

BRAKEMAN'S HUT

Bowes Railway, Springwell Yard, Tyne and Wear

ARCHAEOLOGICAL MONITORING DURING CONSOLIDATION

June 2019



Prepared for Doonan Architects on behalf of Bowes Railway Company Ltd. by

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CONTENTS

1. PROJECT BACKGROUND
2. HISTORICAL BACKGROUND
3. REPAIR WORKS
4. MONITORING WORKS
5. PUBLISHED MATERIAL

APPENDIX 1: SMC Document

APPENDIX 2: Written Scheme of Investigation (AWA)

FIGURES

Figure 1: The Bowes Railway in 1959

Figure 2: Springwell Yard showing the main buildings including the Brakeman's Hut

Figure 3: Rectified photographic elevations of the Brakeman's Hut prior to restoration

Figure 4: NW-SE section through Brakeman's Hut

Figure 5: Ground-floor plan of the Brakeman's Hut

Figure 6: First floor and roof timbers of the Brakeman's Hut

PLATES

Plate 1: Brakeman's Hut from the north

Plate 2: Brakeman's Hut from the south

Plate 3: Looking south. First floor. Door in south-west wall before conservation

Plate 4: First floor. Looking south. Door in south-west wall after conservation

Plate 5: First floor. Looking north. Blocked windows before conservation

Plate 6: First floor. Looking north-east. Windows following conservation

Plate 7: First floor. Looking south-west. Hearth in south-west angle before conservation

Plate 8: Hearth in south-west angle following conservation

Plate 9: Ground-floor. Looking north. Blocked door in north wall of ground floor

Plate 10: North wall after removal of door blocking and fitting of new door leaf

Plate 11: Ground-floor, looking north. Brake transmission lever in floor obscured by debris

Plate 12: Ground-floor. Brake transmission lever cleared

Plate 13: Looking south. Ground floor, south wall

Plate 14: Looking south-east. Ground floor, east wall and brake-transmission lever

Plate 15: Looking north-east. Ground floor. Brake transmission lever

Plate 16: Looking north. Ground floor. North wall and restored doorway

Plate 17: Looking east. Ground floor, east wall

Plate 18: Looking south-west. Ground floor. Base of first-floor fireplace in ground-floor ceiling

Plate 19: Looking north. South wall showing blocked window

Plate 20: Looking south-west. Windows and door restored

Plate 21: Looking north. External stair replaced

Plate 22: Looking north at new steps and door

Plate 23: Looking north-west at platform, steps and windows

Plate 24: Looking west at platform, new steps and window

Plate 25: Looking south at new door and window

Plate 26: Looking north-east at new steps and door

Plate 27: Brakeman's Hut in 1992

Plate 28: Brakeman's Hut in 1990

Plate 29: Brakeman's Hut in 1989

OASIS ID – alanwill1 359495

1. PROJECT BACKGROUND

1.1 Bowes Railway Company Ltd. (BRC) carried out conservation works in 2018-2019 (Scheduled Monument Consent Ref: S00198001) supported by the Heritage Lottery Fund at Springwell Yard (Scheduled Monument TW7, HA 1003723)

Focus of these works was the Brakeman's Hut (Brake Cabin), a two-storey brick structure at the northern end of the yard (NZ 2848 5603) from which the brakeman controlled movement along Springwell Incline falling to the north. By 2018 the building was in a dilapidated condition. Works (Designed and managed by Doonan Architects (DA) of Hexham) were extensive and included reslating, re-pointing, insertion and repair of damaged brickwork and re-instatement of presently blocked windows, doors and rainwater goods. Internal works included re-plastering and replacement of the fire grate in the first-floor control room and clearance and recording of the ground-floor room. Other external works included repair of the adjacent timber platform and replacement of the timber access stairs. Although a relatively late addition to the railway (soon after 1904), the Brakeman's Hut is an integral part of the nationally significant monument, illustrating the operation of the Springwell Incline. Repair works have brought the building back into a state of good repair and contribute greatly to appreciation of the site by visitors.

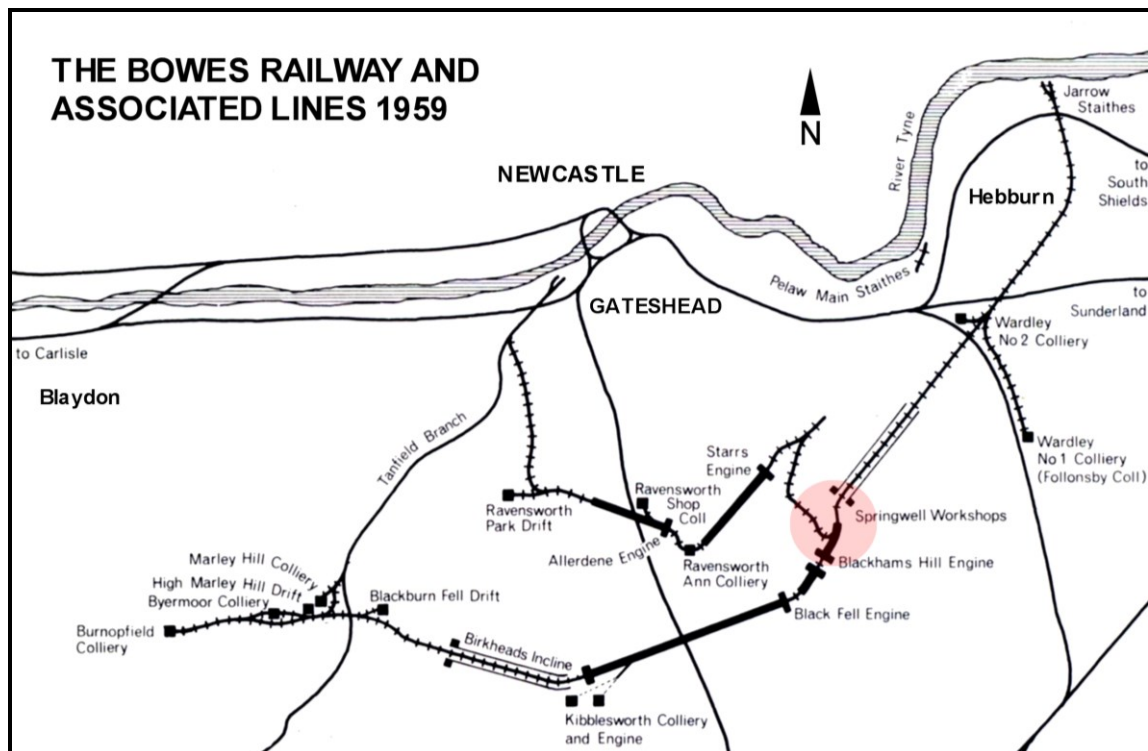


Figure 1: The Bowes Railway in 1959 as shown schematically in Mountford (1976, 38). Springwell Yard lies within the pink circle.

