

Stonyhurst College

Clairvoie - Heritage Statement | December 2018

Job name

Stonyhurst College- Clairvoie Restoration

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Note

A previous heritage statement dated July 2018 was submitted containing information relating to both the repair works to the observatory roof and to the Clairvoie. The former is now subject to a separate application, with this statement relating only to the Clairvoie. No changes have been made to the content, other than the removal of the Observatory sections.

Introduction



Introduction

This Heritage Statement accompanies an application for listed building consent to allow for the restoration of the Clairvoie wall in the gardens at Stonyhurst College.

In order to satisfy the requirements of planning policy, the application consists of the following:

- Application form and certificates
- Location plan
- Existing plans and elevations
- Proposed plans and elevations
- Heritage Statement
- Outline specification for the works (appended in the Heritage Statement)

This heritage statement is required due to the Clairvoie being located on the boundary of a Grade II* Registered Park and Garden. The wider Stonyhurst site also contains a number of Grade I, II and II* listed buildings.

Paragraph 128 of the NPPF (which is currently under review) states that in determining applications, local planning authorities should require an applicant to describe the significance of the heritage assets affected, including the contribution made by their setting. This heritage assessment has been prepared to evaluate the significance of the Registered Park and Garden and the potential impact of the proposal upon this significance.

The following approach was undertaken to produce the heritage assessment:

- Desktop study of existing literature, drawings, historic photos and detailed listing prepared by Historic England and associated documents;
- Site visit and walkaround with the Estate Manager to review the context in respect of the existing condition of the building;
- Assessment of the results of the first two stages to establish the significance of the site, its heritage assets; and
- Assessment of the impact of the proposed development upon the identified assets;
- Inspection of original barley twist railings to determine appearance, form and specification.



Application site



Application site

The application site lies within the Stonyhurst Estate near to the village of Hurst Green in the Ribble Valley area of Lancashire, England.

The site is set within an Area of Outstanding Natural Beauty.

Stonyhurst College is a co-educational Roman Catholic independent school, adhering to the Jesuit tradition. The school occupies a number of Grade I, II and II* listed buildings.

The school was founded in 1593 by Father Robert Persons SJ at St Omer. In 1794, the school was relocated to Stonyhurst Hall. Today the school provides both boarding and day education to approximately 450 boys and girls between the ages of 13 and 18. On an adjacent site, its preparatory school, St Mary's Hall, provides education for boys and girls aged from 3 to 13.

The earliest record indicating a house on the site is c1200AD as stated in a document held in the archives.

Planning history

Whilst numerous planning and listed building consent applications have been submitted and approved in respect of the school, no specific history was found for the Clairvoie.

Registered park and garden

The gardens and parkland have late 17th century origins, including a well preserved formal garden which dates from circa 1700 and an avenue and water features of a similar date.

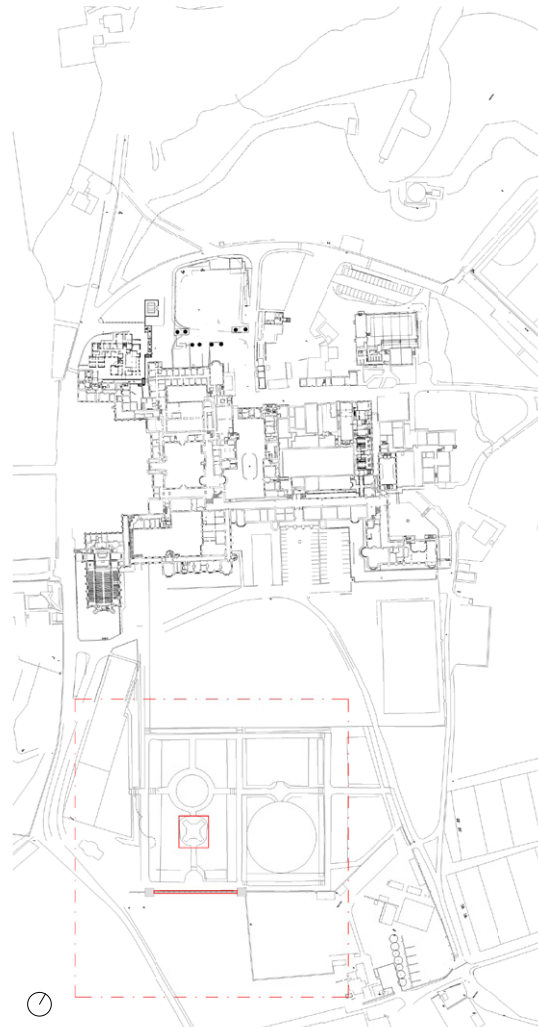
The circa 75ha site is situated on land which slopes gently southwards.

The area in which the application area is sited is primarily made up of woodland which separates Stonyhurst College from St Mary's Hall.

