



**ARCHAEOLOGICAL RECORDING AT OXYGRAINS OLD
BRIDGE, RISHWORTH COMMON, RIPONDEN, WEST
YORKSHIRE**

ARCHAEOLOGICAL SURVEY REPORT

June 2011



ArcHeritage is a trading name of York Archaeological Trust. The Trust undertakes a wide range of urban and rural archaeological consultancies, surveys, evaluations, assessments and excavations for commercial, academic and charitable clients. We manage projects, provide professional advice and fieldwork to ensure a high quality, cost effective archaeological and heritage service. Our staff have a considerable depth and variety of professional experience and an international reputation for research, development and maximising the public, educational and commercial benefits of archaeology. Based in York, Sheffield, Nottingham and Glasgow the Trust's services are available throughout Britain and beyond.



ArcHeritage, Campo House, 54 Campo Lane, Sheffield S1 2EG

Phone: +44 (0)114 2728884 Fax: +44 (0)114 3279793

archeritage@yorkat.co.uk www.archeritage.co.uk

© 2013 York Archaeological Trust for Excavation and Research Limited
Registered Office: 47 Aldwark, York YO1 7BX
A Company Limited by Guarantee. Registered in England No. 1430801
A registered Charity in England & Wales (No. 509060) and Scotland (No. SCO42846)

CONTENTS

NON-TECHNICAL SUMMARY	III
KEY PROJECT INFORMATION	III
1 INTRODUCTION	1
2 SITE LOCATION	1
3 SCOPE OF THE WORKS	1
4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	1
5 SURVEY RESULTS	6
5.1 Oxygrains Old Bridge.....	6
5.2 Adjacent bridge stone	7
5.3 Associated routeways	7
6 DISCUSSION	8
7 BIBLIOGRAPHY	9
8 FIGURES	11
9 PLATES	12
APPENDIX 1 – PROJECT BRIEF	17

Figures

- Figure 1: Site location plan
- Figure 2: Topographical survey
- Figure 3: Plan of bridge
- Figure 4: Elevations of bridge
- Figure 5: Associated packhorse routes

Plates

Cover View of bridge

Plate 1: View of the bridge, looking northeast	12
Plate 2: View of the bridge, looking southwest	12
Plate 3: Lewis-type hole to underside of bridge	13
Plate 4: Rough upper surface of bridge, looking north.....	13
Plate 5: Inner face of north side abutment, looking north	14
Plate 6: North side of the bridge, showing dry walling to side of access ramp, looking southwest.....	14
Plate 7: West projection of dry walling to the north access ramp of the bridge, looking northeast	15
Plate 8: Pronounced hollow way to east of bridge, just downslope from existing road, looking west.....	15
Plate 9: Slight hollow way to west of bridge as track ascends towards course of existing road	16

NON-TECHNICAL SUMMARY

ArcHeritage were commissioned by Pearce Bottomley Architects to undertake the archaeological component of a Conservation Management Plan for Oxygrains Old Bridge, a Scheduled Ancient Monument that appears to have been built at some point between the 16th and 18th centuries. The archaeological input included desk-based research and a Level 3 survey of the structure. Oxygrains Old Bridge is a single arched span stone packhorse bridge, c.2.6m wide, and spanning a gap of 5.3m. The arch springs from shaped skewbacks which support gritstone voussoirs with a smaller central keystone. The underside of the voussoirs are well-dressed, with hand tool-marks clearly visible, whilst the top of the arch is very roughly finished and any original surfacing has long since gone. There is no parapet, and no evidence to indicate that it ever had one. Routeways to the east and west of the bridge identified in the survey may have been associated with the bridge.

KEY PROJECT INFORMATION

Project Name	Oxygrains Old Bridge
ArcHeritage Project No.	5494
Report status	Final
Type of Project	Archaeological survey
Client	Pearce Bottomley Architects
NGR	SE 0041 1584
OASIS Identifier	archerit1-104145
Author	Mark Johnson and Mark Stenton
Illustrations	Marcus Abbott
Editor	Rowan May
Date	28/06/2014

Copyright Declaration:

ArcHeritage give permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although ArcHeritage retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

Disclaimer:

This Report has been prepared solely for the person/party which commissioned it and for the specifically titled project or named part thereof referred to in the Report. The Report should not be relied upon or used for any other project by the commissioning person/party without first obtaining independent verification as to its suitability for such other project, and obtaining the prior written approval of York Archaeological Trust for Excavation and Research Limited ("YAT") (trading as ArcHeritage). YAT accepts no responsibility or liability for the consequences of this Report being relied upon or used for any purpose other than the purpose for which it was specifically commissioned. Nobody is entitled to rely upon this Report other than the person/party which commissioned it. YAT accepts no responsibility or liability for any use of or reliance upon this Report by anybody other than the commissioning person/party.

1 INTRODUCTION

This report presents the results of an archaeological desk-based assessment and Level 3 survey of Oxygrains Old Bridge, Ripponden, West Yorkshire. The work was commissioned by Pearce Bottomley Architects, to contribute to a Conservation Management Plan for the bridge, which is a Scheduled Ancient Monument (SAM 1005803/WY 142).

2 SITE LOCATION

Oxygrains Old Bridge is located at Rishworth Common, Ripponden parish, West Yorkshire (NGR SE 0041 1584), in a central upland area of the Pennines (Figure 1). The town of Ripponden is situated around 3km to the north-east of the site. The A672 road runs immediately to the north of the bridge on more elevated ground. The bridge itself lies within a small area of fairly level ground at the base of a steep-sided, narrow, north-west to south-east aligned valley known as Oxygrains, very close to its confluence with a larger south-west to north-east aligned steep-sided valley known as Spa Clough. The solid geology of the immediate locale is primarily of Lower Kinderscout Grit with areas of Millstone Grit on the higher sides of Oxygrains. Superficial deposits are comprised of alluvium at the base of Oxygrains and Spa Clough whilst peat is present on the higher ground to the south and east.

3 SCOPE OF THE WORKS

ArcHeritage carried out a detailed metric survey, description, photographic recording, and consideration of the landscape setting of Oxygrains Old Bridge. This work followed on from a desk-based assessment of the historic documentary, cartographic and photographic evidence for the bridge.

The fieldwork and desk-based research followed the methodology of *Appendix 2, 'Brief for Archaeological recording of Oxygrains Bridge'* within the *'Project Brief for Management plan for Oxygrains Bridge, Rishworth Common, Ripponden (SE 0041 1584)'* prepared by Christine Hopwood, Historic Environment Advisor, Natural England, on behalf of Yorkshire Water.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Oxygrains Old Bridge comprises a single-span stone bridge, approximately 2m in width, with no parapet. The bridge spans Oxygrains Beck and contains a millstone grit ashlar arch, with one or two of the stones stretching the width of the bridge. The arch springs from shaped skewbacks which support 22 voussoirs, with a smaller central keystone. The top of the arch is very roughly finished; it is possible that this was the original bedding for a series of causeway stones that have been removed. Two courses of squared rubble stone are present on either side of the beck, along with embankments formed of roughly-dressed rubble stones and a grassed path. A 1928 photograph of the bridge indicates that the central arch has subsequently been reinforced with modern mortar, while several large stones that abutted the north-west haunch of the arch have been removed since that date (Crump 1928).

Oxygrains Old Bridge is a Scheduled Ancient Monument (SAM no.WY142) that appears to have been constructed during the 17th or early 18th centuries to carry cloth via the Yorkshire to Lancashire packhorse route over Oxygrains Beck. W.B. Crump's 1928 map of 'ancient highways' in

the parish of Halifax marked a 'minor path' that led south-east from the bridge for approximately 6km before it veered north-east towards Huddersfield (Crump 1928, 59); however, Crump identified the principal route as a track that ran south-west from Rishworth and which could still 'be found in its primitive state, a trodden footpath amongst the rough moorland vegetation, running parallel to the main road' (Crump 1928, 68). Crump stated that Oxygrains Old Bridge was 'an ancient and abandoned pack-horse bridge' which, when 'taken in conjunction with the path approaching it...furnished a perfect example of a 17th-century highway' Crump 1928, 55, 69).

The current West Yorkshire Historic Environment Record, however, states that this route does not appear to have been part of the Halifax to Oldham packhorse trail and that 'no packhorse route has as yet been positively identified in the immediate vicinity'. Conversely, the 1987 HBMC record stated definitely that the bridge was 'on the line of the packhorse roads by which cloth was carried from Yorkshire into Lancashire'. A known packhorse route ran through Ripponden, approximately 5.35 km to the north-east, from at least 1610, when a new church was built adjacent to the track in that year and included a door that opened directly onto a packhorse bridge (<http://www.stbartschurchripponden.co.uk/history.html>).

A packhorse route also appears to have traversed Blackstone Edge, approximately 3 km to the north, although there is no direct evidence to link this with the presumed packhorse trail associated with Oxygrains Old Bridge. The course of the presumed packhorse trail cannot be determined on the basis of the current evidence. The majority of commentators have interpreted the structure as a former packhorse bridge, however, and this designation is accepted for the purposes of this report.

