

Site & Landscape Survey

**Bonnington Mill,** 70-72 Newhaven Road. **Desk Based Assessment** and Standing Building Assessment

Report No.3357

# CFA ARCHAEOLOGY LTD

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### 1. INTRODUCTION

This report presents the results of a desk based assessment and standing building assessment carried out by CFA Archaeology Ltd in May 2014 on behalf of Queensberry Properties Ltd at 70-72 Newhaven Road, City of Edinburgh (Fig 1). The proposed re-development site has had a protracted history of industrial use since the late 18<sup>th</sup> century due to its close proximity to the Water or Leith that would have been the primary source of power at this period. The site currently has a series of extant buildings forming the so-called Bonnington Mills Business Centre. The site is to be re-developed for residential use.

Following a desk-based assessment, a site visit was carried out to assess the plan form and architectural character of the buildings that were present on the site. The survey was confined to mainly the exterior of the buildings, however the interior of some of the buildings were seen.

John Lawson, City of Edinburgh Council advised that the mills at Bonnington formed part of the lands given to Holyrood Abbey in its foundation charter of 1128AD. Though the exact location of these early medieval mills area unknown, mills in this location are recorded from the 15<sup>th</sup> century. The area was affected by the 16<sup>th</sup> century sieges of Edinburgh and Leith, with the Petworth Map depicting the 1559-60 Siege suggesting that the site formed part of the area for encampment of Lord Gray and the Earl of Arran's forces.

### 2. OBJECTIVES

The project's aims and objectives were:

- To undertake a desk based assessment to identify the archaeological potential of the site;
- To carry out a historic building assessment within the proposed redevelopment boundary to determine the age, type, character and architectural significance of the buildings:
- Produce a report on the findings.

# 3. METHODOLOGY

General

CFA bases its methodology for historic building assessments on Guidance from ALGAO Scotland (2013) and Historic England (2016). CFA follows the Chartered Institute for Archaeologists' Code of Conduct and Standard and Guidance as appropriate.

#### Desk-based Assessment

Prior to the site visit a desk-based assessment was made of available on-line bibliographic sources relating to the history of the site. An examination of the first and second edition Ordnance Survey map sheets was made together with earlier map editions. Extracts from the map sheets have allowed map regression analysis to

highlight the broad changes in historic development and layout of the buildings within the proposed development site (within the red-line boundary).

Up-to-date information was sought from the Historic Environment Scotland (HES) database on archaeological sites present within the proposed development area.

The Historic Environment Scotland (HES) National Aerial Photographic Collection was examined to determine what buildings were present at the site between the 1940s and 1960s.

### Photographic recording

CFA used a Nikon D300 camera (12 megapixals) to take high-resolution digital photographs of the buildings in their topographical setting.

A photographic location plan showing the orientation at which each shot was taken has been produced (Fig 1) and this is cross-referenced to the photographic register (Appendix 1). A set of thumbnail prints is also provided at the rear of the report. The buildings and a length of wall within the study area have been given alphabetic descriptions (eg. Buildings A-K) to simplify the discussion of those buildings (Fig 1).

# 4. DESK BASED ASSESSMENT RESULTS

# 4.1 Cartographic Sources (Figs 2a-2i)

General Roy's Military map (1752-55, Fig 2a) shows the placename *Bonningtun* with a crossing over the Water of Leith. On the south side of the crossing are a schematic collection of buildings some of which may have been associated with the early development of Bonnington Mills.

John Ainslie's map of 1804 (Fig 2b) first names the site as Bonnington Mills. The study area was part of a much larger holding under the ownership of a family named Cunningham. Bonnington Bridge is shown crossing the Water of Leith. The mill complex is shown on either side of what would become Newhaven Road. Within the study area, on the east side of the road, five buildings are depicted. The largest is an inverted L-shaped building and the rest are rectangular. A mill lead running west to east through the site from the Water of Leith is also depicted.

Abbenethy and Walkers map of 1807 (Fig 2c) shows five buildings present on the east side of the road. Four are rectangular and another is L-shaped. The complex is not named.

Kirkwood's map of 1817 (Fig 2d) depicts Bonnington Mills and shows the mill lead with a collection of irregular shaped buildings under the ownership of Mr Spalding. A more rather schematic drawing of the site by Crawford in 1824 (Fig 2d) shows the study area with only three buildings and these were part of the larger Bonnington Mills.

Lizars map of 1834 (Fig 2e) shows four buildings in the study area, two of which were L-shaped and two were more or less rectangular. The complex extended westwards and the mill lead was still present.

