

BENCH ARCHITECTS

CONSERVING THE PAST, DESIGNING THE FUTURE

APPENDIX B

Assessment of Heritage Impact and Design & Access Statement



Figure 1 - Eagle Parade Drinking Conduit c2004

Project name: Eagle Parade Drinking Cistern/Conduit
Listing Reference: DRINKING FOUNTAIN - Grade II listed
List entry Number: 1258032
OS Grid Reference: SK 05757 73194 - MARKET PLACE
Client: Buxton Civic Association
Contact: Adam Bench RIBA AABC
Bench Architects
23 Terrace Road, Buxton, SK17 6DU
Tel: 01298 23991
Email: adam@bencharchitects.co.uk

Contents:

1.0 - INTRODUCTION, BACKGROUND AND CONTEXT	2
2.0 - CONDITION SURVEY AND HISTORIC BUILDING RECORDING	3
3.0 - PROPOSED WORKS - STRUCTURAL CONSOLIDATION AND ENHANCEMENT	3
4.0 - CONSULTEES - DCC HIGHWAYS, HPBC and HISTORIC ENGLAND	7
5.0 - ACCESS DURING THE WORKS	8
6.0 - EFFECT OF PROPOSALS MATRIX	9
7.0 - SUMMARY OF IMPACT - CONCLUSION	10

Appendices:

Level 3 – Historic Building Record

Appendix A: Documentary Evidence - Heritage Significance

Appendix C: Sensitivity Matrix

Appendix D: Mann Williams Structural Assessment

Appendix E: ETA - WSI - Archaeological

Appendix F: Buxton Well Dressing

Appendix G: Existing Drawings & Analytical Record

Appendix H: Proposed Drawings

Disclaimer:

© Copyright Bench Architects. This report has been prepared by Bench Architects with all reasonable skill, care and diligence, within the terms of the contract with the client for whom it has been prepared. Bench Architects accept no responsibility or liability whatsoever for the use of the report for any purpose other than that for which it was prepared and provided, or by any parties other than the client. Should the client require to pass copies of this report to other parties for information, the report must be copied in its entirety.

Issue Record:

Revision	Issue Date	Description / Status	Prepared by	Approved by
-	22.09.25	Listed Building & Planning Applications	ALB	RKB
A	30.04.26	Listed Building & Planning Applications	ALB	RKB

1.0 INTRODUCTION, BACKGROUND AND CONTEXT

1.1. Introduction:

This **Heritage Impact Assessment** has been prepared in pursuance of a Full Planning and Listed Building Application for proposed works at *Eagle Parade Drinking Conduit, Eagle Parade, Buxton, SK17 6EQ*.

1.2. The **Heritage Impact Assessment and Design and Access Statement** should be read in conjunction with the **Statement of Heritage Significance**; the **Level 3 Survey with condition survey photographs and drawings**; **Sensitivity Matrix** and the associated design proposals.

1.3. This statement accompanies a full planning and listed building application for proposed works on Eagle Parade Drinking Conduit, Buxton. The works aim to restore the conduit to its original 1840 design. The design approach is conservation-led, and the proposals are informed by a detailed understanding of the conduit's significance, statutory designation, and relevant planning policies.

1.4. The proposed repair and reinstatement arise from our detailed documentary research and the amelioration of the structural defects and ashlar deteriorated noted below and trial pits investigations.

1.5. Reinstatement of Historic External Appearance: [P-534D, P-535C, P-536D & P-537D]

The works include the repair and reinstatement or replacement of the associated masonry using matching materials and techniques, as well as the construction and reinstatement of the cast-iron railings.

1.6. Structural engineer **Stephen Swinbank - Mann Williams** undertook an inspection of the Eagle Parade Conduit and provided comments, proposals and structural assessment of Bench Architects proposals. These have been incorporated into BA's documentation.

1.7. A comprehensive Measured Survey has been carried out by **Bench Architects** and **The Architectural & Land Survey Partnership** and forms the basis for Bench Architects' Existing and Proposed Drawings.

2.0 CONDITION SURVEY AND HISTORIC BUILDING RECORDING

2.1. A non-intrusive visual inspection, photographic and a limited digital borescope survey have been undertaken to assess the conduit's current condition and to inform the scope of proposed works.

2.2. Trial pits to the conduit footings, archaeologically recorded, were excavated adjacent to the north and south sides of the cistern masonry on 16.03.2026.

The masonry condition and footings excavations were inspected and reviewed by Mann Williams Structural Engineers, Historic England and HPBC Conservation and Planning Officers.

2.3. The structure exhibits settlement and severe patterns of masonry deterioration; including stress cracking and deformation, delamination and blistering of the ashlar, and surface loss.

The conduit has been repaired with hard cementitious pointing and cementitious patch indents.