Heritage status

The wider Stonyhurst site contains a number of Grade I, II* and II listed buildings. The following buildings within the wider site are listed:

1. Front Quadrangle – the Shireburn house – Grade I
2. Front Quadrangle – North Side – Grade I
3. Shirk – Grade II*
4. Shireburn Quad – Grade II
5. Old Infirmary and Jumps – Grade II
6. South Front inc. East and West wings – Grade II
7. Ambulacrum and Art Department – Grade II
8. St Peter's Church – Grade I
9. Corn Mill – Grade II
10. St Mary's Hall – Grade II
11. Old Observatory – Grade II
12. Garden Pavilions – Grade I
13. Handballs – Grade I
14. Van Nost Sculpture – Grade I
15. Miscellaneous garden features – Various Grades
16. Registered Park and Garden – Grade II*



Overview of the works

Overview of the works

This application seeks listed building consent for the following works:

Further detail is provided within the specification and drawings submitted as part of the application.

Clairvoie - Wall between the Tea Houses:

- Repairs to existing brick and stone walling including cleaning and mortar re-pointing of joints to brickwork
- Repairs to existing stone and cast iron balusters and stone finials
- Reproduction of stone balusters, acorn and cone stone finials and barley twist railings
- General cleaning and tidying up of landscape surfaces abutting the Clairvoie



**Brief description
and history of
Stonyhurst College**



Brief description and history of Stonyhurst College

The grounds

“The landscape of the College has great cultural significance for a number of diverse reasons, most of which stem from its Catholic and Jesuit history. This has regional, national and international importance.

The site as a whole embodies the survival of Catholicism in a time of religious persecution; this is heightened by the isolated location and dramatic landscape. The continued public opening, the numbers of visitors and visits by parish groups demonstrate the ongoing interest in this heritage. The Gardens and landscape are an integral part of the College offering at public opening times. The grounds are also used as part of the ritual of religious ceremonies, for feast day processions and the annual march of St Peter’s Guild. Both the public opening and use for worship maintain long traditions of each activity and demonstrate continued significance.

The Gardens and in particular the Playground embody a tradition of Jesuit educational philosophy, the use of the Playroom rather than the House

system; the rare survival of the probably unique Handballs adds to this significance.”

The Architectural History Practice Ltd, Chris Burnett Associates, Oxford Archaeology North (2015), Conservation Management Plan

Historic development

The buildings at Stonyhurst College have been formed over the past four centuries, starting with the creation of the Gatehouse by the Shireburn family in 1606. The origins of the estate itself date back to the 13th Century. The College moved to Stonyhurst in 1794. This timeline highlights some of the key pieces of historic development with focus on the period since 1794. Extensive detail and explanation can be found within the 2015 Conservation Management Plan.

A key event in recent times was the move to become fully co-educational in 1999. This has proved a significant challenge to adapt the buildings from an all boys set-up.



Heritage assessment

Heritage assessment

Heritage policies

The National Planning Policy Framework [NPPF] was issued in March 2012 and immediately replaced the old system of PPGs and PPSs.

The NPPF introduces a presumption in favour of sustainable development [para. 14] whereby proposed developments which correctly balance the requirements of economic, social and environmental issues should be granted planning permission unless there are strong reasons why permission should not be granted.

With regards to heritage issues the following extracts are considered of particular relevance:

Para. 17: [Core planning principles] conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life for future generations.

Para. 128: In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Para. 131: In determining planning applications, local planning authorities should take account of:

- *The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable use consistent with their conservation;*
- *The positive contribution that conservation of heritage assets can make to sustainable*

communities including their economic vitality; and

- *The desirability of new development making a positive contribution to local character and distinctiveness.*

Para. 132: When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

Ribble Valley Core Strategy was adopted by the Council on 16 December 2014. Policy EN5 states that there will be a presumption in favour of the conservation and enhancement of the significance of heritage assets and their settings. Assets and their settings will be conserved and enhanced in a manner appropriate to their significance for their heritage value; their important contribution to local character, distinctiveness and sense of place; and to wider social, cultural and environmental benefits.

Heritage assessment methodology

Paragraph 128 of the NPPF states that in determining applications, local planning authorities should require an applicant to describe the significance of the heritage assets affected, including the contribution made by their setting.

This heritage assessment has been prepared in accordance with this guidance to evaluate the significance of the heritage assets at Stonyhurst and the potential impact of the proposal upon this significance.

Accordingly, the following approach was undertaken



to produce the heritage assessment:

- Desktop study of existing literature including listing description and associated documents, photos and drawings;
- Site visit to review the context in respect of the existing condition of the Clairvoie;
- Assessment of the results of the first two stages to establish the significance of the site, its heritage assets; and
- Assessment of the impact of the proposed development upon the identified assets.

The application sits comfortably within this local and national policy context. As an existing property, it must be dealt with as it stands. The restoration of the Clairvoie is considered acceptable in principle. As there are no material alterations proposed, it is set out that the development would not have a detrimental impact upon the significance of the Registered Park and Garden or any of the Listed Buildings on site.

