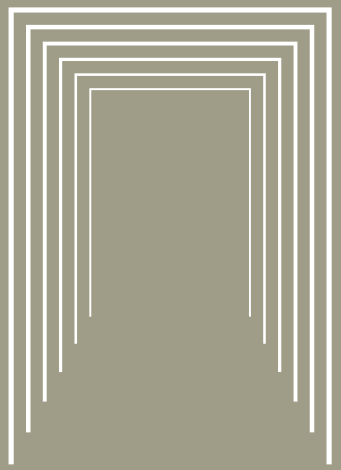
STEVE HILL

CRAYKE CASTLE, CRAYKE NORTH YORKSHIRE

CRAYKE CASTLE - STAGE 01 REPORT

PURCELL ARCHITECTS



PURCELL

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Issued to client for comment 28/09/2016

INTRODUCTION

REPORT SUMMARY

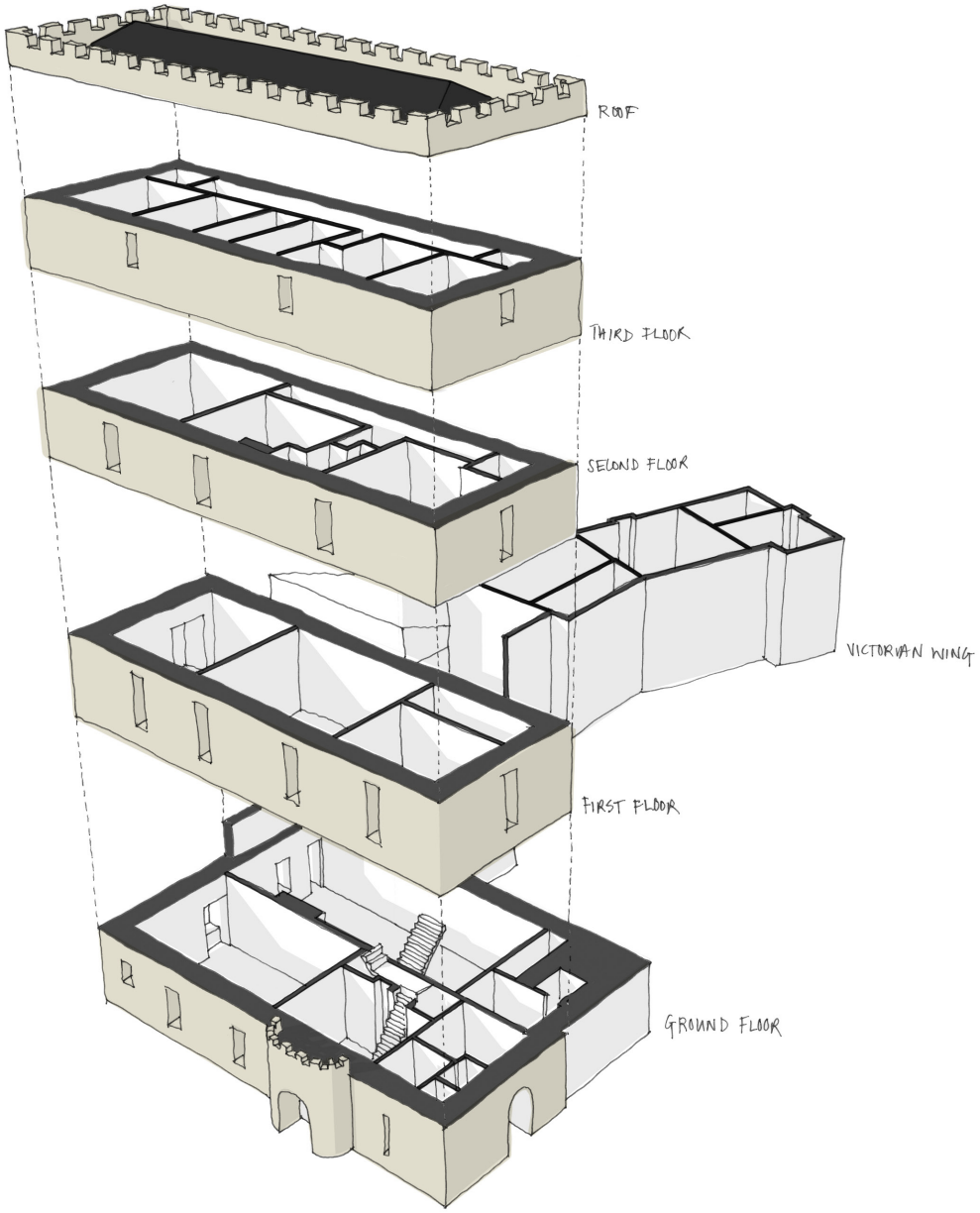
This report is a review of Stages 0 and 1 as per the agreement set out within Appendix A of this report. It is intended to outline the works undertaken by Purcell to satisfy the deliverables outlined within our original agreement.

