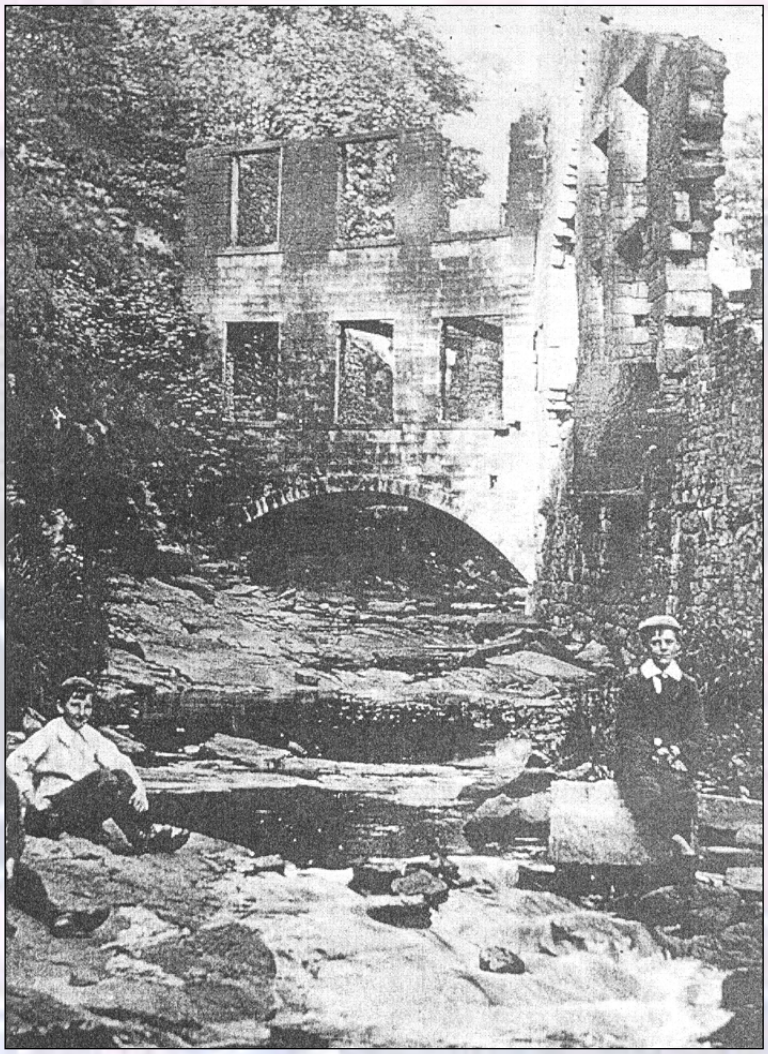
Healey Dell

An Archaeological Desk-Based Assessment

Vol 2: The Illustrations



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UMAU December 2004 (72.2)

Ill. 1: Healey Dell archaeological desk-based assessment, location of study area. Scale 1:12,500.
Base map OS SD 81 SE 1977 & SD 81 NE 1981.
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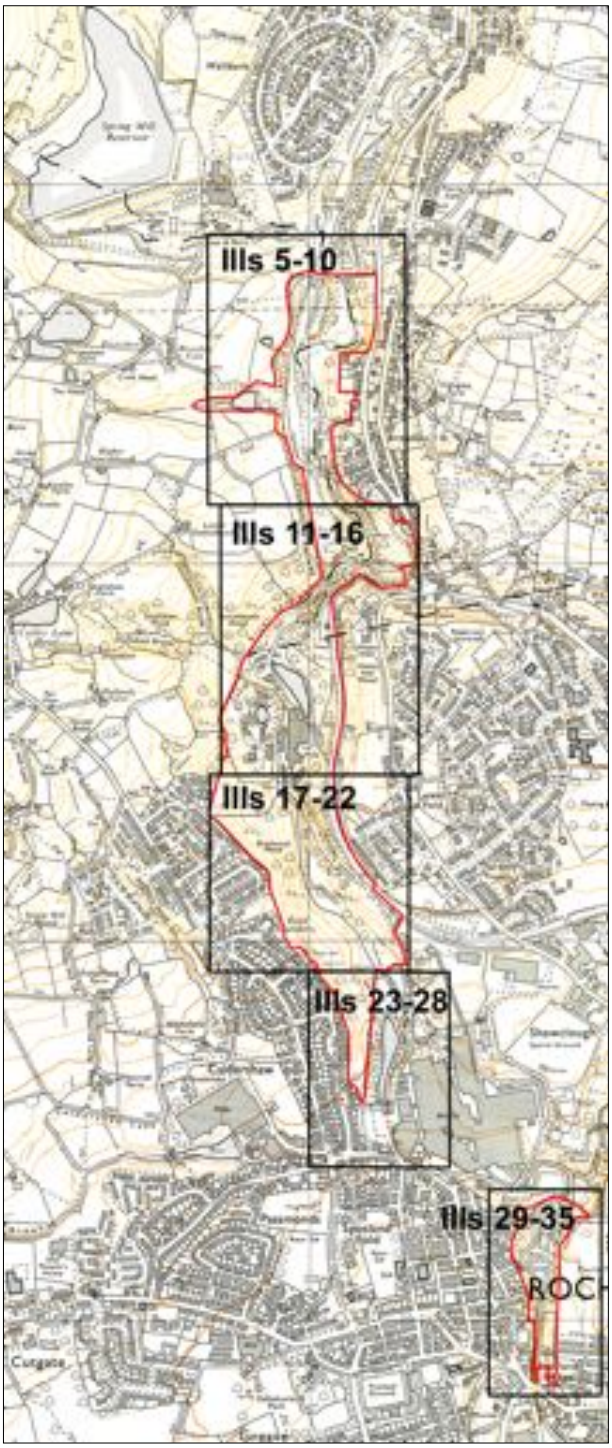

Ill. 4: Keys to 1:2500 maps of study area (**Ills. 5-35**).
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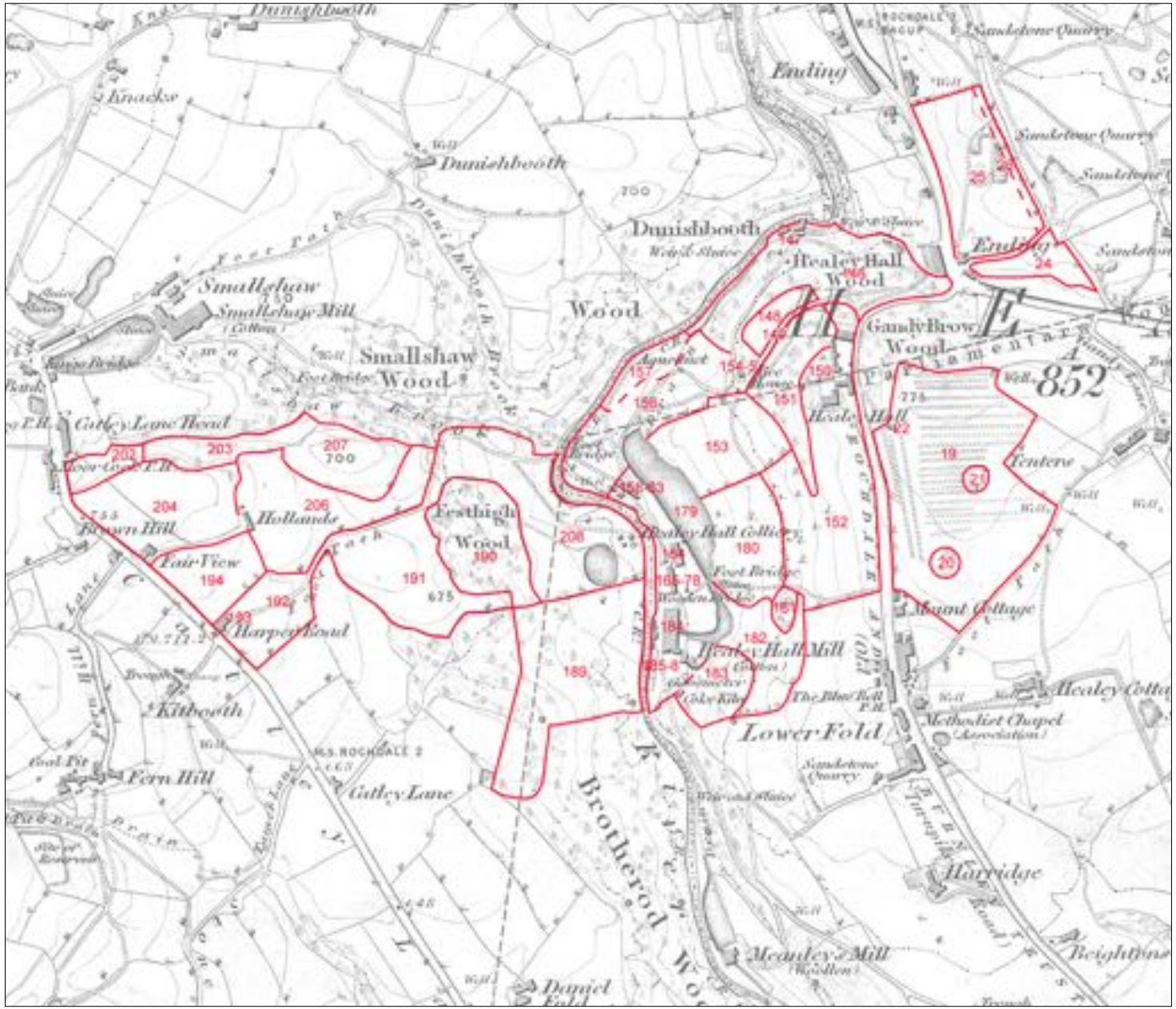
Site of demolished building

Mill reservoir / leat

Other sites

Ill. 142: Detail of the 1844-8 OS map, superimposed with field boundaries shown on the plan accompanying a mining lease of 1846 (JRULM RYCH/3574). Reproduced at 1:5000. For key see **Table 1** of this report.



Ill. 47: Healey Bottoms Mill (**site A33**). Plan of visible remains and demolished buildings (not all demolished buildings are shown). Scale 1:1250.
Based on modern OS mapping. Crown Copyright Reserved.

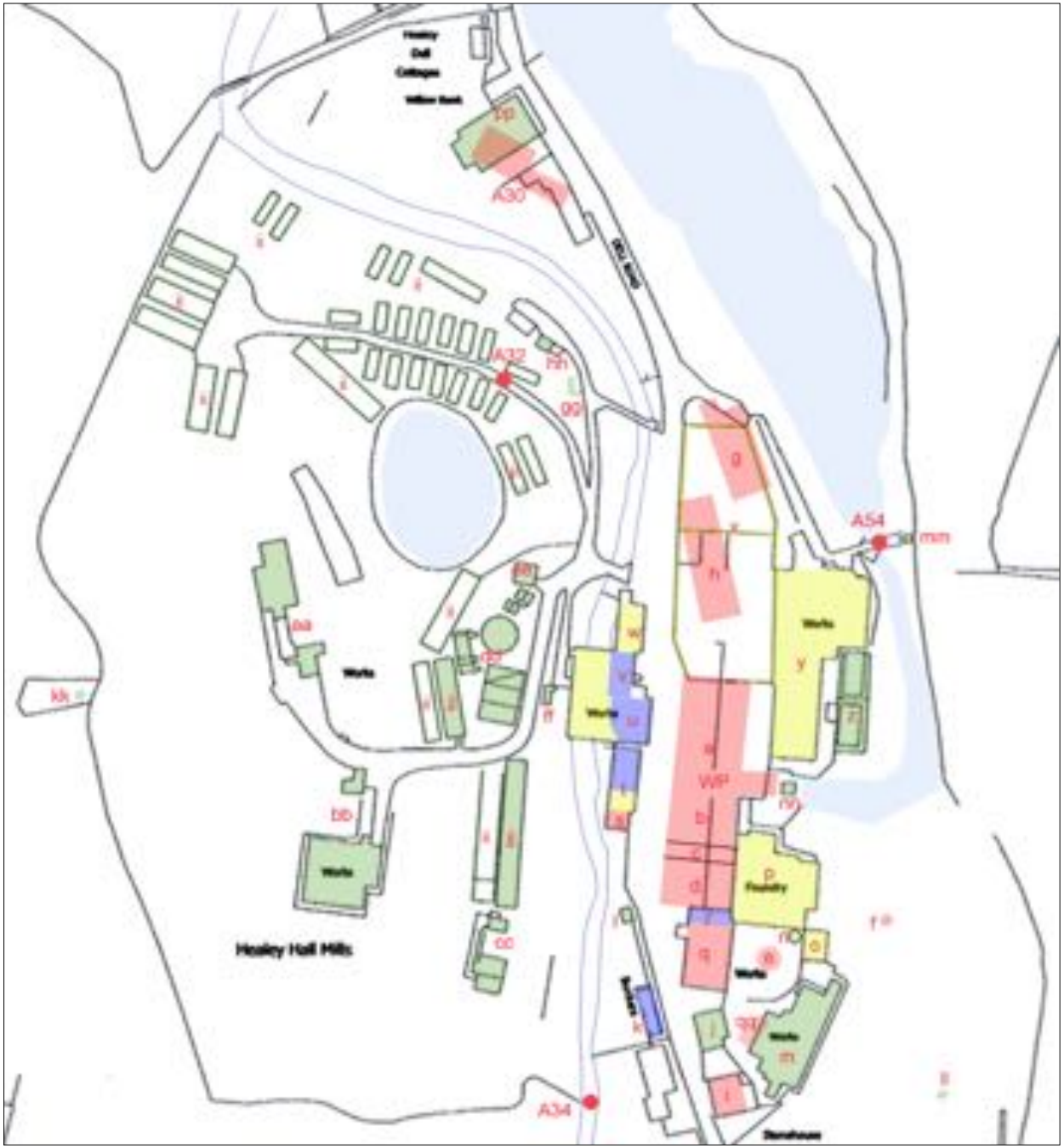
1813-1882 (Leach Tweedale & Co/ Jacob Tweedale & Sons

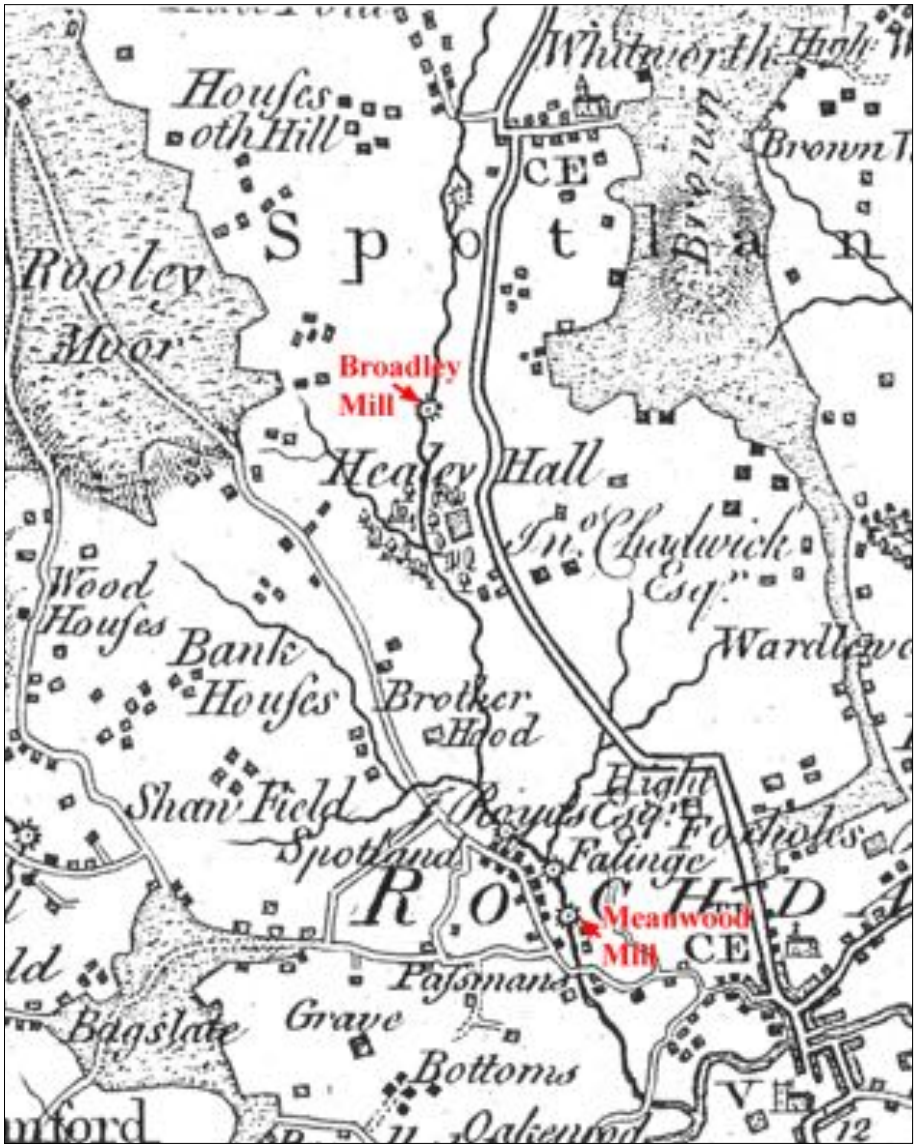
c 1900 (Samuel Heap & Son)

1908-1928 (Samuel Heap & Son)

1941-1943 (Royal Ordnance Factory)

WP indicates approximate position of the wheelpit.





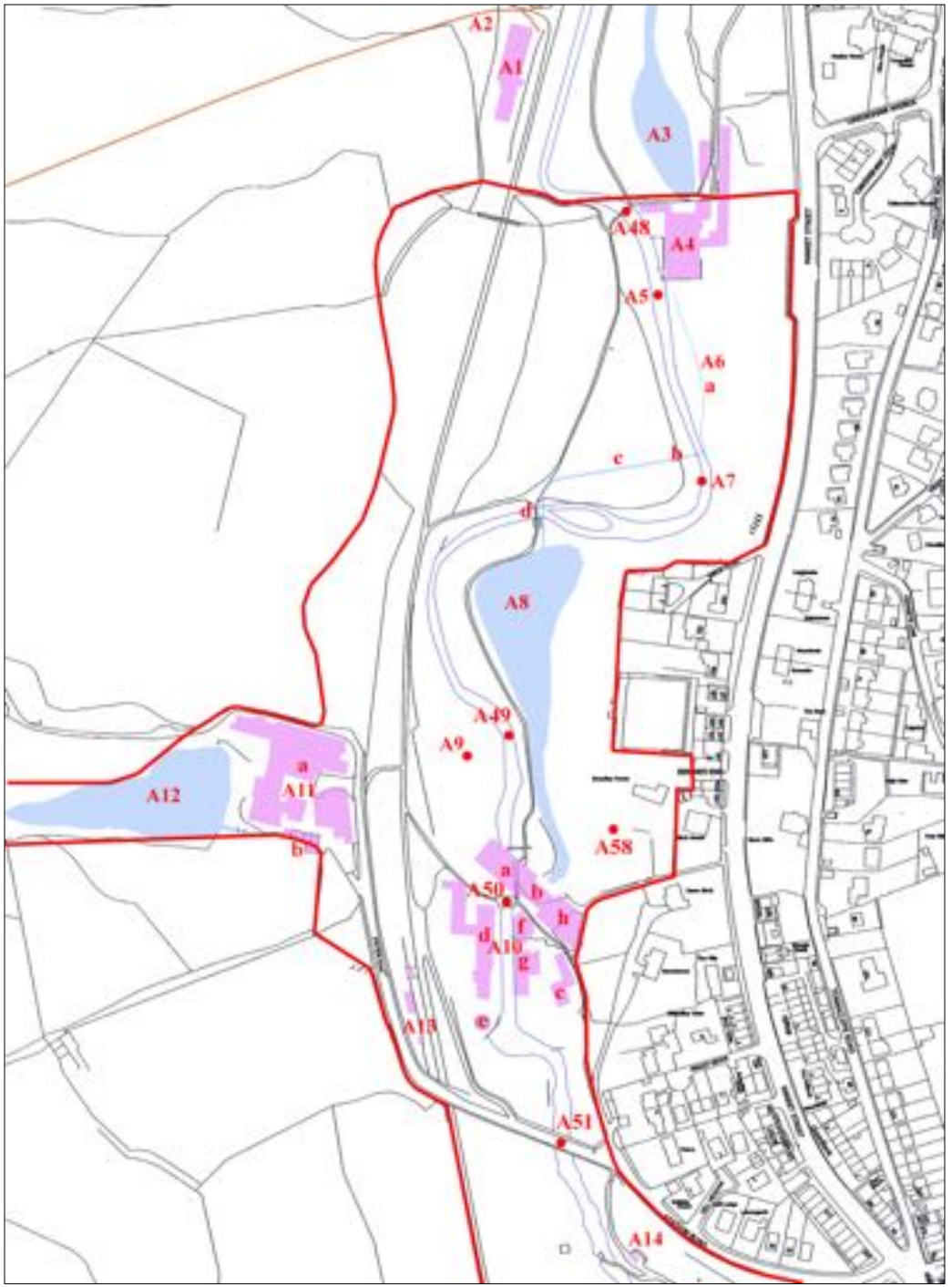
Ill. 2: The environs of Healey Dell on Yates's map of Lancashire, surveyed in the 1770s. Water-powered sites shown within the study area are highlighted.

Ill. 3: The environs of Healey Dell on Greenwood's map of Lancashire, 1818. Water-powered sites shown within the study area are highlighted.

Ill. 5: Area of Tonacliffe Mill, Broadley Mill and Broadley Wood Mill, showing site locations.
Scale 1:2500.
Based on modern OS mapping. Crown Copyright Reserved.

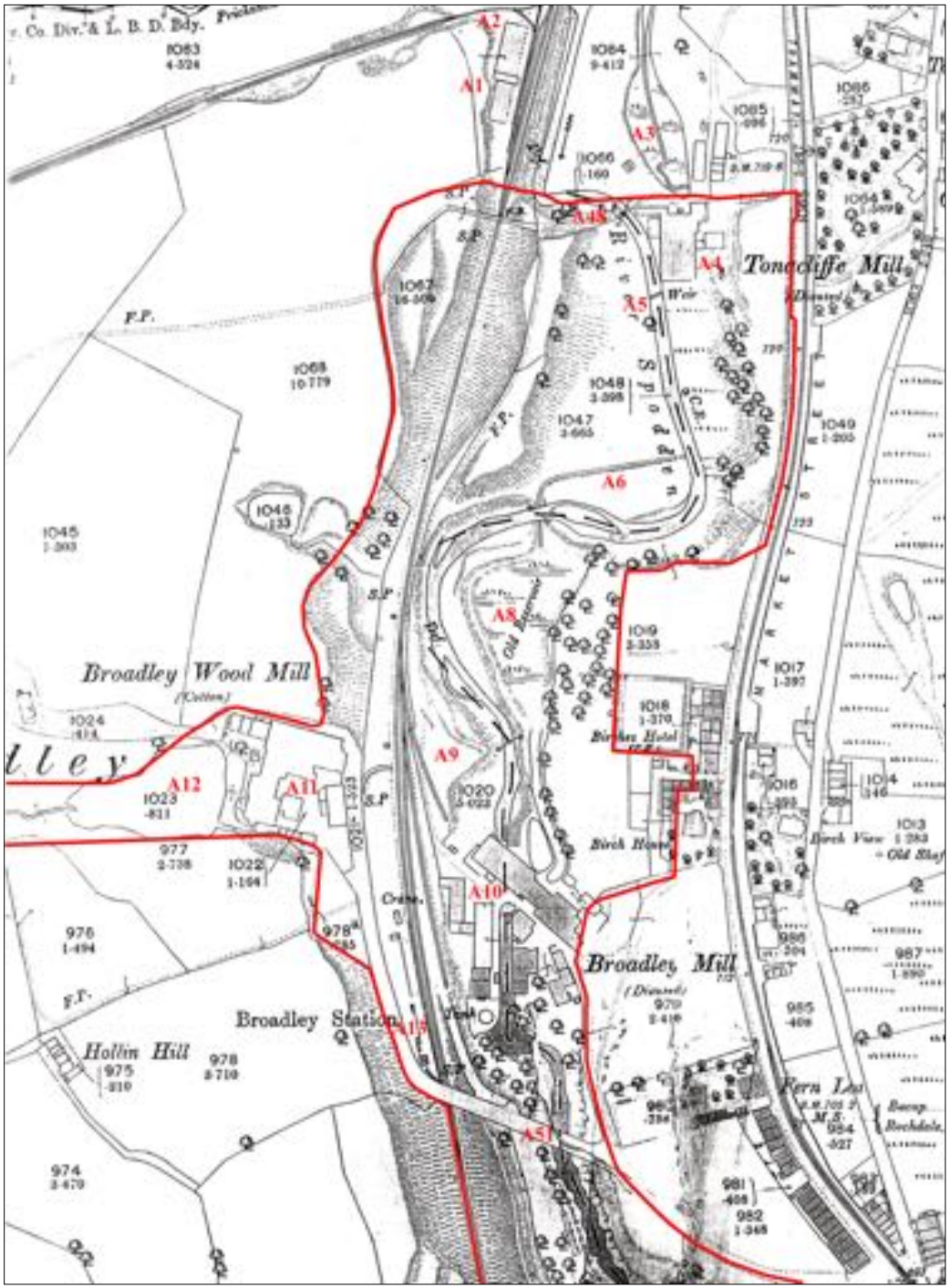
Key:

A1	Broadley Stone Rubbing Mill
A2	Bagden Quarry Tramroad
A3	Leat and Reservoir (Tonacliffe Mill)
A4	Tonacliffe Mill
A5	Weir (Broadley Mill)
A6	Leat (Broadley Mill)
A7	Weir
A8	Mill Reservoir (Broadley Mill)
A9	Tenterfield (Broadley Mill)
A10	Broadley Mill
A11	Broadley Wood Mill
A12	Mill Reservoir (Broadley Wood Mill)
A13	Broadley Station
A14	Shelter
A48	Footbridge (Tonacliffe Mill)
A49	Weir
A50	Bridge (Broadley Mill)
A51	Station Road Bridge
A58	Bloomery (approximate site)

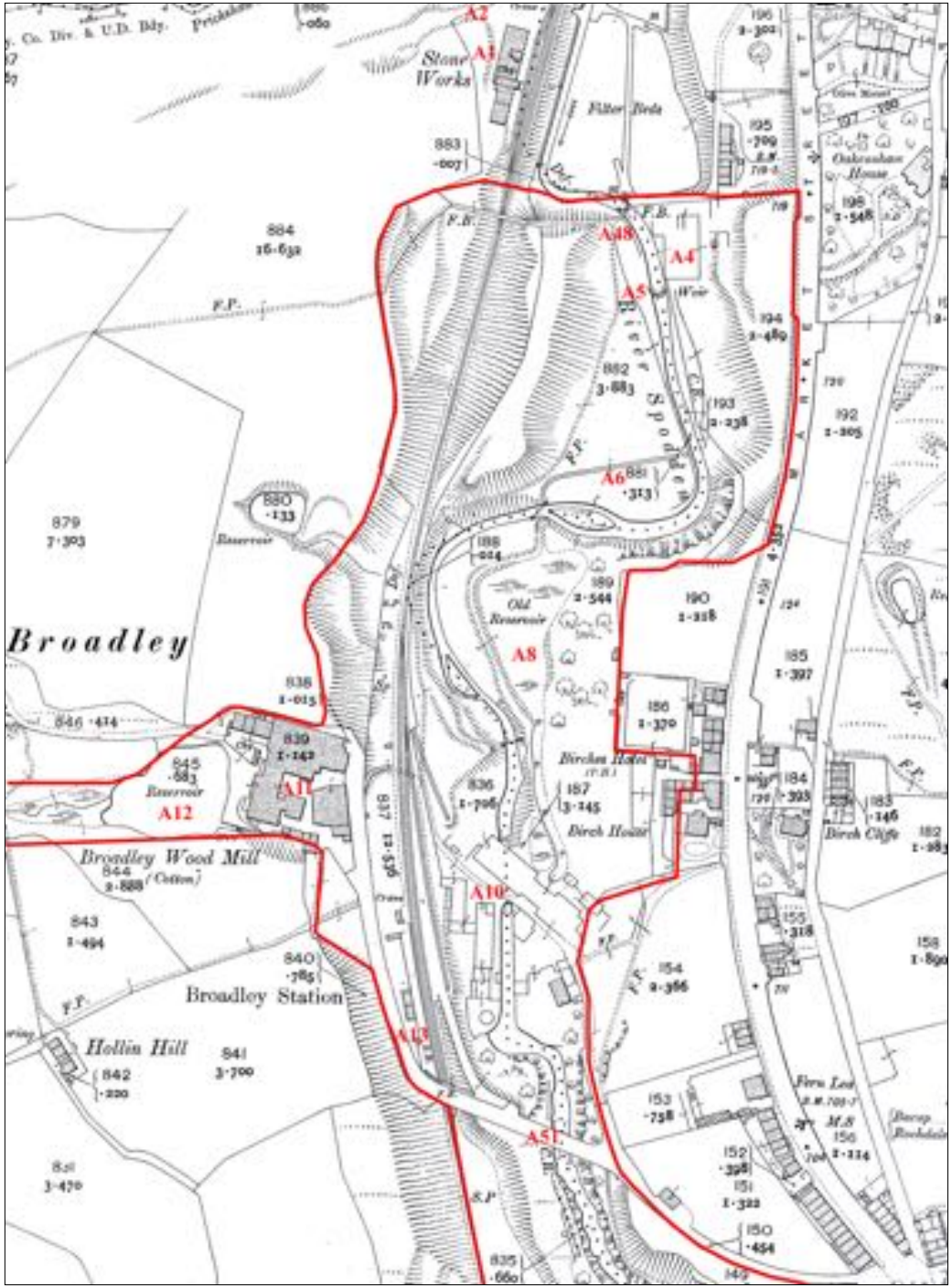


Ill. 6: Area of Tonacliffe Mill, Broadley Mill and Broadley Wood Mill on 1844-8 6in to 1 mile OS map. Reproduced at 1:2500.