Significance assessment

Para. 129 of the NPPF requires applicants to identify and assess the particular significance of heritage assets or their setting and take this into account when considering the impact of a proposal in order to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

The significance of a heritage asset may comprise a number of factors which are similar to the criteria for listing and include, but are not restricted to:

- Age and rarity: most buildings built before 1700 which survive in anything like their original condition are listed, as are most built between 1700 and 1840
- Architectural interest: through architectural design, decoration and craftsmanship and also important examples of particular building types and techniques
- Historic interest: encompassing buildings which illustrate important aspects of the nation's social, economic, cultural or military history, or close historical association with nationally-important people or events
- Group value: especially where buildings are part of an important architectural or historic group or are a fine example of planning (such as squares, terraces and model villages)

Taking such factors into account, the relative significance of the elements of the site can be assessed, using the following scale:

- **High significance** – buildings/features which make an important contribution to the architectural and historic interest and character

of the site, through age, rarity, architectural merit or historical association or group value, and whose preservation and enhancement is considered essential.

- **Medium significance** – those making a lesser contribution, but which nevertheless are also considered worthy of preservation or enhancement.
- **Low significance** – those making only a limited contribution to the site overall, although not necessarily detracting from it.

Stonyhurst College Estate and its surrounds are assets of high significance with national importance. The wider site is covered by a Grade II* Registered Parks and Garden designation. A number of structures across the site are also listed.

Statement of significance

The Clairvoie is of high significance for historic and evidential values as an example of an external landscape feature which serves the school for recreational purposes. Architectural, aesthetic and historic significance are reduced however due to the current condition of the wall with its stone balusters and finials and missing barley twist railings.

The current condition of the Clairvoie has a negative impact upon the significance of the heritage assets.

Statutory Listed Building description

Statutory Listed Building description

Stonyhurst College Gardens and other land

List entry summary

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 English Heritage for its special historic interest.

Name: STONYHURST COLLEGE
List entry Number: 1000953

Location

The garden or other land may lie within the boundary of more than one authority.

County: Lancashire
District: Ribble Valley
District Type: District Authority
Parish: Aighton, Bailey and Chaigley
National Park: Not applicable to this List entry.
Grade: II*
Date first registered: 01-Apr-1986
Date of most recent amendment: Not applicable to this List entry.

Legacy system information

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

Legacy System: Parks and Gardens
UID: 1951

Asset groupings

This list entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

List entry description

Summary of garden

Legacy Record - This information may be included in the List Entry Details.

Reasons for designation

Legacy Record - This information may be included in the List Entry Details.

History

Legacy Record - This information may be included in the List Entry Details.

Details

Gardens and parkland with late C17 origins, including a well-preserved formal garden dating from c 1700 and an avenue and water features of similar date.

Historic development

The estate passed to the Shireburne family in 1377 and remained in the family until 1754 when it passed, through marriage, to the Weld family. After this it was abandoned until Thomas Weld handed it to Jesuit refugees from Liege in 1794, who established the college of St Omers there. This school had the sons of the English Catholic nobility, and members of the Shireburn and Weld families had been educated there. Stonyhurst was initially seen as a place of temporary asylum, but new stability followed the passing of the Roman Catholic Emancipation Act in 1829, and the establishment, which still occupies the building today (1997), had the dual function of being both a school and the headquarters of the English Province of the Society of Jesus.

Description

Location, area, boundaries, landform, setting

Stonyhurst is situated immediately north-east of the village of Hurst Green in an area which is predominantly rural and agricultural. The c 75ha site is situated on land which slopes down gently southwards. The boundary on the south-west side of the site is formed by fencing along the edge of woodland and the walls of a burial ground which is excluded from the registered area. The southern boundary is formed by the south side of The Avenue and the line of the garden walls around the formal garden and the kitchen garden. On the north-eastern side of the building the boundary is on the line of a track which swings eastwards and then joins a drive which runs to the eastern lodge. The boundary then follows the line of a by-road and returns along the line of the north-west drive. The eastern boundary of the park is formed by a stone wall, while the boundary along the northern and western sides of the parkland is formed by a stream and to the south of this a stone wall.

Entrances and approaches

The principal entrance to the site is from Hurst Green. At the northern end of the village a drive, which is a public road, leads north through a pair of low stone piers and continues through woodland for c 200m. At this point it turns through almost 90 degrees and leads eastwards down an avenue, called The Avenue, to a forecourt on the west front of the house.

There are three other entrances, all on the north side of the site off the by-road between Woodfields and Stock Bridge. At the north-east corner of the site there is a stone lodge and gate piers leading to a drive running south-west to the College. Some 500m to the west another stone lodge with gate piers is situated at the head of a drive which runs south to the College, continues across the west front, and then leads southwards, with the walled precinct of St Peter's church on its east side. It then divides, with one branch leading east to the garden (south) front of the building and the other continuing south around the edge of the walled formal gardens to the kitchen leads south-west, with a line of mature lime trees running along its inner (eastern) edge. Some 350m west of the College a path branches off the drive and leads west to the deer park; at this point the drive turns southwards and joins The Avenue drive at a point immediately west of the canals. This

arrangement is shown on Greenwood's county map of 1818. Other entrances to the site are via farm tracks and footpaths.