In line with Purcell's Quality Assurance procedures we can only proceed to the next work stage once the current stage has been closed out and signed off by yourself.

We believe the information included within this document and that within the attached appendices provide the required information to allow Stage 02 to commence, and as such require your authorisation to proceed from RIBA Stage 01 (preparation of brief) to RIBA Stage 02 (concept design).

Please find appended a signed form confirming our close out of the current work stage. Please could you provide your signature to confirm that you are happy for us to proceed on the above basis.

Outstanding and required further information has been outlined within the report - and will form the basis of any ongoing review of the Project Brief (i.e. on site Archaeological Investigations)



RECEIVING THE CLIENTS INSTRUCTIONS AND INFORMATION ABOUT THE PROJECT:

Background Information:

Crayke Castle is a Grade I listed 15th century tower house in the North Yorkshire village of Crayke. With a checkered history, the site has been adapted significantly over time – most notably the slighting of the defences and the 'New Tower' during the civil war which now sits as a ruin within the landscape to the East of the four storey tower house. Most of the original castle structures including 'The Old Hall', the gate house and the walls encircling the inner and outer baileys, have been lost, leaving little evidence of them above ground.

Converted to agricultural use, the original tower house is recorded as a farmhouse in the 18th century which it remained as until the late 19th century when the building and site were gentrified into a country residence after it was sold by the Bishops of Durham. At this point other structures were established on site including the Victorian extension to the North side of the building which is still intact.

With its most recent use as a Bed and Breakfast, the building currently includes a number of reception rooms, bedrooms and bathrooms which are illustrated in the exploded perspective to the left and the floor plans on the next page. Much of the partitions which form the current internal spaces are thought to be relatively modern adaptations, predominantly within the 19th Century.

A detailed analysis of the development of the building has been included within the Archaeological Desktop Assessment carried out by Purcell. It is noted within this report that there is a high Archaeological Potential across the whole site given the age and level of change and adaptation throughout the years.

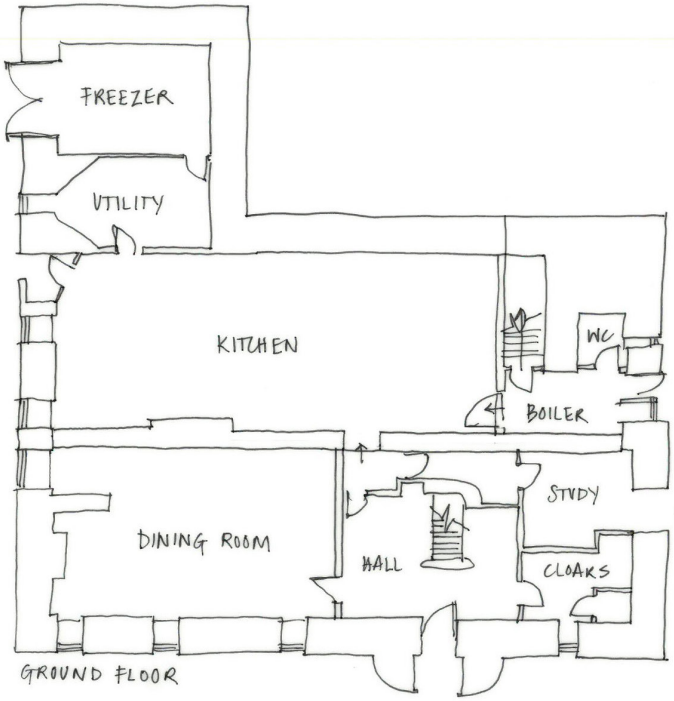
As a Scheduled Ancient Monument, the site is afforded significant statutory protection on a national scale which attests to the importance of this site as a vital part of British history. This inevitably increases the complexity of any proposed works, and as such a sound understanding of the building's history as well as assessments of its significance will be crucial in developing a robust argument for redevelopment. The assessment of Significance is covered within the Heritage Consultancy reports produced by Purcell.

