

Heaton Park Horticultural Centre Wall
Conservation Accredited Architect's Report on Proposals for
Rebuilding with Recommendations
October 2022

KEPCZYK PEARCE SANDERSON
ARCHITECTS, SURVEYORS & HISTORIC BUILDING CONSULTANTS

HEATON PARK HORTICULTURAL CENTRE WALL

CONSERVATION ACCREDITED ARCHITECT'S REPORT ON REBUILDING PROPOSALS WITH RECOMMENDATIONS

OCTOBER 2022

CONTENTS

1.00	INTRODUCTION	2
1.01	Historical Note	2
1.02	Description and Materials	3
1.03	List Description	5
2.00	OBSERVATIONS	9
2.01	Review of Submission Documents	9
2.02	Summary of Observations on Site	10
3.00	RECOMMENDATIONS	11
3.01	Scope of Works	11
3.02	Perceived Impact on the Historic Fabric	11

This report records the findings of a review of material submitted for Listed Building Consent for the above proposed works, together with those of a site visit to assess the scope of works, with recommendations in respect of how to proceed.

It is a condition of our insurers that the following paragraph be inserted in all our condition reports:

'We have not inspected woodwork or other parts of the building which are covered, unexposed or inaccessible and are therefore unable to report that any such part of the property is free from defect'.



F. Duncan Sanderson BA(Hons) BArch(Hons) Grad DiplCons(AA) RIBA AABC
For and on behalf of

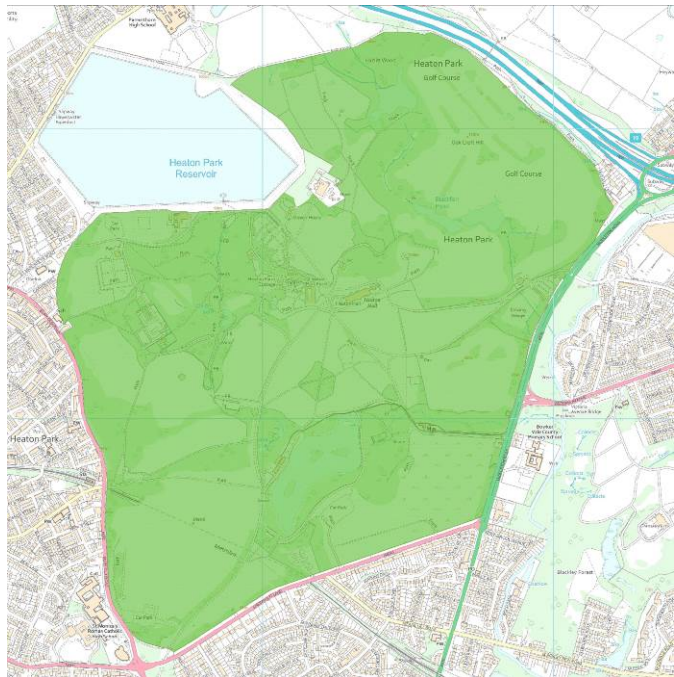
KEPCZYK PEARCE SANDERSON
ARCHITECTS, SURVEYORS & HISTORIC BUILDING CONSULTANTS

1.00 INTRODUCTION

1.01 Historical Note

The Horticultural Centre at Heaton Park is located within the confines of a C18th brick-walled kitchen garden which once supplied fruit and vegetables for the Heaton Estate. The walled garden lies approximately 400m west of Heaton Hall, the Grade I Listed centrepiece of the estate, which was acquired through marriage by the Egertons, later Earls of Wilton, and consolidated by the early C17th. The Hall was designed by James Wyatt 1772-89 for Sir Thomas Egerton, and replaced an earlier house, part of which was incorporated into the design. The south-west facing Hall is situated centrally within the park and is considered by Pevsner to be the finest of its type in the region and one of the finest in the country. In 1830 an orangery was added to the east wing of the Hall by Lewis Wyatt, who also remodelled other areas of the north façade to unify the composition.