2.4. Historically the conduit has been dismantled and emptied of its internal workings. The structure was strengthened by morticing the north and south ashlar panels into the western. It is probable that the ashlar cenotaph was constructed with its capping and urn, and then the eastern slab with the Cavendish Serpent monogram placed last.

2.5. The cast iron railings and corner/gate posts were fluted and the railings floral and of an Italianate design. Such designs were influenced by **Lewis Nockalls Cottingham** (1787-1847) influential pattern-book for ornamental ironwork entitled '*The Ornamental Metal Worker's director*' 1824 and **George Basevi's** 1830's decorative ironwork designs for various London estates.

Sundry Well-Dressings photographs of the 1920's and 1930's provide detailed evidence of the cast-iron railings/posts, which survived until WWII, when they were extracted for scrap metal.

2.6. In circa 2004 the gritstone urn was dismantled and stored in the HPBC Market Street depot, where it was stripped of its leadwork. In December 2022 Buxton Civic Association took stewardship of the urn.

3.0 PROPOSED WORKS - STRUCTURAL CONSOLIDATION AND ENHANCEMENT

3.1. Dismantling and Reconstruction

It is proposed to dismantle the conduit and transport the ashlar components to **R M Eaton Stonemasonry**, who will repair the ashlar and template new components where the masonry is severely decayed.

Temporary nylon strapping around the cistern is required to avoid uncontrolled collapse when the stone cap is lifted during dismantling.

3.2. **Ashlar Source**

The ashlar used for the conduit is a Marsdenian 'Ashover', fine-grained, flaggy, feldspathic, sandstone. **Corbar Gritstone** was a major contributor to 18th and 19th-century Buxton, including The Crescent and the Devonshire Royal Hospital.

Sir Jeffrey Wyatville (1766-1840) and his successor **Sir Josheph Paxton** (1803-1865) utilized **Chatsworth Burntwood ashlar**, a [*still active*] quarry high above Beeley, later work sourced **Stancliffe Stone**, from Darley Dale, outside the Cavendish lands.

The Buxton quarries have long ceased production and Burntwood ashlar is only quarried for Chatsworth estate projects. Derbyshire gritstone is proposed with a similar density and porosity to the Corbar and Burntwood gritstones.

At the **16.03.26** site investigation meeting with Historic England and HPBC - **Peakmoor** and **Birchover Buff** gritstones ashlar samples were presented for the repairs/replacement masonry, and these were approved as suitable stones sources.

All Ashlar indents would be sourced from sound (interior facing) sections of the original ashlar to ensure replacement stone minerology identical in colour / density and porosity to the original.

3.3. **Existing Gritstone Mass Slab Footings: [P-540 - 541]**

The 16.03.2026 trial pit inspection revealed that the north side of the cistern is founded at approximately 650mm below the current finished ground level. The cistern was shown to be founded on the natural bedrock in both trial pits. The foundation depth was marginally shallower on the south side owing to variation in the bedrock profile. There are some open joints beneath the base stones and the rock profile. Refer to drawing **E-049** which documents the trial holes.

The open joints in the founding stones should be deep pack pointed in hydraulic lime mortar as should the bedding joint over the bedrock.

It is probable that the ashlar railing-plinth had been removed along with the cast-iron railings circa 1939 during WW2. Repurposed gritstone kerbs were bedded on cement mortar onto a roofing slate levelling course onto an extant limestone footing. An ash-lime mortar has been used to level the Bee Low bed-rock.

There is no requirement for concrete footings other than two small 500mm cubed padstones to support Buxton Well Dressing's annual displays.

3.4. **Conduit Plinth -**

The original paired large format 1,219mm x 608mm x H270mm gritstone plinth, have separated in the region of 15mm. They are to be carefully lifted, repaired, and any ferrous metalwork that

caused them to separate removed. The plinth stones reinstated, re-bedded and cramped together with a pair of inert grade 316 stainless-steel cramps.

3.5. **New Brickwork Core and Reinforced Concrete Lintel Slab** - [Drawing P-520-1]

Brick Core: [Drawing P-520-1 C (Section AA) - note item 3]

During WW2 the interior and operating mechanisms of the Cistern were removed along with the railings and railing plinth. The interior of the Cistern is empty, a void. The structure has significant multi-directional movement (8-27mm), which is caused by excessive loading and failed ashlar to ashlar connections. Severely decayed and no longer structurally performing ashlar components require mechanical support, restraint or renewal. A brick-core would provide such constraint and allows future repair works of isolated stone to be carried out without further wholesale dismantling of the conduit. The presence of the brickwork will also improve the overall robustness of the structure.