Main Objectives:

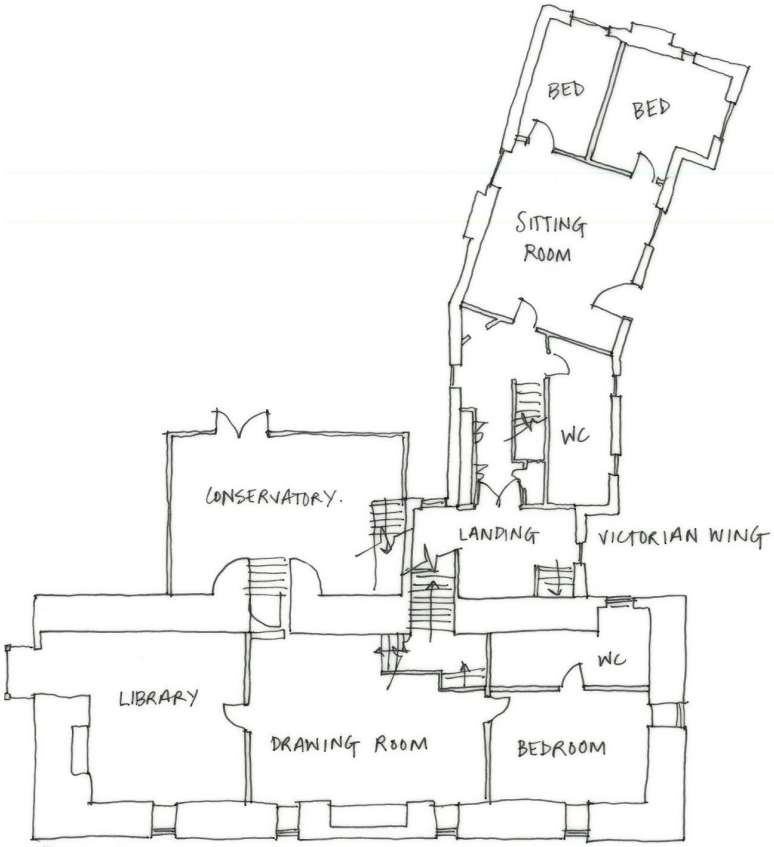
Purcell have been instructed by yourself to commence work on this exciting building project on 21st June 2016 (see Appendix A). This appointment is based on the re-imagining of the Crayke Castle and surrounding site, breathing new life into the listed building and transforming its spaces into bespoke and sustainable uses for the future. Crucially, the project aims to further reveal the historic significance of Crayke Castle and secure its future as a vital part of local and national history.

Specifically, the project includes the sensitive refurbishment of the existing four storey tower house into very high quality residential accommodation. Initial discussions have also included for potential sensitive works to the 'New Tower' to create a pavilion type space out of the very special ruin within the landscape.

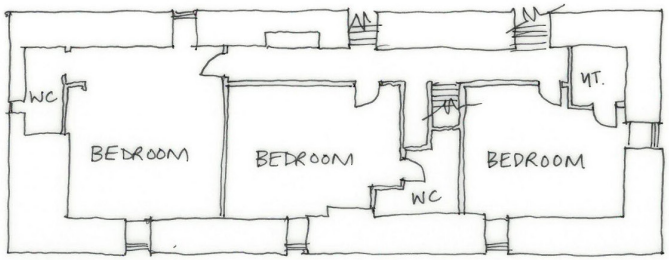
It has been identified that there is a high potential for significant building archaeology across the site given the age and complexity of the site as well as the amount of adaptation and change throughout the years since Crayke Castle was first built. The early stages of the project will investigate this in greater detail through desktop assessments and site based archaeological surveys in order to identify and unlock the opportunities across the whole site. The information gleamed from these investigations will inevitably influence the detailed brief for the project.