1.2 Scheduled Monument Application and Consent

The Brakeman's Hut forms one part of Scheduled Monument No.SMTW7 (HA 1003723). Application for scheduled monument consent (SMC) to carry out the consolidation of the Brakeman's Hut was made to Historic England on 11th July 2018 by Doonan Architects Ltd acting as agents for BRC. This submission included: existing and proposed plans, elevations (rectified photographs) and sections of the building and adjacent areas (DA J1207:1); specification document by DA; preliminaries document by DA; statement of significance and condition report by DA.

SMC was received on August 3rd 2018 (see Appendix 1). As per conditions within the consent, a written scheme of investigation (WSI) for appropriate archaeological monitoring and reporting was prepared by Alan Williams Archaeology (Appendix 2).

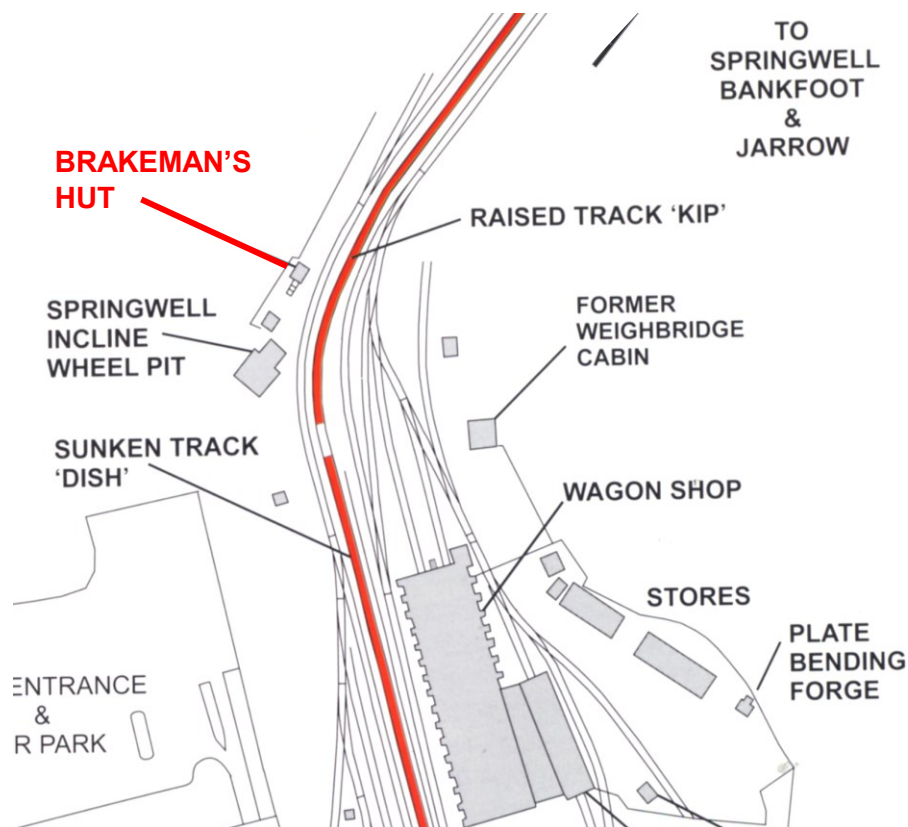


Figure 2: Springwell Yard showing the main buildings including the Brakeman's Hut. North to top. Not to scale (from Elliott 2000).

2. HISTORICAL BACKGROUND

2.1 The Railway

The Bowes Railway was one of the major colliery railways of North East England. The oldest part of the line, at Springwell, was brought into use in 1826, designed by George Stephenson and initially financed by the Grand Allies (the Wortley, Ord, Liddell and Bowes families). By 1860, the line was 15 miles long, served nine collieries, had seven rope-worked inclines (these a particular feature of colliery railways in County Durham) and three locomotive-worked sections, all to transport coal as cheaply as possible to Jarrow staithes on the south bank of the River Tyne for shipping by collier to the South East of England or elsewhere as required. The most remote colliery from the staithes was for a time at Pontop (the line, until 1932, was called the Pontop and Jarrow Railway).

The main proponent for the expansion of this railway and its collieries and associated coking works was the industrialist Charles Mark Palmer, who was brought in as managing partner of the line from 1846 by the existing partners, John Bowes, William Hutt, Lady Strathmore (the mother of John Bowes), and Nicholas Wood (also the firm's engineer). The concern was made a private limited company in 1886, styled John Bowes and Partners Ltd.

For about 150 years, the line remained largely unaltered apart from upgrades, extensions and the closure of some branch lines. The end came in 1974 with the closure of Kibblesworth Colliery to the south-west of Springwell, although the stretch from Wardley to Jarrow remained in some use for a number of years subsequent to this.

Given the great historic importance of the coal industry, nationally and to the North East, and the technological interest of the line, the Springwell colliery buildings and workshops and the Blackham's Hill hauler house and its east and west rope-worked inclines are now scheduled monuments, the inclines still in working order. Beyond these core areas (and the retained Black Fell Engine House south of Blackham Hill west incline) the trackbed has been turned into a footpath.

2.2 Springwell Yard and Incline

Springwell Yard, the site of the former Springwell Colliery which opened in 1826, lies between the Springwell and Blackham's Hill east inclines. Many of the old colliery

buildings survive and it is, since the commercial closure of the line in 1974, the core and headquarters of the preserved and protected sections of the Bowes Railway, managed and run today by the Bowes Railway Company Ltd.