The proposed brick core - H.G. Matthews Grey Brown 50.3 N/mm² handmade imperial brick (230x110x66mm), 20 courses laid to English Bond with Queen-Closers and King-Closers to form quarter bonds between courses. Brickwork laid with NHL.2 mortar, or a hot-mixed-lime mortar with a pozzolan.

A stainless-steel internal frame to support the perimeter ashlar components were also considered in lieu of brick core, but it is viewed that a brick core would be preferable as a brick-core has greater practicality and economy than a stainless-steel frame; with ensuing flexibility and ease in the placement of the structural fixings restraining the masonry. Further, a stainless-steel frame would require epoxy resin-anchored structural fixings into the cistern plinth, whilst a brick-core's stability is provided by its mortar bedding.

Reinforced Concrete Slab: [Drawing P-520-1 C (Section AA) - note item 4]

150mm deep reinforced concrete slab to support the massive gritstone cornice and the Urn, to Structural Engineer's specification.

3.6. **Cenotaph** - [Drawings/Photographs E-032- E050]

Repair to Ashlar Cenotaph: [P-534-537]

The ashlar cenotaph has deteriorated over time and suffered from significant structural movement. The condition of the ashlar and masonry deterioration patterns illustrated on drawings/photographs E-032-E050. The decayed ashlar includes: a) freeze-thaw shattering; b) Splitting and deformation due to excessive loading; c) Delamination due to vertical positioning of the bedding planes; d) Granular disintegration due to salt crystallisation and binder dissolution.

The ashlar components require substantial repairs, indent repairs, and renewal of the severely decayed components. The architect and stonemasons will assess individual masonry at their yard should further salvage or part reuse of ashlar components be an option.

The perimeter ashlar components will be reassembled and fixed to the brick core utilising inert grade 316 stainless steel cramps to Structural Engineer's design, and bedded with NHL.2 mortar, or a hot-mixed-lime mortar with a pozzolan.

Following the site meetings 02.03.2026 with HPBC [Rachel Robinson & Jane Colley] and 16.03.2026 HPBC and Historic England [Jess Jenkinson & Tim Allen] during trial holes - HE noted that they had not appreciated the scale of the ashlar deterioration and that BA's HPK/2025/0336 and 0367 applications documentation was now considered appropriate. JJ.HE 01.04.26 email - *"Having reviewed the pre-app documents and having now seen the conduit on site, we understand that the scale of rebuilding proposed to the conduit is necessary due to the scale of delamination of stone/cracks and fractures seen across the structure"*.

Restoration of the Cavendish Motif: [P-550]

The original raised Cavendish coiled serpent motif and the date 1840 as can be seen on the eastern elevation of the conduit are to be restored from documentary evidence including the photograph from the DCC Buxton Museum ref DCBM10038. The 1840 numbering appears to be a slab serif typeface similar to a Clarendon font.

Two bronze taps are to be reinstated to the western ashlar [P-550].

3.7. Cornice - [Drawing P-540 - notes item 6]

A new gritstone cornice is required with its core drilled to receive stainless steel urn reinforcement rod and locking nuts.

3.8. Urn Pedestal - [Drawing P-540 - notes item 7]

New gritstone urn pedestal is required with its bedding laid perpendicular to the ss prestressing rod.

3.9. Reinstatement of Gritstone Urn - [Drawing P-540 - notes item 8]

The existing urn-vase is to be indent and crack repaired, and code 8 lead sheet vessel lining reinstated.

3.10. Burlington Brathay Urn Lid - [Drawing P-540 - notes item 9]

The urn is to be 'closed' for durability with a black Brathay or Kirkby urn lid, which is supported on Brathay or Kirkby 'Sockets' with a stainless-steel lifting socket, and will sit on the new gritstone urn pedestal with its bedding laid perpendicular to the stainless steel prestressing rod. The Burlington Stone lid is introduced to protect the urn and prevent water ingress. A contrasting material has been selected to differentiate the capping from the original design.

Burlington Brathay [or Kirkby] provides a Cavendish Chatsworth link as historic owner of the Brathay quarry.

3.11. **Railing Plinth** - [Drawing P-534, 550-552] - notes item 10]

The gritstone railing plinth is to have a cambered top cW195 x H395mm. Western elevation central plinth is arched to allow draining of surface water. Gritstone plinth secured with M16 dowels at circa 250mm centres into concrete footings.

3.12. **Riven Gritstone Pavers** - [Drawing P-520 & 540 - notes item 11]

8no W600 x L1200mm rhomboid shaped c75mm thick. 2no at drainage arch W550 x L440mm. Pavers bedded on minimum 25mm of 50%/50% soft and sharp sand 4:1 NHL.5 lime mortar mix. 2% slope from eastern apex to western drainage arch.

18no slabs W295-375 x L650-700mm. Western elevation apron tapered to abut kerbstones. Eastern apron with stainless steel sockets to receive Buxton Well Dressing displays.

