

Archaeological Watching Brief on works to the City Wall, City Walls Road, Worcester



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Worcestershire Archaeology
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Archaeological watching brief on works to the City Wall, Worcester

Graham Arnold (project leader)

Summary

An archaeological watching brief was undertaken at City Walls Road, Worcester (NGR SO 852 548; WCM 102153; List entry Number: 1005282). It was undertaken on behalf of Worcestershire County Council who commissioned works to block access through the City Wall as part of the Worcester Transport Strategy Key Corridors scheme.

The section of the former medieval wall of the Worcester which stands adjacent to the western edge of City Walls Road is well preserved, comprising seven courses of shaped, sandstone blocks with some post-medieval brick infill. A gap in the City Wall at this point had formerly allowed access to an alleyway and a pedestrian bridge crossing City Walls Road.

The works required the removal of a brick parapet built on top of the historic fabric of the wall, stopping up access from City Walls footbridge to City Walls Road using reclaimed bricks, the installation of new pedestrian barrier set back at the top of the City Wall, installation of pedestrian deterrent paving installed behind the city wall and repointing of the historic City Wall.

The wall is included on the schedule of ancient monuments and consent for these works was obtained from Historic England (ref S00109962) subject to conditions including the provision of an archaeological watching brief.

All intrusive works and removal of brickwork close to the historic fabric of the wall were monitored by an archaeologist and a channel of communication was maintained with Dr Neil Rimmington of Historic England to ensure that the works were carried out to an agreed method statement. The works were carried out with no impact on the historic fabric of the wall and no significant archaeological deposits or artefacts were encountered.

Report

1 Background

1.1 Reasons for the project

An archaeological watching brief was undertaken at City Walls Road, Worcester (NGR SO 852 548; WCM 102153; List entry Number: 1005282). It was undertaken on behalf of Worcestershire County Council who commissioned works to block access through the City Wall as part of the Worcester Transport Strategy Key Corridors scheme.

The works required the removal of a brick parapet built on top of the historic fabric of the wall, stopping up access from City Walls footbridge to City Walls Road using reclaimed bricks, the installation of new pedestrian barrier set back at the top of the City Wall, installation of pedestrian deterrent paving installed behind the city wall and repointing of the historic City Wall.

This section of the City Wall is designated as a scheduled monument (Worcestershire SAM WCM96111; Listed Building (II) - 1063805) under the Ancient Monuments and Archaeological Areas Act 1979 (as amended). The proposed works were discussed with Dr Neil Rimmington Inspector of Ancient Monuments for Historic England and James Dinn, Archaeological Officer for Worcester City Council. Scheduled Monument Consent (ref S00109962) was confirmed in a letter, dated 17 November 2015 by Dr Rimmington, and was issued subject to the provision of an archaeological watching brief. A methodology for the proposed works was approved by Historic England. A Written Scheme on Investigation for the watching brief was produced by Worcestershire Archaeology which was approved by Historic England. .

The project also conforms to *Standard and guidance: Archaeological watching brief* (ClfA 2014 *Statement of standards and practices appropriate for archaeological fieldwork in Worcester* (Worcester City Council 1999), the approved Method Statement and the terms of the Scheduled Monument Consent issued by Historic England (Appendix 3).

The event reference for this project, given by the Worcester City HER is WCM 102153.

2 Aims

The aims of the watching brief were to observe and record exposed fabric of the City Wall and significant buried deposits as well as ensure that works were carried out to the agreed method statement.

3 Methods

3.1 Personnel

The project was led by Graham Arnold (BA (hons.), MSc) who joined Worcestershire Archaeology in 2009 and has been practicing archaeology since 2003, assisted by Richard Bradley (BA (hons.), MA; ACIfA) and Jamie Wilkins (BA (hons.)). The project manager responsible for the quality of the project was Tom Rogers (BA (hons.); MSc. Illustrations were prepared by Carolyn Hunt (BSc (hons.); PG Cert; MCIfA), whilst further figures were provided by the client.

3.2 Documentary search

Prior to fieldwork commencing a search was made of the Historic Environment Record (HER) (WCC2016). The National Heritage List for England (Historic England) was also consulted prior to works (HE 2016 - <https://historicengland.org.uk/listing/the-list/>).

3.3 Fieldwork strategy

A detailed specification has been prepared by Worcestershire Archaeology (WA 2016)

Fieldwork was undertaken between 8 March 2016 and 31 March 2016. The site reference number and site code is WCM 102153.

The following works were observed:

- Removal of a brickwork parapet on top of City Wall
- Lime mortar fillet of the City Wall stonework, prior to stopping up access with a concrete in fill.
- The reduction of the current ground level behind the wall, prior to the installation of new pedestrian barrier set back at the top of the City Wall and the installation of pedestrian deterrent paving installed behind the city wall
- The removal of the existing footpath onto City walls Road and replacement with topsoil.

The modern parapet walls were reduced to the level of the existing footpath above the wall, whilst the area of the flowerbed was reduced to 0.15m below the existing level to allow for a concrete base for the proposed pedestrian deterrent cobbles. Reduction of the walls was carefully carried out using manual, hand-held power tools, with bricks being cleaned and reused in blocking the access.

Deposits from the flowerbed, considered not to be significant were removed using a 360° tracked excavator, employing a toothless bucket and under archaeological supervision. Excavation for fence posts was undertaken by hand. Only modern made ground was observed during the works, built up against the City Wall and underlying the modern footpath to the stairwell. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012a).

The exposed stonework of the City Wall was skimmed with a lime mortar fillet to protect it from the modern concrete infill of the stairwell. The City Wall was also covered by plastic sheeting to protect the face during pouring of concrete to infill the stairwell.

3.4 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources. Artefact retrieval followed the *Manual of service practice, recording manual* (WA 2012). No archaeological artefacts or deposits with potential to were present during the works.

3.5 Statement of confidence in the methods and results

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. The works did not reveal any significant archaeological deposits, finds or structures and the construction works complied with the Scheduled Monument Consent.

4 The application site

4.1 Archaeological context of the City Wall

The Scheduled Ancient monument is listed on the National Heritage List for England (NHLE) as:

'City walls: section extending 130ft (40m) from the back of No 27 New Street to Windsor Row' (HE 2016)

The Worcester HER (WCM96111) reference is described as:

'Section of the medieval city wall, partly surviving above ground'.

From the bastion (WCM 96110) the city wall masonry continues northwards for c.19 metres. The plinth courses remain visible for c.12 metres north of the bastion before they are truncated. The superstructure masonry (7 visible sandstone courses) continues until cut by the rear wall of nos.6-9 Cornmarket (furniture store) (WCC2016).

Well preserved sections of the City wall continue both north and south (WCM96109) on the western edge of City Walls Road, comprising both medieval sandstone and post-medieval brick structures included.

Lowesmoor City ditch (WCM96136) is 100m north of the site. Other ditches that pre-date the existing city wall have been recorded to the north (WCM96394; WCM100498) by Bennet during works in the 1980s. The Lowesmoor ASDA site was subject to excavations in 2010-11 by Worcestershire Archaeology (report forthcoming).

A series of medieval and post medieval buildings are found on New Street (WCM99169), some with associated undercrofts and cellars (WCM96208) located 75m to the West of the site and Cornmarket (WCM96432) 100m northwest of the site.

Nash's hospital and almshouses (WCM96072) erected in 1664, is 50m to the south of the site. Moore's Hospital (WCM96070), almshouse and school with origins in is also located close by.

There is also documentary evidence of an earlier hospital of St John and Jerusalem (WCM96014) dating to the 12th and 13th Century in the vicinity of modern day New Street.

A Roman burial (WCM96668; WCM 100008) with associated pits including pottery were found at 11-12 New Street in 1985 during a watching brief on foundations cut through an existing cellar floor, 85m southwest of the site location.

4.2 Current land-use

The site was formerly a thoroughfare allowing access from Windsor row footbridge over City walls road, down to City walls Road pavement. Works were stopping up access from City Walls footbridge to City Walls Road and the installation of fencing and pedestrian deterrent cobbling.

5 Description of works

The site location is shown in Fig 1. The architects plans of the works are shown in Appendix 4. The results of the structural analysis are presented in Appendix 1.

5.1.1 Reduction of the existing brick parapet

The modern brick walls surrounding the stairwell and on top of the City wall were reduced the paving level using handheld power tools (Plates 1 +2). A free-standing aluminium scaffold was also used (Plate 7) as was requested in the brief from Historic England. The later scaffold was independent of the existing wall and did not affect the historic fabric of the Scheduled Monument (Plate 8).