The First Edition 1852 Ordnance Survey map (Fig 2f) shows that the site was extensively developed as Bonnington Mills on the north side of the mill lead. Within the proposed development boundary the largest building on the site was part of the tannery complex built around a grid of tanning pits. A single square building (Building A) was present with what appears to be an external staircase on its north side. Further west was a corn and flour mill with a granary building. A T-shaped building was present on its west side adjoining Newhaven Road. The footprint of this building may be associated with Building D and G which are more or less on the same alignment.

The Second Edition 1876 (Fig 2g) Ordnance Survey map shows that by the year the tannery had expanded considerably. The complex is now named as a *Tannery* comprising a series of large buildings with a courtyard at its centre. Some of the buildings fronted Newhaven Road. The mill lead is still present. On the north side of the complex, Building A was enlarged at its west end and Building B (the mill House) was built on its east end. A building is depicted with a cross implying that it was over a passage. This conforms to the footprint of building C.

The Third Edition 1896 Ordnance Survey map (Fig 2h) shows an increase in buildings that are now depicted in block-layout. The courtyard at the centre of the complex has been altered slightly. The lead is still extant. The buildings on the north side of the main complex appear to be the same.

The 1908 Ordnance Survey map (not shown) depicts the same level of detail as the 1896 map showing no changes had occurred. Although still visible on the 1908 map, the mill lead is not named suggesting it was now no longer in use.

The 1914 Ordnance Survey map (Fig 2i) depicts the site as *Paper Mills* and there is no significant alteration to the layout with only minor additions.

The 1933 Ordnance Survey map now depicts the site as Bonnington Bridge Paper Mills and the same level of building detail is the same as that shown on the 1914 Ordnance Survey map.

Ordnance Survey map editions post-dating the 1950s show the site in block layout plan and provide no useful details.

# 4.2 Aerial Photographs

An aerial map dated to 1929 shows clearly Buildings A-B and a collection of sheds aligned north to south (Buildings E, G, and H) with a larger building at the north end aligned east to west, with a pitched gable. This was in turn joined to a building aligned north-south with a chimney stack (possibly Building H). This arrangement of buildings was visible on the 1946, 1958 aerial photographs. The 1961 aerial photograph showed that the large building aligned east to west on the north side of Building H had been demolished by this year.

#### 4.3 CANMORE

The CANMORE database contained record NT27NE 1399. The record contains no in-depth descriptive details on the morphology of the site but it did contain three historical photographs taken by John Hume in 1971. One photograph (SC 772993) includes a view from the NW showing parts of the NNW and WSW fronts of the works. A second photograph (SC 777128) shows a perspective from the SSW showing the front of a paper shaving works with the paper mill in the background. A third photograph (SC773053) shows the Bonnington Paper Mills fronting Newhaven road and a chimney to its rear.

# 4.4 Listed Buildings and Scheduled Ancient Monuments

Pastmap shows that the proposed development site contains no Listed Building or Scheduled Ancient Monuments.

# 4.5 Bibliographic

Stuart Harris (1991) in his paper on the fortifications and siege of Leith in 1560 provides a plan transcribed from a historic map by Petworth and the modern street plan of the area around Leith. His plan shows that siege earthworks were established close to Old Bonnington and nearby to the east was the Buers Mount defenses where a field gun was stationed.

Stuart Harris (1996) in his *Place Names of Edinburgh* mentions that Bonnington Road was a section of new highway leading from Cannonmills to Leith and is mentioned in an original charter for the Stewartfield feu in 1735. This was part of a new road system that is vividly shown on General Roy's Map of 1753. In the mid-19<sup>th</sup> century the road was renamed as Newhaven Road.

According to Enid Gauldie (1999) in her book entitled *The Scottish Country Miller* Bonnington Mill was where the world renowned engineer John Rennie (1762-1821) was contracted to advise and build machinery for a mill in 1780. It was here where he first attempted the use of cast iron pinions instead of the old fashioned wooden trundles, or lantern pinions that were commonly in use at that period.

### 5. BUILDING ASSESSMENT RESULTS

# 5.1 Architectural descriptions of the buildings

The buildings (A-J) and a section of wall (K) are now described and their layout is shown on Fig 1b. Figs 3-15 in Table 1 are at the rear of the report.

