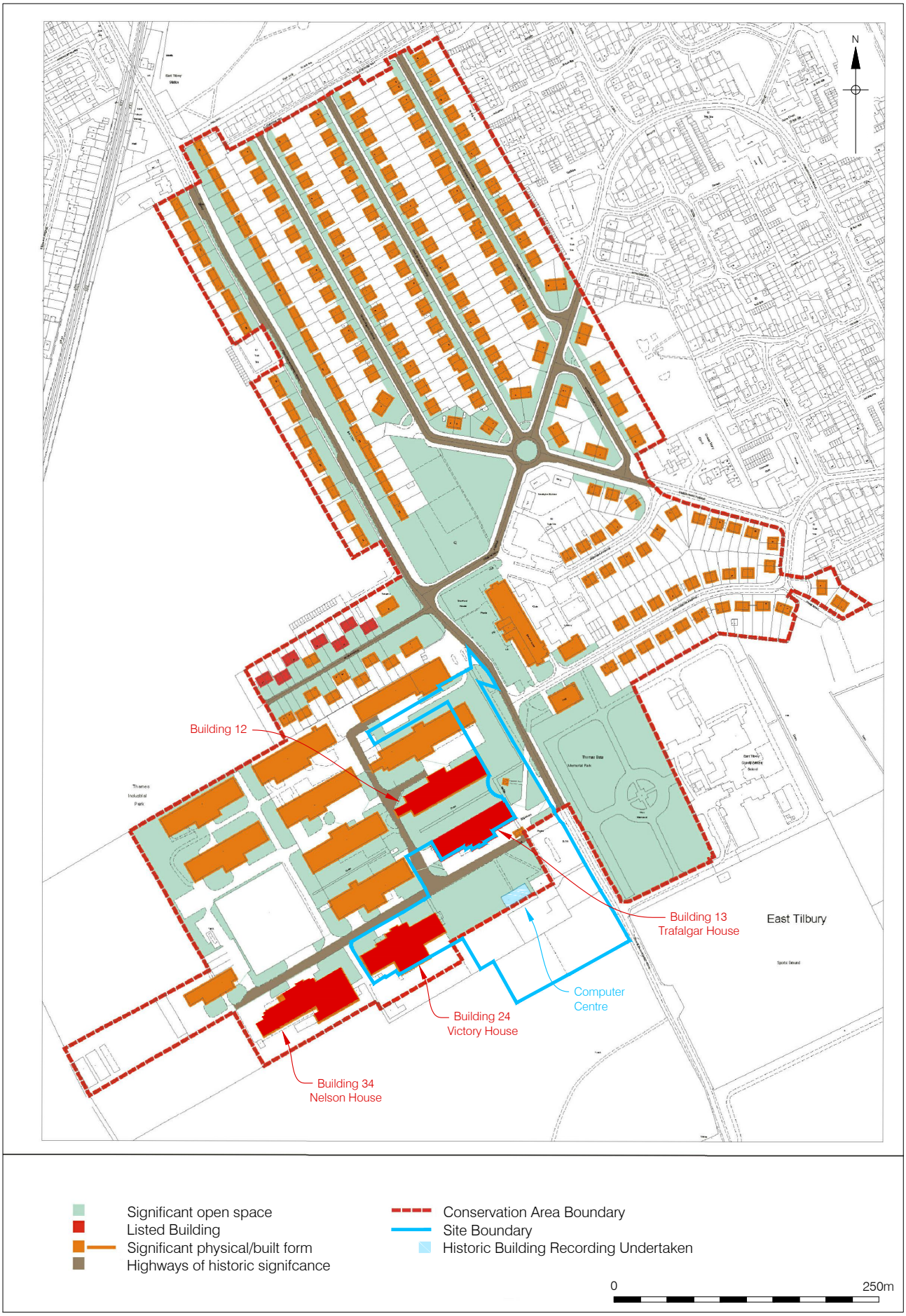
Figure 2
Detailed Site Location
1:2,000 at A4