Springwell Incline runs down towards the River Tyne from Springwell bank head at the northern end of the old colliery yard. It is one and a quarter miles long to bank foot with an average gradient of 1:24. This was a gravity-powered incline; full wagons, in 'sets' ran down the slope, the attached hauler-rope pulling up a set of empty - much lighter - wagons from the bottom of the incline. Speeds reached up to 30mph and braking was controlled from the tall brick-built brake cabin (referred to in this document as the Brakeman's Hut) on the west side of the track at bank head. The prominent feature of the false crest or 'kip' at bank head, a substantial stone built structure, was there to allow empty wagon sets to come to a rest and for the attached rope to loosen and be released (the wagons would then be re-hitched and slowly run to the 'dish' or 'hole', an excavated concavity in the line within the yard, where they were readied for the powered Blackham's Hill east incline). To allow empty and full wagons to pass and manoeuvre on the Springwell incline, the track is variously of three, two or one roads wide.

2.3 The Brakeman's Hut

Function

The building overlooks the yard and was the control point for braking on the Springwell Incline to the north. It was linked to the hauler wheel to the south (see figure 2: this building identified as 'Springwell Incline Wheel Pit') by links and chains and formerly held all of the brakeman's manual controls (now removed). A lever arm connecting the wheel to the control cabin above survives set in the planked ground floor.

The Building

It is a two-storey brick structure, c.3m x 3.3m and 4.6m to eaves height, topped with a hipped (pyramidal) Welsh slate roof with a brick chimney set in the south-west corner. There is one room per floor. The ground floor was accessed by a door in the north wall and lit by a window in the south. By 2018, both were blocked and the room inaccessible. Parts of the braking lever controls survive set into the planked floor. The first-floor control room is accessed - via an external timber stair and platform - through a door in the south wall. Large observation windows, boarded over when

inspected in early 2018 took up much of the north and east faces at this level. Internally, the roof structure is exposed, the walls plastered with a small fireplace occupying the south-west angle. The remains of a control dial sit in the north-east corner of the room.

3. REPAIR WORKS

By 2017, the building was in a poor state of repair. Works required were extensive as set out in the specification of works document prepared by DA as part of the SMC submission. They included reslating, extensive re-pointing, insertion and repair of damaged brickwork, repair of the external timber platform and addition of new timber access steps as well as re-instatement of shuttered windows and replacement of access door and rainwater goods. Internal works included re-plastering and replacement of the fire grate on the first floor, opening up of the ground-floor door and the installation of a new door leaf.

4. MONITORING WORKS

Monitoring works included initial recording of the hut as it existed in 2018, the first floor cabin as completed and of the ground floor as opened out and cleared in December 2018. A final photographic record of the hut was made in June 2019. The results are as shown in plates 1 to 26 in this report. An OASIS record has been created: OASIS ID - alanwill1-359495.

5. PUBLISHED MATERIAL

Ayris, I and Linsley, SM 1994 *A guide to the industrial archaeology of Tyne and Wear* Tyne and Wear Specialist Conservation Team

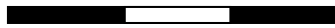
Elliott, J 2000 *A guide to the Bowes Railway* Chilton Ironworks

Mountford, C E 1976 *The Bowes Railway* Tyne and Wear Industrial Monuments Trust

Mountford, C E undated *Bowes Railway Centre* The Bowes Railway Co. Ltd.



1



2



3



4

Figure 3: Rectified photographic elevations of the Brakeman's Hut prior to restoration in 2018. 1. south-east; 2. south-west; 3. north-west; 4. north-east. DA. Scale is 3m long.

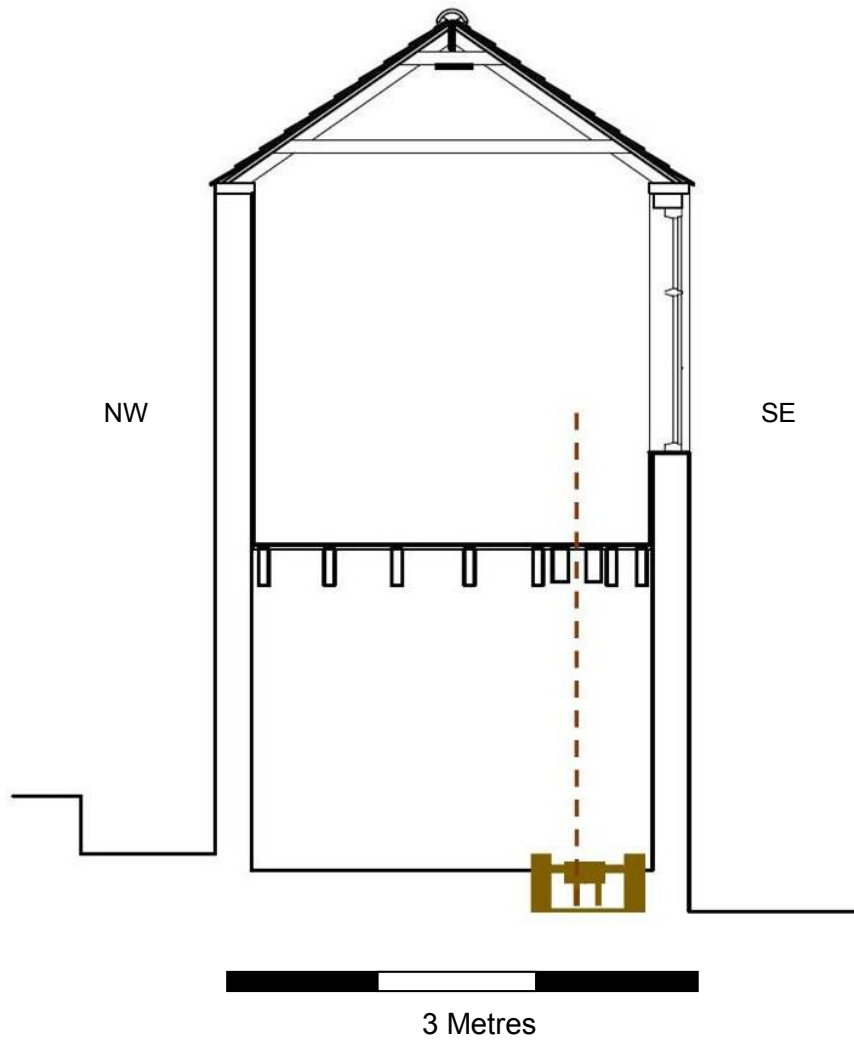


Figure 4: NW-SE section through Brakeman's Hut. Braking lever in brown and indicative line of connecting arm shown as hatched line. Not to scale. Outline drawing by DA. See figure 5 for location.