Building	<b>Summary Description</b>	Period
A (Figs 3	This building comprised a large blue-painted three-	Early 19 <sup>th</sup> century
&4)	storey house with a pitched roof at its east end and a	
	hipped roof at the west end. The eastern end was	
	built before 1852 and the west end was added by	
	1876. The north-facing elevation had five bays; the	
	earliest part had three bays with two windows on	

		I
	either side of a doorway, formerly accessed by an	
	external staircase. On the same elevation the addition	
	had a door at the ground floor and first and second	
	floor windows. The west-facing gable had five	
	windows. The south-facing elevation had two	
	doorways, one at ground floor (east end) and one at	
	the top of a forestair (west end). The fenestration was	
	mainly boarded. Sash-and-case windows within	
	raised margins were present on the south-facing	
	elevation. The interior of the building was not seen.	
B (Fig 5)	Building B comprised a two storey former mill house	Late 19 <sup>th</sup> century
D (1 1g 3)	with a pitched slate roof. Dormer windows were	Late 17 century
	present on its north and south-facing elevations. The	
	east gable had two first floor windows with a smaller	
	window at the ground floor. The west gable was	
	featureless. On the south-facing elevation a timber-	
	framed glass porch covered the doors to the ground	
	and first floor levels Three fireplaces were seen	
	within the modern interior. These included two late	
	19 <sup>th</sup> -early 20 <sup>th</sup> century cast iron fireplaces with	
	corbelled mantelpieces and a smaller cast-iron	
	mantelpiece probably dating to the Edwardian period.	. 4.
C (Fig 6)	Building C comprised a first-floor level building with	Late 19 <sup>th</sup> century
	an underpass to the rear of the building complex. The	
	building had a pair of steel-clad hipped roofs. The	
	building was supported in concrete columns built on	
	top of a low wall flanking the underpass. The eastern	
	side of the building was timber-clad. The interior of	
	the building was not seen.	
D (Figs 7-	Building D was a long rectangular former four-storey	Late 19 <sup>th</sup> century
8)	brick-built mill building with a hipped roof at its west	
	end and a pitched gable at its east end. The interior of	
	the building was not seen.	
E (Fig 9)	Building E was a pair of rectangular brick-built two-	Late 19 <sup>th</sup> century
	storey buildings. The principal elevation fronted	
	Newhaven Road. The fenestration was modern and	
	the roof was clad with metal sheeting. The interior	
	was not seen.	
F (Fig 10)	Building E was a short rectangular two storey	Late 19 <sup>th</sup> century
	building with a brick-built pitched gable visible	Late 17 Contains
	within a small courtyard. The interior was not seen.	
G (Fig 11)	Building G was a brick-built rectangular two storey	Late 19 <sup>th</sup> century
G (Fig 11)	building with a skewed footprint and pitched roof.	Law 19 Contury
II (E: - 12)	The interior of the building was not seen.	Lata 10th assistance
H (Fig 12)	Building H was a two storey brick-built structure	Late 19 <sup>th</sup> century
	with a pitched roof. The roof trusses comprised	
	composite bolted steel duel-pitch roof. The roof	
T (E; 12)	space (now an office) was well lit by roof lights.	T toth
I (Fig 13)	Building I was a large rectangular brick-built three	Late 19 <sup>th</sup> century
	storey building with a pitched roof. The interior was	
	modern and used as offices and workshops. The roof	
	trusses at second floor level were composite angle-	
	iron supported on steel I-beams. The interior of the	
	roof was clad with timber boards supported on steel	

	purlins.	
J (Fig 14)	Building J was a large rectangular brick-built	Late 19 <sup>th</sup> century
	structure forming a series of modern garages and	
	offices. The ground floor of at the north end of the	
	building had been converted into a two-storey office	
	with a timber-clad frontage. The rear (east-facing	
	elevation) has two garage doors.	
K (Fig 15)	Feature K comprised a section of wall measuring	Late 19 <sup>th</sup> century
	c.8m x 3.5m and c.0.5m thick and constructed of	
	random rubble. At its east end was a brick-blocked	
	window surmounted by a rudimentary brick-arch.	
	This section of wall is all that remained of a much	
	larger factory building that was still standing in 1958	
	according to the aerial photographic record.	

Table 1 - Building, summary description and broad period of construction.

### 6. **SUMMARY**

No other sites other than Bonnington Mill are listed in the Canmore database. There are no other records of archaeological find spots.

The archaeological evidence for the remains of the 16<sup>th</sup> century English siege works within the proposed re-development boundary is unknown and cannot be discounted.