The estate landscape was redesigned by William Emes between 1770 and 1772 in parallel with the first phase of building works to the Hall, with further works undertaken between 1808-9 by John Webb, a pupil of Emes, while Lewis Wyatt was working on the Hall. Sir Thomas Egerton's interest in contemporary ideas about landscape is witnessed by his Grand Tour journal of 1784-5, and his estate, enclosed by a 3m high wall, incorporates 6 no. main entrances, 4 no. with lodges, gardens, pleasure grounds, a farm, and stables. Other structures include a colonnade reconstructed from stonework salvaged from the former Town Hall entrance portico. The 240 hectare site was acquired by Manchester Corporation in 1902 and subsequently used as a public park but retains clearly legible elements of the historic landscaping scheme. The parkland is Listed Grade II, and a copy of the List Description can be found in Section 1.3.



Map of Heaton Park.



Site Plan with section of walls to be rebuilt highlighted red.

The brick boundary walls of the Horticultural Centre are likely to date from the late C18th / early C19th but have been subject to later alterations and remedial / maintenance works. Whilst the line of the walls is offset from true compass points, for the purpose of this document the walls are identified by their closest geographical reference. The east wall (true north-east) has been reduced in height, whilst the configuration of the other walls remains largely as built. Within the area enclosed by the walls are a collection of late C20th structures serving the space's gardening function including a number of aluminium framed greenhouses, steel framed garages, concrete panel garages, a brick boiler house, steel containers and timber shed. Immediately south of the area enclosed by the wall the former gardener's house (listed Grade II) lies within a garden bounded by hedges.

A section of the south garden wall, approximately 16m long to the west of an opening through to the area around the gardener's house collapsed some time ago. The displaced bricks and copings were salvaged, put onto pallets, and stored in the grounds of the gardener's house ready for rebuilding back into the wall. In addition to this a c47m section south of the opening through the west boundary wall is unstable and is currently supported by timber raking shores.



Area of the west boundary wall fenced off and supported by raking timber shores.

An application for Listed Building Consent to rebuild the 2 no. sections of the wall was lodged by Manchester City Council Capital Programmes and Procurement section, and KPS was asked to assist in addressing the following concerns raised by the Local Planning Authority in an Email dated 30 June 2022:

- A Conservation Accredited specialist was asked to be consulted in respect of the number and need for expansion joints on a historic wall, as expansion joints were suggested every 6 metres as part of the rebuilding solution
- To support the view that the mortar needs to match the original conservation specification and not be cement based if the original was lime based. Sampling will need to be carried out to get an exact match

KPS's support was to comprise a review of the submission documents and advice the client on the information and necessary modifications to the submitted drawings required to make them suitable for obtaining Listed Building Consent.

1.02 Description and Materials

The walls enclosing the former Kitchen Garden are constructed from solid brickwork surmounted by blue terracotta saddleback copings, and, whilst the height above ground remains largely consistent, the wall gradually steps down from north to south, following the contours of the land. The wall is 1.5 bricks thick, built from red commons laid in an English garden wall bond of 5 no. courses stretchers followed by 1 no. course headers, although this pattern does not appear to have been followed in areas of local repair / rebuilding, where local areas of ill matching 'Accrington' bricks can be found. Some sections of the south wall also display a different, more common, bonding pattern of 3 no. courses stretchers to 1 no. header.



Differing bonding patterns to south (L) and west (R) walls. Note engineering bricks in upper area of west wall.

Originally the wall would have been bedded and pointed in lime mortar, but later repointing regimes have been undertaken in cement. Whilst the use of this has had little effect on the later inserted red engineering bricks, it is responsible for the accelerated decay and loss of face of many of the original, softer, clay common bricks. This mortar will also restrict thermal expansion of the wall, and may be, in part responsible for cracking noted locally.



Effects of cement pointing seen on the softer, common brickwork (blown faces).

There are openings through the south and west walls. The opening towards the east end of the south wall would have, most likely, been introduced to create a way through to the gardener's house in the area immediately south of the walled garden, whilst that in the centre of the west wall connects to a footpath in the adjacent landscape.