Based on East Tilbury Conservation Area Character Appraisal - Special Interest

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18/04/17 HB

Figure 3
Conservation Area & Listed Buildings
1:5,000 at A4

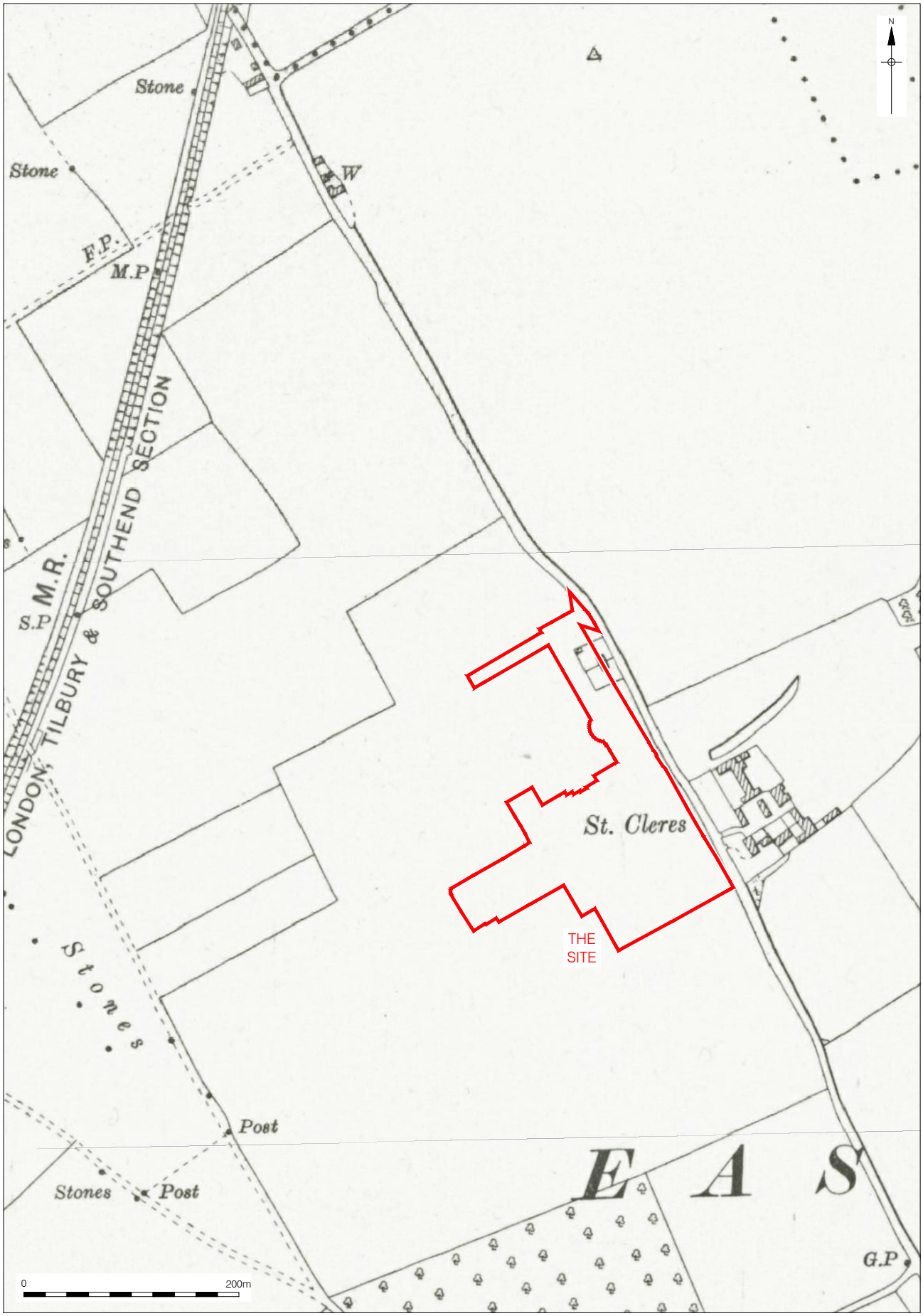

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Figure 4
Third Edition Ordnance Survey, 1915 (Six Inch)
1:5,000 at A4