It is not clear if Oxygrains Old Bridge was built to supersede a ford located approximately 0.14km to the north-east or if it replaced a medieval predecessor. Crump believed that the packhorse trail had crossed the ford but by 1928 this could not be demonstrated as its course in the area 'had been extinguished by sporting rights or died out from disuse' (Crump 1928, 69). There is no evidence that cloth was transported via Oxygrains during the medieval period, however, and if the bridge was indeed constructed as part of a packhorse route it is likely to have been built in association with the substantial increase in the number of packhorse trails during the post-medieval period (Hey 1980). The majority of packhorse bridges appear to have been constructed between 1660 and 1740 (Hey 1980).

The builders of Oxygrains Old Bridge, its original owners and the precise date of its construction are not known. J.H. Heginbottom stated that the structure of the bridge was typologically related to 17th-century bridges, with the preservation of the masonry surface suggesting that it was more likely to date from late in that century or early in the 18th century (Heginbottom 1986). P.H. Thornborrow agreed with the latter period, as 'the stones have smooth tooling often associated with structures of that date' but thought that the apparent lack of wear indicated that the 'causey stones that may have run across its middle' had been removed (Thornborrow 1988, 1). Alternatively, the lack of the use-wear 'usually visible on similar packhorse bridges' suggested to Thornborrow that Oxygrains Old Bridge was 'little used by packhorse teams' or even the possibility that 'the bridge was only designed as an accommodation bridge for the transit of cattle and sheep rather than being part of a packhorse route' (Thornborrow 1988, 1). However, the presence of the ford to the north-east is likely to have been sufficient for moving animals over the beck and the HER states that 'it is difficult to explain the presence of such a well-built footbridge if it is not a packhorse bridge'.

Oxygrains Old Bridge was not shown on John Ogilby's 1675 map of the road between York and Westchester, although features in the area were marked, including the ancient road at Blackstone Edge. The bridge was not included in a 1752 tally of the bridges within the West Riding of Yorkshire, nor shown on an accompanying plan (WYASW QD3/5; QD3/6). This survey included bridges for which the West Riding authorities were responsible and those that were under the control of other bodies, and included several bridges that were located on becks. These were substantially larger than Oxygrains Beck, however, and the omission of the bridge is likely to have been due to the small scale of both the structure and the beck itself.

Neither the bridge nor the course of an associated packhorse route were marked on Thomas Jefferys' 1771 map of Yorkshire or on Christopher Greenwood's 1818 map of Yorkshire. Although the date of the bridge's construction remains unknown, the structure was extant prior to 1795 as it was superseded in that year by a larger bridge that was constructed approximately 0.05km to the north-west as part of the Ripponden to Oldham turnpike road (Crump 1928, 55). It is not clear to what extent the latter followed the course of the earlier packhorse trail, although the location of Oxygrains Old Bridge indicates that the two routes were not identical in the vicinity of the crossing over the beck. The position of the packhorse bridge demonstrates that the trail had run down the slope to cross the beck at the lowest point of Spa Clough; the turnpike road, however, did not veer into the bottom of the Clough but continued to run along higher ground approximately 0.04km to the north.

As the bridge that carried the turnpike over the beck was also a taller structure than the packhorse bridge, traffic no longer had to travel into the very bottom of Spa Clough before climbing up a steep incline on the far side of the beck. This appears to have been an important element in the turnpike's design, as the level of the road was increased by a further 0.9m when the 1795 bridge was replaced by a larger bridge in 1827 (WYAW QD3/255).

Bernard Hartley, County Surveyor of Bridges in the West Riding of Yorkshire (Skempton 2002, 301), designed the second turnpike bridge. Hartley's 1825 sketch plan of the site (WYAW QD3/255) showed Oxygrains Beck, Spa Clough, the late 18th-century turnpike bridge and the course of the turnpike road itself. The 1825 plan did not, however, overtly depict the packhorse bridge. Hartley appears to have represented the old bridge by two, unlabelled, parallel dashed lines which were marked across the beck in an area that had been demarcated as the course of a proposed replacement section of the turnpike road. The dashed lines appear to have been marked several metres to the south of the location of Oxygrains Old Bridge, but the 1825 plan was little more than a sketch and it is difficult to determine what else Hartley could have denoted by the lines over the beck if he had not intended them to mark the location of the packhorse bridge.

The proposed diversion of the road would have removed the pronounced bend or 'dog-leg' where the turnpike crossed the beck but would also have required the demolition of the packhorse bridge. It is not known why the intended diversion was abandoned, but this decision appears to have been directly responsible for the survival of Oxygrains Old Bridge. Bernard Hartley produced several further plans and elevations relating to the replacement turnpike bridge but none of these depicted the old packhorse bridge. References to the 'Old Bridge' in Hartley's specifications do not relate to the packhorse bridge but to the 1795 turnpike bridge, which was being replaced by the new 1827 structure (WYAW QD3/255).

Oxygrains Old Bridge was not marked on the 1843 Ordnance Survey map (First Series) but the packhorse and turnpike bridges were both marked as 'Oxygrains Bridge' on the 1854 Ordnance Survey map, with the older, smaller, bridge differentiated by smaller font. An intermittent linear

feature was shown leading south-west to the bridge, between the turnpike road and Spa Clough on the 1854 map. It is not clear if this represented the line of the former packhorse route or if it was simply the track that was shown as a more defined feature along part of this alignment on the 1892 Ordnance Survey map. It is also possible that the late 19th-century track partially followed the course of the former packhorse trail in this area.

The 1854 Ordnance Survey map marked Oxygrains Bridge within a small area of Rishworth Moor called 'Castle Dean'. During the post-medieval period, the term 'castle' typically became associated in place-names with the remnants of features in the landscape such as prehistoric British hillforts, Roman forts or the mottes of medieval castles. In 1836, John Crabtree stated that 'there are yet to be seen traces of a large building...by a place called Castle-dean' (Crabtree 1836, 26), while an 1839 account described these as 'the remaining vestiges of the foundations of a large building' (Walker 1839, 137). Neither the HER or ADS records the site of such a feature at Castle Dean or any of the 'Druidical remains, and traces of encampments' that were also said to be present in the immediate area (Walker 1839, 137) and the nature of the 'large building' is unknown.

'The Manor House' was marked approximately 0.07km to the north-east of Oxygrains Old Bridge on the 1854 Ordnance Survey map, however, and it is possible that this building had replaced a medieval predecessor, such as a fortified manor house. However, Greenwood's 1818 map marked this structure as an 'Old Bar House', indicating that it was a toll house associated with the Oldham and Ripponden Turnpike Road. The use of the term 'old' in this context is problematic, as the turnpike road had only been constructed in 1795. It is possible that the building was a pre-existing structure that had been converted into a toll house by the Oldham and Ripponden Turnpike Trust. Alternatively, a similar structure on the Blackstone Edge turnpike, to the north of the area, became disused during this period (Gledhill 1987) and it is possible that the Oxygrains toll house was also out of use by 1818.

Bernard Hartley's 1825 plan of the area (WYAW QD3/255) marked the site as a 'Cottage', which may also imply that the building was not then in use as a toll house. Statements of annual income and expenditure issued by the Oldham and Ripponden Turnpike Trust, however, demonstrate that tolls were indeed taken at 'Grains Gate' between 1823 and 1832 (QE22/74). The 1843 Ordnance Survey map marked the site 'Bar House', which suggests that tolls continued to be taken at Oxygrains during this period. An actual toll bar was not marked at this location on Hartley's 1825 plan or the 1854 and 1892 Ordnance Survey maps.

The toll house itself occupied the south-west corner of a large rectangular enclosure, which was open to the road on the south. Hartley had depicted only the south-west corner of the enclosure, not the building itself, and it is not known if the 1818 Old Bar House or the 1825 cottage were the same structures as the 1843 Bar House or the 1854 Manor House. It is possible that the walls of the enclosure were the feature believed by Crabtree and Walker to represent 'the foundations of a large building' (Walker 1839, 137). The enclosure's north wall remains extant, however, and is approximately 0.74m in length; its scale is perhaps unlikely to have suggested the 'vestiges' of a building. Manor House is not recorded by the HER or ADS and its name, date of construction and the history of its development is unknown.

Manor House stood on the north side of the turnpike road and was shown on the 1854 Ordnance Survey map as a rectangular structure with a smaller rectangular projection on its east face. The lines of the east and west walls of the main block can be traced on several modern aerial photographs and appear to have been approximately 8.8m apart. This suggests that the designation 'cottage' may have been more applicable than that of 'Manor House' and that the

latter may have been a local colloquial term. Given the relative sizes of the house and the enclosure, it is possible that the latter pre-dated the house and that other structures were located formerly within other parts of the enclosure.