Both are gated and do not appear to be currently in use. Both openings are similarly, plainly, detailed with the only feature being the flat gauged brick arch carrying the upper area of the walls over the openings.



Brick piers to west (L) and south (R) walls. Difference in coursing (see left image) suggests later additions.

Both walls subject to the application have brick piers on the garden side only. The west wall has 2 no. brick length which projects 1 no. brick from the face of the wall, whilst the south wall has a single half brick thick pier, 2 no. bricks long. The fact that all of these have no copings, are irregularly spaced, and in some sections don't appear to course in with the main area of the wall, suggests that these are later additions introduced as remedial measures. Confirmation of this is not possible as mortar fillets introduced at the junction of pier and wall masks the area where the pier brickwork would be bonded into the wall, and further investigation (by local removal of the fillet) should be undertaken to determine whether the piers are original features.

1.03 List Description

Heaton Park is listed Grade II. A copy of the listing description is appended below.

OFFICIAL LIST ENTRY

Heritage Category: *Park and Garden*
Grade: *II*
List Entry Number: *1000854*
Date first listed: *20-Feb-1986*

LOCATION

The building or site itself may lie within the boundary of more than one authority.

District: *Manchester and Bury (Metropolitan Authority)*
Parish: *Non Civil Parish*
National Grid Reference: *SD 82745 04249*

DETAILS

A park and pleasure grounds retaining elements of schemes probably designed by William Emes and John Webb.

CHRONOLOGY OF HISTORIC DEVELOPMENT

The Heaton Estate had been consolidated by the early C17. It was acquired through marriage by the Egertons, later Earls of Wilton, in 1684. Sir Thomas Egerton, first Lord Wilton, made several payments to William Emes (1729-1803) during the period 1770-2 when the park was being redesigned. Further works were undertaken during the period 1808-9 by John Webb (1754-1828), a pupil of Emes, at the same time that Lewis Wyatt (1777-1853) was working on the Hall. Sir Thomas Egerton's interest in contemporary ideas about landscape is witnessed by his Grand Tour journal of 1784-5 and the fact that he bought two Claude glasses for his trip. The site was acquired by Manchester Corporation in 1902 and subsequently used as a public park.

DESCRIPTION

LOCATION, AREA, BOUNDARIES, LANDFORM, SETTING Heaton Park is situated c 5km north of Manchester city centre. The site is defined by Sheepfoot Lane to the south, Bury Old Road to the west, St Margaret's Road and the M66 motorway to the north and Middleton Road to the east. Motorway widening has encroached slightly into the historic parkland at its northernmost point and in the north-west corner a C20 reservoir cuts into the park, but otherwise the boundary is marked by a mixture of brick walls, railings and walls surmounted by railings. These generally represent the replacement or rebuilding of a 3m high wall which was built to enclose the site during the period 1807-14, probably under the supervision of John Webb and Lewis Wyatt. Some parts of the wall survive to the original height on Middleton Road and adjacent to the former main entrance flanking the Grand Lodge, on the corner of Sheepfoot Lane and Bury Old Road. The c 240ha park is situated on land which rises from the south and west, and there is a valley running through the northern and north-eastern part of the site. The setting is urban in character but there are views over partially open country to the east and south-east and to the Pennines to the north and north-west.

ENTRANCES AND APPROACHES There are six main entrances, four with lodges. At the principal entrance is the Grand Lodge (early C19, listed grade II*) designed by Lewis Wyatt which is situated at the junction of Sheepfoot Lane and Bury Old Road. A drive leading to the Hall appears to follow the line of an avenue shown on an estate map of c 1750. An entrance called Heaton Gates, with lodge, gates and gate piers of early C20 date, is situated on Middleton Road. Another entrance north of this has a neo-classical octagonal stone lodge,

known as Smithy Lodge (late C15, grade II'). This entrance, with a driveway leading to the Hall, has a late C20 golf driving range c 30m south-west of the lodge building and a late C20 golf club house c 70m west of this. An entrance on St Margaret's Road has a small lodge of simple design. The drives leading from these lodges to the Hall were widened following acquisition by Manchester Corporation and these, as well as later routes through the park, are almost all fenced with railings of various C20 dates.