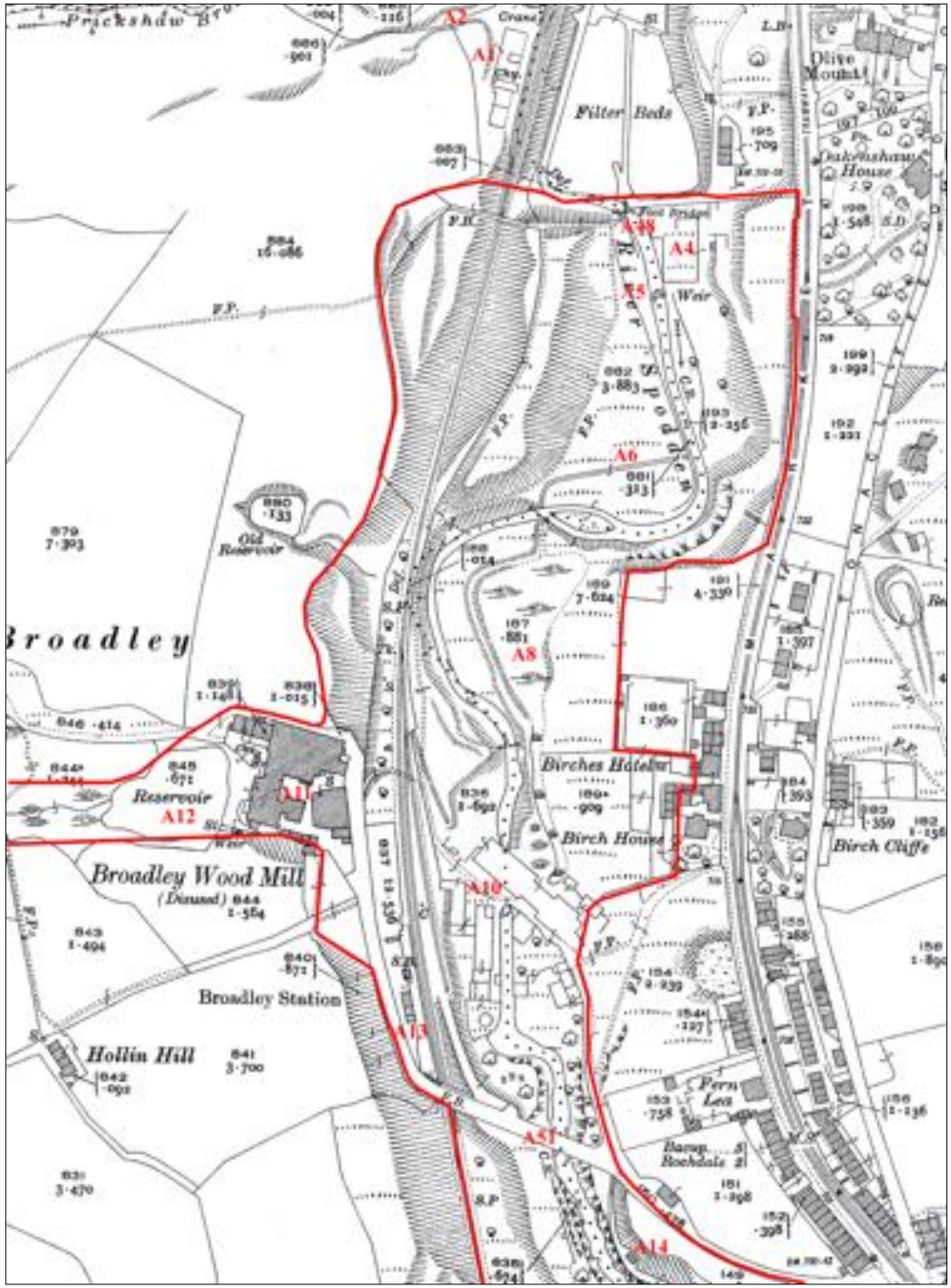
Ill. 7: Area of Tonacliffe Mill, Broadley Mill and Broadley Wood Mill on 1890 OS map. Scale 1:2500.



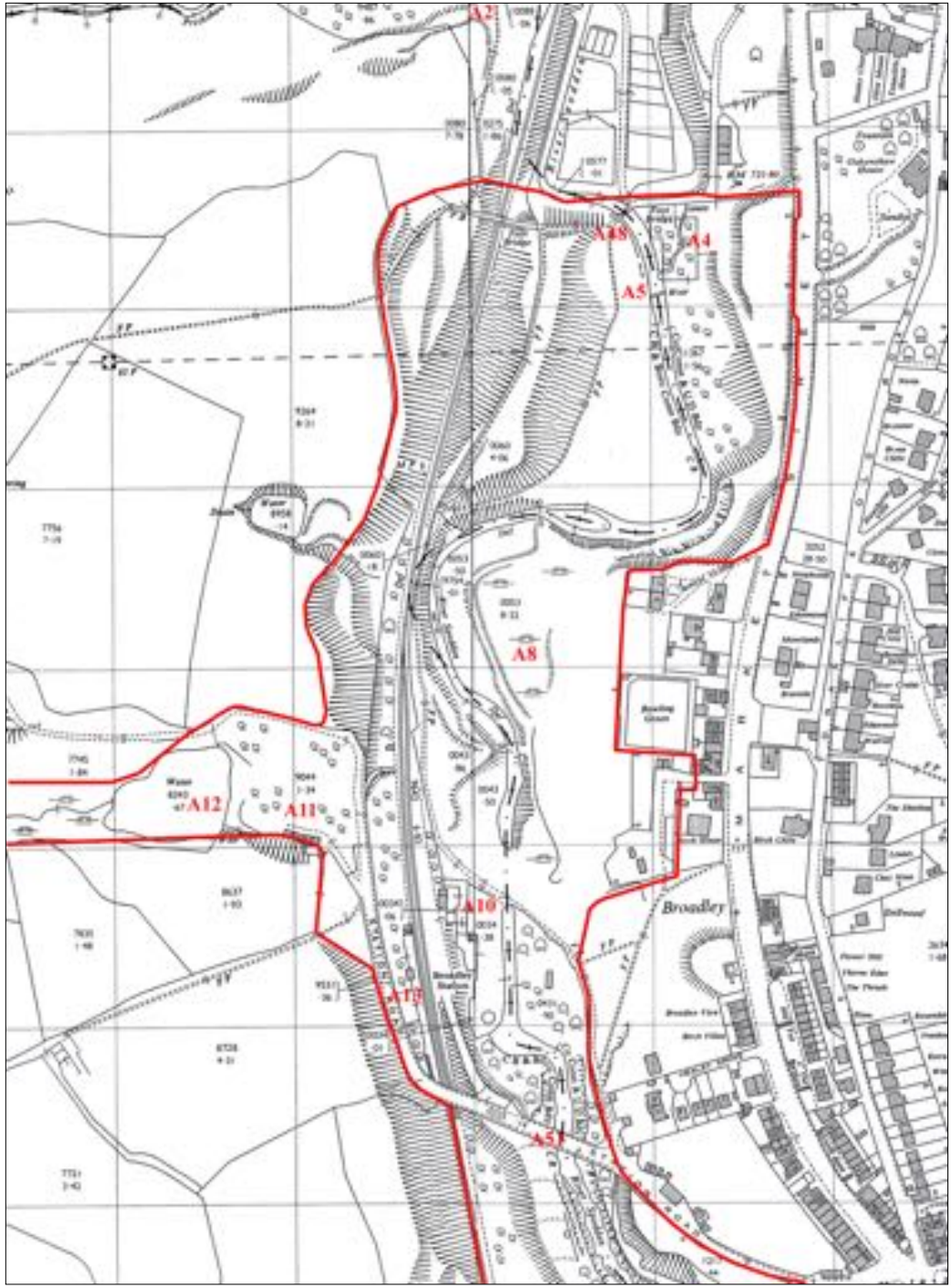
Ill. 8: Area of Tonacliffe Mill, Broadley Mill and Broadley Wood Mill on 1908 OS map. Scale 1:2500.



Ill. 9: Area of Tonacliffe Mill, Broadley Mill and Broadley Wood Mill on 1928 OS map. Scale 1:2500.



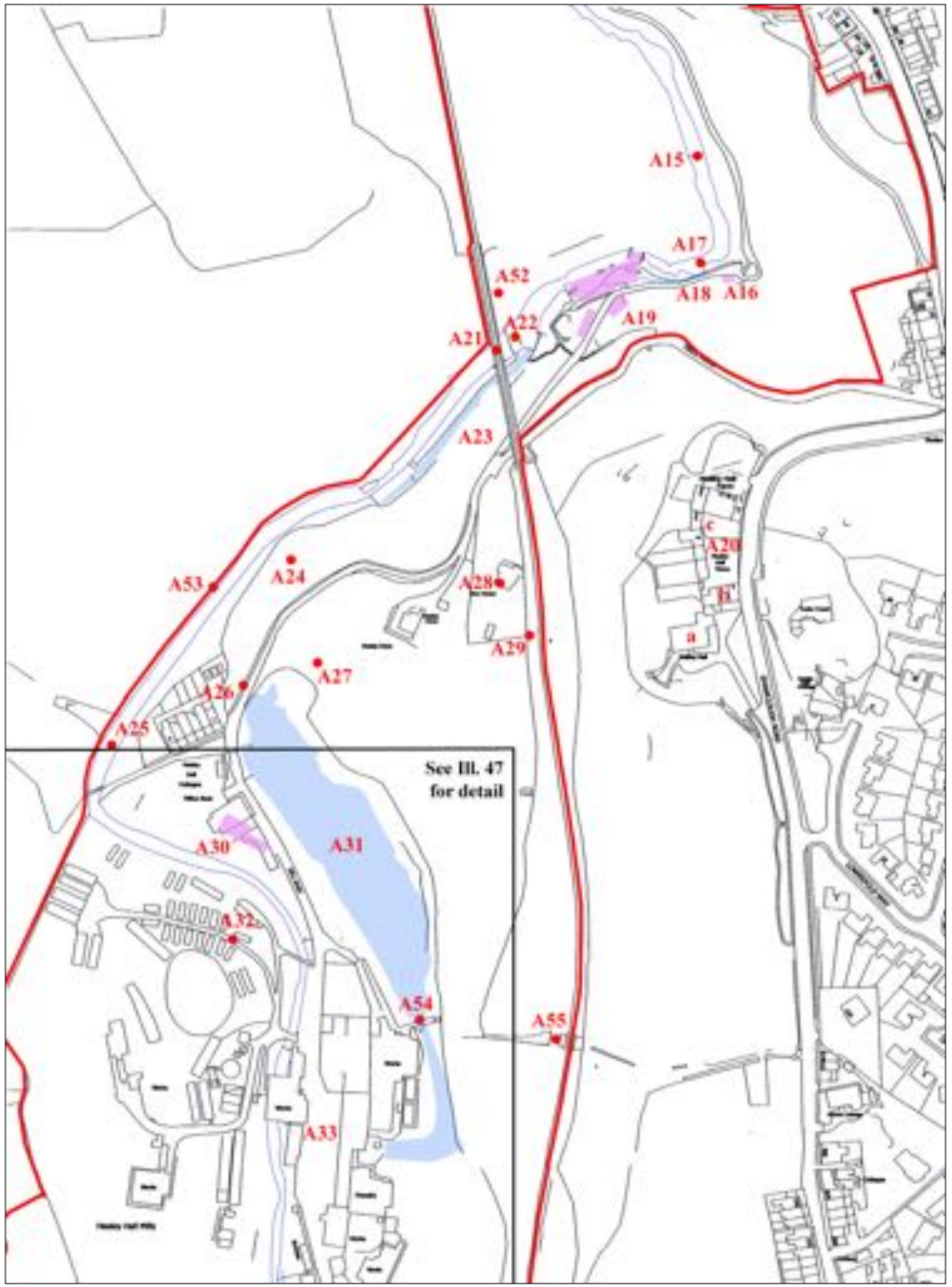
Ill. 10: Area of Tonacliffe Mill, Broadley Mill and Broadley Wood Mill on 1964 OS mapping. Scale 1:2500.
Crown Copyright Reserved.



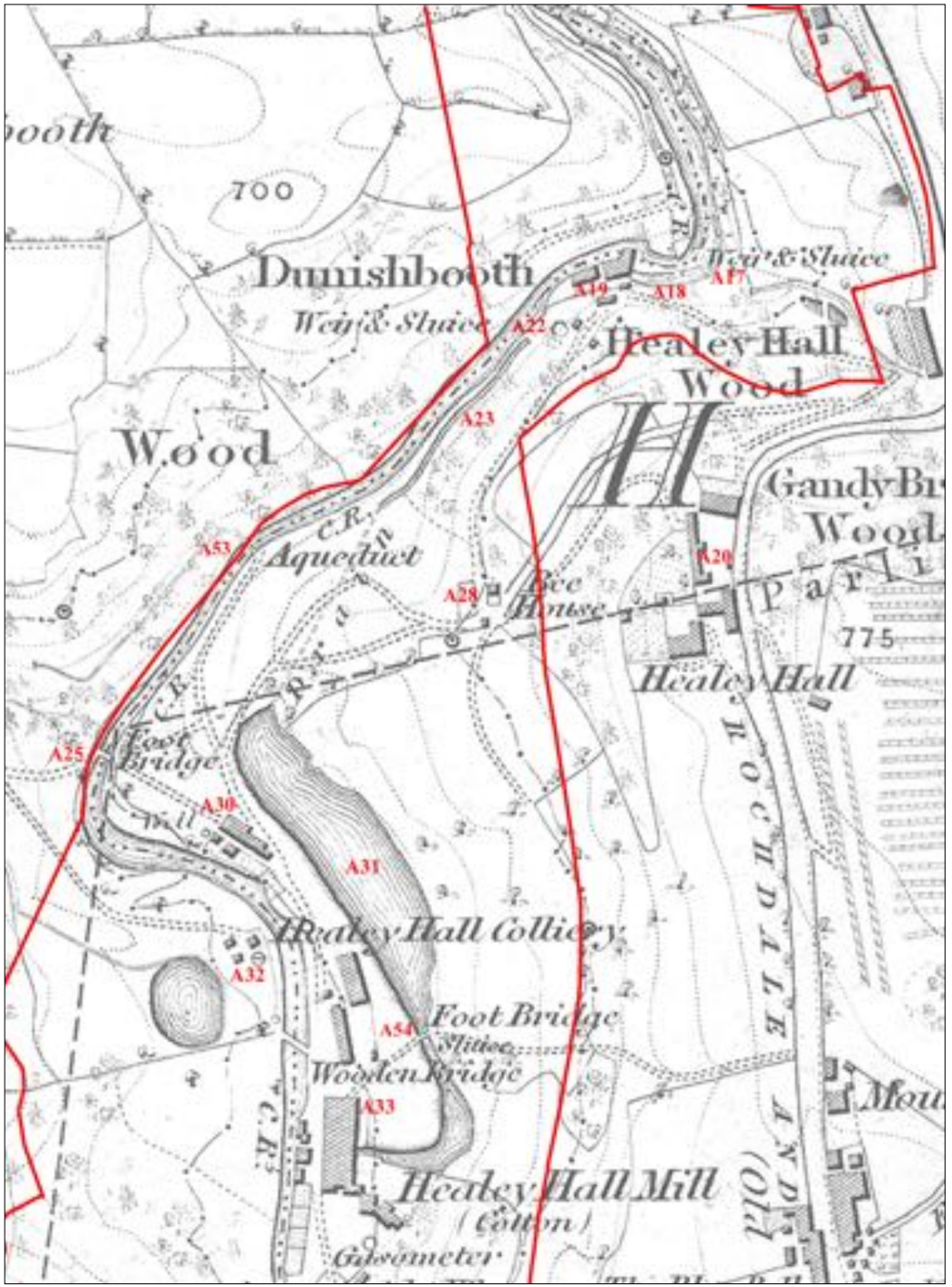
Ill. 11: Area of Th'Owd Mill I't Thrutch (Healey Dene Mill), Healey Bottoms Mill (Healey Hall Mill) and Healey Hall, showing site locations. Scale 1:2500.
Based on modern OS mapping. Crown Copyright Reserved.

Key:

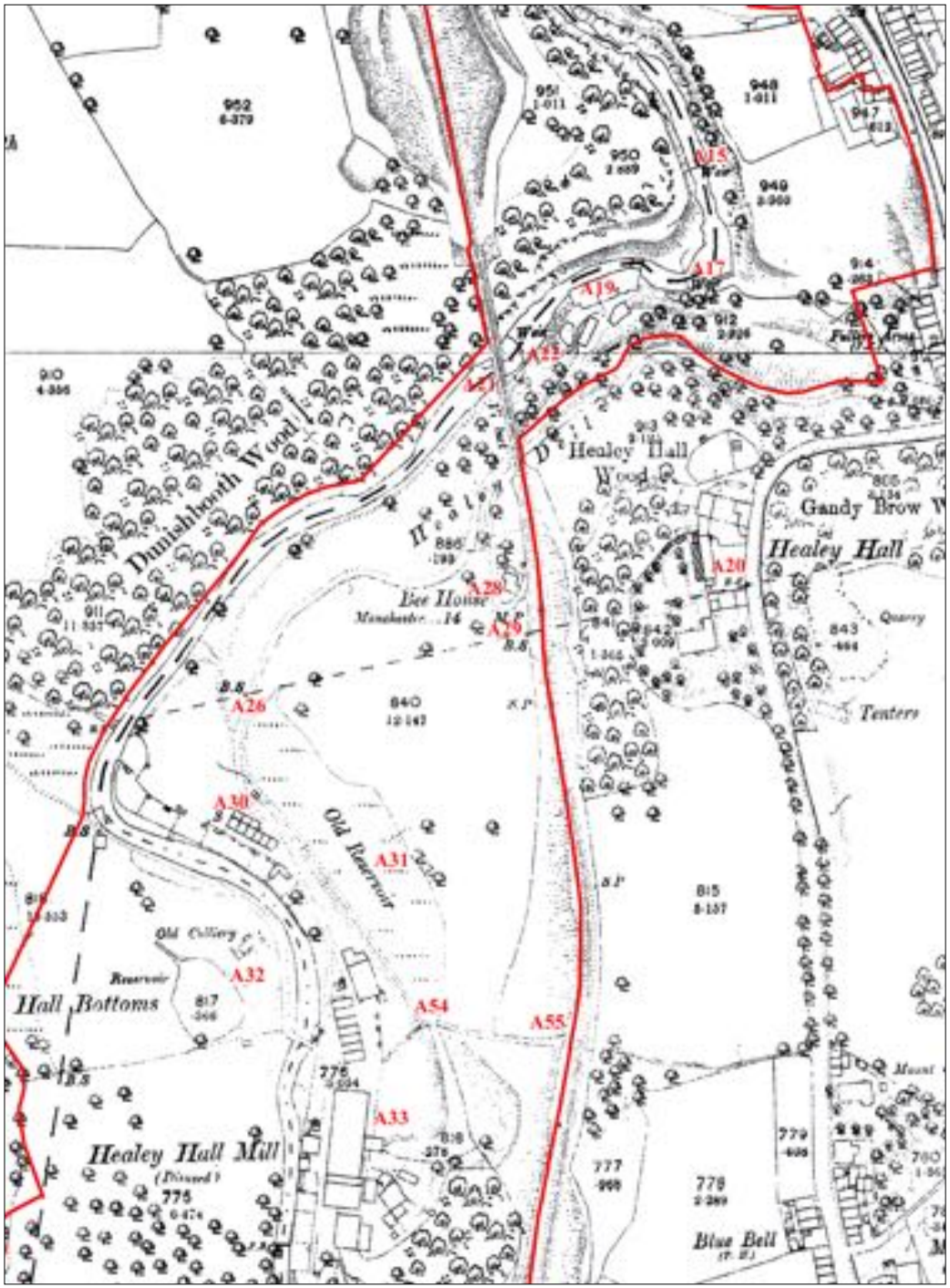
A15	Weir
A16	Shelter
A17	Weir (Th'Owd Mill I't Thrutch)
A18	Leat (Th'Owd Mill I't Thrutch)
A19	Th'Owd Mill I't Thrutch
A20	Healey Hall and Associated Buildings
A21	Healey Dell Viaduct
A22	Weir (Healey Bottoms Mill)
A23	Leat (Healey Bottoms Mill)
A24	Quarry
A25	Footbridge
A26	Boundary Stone
A27	Coal Shaft
A28	Bee House
A29	Boundary Stone
A30	Cottages (Healey Bottoms Mill)
A31	Mill Reservoir (Healey Bottoms Mill)
A32	Healey Hall Colliery
A33	Healey Bottoms Mill
A52	Munitions Sidings (Healey Bottoms Mill)
A53	Aqueduct Pier
A54	Footbridge (Healey Bottoms Mill)
A55	Twin Railway Bridges



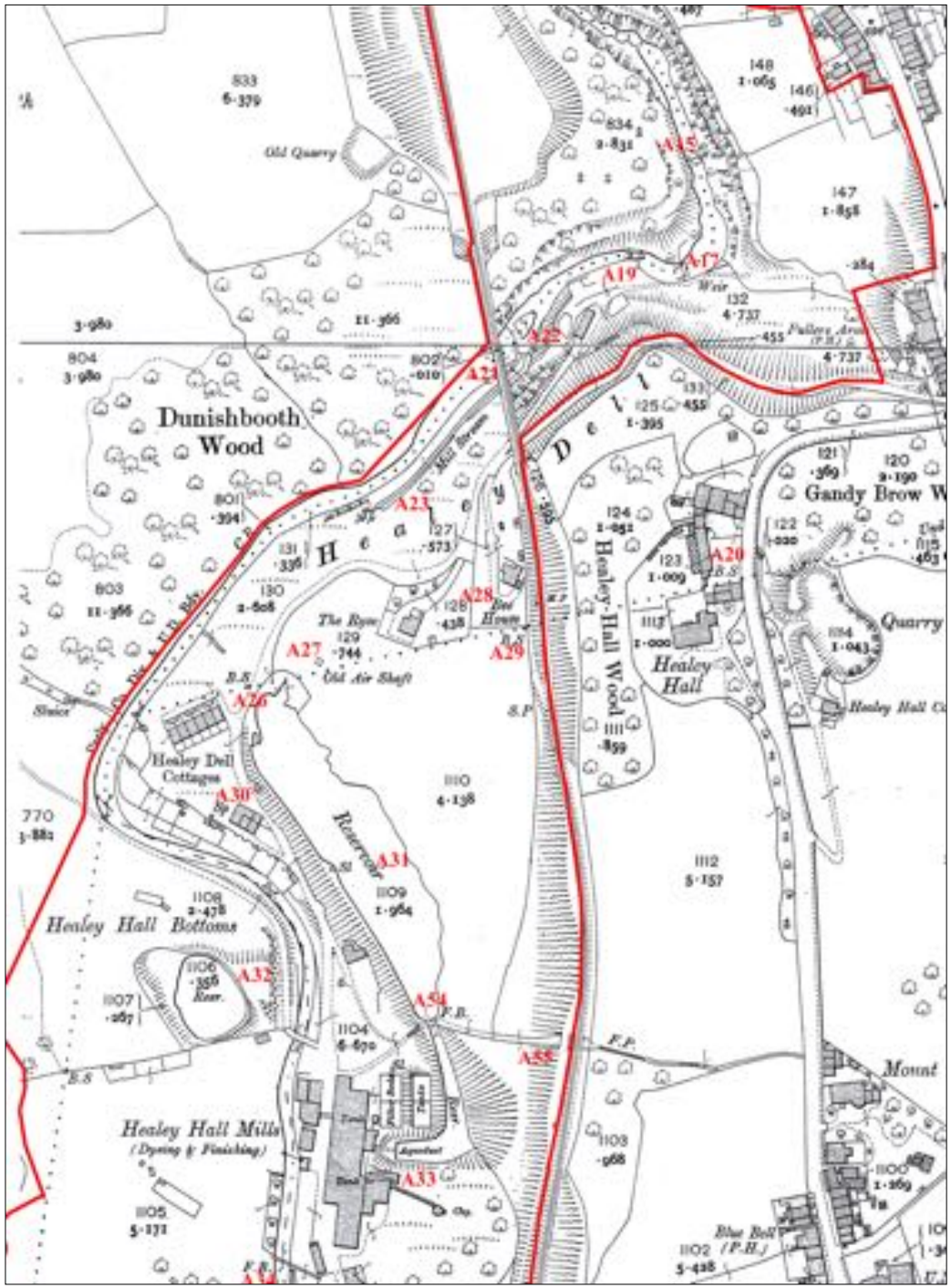
Ill. 12: Area of Th'Owd Mill I't Thrutch (Healey Dene Mill), Healey Bottoms Mill (Healey Hall Mill) and Healey Hall on 1844-8 6in to 1 mile OS map.
Reproduced at 1:2500.