Although the name 'Oxygrains' was not marked as a place-name on the 1854 map, the bridge was constructed approximately 0.03km north-west of the confluence of Oxygrains Beck and Spa Clough and is thus likely to derive its name from the medieval term 'graining piece', which indicated a plot of land at the junction of two streams. It is thus possible that the immediate area itself was known formerly as 'Oxygrains' and Bernard Hartley used this name for the area throughout his specifications and correspondence relating to the 1825-1827 turnpike works (WYASW QD3/255).

Other features in the vicinity of the bridge in 1854 included a linear channel that ran south-east from Castle Dean Springs to the Manor House enclosure, before it followed an undulating course around the enclosure's eastern boundary to the road; a trough that stood on the roadside, immediately south-east of the enclosure; a small sandstone quarry to the north-east of the enclosure; and a larger, disused quarry to the south-west of the turnpike bridge.

The packhorse bridge was marked as 'Oxygrains Old Bridge' on the 1892 Ordnance Survey map. This may have indicated that the bridge was disused by all except casual foot traffic at this date, or may have been used to differentiate it from the newer turnpike bridge. A weir was shown on Oxygrains Beck, to the north-west of the bridge, in 1892. Manor House appeared unchanged from the 1854 map, while the roadside trough remained extant and a small, sub-circular quarry had been established immediately north-west of the Manor House enclosure. The quarry was accessible via a track that led north-west from the turnpike road. The area between the enclosure's eastern perimeter and the land drain had been cleared and was not shown as moorland in 1892. The reason for this clearance is not known.

A track was shown on the south side of the turnpike road on the 1892 Ordnance Survey map. This feature ran south-west between the road and Spa Clough, crossed the road immediately opposite Manor House and ran north-west, several metres to the north of Oxygrains Beck. A small, rectangular sheepfold had been constructed immediately south of the latter's course to the north-east of the bridge, while a large, open land drain marked 'Catchwater' had been constructed approximately 0.13km to the south.

Manor House had been demolished by the time of the 1907 Ordnance Survey map, although the large, rectangular enclosure in which it had stood remained extant. The boundary of the cleared area that had been shown at the east of the enclosure in 1892 continued to be shown in 1907, although the land within had reverted to moorland or rough heath by the later date. A possible sheepfold had been created on the moor to the north-west of the enclosure, while a footbridge had been constructed over Spa Clough to the north-east of Oxygrains Old Bridge.

No further substantive changes were shown on the 1907 map, with the exception of the south side of the turnpike road; this was no longer depicted with a solid line, which suggests that its course had become less formal or was no longer maintained since the ending of the turnpike era in the late 19th century. A 1928 Ministry of Works description stated that the bridge was a single-arched structure, approximately 2.4m in width, 'with practically no parapet'. The arch was built of ashlar. One of the stones was approximately 1.2m in length and extended halfway across the width of the bridge. The former packhorse track was said to be overgrown with grass and difficult to trace in 1928 (Crump 1928).

The deterioration of the former turnpike road continued throughout the first half of the 20th century, and the road was shown as an increasingly less substantial feature on the 1948 and 1956 Ordnance Survey maps. With the exception of the removal of the roadside trough by 1948, no further changes were marked in the immediate vicinity of Oxygrains Old Bridge on the 1948, 1956, 1968 and 1972 Ordnance Survey maps.

The bridge was marked as a footbridge on the 1980 Ordnance Survey map. A contemporary Department of Environment description stated that the bridge comprised 12 stones on each side of a keystone. The stones were found to be well cut on the soffit but were rough on the former road surface. No parapet wall was visible in 1980, by which time the bridge comprised only a single course of stones. Little evidence of the former packhorse track was visible on the ground at that date.

The majority of the former Manor House enclosure was not depicted on the 1980 Ordnance Survey map, with only part of the north and west sides remaining extant. The remainder may have been removed in association with the upgrading of the former turnpike road into the A672. It is not clear if the latter development impacted on the site of the Manor House itself; no archaeological discoveries appear to have been reported in association with the upgrading of the road in this area.

Booth Dean Upper Reservoir had been constructed to the north-east of the bridge by 1980. A 1986 HBMC report found that it was still possible to walk across the bridge at that date and identified part of the course of the former packhorse route, which could 'be traced descending the hillside from the road above'. J.H. Heginbottom described the bridge in 1986, stating that the parapets had been demolished and the stone removed from the site (Heginbottom 1986). Thornborrow, however, argued that there were 'no indications that the bridge ever had a parapet' (Thornborrow 1988, 1). The remaining masonry is hammer-dressed narrow voussoirs with rough walling in the abutments (Heginbottom 1986).

Oxygrains Old Bridge remains in use as a footbridge in 2011.

5 SURVEY RESULTS

5.1 Oxygrains Old Bridge

The plans and elevations of the bridge are reproduced in Figures 2-4. The bridge is of a single arched span some 2.6m wide and spanning a gap of some 5.3m (outer side of lower voussoir to outer side of lower voussoir). This segmental arch is of a single course of stone, typically with a depth in the range of 270-320mm (Plates 1 and 2). There is a narrow central keystone some 130mm wide and comprised of four blocks across the width of the bridge. There are eleven voussoirs to each side of the keystone, all of broadly similar width between 210-250mm. The length of the blocks varies between 400mm – 1.4m. All the stonework of the arch is gritstone. The underside of the voussoirs (lower side of the arch) together with the outer faces (those visible in elevation) are well dressed and tool-marks are clearly evident on the less weathered underside. The tool-marks are all of coarse parallel lines mostly cut square to the sides of the blocks, very occasionally diagonally. These tool-marks are the product of work by hand there being no evidence for mechanical sawing. No 'masons marks' were evident on any of the stone. A single lewis-type-hole is visible on the underside of one large block (Plate 3) and this extends fully through the stone as on the upperside of this block there is a small area infilled with mortar. Bonding material is present between the voussoirs, to the upper and lower sides as well as the elevations. The vastly overwhelming majority of this material is a hard very pale yellow (when damp, becoming much whiter when dry) mortar. The prominent and relatively un-weathered appearance of this mortar,

which may be cement based rather than lime based, suggests that it relates to maintenance or repair and not to original construction. One or two small isolated areas of a softer, pale creamy white coloured (when damp) mortar were also observed and this seems likely to relate to either original construction or earlier repair. The finish to the stonework on the upper side of the arch is virtually none existent (Plate 4). This surface is very irregular and rough with rises and hollows, particularly between individual blocks, often being in excess of 100mm.

The lowest voussoirs of the arch are supported by elongated wedge-shaped skewbacks of gritstone that sit atop the abutments proper. As is normally the case with bridges, only limited portions of the abutments are visible owing to their being largely underground and masked from view by access ramps to their rear sides. Some obscuring by vegetation was also evident to the lower portions of the south-east abutment. The upper parts of the inner faces of the abutments (i.e. facing the beck) are visible and were here seen to be comprised of two to three irregular courses of crudely dressed blocks of stone of variable size (Plate 5). Both gritstone and less coarse sandstone, believed to be stone derived from the immediate environs of the site, are present and this has clearly been re-pointed and patched with a hard, seemingly cement-based, mortar. The very lowest parts of the inner sides of the abutments had been irregularly capped with concrete. Both abutments are very slightly wider than the arch of the bridge, this ranging from a few mm to 320mm.

The backs of both of the abutments are overlain by access ramps. These ramps provide the means of accessing the bridge, effectively forming causeways between the higher sides of the riverbank and the bridge arch, the latter of which springs from the abutments at the lower level of the lower sides of the riverbank. The outer faces of these access ramps are composed of stonework laid dry, the stone being a mixture of rough blocks of gritstone (tending to concentrate in the lower parts of the elevation) and less coarse sandstone typically in slab-like pieces (Plates 6-7). This latter material is thought to be the local Kinderscout Grit. Neither of these stone types shows any evidence of having been worked or otherwise shaped. The precise nature of the material between the drystone walling of the elevations of the ramps is uncertain, though this may well be an infill of earth and stone rather than dry stone alone. The western side of the northern access ramp extends upstream for around 2.8m, the stonework progressively stepping down from the bridge to the level of the lower part of the riverbank. Quite why this should be so on this side only is uncertain though it may relate to additional protection when the watercourse is in full spate, effectively acting as a cutwater.

5.2 Adjacent bridge stone

The beck is strewn with local stone along its course, not just that part adjacent to the bridge. As much of the bridge, excluding the arch, is of this stone in un-worked form, identifying which pieces may have derived from the bridge presents problems. A large, seemingly un-worked, piece of gritstone lies almost underneath the bridge whilst around 10m and 16m downstream two squared blocks with some tooling are evident (see Figure 2). Adjacent to the access ramps there are a number of large stones which almost certainly derive from eroded parts of the ramps. Stonework likely to be derived from the bridge appears in the metric survey.