5.1.2 Reduction of area above wall and installation of fencing posts and paving

Modern made ground was encountered in all of the intrusive works and included recently deposited topsoil, overlying hardcore, type 1 and sub-base material from the surrounding buildings, with a CCTV duct crossing the area (Plates 4-6). In the northern end of the area a concrete slab was uncovered with a modern drain (Plate 3). The fence posts were equally spaced 2.00m apart and each 0.60m from the face of the wall. The fence posts were 0.30m in diameter and a maximum of 0.40m deep, into the modern hardcore made ground material (101).

5.1.3 Blocking access of stairwell

To protect the exposed stonework of the lower City Wall, the wall was filleted with a lime mortar mix, which had been approved by Historic England (Plates 9-11). The access was then blocked with wooden shuttering before pouring concrete. The existing Scheduled Wall stonework to the

south of the access was also covered in plastic sheeting to protect it during concreting of the stairwell.

5.1.4 Removal footpath at base of wall

Works to the footpath in front of the City wall (Plate 15) removed the tarmacadam surface to a maximum depth of 0.20m. This was overlying the existing hardcore levelling material, which was left in place before replacement with new topsoil and turf.

6 Synthesis

All of the works conformed to the approved method statement for the Scheduled Monument Consent and only modern deposits were exposed during the works. The works did not adversely affect the setting or fabric of the City Wall.

7 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

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8 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Kate Passant (Worcestershire County Council), Nigel Davies (Alun Griffiths Contractors Ltd) and Dr Neil Rimmington (Inspector of Ancient Monuments, Historic England).

9 Bibliography

CIfA 2014 *Standard and guidance: Archaeological watching brief*, Chartered Institute for Archaeologists

DCLG 2012 *National Planning Policy Framework*, Department for Communities and Local Government

DCLG/DCMS/EH 2010 *PPS5 Planning for the historic environment: historic environment planning practice guide*, Department for Communities and Local Government/Department for Culture, Media and Sport/English Heritage

English Heritage 2011 *The setting of heritage assets*, English Heritage

Historic England 2016 National Heritage List for England (NHLE)

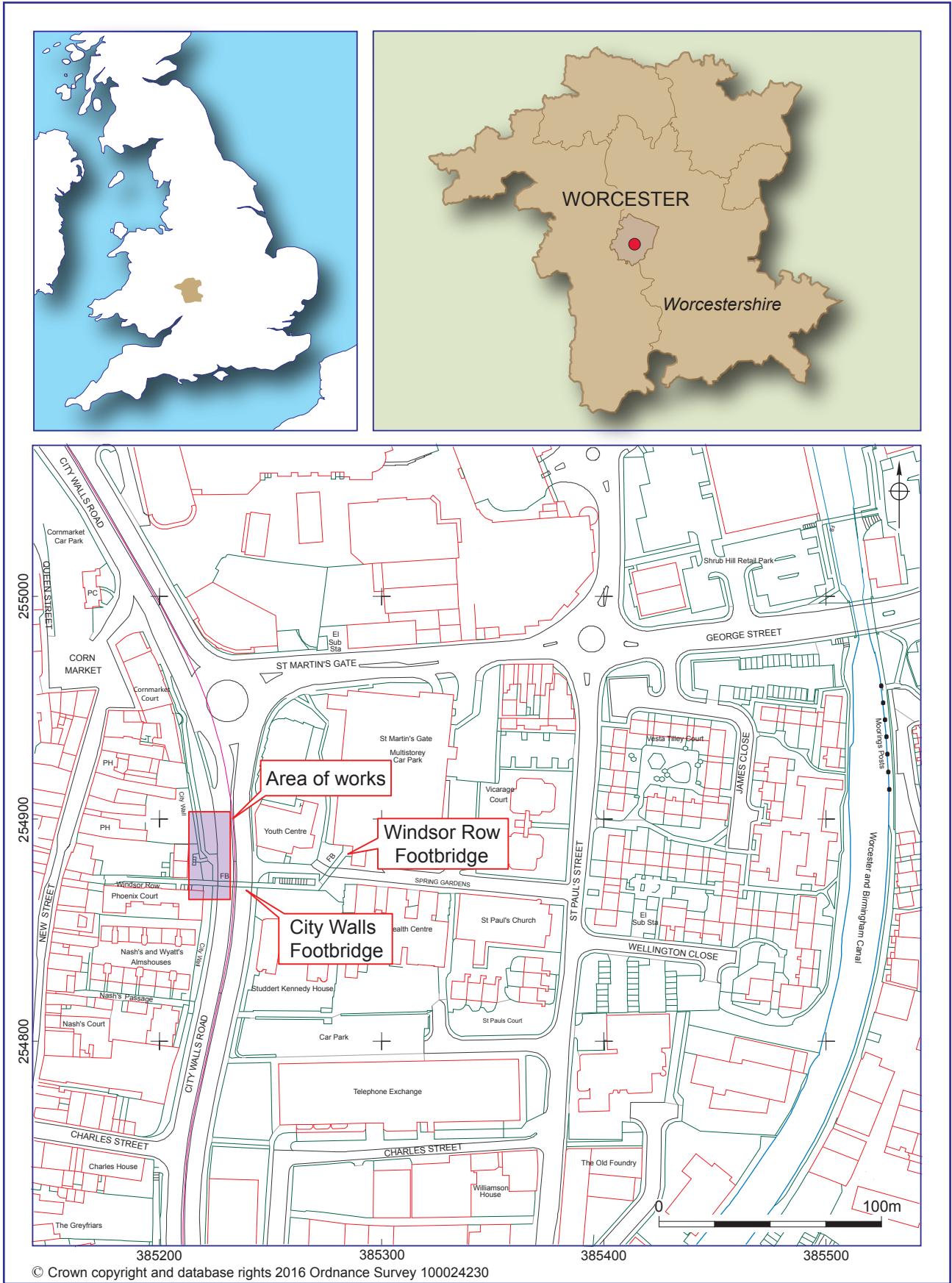
<https://historicengland.org.uk/listing/the-list/>

WA 2012 *Manual of service practice, recording manual*, Worcestershire Archaeology, Worcestershire County Council, report **1842**

WA 2015 *Written Scheme of Investigation for an archaeological* for an archaeological watching brief on works to the City Wall, Worcester, Worcestershire Archaeology, Worcestershire County Council, unpublished document dated 8 January 2016, **P4728**

Worcester City Council 1999 *Statement of standards and practices appropriate for archaeological fieldwork in Worcester*, Appendix 3 in Supplementary Planning Guidance Number 8: Archaeology and Development, Worcester City Council, document revised June 1999

Figures



Location of the site

Figure 1

Plates



Plate 1: Beginning reduction of the brick stairwell, parapet



Plate 2: The site overall during works, view from City Walls road bridge looking northwest.



Plate 3: The concrete pad and drain beneath the flowerbed topsoil. View east.



Plate 4: The flowerbed during reduction. Plastic terram enclosing topsoil evident. View north.



Plate 5: Trench 1 after reductions completed. View north.



Plate 6: Trench 1 following reduction: View south.



Plate 7: Reducing the brick parapet on a freestanding aluminium scaffold. View south.



Plate 8: Scaffold for new brickwork. Not fixed to the Scheduled Monument City wall; View north



Plate 9: Sandstone wall covered by lime mortar fillet prior to concreting stairwell.



Plate 10: Sandstone wall covered by lime mortar fillet prior to concreting stairwell.



Plate 11: Sandstone wall covered by lime mortar fillet prior to concreting stairwell. View northwest



Plate 12: Stairwell shuttering and wall covered by plastic sheeting to protect from concrete.



Plate 13: Fence posts 2 metres apart and 0.60m from face of wall after hand excavation



Plate 14: Fencing installed at North end of City Wall.



Plate 15: Tarmac removed from footpath to City wall access after blocking up. View northwest.