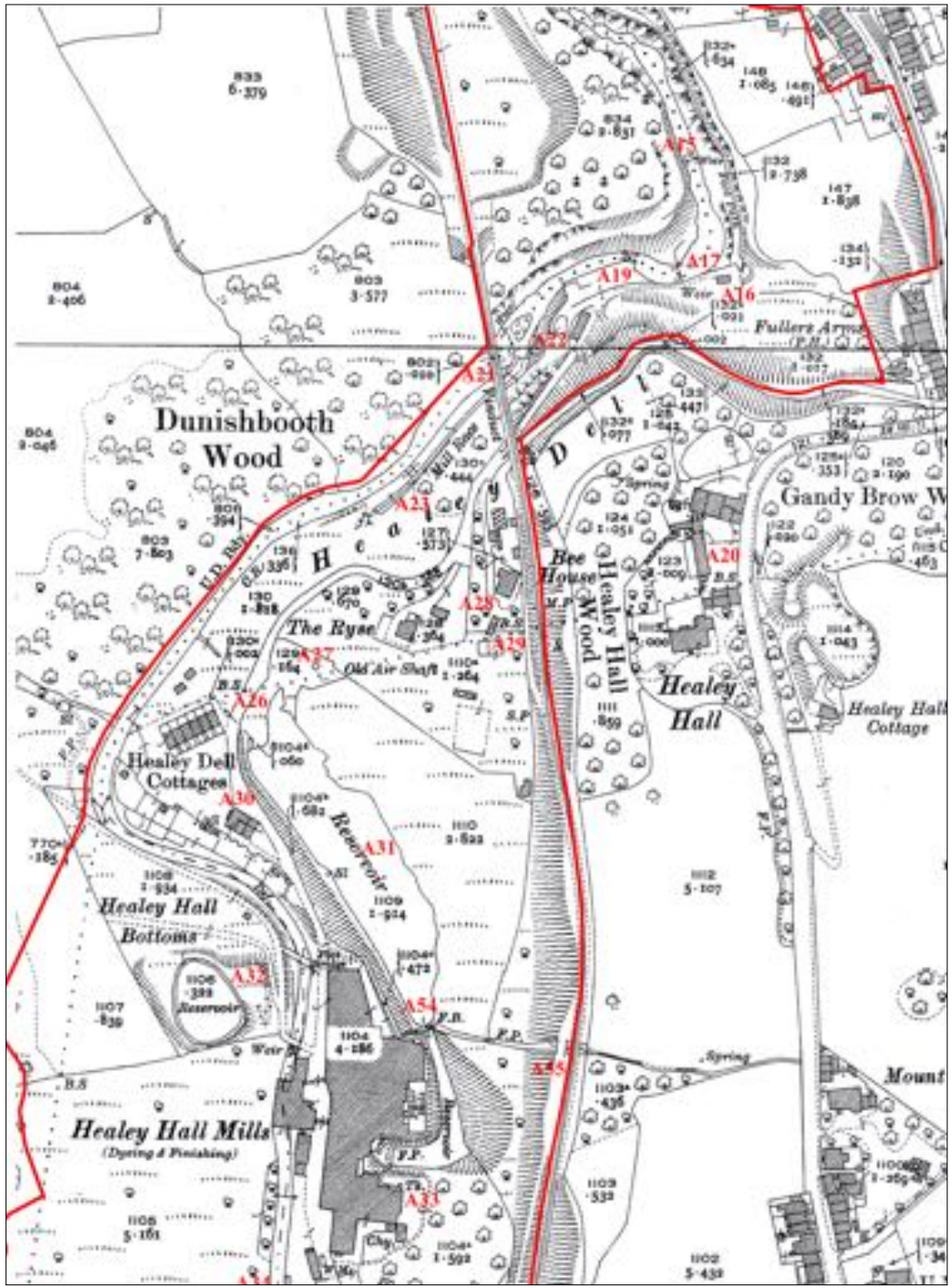
Ill. 13: Area of Th'Owd Mill I't Thrutch (Healey Dene Mill), Healey Bottoms Mill (Healey Hall Mill) and Healey Hall on 1890 OS map. Scale 1:2500.



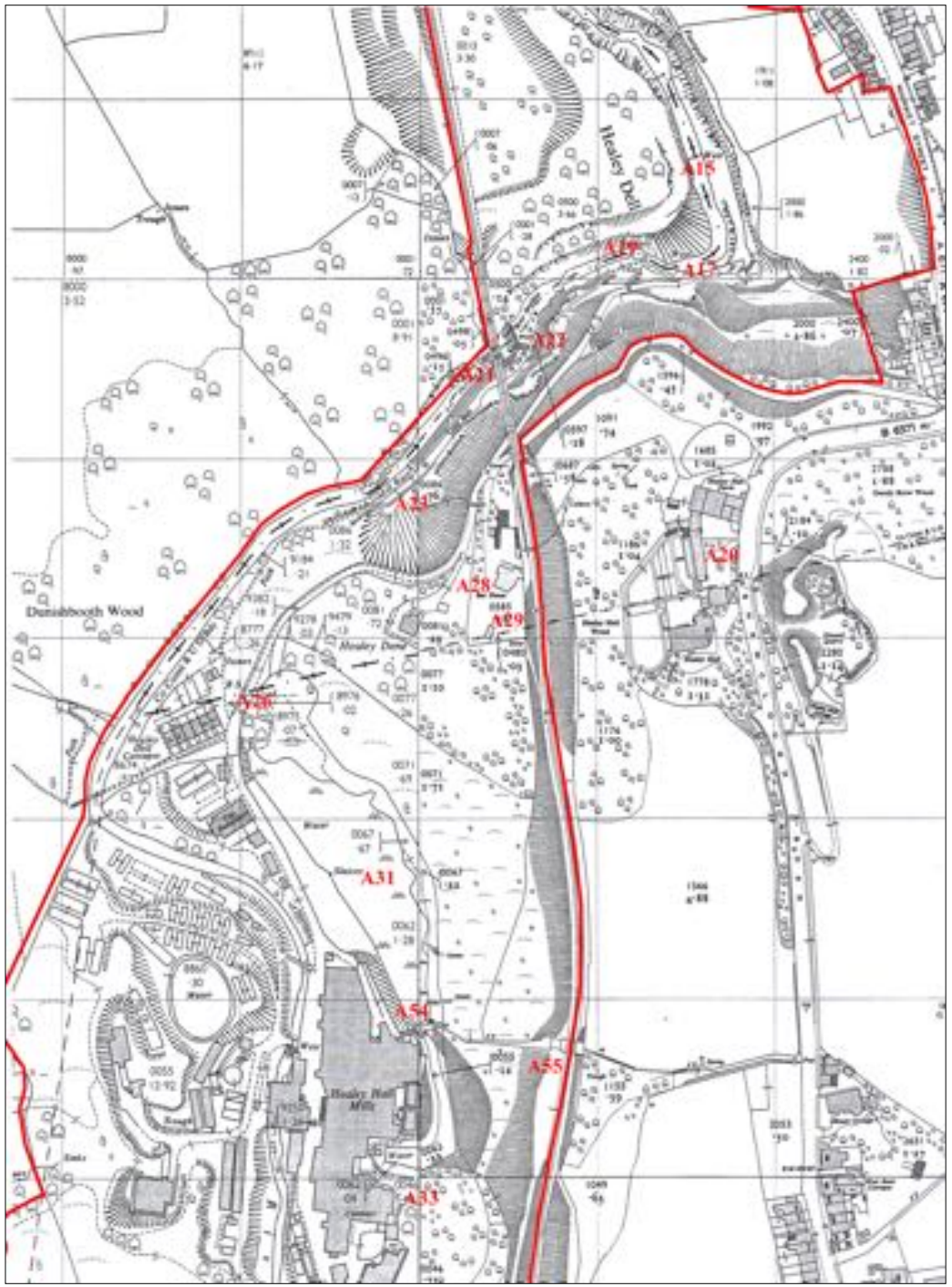
Ill. 14: Area of Th'Owd Mill I't Thrutch (Healey Dene Mill), Healey Bottoms Mill (Healey Hall Mill) and Healey Hall on 1908 OS map. Scale 1:2500.



Ill. 15: Area of Th'Owd Mill I't Thrutch (Healey Dene Mill), Healey Bottoms Mill (Healey Hall Mill) and Healey Hall on 1928 OS map. Scale 1:2500.



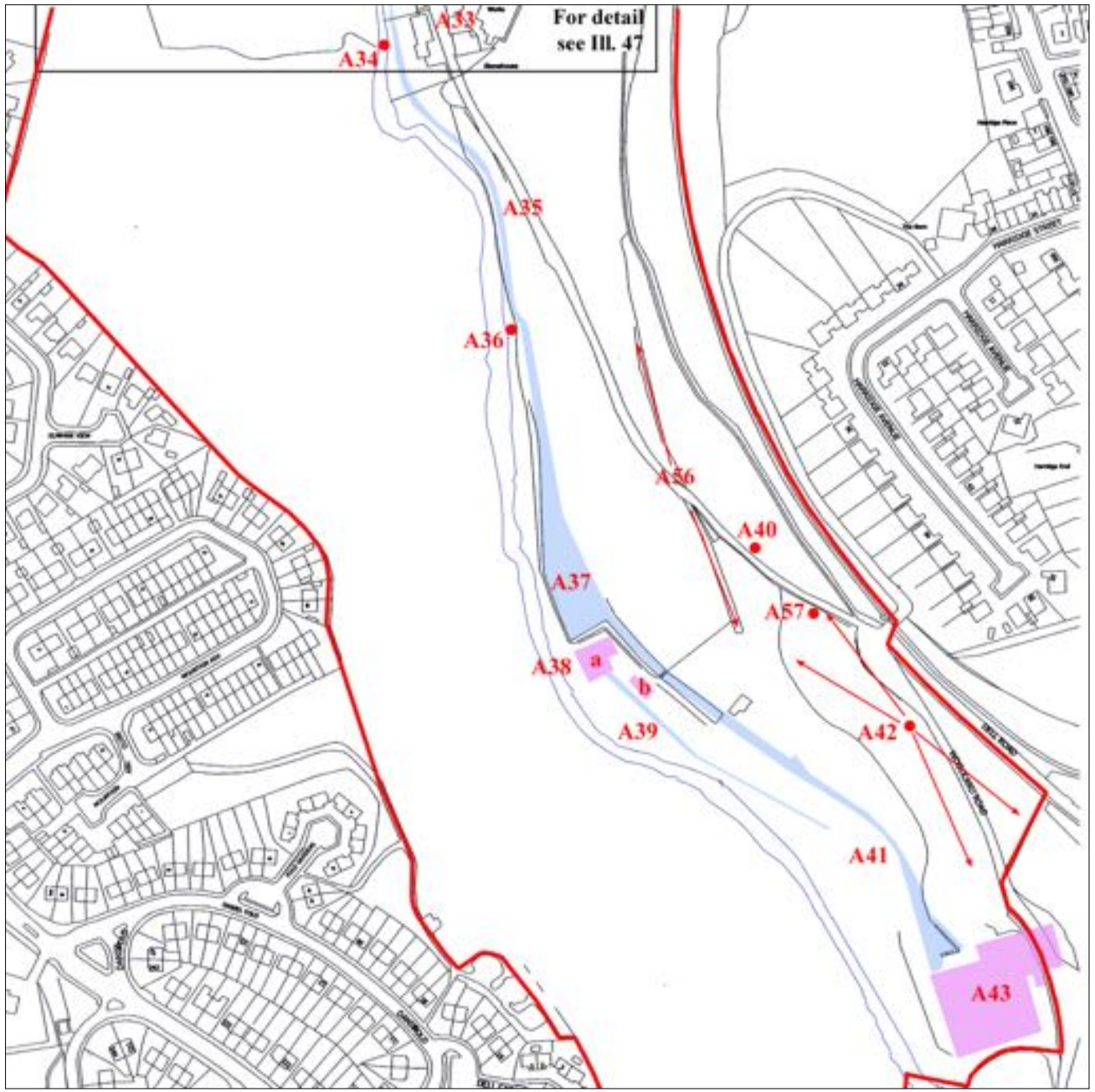
Ill. 16: Area of Th'Owd Mill I't Thrutch (Healey Dene Mill), Healey Bottoms Mill (Healey Hall Mill) and Healey Hall on 1960,1964 and 1969 OS mapping. Scale 1:2500.
Crown Copyright Reserved.



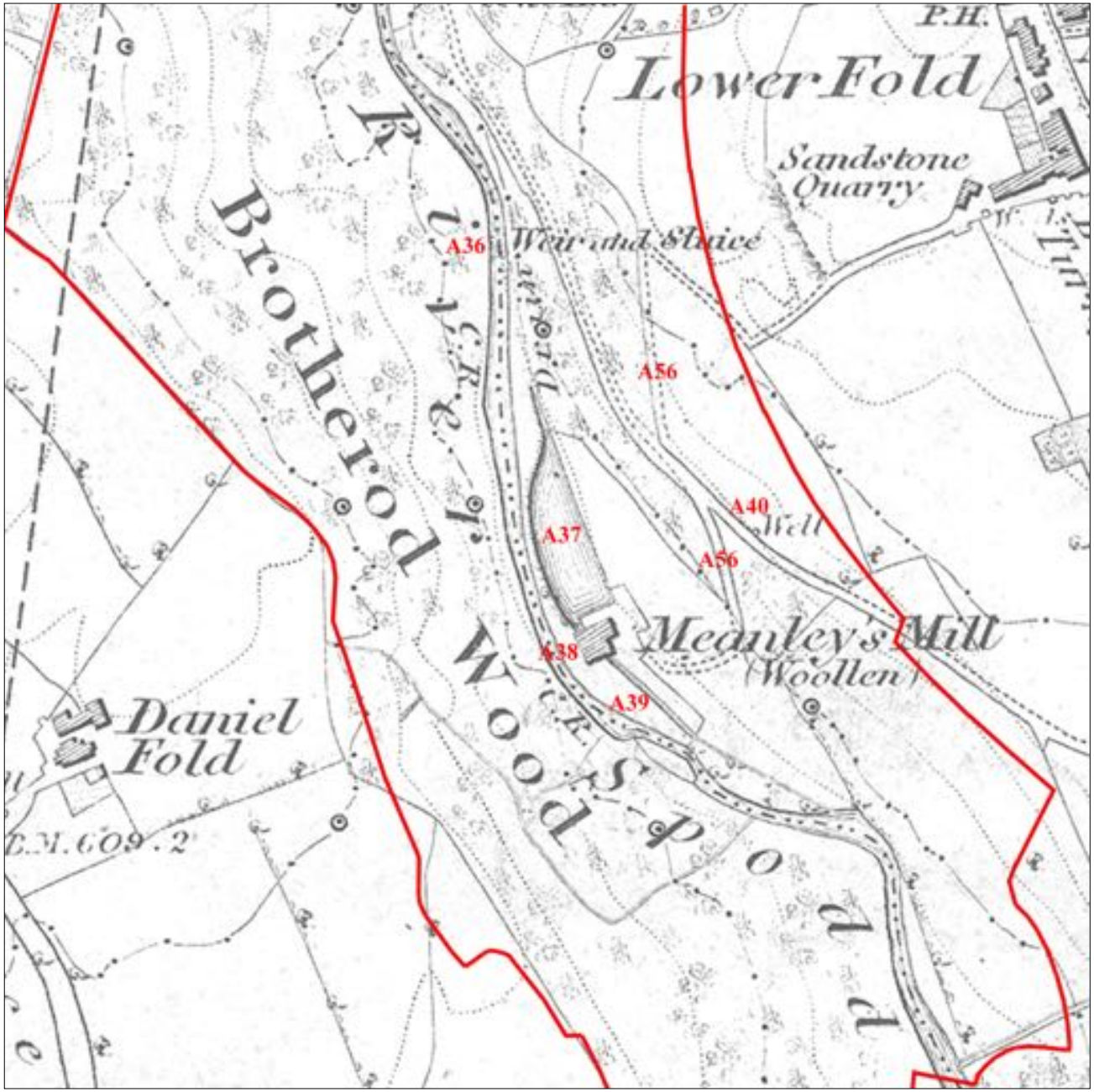
Ill. 17: Area of Meanley's Mill and Harridge Mill, showing site locations.
Scale 1:2500.
Based on modern OS mapping. Crown Copyright Reserved.

Key:

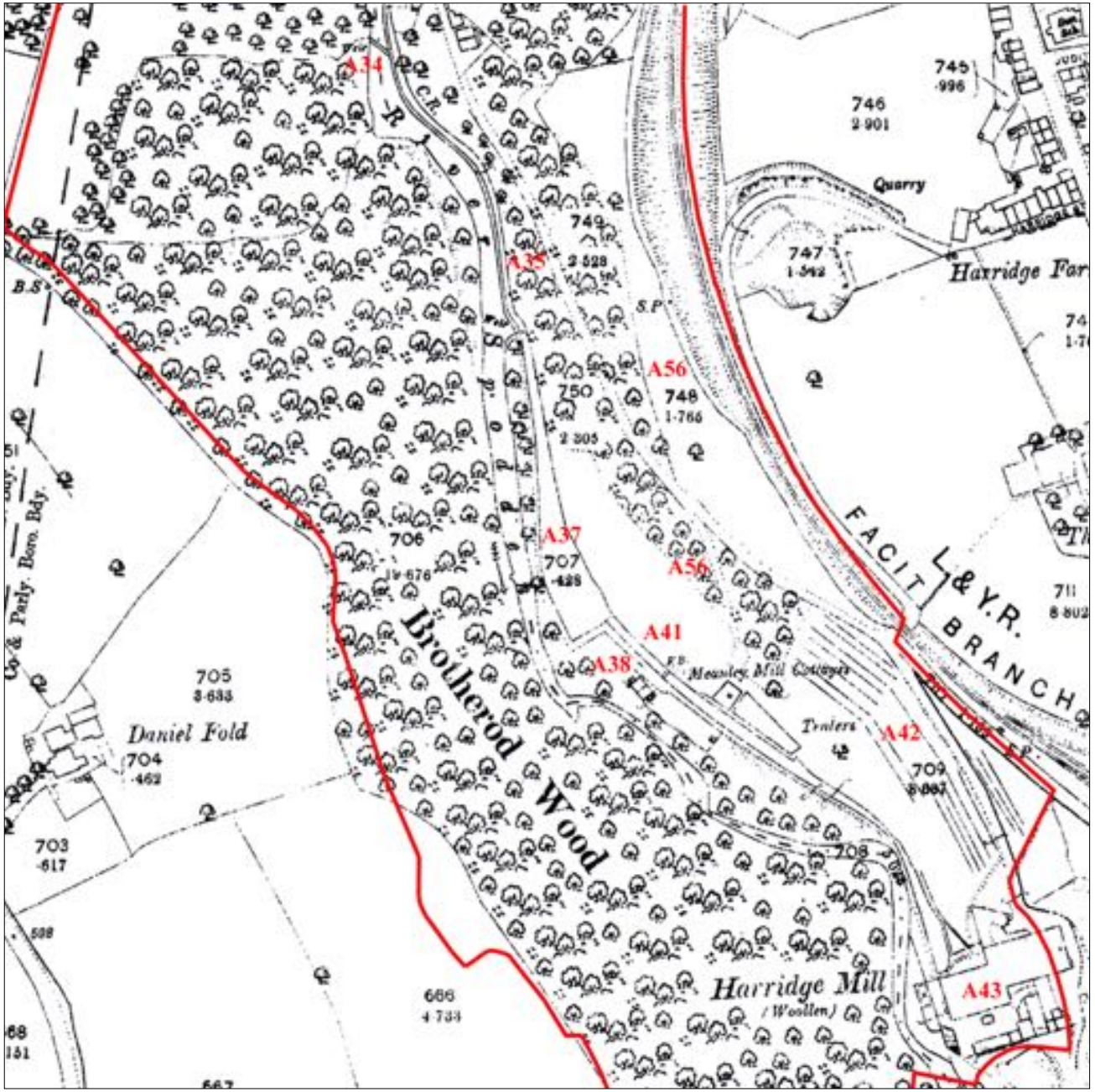
A34	Weir (Harridge Mill)
A35	Leat (Harridge Mill)
A36	Weir (Meanley's Mill / Harridge Mill)
A37	Mill Reservoir (Meanley's Mill)
A38	Meanley's Mill
A39	Leat (Meanley's Mill)
A40	Well
A41	Leat (Harridge Mill)
A42	Tenterfield (Harridge Mill)
A43	Harridge Mill
A56	Routeway to Meanley's Mill
A57	Stone Blocks



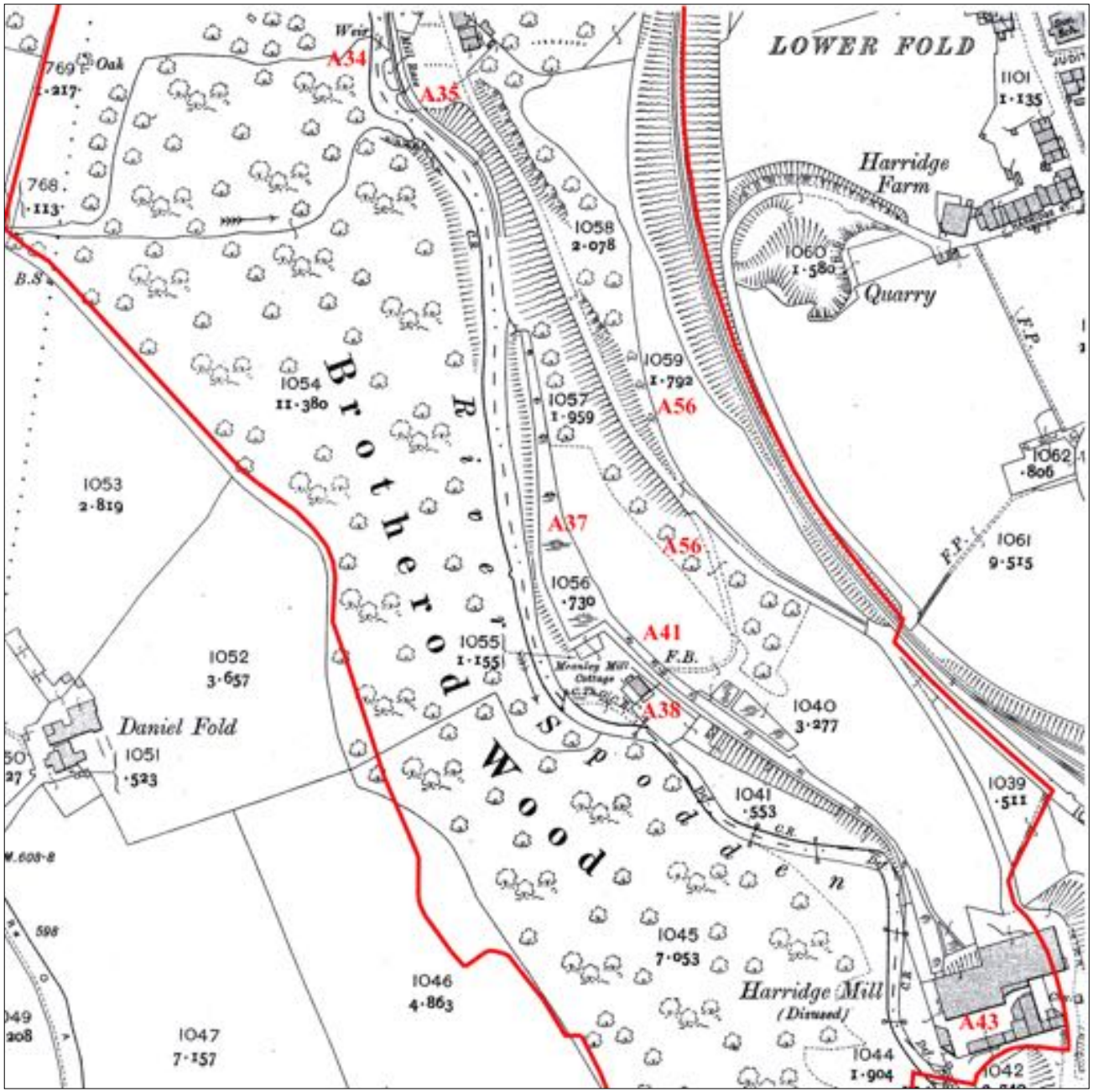
Ill. 18: Area of Meanley's Mill and Harridge Mill on 1844-8 6in to 1 mile OS map. Reproduced at 1:2500.