3.13. **Cast Iron Railings** - [Drawing P-540 - notes item 12]

Reinstatement of Cast-Iron Railings: [P-550 - 554]

The cast-iron railings are to be reinstated from documentary evidence including photographs from the DCC Buxton Museum ref DCBM100383 and 1920's Buxton Museum - Well Dressing J.R. Board photographs. The design of railings and posts appear influenced by **Lewis Nockalls Cottingham's** 1824 Founders Director, and typically Italianate designs of **Wyatville, Basevi, Papworth, Barry**. For safety reasons the railing finials have been blunted, and the railing gaps are less than 100mm.

An inward opening locked 'secret' gate is positioned on the western elevation, along with two new cast-aluminium signs, refer to drawings **P-551 and P-554** for details. The railings are to be two-pack epoxy painted in a low-sheen in Hague Blue, or Purple-Brown.

Signage - [P-554]

QR Code and Patron Dedication in cast-aluminium, painted as railings. QR Code and font painted in opposing colour.

4.0 CONSULTTEES - DCC HIGHWAYS, HPBC and HISTORIC ENGLAND

- 4.1. As part of HPK/2025/0336 and 0367 previous applications Alex Land and Angus Clark – DCC Highways was consulted regarding the proposed works and a Section 50 licence from Derbyshire County Council would need to be obtained before work commences.
- 4.2. Bench Architects have consulted with HPBC [Rachel Robinson & Jane Colley] and Historic England [Jess Jenkinson & Tim Allen] and Dr. Ian Parker-Heath-Archaeologist consulted with DCC Archaeologist Steve Baker.

5.0 ACCESS DURING THE WORKS

- 5.1. Drawing **P-502** illustrates the temporary works area required to carefully dismantle, workshop repair and reconstruct the conduit. This area will require a short term extension into the highway in order to install the western railings and gritstone apron.

6.0 EFFECT OF PROPOSALS MATRIX

6.1. Below are proposals for **Eagle Parade Conduit**, together with:

- Assessment of Significance and Impact.
- Assessment Table.
- Justification for the design decisions and proposals.

Note: All proposals are to be read in conjunction with Bench Architects' drawings.

6.2. Assessment of Significance and Impact

Each proposal is mapped against a chart, with a key recorded beside the intervention. The key identifies the following:

Article I. Contribution to Significance

Code	Definition
H	High – Fundamental to significance.
M	Medium – Provides an important contribution to significance.
L	Low – Has a minor contribution to significance.
N	Neutral – Does not affect significance.
D	Detrimental – Has a detrimental impact on significance.

Article II. Effect of Proposal

Code	Effect
++	Very Positive
+	Positive
0	Neutral
–	Negative
—	Very Negative

Example: [M+] indicates that a component of medium significance will be positively affected by the proposed intervention.

Article III. Assessment Table

Ref.	Proposal Description	Significance Contribution	Effect of Proposal	Comments
4.1	Restoration of the Cavendish motif	H	++	The original raised Cavendish coiled serpent motif and the date 1840 as seen in the documentary evidence has been worn down over time to the point of unintelligibility.
3.1	Reinstatement of the cast-iron railings	H	++	The original railings surrounding the conduit were extracted as scrap-metal during WW2. Their reinstatement (with or without fluting) and painted Hague Blue or Purple-Brown - would be authentic to the conduit's historical context.
3.1 4.4	Repair and reinstatement of the gritstone urn	H	++	The gritstone urn was removed after 2003 and stored in DCC Market Street depot. Its repair and reinstatement would contribute considerably and very positively to the significance of the conduit
4.2	Repair or replacement of conduit masonry units.	M	+	Essential for ensuring the longevity of the conduit. Matching ashlar will be used for replacement units, indent repairs will be executed in source material repurposed from the original 1840 ashlar. The extent of the ashlar replacement has been determined by the severity of the masonry deterioration.
4.3	Retention of the Footings	H	++	Trail holes have revealed the existing footings are adequate, retention of the footings increase the proportion for retained and consolidated original masonry.

7.0. SUMMARY OF IMPACT - CONCLUSION

- 7.1. The proposed works will preserve and enhance the heritage significance of this Grade II listed heritage asset. It is considered that the repairs and restoration of missing components will result in no significant harm to the heritage asset, either in the form of direct physical impacts or in terms of effect on the setting. The proposed modifications will result in the conduit being equivalent to that of the original construction. Urgent repairs to the Conduit are to be executed in conjunction with the reinstatement of missing components which are based upon extensive documentary research and reveal the aesthetic and historic value of the monument.

The above works are essential in order to prevent the Conduit from collapse with ensuing health and safety implications and corporate liability.