Plate 16: Completed blocked passageway

Appendix 1 Trench descriptions

Trench 1

Site area: Flowerbed reduction behind City Wall

Maximum dimensions: Length: 12.50m Width: 3.00m Depth: 0.50m (0.15m below paved level)

Orientation: N-S

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
100	Topsoil	Friable dark brown sandy silt with frequent small sub angular gravels and rooting, with occasional large roots from bushes. Modern refuse. Within vertical slab edging and a modern plastic sheet terram.	0.0 – 0.35m
101	Hardcore	.Compact Type 1 gravel and loose broken brick and concrete. Concrete footings for modern brick wall and paving surrounds the area.	0.0.35 – 0.45m
102	Concrete pad	Concrete surface in North end of the area, with drain in the centre.	0.30 – 0.45m

Trench 2

Site area: Footpath in front of City Wall access

Maximum dimensions: Length: 4.20m Width: 3.50m Depth: 0- 0.20m

Orientation: E-W

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
200	Modern footpath	Tarmacadam footpath	0.00-0.20m
201	Hardcore	.Type 1 gravel and orange sub-base levelling for modern path and concrete footings of path	0.20m

Appendix 2 Technical information

The archive (site code: WCM 102153)

The archive consists of:

- 4 Field progress reports AS2
- 1 Photographic records AS3
- 65 Digital photographs
- 3 Trench record sheets AS41
- 1 CD-Rom/DVDs
- 1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Worcester City Museum and Art Gallery
Museums Worcestershire
Foregate Street
Worcester
WR1 2PW

Tel. Worcester (01905) 25371

Appendix 3 Scheduled Monument Consent and Method Statements



Historic England

WEST MIDLANDS OFFICE

Ms Laura Bown
CH2M HILL
Redhill House
227 London Road
Worcester
WR5 2JG

Direct Dial: 01216256856

Our ref: S00109962

17 November 2015

Dear Ms Bown

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

**CITY WALLS: SECTION EXTENDING 130FT (40M) FROM THE BACK OF NO. 27
NEW STREET TO WINDSOR ROW, WORCESTER
Scheduled Monument No: SM WT 285 B, HA 1005282
Our ref: S00109962
Application on behalf of Worcestershire County Council**

1. I am directed by the Secretary of State for Culture, Media & Sport to advise you of the decision regarding your application for Scheduled Monument Consent received 7 May 2015 in respect of proposed works at the above scheduled monument concerning the taking down of new brickwork parapet on top of City Wall, stopping up access from City Walls footbridge to City Walls Road using reclaimed bricks, installation of new pedestrian barrier set back at top of City Wall, installation of pedestrian deterrent paving installed behind city wall and repointing of historic City Wall. The works were detailed in the following documentation submitted by you:

- Email from Tony Rich dated 29th June 2015 containing amended drawings for proposed works.
- Email from Kate Passant dated 6th July 2015 confirming that some repointing of historic fabric will be included.
- Amended scheme drawings: Drawing 473946.LE.00.40-01, Drawing 473946.LE.00.40-02, Drawing 473946.LE.00.40-03.

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.



THE AXIS 10 HOLLIDAY STREET BIRMINGHAM B1 1TG

Telephone 0121 625 6870
HistoricEngland.org.uk



Historic England is subject to the Freedom of Information Act 2000 (FOIA) and Environmental Information Regulations 2004 (EIR). All information held by the organisation will be accessible in response to an information request, unless one of the exemptions in the FOIA or EIR applies.

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.



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 presentation and public enjoyment of the monument, but necessitating unavoidable but on balance acceptable interference with the historic fabric and some ground disturbance. Necessary archaeological supervision is included by condition.

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 Dr Neil Rimmington, Assistant Inspector of Ancient Monuments, Historic England, The Axis, 10 Holliday Street, Birmingham, B1 1TG (Telephone 0121 625 6856; Email: neil.rimmington@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) No ground or building works for the installation of the new pedestrian railings shall take place until the applicant has confirmed in writing the commissioning of a programme of archaeological work 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.
- (c) All fixings shall be made into the joints and not into the brick/ stone.
- (d) All pointing and mortar work shall be in a mixture and finish to match the existing in composition, colour, texture and style.
- (e) Care shall be taken that fittings do not rust so as to stain the brickwork/ masonry.
- (f) Any vegetation growing in the masonry shall be cut off level with the surface of the stonework and the roots poisoned/ carefully removed.
- (g) All those involved in the implementation of the works granted by this consent



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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.

- (h) 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/ ground disturbance other than that which is expressly authorised in this consent.
- (i) A report on the archaeological recording shall be sent to the Historic Environment Record and to Dr Neil Rimmington at Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed).
- (j) The contractor shall complete and submit an entry on OASIS (On-line Access to 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.
- (k) No ground or building works shall take place until the applicant has provided a method statement for the works, which has been submitted to and approved by the Secretary of State advised by Historic England.

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



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Historic England

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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

Neil Rimmington

Assistant Inspector of Ancient Monuments

E-mail: neil.rimmington@HistoricEngland.org.uk

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

cc James Dinn - Worcester City Council



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ALUN GRIFFITHS CONTRACTORS LTD

City Walls

METHOD STATEMENT NO. MS 001

SUBJECT:

Site establishment

Originated by: N. Davies		Construction Approval:		Environmental Approval:		Works-Manager Approval:		
Date: 02/02/16		Date:		Date:		Date:		
P.M. Acceptance:				Work to commence Approval:				
Date:				Date:				
Revision	Date	Change		Revision	Date	Change		
0		Issued for approval						
Distribution:		P. EVANS Contracts Manager	N. Davies Project Manager	.M Finch Foreman	S. ENGINEER SITE COPY			H&S FILE

1.0 Introduction.

The following method statement covers the procedures to be adopted for site establishment works at City Walls Worcester.

Main activities include:

- Erection of perimeter fencing
- Welfare units

2.0 Responsibilities.

Name	Position	Emergency contact No.
Peter Evans	Contracts Manager	07977 280469
Nigel Davies	Project Manager	07966318173
Mike Finch	Works Manager	07977280410

3.0 Method/Procedure.

Hold points prior to works commencing.

- All personnel will undertake a general site induction.
- All personnel will undertake an environmental site induction.
- Relevant PPE will be issued and worn at all times.
- All operatives certification regarding competence will be produced and copied to file.
- All plant to be inspected and defects reported immediately
- Carry out method explanation to all employees associated with the work.
- Pollution control and contingency plan to be developed and approved prior to commencement.

Method

- The Welfare unit and Store will be located on the verge to City Walls Road
- Welfare unit will be delivered by 20 tonne hiabb lorry and lifted into place under the supervision of a competent slinger and signaller, which will be covered under the lifting plan. This operation will be carried out under a lane closure on City Walls Road
- Welfare unit will have toilet block which gets emptied on a weekly cycle, and has a canteen area supplied with drinking water in 5 gallon jacks and a facility for hot food and drinks.
- The site compound area will be kept clean and tidy at all times, and monitored on a daily basis.
- The site limits will be securely fenced with heras fencing and warning signs erected to prevent unauthorised access.
- Security Cameras will be employed to maintain the site outside of working hours.

4.0 Principal Equipment.

- 6 tonne dumper
- 20 tonne Hiabb lorry

5.0 Environmental Considerations

- Noise levels shall be minimised where possible and within the site working hours.
- Refuelling of plant to be carried out in accordance with the approved procedures.

6.0 COSHH

- Diesel
- Grease
- Oil

Refer to main COSHH assessment file in site office

7.0 Specific Requirements for Risk Assessment

- A will be first aiders on site at all times.
- Certificates will be in file on site.

8.0 P.P.E. Requirements

- Hard hats.
- Safety footwear.
- High visibility clothing.
- Gloves.
- Overalls may be required for certain operations

9.0 Appendices

Appendix A	Risk assessment
Appendix B	Method statement explanation form

Appendix A Risk Assessment

Method Statement Name: Site Establishment					Method Statement Number: 001					
Contract: City Walls					Contract Number: W0027					
Originator Name: N. Davies					Approval Name:					
Signature:			Date:		Signature:			Date:		
KEY:		L = Likelihood	S = Severity		R = Risk (Likelihood x Severity)					
RISK RANKING:		3= Likely 2= Possible 1= Unlikely	3= Fatality 2= Major Injury 1= Minor Injury		1 to 4 = Acceptable – Use basic control measures (PPE,supervision,tool box talks) 6 = Significant Risks, further control measures to be applied to reduce results to Acceptable 9 = Critical Risks – Not Acceptable					
Ref No	Task/Element	Potential Hazards	Population at Risk	Risk Rating			Control Measures Specified	Revised Risk Ranking		
2	Working area	Trips and falls	Employees	3	3	9	All working areas to be kept free of debris where possible with surplus tools and materials removed. Only those involved in the working operations to be within the area. Provide suitable fencing, signing and guarding to the working area as necessary.	1	3	3
3	Services	Presence of existing services	Employees	3	3	9	All known services shall be disconnected and/or removed prior to commencing operations where possible and if not possible they shall be clearly identified and protected. Area shall be CAT scanned, with permit to dig issued. Overhead cable goalposts to erected and maintained throughout operations as necessary.	1	3	3
4	Lifting operations	Offloading of offices and containers	Employees	3	3	9	Competent slinger and signaller to oversee all lifting operations, certified chains to be used. Lifting operation to be undertaken from firm and level ground. Only dedicated people to be in vicinity of lifting zone.	1	3	3