Principal building

Stonyhurst College (listed grade I) is on the site of a building of late C14 or C15 date. A gatehouse on the west front of the house leads to a courtyard with buildings on each side. This phase of building was started by Sir Richard Shireburn in 1592 and was continued by his grand-son, Nicholas Shireburn, in the late C17 and early C18. Additions were made in 1799 when the Society of Jesus took over the house, and three campaigns of building during the C19 greatly enlarged the house on the north and east sides. Other additions in connection with the building's use as a school were made in the C20. Attached to the south-west tip of the house is St Peter's church which was designed in 1832 by J J Scoles.

Gardens and pleasure grounds

Before the west front of the College, at the end of The Avenue, there is a walled forecourt, entered through stone gate piers with broken pediments and urns (c 1700, listed grade II). The piers were moved to this position, probably from the south side of the house, and are not shown on an engraving of 1801 (Whitaker 1801). The forecourt overlooks the main drive which is aligned with the front of the house and flanked by stone-lined canals. The view west along The Avenue is terminated by a C19 statue on a mound. Sir Nicholas Shireburn laid out The Avenue and canals in 1696 and the latter were enlarged to their present length, of c 200m, in 1710.

The gardens of the south front consist of a large rectangular area of lawns and playing fields bordered by a low stone wall punctuated by low piers (C19, listed grade II). Both the east wall and part of the south wall retain a range of evenly spaced cast-iron baluster-like piers with railings between. The piers are copied from C17 originals in the formal garden (see below). This area is used for sports activities and was levelled in the early C19, removing terraces, water features and a maze. The only features which seem to survive from the pre C19 garden are two sections of walling, aligned north/south, c 30m from the building and c 50m apart. They are c 6m in height.

To the south of the south lawns there is a formal garden which is enclosed by lawns, c 100m south of the College. It has gate piers capped with broken pediments and is aligned with the western of the two wall sections. This leads to a path running east/west which forms the northern edge of the formal gardens. These consist of two subdivided rectangular areas of equal size, flanked on the east and west sides by irregularly shaped areas. On the west side the area is triangular in shape and walled on the west and south sides. It was laid out as tennis courts in the late C20. The 1st edition OS map surveyed 1844 shows a perimeter path and tree- or shrub-lined axial paths. Set into the south wall is a domed observatory, and at the north-west corner there is a stone doorway, probably of early C18 date (walls and doorway listed grade II).

Steps lead up from the centre of the east side of this area to the western of the two rectangular gardens, which consists of a raised platform with ramped sides. On the east and west sides of the ramp allées lead directly south and terminate with pavilions (both listed grade I) of c 1700. These are of identical design, with ogee pyramidal roofs and paired windows giving views north over the gardens and long-distance views southwards over the Pennines. They are linked by a clairvoie which consists of a stone wall punctuated by balusters with alternating acorn and cone finials. Some of these are of stone and some are cast-iron replicas of the type used for the walls around the south lawns. Photographs show that they were linked by barley-twist railings, said to have been made of wood (CL 1910).

In the centre of the raised platform is a circular lily pond (c 1700, retaining wall listed grade II), with a stone basin and central plinth. Around the pond are a number of plinths which formerly supported statuary. Between the pond and the clairvoie is an octagonal stone observatory (1838, listed grade II), called the Old Weather Station and used as a cafe.

The pond has quartering paths leading from it, those to the east and west with flights of stone steps (both listed grade II, repositioned mid C19) leading down to the allées. That on the east side links with a path leading through to the neighbouring garden. This consists of an area divided into two compartments of unequal size by a path flanked by yew hedges which bow out at the mid-point to form a circular area. On the north side the smaller of the two

areas consists of a parterre with geometrical beds, probably of C20 date. On the south side there is a large sunken circular lawn, called the Bowling Green. This is surrounded by clipped hedges of yew on all but the east side, where the circle is completed by a number of yew trees. Immediately to the south of the Bowling Green, south of the yew hedge, a path leads eastwards through the garden from the clairvoie.

To the east of this garden there is a terrace with three sets of stone steps leading down from the three axial paths of the formal garden; these lead to an area of irregular rhombic shape with walls on the east and south sides splaying at an angle to the axis of the gardens. On the west side there is a yew walk, called the Dark Walk, which runs north/south along the edge of the terrace. On the east side there is a centrally positioned doorway in the wall, aligned with the path leading from the lily pond, and on the south side there is an offset opening leading to the kitchen gardens.

Elements of these gardens were described by the poet Gerard Manley Hopkins, who taught at Stonyhurst during the 1870s, in a letter to Robert Bridges of c 1873: 'There is a garden with a bowling green, walled in by massive yew hedges, a bowered yew walk with two real Queen Anne summerhouses, observatories...' (Martin 1991).