The cartographic record shows that the site has a protracted history of industrial development and contraction during the early and later 19<sup>th</sup> century. Roy's map of 1752-55 shows Bonnington was in existence by this time. Gauldie's reference (op.cit.) to the engineer John Rennie's involvement at Bonnington in 1780 shows that a new mill was under construction by this year.

Building A was built during the first half of the 19<sup>th</sup> century along with the tannery buildings and pits that were then part of the much larger Bonnington Mills complex. By the late 19<sup>th</sup> century Building A was enlarged at its west end and Building B was then attached to it. At the same time, the tannery had expanded with Buildings C-I forming the nucleus of the factory. All of these buildings were mainly brick-built with hipped or pitched roofs.

By 1896 according to the OS map of that year the tannery was converted to the Bonnington Paper Mills that continued in production up until the 1970s.

The short length of rubble-built wall (K) is all that remains of a much larger L-shaped building that was extant in the 1960s according to aerial photographs.

### 7. CONCLUSION

This assessment has shown that industrial activity at the site can be traced back to the late 18<sup>th</sup> century. The building complex within the study area was at one time part of a much larger industrial complex that developed from an early 19<sup>th</sup> century tannery and later 19<sup>th</sup>-20<sup>th</sup> century paper mill. All of the buildings have undergone major internal refurbishment to suite the requirements of modern 20<sup>th</sup> and 21<sup>st</sup> century office use.

Not all the interiors were seen so it is likely that period features may survive in some of the buildings, namely in Building A.

Sixteen century siege works erected by the English Army are known to have existed in Bonnington, whether any buried archaeological remains from this event survive within the proposed development area is not known.

Given the history of industrial use of the site from late 18<sup>th</sup> century to late 20<sup>th</sup> century it is likely that further building survey and archaeological site investigation will be required. The scale of any future work will have to be agreed with CECAS underpinned by a Written Scheme of Investigation.

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Cartographic

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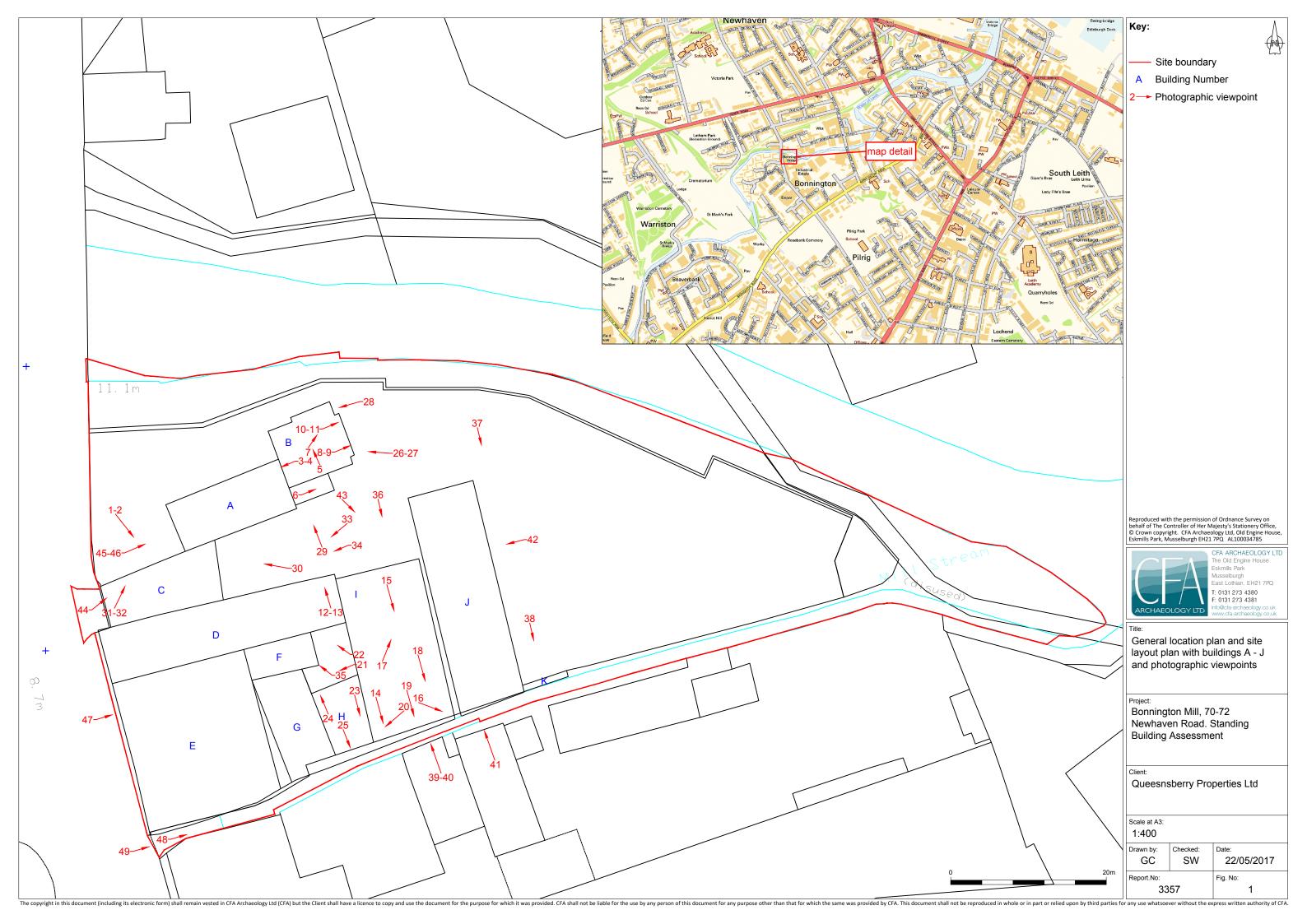
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# **APPENDIX 1: PHOTOGRAPHIC REGISTER**