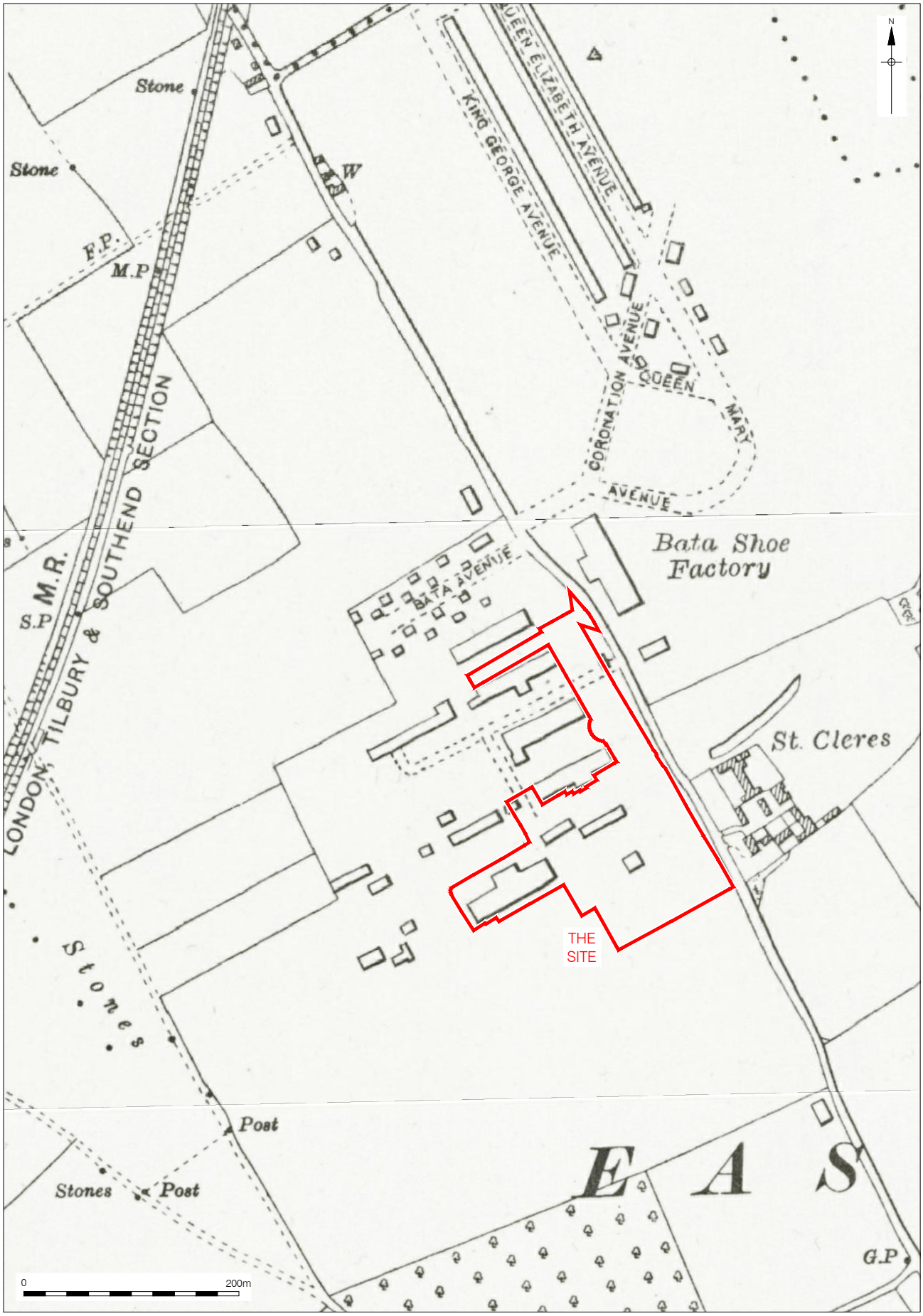

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Figure 5
Fourth Edition Ordnance Survey, 1938 (Six Inch)
1:5,000 at A4

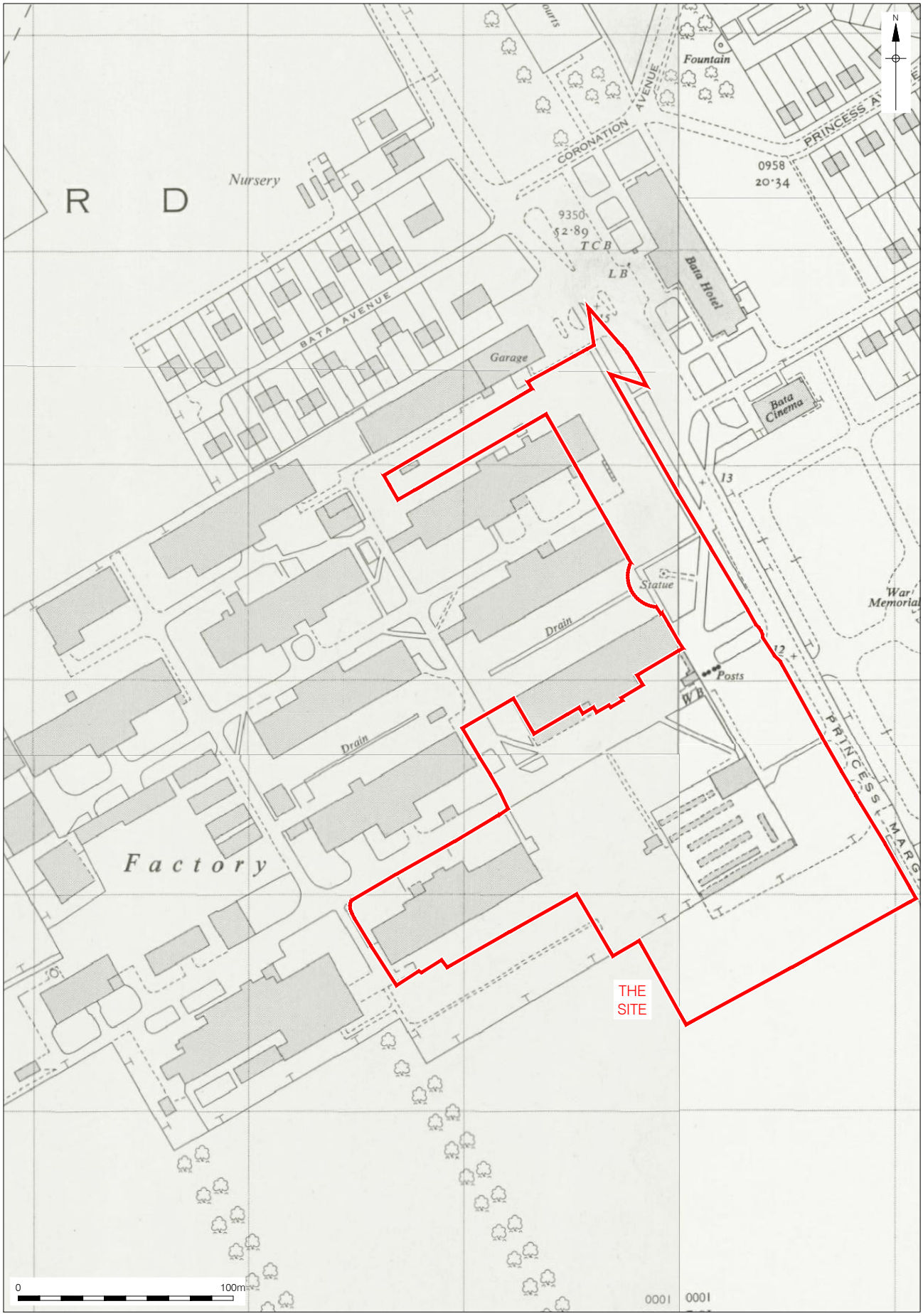

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Figure 6
Ordnance Survey, 1958 (1;2,500)
1:2,500 at A4