Park

Parkland is situated to the north and west of the College. To the north there is open land with a tree belt to the north and an area of woodland, called Crow Wood, to the north-west. West of this, on the east side of the north-west drive, there is open grassland scattered with mature trees. Immediately north of The Avenue there is open grassland with sports pitches. The remaining parkland, in the area north of The Avenue, is part of a former deer park which is now (1997) used as a golf course. This area is open grassland, walled on the south and east sides, with scattered mature trees and clumps, including a large circular walled clump, called Park Clump. A belt of trees called Park Wood planted on the steep sides of a stream, as shown on the 1818 county map, shelters the northern boundaries, and beyond this, to the north and outside the registered area, is Higher Stonyhurst Park, which is largely walled and represents the extent of the deer park shown on the 1818 map.

Kitchen garden

The kitchen garden is situated c 300m south of the house, south-east of the formal garden. It is walled on the east and south sides; the northern wall is shared with the formal gardens while the western wall, which is shown on the 1932 OS map, has been taken down. A gardener's house is situated at the west end of the south wall. A range of glasshouses running from east to west divides the garden into two areas. The garden is not shown on the 1844 OS map; it is probably the site of 'orchards, vineries, greenhouses...' described c 1873 by Gerard Manley Hopkins (Martin 1991), and is shown in approximately its present form on the 1932 OS map. (15 October 1910), pp 534-42; (22 October 1910), pp 574-82; 84 (16 July 1938), pp 60-5; (23 July 1938), pp 84-8 The Victoria History of the County of Lancashire 7, (1912), pp 7-14 N Pevsner, The Buildings of England: North Lancashire (1969), pp 239-42 R B Martin, Gerard Manley Hopkins (1991), pp 199-223

Maps C Greenwood, Map of the County Palatine of Lancaster, 1818

OS 6" to 1 mile: Lancashire sheet LIV, 1st edition surveyed 1844 Lancashire sheet LIV, 2nd edition published 1913 Lancashire sheet LIV, 1932 edition

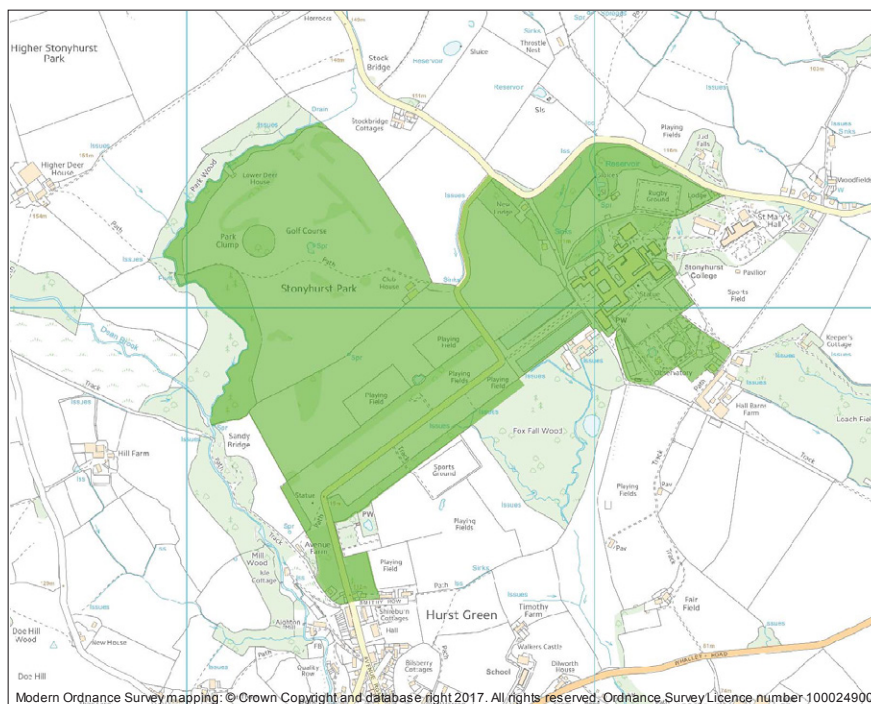
Archival items W Turner, Stonyhurst, engraving, c 1801 (reproduced in Whitaker (1801)) A Symondson (SJ), Stonyhurst College Lancashire, (typescript tour notes 1996 (EH file))

Description written: August 1997 Register Inspector: CEH Edited: March 1999 69.

Selected sources

Legacy Record - This information may be included in the List Entry Details

National Grid Reference: SD 68637 38862



Name: STONYHURST COLLEGE

This is an A4 sized map and should be printed full size at A4 with no page scaling set.

Heritage Category:	Park and Garden
List Entry No :	1000953
Grade:	II*

County:	Lancashire
District:	Ribble Valley
Parish:	Aighton, Bailey and Chalgley

Each official record of a registered garden or other land contains a map. The map here has been translated from the official map and that process may have introduced inaccuracies. Copies of maps that form part of the official record can be obtained from Historic England.

This map was delivered electronically and when printed may not be to scale and may be subject to distortions. The map and grid references are for identification purposes only and must be read in conjunction with other information in the record.