Shot No	Summary description	Facing
1-2	Exterior north-facing elevation of Buildings A and B	SE
3-4	A cast-iron fireplace on the first floor of Building B	W
4	Ground floor hallway in Building B	N
5	A forestair leading to the first floor of Building B	N
6	First Floor of Building B, former office space	NE
7	Office on the first floor of Building B	Е
8-9	First floor fireplace in Building B	Е
10-11	First floor fireplace	Oblique
12-13	Composite iron truss over the stairs to Building D and I	
14	Composite steel truss and stanchion within the hall, Building I	S
15	Composite steel trusses in Building I	S
16	Composite steel trusses in Building I and later stanchions	SE
17	Composite steel trusses in Building I with steel purlins	Е
18	Composite steel truss with fish plates on a steel stanchion	N
19	Composite steel truss and ridge, Building I	S
20	Composite steel truss and valley in between Building H and I	SW
21	Exterior of the courtyard with gantry at first floor level	W
22	Gable wall of building F showing banding in the brickwork	NW
23	Short spanning composite steel truss in Building H	S
24	Dual spanning composite steel truss in Building I	N
25	Dual spanning composite steel truss in Building I	S
26-27	External view of Buildings B with Building A at the rear	NW
28	East-facing gable of Building B	W
29	South-facing elevation of Building A	N
30	South-facing elevation of Building A and Building C	S
31-32	View from beneath Building C showing supports	Е
33-34	Stairs to main entrance on the first floor, Building D	S
35	Gable wall at ground level, Building F	S
36	Gable wall of Building I	S
37	Gable wall of Building J	S
38	Section of rubble built wall (K)	S
39-40	Rear gable wall of Buildings I and H	NW
41	Rear of gable J (spoilt shot)	N
42	General view of the complex Building	S
43	An office at the north end of Building J	Е
44	Ashlar parapet and pillars supporting Building C	Е
45-46	Gable wall of Building A	Е
47	Main street frontage of Buildings D and E	Е
48	Gable of part of Building E brick-built gable	N
49	Gable walls of Building E	NE