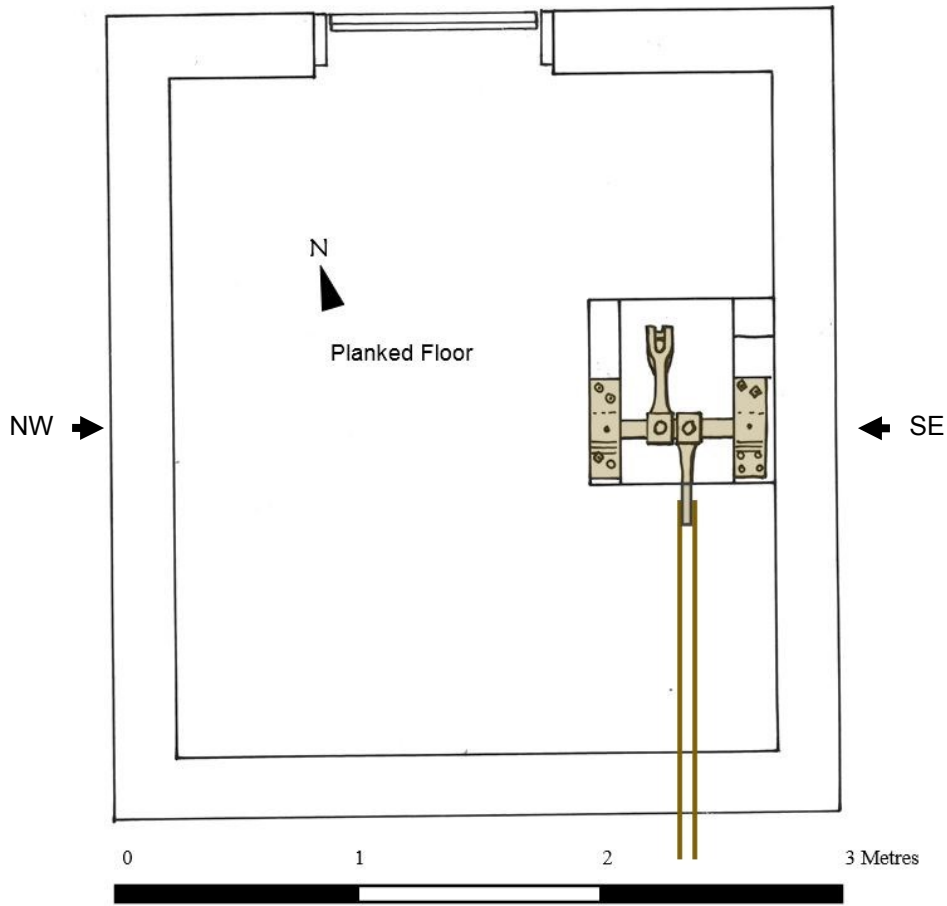


Figure 5: Ground-floor plan of the Brakeman's Hut showing brake transmission lever (formerly connected to wheel pit to the south) Location of figure 4 indicated.

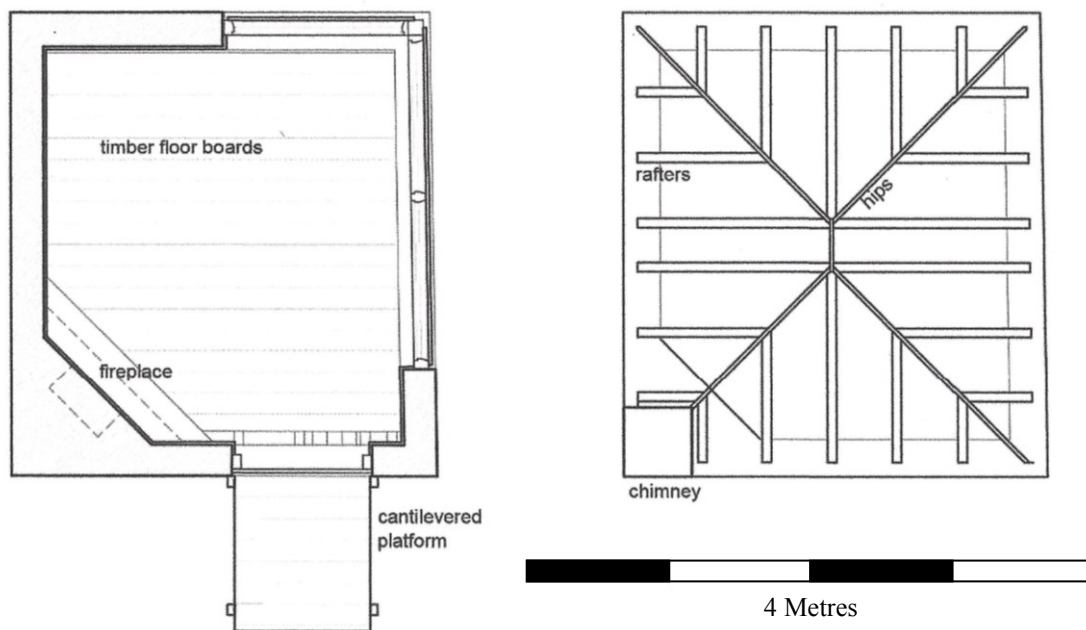


Figure 6: First floor (left) and roof timbers of the Brakeman's Hut (drawing by DA).

General Photographs Prior to Conservation Works



Plate 1: Brakeman's Hut from the north (Drone photograph by Doonan Architects 2018).



Plate 2: Brakeman's Hut from the south (Drone photograph by Doonan Architects 2018).

Before and After Conservation Works: First Floor



Plate 3: Looking south. First floor. Door in south-west wall before conservation.



Plate 4: First floor. Looking south. Door in south-west wall after conservation.



Plate 5: First floor. Looking north. Blocked windows before conservation.



Plate 6: First floor. Looking north-east. Windows following conservation.



Plate 7: *First floor. Looking south-west. Hearth in south-west angle before conservation.*



Plate 8: *Hearth in south-west angle following conservation.*

Before and After: Ground Floor



Plate 9: Ground-floor. Looking north. Blocked door in north wall of ground floor with obscured brake lever to the right.



Plate 10: North-east wall after removal of door blocking and fitting of new door leaf.



Plate 11: Ground-floor, looking north. Brake transmission lever in floor obscured by rubbish and building debris prior to clearance.



Plate 12: Ground-floor. Brake transmission lever cleared.



Plate 13: Looking south. Ground floor, south wall.