Method Statement Name: Site Establishment				Method Statement Number: 001						
Contract : City Walls				Contract Number: W0027						
Originator Name: N. Davies				Approval Name:						
Signature:			Date:	Signature:		Date:				
KEY:		L = Likelihood	S = Severity	R = Risk (Likelihood x Severity)						
RISK RANKING:		3= Likely 2= Possible 1= Unlikely	3= Fatality 2= Major Injury 1= Minor Injury	1 to 4 = Acceptable – Use basic control measures (PPE,supervision,tool box talks) 6 = Significant Risks, further control measures to be applied to reduce results to Acceptable 9 = Critical Risks – Not Acceptable						
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				3	3	9		1	3	3
6	Unauthorised access / vandalism	Collision with plant Tampering with plant	General public	3	3	9	Site to be fenced prior to operation commencing, Warning signs to be erected and monitored. Proactive liaison with the community to highlight construction risks. Plant to be rendered inoperative during out of site hours. Security to be employed.	1	3	3

Appendix B Method explanation form

ALUN GRIFFITHS CONTRACTORS LTD

City Walls

METHOD STATEMENT EXPLANATION FORM

Method statement	Site establishment
Method Statement No.	001
Date of explanation	
Explanation given by	
Topics covered:	Method statement explanation including toolbox talks on:

No.	Attendee	Signature	No.	Attendee	Signature
1			14		
2			15		
3			16		
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5			18		
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7			20		
8			21		
9			22		
10			23		
11			24		
12			25		
13			26		

Signature of person giving explanation:

Signature of attendee confirms understanding of explanation given

For comments/questions raised during explanation please refer to back of form

ALUN GRIFFITHS CONTRACTORS LTD

City Walls

METHOD STATEMENT NO. MS 002

SUBJECT:

General Procedure

Originated by: N. Davies		Construction Approval:		Environmental Approval:		Works-Manager Approval:		
Date: 02/02/16		Date:		Date:		Date:		
P.M. Acceptance:				Work to commence Approval:				
Date:				Date:				
Revision	Date	Change		Revision	Date	Change		
0		Issued for approval						
Distribution:		P. EVANS Contracts Manager	N. Davies Project Manager	M. Finch Foreman	S. ENGINEER SITE COPY			H&S FILE

1.0 Introduction.

The following method statement covers the procedures to be adopted for construction of the works required to close the footway at City walls Worcester.

Main activities include:

- The erection of Heras fencing to the Entire site to prevent unauthorised access.
- The erection of an approved scaffold to allow access to remove and clean existing brickwork. The scaffold will be anchored with supports onto the existing grass area and will be independent of the existing walls.
- The scaffold will include a Hoist to enable the lifting of bricks, mortar, concrete for paving and cobbles.
- The existing bricks will be removed using hand tools and will be cleaned ready for reuse and stored on pallets on the existing City Walls Road verge.
- A shutter will be erected in the existing opening to support the concrete infill. The shutter will be erected to the full height and will have a face on the back line of the proposed brick face. The shutter will have two vertical rows of Abbey Slots to provide a tie for the brickwork facing.
- In fill behind the shutter with ST2 concrete. This operation will be done in three lifts as specified i.e. approx. height of lift 800mm.
- Construct the brick infill panel to close off the existing access from City Walls Road. The brickwork will constructed using the salvaged bricks and using an approved lime mortar and will be keyed into the existing adjacent wall as specified. Lime mortar mixes will be submitted for approval and samples provided prior to use within the works. A lime mortar fillet will be incorporated between the new build and the existing Historic City Wall. All brickwork will be carried out by an approve subcontractor with experience of lime mortar work and historic restoration
- Complete the infill panel and then construct the stub wall on a lime mortar bed along the top of the ancient monument wall
- Remove the existing brickwork to the remaining walls to one brick below the proposed finished level
- Complete the concrete infill to 150mm below finished level with 225mm dia. sleeve inserts the allow erecting of the permanent fencing.
- Complete the concrete infill in sections 150mm thick and incorporate the large cobble stones as deterrent paving.
- Erect the new fencing in the preformed sleeves and secure with high strength grout
- Remove scaffolding from the verge
- Excavate out and remove the existing footway on City Walls road and construct a new boundary edging using salvage edgings for the existing works. These work will carried out within the curt ledge of the existing footway to minimise the effect on the surrounding area
- Fill the removed area with topsoil and the turf surface.

2.0 Responsibilities.

Name	Position	Emergency contact No.
Peter Evans	Contracts Manager	07977 280469
Nigel Davies	Project Manager	07966318173
Mike Finch	Works Manager	07977280410

3.0 Method/Procedure.

Hold points prior to works commencing.

- All personnel will undertake a general site induction.
- All personnel will undertake an environmental site induction.
- Relevant PPE will be issued and worn at all times.
- All operatives certification regarding competence will be produced and copied to file.
- All plant to be inspected and defects reported immediately
- Carry out method explanation to all employees associated with the work.
- Pollution control and contingency plan to be developed and approved prior to commencement.

4.0 Principal Equipment.

- Small Hand Tools
- 1.5 Tonne mini excavator
- 1 tonne dumper
- Concrete pump
- Concrete Mixer
- Hoist

5.0 Environmental Considerations

- Noise levels shall be minimised where possible and within the site working hours.
- Refuelling of plant to be carried out in accordance with the approved procedures.

6.0 COSHH

- Diesel
- Grease
- Oil

Refer to main COSHH assessment file in site office

7.0 Specific Requirements for Risk Assessment

- A will be first aiders on site at all times.
- Certificates will be in file on site.

8.0 P.P.E. Requirements

- Hard hats.
- Safety footwear.
- High visibility clothing.
- Gloves.
- Overalls may be required for certain operations

9.0 Appendices

Appendix A	Risk assessment
Appendix B	Method statement explanation form

Appendix A Risk Assessment

Method Statement Name: Site Establishment					Method Statement Number: 001					
Contract: City Walls					Contract Number: W0027					
Originator Name: N. Davies					Approval Name:					
Signature:			Date:		Signature:			Date:		
KEY:		L = Likelihood	S = Severity		R = Risk (Likelihood x Severity)					
RISK RANKING:		3= Likely 2= Possible 1= Unlikely	3= Fatality 2= Major Injury 1= Minor Injury		1 to 4 = Acceptable – Use basic control measures (PPE, supervision, tool box talks) 6 = Significant Risks, further control measures to be applied to reduce results to Acceptable 9 = Critical Risks – Not Acceptable					
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Method Statement Name: Site Establishment				Method Statement Number: 001						
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ALUN GRIFFITHS CONTRACTORS LTD

City Walls

METHOD STATEMENT EXPLANATION FORM

Method statement	General Procedure
Method Statement No.	002
Date of explanation	
Explanation given by	
Topics covered:	Method statement explanation including toolbox talks on:

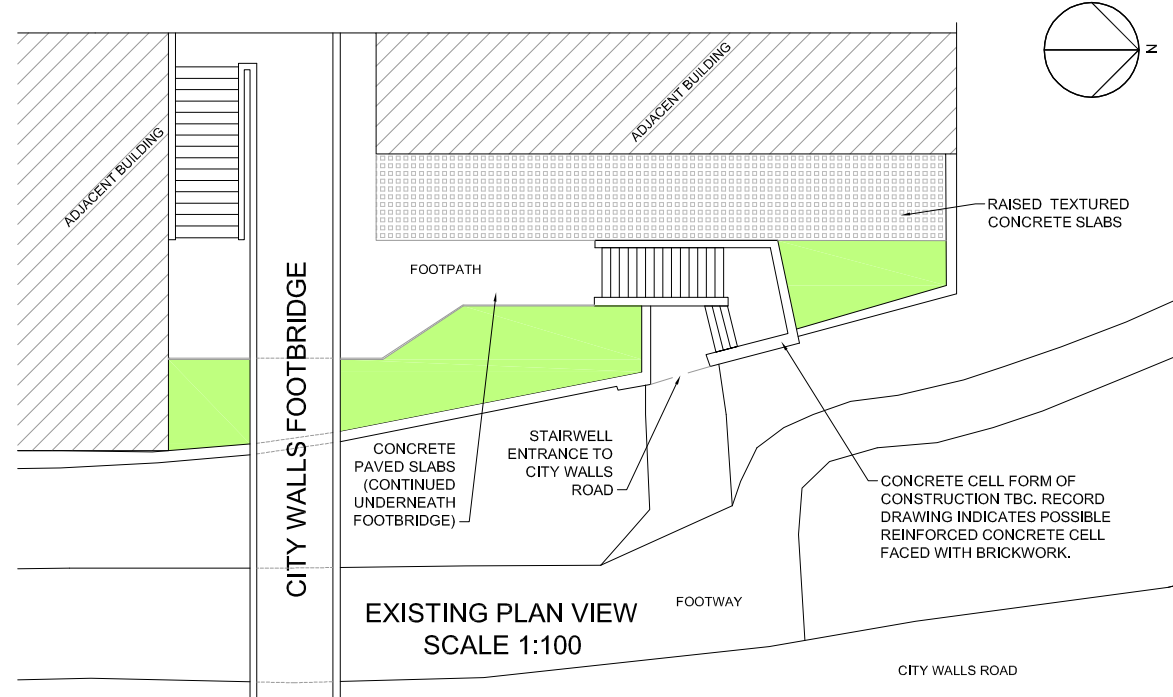
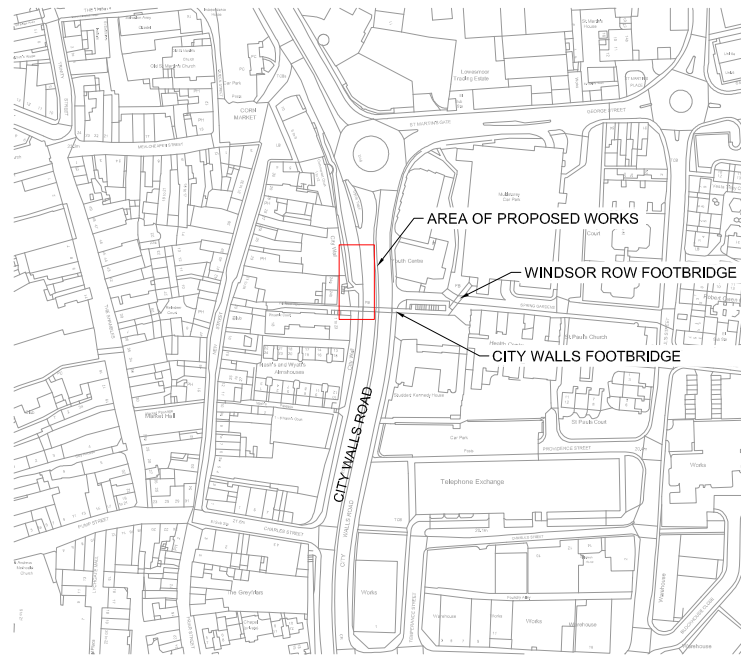
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13			26		

Signature of person giving explanation:

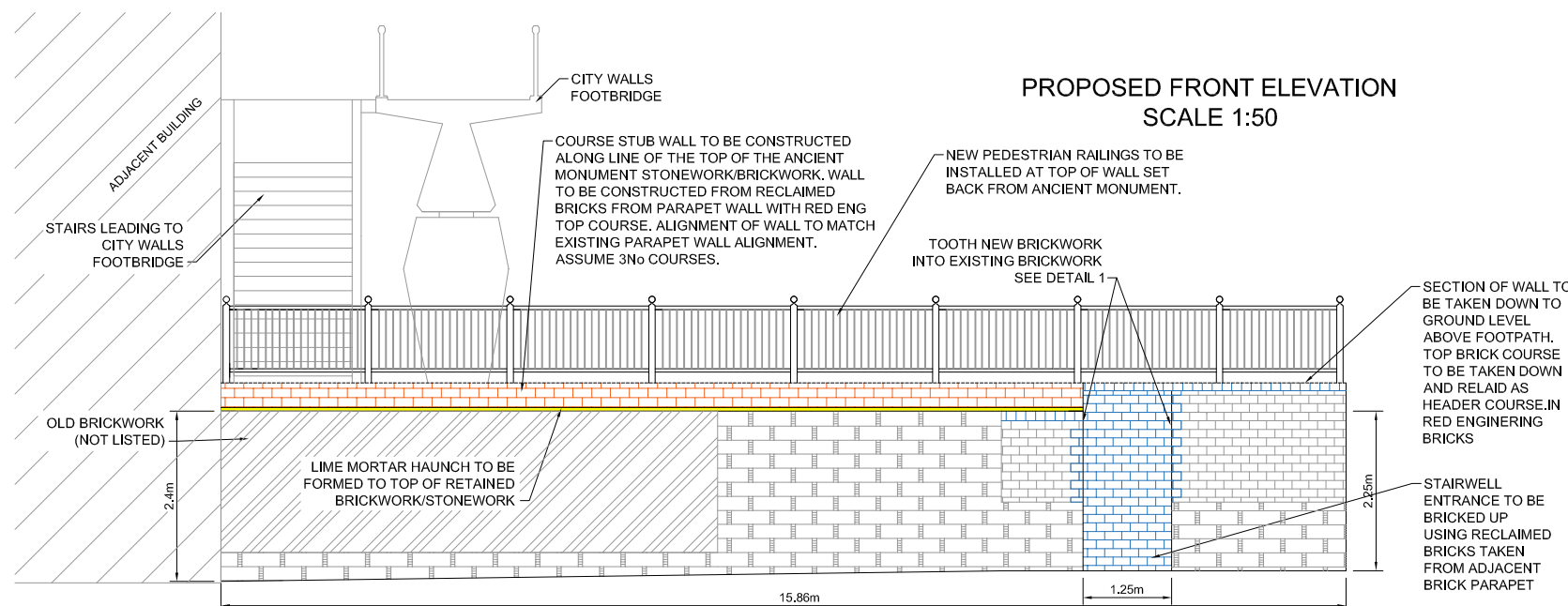
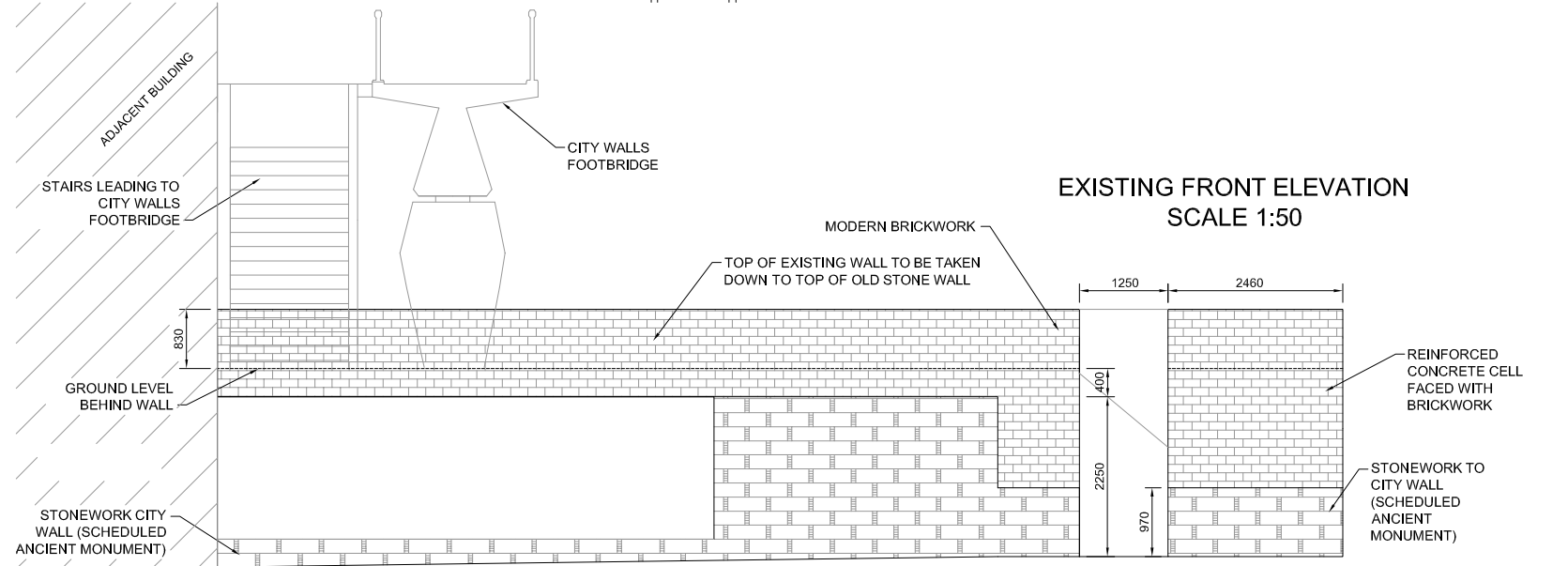
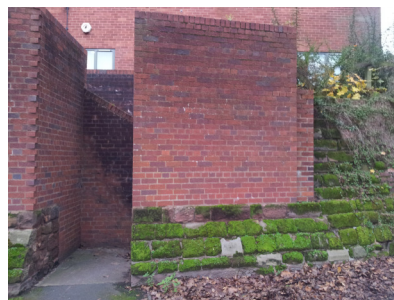
Signature of attendee confirms understanding of explanation given