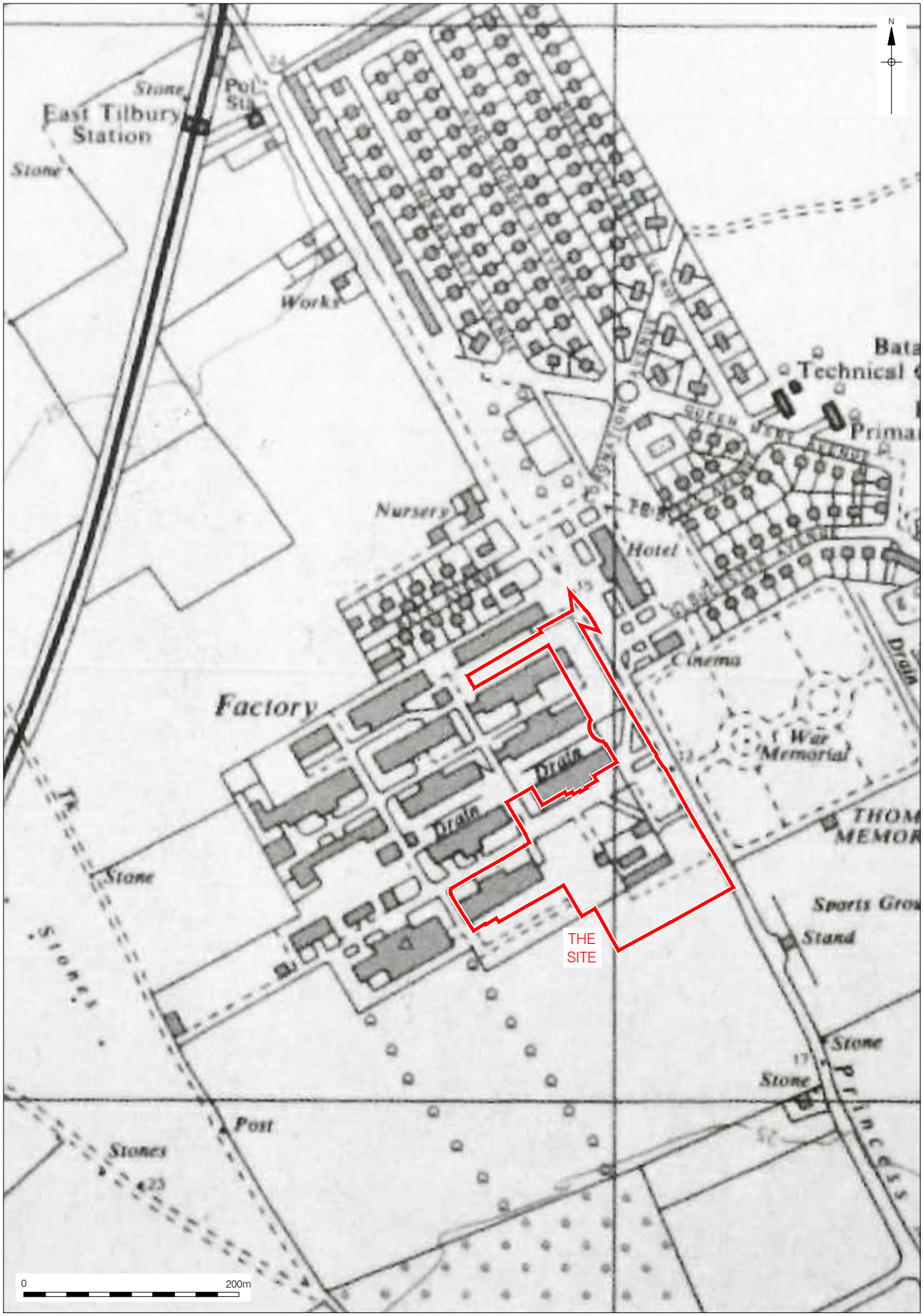

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Figure 7
Ordnance Survey, 1967 (Six Inch)
1:5,000 at A4

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Figure 8
Ordnance Survey, 1967-77 (1;2,500)
1:2,500 at A4