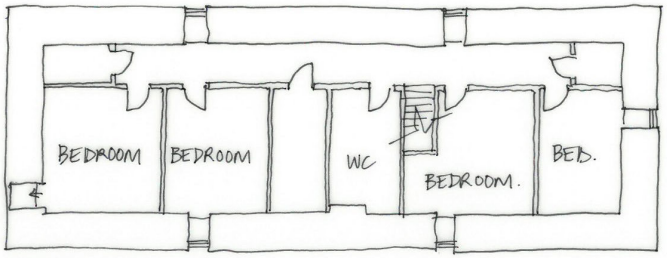
GROUND FLOOR



FIRST FLOOR



SECOND FLOOR



THIRD FLOOR

ASSISTING THE CLIENT IN DEFINING THE CLIENT'S STRATEGIC REQUIREMENTS & IDENTIFYING PROJECT CONSTRAINTS:

Time Constraints

A specific date for completion is yet to be determined, and will be subject heavily to the findings of the initial archaeological investigations. Once these complexities are understood, the time scales for the overall project can be better understood.

Physical Constraints

Location – The project is to be delivered within buildings and land solely owned and occupied by the client.

Adjoining Owners – The site is surrounded predominantly by agricultural holdings which fall outside of the ownership of the client. The existing building and proposed works, however, are of sufficient distance to mitigate against any risk. The neighboring church is the closest building to Crayke Castle – and as such it is recommended that the Church PCC is engaged with from the early stages to identify any concerns and to mitigate against these if necessary.

It is also recommended that engagement is undertaken with other nearby neighbours in order to reduce the risk of opposition to the proposed works.

Existing Archaeology – The desktop archaeological assessment conducted by Purcell has identified the site as having a high potential for archaeology. This is a risk item given the nature of the site as a Scheduled Ancient Monument. In order to mitigate against this risk, it will be imperative that a closer understanding is gleamed from a sequence of surveys to understand the extent, type and significance of the potential archaeology across the site.

Furthermore, given the historical importance of the site, a close engagement with English Heritage will be required to reduce any risk of opposition to the proposed works. It is recommended that this relationship is engaged at an early stage in order to identify any potential opposition to the site investigations and ultimately the redevelopment of the site and building.

Ecology – It has been noted that St Cuthbert's Church which sits next door to the site is a significant bat roost. As such, given the proximity, it is highly likely that Crayke Castle also has the capacity to home a bat roost amongst other ecology. In order to mitigate against these risks, it is recommended that a Phase 1 habitat survey is undertaken by an accredited Ecologist. This will allow mitigation measures to be developed and put into place prior to any site works which is stipulated by the Local Authority and Natural England.

Quality

The client expects the highest quality standards to be achieved in all aspects of the project commensurate with the scope of works, stated objectives and agreed budget.

The Design Team, once appointed, will be responsible for coordinating all design activity, and should agree the proposed quality procedures with the other members of the team. The client will approve the systems and procedures proposed by the Design Team once these have been formalised.

Statutory Constraints:

Planning Requirements – A review of the national, regional and local planning and legislative framework governing the treatment of historic buildings has been summarised within the Desktop Archaeological Assessment conducted by Purcell. This outlines the following:

POLICY NO.	TITLE	SUMMARY
n/a	Ancient Monuments and Archaeological Areas Act 1979 (as amended)	*Scheduled Monuments and AAIs are afforded statutory protection and the consent of SoS (DCMS), as advised by English Heritage (EH), is required for any works.*
n/a	Planning (Listed Buildings and Conservation Areas) Act 1990	*Works affecting Listed Buildings or structures and Conservation Areas are subject to additional planning controls administered by Local Planning Authorities (LPAs). EH are a statutory consultee in relation to works affecting Grade I/II* Listed Buildings.*
n/a	National Planning Policy Framework (NPPF)	*The National Planning Policy Framework (NPPF, published March 27th 2012) is the overarching planning policy document for England. Within Section 12: Conservation and enhancing the historic environment are the government's policies for the protection of heritage. The policies advise a holistic approach to planning and development, where all significant elements which make up the historic environment are termed 'heritage assets'. These consist of designated assets (such as listed buildings or conservation areas) non-designated assets (such as locally listed buildings) or any other features which are considered to be of heritage value. The policies within the document emphasise the need for assessing the significance of heritage assets and their setting in order to fully understand the historic environment and inform suitable design proposals for change to significant buildings.*

Any works to the site, including invasive Archaeological investigations, will require consent from the Secretary of State (DCMS). Furthermore, all proposed works which directly and indirectly impact on the listed building and other historic features will require Planning Consent and Listed Building Consent prior to any works taking place.