PRINCIPAL BUILDING Heaton Hall (listed grade I) was designed by James Wyatt 1772-89 for Sir Thomas Egerton, seventh baronet. There is evidence that part of an earlier house, shown on an engraving of c 1750, was incorporated into the design. The Hall is considered to be the finest of its type in the region and one of the finest in the country (Pevsner 1969). It is situated almost at the centre of the park and faces south-east, with views to the south and east now obscured by C20 planting. In 1830 an orangery was added to the east wing of the Hall, probably by Lewis Wyatt.

The stable block and site of a home farm are situated c 60m north-west of the Hall. The stable block, attributed to Samuel Wyatt (late C18, listed grade II), is used partly for offices and partly as stables. The home farm was situated c 100m west of the stables; the early C19 bailiff's house and part of another building of similar date survive but the rest was demolished in the 1970s. The remains of an icehouse c 20m to the north-east of the farm were excavated by the Greater Manchester Archaeological Unit in 1989.

GARDENS AND PLEASURE GROUNDS The pleasure grounds consist of a terrace on the south-east front of the Hall and an area to the north and west, including the stables and home farm, enclosed by a ha-ha shown on a sale map of 1866. The ha-ha is partially extant and it is well-preserved in the area north of the Hall where it exhibits signs of later C20 repair. A path is shown on the 1st edition OS map surveyed 1844 leading along its inside edge, following the contours of the slope, from a point c 50m north of the Hall around to the south front of the building where the ha-ha disappears. A modern path which leads between the terrace in front of the Hall and the bowling greens beyond appears to follow its line.

The C20 terrace in front of the Hall is laid out as a formal garden with geometric beds. C20 bowling greens lie below the terrace to the south-east and the area is screened with C20 planting. The land rises steeply behind the Hall on the north and north-east sides and on the highest point of this eminence is a circular neo-classical temple, probably by Samuel Wyatt (c 1795-1802, listed grade II'). This commands panoramic views of the surrounding area and the Pennines to the north, east and south.

West of the Hall, in the area between the stables and the home farm, is a garden enclosed by a brick wall on the north side running between the stables and farm, the fenced site of the farm and a causeway on the west side, a tree belt to the south, and the stables on the east. The garden is reached by a path which runs west from drives on the south side of the Hall. The north end of the garden has lawns and geometric beds on the site of hothouses shown on the 1844 and 1933 OS maps. The land slopes down to the south where there are lawns and specimen trees fringed with a belt of trees. A stone grotto consisting of an arched recess flanked with rockwork is set into a slope c 10m south of the home farm site. On the west side of the garden a tunnel in the form of a rustled stone work bridge leads beneath a causeway. The causeway leads from the park to the home farm and was probably provided so that cattle could be driven there without entering the gardens. Beyond the bridge is a clearing and a path leading into the Dell, an irregularly shaped wooded area with curving paths leading through it, and to a small lake c 300m south-west of the stables. This is overlooked by a C20 bandstand. The walks are connected by a path leading west through a belt of woodland to the kitchen garden. This path, the causeway, the Dell and the lake are all shown on the 1844 OS map. At that time the lake was of serpentine shape.

PARK There are tree belts around the parts of the northern, north-western and north-eastern park boundaries which are the survivors of the extensive perimeter plantings shown on the 1844 OS map. The northern and north-eastern part of the park is described as a deer park on the 1844 OS map. In this area there are three small lakes and a stream which runs in a steep wooded valley. The northernmost lake is called New Pond on

the 1844 OS map. These parts of the park are otherwise mainly open grassland which has been turned into a golf course.