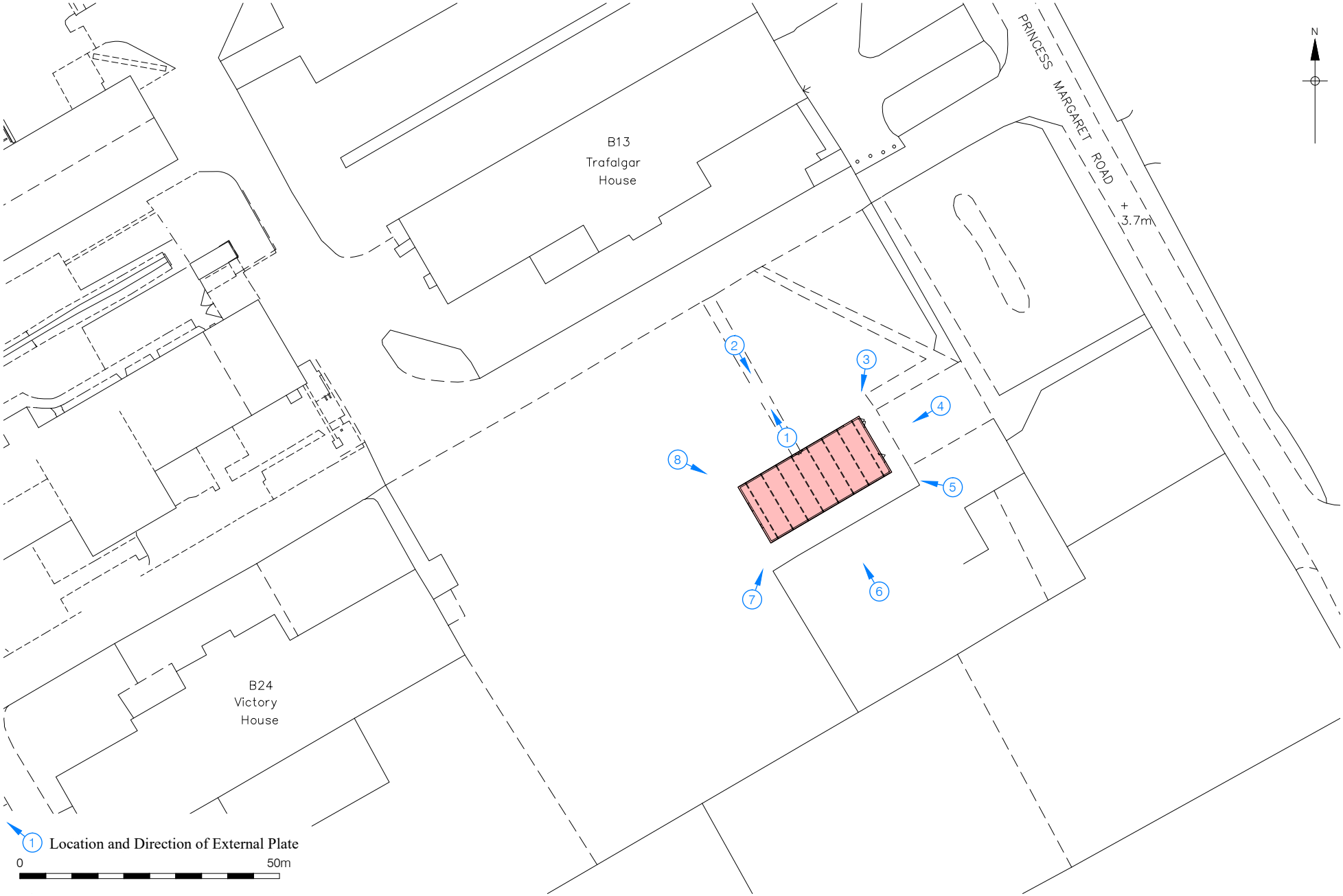

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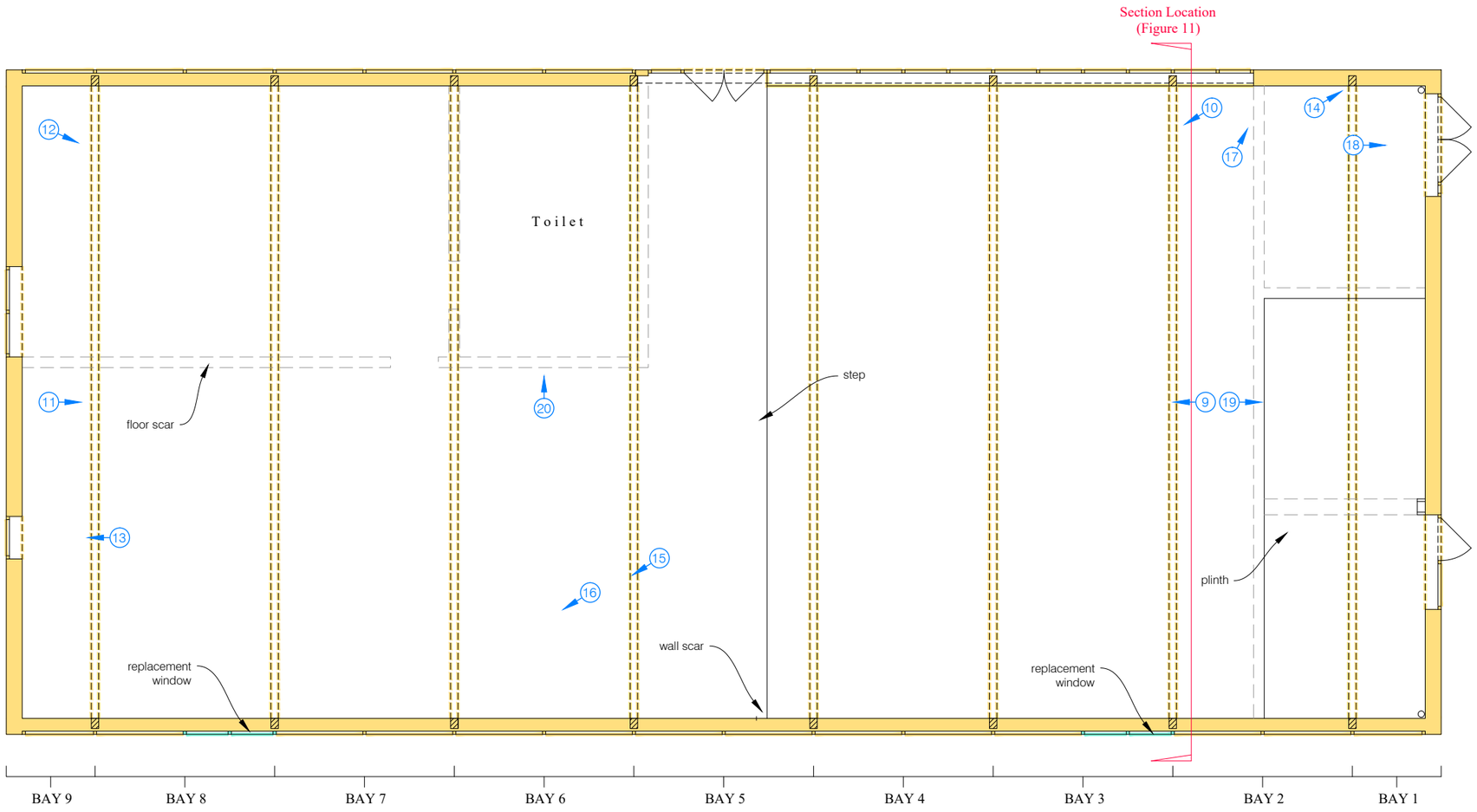
Figure 9
External Plate Locations
1:1,000 at A4