5.3 Associated routeways

To the east-north-east of Oxygrains Bridge and immediately to the south of the A672 an old route-way can be followed (Figure 5). This route-way follows a course slightly further down the valley side than the present road. In places this old track has developed into a well defined hollow-way in excess of 2m wide (Plate 8), in other places it appears as a slight terrace into the ground-slope of

the valley side. Some distance to the east of the bridge two courses, which appear as linear depressions 2-3m wide, can be seen to descend into the valley bottom and head towards the bridge. The present footpath with hairpin bend into the valley bottom immediately to the east of the present road bridge may again be of some antiquity.

Two distinct route-ways from the western side of Oxygrains bridge can be seen to ascend up the valley slope to join the modern A672. One of these is sinuous, fairly short, but steep and appears as a 3m wide ribbon. The other route is straighter, longer and generally less steep and this again rises up to the A672, though to the west of the more sinuous route. This latter course has developed into a hollow-way around 2.5m wide, particularly in its steeper upper parts (Plate 9).

On the assumption that the above mentioned track-ways historically relate to the use of Oxygrains Bridge then the wider course of these routes can be suggested as forming a precursor to the extant A672, albeit along a course that diverges slightly from that of the present.

The presence of multiple routes immediately to either side of the bridge need not have significant implications regarding use or replacement. Multiple routes for roads, particularly in areas of hill ascents/descents were common on medieval and post-medieval roads and a number of examples are archaeologically known. The need for this was normally due to increased erosion on inclines, caused particularly in wet weather, whilst medieval legislation provided the legal right for users of public highways to travel along the adjacent land within certain limits of distance.

6 DISCUSSION

Oxygrains Bridge is simple in its design and completely plain and unadorned. In this sense is in keeping with many such isolated packhorse bridges. The date of the structure is not readily apparent from its fabric, indeed simple packhorse bridges have proved difficult to date (Cook 1998, 38). Many packhorse bridges were built in the 16th and 17th centuries and relate to increases in trade (Yorke 2008, 45). The HER entry for the bridge suggests a 16th century date for Oxygrains though the grounds for stating this are unclear. The surest way of dating this bridge would be via documentary sources, in the absence of this the date range of the 16th – 18th centuries postulated by various commentators cannot be refined with absolute certainty.

Unlike other parts of the bridge the entirety of the arch is of gritstone, the under and outer sides of which have been dressed. It is probable that the material for this arch, together with that of the skewbacks was quarried and prepared within the wider locality. These pieces will then have been brought to the bridge site and built over wooden centring on the pre prepared abutments. The stonework of the abutments is almost certainly of very local origin and more crudely prepared than that of the arch. This contrast in quality need relate to no more than the voussoirs needing to be of some precision for the arch to successfully work.

Comment has been made on the 'roughness' of the upper side of the arch, this seemingly being far greater than required for secure purchase by either foot or hoof. Any original surfacing has long since gone and the nature of what this may have been is uncertain. Such surfacing could have been of some form of stone setts, though none survive, either on the bridge, its surroundings or in the beck. It is perhaps more likely that the bridge was surfaced simply with earth and fine stone. The absence for a parapet has been noted by a number of commentators. Many pack-horse bridges do have parapets though these are typically quite low. Such lowness of height is normally attributed to the requirement to keep obstructions clear of packs secured to the flanks of horses. There is no evidence within the existing fabric of the bridge to indicate that Oxygrains Bridge possessed

parapets, though this lack of evidence need not preclude their having been so. It cannot be ruled out that something like a low parapet or kerb could have been formed of blocks simply mortared to the upper surface of the central parts of the arch – all trace of these could simply have been removed.

No evidence was found to suggest a chronology of bridge work, or development at the site, save for the application of mortar to the arch and the application of mortar with some concrete to the abutments. As it stands the bridge appears to be of a single build.

7 BIBLIOGRAPHY

Publications

Anon. 2010. 'St. Batholomew's Church, Ripponden: Church History'.

<<http://www.stbartschurchrripponden.co.uk/history.html>>

Cook, M. 1998. *Medieval Bridges*. Shire.

Crabtree, J. 1836. *A Concise History of the Parish and Vicarage of Halifax*. Hartley and Walker: Halifax.

Crump, W.B. 1928. 'Ancient Highways of Halifax Parish, VIII: Sowerby Highways'. *Halifax Antiquarian Society Transactions* 10, 45-82.

Gledhill, B. 1987. Cragg Road: A Turnpike Trust. *Halifax Antiquarian Society Transactions* 36, 53-75.

Heginbottom, J.H. 1986. Early Bridges in Calderdale. *Halifax Antiquarian Society Transactions* 35 (HER partial photocopy; full ref. unknown).

Hey, D. 1980. *Packmen, Carriers and Packhorse Roads*. Leicester University Press: Leicester.

Skempton, A. 2002. *A Biographical Dictionary of Civil Engineers in Britain and Ireland, Vol.1: 1500-1830*. Telford: London.

Thornborrow, P.H. 1988. Oxygrains Old Bridge: Historic Building Report. Unpublished West Yorkshire Archaeology Service report.

Walker, J.K. 1839. Some Observation on Certain Supposed Druidical Remains in the County of York. *Gentleman's Magazine* 2, 133-140.

Watson, J. 1775. *History and Antiquities of the Parish of Halifax*. Lowndes: London.

Yorke, T. 2008. *Bridges Explained*. Countryside Books

Documents

Hartley, B. 1825-27. 'Specification: Oxygrains Bridge, Ripponden' (West Yorkshire Archive Service Wakefield [WYASW] QD3 255).

Oldham and Ripponden Turnpike Trust. 1823-1884. Annual Statements of Expenses and Income. (WYASW QE22/74).

Westerman, J. and Gott, J. 1752. An Account of all the Bridges in the West Riding of York' (WYASW QD3/6).

Historic maps

1675 John Ogilby map of the road from York to Westchester

- 1752 J. Westerman and J. Gott plan of bridges in the West Riding of Yorkshire (WYASW QD3/5).
- 1818 Christopher Greenwood map of Yorkshire (WYASW C559/85).
- 1825-1827 Benjamin Hartley 'Sections and Elevations: Oxygrains Bridge, Ripponden' (WYASW) QD3 255).
- 1834 J. and C. Walker updated copy of Christopher Greenwood's 1818 map of Yorkshire (WYASW C559/88).
- 1843 Ordnance Survey map (First series, Sheet 88; <http://visionofbritain.org.uk>)
- 1854 Ordnance Survey map
- 1892 Ordnance Survey map
- 1907 Ordnance Survey map
- 1928 W.B. Crump plan of Ancient Highways in the Parish of Halifax.
- 1948 Ordnance Survey map
- 1956 Ordnance Survey map
- 1968 Ordnance Survey map
- 1972 Ordnance Survey map
- 1980 Ordnance Survey map