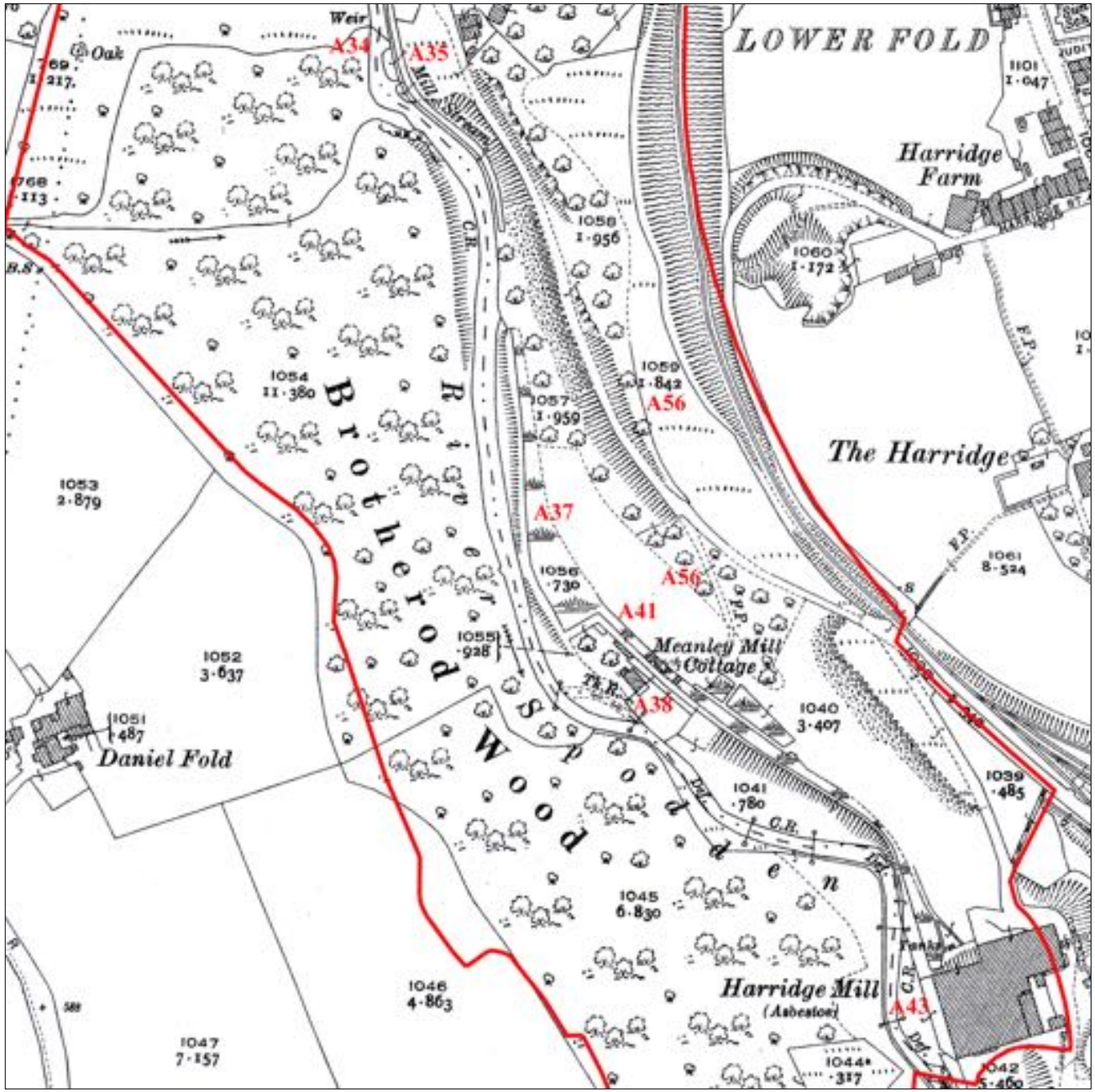
Ill. 19: Area of Meanley's Mill and Harridge Mill on 1890 OS map. Scale 1:2500.



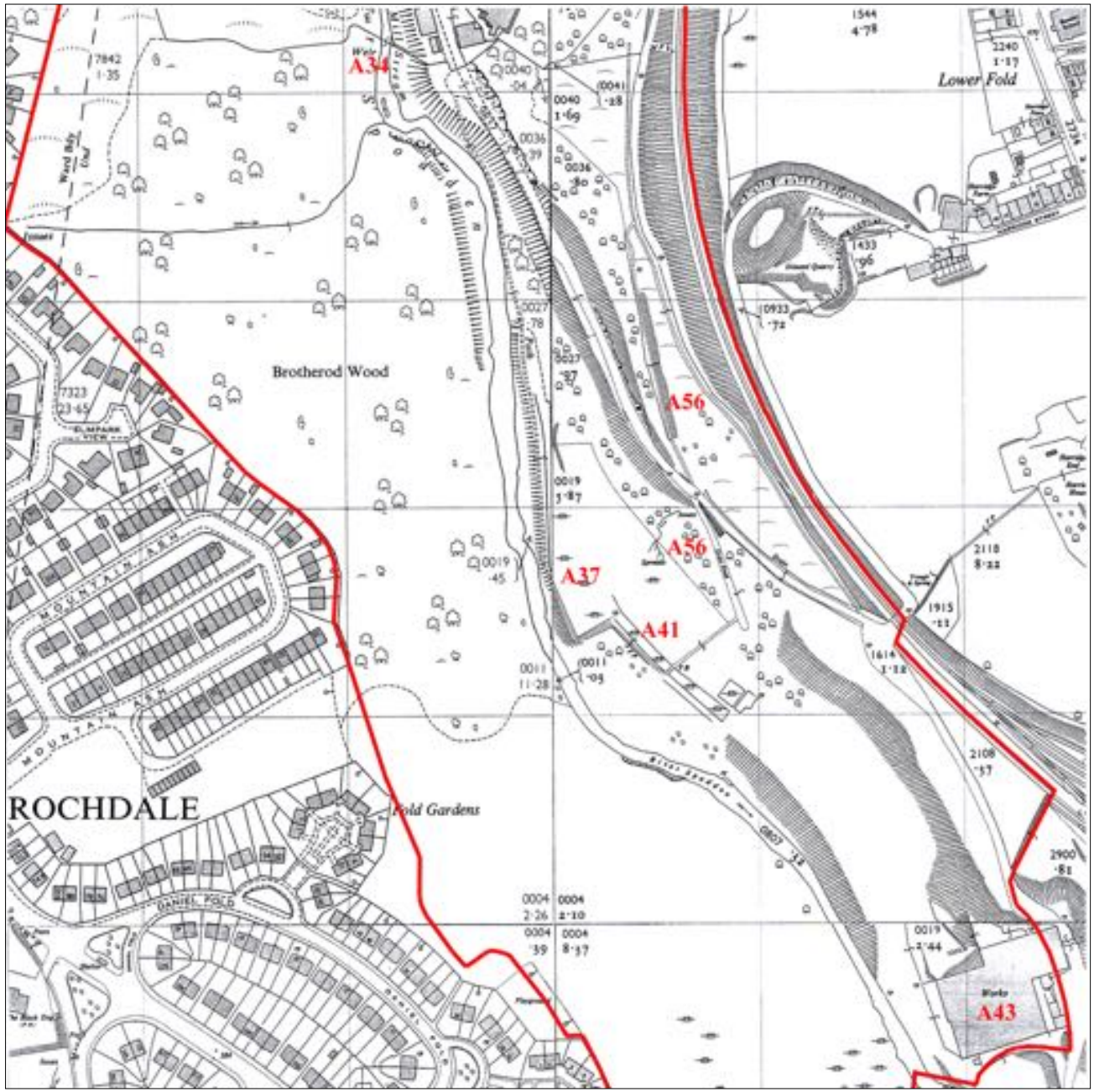
Ill. 20: Area of Meanley's Mill and Harridge Mill on 1908 OS map. Scale 1:2500.

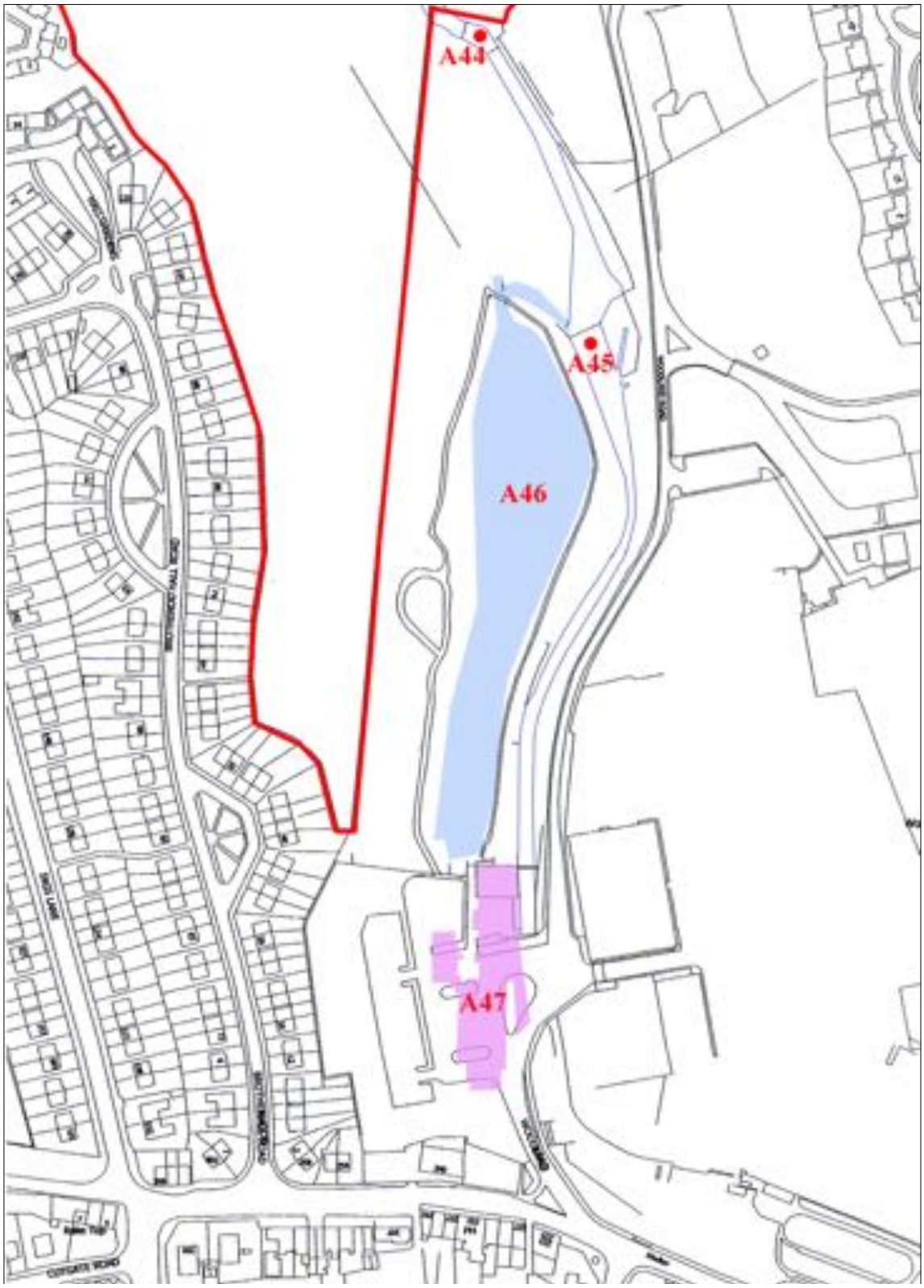


Ill. 21: Area of Meanley's Mill and Harridge Mill on 1928 OS map. Scale 1:2500.



Ill. 22: Area of Meanley's Mill and Harridge Mill on 1960 and 1969 OS mapping. Scale 1:2500.
Crown Copyright Reserved.

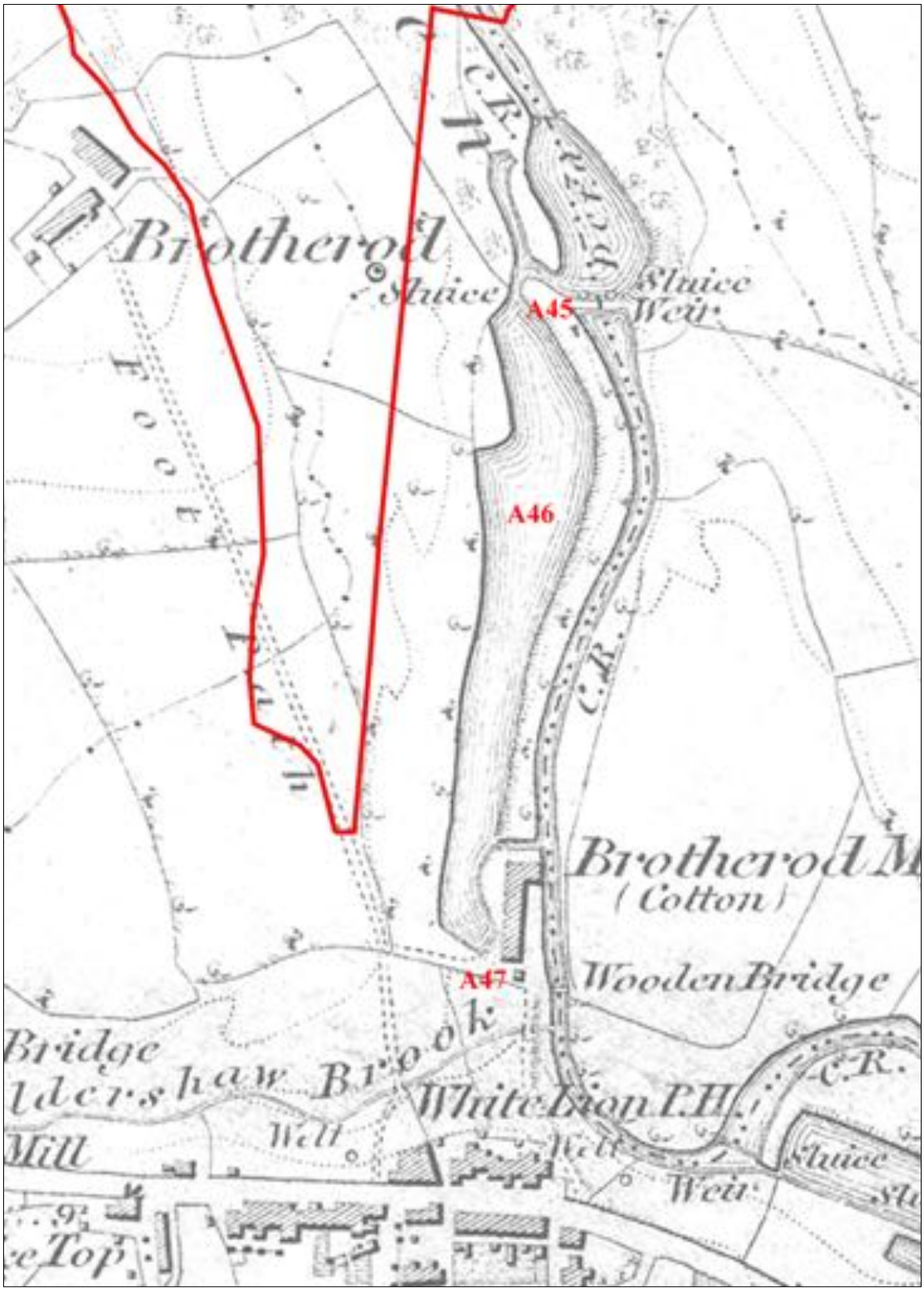




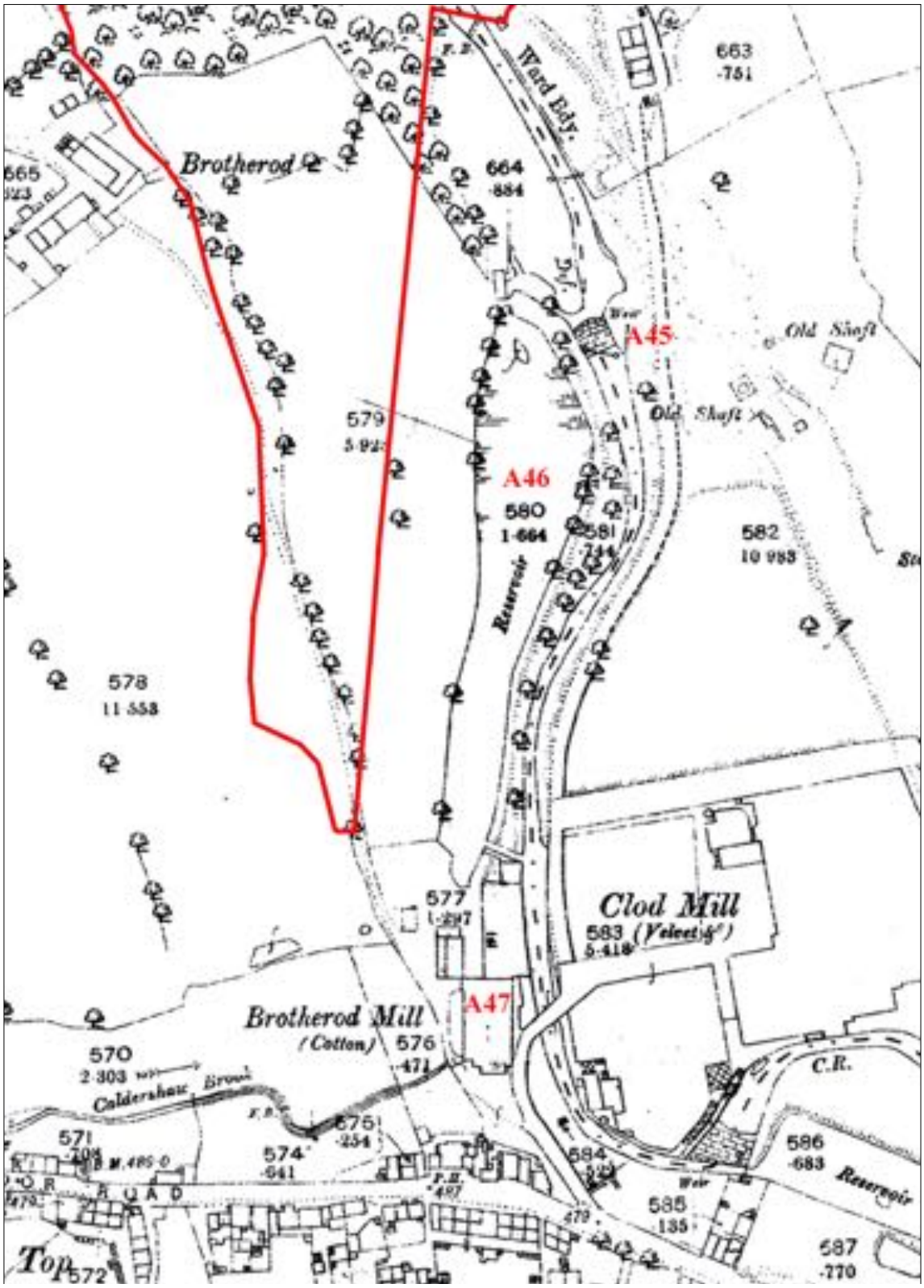
Ill. 23: Area of Brotherod Mill, showing site locations. Scale 1:2500.
Based on modern OS mapping. Crown Copyright Reserved.

Key:

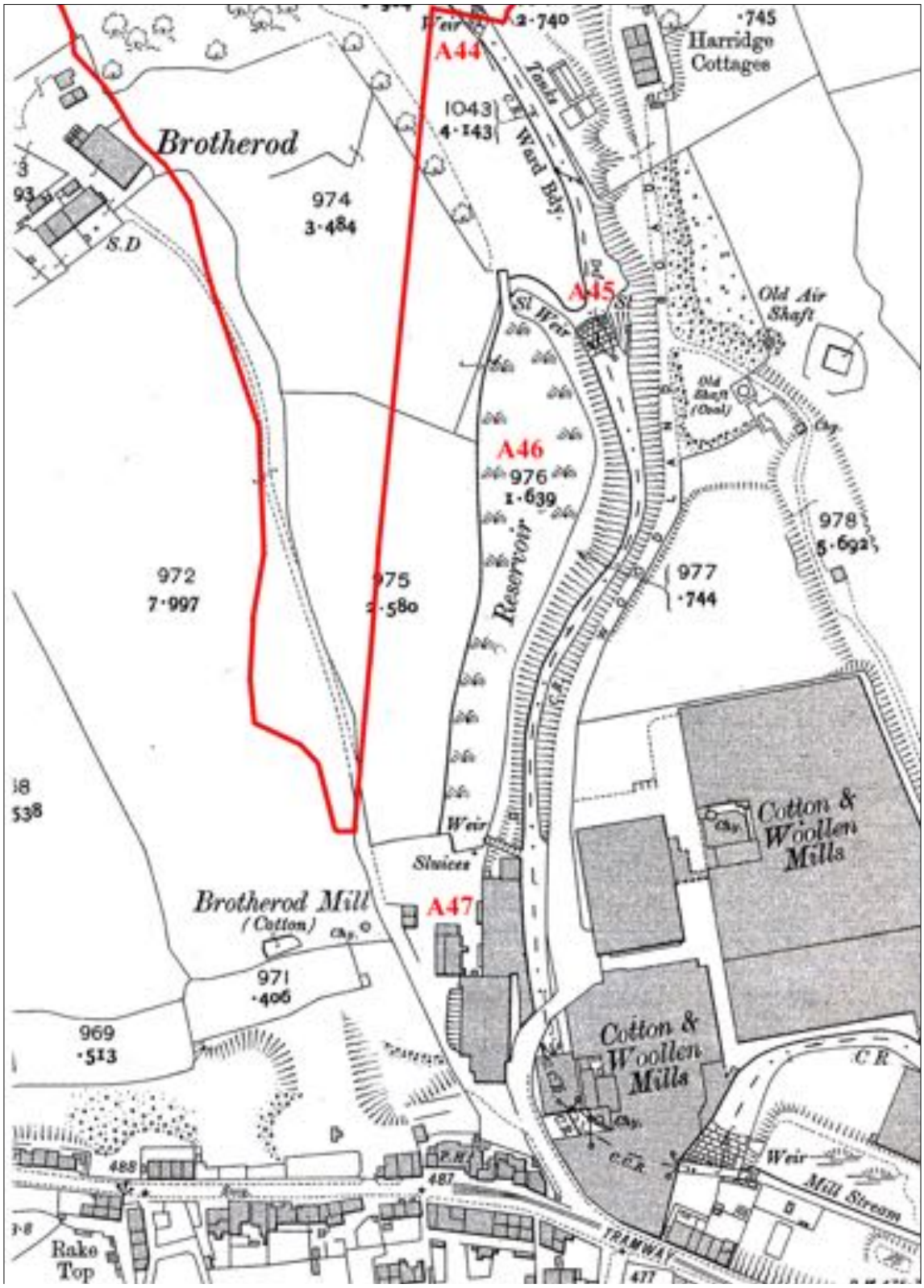
A44	Weir
A45	Weir (Brotherod Mill)
A46	Mill Reservoir (Brotherod Mill)
A47	Brotherod Mill



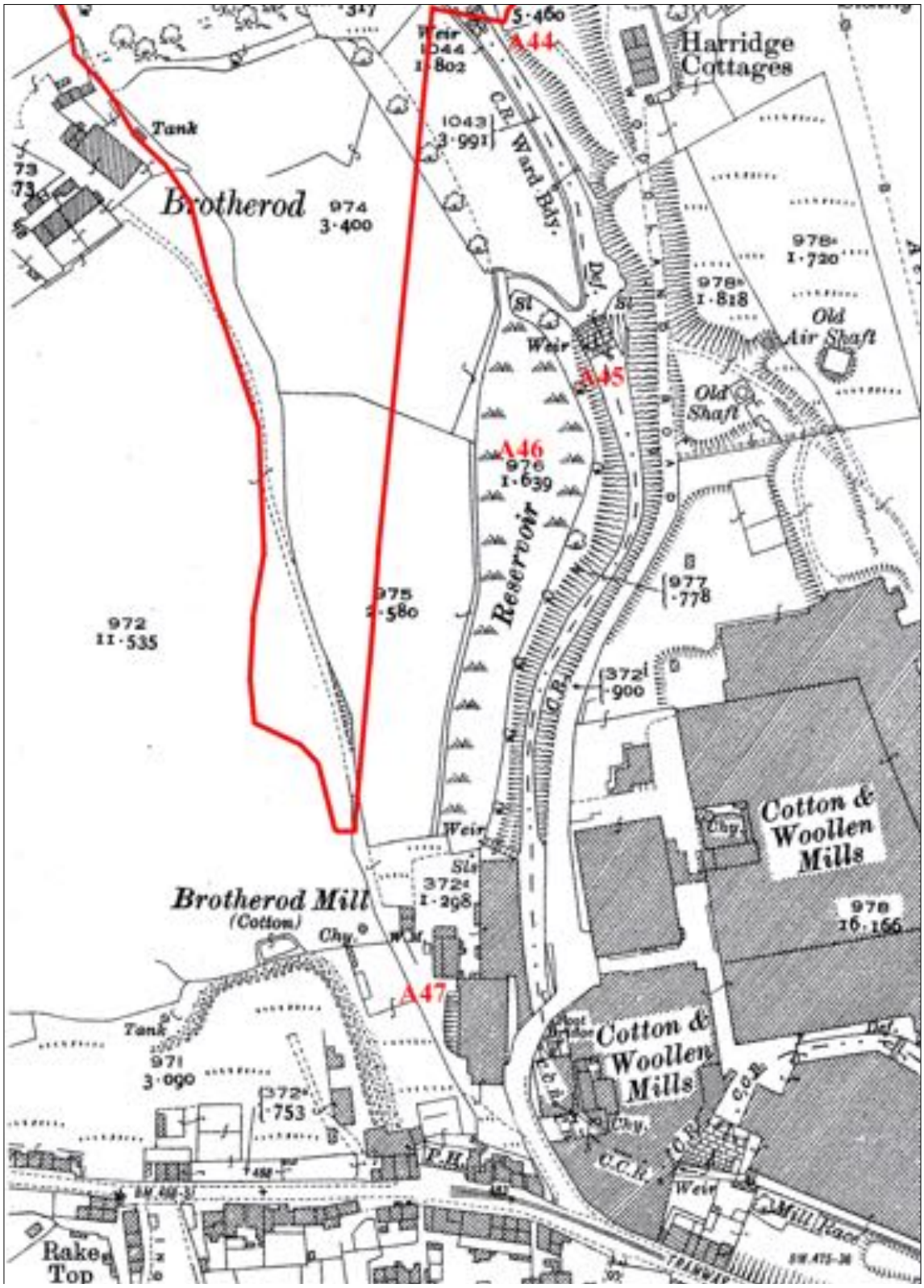
Ill. 24: Area of Brotherod Mill on 1844-8 6in to 1 mile OS map. Reproduced at 1:2500.