Plate 14: Looking south-east. Ground floor, east wall and brake-transmission lever.



Plate 15: Looking north-east. Ground floor. Brake transmission lever, east wall and part of north wall.



Plate 16: Looking north. Ground floor. North wall and restored doorway.



Plate 17: Looking east. Ground floor, east wall.



Plate 18: Looking south-west. Ground floor. Base of first-floor fireplace in ground-floor ceiling.

External Views During Conservation Works



Plate 19: Looking north. South wall showing blocked window.



Plate 20: Looking south-west. Windows and door restored.



Plate 21: Looking north. External stair replaced.

External Views Following Conservation Works



Plate 22: Looking north at new steps and door.



Plate 23: Looking north-west at platform, steps and windows.



Plate 24: Looking west at platform, newsteps and window.



Plate 25: Looking south at new door and window.



Plate 26: Looking north-east at new steps and door.

The Brakeman's Hut in the 1980s and 1990s (Bowes Railway Collection)



Plate 27: Brakeman's Hut in 1992.



Plate 28: Brakeman's Hut in 1990.



Plate 29: Brakeman's Hut in 1989.

APPENDIX 1: SMC DOCUMENT



Historic England

NORTH EAST OFFICE

Mr Tristan Spicer
Doonan Architects
16 Hallstile Bank
Hexham
Northumberland
NE46 3PQ

Direct Dial: 0161 242 1402

Our ref: S00198001

3 August 2018

Dear Mr Spicer

**Ancient Monuments and Archaeological Areas Act 1979 (as amended); Section 2
control of works
Application for Scheduled Monument Consent**

**BOWES RAILWAY , SPRINGWELL ROAD, GATESHEAD, NE9 7QL
Scheduled Monument No: SM TW 7, HA 1003723
Our ref: S00198001
Application on behalf of Bowes Railway Company**

1. I am directed by the Secretary of State for Digital, Culture, Media & Sport to advise you of the decision regarding your application for Scheduled Monument Consent received 11 July 2018 in respect of proposed works at the above scheduled monument concerning concerning repair of the Brakeman's Hut including reslating, repointing brickwork, rebuilding small areas of brickwork, repair of damaged bricks, reinstatement of windows and doors, replastering the interior, reinstatement of fire grate, repair of external platform, reinstating external timber staircase, decoration of the joinery, introduction of rainwater goods and associated drainage with soakaway. The works were detailed in the following documentation submitted by you:

- SMC application
- drawings of existing and proposed plans, elevations and sections
- specification for repairs, reinstatements and new insertions
- preliminaries including need for archaeological watching brief
- statement of significance
- condition report

2. In accordance with paragraph 3(2) of Schedule 1 to the 1979 Act, the Secretary of State is obliged to afford you, and any other person to whom it appears to the Secretary of State expedient to afford it, an opportunity of appearing before and being heard by a person appointed for that purpose. This opportunity was offered to you by Historic England and you have declined it.



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Historic England is subject to both the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Any information held by the organisation can be requested for release under this legislation. Historic England will use the information provided by you to evaluate your application for Scheduled Monument Consent. Information contained in this application and any information obtained from other sources will be retained in all cases in hard copy form and/or on computer for administration purposes and future consideration where applicable.



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3. The Secretary of State is also required by the Act to consult with the Historic Buildings and Monuments Commission for England (Historic England) before deciding whether or not to grant Scheduled Monument Consent. Historic England considers the effect of the proposed works upon the monument to be beneficial for the preservation of the monument and unlikely to damage archaeological deposits; there is no requirement for archaeological recording.

I can confirm that the Secretary of State is agreeable for the works to proceed providing the conditions set out below are adhered to, and that accordingly Scheduled Monument Consent is hereby granted under section 2 of the 1979 Act for the works described in paragraph 1 above, subject to the following conditions:

- a) The works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by Historic England. At least 4 weeks' notice (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Sarah Howard, Inspector of Ancient Monuments, tel 0161 242 1402, email sarah.howard@HistoricEngland.org.uk in order that an Historic England representative can inspect and advise on the works and their effect in compliance with this consent.
- b) The specification of work for which consent is granted shall be executed in full.
- c) Photographs and survey drawings to a scale and quality to be agreed in writing shall be prepared of the monument after completion of the works and a set of the digital prints and drawings shall be sent to Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed).
- d) No ground disturbance or building works shall take place until the applicant has confirmed in writing the commissioning of a programme of archaeological monitoring during the development in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by Historic England.
- e) Original material shall be reused wherever possible as detailed in the specification.
- g) Any replacement material shall be of a type, texture and colour which matches the original material as detailed in the specification.
- h) Any replacement brick/stone shall be of a suitable size, and laid in courses to



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match the original courses and joint widths as detailed in the specification.

- (i) All fixings shall be made into the joints and not into the brick/stone.
- (j) All pointing and mortar work shall be in a mixture and finish to match the existing in composition, colour, texture and style as detailed in the specification.
- (k) Care shall be taken that fittings do not rust so as to stain the brickwork/masonry.
- (l) Any vegetation growing in the masonry shall be cut off level with the surface of the stonework and the roots poisoned/carefully removed.
- (m) All those involved in the implementation of the works granted by this consent must be informed by the owner, occupier and/or developer that the land is designated as a scheduled monument under the Ancient Monuments and Archaeological Areas Act 1979 (as amended); the extent of the scheduled monument as set out in both the scheduled monument description and map; and that the implications of this designation include the requirement to obtain Scheduled Monument Consent for any works to a scheduled monument from the Secretary of State prior to them being undertaken.
- (n) Equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument or ground disturbance other than that which is expressly authorised in this consent.
- (o) Levelling shall be effected by filling holes and depressions with material imported from outside the scheduled area.
- (p) A report of the archaeological recording shall be sent to Tyne and Wear Historic Environment Record, Newcastle City Council, Planning, Civic Centre, Newcastle upon Tyne, Tyne and Wear, NE1 8QH and Sarah Howard, Inspector of Ancient Monuments, Historic England, Bessie Surtees House, 41-44 Sandhill, Newcastle upon Tyne, NE1 3JF, within 3 months (or such other period as may be mutually agreed) of completion of the archaeological monitoring. Within 5 years of completion of the excavation a full site archive (and assessment) shall be prepared and deposited in the Tyne and Wear Historic Environment Record and a final report of the excavation (and analysis) shall be prepared and made available for publication in a vehicle acceptable to the Secretary of State advised by Historic England. The National Monuments Record shall also be invited to receive copies of both archive and report.
- (q) The contractor shall complete and submit an entry on OASIS (On-line Access to



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the Index of Archaeological Investigations - <http://oasis.ac.uk/england/>) prior to project completion, and shall deposit any digital project report with the Archaeology Data Service, via the OASIS form, upon completion.