8 FIGURES

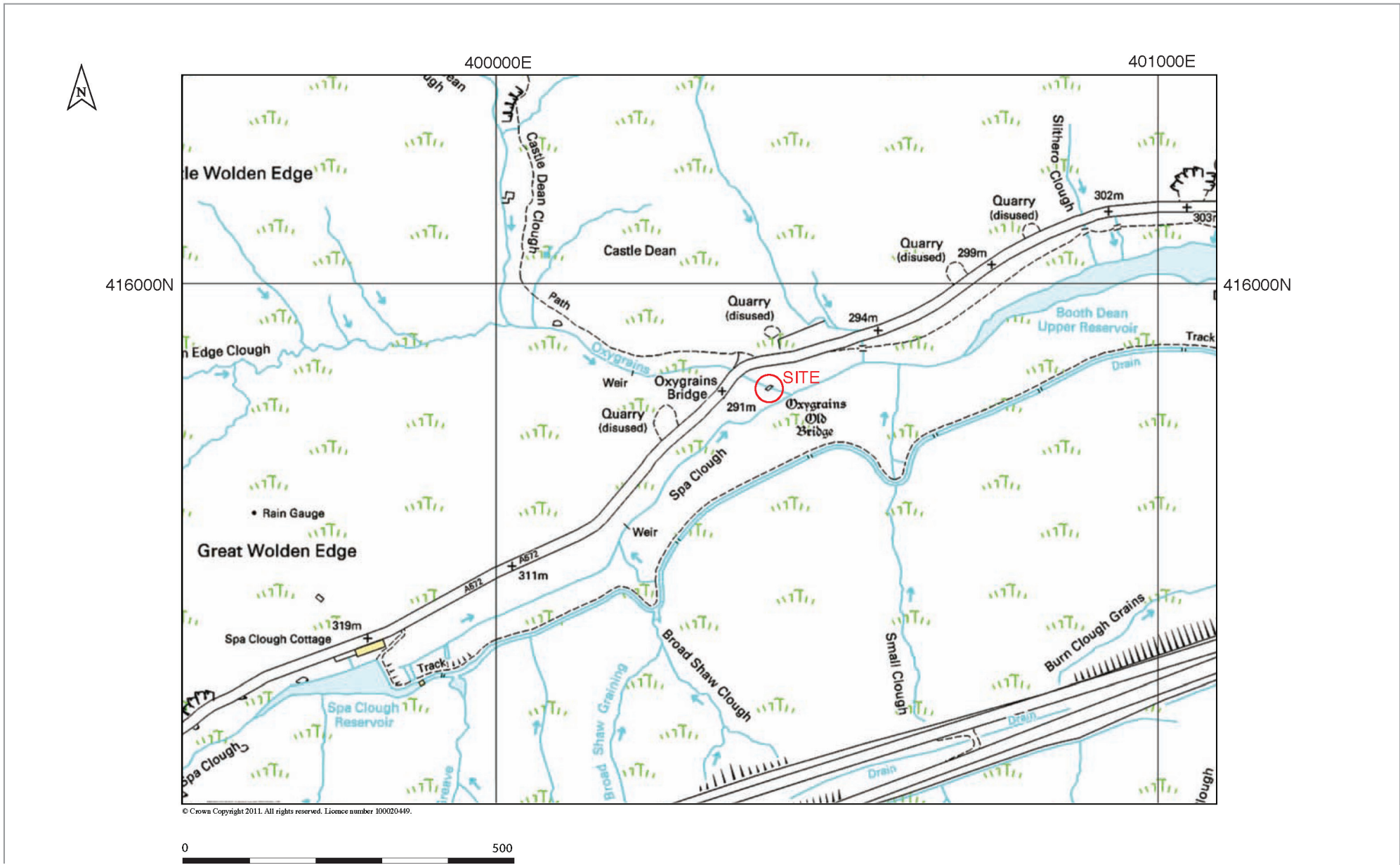
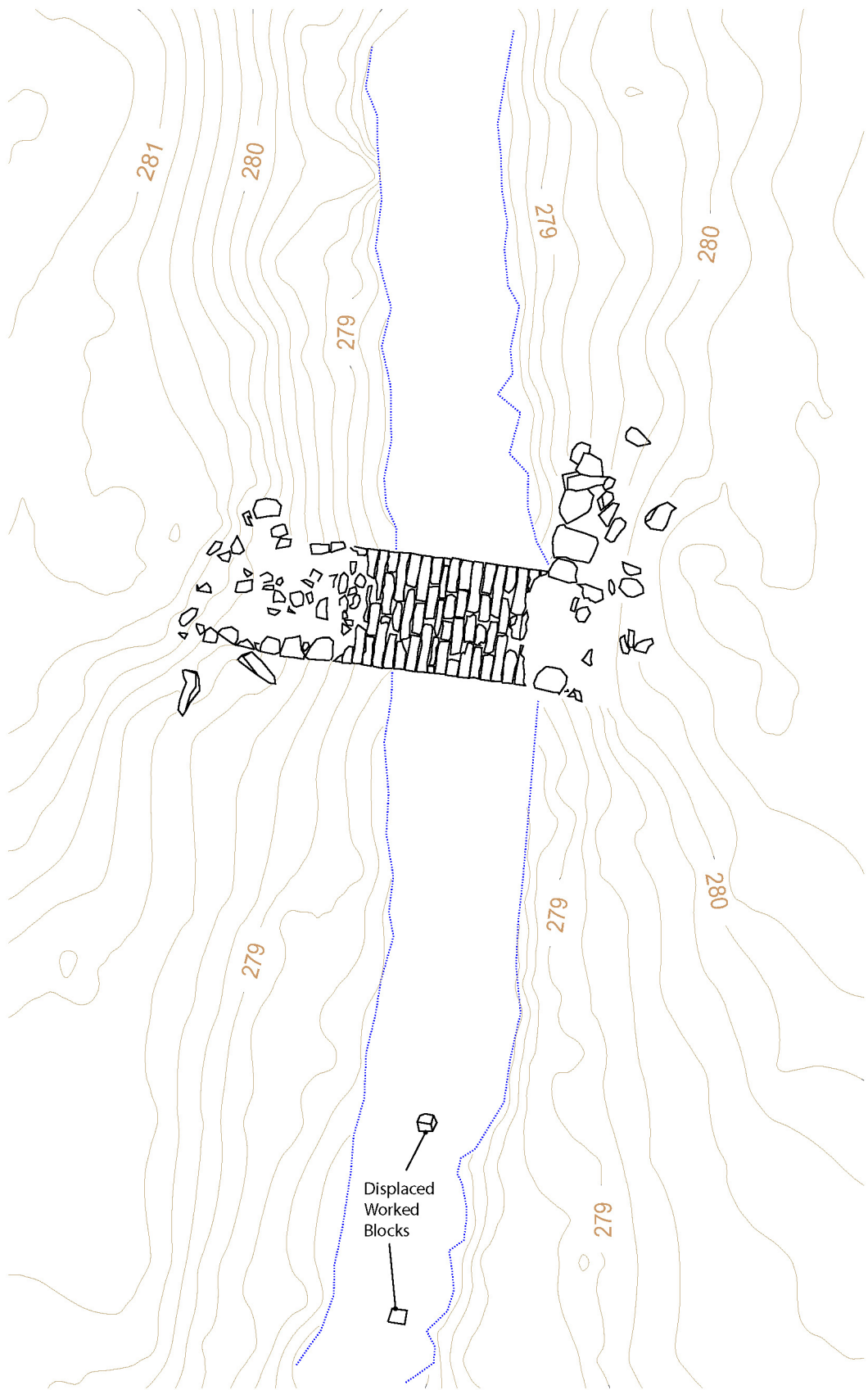
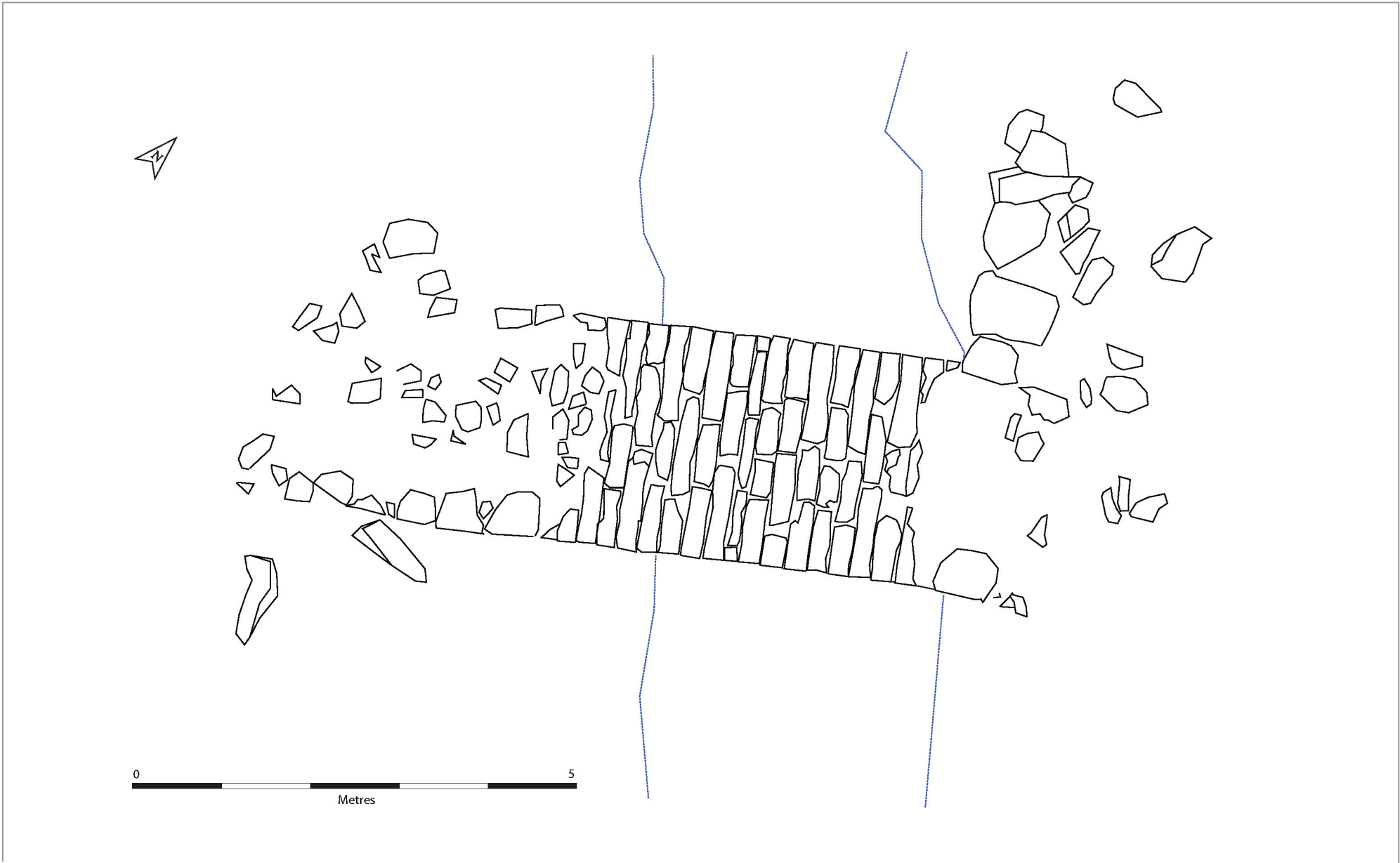