1967

Late 20th Century

1 Location and Direction of Internal Plate

0 4 12 Feet
0 2 4 Metres

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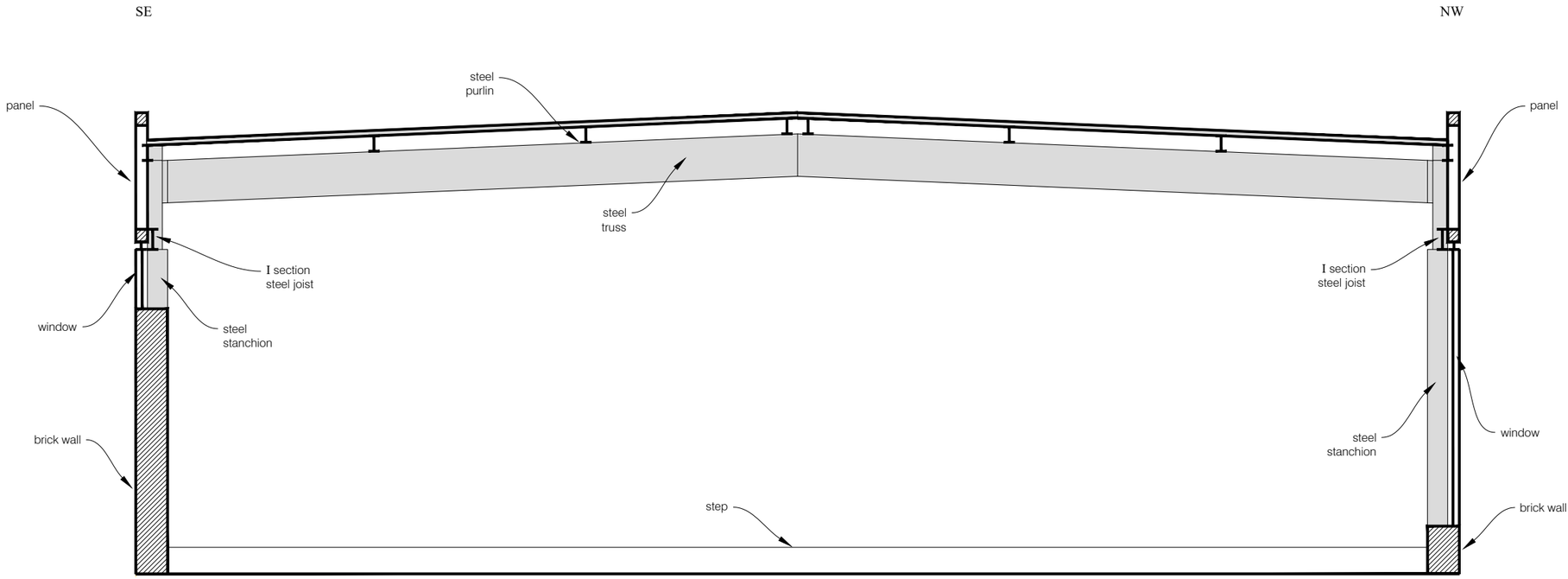
Figure 10
Ground Floor Plan as Existing
1:100 at A3



0 2 6 Feet
0 1 2 Metres

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Figure 11
Cross Section, Looking South West
1:100 at A3