Ill. 25: Area of Brotherod Mill on 1890 OS mapping. Scale 1:2500.

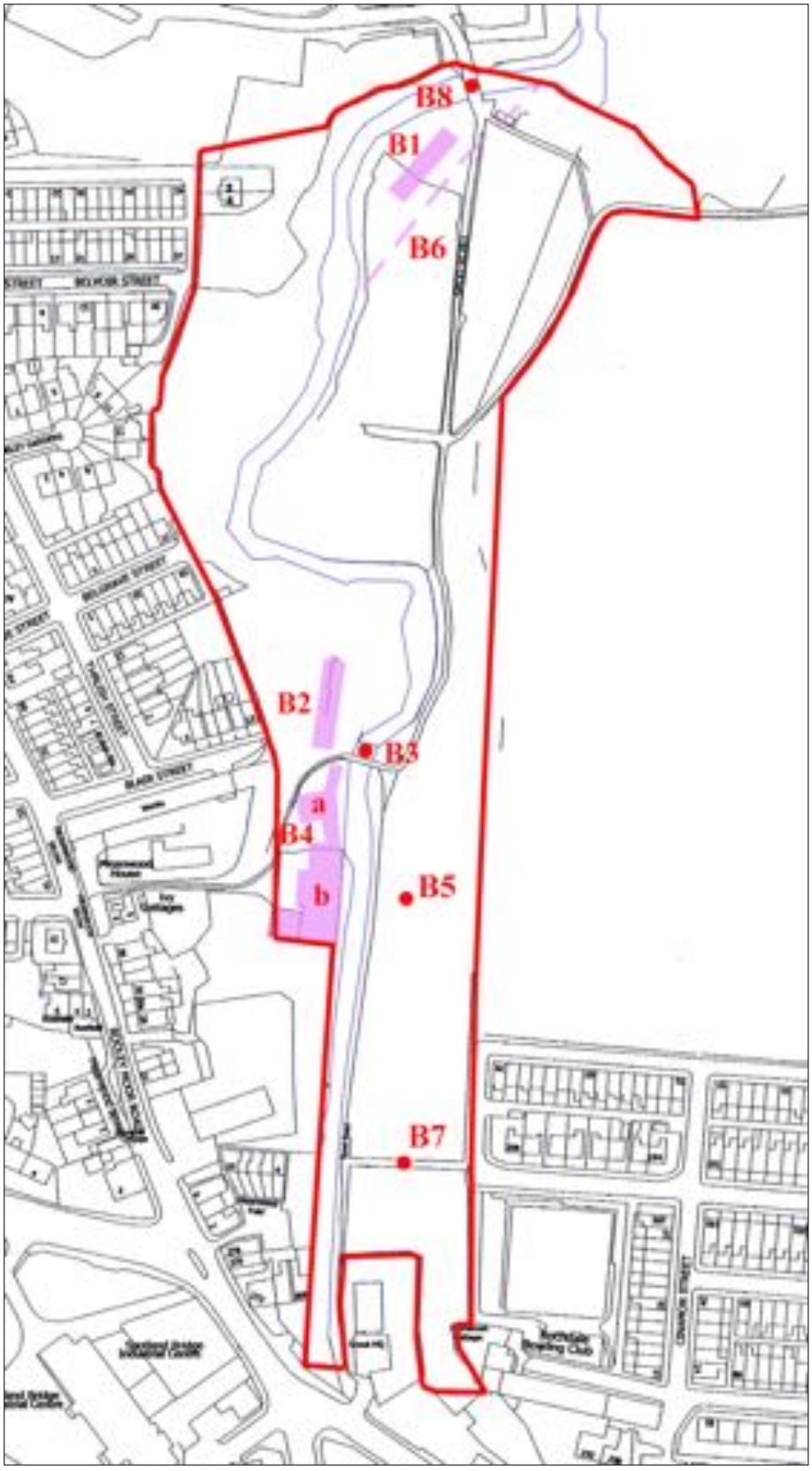


Ill. 26: Area of Brotherod Mill on 1908 OS mapping. Scale 1:2500.



Ill. 27: Area of Brotherod Mill on 1928 OS mapping. Scale 1:2500.

Ill. 28: Area of Brotherod Mill on 1960 OS mapping. Scale 1:2500.
Crown Copyright Reserved.



Ill. 29: Area of Meanwood Mill, showing site locations. Scale 1:2500.
Based on modern OS mapping. Crown Copyright Reserved.

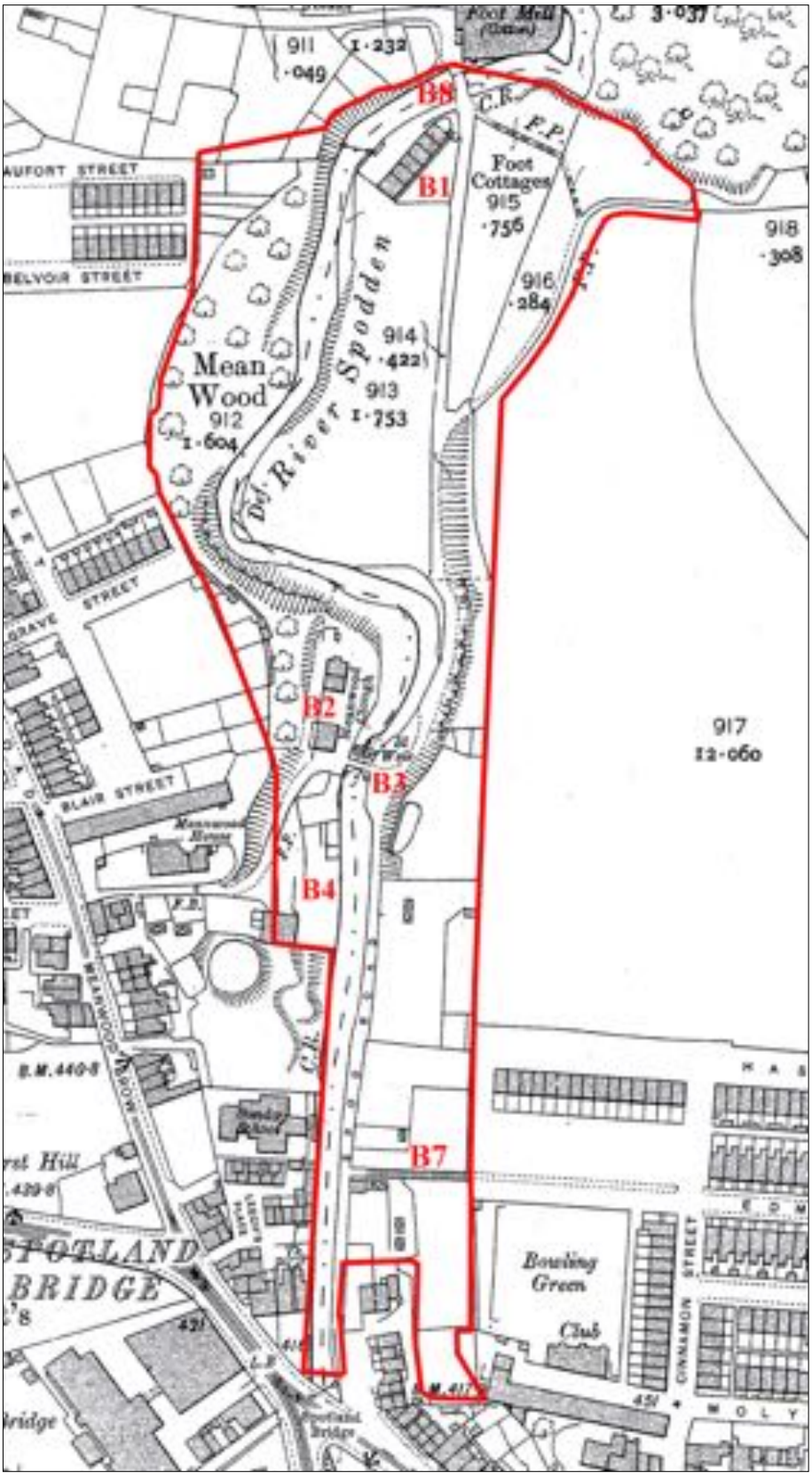
Key:

B1	Cottages	B5	Well
B2	Stables?/Cottages	B6	Tunnel
B3	Weir (Meanwood Mill)	B7	Stairs
B4	Meanwood Mill	B8	Bridge

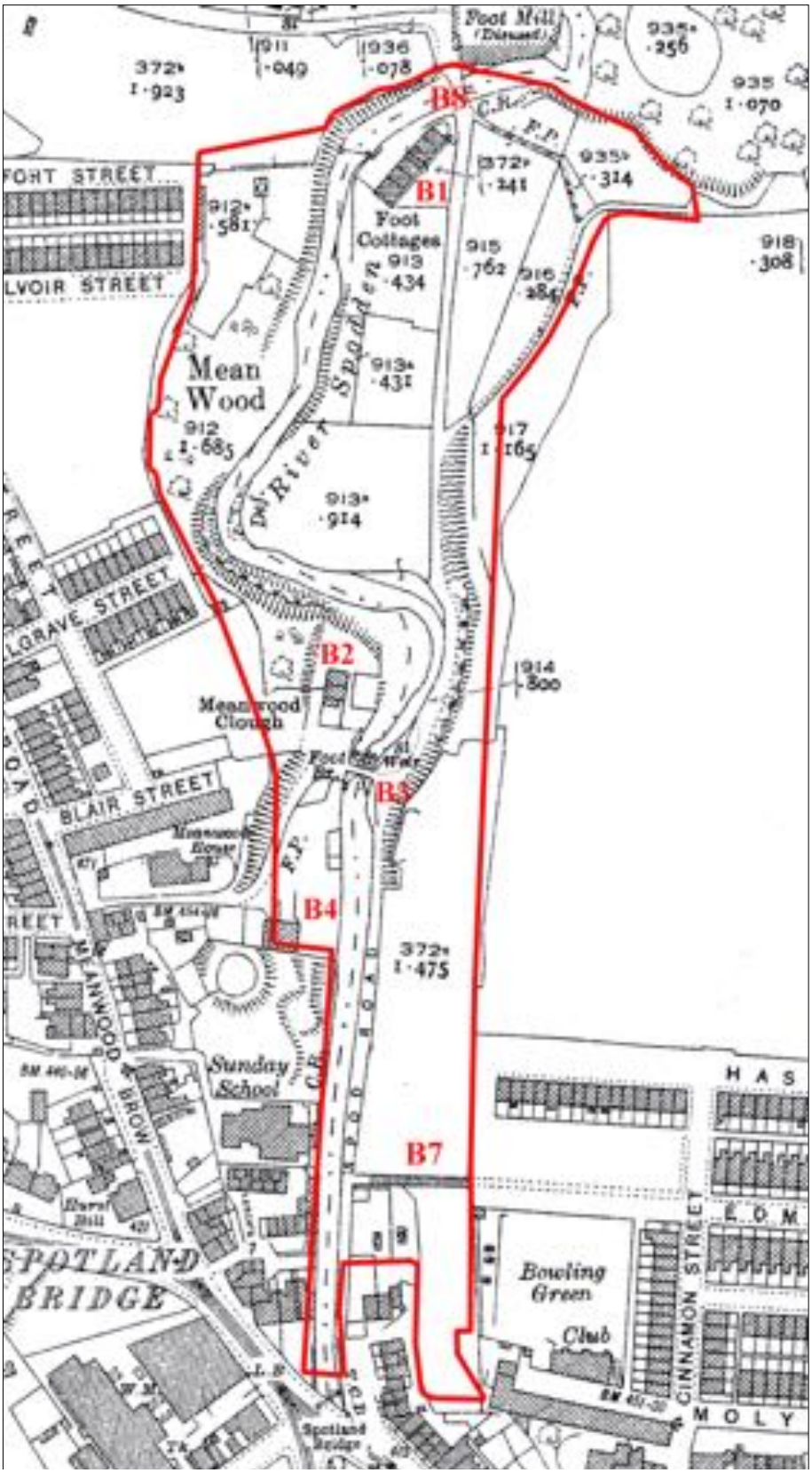
Ill. 30: Area of Meanwood Mill on 1831 map of Rochdale. Reproduced at c 1:2500.

Ill. 31: Area of Meanwood Mill on 1844-7 OS map. Reproduced at 1:2500.

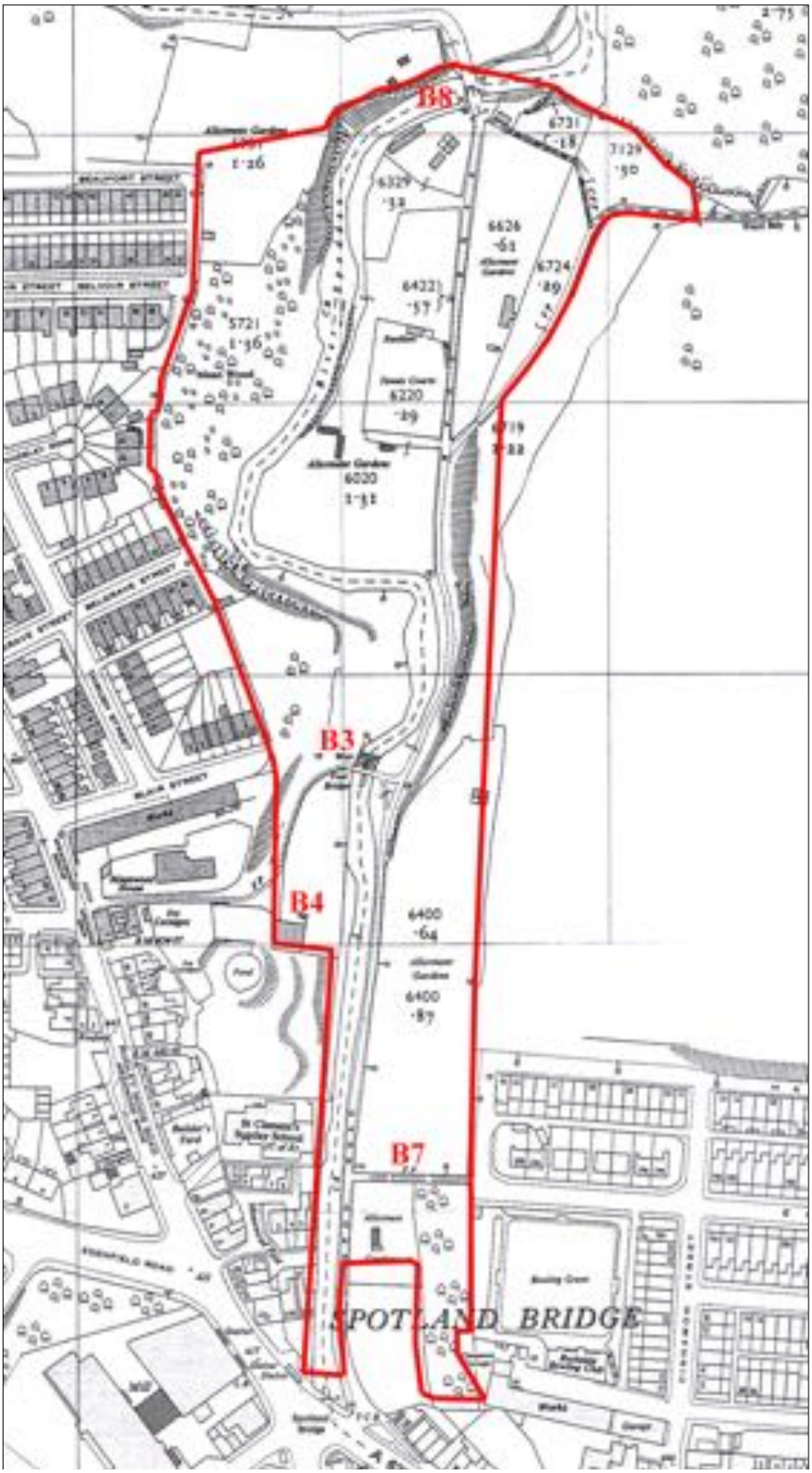
Ill. 32: Area of Meanwood Mill on 1890 OS map. Scale 1:2500.



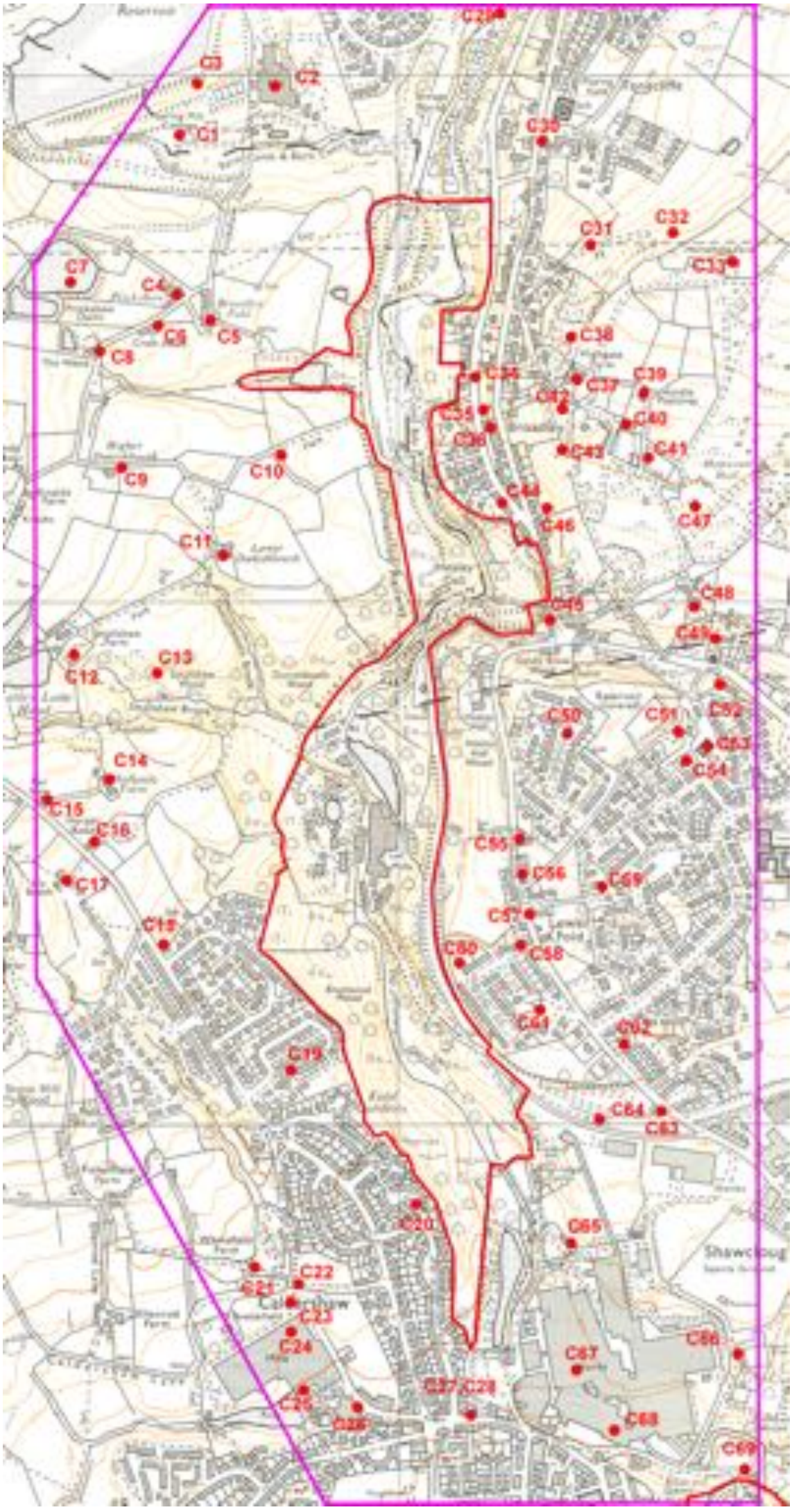
Ill. 33: Area of Meanwood Mill on 1908 OS map. Scale 1:2500.



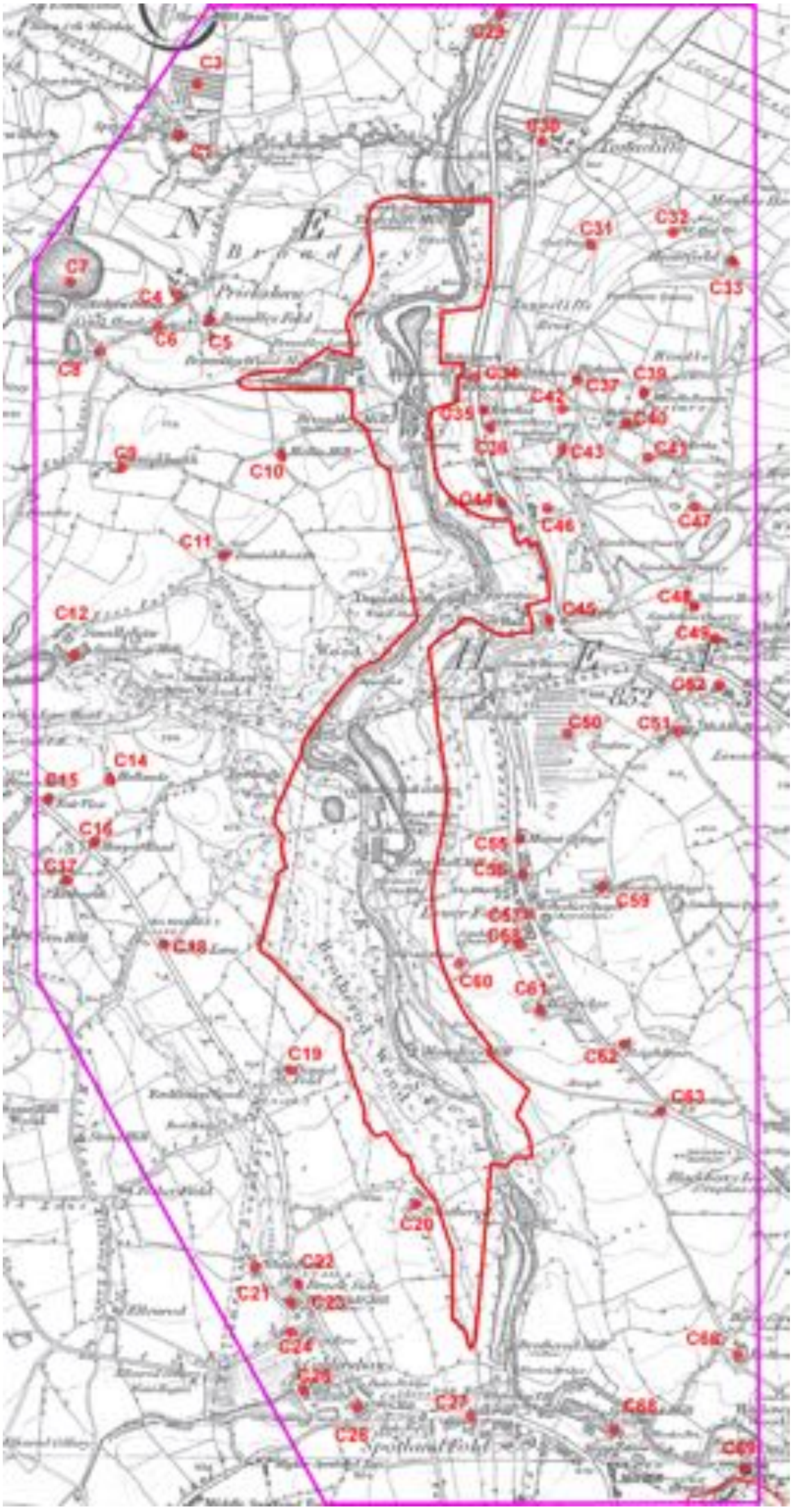
Ill. 34: Area of Meanwood Mill on 1928 OS map. Scale 1:2500.



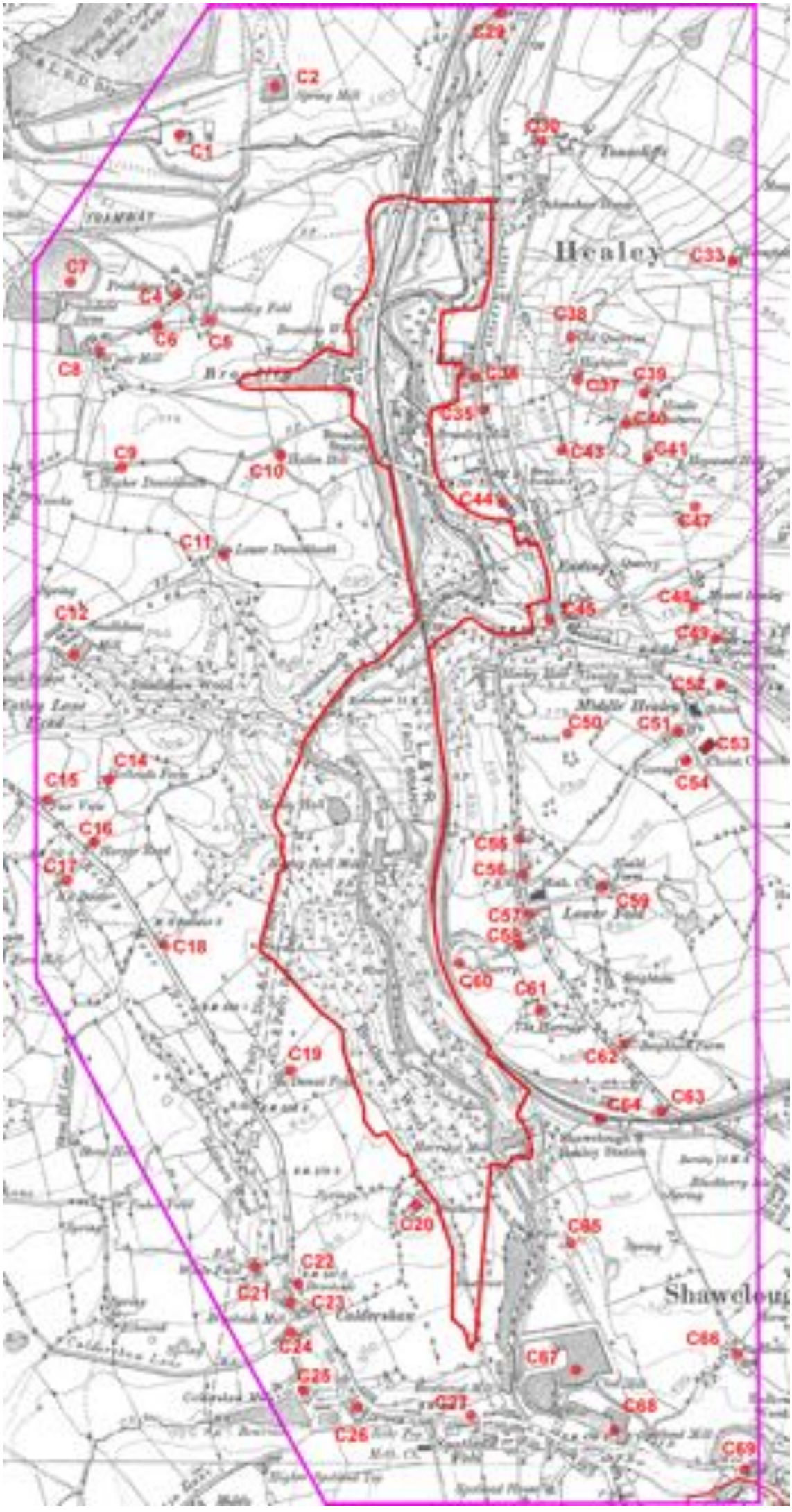
Ill. 35: Area of Meanwood Mill on 1960 OS mapping. Scale 1:2500.
Crown Copyright Reserved.