4. By virtue of section 4 of the 1979 Act, if no works to which this consent relates are executed or started within the period of five years beginning with the date on which this consent was granted (being the date of this letter), this consent shall cease to have effect at the end of that period (unless a shorter time period is set by a specific condition above).
5. This letter does not convey any approval or consent required under any enactment, bye law, order or regulation other than section 2 of the Ancient Monuments and Archaeological Areas Act 1979.
6. Your attention is drawn to the provisions of section 55 of the 1979 Act under which any person who is aggrieved by the decision given in this letter may challenge its validity by an application made to the High Court within six weeks from the date when the decision is given. The grounds upon which an application may be made to the Court are (1) that the decision is not within the powers of the Act (that is, the Secretary of State has exceeded the relevant powers) or (2) that any of the relevant requirements have not been complied with and the applicant's interests have been substantially prejudiced by the failure to comply. The "relevant requirements" are defined in section 55 of the 1979 Act: they are the requirements of that Act and the Tribunals and Inquiries Act 1971 and the requirements of any regulations or rules made under those Acts.

Yours sincerely

Sarah Howard

Inspector of Ancient Monuments

E-mail: sarah.howard@HistoricEngland.org.uk

For and on behalf of the Secretary of State for Digital, Culture, Media and Sport

cc: Claire McRae, Tyne and Wear Archaeology Service, Newcastle City Council, Planning, Civic Centre, Newcastle upon Tyne, NE1 8QH.



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APPENDIX 2: WRITTEN SCHEME OF INVESTIGATION (AWA)

BRAKEMAN'S HUT

Bowes Railway, Springwell Yard, Tyne and Wear

WRITTEN SCHEME OF INVESTIGATION FOR
ARCHAEOLOGICAL MONITORING DURING
CONSOLIDATION

September 2018

SCHEDULED MONUMENT No: SM TW7 (HA 1003723)

SMC Ref: S00198001

Prepared for Doonan Architects on behalf of Bowes Railway Company Ltd. by

Alan Williams Archaeology, 216 Wingrove Road
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CONTENTS

1. PROJECT BACKGROUND
2. HISTORICAL BACKGROUND
3. REPAIR WORKS
4. ARCHAEOLOGICAL REQUIREMENT
5. ARCHAEOLOGICAL WATCHING BRIEF
6. ARCHIVE REPORT AND OASIS
7. HEALTH AND SAFETY
8. SOURCES

APPENDIX 1: SMC Document

FIGURES

Figure 1: The Bowes Railway in 1959 as shown schematically in Mountford (1976, 38). Springwell Yard lies within the pink circle.

Figure 2: Springwell Yard showing the main buildings including the Brakeman's Hut. North to top. Not to scale (from Elliott 2000).

1. PROJECT BACKGROUND

1.1 Bowes Railway Company Ltd. (BRC) are to carry out conservation works subject to scheduled monument consent at Springwell Yard - a nodal point of the historic rope-worked line and the company's headquarters - supported by the Heritage Lottery Fund. Focus of these works is the Brakeman's Hut (Brake Cabin), a tall brick-built structure at the northern end of the yard which controlled movement along Springwell Incline falling to the north. The building is currently in a dilapidated condition. Works (Designed and managed by Doonan Architects (DA) of Hexham) will be extensive and include reslating, re-pointing, insertion and repair of damaged brickwork and re-instatement of presently blocked windows, doors and rainwater goods. Internal works will include re-plastering and replacement of the fire grate. Other external works will include repair of adjacent timber platform and addition of new timber access stairs and possibly, a new drainage soakaway. Although a relatively late addition to the railway (soon after 1904) it is an integral part of the nationally significant monument, illustrating the operation of the Springwell Incline. Repair works will bring the building back into a state of good repair and contribute greatly to appreciation of the site by visitors.