Figure 1: Site location Plan



0 5
Metres



North West Facing Elevation

280.88m π

π 280.88m

South East Facing Elevation

280.91m π

π 280.91m



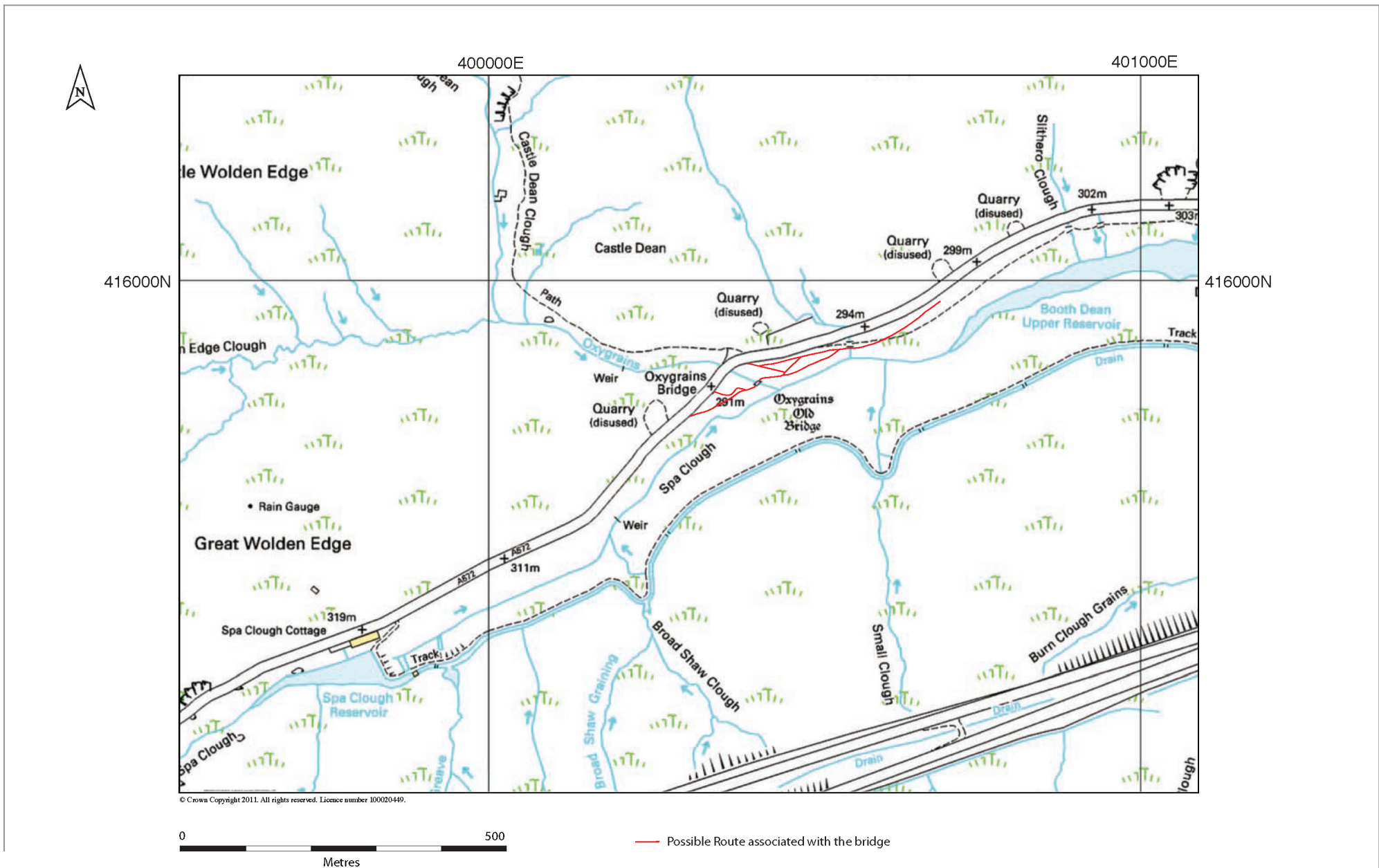


Figure 5: Associated Routes

9 PLATES



Plate 1: View of the bridge, looking northeast



Plate 2: View of the bridge, looking southwest



Plate 3: Lewis-type hole to underside of bridge



Plate 4: Rough upper surface of bridge, looking north



Plate 5: Inner face of north side abutment, looking north



Plate 6: North side of the bridge, showing dry walling to side of access ramp, looking southwest



Plate 7: West projection of dry walling to the north access ramp of the bridge, looking northeast



Plate 8: Pronounced hollow way to east of bridge, just downslope from existing road, looking west



Plate 9: Slight hollow way to west of bridge as track ascends towards course of existing road, looking west

APPENDIX 1 – PROJECT BRIEF

**Project Brief for Management plan for Oxygrains Old Bridge, Rishworth
Common, Ripponden (SE 0041 1584)**



Prepared for:

Carol Prenton
Yorkshire Water
Western House
Halifax Road
Bradford
BD6 2LZ

Carol.Prenton@yorkshirewater.co.uk

By:

Christine Hopwood
Historic Environment Adviser (HEA)
Natural England
3rd Floor
25 Queen Street
Leeds
LS1 2UN

Email: christine.hopwood-lewis@naturalengland.org.uk

Agreement reference: AG00250892 (to be quoted on all correspondence)
December 2010

Introduction

Oxygrains Old Bridge is situated in the Ripponden parish of West Yorkshire. It would have originally carried the old bridle track used by packhorses, trading cloth and other goods between Yorkshire and Lancashire over the Oxygrains Beck. The bridge is approximately 9 feet wide and 14 feet from bank to bank, of stone construction. It currently has no parapets and it seems probable that it never had. It is likely that the bridge was originally constructed in lime mortar or earth bond however subsequent repairs have been undertaken insensitively in cement. The bridge dates to the 17th century and is still in occasional use as a footbridge today although the packhorse trail itself has probably been replaced by the A58. The majority of traffic now crosses the beck at the A58 road bridge some 50 yards upstream and the main value of the bridge is as an historic and landscape feature. The bridge is visible from the A58 and an associated layby and forms a visual link to the trading history of this part of the South Pennines. The area is part of the Rishworth Common HLS agreement and as such the restoration work is eligible for Natural England funding.

Oxygrains Packhorse Bridge is a Scheduled Monument (WY142) and is currently on the English Heritage Monuments at Risk Register with a high level of risk. The EH description can be viewed via the following link:

<http://risk.english-heritage.org.uk/2010.aspx?id=5769&rt=0&pn=1&st=a&ctype=all&crit=oxygen>

While it is described as suffering from extensive visitor erosion a recent visual inspection suggests that repeated winter flooding may also have contributed to its current state. Fallen squared stones in the river downstream further support this hypothesis. The arch itself is still standing, however the approaches are badly eroded. Raised turf areas to either side of the structure suggest that the approaches to the bridge may originally have been built up much higher. The impact of the reduced load on the stability of the arch should be identified and possible remedies, including restoration and rebuilding of the approaches should be identified.

Before any decisions on restoration can be made, a programme of archaeological recording is needed. This will inform the engineering team of the original bonding materials and building techniques which should, so far as is possible, be taken into consideration when formulating restoration recommendations. Scheduled Monument Consent from English Heritage may be required prior to any restoration. SSSI consent may also be required for works requiring ground disturbance. This should be built into the project timetable.

Prior to any works a wildlife survey must be commissioned to identify the location of any wildlife species which use the bridge and surrounding area either seasonally or throughout the year. As the bridge lies within the South Pennines SPA & SAC areas any work undertaken on the structure must take nesting birds into consideration. The aim is to undertake this survey in early spring 2011 in order to avoid disturbance of ground nesting birds during their reproductive season. The project must be completed and invoices submitted by the beginning of July 2011 as this coincides with the end of a funding period.

1.2 Objective of the Project

- To understand the relationship of the bridge to the packhorse trails and to site it in its landscape context
- To use this information to develop recommendations on future conservation and repairs with the aim of conserving the structure as a historic and landscape feature.

1.3 Objectives of this Brief

This brief should be used by the applicant to obtain 3 itemised quotes, from appropriately qualified conservation professionals, for the preparation and production of:

- i) a comprehensive, photographically illustrated, measured condition survey of the structure
- ii) a fully costed schedule of works and specification for the restoration of the structure
- iii) an archaeological record and interpretation of the development of the structure to EH Level 3
- iv) an appropriate wildlife survey by a licensed professional
- v) a brief method statement explaining how any works will be undertaken

The submission should also include:

- i) identification of who will undertake the work and an outline of their professional expertise (including that of any subcontractors). This may take the form of a brief CV.
- ii) a clear statement of statutory responsibilities which arise including, but not limited to, any duties under the Construction (Design and Management) Regulations 2007 and the Site Waste Management Plan Regulations 2008. Where appropriate, providers of these services should be identified and their input clearly costed.