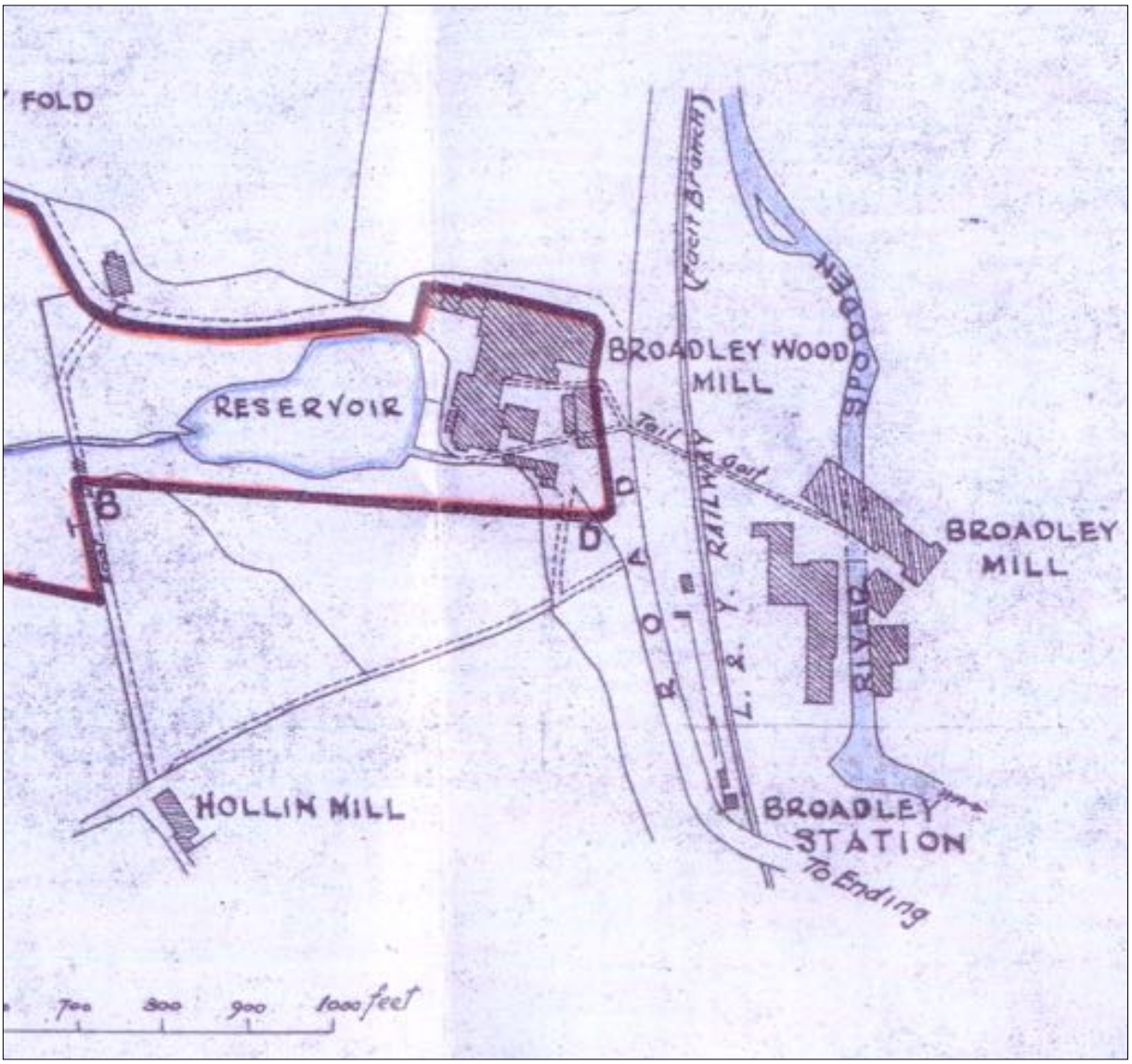
Ill 36: Location of sites identified within wider study area. Scale 1:10,000. Base map OS SD 81 SE 1977 & SD 81 NE 1981. Crown Copyright Reserved.



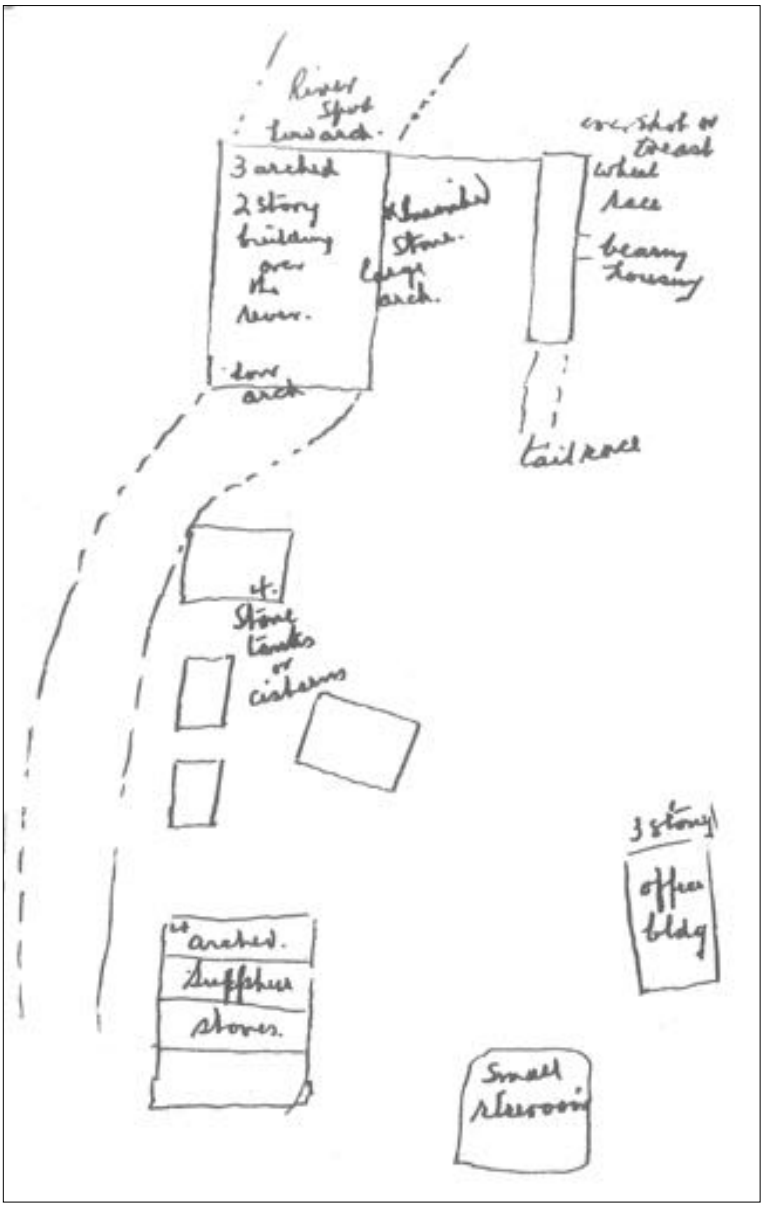
Ill 37: Detail of 6in to 1 mile OS mapping of 1844-8, showing sites identified within wider study area. Reproduced at 1:10,000.



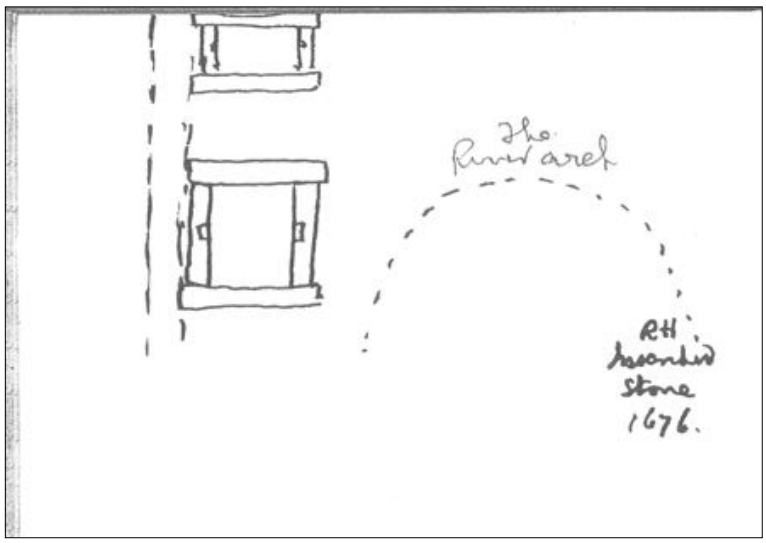
Ill 38: Detail of 6in to 1 mile OS mapping of 1890, showing sites identified within wider study area. Reproduced at 1:10,000.



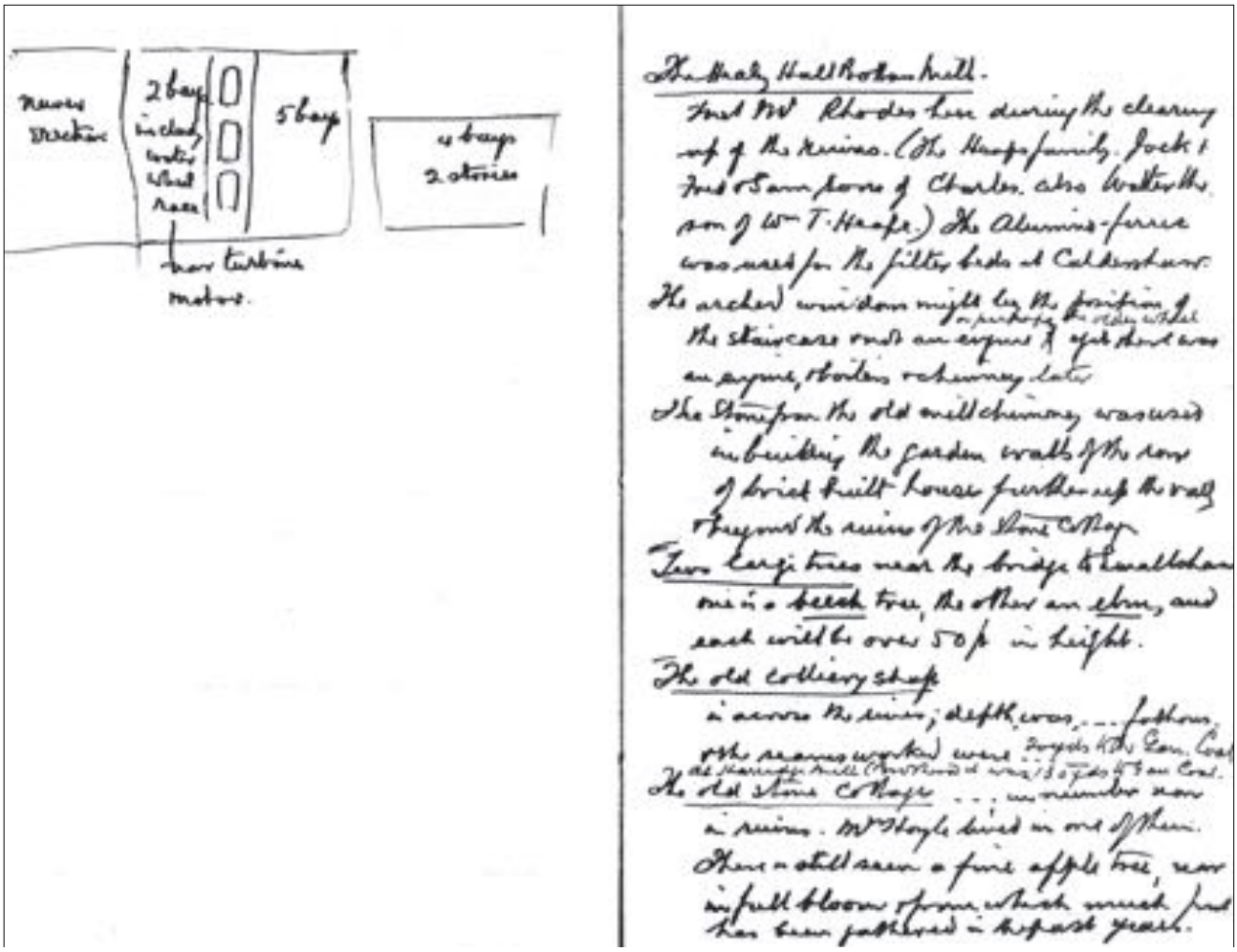
Ill. 39: Plan of Broadley Wood Mill accompanying sale of 1897 (from copy of abstract of title held at Healey Dell Nature Reserve Visitor Centre)



Ill. 40: Sketch plan of remains of Th'Owd Mill I't Thrutch (Healey Dene Mill) made in the early 20th century by J L Maxim (RLSL F8/4/MAX 156W).

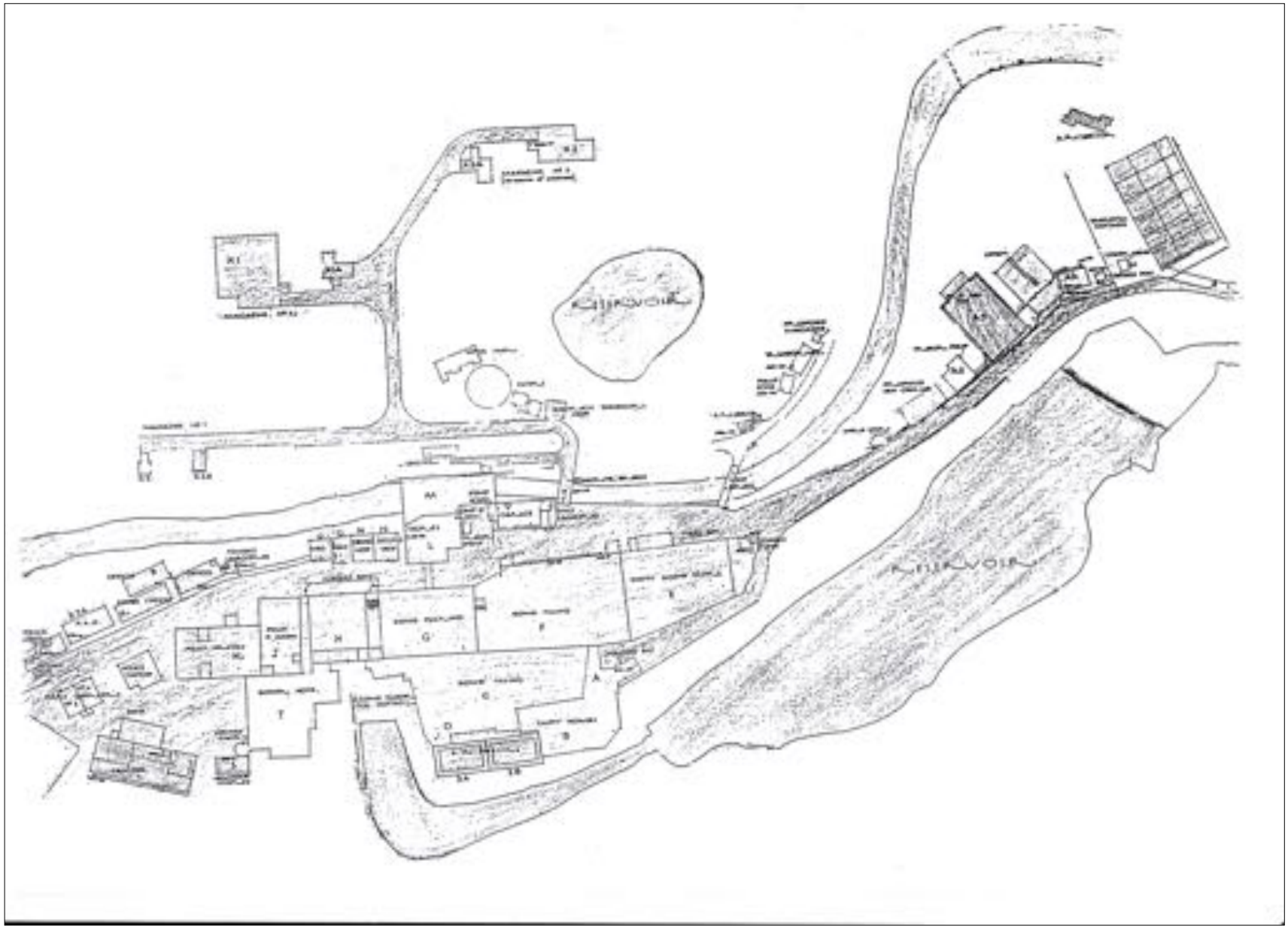


Ill. 41: Sketch plan of elevation of Th'Owd Mill I't Thrutch (Healey Dene Mill) made in the early 20th century by J L Maxim (RLSL F8/4/MAX 156W). The 'river arch' is the 'large arch' on the plan above. Maxim identified the two openings to its side as housings for shafting.

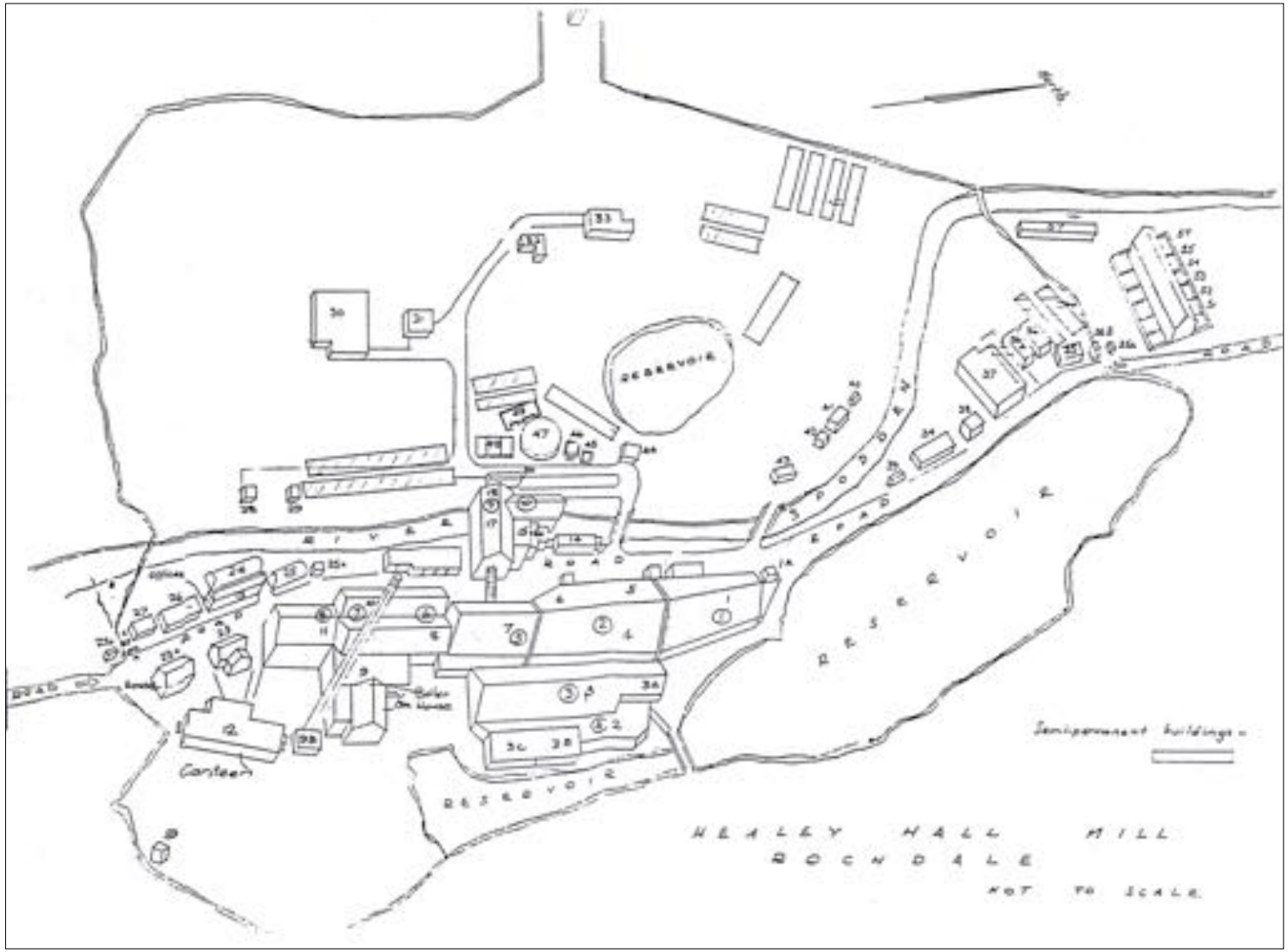


Ill 42: Notes on Healey Bottoms Mill (Healey Hall Mill) made in the early 20th century by J L Maxim, with sketch of the western elevation of the main range of mill buildings (RLSL F8/4/MAX 156W).

Ill. 43: Plan of WWII Royal Ordnance Factory, Healey Dell, nd (Healey Dell Reserve Visitor Centre & GMSMR). Scale c 1:1250.



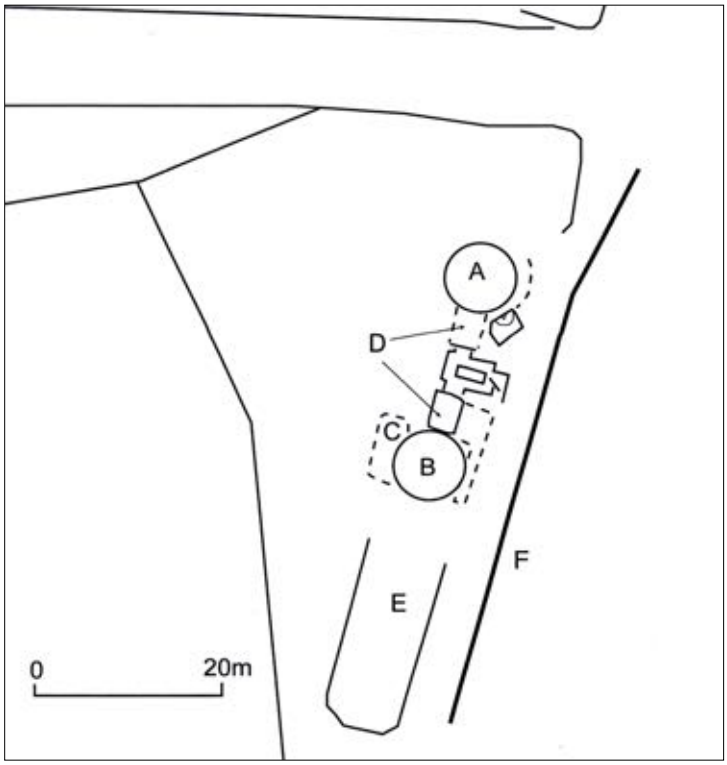
Ill. 44: Aerial plan of WWII Royal Ordnance Factory, Healey Dell, nd (Healey Dell Reserve Visitor Centre & GMSMR). Not to scale.



The key to this map is lost. Healey Dell Nature Reserve Visitor Centre and GMSMR hold a modern copy of a key but the numbers do not correspond to the present map.

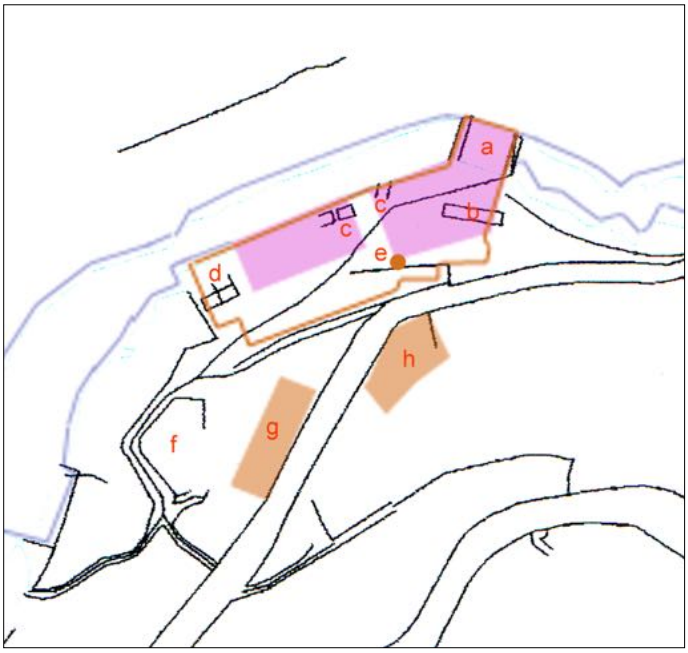
This other key is given below.