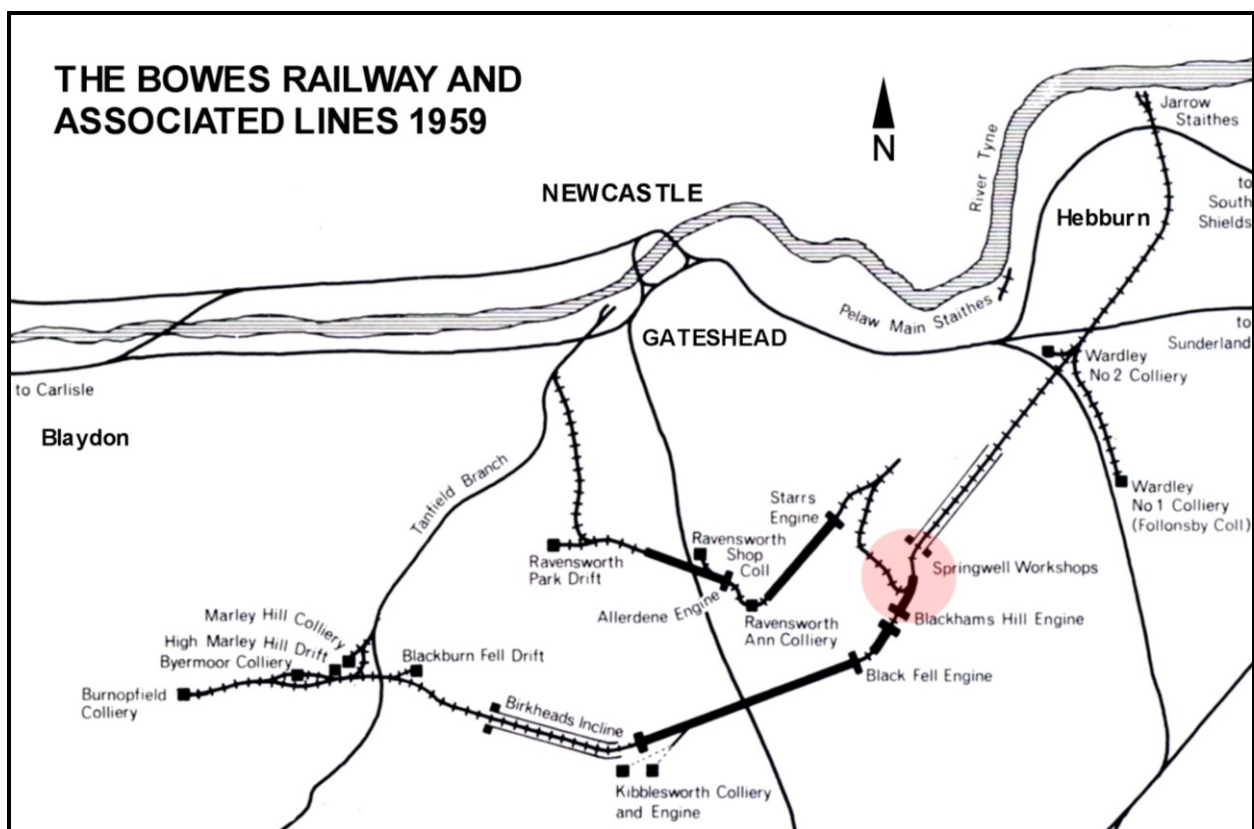


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SMC was received on August 3rd 2018 (see Appendix 1). This included a requirement that a written scheme of investigation (WSI) for the appropriate archaeological monitoring of these works and for the preparation of a report providing the results of the works once completed would be supplied to Historic England North East as advisors to the Secretary of State. This document forms the required WSI and has been prepared by Alan Williams Archaeology.

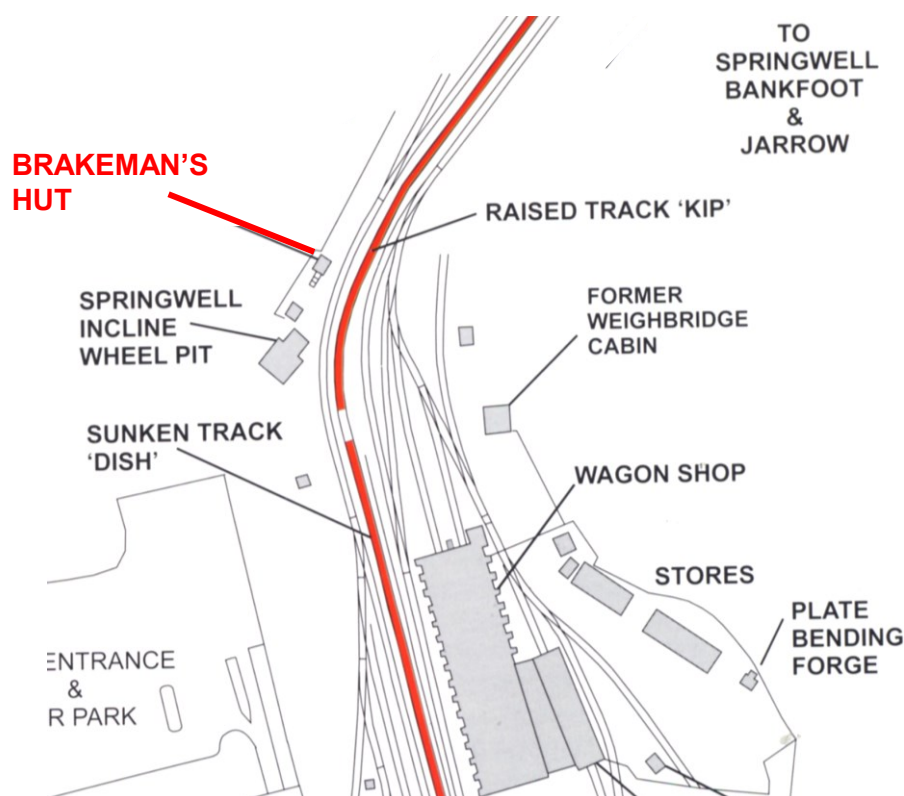


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2. HISTORICAL BACKGROUND

2.1 The Railway

The Bowes Railway was one of the major colliery railways of North East England. The oldest part of the line, at Springwell, was brought into use in 1826 and was designed by George Stephenson and initially financed by the Grand Allies (the Wortley, Ord, Liddell and Bowes families). By 1860, the line was 15 miles long, served nine collieries, had seven rope-worked inclines (these a particular feature of colliery railways in County Durham) and three locomotive-worked sections, all to transport coal as cheaply as possible to Jarrow staithes on the south bank of the River Tyne for shipping by collier to the South East of England or elsewhere as required. The most remote colliery from the staithes was for a time at Pontop (the line, until 1932, was called the Pontop and Jarrow Railway).

The main proponent for the expansion of this railway and its collieries and associated coking works was the industrialist Charles Mark Palmer, who was brought in as managing partner of the line from 1846 by the remaining partners, John Bowes, William Hutt, Lady Strathmore (the mother of John Bowes), and Nicholas Wood (also the firm's engineer). The concern was made a private limited company in 1886, styled John Bowes and Partners Ltd.

For about 150 years, the line remained largely unaltered apart from upgrades, extensions and the closure of some branch lines. The end came in 1974 with the closure of Kibblesworth Colliery to the south-west of Springwell, although the stretch from Wardley to Jarrow remained in some use for a number of years subsequent to this.

Given the great historic importance of the coal industry, nationally and to the North East, and the technological interest of the line, the Springwell colliery buildings and workshops and the Blackham's Hill hauler house and its east and west rope-worked inclines are now scheduled monuments, the inclines still in working order. Beyond these core areas (and the retained Black Fell engine house south of Blackham Hill west incline) the trackbed has been turned into a footpath.

2.2 Springwell Yard and Incline

Springwell Yard, the site of the former Springwell Colliery which opened in 1826, lies between the Springwell and Blackham's Hill east inclines. Many of the old colliery buildings survive and it is, since the commercial closure of the line in 1974, the core and headquarters of the preserved and protected sections of the Bowes Railway, managed and run today by the Bowes Railway Company Ltd.