An ornamental temple called the Dower House (late C18, listed grade II) is situated c 300m north-west of the Hall on the edge of woodland which screens the south-east end of a reservoir. This was constructed in the 1930s, taking an area of c 15ha from the north-west corner of the park; a water treatment plant was added during the 1950s at the south-east end of the reservoir. A telecommunications tower was erected c 320m north-west of the Hall in the 1960s. Playing fields are situated south of the reservoir in the north-west corner of the park.

The southern part of the park is also open grassland with some tree cover, including C20 avenues along parts of the drives from the Grand Lodge and Heaton Gates. This part of the park is illustrated in a watercolour of 1802 (Manchester City Art Galleries 1972) which indicates that there was fairly extensive tree cover with planting north and west of the Hall, together with clumps and belts of trees in grassland. This view shows the park after it was redesigned in the 1770s. The redesign included the removal of a formal garden with radiating avenues and terraces on the south front of the Hall which is shown on an estate plan of c 1750. Two other views of this area by John Ferneley (ibid), painted in 1829 after John Webb had been involved with the landscape, show a racecourse in the south-eastern part of the park which had been created in 1827 and was situated c 600m south of the Hall. A comparison with the 1802 watercolour suggests that the tree cover had been thinned out to give better views to and from the Hall.

This part of the park is now dominated by a large boating lake which was made on the site of the racecourse in 1912-13. At the same time, part of the facade of Manchester's former Town Hall designed by Frances Goodwin in 1822-4 (listed grade II*) was erected c 20m south of the south end of the lake. There is a boathouse on the western shore and a tram line runs east from the north end of the lake to a large tram shed of early to mid C20 date c 280m west of Heaton Gate.

The south-west part of the park is mainly open grassland with some fenced areas where cattle are grazed. A section of railway shown on the 2nd edition OS map published 1889 emerges from a tunnel c 1km south-west of the Hall and runs for a short distance through the park and thence into a tunnel beneath Bury Old Road.

KITCHEN GARDEN A brick-walled kitchen garden is situated c 400m west of the Hall. It is shown on the 1844 OS map when, as now, it was linked to the pleasure grounds by a path leading through a belt of woodland. The north-east wall has been reduced in height, while other walls are intact. Inside are a number of late C20 glasshouses. A gardener's house (listed grade II) lies immediately to the south-east within a garden bounded by hedges.

REFERENCES

The Victoria History of the County of Lancashire 5, (1911), pp 80-2 Country Life, 36 (28 November 1914), pp 710-17; 58 (29 August 1925), pp 322-8; (5 September 1925), pp 354-9 N Pevsner, The Buildings of England: South Lancashire (1969), pp 328-30 Heaton Hall, Manchester, (Manchester City Art Galleries 1972) J Lomax, Heaton House (1983), (reprinted from Trans Lancashire Cheshire Antiq Soc 82, pp 58-101) Parks for the People, (Manchester City Art Galleries 1987), pp 19-20 Heaton Park Icehouse, (Greater Manchester Archaeological Unit 1991) Heaton Park - Summary of Landscape History, (Elizabeth Banks Associates 1995)

Maps Estate Map, c 1750, Greater Manchester Record Office

OS 6" to 1 mile: 1st edition surveyed 1844 2nd edition published 1889 revised 2nd edition published 1907 provisional edition 1932 with additions 1938 Map attached to 1866 Sale Prospectus, reproduced in Lornax 1983 M66 Manchester Outer Ring Road Draft Landscape Proposals, 1991

Description written: February 1997 Amended: June 1998 Register Inspector: CEH Edited: March 1999