Quotations should be based on the requirements set out in each section of this brief and each item of work costed separately (format for accepted quotes is shown in **Appendix Three**). This brief and the resulting specification should be used to facilitate full liaison with Natural England concerning the technical details of any subsequent application for grant aided work to restore the structure.

Quotes should be presented to the Agreement Holder at the above address, and electronically copied to Christine Hopwood-Lewis (regional HEA) at Natural England – contact details listed above. The consultant will be commissioned in writing by the Agreement Holder, not by Natural England. Any contract remains between the agreement holder and the contractors. All day to day agreements, health and safety requirements etc are matters between these parties.

The contractor is advised to visit the site before completing their specification as there may be implications for accurately costing the project. Access may be arranged through the agreement holder **not** through Natural England.

Once the management plan is completed to a satisfactory standard, and if the project is considered acceptable to Natural England, Natural England and the agreement holder will expect that the producer of the Management Plan will also undertake project management of the repair/consolidation work. The availability of resources will be confirmed after the management plan is completed. This phase would consist of contract administration and inspection of works, to include

- Pre-contract meeting with selected contractor, Natural England and client.
- Gaining appropriate permissions and licences, for example Scheduled Monument Consent from English Heritage, SSSI consent from Natural England.
- Inspection and certification of monthly / work-stage valuation claims.
- Responding to on-site queries and monitor against approved specification.
- Completion inspection and issue of Practical Completion Certificate.
- Production of snagging list and End of Rectification Inspection.

An indication of project management costs for this phase of works would be useful although it is understood that final costs would depend upon the agreed specification and schedule of works.

Appendix One, 'Guidance Notes on the Restoration of Historic Buildings under Agri-Environment Schemes', explains in more in detail the principals of funding under agri-environment schemes, and should be referred to in conjunction with this brief. While primarily guidance for roofed structures, the principles of repair are also relevant to consolidation of upstanding ruins in the landscape as here.

2. The Scope of the project

This management plan is intended to provide all the information necessary for a restoration project on this monument to proceed. The contractor is responsible for arranging access and licences where necessary prior to the start of fieldwork. In this case a Section 42 licence (Scheduled Ancient Monument Consent) may be required from English Heritage. SSSI consent may be required from Natural England and the successful contractor should liaise with the appropriate Land management Advisor regarding this eventuality.

3. Content of the Management Plan

3.1 Summary

A summary is required. This should be concise and should include;

- Site Location (including a central grid reference to a minimum of 8 figures)
- Site Description, including a short description of the topography and current land uses and a site plan to an appropriate scale
- Contractor and client details
- Date works carried out
- The aims of the restoration project
- Current condition of the structure and the threats and issues it faces

3.2 Summary of the Historical Development and Statement of Significance

A *concise* summary of the historical development of the structure should form part of the specification, upon records at the local Record Office, the Local Studies Library, the local Historic Environment Record and any other local archives. Photographs from key viewpoints should be included and cross-referenced to an appropriately scaled site plan. A statement of the significance of the bridge should assess the structure from a local, regional and national perspective. It should also comment on its contribution to the local landscape character, public amenity and biodiversity. The contractor should liaise with the appropriate HER, English Heritage, and Natural England prior to commencing fieldwork to ensure that existing data is used to inform the works

3.3 Condition Survey

Prepare a comprehensive, photographically illustrated condition survey of the bridge. Comments should be made on the feasibility of repair, highlighting good points as well as looking at defects and the remedies required. Input will be required from a structural engineer. The survey should prioritise work into areas; immediate concern (1-2 years), necessary (2-5 years) and desirable (10 -20 years). The condition survey should also identify the probable causes of damage or deterioration and suggest management which would mitigate this.

Contact with the Historic Environment Advisor of Natural England will be essential, at this stage, to discuss approaches to repair of historic structures. These must focus on conservation of the bridge 'as found' but there will be scope for discussion on the most appropriate remedies, and approaches to conservation and future management.

All commentary, photographs or additional survey work must be tied into a scaled plan.

3.4. Wildlife Survey

Identify the location of any wildlife species which use the structure either seasonally or throughout the year and consider their legal obligations under the relevant wildlife legislation, when compiling the plan and scheduling of works. The impact of any restoration works on the river ecology should be considered in particular. If protected species are found, a licence may be needed before work can take place. Certain species using a structure may be protected under the UK Wildlife & Countryside Act (1981) and/or European wildlife legislation. Species lists can be found at:

<http://www.naturalengland.org.uk/conservation/wildlife-management-licensing/habsregs.htm>

or by contacting your local Natural England office. Results of any ecological surveys should be fed back to the local biological records centre – details of the appropriate centre can be found at:

<http://www.nbn-nfbr.org.uk/nfbr.php>

3.5 Archaeological Analysis and recording

Undertake a site survey of the structure looking at its form, use of materials and methods of construction, past function, style of architecture and changes/adaptations over time and the reasons for the changes. This should be cross-referenced with the information gathered in 3.2 above. A brief for this recording is attached – see **Appendix Two**

A record of the structure as it presently exists, and analysis of the fabric likely to be affected by repair, should be made using an appropriately scaled plan, elevation drawings and photographs, equivalent to Level 3 of English Heritage's recording guidelines as published in '*Understanding Historic Buildings: A Guide to Good Recording Practice*' (available at www.helm.org.uk under Guidance Library).

Level 3 is an analytical record, and will comprise an introductory description followed by a systematic account of the structure's origins, development and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the bridge's appearance and structure and to support an historical analysis.

Any surveys should cover not only the bridge itself but also the footings on either side of the river. They should attempt to identify the original construction methods and further to survey the surrounding area to identify possible lost material from the original structure.

The information contained in the record will for the most part have been obtained through an examination of the structure itself. The work shall be carried out in accordance with appropriate Institute of Field Archaeology Standards and Guidance <http://www.archaeologists.net/modules/icontent/inPages/docs/codes/build2.pdf>

3.6 Specification of Structural Repairs and Alterations

Using information from 3.2 to 3.5 above, identify the repair work required and prepare a full specification for materials and work methods, together with a schedule of works in order for comparable quotations from building contractors to be obtained.

It is important to ensure that any works proposed are conservation friendly and use appropriate materials and techniques. The need to retain as much existing fabric as possible is a key underpinning principle – where possible material identified by the archaeological survey as likely to have previously formed part of the bridge should be retained and reused. Scheme requirements state that there should be minimum intervention required to ensure the structures are retained for future generations, that any replacement should be on a like-for

like basis unless there is a good reason (such as failure of original material or a health and safety issue) and traditional methods and materials should be used. While the principal use of this structure is as a landscape feature rather than for regular foot traffic it should be restored so that occasional use by pedestrians would be considered safe. The restoration work should be capable of withstanding expected winter water flow. It is expected that advice from a structural engineer will be required. Further guidance is available in Appendix One. Proposals should conform to the Construction (Design and Management) Regulations 2007 where appropriate.

At this stage the consultant should provide a draft copy of the specification to both the owner and the Historic Environment Advisor of Natural England which covers the above points of the brief. This will enable NE to comment further prior to proceeding with an invitation to building contractors to tender for the building work.

3.7 Mitigation Implications of the Work

The management plan should identify where ground disturbance, loss of important fabric in the structure, or ground works considered essential for repair may affect archaeological remains and, in conjunction with the English Heritage HEFA, provide a brief for this work that can be costed as part of the restoration work package. It should also identify where mitigation strategies are necessary to reduce impact of works on wildlife identified during the ecological survey e.g. newt fencing, bat boxes etc. Where no archaeological or ecological impact is anticipated this stage may be omitted.

3.8 Tender and Tender Reporting

Using the agreed specifications and schedules of work, obtain three competitive quotes from building contractors with demonstrable experience of working on building conservation projects and structures of this type. Evaluate and make an assessment of the tenders and provide a written and justified recommendation to NE and the owner as to which offers the best value.

3.9 Reporting Requirements

Copies of a draft report should be submitted to the Natural England Historic Environment Advisor and to English Heritage (where appropriate) for comment within 3 months (or such other period as may be mutually agreed) before final submission. Within 6 months (or such other period as may be mutually agreed Natural England will require 2 copies of the Survey in a bound A4 printed and bound format. Where appropriate to guide the repair work A3 annotated drawings folded to A4 should be included. A full digital copy of the report should also be submitted to NE. A full copy of the report must also be submitted to the Client. An additional A4 bound and e-copy of the survey must be submitted to the West Yorkshire HER:

Jason Dodds (HER Officer)
West Yorkshire Historic Environment Record
Registry of Deeds
Newstead Road
Wakefield
West Yorkshire
WF1 2DE
01924 306797
jdodds@wyjs.org.uk

An OASIS submission should also be made and the OASIS number included within the report.