For comments/questions raised during explanation please refer to back of form

Appendix 4 Architects Plans of Works



PHOTOGRAPHS



GENERAL NOTES

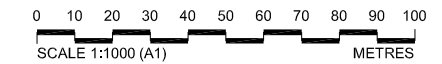
1. ALL DIMENSIONS IN MILLIMETRES UNLESS STATED OTHERWISE.
2. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS OF EXISTING CONSTRUCTION BEFORE PROCEEDING WITH THEIR WORK
3. DO NOT SCALE FROM DRAWINGS FOR INDICATIVE PURPOSES ONLY

NOTES

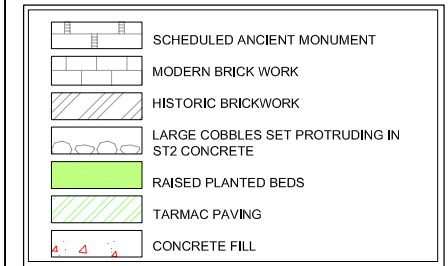
1. INDICATIVE PROPOSED PEDESTRIAN FENCING TO BE AGREED WITH KATE PASSANT WCC. DESIGN APPROVED BY CONSERVATION OFFICER - TBC
2. WALL TO BE TAKEN DOWN TO OLD BRICK/STONE LEVEL. OLD STONE WALL (ANCIENT MONUMENT) TO REMAIN UNCHANGED AS SHOWN.
3. FOUNDATIONS FOR PROPOSED PEDESTRIAN FENCING MUST BE INDEPENDENT FROM OLD CITY WALL.
4. LIME MORTAR SKIM INSTALLED BETWEEN ALL ANCIENT MONUMENT STONEMWORK AND PROPOSED STOPPING UP WORKS/ CONCRETE FILL AS PROTECTIVE LAYER BEFORE ANY CONCRETE WORKS COMMENCE.

PROPOSED WORKS

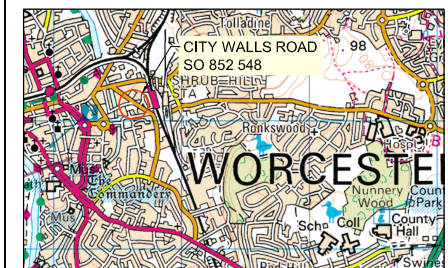
- REMOVE EXISTING BRICK PARAPET WALL DOWN TO ANCIENT MONUMENT LEVEL SOUTH OF STAIRWELL ENTRANCE. TAKE DOWN STAIRWELL BRICKWORK TO CURRENT GROUND LEVEL ABOVE WALL. RECOVER BRICKS AND CLEAN FOR REUSE.
- CONSTRUCT LOW 3 BRICK THICK WALL FROM RECLAIMED BRICKS TO MAKE UP HEIGHT DIFFERENCE FROM TOP OF WALL TO EXISTING GROUND LEVEL ABOVE.
- LAY DETERENT PAVING BEHIND TOP OF WALL PARAPET.
- REMOVE ACCESS FOOTWAY SURFACING FROM STAIRWELL ENTRANCE. REINSTATE AS GRASS SEEDED VERGE.
- CONFIRM DEPTH OF STAIRWELL BASE. IF REQUIRED FORM FOUNDATION FOR WALL WITHIN ENTRANCE.
- FORM 3 BRICK THICK WALL STOPPING UP ACCESS. LIME MORTAR BRICKWORK TO BE TOOTHED INTO EXISTING MODERN BRICKWORK ONLY.
- MORTAR TO BE LIME MORTAR HL3.5
- CONCRETE FILL IN STAIRWELL TO BE POURED IN AT LEAST 3 LIFTS.
- PEDESTRIAN RAILING FENCE TO BE INSTALLED ALONG TOP OF WALL BEHIND NEW LOW BRICK WALL AND OVER EXISTING STAIRWELL AS SHOWN. RAILING TYPE AND DESIGN TBC BY CLIENT. LENGTH OF RAILING APPROX. 20m
- CONCRETE INFILL TO BE SPECIFIED AS ST2 WITH A CONSISTENCY CLASS OF S3 AND MAXIMUM AGGREGATE SIZE 20MM REQUIRED TO CONFORM TO BS 8500-2.



LEGEND



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CH2MHILL WORCESTER
REDHILL HOUSE, 227 LONDON ROAD, WRS 2JG
TEL: 01905 361361 FAX: 01905 361362

worcestershire
county council
WORCESTERSHIRE COUNTY COUNCIL

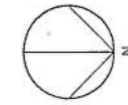
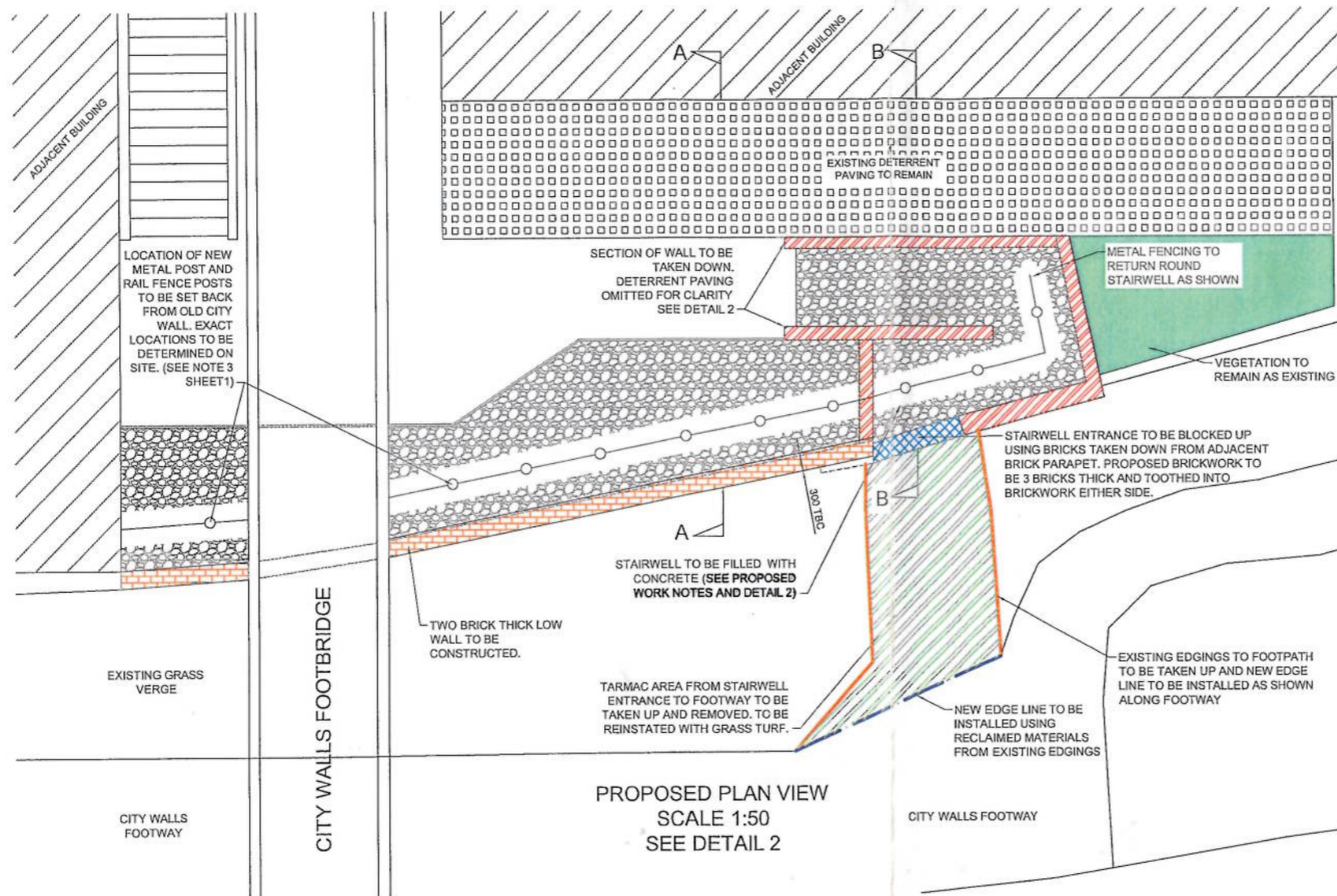
CH2MHILL®
KEY CORRIDORS
CITY WALLS ROAD
CITY WALLS FOOTBRIDGE
ACCESS BLOCK UP