List Entry NGR:	SD 68637 38862
Map Scale:	1:10000
Print Date:	23 February 2017



Impact and mitigation of proposed works

Impact and mitigation of proposed works

Clairvoie

The principle aim of the proposed development is to fully restore the Clairvoie to its former glory. There are a number of missing features, namely;

- 2no. stone pilasters
- 6no. acorn or cone stone finials
- 15no, bays of barley twist wood railings supported by 2no. horizontal bars – 21no. railings per bay

The current condition of the masonry wall and stonework require extensive repair, re-pointing and cleaning. No material changes are proposed.

An outline specification is provided for these works and is appended to this report.

Summary

It is considered that the proposed development will have no material impact upon the Estate, all works proposed will re-instate the original character and appearance of the Clairvoie.

The proposed use will be in keeping with the rest of the site.

It is considered that as only restoration and repair works are proposed these would not have an impact upon the setting and character of the Registered Park and Garden nor any of the Listed Buildings.



Appendices

Appendix A - Historic photos



1885



1895



Looking West from the College



To the Bowling Green & Park Walk



Looking S.E. from the College.

1904



View from the Eastern Summer-House

1908



To the Park Walk and Magnetic Obs^y



POND
1908



Tea on the Bowling Green, Academy Day, 1908



Meteorological and Magnetical Observatories

1908

1908



To the Bowling Green & Park Walk



1920-30



1908



c. 1815



c. 1860



c. 1860



c. 1885



c. 1885



(from Playground)

South Front



Observatory Pond; Dome in the distance



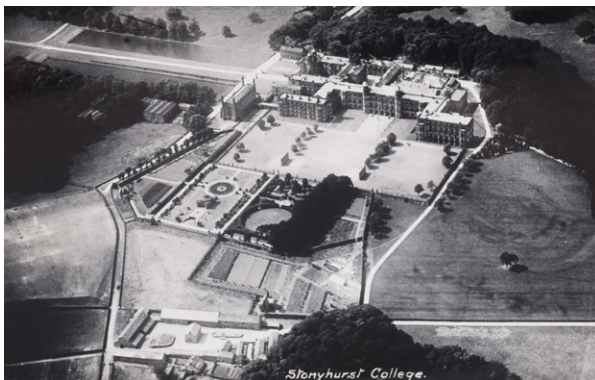
(from garden lawn)



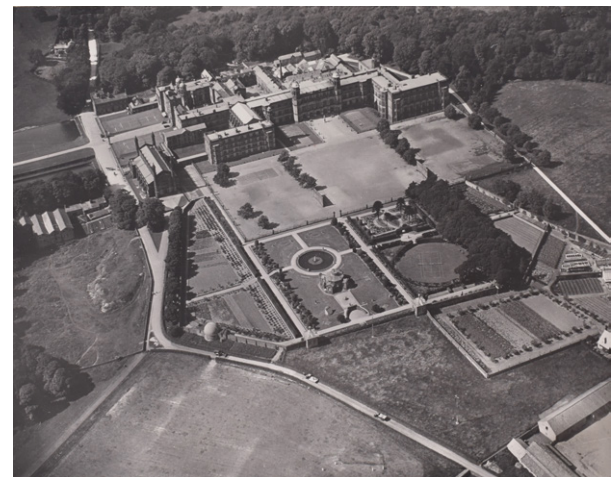
Western Summer-House Walk

c. 1905

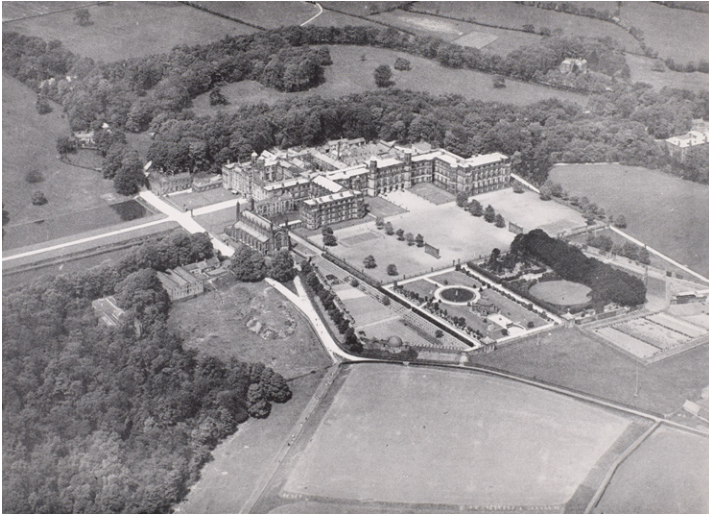
c. 1905



c. 1920



c. 1925



c. 1930



c. 1930



c. 1938

Appendix B - Outline specification for the works

Clairvoie Works

1.0 Description / overview

The Clairvoie is an external wall that links two identical pavilions (Grade I listed) in the southern gardens at Stonyhurst College near to the village of Hurst Green in the Ribble Valley area of Lancashire, England.

The Clairvoie is an external masonry wall that is constructed of a multi red brick with feature stonework at the base and head of the wall. The wall is punctuated by stone pilasters with alternating acorn and cone finials.