Early engagement with the Local Authority and English Heritage is advised to encourage their support of the proposed works from the offset. Purcell have extensive experience with working with Local Authorities and English Heritage when dealing with historically significant buildings, and will draw on this experience to ensure a positive outcome for Crayke Castle.

Building Control -

All proposed works to Crayke Castle will be required to comply with Building Regulation legislation, including any extensions to the existing building as well as the refurbishment of the existing building itself.

Early engagement with an approved inspector will identify the key risk areas with regards to Building Control approvals, allowing the proposed design to be responsive from the outset to the legislative requirements of Building Control.

CDMC – The Construction Design Management Regulations (2015) apply to all building and construction projects, regardless of the size, duration and nature of the work.

Under the regulations, the client is obliged to ensure that a construction project is set up so that it adequately controls risks to health and safety of those who may be affected form start to finish. The client has overall responsibility and the Principle Designer and Principle Contractor provide support in different phases of the project.

Please refer to Appendix D which provides a full description of the roles and responsibilities included within the CDM requirements.

REVIEWING WITH CLIENT ALTERNATIVE PROJECT TEAM OPTIONS:

It has been noted within the original appointment documents (See Appendix A) that the early design stages of the Crayke Castle project will require a number of specialist Consultants to allow a fully coordinated and feasible scheme from the outset. These include:

Quantity Surveyor:

The Quantity Surveyor will provide an initial Project Budget based on the site information, the client's aspirations and strategic brief as well as any additional information (such as Condition surveys and Archaeological findings). Regular updates to this will take place throughout the design stages to allow the client to fully understand the cost repercussions of design decisions.

Full cost reports will be provided at key milestones throughout the project – including prior to planning submission and prior to tender submission. The QS will also support the client during tender reviews and interviews.

The QS will manage all onsite instructions in respect of expenditure of provisional sums, interim payment certificates for valuations and materials on and off site.

Conservation Engineer:

The Conservation Structural Engineer will support the design team usually from stage 02 through to completion, specifically with reference to the proposals structure. In the case of Crayke Castle, this will also include a structural survey of the existing building to identify any structural remediation works which may be required to secure the longevity of the building.

Initial coordination will take place between the Structural Proposals and Architectural Designs prior to planning submission to identify and mitigate against any major clashes. This base will then be developed upon throughout the detailed and technical design phases to ensure a fully coordinated and feasible design.

Building Services Engineer:

The Building Services Engineer will support the design team usually from stage 02 through to completion. This would usually include design work for the mechanical, electrical and drainage services to the building.

Initial coordination will take place between the Mechanical and Electrical scheme, Architectural Designs and Structural proposals prior to planning submission to identify and mitigate against any major clashes. This base will then be developed upon throughout the detailed and technical design phases to ensure a fully coordinated and feasible design.

Principle Designer for Health and Safety:

Refer to Appendix E for client briefing on CDM responsibilities. It is recommended that the CDM Coordinator be involved within Stage 02 onwards.

Additional Consultant Requirements:

Additional consultant and survey requirements include the following:

-Ecology (stage 2)
-Landscape Architect (stage 2-6)
-Measured Building (stage 0-1)
-Topographical (stage 0-1)
-Archaeology (stage 0-1)

To ensure competitiveness 2-3 quotes have been sourced for each discipline. These quotations along with capability statements are included within Appendix B for a more detailed comparison. An overview is provided below of this information:

Consultants	**Target Fee** *(as outlined within initial appointment documents)*	**Fee Proposal**
QUANTITY SURVEYOR		
Greenwoods	2.25%	2.25%
Thornton Firkin	2.25%	2.25%
CDMC		
Greenwoods	0.25%	0.23% *(based on QS and CDMC)*
Thornton Firkin	0.25%	0.25% *(based on QS and CDMC)*
Cameron Miller (Purcell)	0.25%	0.25%
STRUCTURAL ENGINEER		
Patrick Parsons	1.25%	1.25%
Structural and Civil Consultants	1.25%	Time Charge Only
MCA	1.25%	1.25%
M&E CONSULTANTS		
TGA	2.25%	2%
Preston Barber	2.25%	1.9%

NB: Please note all fees are subject to scope and value of the project, which we have currently assumed at £1.4m as per our initial conversations. Once a cost plan has been undertaken by the appointed QS, a review of these fees should take place.