1 =
VERIFY SCALE
BAR IS 25mm ON ORIGINAL DRAWING
0 25mm

DATE	16/03/2015
PROJ	473946.LE.00.40
DWG	473946.LE.00.40-01
SHEET	1 of 3

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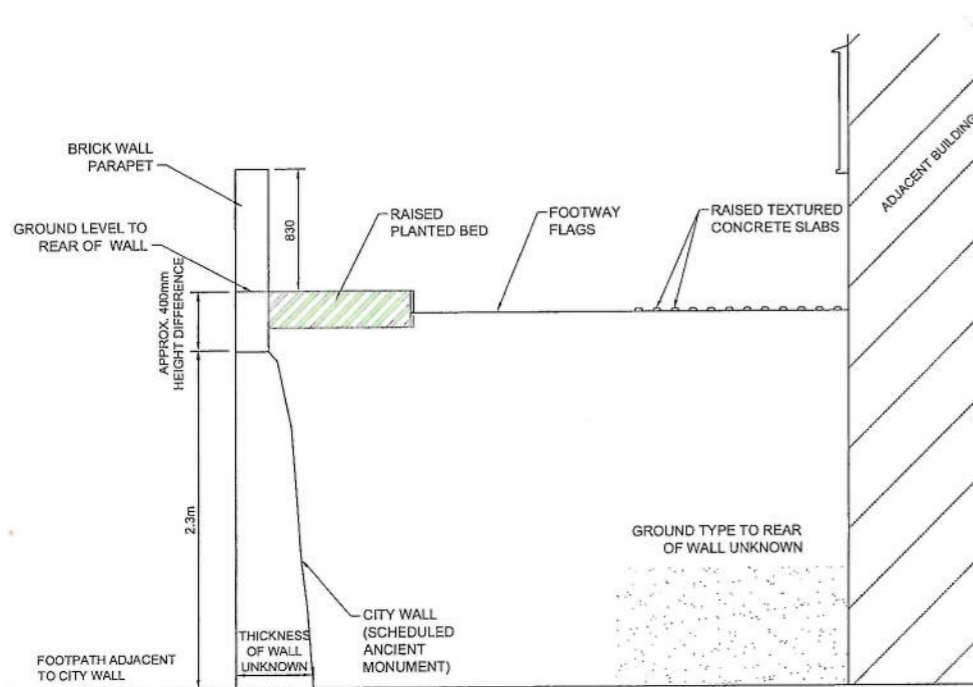
GENERAL NOTES

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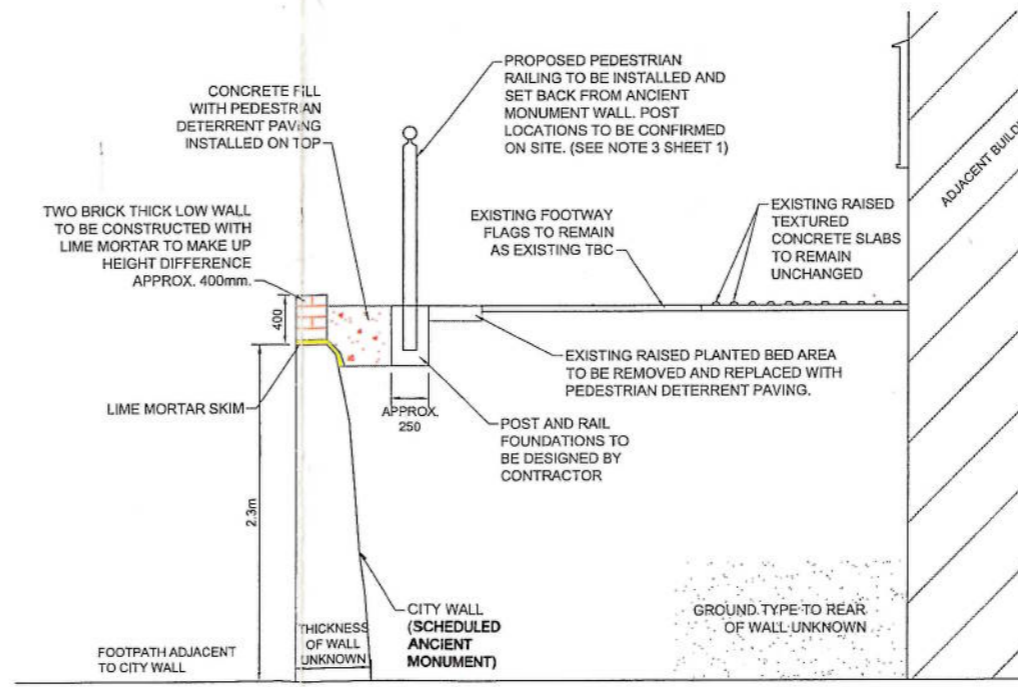
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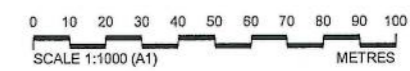
PHOTOGRAPH OF INDICATIVE FENCING.



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SCALE 1:25



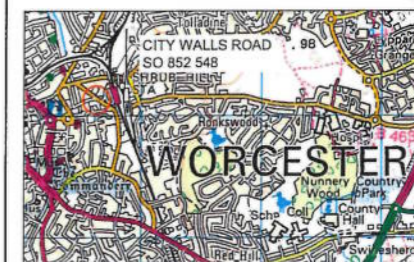
PROPOSED CROSS SECTION A-A
SCALE 1:25



LEGEND

	SCHEDULED ANCIENT MONUMENT
	MODERN BRICK WORK
	HISTORIC BRICKWORK
	LARGE COBBLES SET PROTRUDING IN 5% CONCRETE
	RAISED PLANTED BEDS
	TARMAC PAVING
	CONCRETE FILL