1 Reservoir
2 River Spodden
3 Contraband
4 Gates
5 Defence Posts
6 Police Lodge
7 Police Quarters
8 Police Station
9 Administration Offices
10 Canteen
11 Canteen Stores
12 Pellet Press
13 Pellet Room and Loading Bay
14 Boiler House and Chimney
15 Toilets
16 Magazines
17 Chemist Shop
18 Fitters Shop
19 Stores
20 Garage
21 Bomb Packing
22 Bomb Filling and Loading Bay
23 Bomb Filling
24 Empty Bombs and Loading Bay
25 Empty Bomb Store and Loading Bay
26 Air Raid Shelters
27 Pump House
28 Trailer Pump
29 Sceptic Tank and Filters
30 Transformer
31 Spirit Store
32 Chemical Laboratory
33 First Aid Post
34 Employees Cottages



Ill. 45: Broadley Stone Rubbing Mill (**site A1**) (after Gregory & Lloyd 2003).

Key:
2: Site of railway sidings
3. Stone platform
4. Broadley Stone Rubbing Mill
A & B: Circular Grinding Pits
C: Flagstones
D: Passages
E: Linear Depression
F: Stone Platform



Ill. 46: Th'Owd Mill I't Thrutch (**site A19**), site plan. The main buildings of the mill shown on the 1844-8 OS map are indicated in purple. The outline of the mill site as shown on the 1890 map is indicated in brown, along with the position of ancillary buildings. Scale 1:1000.
Based on modern OS mapping. Crown Copyright Reserved.

Key:
a - Arches over the river
b - Wheelpit
c - Stone vats
d - Sulphur stoves
e - Chimney?
f - Lodge
g - Warehouse
h - Building, function uncertain.

Ill. 48: Broadley Stone Rubbing Mill (**site A1**), central engine house, viewed from north-east.

Ill. 49: Broadley Stone Rubbing Mill (**site A1**), southern grinding pit, viewed from south-east.

Ill. 50: Footbridge over the River Spodden (**site A48**), west of Tonacliffe Mill.

Il. 51: Broadley Mill Weir (**site A5**), viewed from south-east.

Ill. 52: Broadley Mill Leat, culvert below path (**site A6b**), viewed from west.

Ill. 53: Broadley Mill Leat, earthwork of leat (**site A6c**), viewed from west.

Ill. 54: Broadley Mill Leat, abutment for launder over the River Spodden, now also carrying a footbridge (**site A6d**), viewed from south-east.

Ill. 55: Weir north of Broadley Mill (**site A49**), viewed from south-east.

Ill. 56: Broadley Mill, leat from reservoir to mill (**site A8**), with retaining embankment by the River Spodden (right), viewed from north.

Ill. 57: Broadley Mill Bridge (**site A50**), viewed from south.

Ill. 58: Broadley Mill, remains of circular gasometer (**site A10c**) and, upper left, site of possible cotton mill (**site A10d**), viewed from south-west.

Ill. 59: Broadley Mill, wall footing of range on east bank of the Spodden (**site A10g**), viewed from west.

Ill. 60: Broadley Wood Mill, reservoir embankment with byewash (left) (**site A12**), viewed from east.

Ill. 61: Broadley Wood Mill, detail of byewash (**site A12**).

Ill. 62: Broadley Wood Mill, brick and stone engine beds, viewed from south (**site A11a**).

Ill. 63: Broadley Wood Mill, brick and stone engine beds, viewed from north-west (**site A11a**).

Ill. 64: Broadley Wood Mill, stables (**site A11b**), viewed from north-west.

Ill. 65: Broadley Station (**site A13**), footings of main station building, viewed from north.

Ill. 66: Station Road Bridge (**site A51**), viewed from south, from the Fairy Chapel.

Ill. 67: Weir to south of Station Road (**site A15**), viewed from east.

Ill. 68: Th'Owd Mill I't Thrutch, site of weir (**site A17**), viewed from west.

Ill. 69: Th'Owd Mill I't Thrutch, looking westward from the weir to the mill arches over the River Spodden (**site A19a**).

Ill. 70: Th'Owd Mill I't Thrutch, arches over the river (**site A19a**) and, right, walling of the wheelhouse(**site A19b**), viewed from south.

Ill. 71: Th'Owd Mill I't Thrutch, the wheelpit looking east, towards the hearace (**site A19b**).

Ill. 72: Th'Owd Mill I't Thrutch, detail of headrace end of the wheelpit (**site A19b**).

Ill. 73: Th'Owd Mill I't Thrutch, the wheelpit looking west, towards the tailrace (**site A19b**).

Ill. 74: Th'Owd Mill I't Thrutch (**site A19**), remains of wall to south of the main mill building (centre) and wheelpit (foreground), viewed from north.

Ill. 75: Th'Owd Mill I't Thrutch, vats (**site A19c**), viewed from south.

Ill. 76: Th'Owd Mill I't Thrutch, detail of western three vats (**site A19c**), viewed from south.

Ill. 77: Th'Owd Mill I't Thrutch, detail of easternmost vat (**site A19c**), viewed from south.

Ill. 78: Th'Owd Mill I't Thrutch, sulphur stoves (**site A19d**), viewed from east.

Ill. 79: Th'Owd Mill I't Thrutch, wall at north-west corner of the site (**site A19**), viewed from south-west.

Ill. 80: Th'Owd Mill I't Thrutch, retaining wall of lodge (**site A19f**), viewed from south-east.

Ill. 81: Th'Owd Mill I't Thrutch, foundations of warehouse (**site A19g**) (right) and the trackway down to the mill, viewed from west.

Ill. 82: Th'Owd Mill I't Thrutch, remains of building on south side of the roadway above the mill (**site A19h**), viewed from east.

Ill. 83: Healey Hall (**site 20a**), viewed from south-east.

Ill. 84: Bee House, viewed from east (**site A28**).

Ill. 85: Boundary Stone (**site A26**), north-east of Healey Dell Cottages, viewed from east.

Ill. 86: Healey Bottoms Mill Weir (**site A22**) and entrance to leat (**site A23**), viewed from south.

Ill. 87: Healey Bottoms Mill Leat, entrance to tunnel (**site A23**), viewed from north-east.

Ill. 88: Aqueduct Pier (**site A52**), viewed from south-east.

Ill. 89: Healey Bottoms Mill, viewed from southern entrance, with cottages to right (**site A33i**).

Ill. 90: Healey Bottoms Mill, looking towards the southern entrance, with office building (**site A33k**) and infill building to left (**site A33r**).

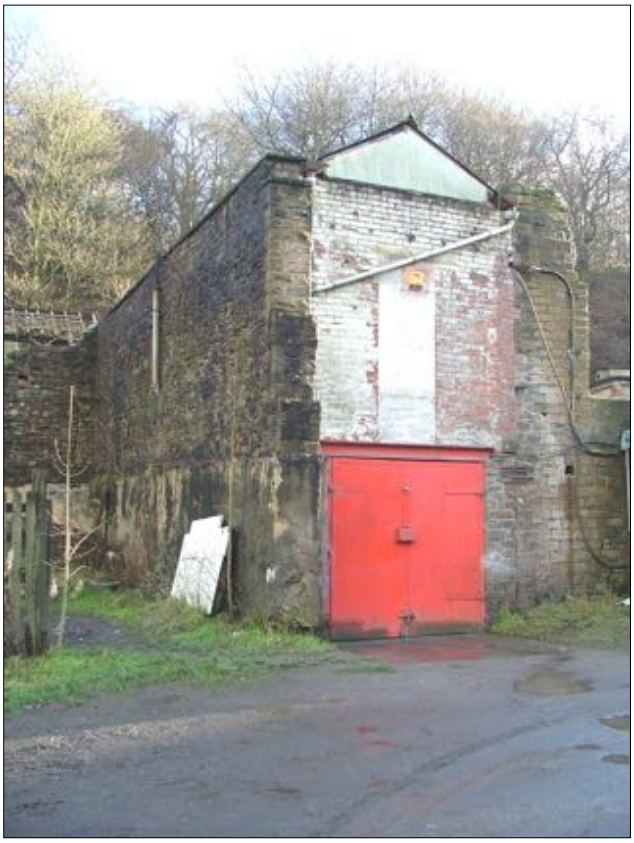
Ill. 91: Healey Bottoms Mill, looking south, with early 20th-century warehouses to right (**sites A33u-v**).

Ill. 92: Healey Bottoms Mill, looking north with site of main mill range to right (**sites A33a-d**).

Ill. 93: Healey Bottoms Mill, c 1900 office building (**site A33k**), viewed from east.

Il. 94: Healey Bottoms Mill, former boiler house, viewed from south (**site A33p**).

Ill. 95: Healey Bottoms Mill, surviving ground-floor façade of southernmost mill (**site A33q**), viewed from west.

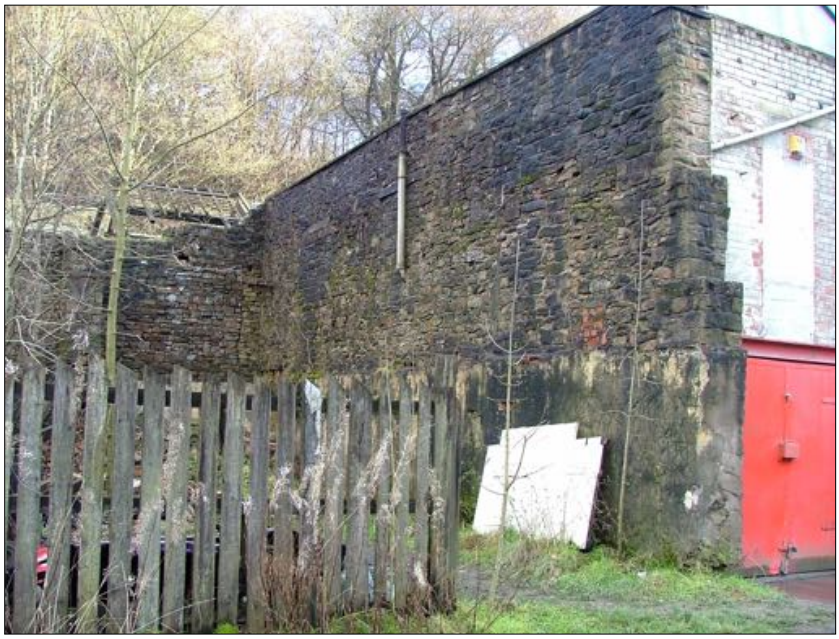


Ill. 96: Healey Bottoms Mill, c 1900 infill block, between 19th-century mills (**site A33r**), viewed from north-west.

Ill. 97: Healey Bottoms Mill, smithy and workshop range, with warehouse to right (**sites A33s-u**), viewed from south-east.

Ill. 98: Healey Bottoms Mill, c 1900 warehouse (**site A33u**), viewed from east.

Ill. 99: Healey Bottoms Mill, c 1900 warehouse (**site A33v**), viewed from east.



Ill. 100: Healey Bottoms Mill, south wall of south mill in main range, mid-19th-century (**site A33d**), viewed from north-west

Ill. 101: Healey Bottoms Mill, north wall of north mill in main range, early 19th-century (**site A33a**), with early 20th-century finishing works building to right (**site A33y**), viewed from south.

Ill. 102: Healey Bottoms Mill, bridge over leat at south end of mill reservoir (**site A54**), viewed from south-west.

Ill. 103: Healey Bottoms Mill, WWII Royal Ordnance Factory, pillbox guarding bridge over the leat, viewed from north-west (**site A33mm**).

Ill. 104: Healey Bottoms Mill, WWII Royal Ordnance Factory, pillbox on western hillslope (**site A33kk**), viewed from north-west.

Ill. 105: Healey Bottoms Mill, WWII Royal Ordnance Factory, pillbox on eastern hillslope (**site A33ll**), looking down on mill site.

Ill. 106: Healey Bottoms Mill, WWII Royal Ordnance Factory, Magazines No 2, viewed from south (**site A33aa**).

Ill. 107: Healey Bottoms Mill, WWII Royal Ordnance Factory, Magazines No 3, viewed from south-west (**site A33cc**).

Ill. 108: Healey Bottoms Mill, WWII Royal Ordnance Factory, northern surviving Nissen hut (**site A33jj**), viewed from south-west.

Ill. 109: Healey Bottoms Mill, WWII Royal Ordnance Factory, concrete footings of Nissen huts west of pond (**site A33ii**), viewed from west.

Ill. 110: Healey Bottoms Mill, WWII Royal Ordnance Factory, entrance to air raid shelter (**site A33hh**), viewed from south-east.

Ill. 111: Healey Bottoms Mill, WWII Royal Ordnance Factory, air raid shelter interior (**site A33hh**), looking north.

Ill. 112: Twin Railway Bridges, viewed from west (**site A55**).

Ill. 113: Roadway to Meanley's Mill (**site A57**) crossed by Dell Road, looking north.

Ill. 114: Roadway to Meanley's Mill (**site 57**), looking south towards Dell Road.

Ill. 115: Harridge Mill Reservoir, looking south (**site A37**).

Ill. 116: Harridge Mill Leat (**site A37**), entrance from reservoir, viewed from north-east.

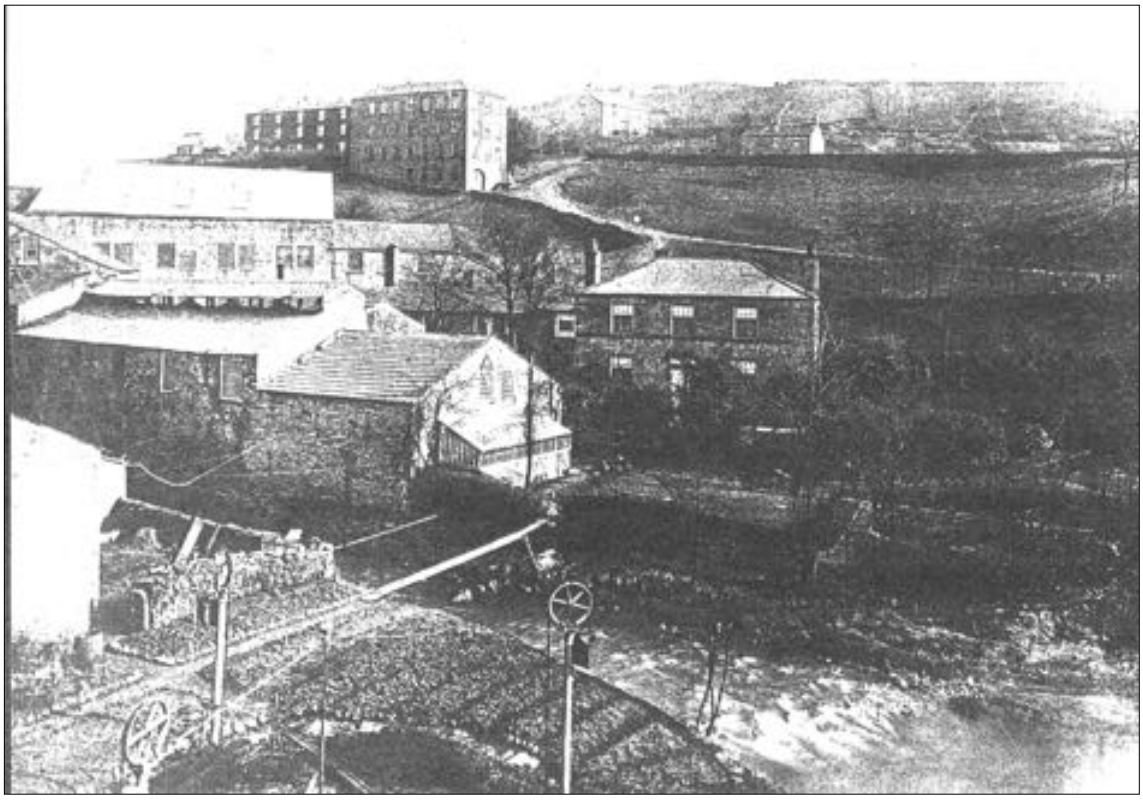
Ill. 117: Meanley Mill Cottages (**site A39b**), viewed from north-east.

Ill. 118: Meanwood Mill, site of fulling mill (**site B4a**), and weir (**site B3**), viewed from south.

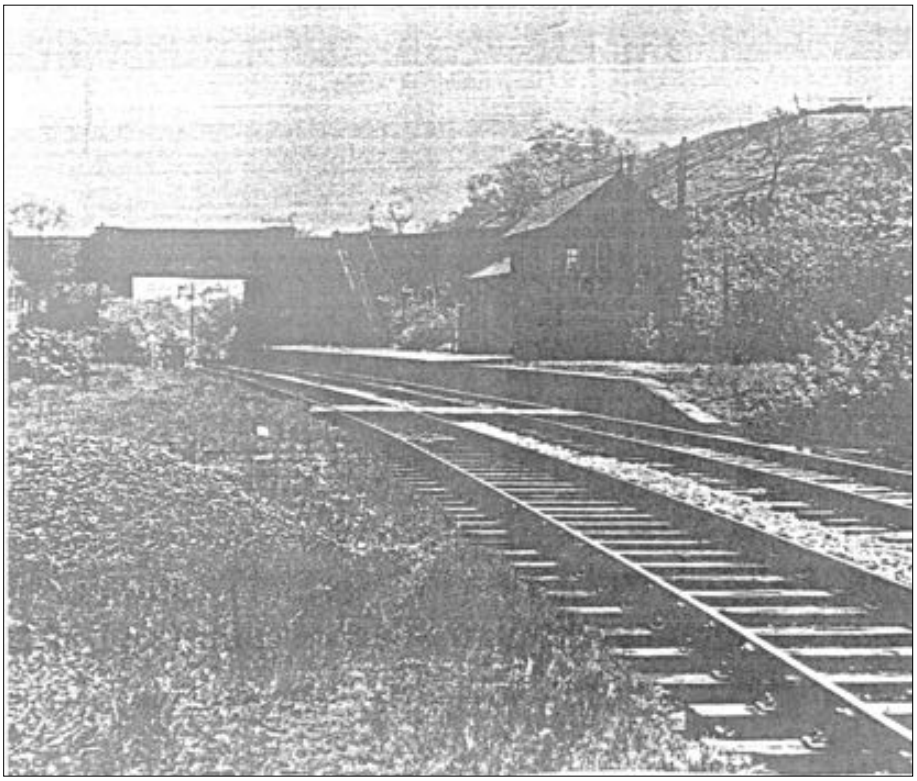
Ill. 119: Meanwood Mill, wall on west side of site of fulling mill (**site B4a**), viewed from north.

Ill. 120: Site of building on north side of Meanwood Mill (**site B2**), looking south.

Ill. 121: Broadley Mill (**site A10**) viewed from west, c 1870 (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).



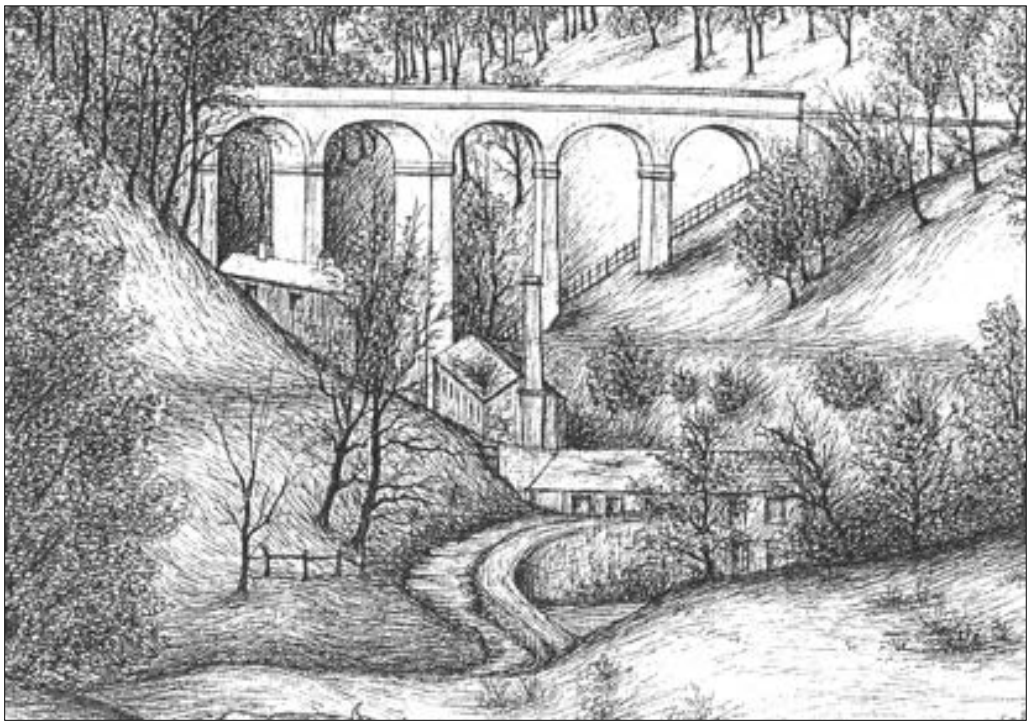
Ill. 122: Broadley Mill (**site A10**) viewed from south-west, c 1870 (Rochdale Local Studies Library).



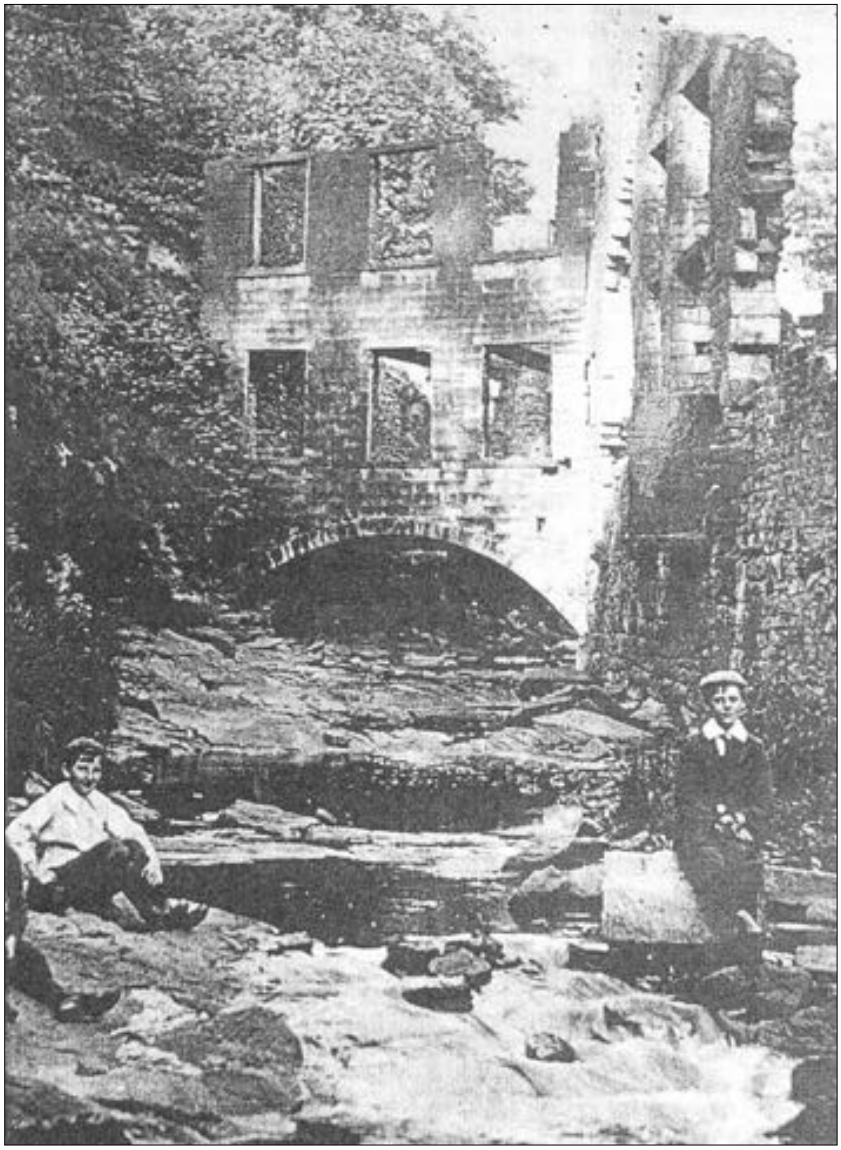
Ill. 123: Broadley Station (**site A13**), viewed from the north, early to mid-20th century (Healey Dell Nature Reserve Visitor Centre).

Ill. 124: Shelter at the Spaw (**site A16**), viewed from east, at its opening in 1912 (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).

Ill. 125: Th'Owd Mill I't Thrutch (**site A19**) on watercolour of 1877, viewed from east (copy held at Healey Dell Nature Reserve Visitor Centre).



Ill. 126: Th'Owd Mill I't Thrutch (**site A19**), detail of drawing by C Dowell 1889, viewed from east (Rochdale Local Studies Centre).