Based on the above and based on our experiences with the consultants listed, our recommendations for the Design Team are highlighted in green. This is based on cost, but also our confidence in each of the consultant's to deliver an excellent project that a building such as Crayke Castle deserves.

We would be happy to discuss this further with you should you have any questions relating to the proposed Design Team.

It is recommended that the Quantity Surveyor be appointed at the completion of Stage 01 to allow an initial budget estimate to be compiled based on the information gathered so far (such as strategic requirements/ condition survey and repair schedule/ programme etc.)

Once a budget estimate has been produced, a review of consultant fees can take place and the full Design Team can be assembled ahead of the Stage 02 (Concept design)/ Stage 03 (Developed Design) works.

CONTRIBUTING TO THE PROJECT PROGRAMME AND ASSEMBLING THE PROJECT TEAM:

Surveys

Similarly, to the previous section, a number of providers have been approached for each survey required to ensure competitive pricing.The Surveys identified for Stages 0-1 include Measured Building, Topographical and Archaeological.The table below surmises the fee quotes received for these services, indicating which ones have been commissioned thus far (in orange).

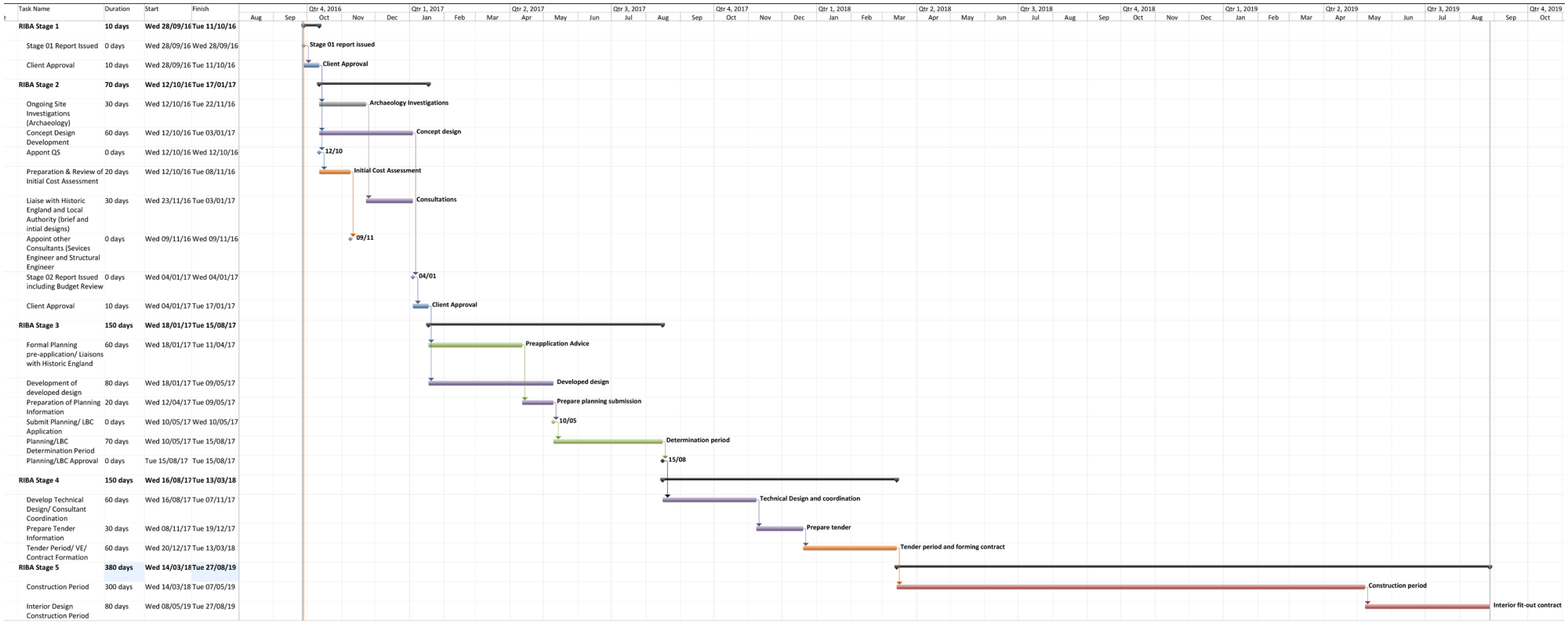
Our recommendation for the Archaeological Survey would be Durham University based on their capabilities on the constrained site, their competitive price and our experience of working with them historically.