KEY PLAN



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county council

WORCESTERSHIRE COUNTY COUNCIL

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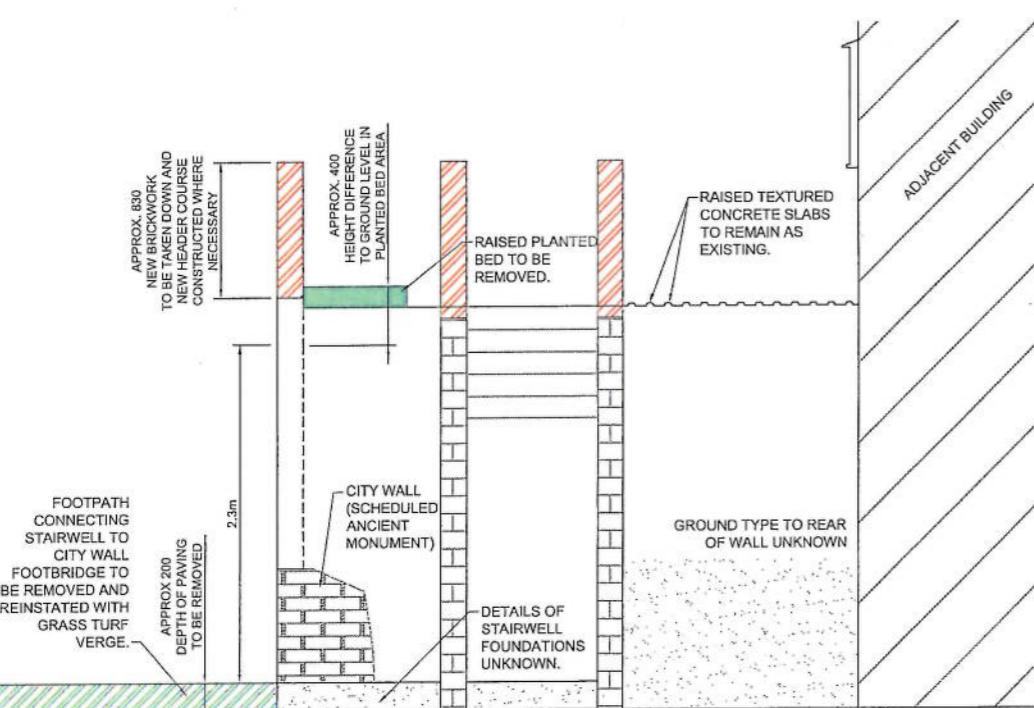
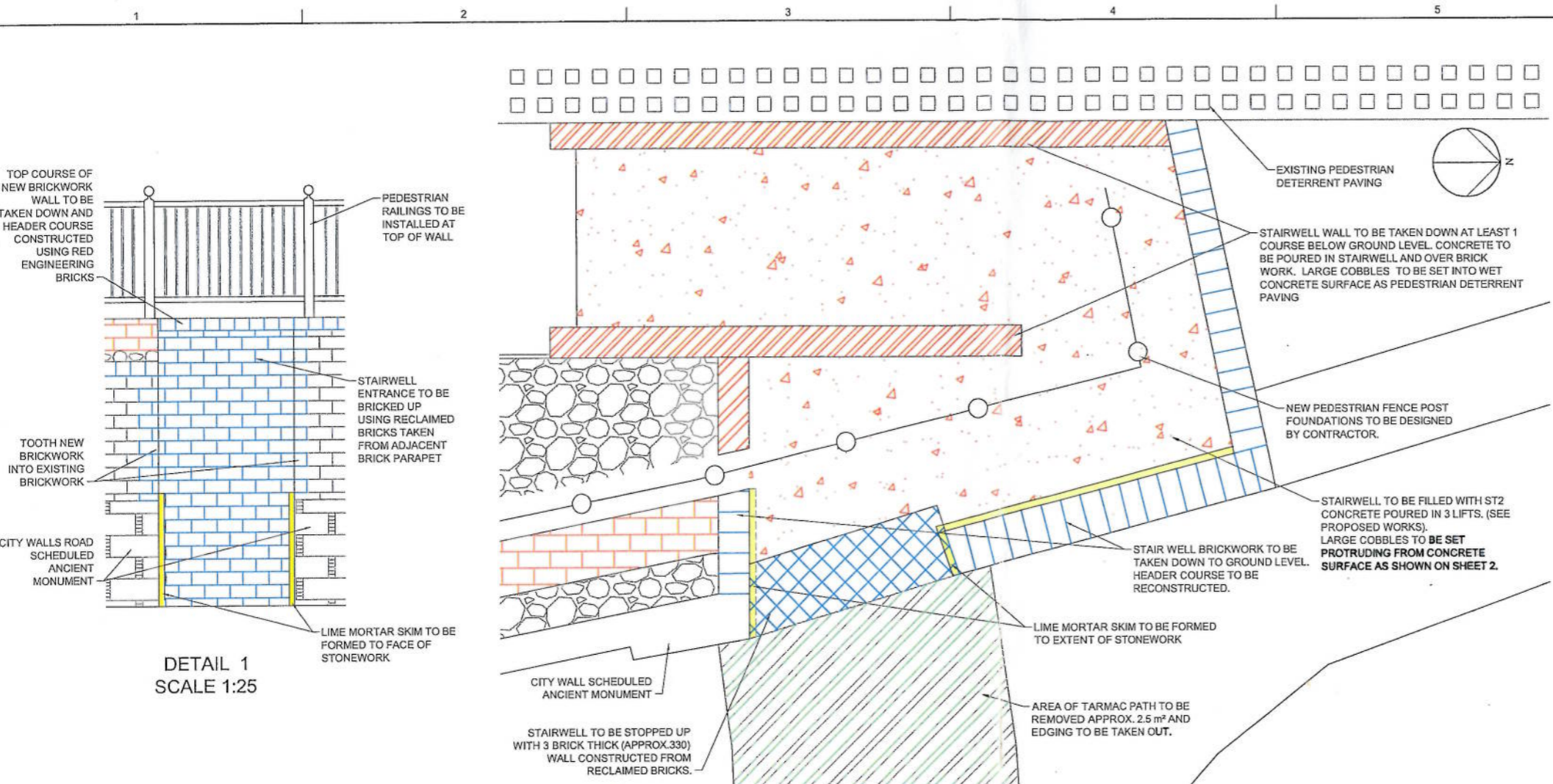
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SHEET	2 of 3

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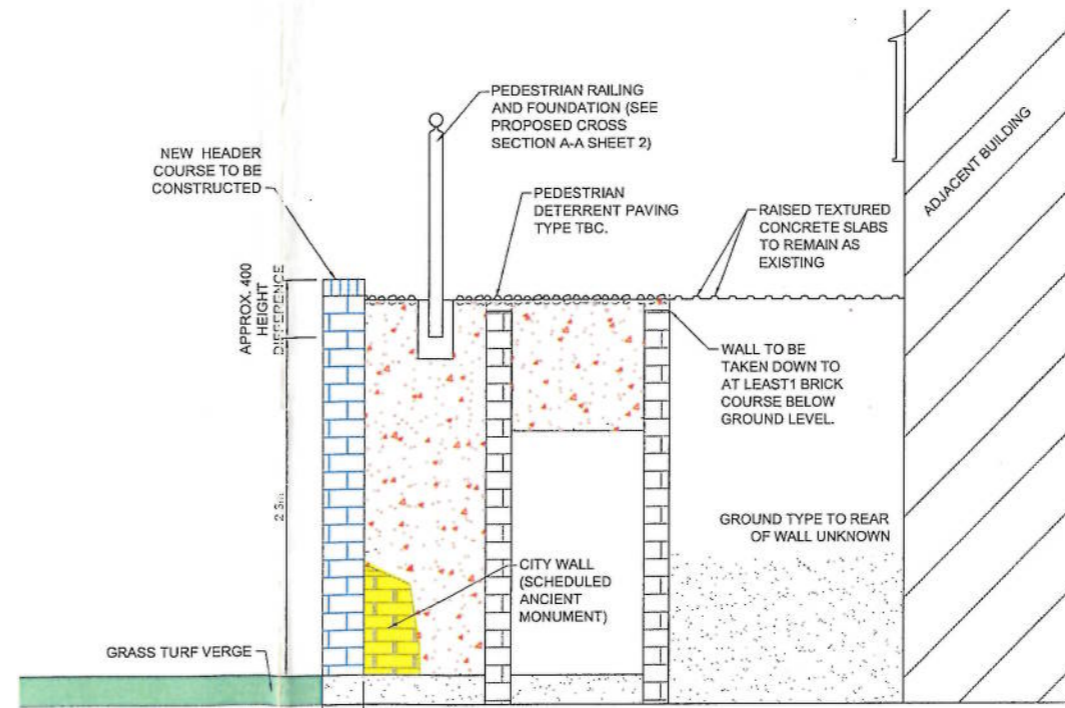
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PROPOSED SECTION B-B (SHEET 2)
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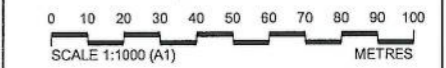
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GENERAL NOTES

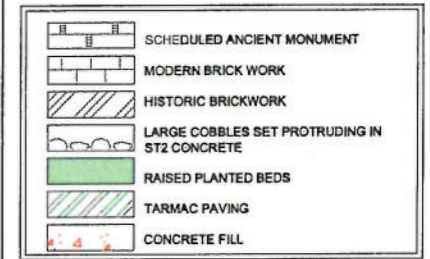
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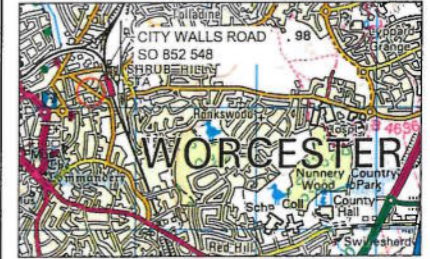
1. NOTES AS PER SHEET 1 OF 3.



LEGEND



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worcestershire
county council
WORCESTERSHIRE COUNTY COUNCIL

2	26/05/15	FOR CONSTRUCTION PURPOSES	APVD	AJR
1	27/03/15	ALTERNATIVE FENCE TYPE AND PAVING STONES	REVISION	AJR
			DATE	BY
			DSGN	APVD
			CHK	CB
			DR	LB
			REV	LB

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VERIFY SCALE
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SHEET 3 of 3

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