3.10 Health and Safety

Contractors are expected to abide by the *1974 Health and Safety Act* and its subsequent amendments as stated in the *Construction and Design Management Regulations 1994*. The project must have a nominated safety officer and appropriate insurance.

3.12 Personnel

Each aspect of the work should be carried out by suitably experienced and qualified professionals with specialist expertise in their area of competence. The names and titles of the Project Manager and all staff should be listed with a précis of their relevant and recent experience.

3.13 Copyright

Please note that by depositing their report, the author of the material gives permission for the material presented within the document to be used by NE and West Yorkshire HER, in perpetuity, although the author of the material retains the right to be identified as the author of all project documentation and reports as specified in the *Copyright, Designs and Patents Act 1988* (chapter IV, section 79). The permission will allow NE and West Yorkshire HER to reproduce material, including for non-commercial use by third parties, with the copyright owner suitably acknowledged.

4. References

ALGAO 1997 *Analysis and recording for the conservation and control of works to historic buildings* ALGAO

Andrews D, Blake B, Clowes M & Wilson K 1995 *The Survey & recording of historic buildings and monuments: Technical Paper 12* AAI&S

English Heritage 2006 *Understanding Historic Buildings: A Guide to Good Recording Practice* English Heritage Publishing

HMSO 1974 *Health and Safety Act*

HMSO 1988 *Copyright, Designs and Patents Act* (chapter IV, section 79)

HMSO 1994 *Construction and Design Management Regulations*.

McEwen C 2008 *Jaggersmen's Bridges on Packhorse Trails* Sledgehammer Engineering Press Ltd

RCHME 1990 *Recording Historic Buildings: A Descriptive Specification* RCHME

5. Figures

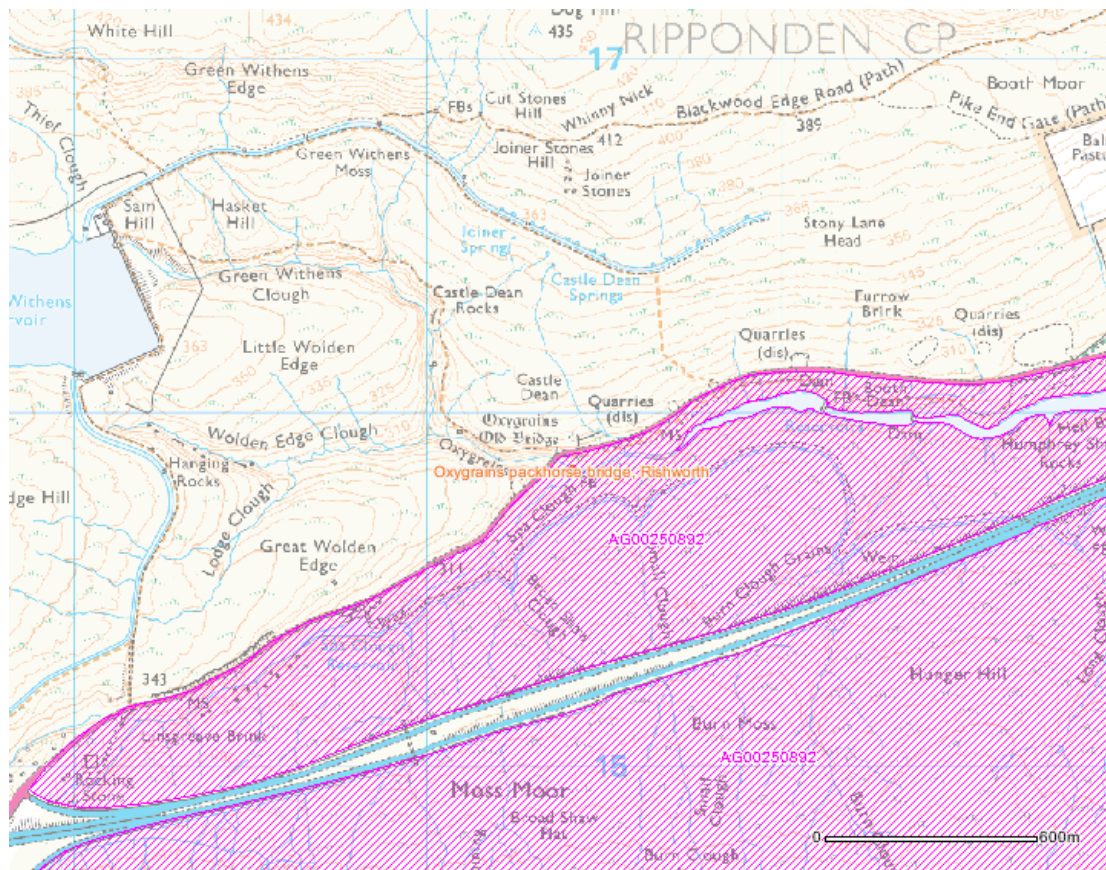


Figure 1. Map showing location of Oxygrains Old Bridge and area covered by HLS agreement

Appendix One

Higher Level Stewardship: the Repair and Restoration of Historic Buildings
Applicants' Guide

A guide to help applicants understand which types of buildings and what restoration works are eligible for grant aid under Higher Level Stewardship (HLS): *attached as separate document.*

Appendix Two

Brief for Archaeological Recording of Oxygrains Bridge

Introduction

This brief outlines the necessary level of archaeological recording. It should be used to inform the production of the Management Plan. Some temporary turf removal may be required during the recording in order to create an adequate record and appropriate permissions must be sought from Natural England and English Heritage before this is undertaken. An attempt should also be made during the recording to identify material likely to have formed part of the original structure and to photograph it and mark its location for reuse in the restoration process.

Level of Recording

The archaeological recording should be undertaken to Level 3 of 'Understanding Historic Buildings: A Guide to Good Recording Practice' as referenced in 3.5 above. This guidance should be referred to in conjunction with this brief.

Both the structure itself and its relationship with the surrounding ground will be photographed and a plan made. The examination of the structure will produce an analysis of its development and use and the record will include the conclusions reached.

A Level 3 record will typically include:

Written Record

The written record should adhere to standards laid out in the English Heritage downloadable publication, "*Understanding Historic Buildings: A Guide to good recording practice*". It should include:

1. The structure's precise location, as a National Grid reference and in address form
2. A note of any statutory designation
3. The date of the record, the name(s) of the recorder(s) and, if an archive has been created, its location
4. A summary of the structure's form, function, date and sequence of development
5. An introduction, setting out the circumstances in which the record was made, its objectives, methods, scope and limitations
6. A discussion of published sources relating to the building and its setting, an account of its history as given in published sources, an analysis of historic map evidence (map regression)
7. An account of the bridge's overall form (structure, materials, layout) and its successive phases of development, together with the evidence supporting this analysis. Identification of the original building materials and construction methods, insofar as this is possible. This may entail mortar analysis.
8. An account of the past and present uses of the bridge and its parts, with the evidence for these interpretations. An interpretation of the bridge and its place within the local network of packhorse trails where possible, comparison with other similar structures in the region may be useful here
9. Any evidence for the former existence of demolished structures, such as parapets
10. Full bibliographic and other references

Drawn Record

The drawn record should adhere to standards laid out in the English Heritage downloadable publication "*Understanding Historic Buildings: A Guide to good recording practice*". Drawings should be submitted in .pdf format, wet ink drawings are not required

1. A location plan drawn to an appropriate scale (at least 1:1000). A scale of 1:500 may be useful to illustrate detail.
2. A plan of the structure (to scale) which should show the form and location of any structural features of historical significance (e.g. piers, piles, footings, bonding materials, evidence of former parapets or abutments, masonry joints, changes in ground levels).
3. Elevations (to scale) recording the form and location of other significant structural detail and the relationship of the structure to the surrounding ground levels and river bottom.
4. A plan or plans identifying the location and direction of accompanying photographs and locating any potentially reusable bridge material.
5. Copies of earlier drawings throwing light on the structure's history, where these are available
6. Reconstruction drawings and phased drawings where these are of value.

Photography

Photography should be undertaken before and after works. Should the situation warrant it (for example a high level of repair to historically significant fabric) then photos should be taken during works. Good quality digital images are acceptable; again see English Heritage guidance as above. The record should consist of:

1. General views of the bridge, siting it in its landscape context
2. Views of the exterior of the bridge, including details of any structural features of historical significance
3. Views of the underside of the bridge, including details of any structural features of historical significance.
4. Identification shots of any loose material believed to have originally formed part of the bridge structure

The photographs should be tied in with the block plan.

Deposition of Record

The results of the recording of the historic structure are to be included within the Management Plan.

One copy of the recording of the historic structure, as described in Section 9 above, should also be submitted to Historic Environment Record at the County Council.



ArcHeritage



ArcHeritage
54 Campo Lane
Sheffield
S1 2EG

T: 0114 2728884
F: 0114 3279793

www.archeritage.co.uk