The current condition of the wall and its associated features are poor due to weathering and inherent movement and settlement as well as missing stone pilasters, stone finials and timber barley twist railings.

1.1 Scope of work

The following works are required to the Clairvoie wall:

- Cleaning to external brickwork and stonework with approved methods and careful monitoring (evidence of algae and lichen is present)
- Re-bedding of any loose bricks or stone sections
- Re-pointing of brickwork joints with suitable mortar to match existing in properties, colour, texture and appearance
- Re-production and installation of 2no. stone pilasters
- Re-production and installation of 7no. acorn or cone stone finials
- Re-production of 15no. bays of timber barley twist railings supported by 2no. horizontal bars per bay – 21no. railings per bay

1.3 Drawings

Please refer to Levitt Bernstein drawing numbers:
3477C – DR – 1100 – Site plan
3477C – DR – 1101 – Existing plan and elevation
3477C – DR – 1102 – Proposed plan and elevation
3477C – DR – 1103 – Proposed details

2.0 Cleaning external brickwork and stonework

2.1 Standards and Codes of Practice

All work is to comply with current standard, guidance documents and best practice as set out in the following documents:

- Historic England, Practical Building Conservation: Earth Brick and Terracotta, 2016
- BS 8221 – 2012 (2 parts) Code of Practice for Cleaning and Surface Repair of Buildings
- N Ashurst, Cleaning Historic Buildings, Donhead, 2 vols, 1994
- BS 7913:2013 Guide to the conservation of historic buildings

2.2 General

Masonry cleaning is to be carried out by suitably skilled operatives, experienced in the use of specified methods and materials.

Monitoring of the progress of cleaning will be required. Any damage to the listed fabric will need to be reported immediately.

2.3 Scope of work

The overall aims and rationale for cleaning objectives:

- Removing soiling deposits without over cleaning and causing alteration or damage to the underlying substrate. Methods (equipment and materials) that might effectively and safely remove soiling can only be assessed by trial on the different types of soiling present.
- Harmonising the appearance of the façade, reduce visually distracting contrasts between areas that are relatively lightly soiled (flat / plain 'ashlar' work) and those which are more heavily soiled (copings, string courses, areas of the wall that receive limited sunlight i.e. sit in shady conditions without over-cleaning).
- Minimising the contrast between new repairs and existing fabric to avoid a patchwork appearance.
- Removal of the heavier soiling deposits, especially the organic soiling and atmospheric

soiling on weatherings that may reveal defects (e.g. fractures, spalls, open / eroded joints) that may be entirely or partly concealed.

- To reduce deterioration of the building fabric.
- Works to be executed following agreed exemplars and proceed from the least aggressive and most gentle methods to successively stronger methods – sufficient to achieve effective removal of soiling without surface damage / alteration.

2.4 Method

2.4.1 Thermatech hot water washer or similar approved.

To be used, subject to trial, for:

- Removal of light surface soiling across the wall, in preparation for remedial work to mortar joints and stonework
- Areas of heavier, organic soiling (weatherings, string courses, mouldings)
- Rinsing of surfaces after application of any chemical cleaning agents.
- Rinsing of surfaces after other cleaning and repair work to remove residual dirt
- To be assisted by brushing with soft (artificial, plastic bristle) brushes, where this proves to be effective and enables the Thermatech to be used at greater (safer) working distance from the wall face.

2.4.2 Mechanical removal

- With small timber or plastic spatulas or nylon brushes
- Efflorescence removal
- Localised heavy organic soiling
- Removal of top layer of thick, heavy algae and lichen soiling (prior to chemical cleaning of well bonded residues)
- Anti-pigeon gel (prior to chemical cleaning of black residues)

2.4.3 Jos Vortech wet Air Abrasive system or similar approved.

- To be used subject to trial and assessment of effectiveness compared to other methods, for: areas of heavier atmospheric soiling, such as window cills, string courses, other projections / weatherings / mouldings.
- Locations and extent to be agreed subsequent to trials

2.4.4 Chemical Cleaning. For heavier soiling

- To be used, subject to trial, for cleaning of heavier atmospheric soiling
- Anti-pigeon gel (localised deposits on blackened residues on hood moulds, capitals, cills, other projections)
- Adhesive tape residues (localised)
- Paint residues (localised)
- Iron oxide staining residues from embedded fixings(localised)

2.4.5 Poultice Cleaning

- For heavier soiling, to be used, subject to trial, for cleaning of:
- Efflorescence, Iron oxide staining residues from embedded fixings (localised) if required.
- Any small plants with roots are to be carefully removed from masonry joints by hand prior to any washing methods.