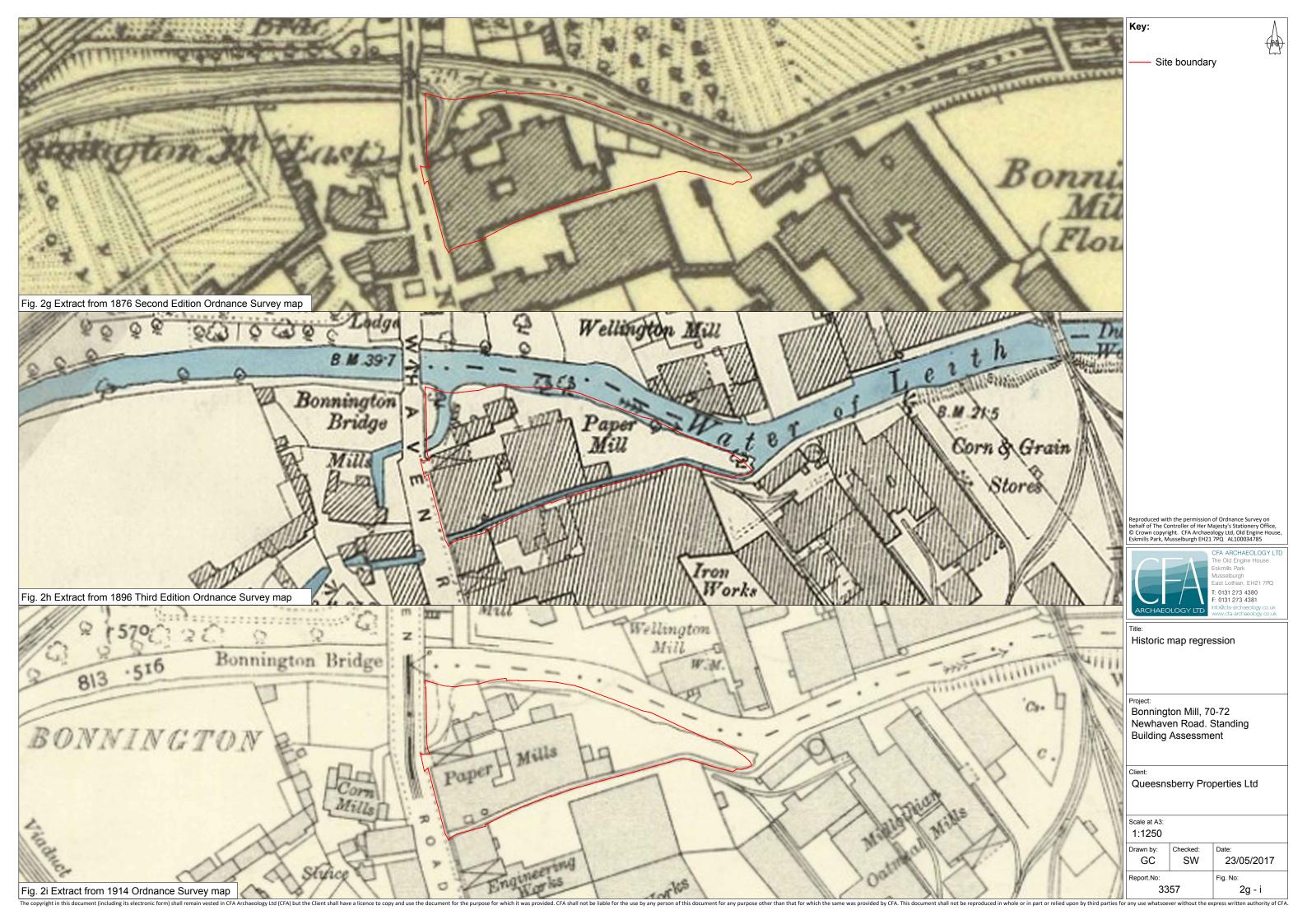




Fig.3 Building A, North-facing elevation with pitched and hipped roofline



Fig.4 Part of Building A, south-facing elevation and fenestration



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Fig.5 Building B, south and east-facing elevations



Fig.6 Building C supported by pillars and underpass

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Fig.7 Building D, north-facing elevation with connecting Building C



Fig.8 Building D and E street-frontage elevations

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Fig.9 Building E south-facing gable walls



Fig.10 Building F, brick-built gable within the courtyard



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Fig.11 Building G behind a first floor gantry



Fig.12 Building H interior composite steel roof truss



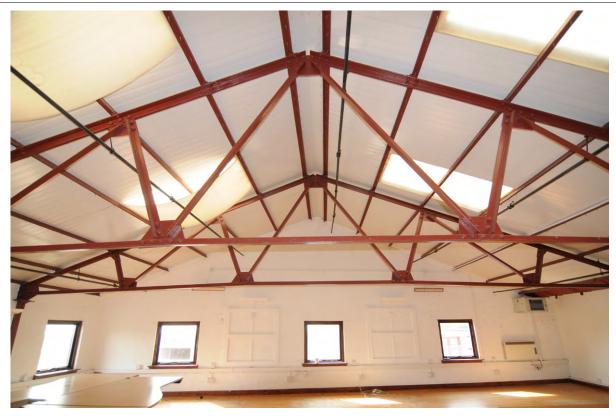


Fig.13 Building I, interior composite steel truss



Fig.14 Building J, north-facing gable and east-facing elevation



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Fig.15 Section of north-facing upstanding wall (K)



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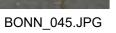
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