LEGACY

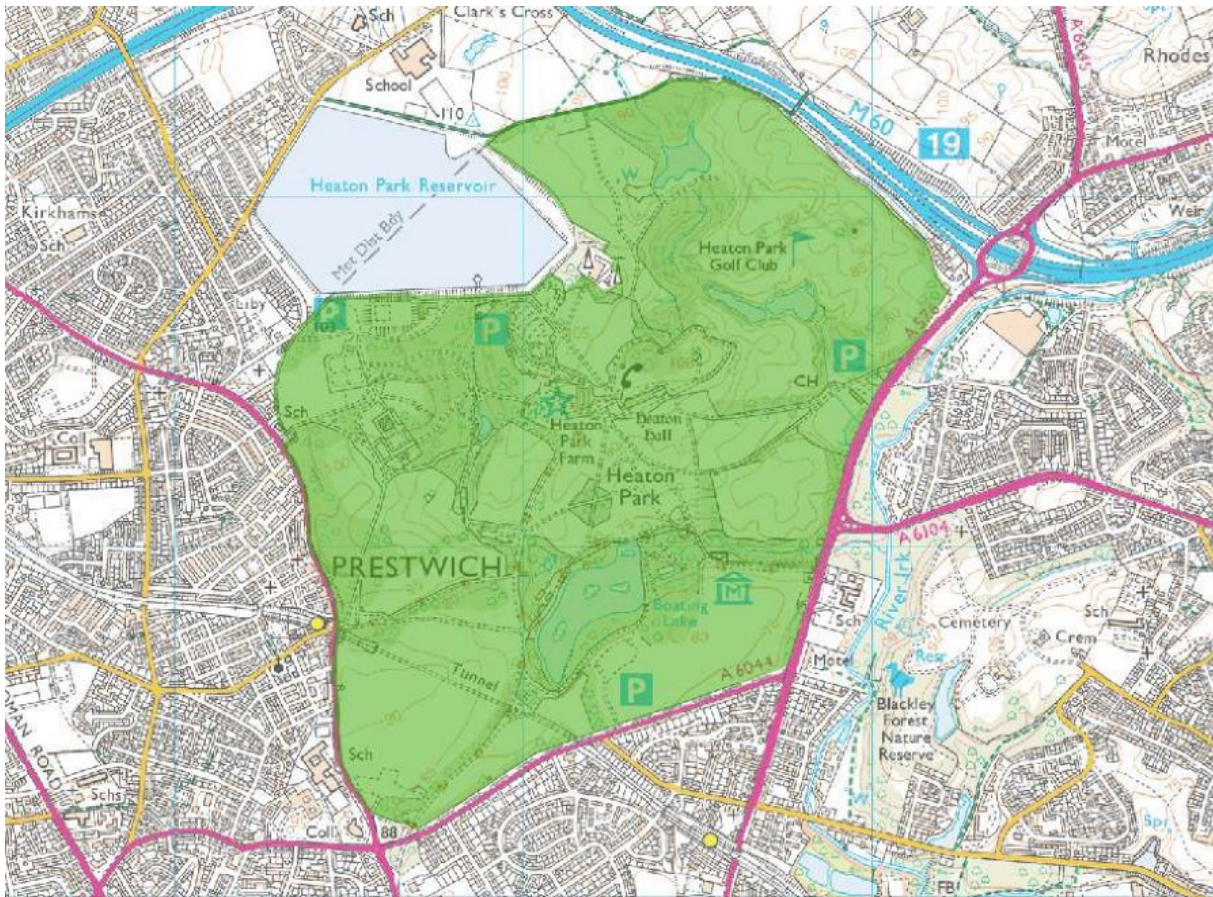
The contents of this record have been generated from a legacy data system.

Legacy System number: 1851

Legacy System: Parks and Gardens

LEGAL

This garden or other land is registered under the Historic Buildings and Ancient Monuments Act 1953 within the Register of Historic Parks and Gardens by Historic England for its special historic interest.



Map

This map is for quick reference purposes only and may not be to scale. This copy shows the entry on 10-Oct-2022 at 18:35:03.

© Crown Copyright and database right 2022. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2022. All rights reserved. Licence number 102006.006.

Use of this data is subject to [Terms and Conditions](https://historicengland.org.uk/terms/website-terms-conditions/) (https://historicengland.org.uk/terms/website-terms-conditions/).

As outlined in the following section the proposals have a very limited impact on the historic asset, and, rather than the intended method of rebuilding by introducing expansion joints, rebuilding historically 'like for like' is recommended.