Proposed Development drawing suuplied by client

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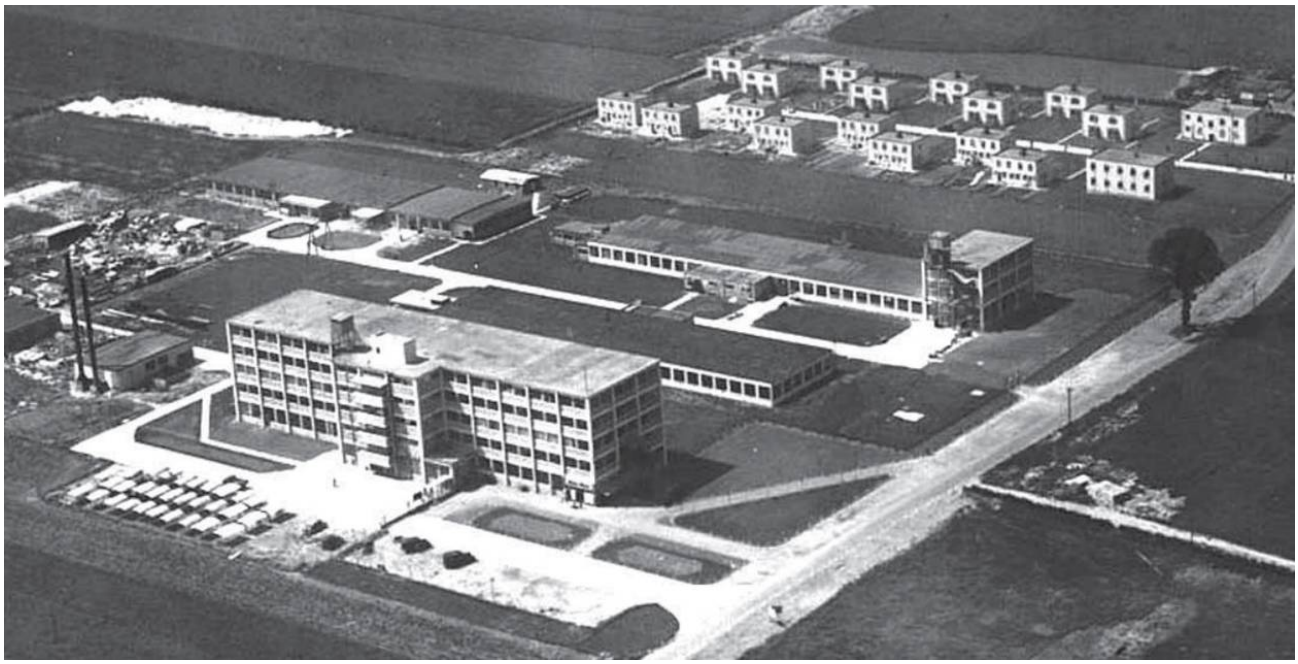
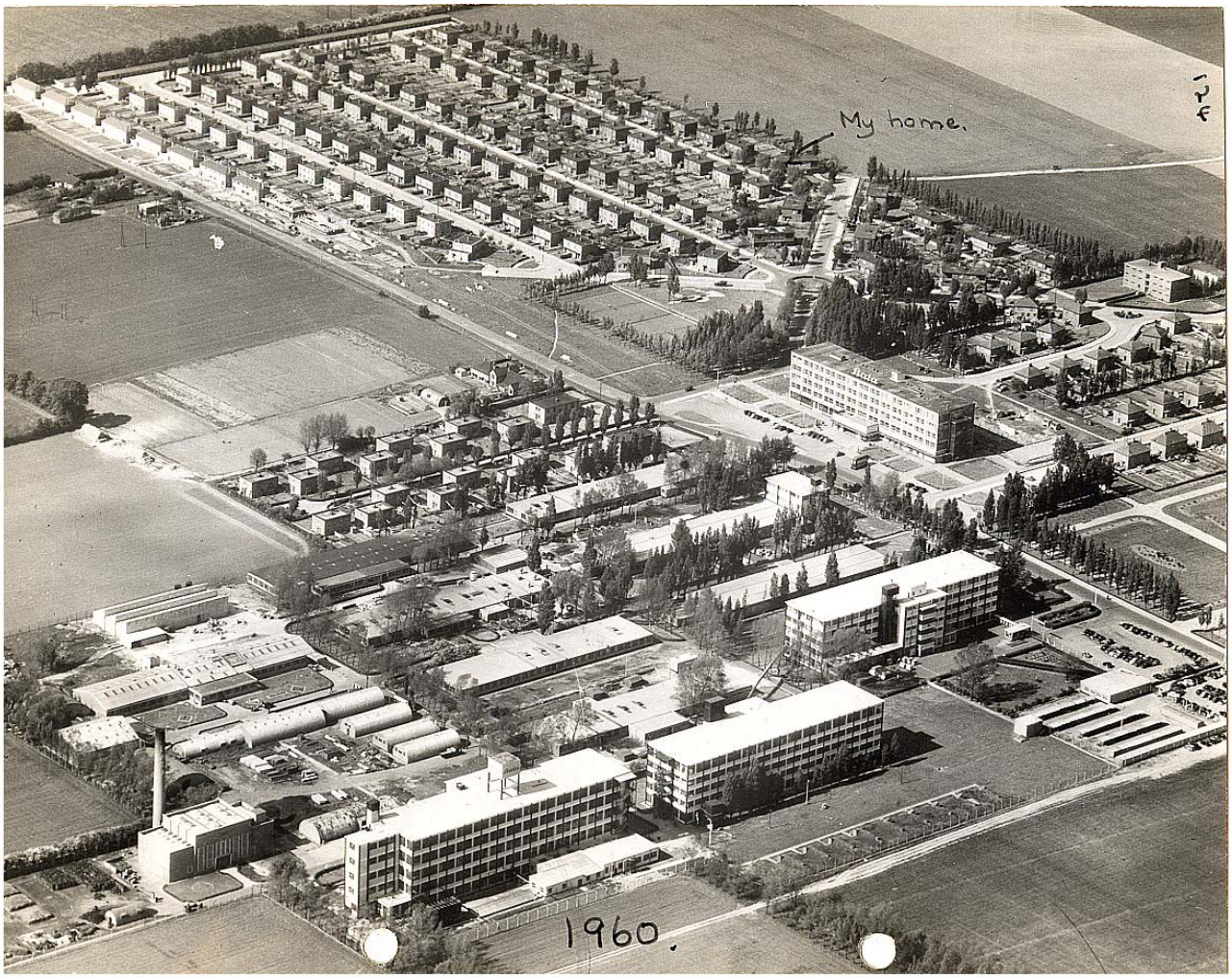
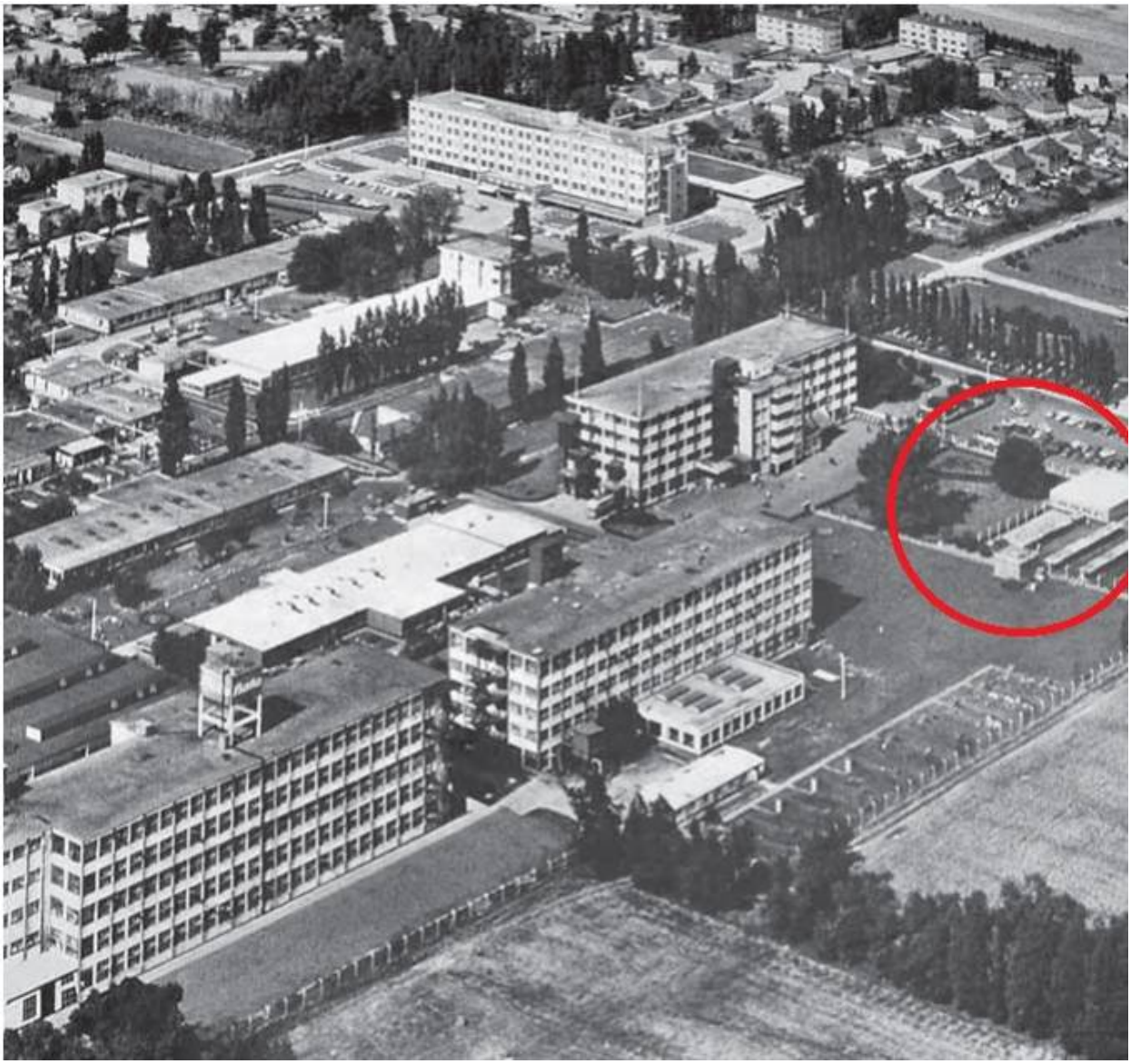
Figure 12
Plan of Proposed Development
1:1,600 at A4



Historic Plate 1 Aerial photograph taken in 1935, looking north-west



Historic Plate 2 Aerial photograph taken in 1960, looking north-east



Historic Plate 2 Aerial photograph taken around 1966, showing former buildings on site

Plate 1 View north towards the Grade II listed Trafalgar House

Plate 2 Computer Centre northern elevation, looking south

Plate 3 Computer Centre northern elevation, looking south-west

Plate 4 Computer Centre eastern elevation, looking west

Plate 5 Computer Centre southern elevation, looking north-west

Plate 6 Computer Centre southern elevation, looking north

Plate 7 Computer Centre southern elevation, looking north-east

Plate 8 Computer Centre western elevation, looking south-east

Plate 9 Internal view looking west

Plate 10 Internal view looking south-west

Plate 11 Internal view looking east

Plate 12 Internal view looking south-east

Plate 13 Detail of window, looking west

Plate 14 Detail of stanchion head and truss connection

Plate 15 Detail of truss and roof covering

Plate 16 Suction bracing

Plate 17 Fletton brick and blockwork elevation

Plate 18 Door with blocked light and louvred vent, looking east

Plate 19 Isolated room with slab ceiling, looking east

Plate 20 Evidence of toilet block

P C A

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