3.0 Repairs and remedial works

3.1 Standards and Codes of Practice

All work is to comply with current standard, guidance documents and best practice as set out in the following documents:

- Historic England, Practical Building Conservation: Earth Brick and Terracotta, 2016
- Historic England, Practical Building Conservation: Mortars, Plasters, and Renders
- Historic England, Practical Building Conservation: Masonry
- BS 8221 – 2012 (2 parts) Code of Practice for Cleaning and Surface Repair of Buildings
- John Ashurst, Mortars in Building Conservation, EASA, 2nd edition, 2002

3.2 General

- Records of masonry to be repaired: Before starting work, use measurements and photographs as appropriate to record bonding patterns, joint widths, special features, etc.
- Identification of masonry units to be removed, replaced or repaired: Mark clearly, but not indelibly, on face of masonry units or parts of units to be cut out and replaced. Transcribe markings to drawings/ photographs.
- All repair methods are subject to trials / samples to be approved by the Architect and statutory authorities (Conservation Officer).

3.3 Brickwork and stonework repairs

- Work includes repairs required to external masonry surfaces, full extent of repairs to be

- determined after cleaning, subject to re-survey.
- All the stonework and mortar needs cleaning using a steam based cleaning system to give a very gentle clean initially. Refer to section 2.0 for alternative methods where more invasive techniques are specified.
- Prior to steam cleaning, removal of biological growth (e.g. algae, lichen, climbing ivy) by hand, ensuring all roots are fully removed without harming the original brickwork and stonework.
- Repointing and brickwork repairs should only be done after the brickwork is cleaned.
- All loose bricks to be carefully removed and re-bedded with suitable mortar mix to match existing in composition, colour, texture and appearance. The mortar colour should match the immediately surrounding areas of point. No attempt should be made to remove firmly embedded hard cement.
- Careful re-pointing of stonework joints in suitable mortar to match colour, texture and appearance of the original work.
- Document all repair work before, during and after operation with photos and notes to monitor the refurbishment.
- Repair types to be carried out include:
 - Filling redundant fixing holes
 - Removal of defective or unsightly previous mortar repairs and reinstatement using hydraulic lime-based mortars, to match existing masonry (stone and brick) substrates
 - Repointing of any open or defective joints using hydraulic lime-based mortar, to match existing original
 - Fractures to masonry – preparation and filling of fractures using hydraulic lime-based mortar to match existing stone, brick and mortar joints if required, and only by direction of the Architect, stone or brick indents to areas of damage or loss – new, natural stone and buff brick indents to be grouted into carefully prepared repair cavities with natural hydraulic lime-based grout
- Repairs and replacement bricks subject to survey findings
- Sample panels must be approved.

3.4 Removal of plant growths from masonry

- Plants, root systems and associated soil/debris: Carefully remove from joints, voids and facework.
- Removal of roots: where growths cannot be removed completely without disturbing

masonry seek instructions.

- Unwanted plants close to masonry: Where removal of root system is not possible or desirable, cut through stem as close to the ground as possible. Remove bark from stump and apply herbicide paste. Leave stump to wither.

4.0 Reproductions

4.1 Stone pilasters

- Full condition survey to be undertaken by a specialist stone-worker/mason of all existing stone pilasters to assess suitability for retention or replacement.
- Re-production of missing stone pilasters to match existing stone type, dimensions and design. Control sample to be produced and approved prior to production of full quantity.
- Assembly and fixing of re-produced stone pilasters to specialist stonemason's design. Final appearance of stone pilaster and its fixings to match original design. Control sample to be installed and approved prior to construction of full quantity.
- Document installation of new re-productions before, during and after with photos and notes to monitor the refurbishment.
- Approx. quantity to be re-produced is min. 2no. pilasters, see Levitt Bernstein drawings.

4.2 Stone finials – acorn and cone design types

- Full condition survey to be undertaken by a specialist stone-worker/mason of all existing stone finials to assess suitability for retention or replacement.
- Re-production of missing stone finials to match existing stone type, dimensions and design. Control sample to be produced and approved prior to production of full quantity.
- Assembly and fixing of re-produced stone finials to specialist stonemason's design. Final appearance of stone pilaster and its fixings to match original design. Control sample to be installed and approved prior to construction of full quantity.
- Document installation of new re-productions before, during and after with photos and notes to monitor the refurbishment.
- Approx. quantity to be re-produced is min. 7no. pilasters, see Levitt Bernstein drawings.

4.3 Barley twist railings

- Works to be undertaken by a specialist carpenter / wood-worker.
- Re-production of missing timber barley twist railing to match original design, dimensions and appearance. Control sample to be produced and approved prior to production of full quantity.
- Barley twist railing to be re-produced in timber – all final details, wood species and specification subject to confirmation with Stonyhurst College, local planning authority and local heritage bodies.
- Assembly and fixing of re-produced railings to specialist carpenter's design.
- Final appearance of railings and its fixings to match original design. Spindles were historically painted 'stone grey'. Method for specifying and applying colour to be confirmed. Control sample to be installed and approved prior to construction of full quantity.
- Reference to be taken from historic photo records of the Clairvoie and remaining original railings that are available for inspection from Stonyhurst College (Contact: Steve Young).
- Document installation of new re-productions before, during and after with photos and notes to monitor the refurbishment.
- Quantity to be re-produced is 15 bays of railings with varying sizes of 21 railings per bay supported by an upper and lower level horizontal bar, see Levitt Bernstein drawings.