Springwell Incline runs down towards the River Tyne from Springwell bank head at the northern end of the old colliery yard. It is one and a quarter miles long to bank foot with an average gradient of 1:24. This was a gravity-powered incline; full wagons, in 'sets' ran down the slope, the attached hauler-rope pulling up a set of empty - much lighter - wagons from the bottom of the incline. Speeds reached up to 30mph and braking was controlled from the tall brick-built brake cabin (referred to in this document as the Brakeman's Hut) on the west side of the track at bank head. The prominent feature of the false crest or 'kip' at bank head, a substantial stone built structure, was there to allow empty wagon sets to come to a rest and for the attached rope to loosen and be released (the wagons would then be re-hitched and slowly run to the 'dish' or 'hole', an excavated concavity in the line within the yard, where they were readied for the powered Blackham's Hill east incline). To allow empty and full wagons to pass and manoeuvre on the Springwell incline, the track is variously of three, two or one roads wide.

2.3 The Brakeman's Hut

Function

As described above, the building overlooks the yard and was the control point for braking on the Springwell Incline to the north. It was linked to the hauler wheel to the south (see figure 2: Building identified as 'Springwell Incline Wheel Pit') by links and chains and formerly held all manual controls (now removed).

The Building

It is a two storey, brick structure, c.3m x 3.3m and 4.6m to eaves height, topped with a hipped (pyramidal) Welsh slate roof with a brick chimney set in the south-west corner. There is one room per floor. The ground floor was accessed by a door in the north wall and lit by a window in the south. Both are now blocked and the room is presently inaccessible although possible to view through gaps. There is evidence for the former locations of the braking levers/controls in the floor. The first floor room is accessed via a timber platform (formerly reached by a timber stair) through a door in the south wall. Large windows took up much of the north and east faces at this level (now boarded over). Internally, the roof structure is exposed, the walls plastered and a small chimney breast occupies the south-west angle. The remains of a control dial sit in the north-east corner of the room.

3. REPAIR WORKS

As set out in the specification of works document, the building is currently in a poor state of repair although basically sound. Repair and conservation works to be carried out are extensive and are set out in the specification of works document prepared by DA as part of the SMC submission. The works will include include reslating, re-pointing, insertion and repair

of damaged brickwork and re-instatement of presently blocked windows, doors and rainwater goods. Internal works will include re-plastering and replacement of the fire grate. Other external works will include repair of adjacent timber platform and addition of new timber access stairs and, possibly, a new drainage soakaway.

4. ARCHAEOLOGICAL REQUIREMENT

4.1 As per the terms of the SMC, an intermittent archaeological watching brief will be put in place to monitor the conservation works and make appropriate record of these works and the building pre and post repairs.

- A digital photographic record of the building 'as existing' including rectified photographs of all exteriors, has already been prepared by Tristan Spicer of DA.
- A digital photographic record of newly exposed areas (the ground floor room) will be prepared by the monitoring archaeologist and appropriate drawn record made of the locations of fixtures and fittings and of any significant detritus remaining within the room.
- A digital photographic record of the building will be prepared once works have been completed.

4.2 Should groundworks for the drainage soakaway be carried out (presently uncertain) these will be monitored by the archaeologist to the terms set out below.

5. ARCHAEOLOGICAL WATCHING BRIEF

5.1. A record of all features exposed/excavated during the monitoring will be produced using an appropriate recording system. All features will have a written and drawn record. Measurements will be expressed in metres. Plans and sections will be produced at 1:10 or 1:20 scale using repeatable control points.

A digital camera will be used to record all features. The photographic archive will be deposited with Archaeological Data Service (ADS) as a digital archive.

5.2 Pottery and metalwork will be retained and located by context. Loose architectural fragments will be treated as small finds and recorded individually.

5.3 Finds of significance will be deposited with the North East Museum (Hancock) Newcastle upon Tyne.

5.4 In the event of disturbance of archaeological remains of national significance during excavation of foundation, work will cease and the Inspector for Historic England (Lee McFarlane) will be notified. An assessment will be made of the importance of the remains and provision for their recording or preservation in situ put in place as appropriate.

5.5 Specialist Analyses

Although unlikely on the current project, the potential requirement for specialist analyses is an unavoidable risk in all archaeological work. The scientific investigation of any features/deposits which are considered significant will be undertaken as a non-negotiable part of this programme.

5.6 On completion of the fieldwork, any samples will be processed and artefacts cleaned, conserved, identified, labelled and packaged. An appropriate programme of analysis and publication of the results will be completed if no further archaeological investigations are to be carried out.

6. ARCHIVE REPORT AND OASIS

6.1 The digital archive (photographs) will be retained within the archive/report.

6.2 If appropriate, arrangements will be made to publish the results of the investigations through a local or national journal.

6.3 The site archive will be prepared to the standards specified in the Management of Research Projects in the Historic Environment (MoRPHE), English Heritage, 2006. Archive preparation and deposition will be undertaken with reference to the repository guidelines and standards, and where necessary the Museums and Galleries Commission (MGC), United Kingdom Institute for Conservation (UKIC) standards and guidelines.

6.4 An illustrated report will be supplied within 3 months (or shorter period by mutual agreement) on completion of the fieldwork. Copies of the report will be sent to the client,

Historic England (one bound and one digital copy in Word or PDF format) and the County Historic Environment Record. The report will contain:

- Non-technical summary
- Introductory statement
- Aims and objectives
- Methodology
- Results
- Any further recommendations
- Index and location of archive
- References and bibliography
- Copy of project design (WSI)

6.5 AWA supports the Online Access to Index of Archaeological Investigations (OASIS). The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The online OASIS form will be completed at <http://ads.ahds.ac.uk/project/oasis/>.

7. HEALTH AND SAFETY

7.1 AWA will comply with the Health and Safety at Work Act and subsequent additions and amendments.

7.2 If the Provisions of Construction, Design and Management (CDM) Regulations 2007 are appropriate the employer will appoint a CDM Coordinator who will prepare a Health and Safety Plan which will be made available to the archaeological contractor prior to the commencement of work.

8. SOURCES

Historic England List Entry Summary: List Entry No. HA 1003723.

Published Material

Ayris, I and Linsley, SM 1994 *A guide to the industrial archaeology of Tyne and Wear* Tyne and Wear Specialist Conservation Team

Elliott, J 2000 *A guide to the Bowes Railway* Chilton Ironworks

Mountford, C E 1976 *The Bowes Railway* Tyne and Wear Industrial Monuments Trust

Mountford, C E undated *Bowes Railway Centre* The Bowes Railway Co. Ltd.

APPENDIX 1: SMC DOCUMENT (Moved to Text of Monitoring Report as Appendix 1)