2.00 OBSERVATIONS

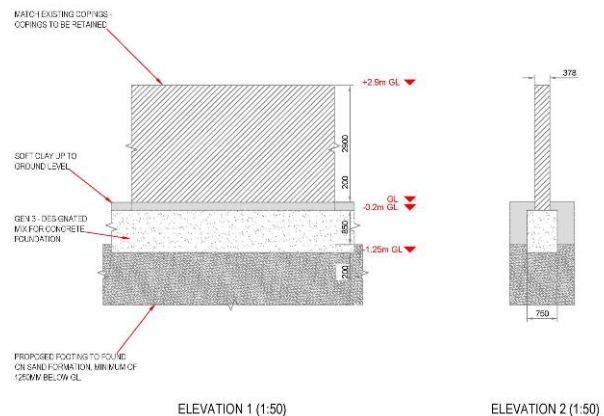
2.01 Review of Submission Documents

The documents submitted to KPS for review, and which largely comprised the application for Listed Building Consent (Ref: 133818/LO/2022) to rebuild the collapsed and temporary shored areas of the south and west walls enclosing the Horticultural Centre, comprised the following:

- Drawing no. MCC B01 01 DR B001 S3 Site Location Plan
- Drawing no. MCCB01 01 DR B010 S3 Site Plan & Specification of Works
- Drawing no. MCC B01 01 DR B011 S3 Elevations of Boundary Wall to be Re-built
- Document AMP44733.1 Heaton Park Horticultural Centre Specification for Boundary Wall Rebuilding
- Drawing no. 001 New Wall & Foundation - Wall Elevations
- Drawing no. 002 New Wall & Foundation - Ancon Wall Tie
- Document AMP44733.1 Designers Risk Assessment
- Document AMP44733.1 Authority's Requirements General Works Information

Initial appraisal of the drawings suggested that they were lacking in detail, and the 'Elevations of the Boundary Wall to be Rebuilt' showed the elevations as existing, in their current, dilapidated state, supplemented by photographs. The package contained no full elevations of the walls as proposed, highlighting the extent and nature of rebuilding and foundation renewal. It is only by reference to the 'Specification' document that the intention to rebuild the wall incorporating expansion joints can be determined, although this is suggested by the 'Ancon Wall Tie' drawing, (no. 002).

You might expect to find this information on drawing no. 001, 'New Wall and Foundations – Wall Elevations', but this comprises a 'typical' elevation and section of a short section of the wall only, lacking an overall layout indicating the position and spacing of the expansion joints or the areas of foundation renewal (unless this is intended for the complete length of the rebuilt sections of the walls).



The drawing also lacks information likely to be required by the Local Authority Conservation Officer, such as coping profile, brick coursing and bonding, and the existing nature of the footings (brick spreaders?).

Extract from drawing no. 001, further detail would give more clarity to the submission.

Correspondence between the client and Local Planning Authority in respect of the submission also refers to expansion joints at 6m centres, and cement mortars, although 2 no. expansion joints per section of wall and the use of lime mortars and sampling is referred to in the 'Specification' document.

In summary the exact scope of work and detail of the proposed rebuilding is difficult to determine from the information in its current form, and we would recommend that the following information needs to be added to the drawings:

- Elevations of the walls to be rebuilt as proposed, with the rebuilt sections and expansion joint positions highlighted, together with the extent of any foundation renewal
- Add detail to drawing no. 001 to show brick coursing and bonding in elevation and section, coping profile, and add notes detailing brick sizes (for any replacements required), and mortar specification for bedding and pointing (to avoid any confusion regarding the use of cement)

2.02 Summary of Observations on Site

Whilst the solution submitted to rebuild the walls respects the existing fabric by rebuilding the collapsed and propped sections of the walls using as much of salvaged material as possible, the method of rebuilding, by introducing expansion provision, seems an unnecessary intervention. The introduction of vertical joints will alter the appearance of the walls and change bonding patterns in the brickwork either side.