Ill. 127: Th'Owd Mill I't Thrutch, main fulling mill building and wing over the River Spodden (**site A19a**), viewed from west (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).
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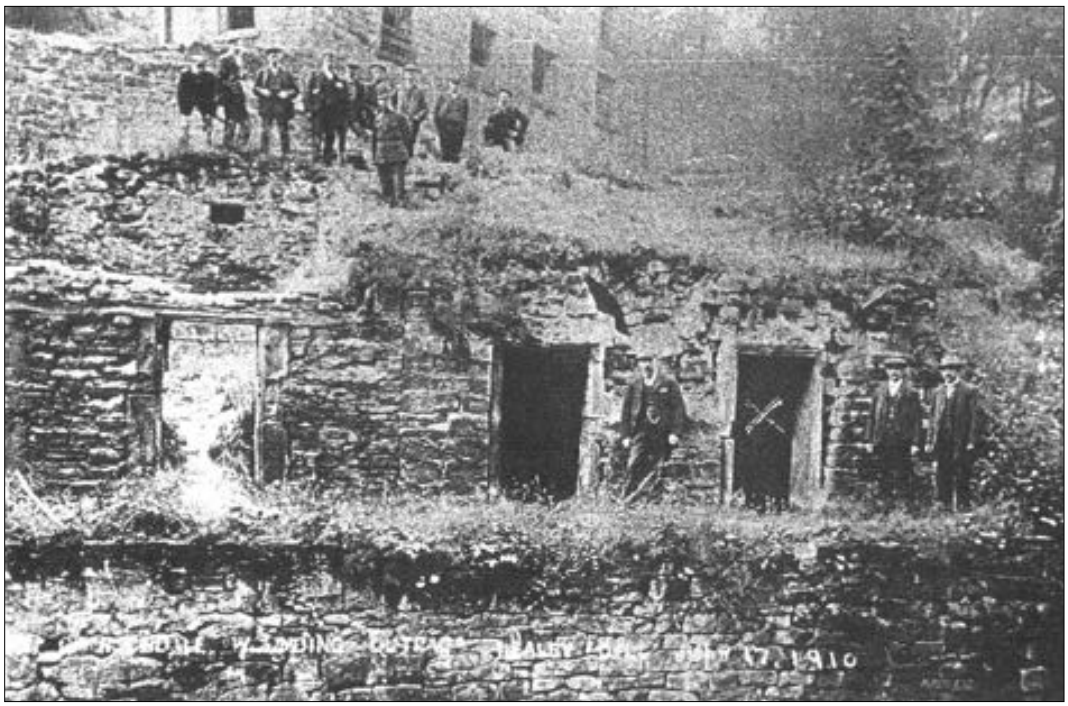
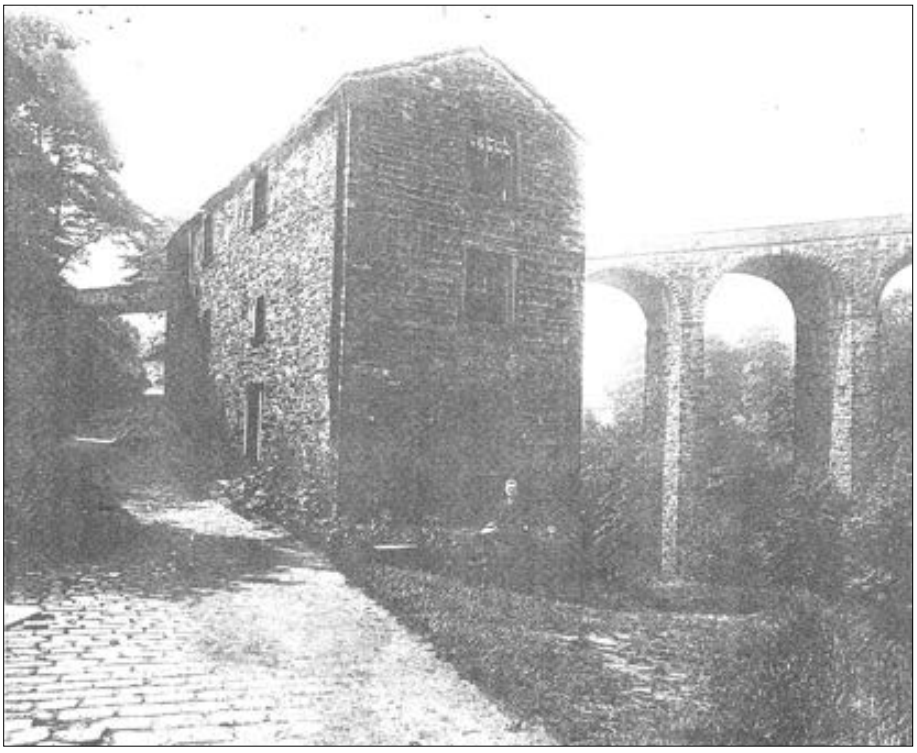
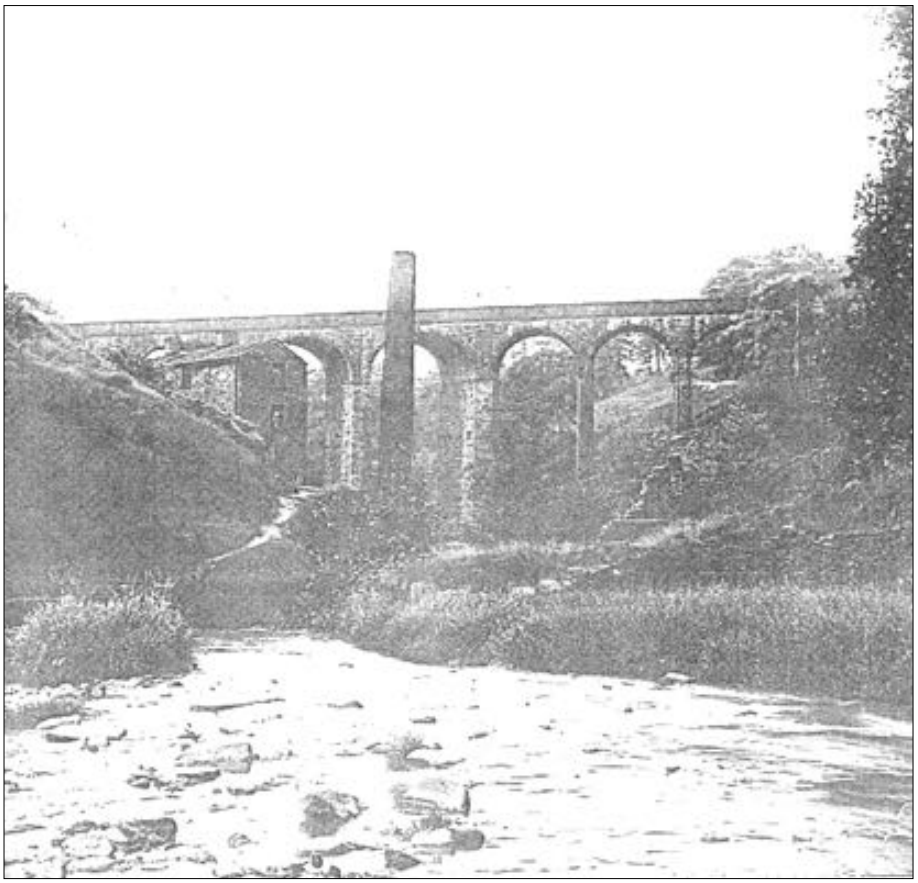
Ill. 128: Th'Owd Mill I't Thrutch, the wing over the River Spodden (**site A19a**), viewed from west (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).



Ill. 129: Th'Owd Mill I't Thrutch, sulphur stoves (**site A19d**), 1910, viewed from north (Healey Dell Nature Reserve Visitor Centre).

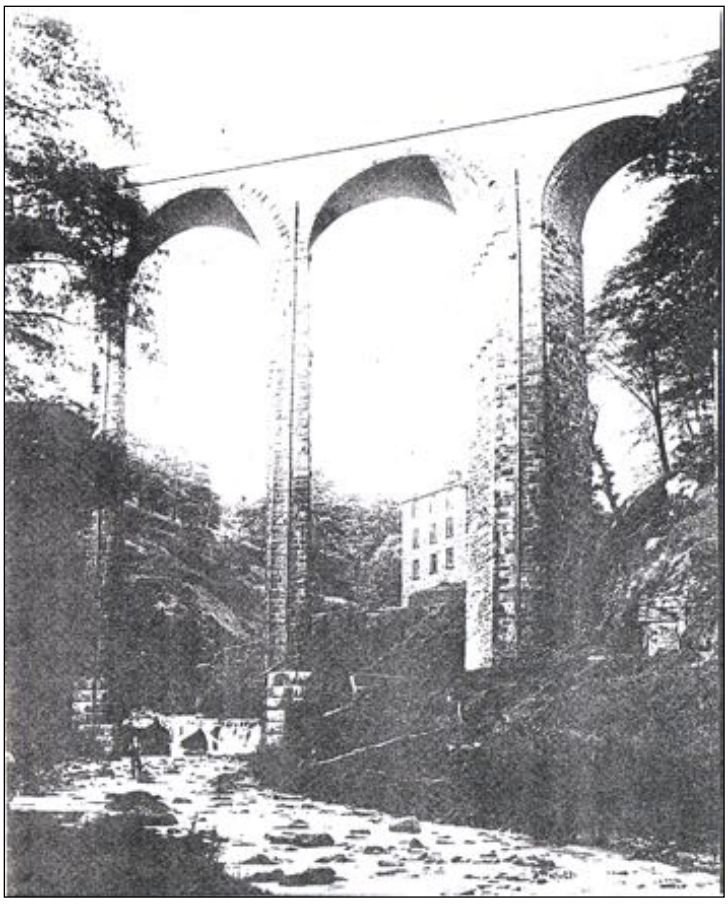


Ill. 130: Th'Owd Mill I't Thrutch, warehouse (**site A19g**), viewed from north-east (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).

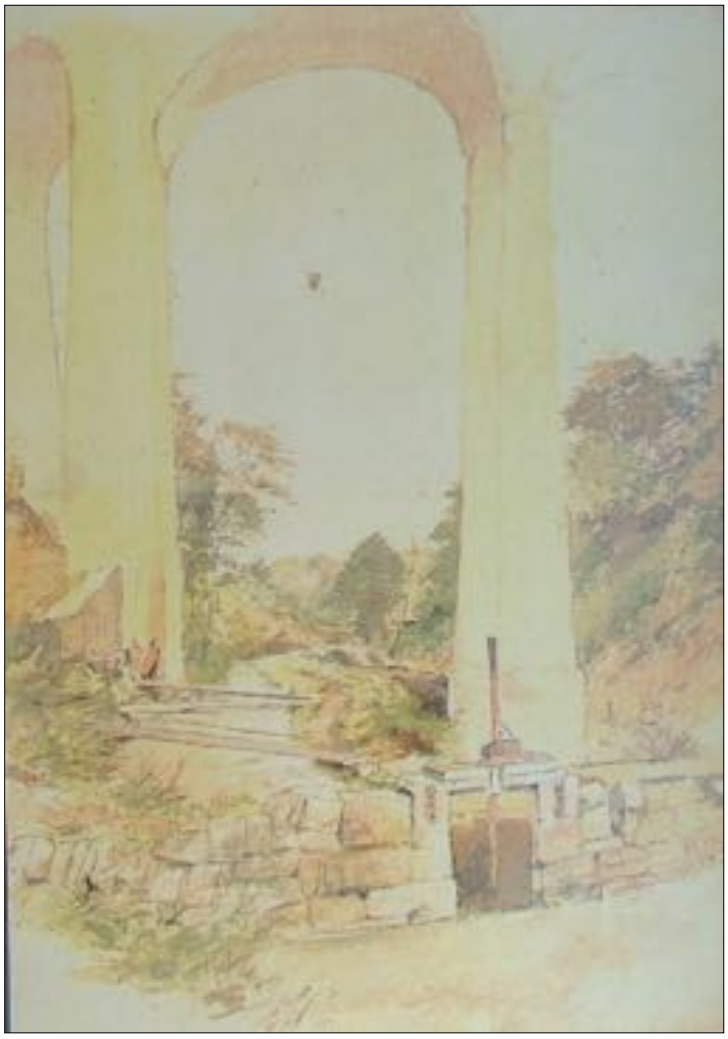


Ill. 131: Th' Owd Mill I't Thrutch, (**site A19**), viewed from east (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).

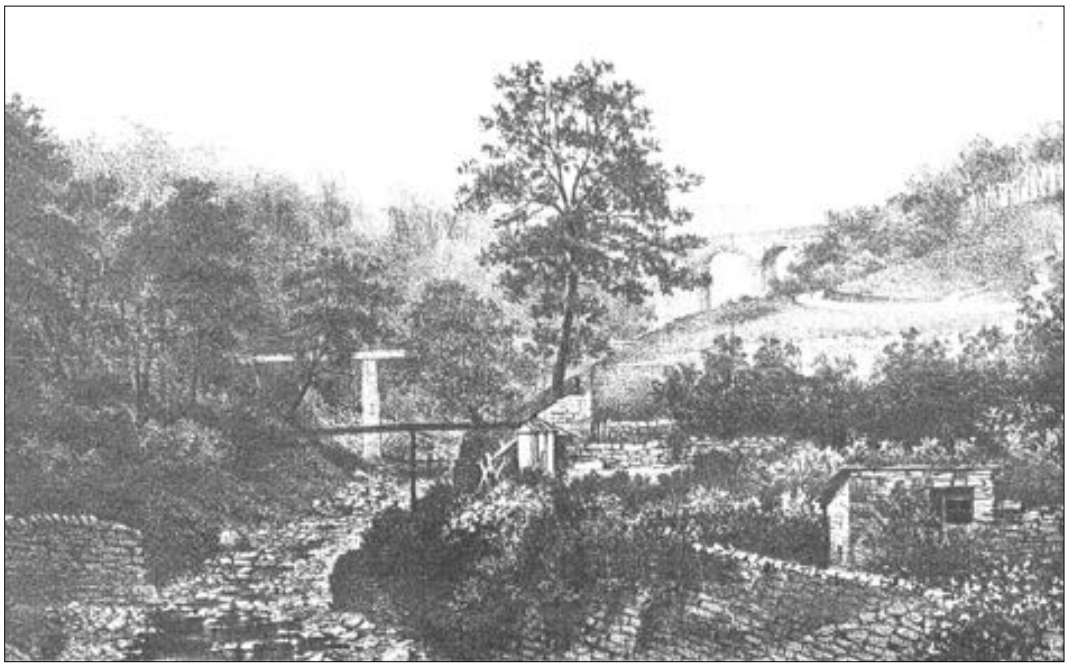
Ill. 132: Th' Owd Mill I't Thrutch, Weir (**site A17**), viewed from west (Healey Dell Nature Reserve Visitor Centre).



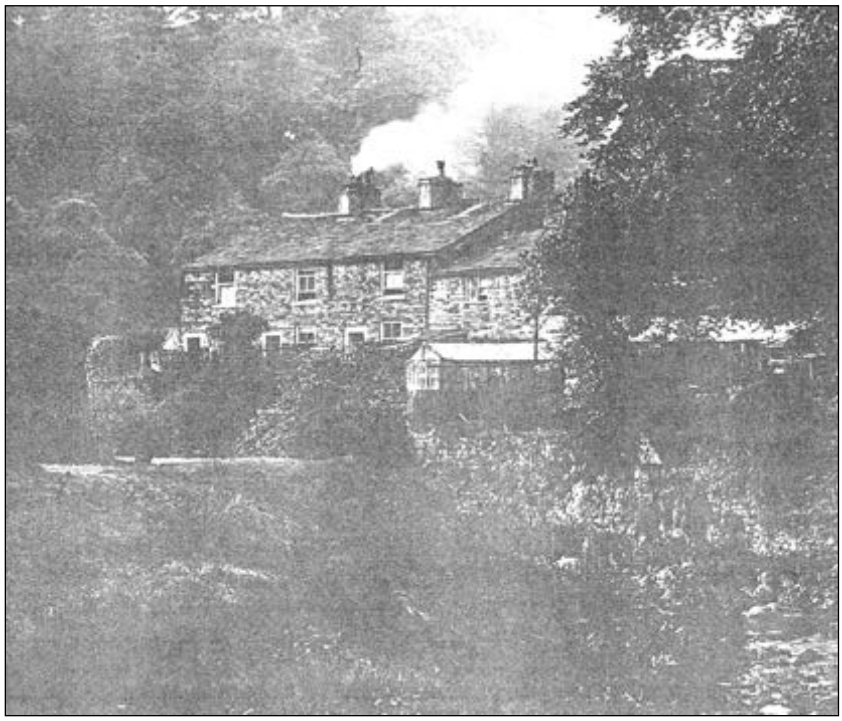
Ill. 133: Healey Viaduct (**site A21**) and Healey Bottoms Mill Weir (**site A22**), viewed from south-west, with warehouse of Th'Owd Mill I't Thrutch (**site A19g**) to rear (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).



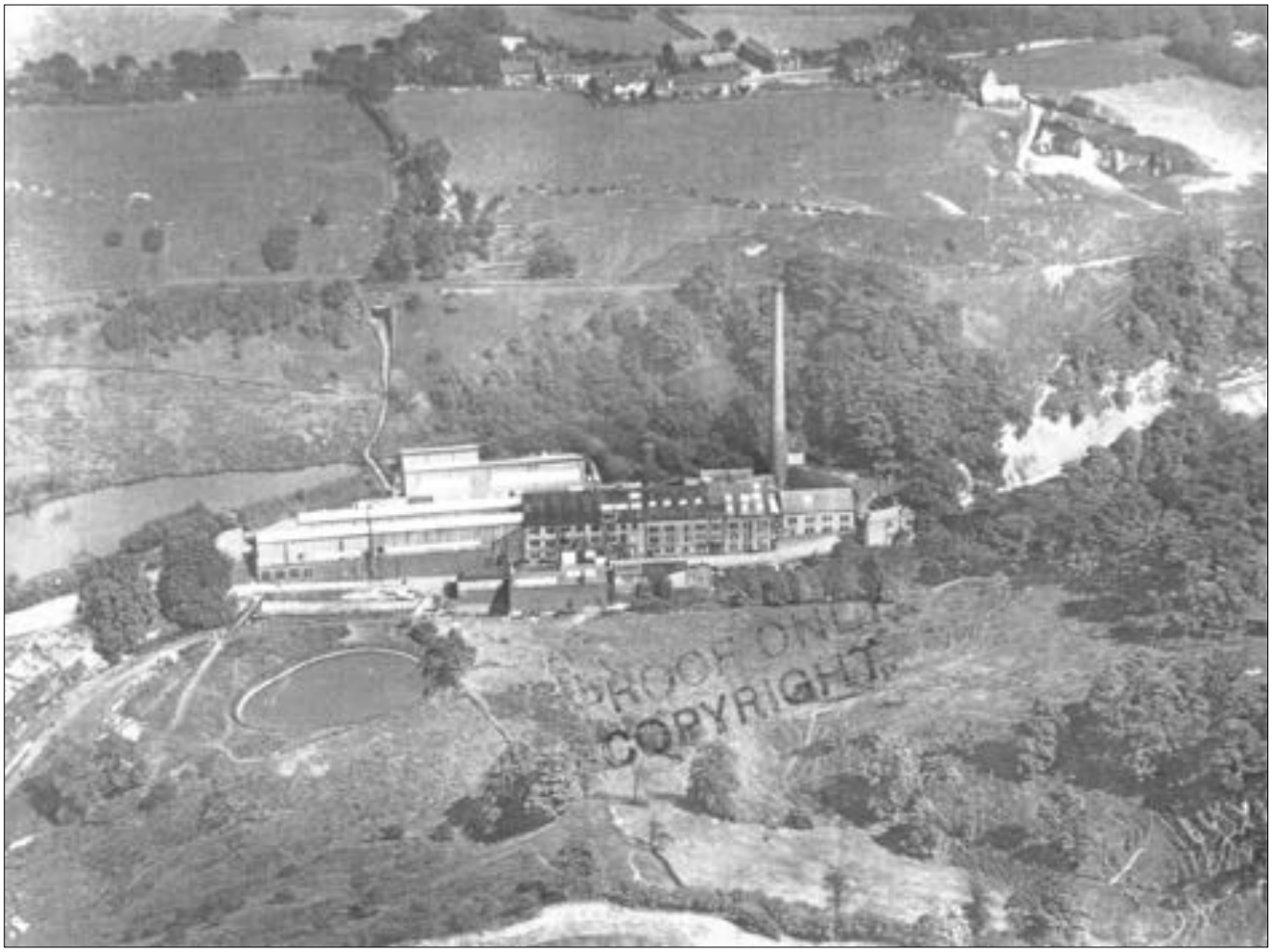
Ill. 134: Healey Bottoms Mill Leat (**site A23**), sluice at leat entrance, a watercolour of 1877, viewed from north-east (copy held at Healey Dell Nature Reserve Visitor Centre).



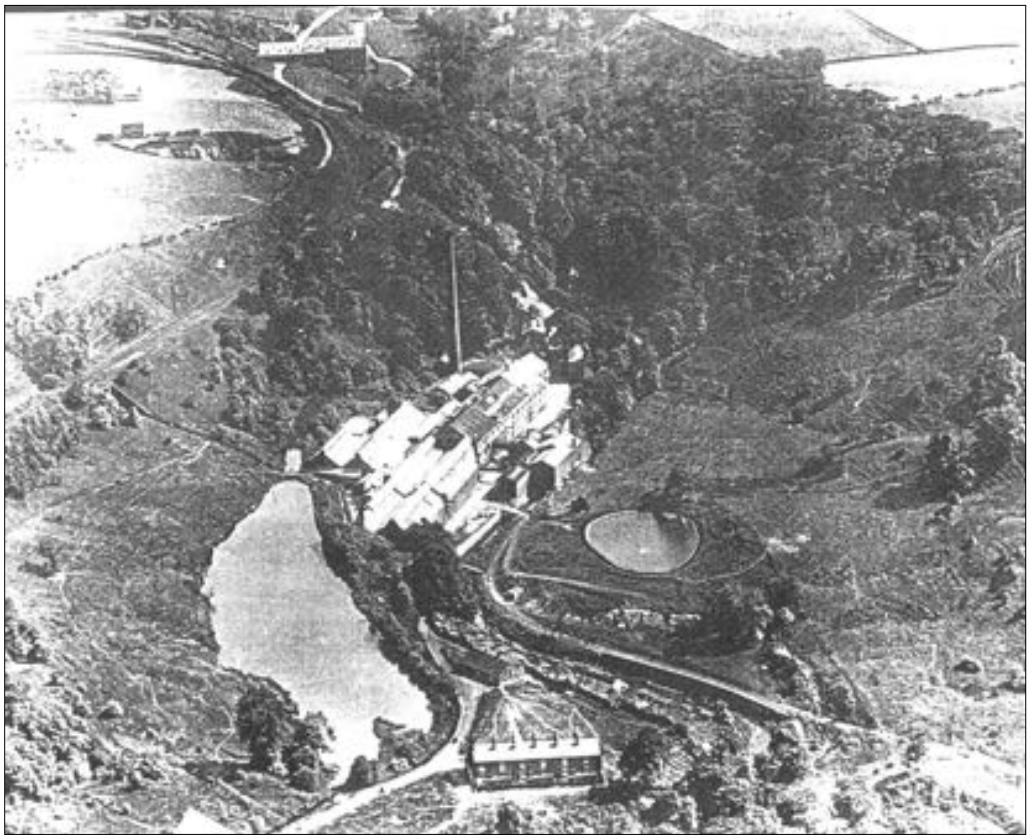
Ill. 135: View looking north-eastwards along the River Spodden towards Healey Viaduct, showing (centre) the stone pier carrying the aqueduct across the river (**site A53**) (Rochdale Local Studies Library).



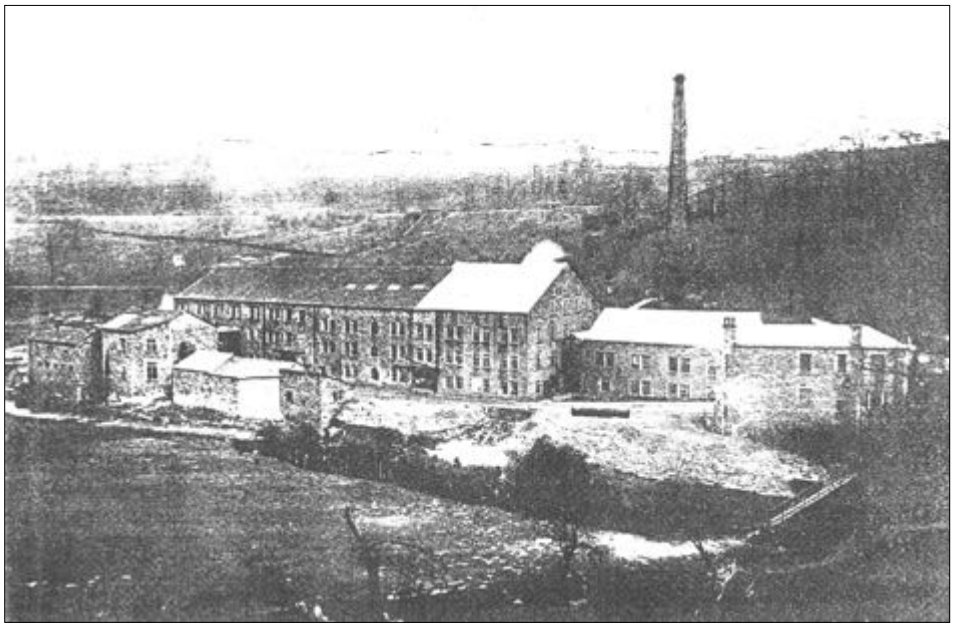
Ill. 136: Cottages, Healey Bottoms Mill (**site A30**), viewed from south (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).



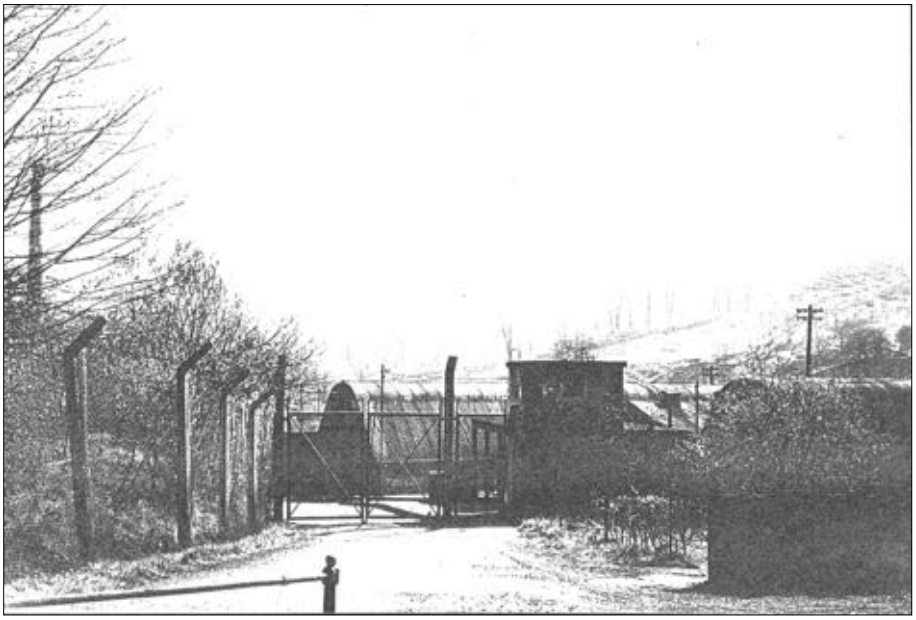
Ill. 137: Healey Bottoms Mill from the air (**site A33**), looking east (Healey Dell Nature Reserve Visitor Centre).



Ill. 138: Healey Bottoms Mill from the air (**site A33**), looking south (copy held at Healey Dell Nature Reserve Visitor Centre of photograph in Rochdale Local Studies Library).



Ill. 139: Healey Bottoms Mill **(site A33**) from the south-west (Healey Dell Nature Reserve Visitor Centre).



Ill. 140: Healey Bottoms Mill (**site A33**), WWII Munitions Factory, north entrance (Rochdale Local Studies Library).

Ill. 141: Meanwood Mill, early 19th-century view of fulling mill (**site B4a**) from east, artist unknown (copy held at Healey Dell Nature Reserve Visitor Centre of original held by Rochdale Arts and Heritage Resource Centre).