Traditional lime mortars will accommodate thermal movement, and we would question the need for expansion joints. Expansion provision is common practice in brickwork bound by cement mortars, cement being a harder, more rigid material which is less able to 'flex' in response to environmental conditions, so 'soft' expansion joints are necessary to prevent cracking in long lengths of walling under thermal stress.

The original wall was built without expansion joints and is likely to have stood for over 200 years without the need for significant intervention, so it is unlikely that the walls have failed due to the lack of expansion provision. Other factors to be considered in the reasons for failure are:

- In all areas the wall is under considerable pressure from encroaching vegetation, largely from self-seeded bushes and trees, which have not been cut back or removed. This has resulted in both pressure being applied to the walls, and root growth being present in the depth of the masonry (as seen at the collapsed south end of the west wall)
- Invasive vegetation, particularly the likes of Buddleia, will displace the walling brickwork and foundations
- Past patch pointing regimes have been undertaken in cement mortar, which will restrict the ability of the walls to accommodate thermal movement, and lead to accelerated decay of the brickwork
- Some larger trees are also quite close to the walls, which their canopies overhang. This suggests their roots may be undermining the footings locally
- Local areas of wall have been rebuilt in hard engineering brick pointed in cement over the original, lime mortar pointed, 'softer' clay commons. Stresses are introduced in the wall where materials of differing rates of expansion meet, resulting in local cracking
- The buttresses, which appear to have been retrospectively introduced, may be contributing to the outward lean of the west wall by applying pressure



Root growth in the core of the west wall (L), vegetation taking hold on / trees overhanging south wall (R)

3.00 RECOMMENDATIONS

3.01 Scope of Works

Taking all observations made in Section 2.00 into account the walls should be rebuilt in what we believe to be their original configuration of 1.5 bricks thick, without piers (unless further investigation reveals the piers are likely to be original), in salvaged brickwork supplemented with new commons to match (where required) and capped by the existing terracotta saddleback copings. All rebuilding should be bedded and pointed in 1:3 lime (NHL 3.5) / sand mortar, or similar subject to analysis of the original binding material, and no expansion joints are considered necessary.

The rebuilding should respect the original brick gauge and bonding pattern, and if the works are undertaken along the lines described above, materially 'like for like', I believe that the scheme will have no impact on the historical character and appearance of the Designated Asset. The works may be considered essential maintenance and so Listed Building Consent may not be required, but the Local Authority may, however, need to see and approve samples of replacement brickwork, copings, and view the proposed pointing mix. The extent of foundation renewal should be determined following further investigation on site.

The solution submitted is an Engineering one, so if the client's Engineer has any concerns regarding future stability should the walls be built back as described above, bed joint reinforcement could be introduced, a solution I have discussed with a conservation experienced Engineer. This would have no impact on the appearance of the walls. It should be noted that the walls have stood for centuries prior to failure and large areas remain intact, so there should be no reason why the walls should not be rebuilt in their original form.

In conjunction with the above the following work is recommended:

- Cut back / remove all vegetation encroaching on the base of the wall and taking hold on the surfaces of the brickwork
- Replace all Engineering bricks with commons to unify the appearance of the walls
- Cut back trees where canopies and roots are likely to endanger the walls
- Ensure all copings are in place to prevent water penetrating the core of the wall (Section missing over the south side of the opening in the west wall, immediately before the change in level)

3.02 Perceived Impact on the Historic Fabric



Vegetation build up, collapsed section of south wall.

Undertaking the works as described above will have a positive impact on the fabric of the historic asset, by returning the walls to their original configuration and appearance. Introducing bed joint reinforcement will add strength to an already substantial and durable construction yet will have no visual impact on the walls.

It should, however, be remembered that regular maintenance is essential to keeping the wall in good condition, including regular repointing regimes to the brickwork and copings using lime mortars, and ensuring that vegetation is not allowed to encroach and collect on the surfaces of the walls.

Keeping the vegetation back from the walls also aids the regular inspection and maintenance vital to ensuring the security and future of the historic fabric for years to come.