Given the complexity of the site and the amount of movement it has undertaken - there may be areas across the site which are unable to be surveyed - this has been highlighted by each of the tenderers.

Further correspondence is required to establish the extent of the site available for the survey; however Durham University are currently the only tenderer willing to survey the majority of the site.

Surveyor	Fee Proposal
Measured Building Survey	
Silkstone Surveys	3870
CT Surveys	1990
Landscope	5850
Topographical Survey	
Met Consultancy	1600
CT Surveys	2650
Silkstone Surveys	930
Archaeological Survey	
Met Consultancy	980 (no interpretation)
WYAS	1300 (partial site due to safety)
Landscope	7205 (no interpretation)
Durham University	1960
Archaeological Project Services	3172

Project Programme



The project programme above sets out what we believe to be realistic time scales for the Crayke Castle project. It is very difficult at this stage to understand how cooperative the Local Authority and Historic England will be with their consultation, and as such these have been identified as risk items. We have allowed adequate time for these consultations, and any overrun will be documented and discussed fully with yourself to ensure you are aware of any impact on the project programme.

Other risk items include the potential for Ecology across the site, including bats, newts and nesting birds. In line with legislation - appropriate surveys should be undertaken to establish the extent of this risk. Once these have been completed, the impact on project programme can be better understood and built into the above Gantt Chart.

Finally, a period of Archaeological Investigation has been allowed for in the above programme, however given the historic complexity of the site it is difficult at this stage to fully understand the impact that this area of investigation may have on the project programme. Once the initial surveys have been undertaken this will be come more clear and the chart will be updated accordingly. Adequate periods have been included for client liaison and sign off at each stage which will include robust cost reviews to ensure that you are happy and comfortable with the programme, cost and quality of the project at regular intervals throughout the life of the project.

VISITING THE SITE AND CARRYING OUT AN INITIAL APPRAISAL:

Since the commissioning of the project, the following site visits, meetings and research visits have taken place to contribute to the development of the strategic brief:

-**7th July** – *Start-up Meeting with Purcell Team on site*

-**8th July** – *Information received from client (http://craykecastle.com)*

-**18th July** – *Meeting on site with WYAS (Archaeological Survey Briefing & Information)*

-**21st July** – *'Home Information Pack' requested and received with red line boundaries*

-**12th August** – *Client Meeting at Walton Hall to review brief development and Design Team options*

-**23rd August** – *Durham Archives visit (Heritage Consultants)*

-**24th August** – *North Allerton Archives visit (Heritage Consultants)*

-**25th August** – *'Gazetteer' review on site (Heritage Consultants)*

-**31st August** – *'Gazetteer' review on site concluded (Heritage Consultants)*

-**1st September** – *Commissioning of Topographical and Measured Building Surveys*

-**6th/7th September** – *On site condition survey data collection*

-**16th September** – *Topographical Survey Received*

-**26th/27th September** – *Measured Building Survey taking place on site*

The collected information from the above activity has provided a foundation to build a successful project from and has started to form a deep understanding of the building, the site and your aspirations for its future.

The culmination of the above is summarised within the next section, which highlights what we believe to be the strategic requirements for your project. In addition, the initial research period will feed into the Building Condition Survey, Archaeological Desktop Assessment and Conservation Management Plan, all of which will be prepared by Purcell.

ASSISTING IN THE DEVELOPMENT OF THE INITIAL PROJECT BRIEF, AND REVIEW OF SITE INFORMATION:

Project Aspirations:

We have discussed a number of areas where we feel there are opportunities for bold change and intervention that could lead to the enhancement of the significance of the building, as well as an improvement in usefulness of the spaces and their presentation.

A key adaptation which has been discussed is the re-organisation of the circulation through the building which is currently convoluted and sometimes unclear. A simplified clear vertical circulation through the entire building would significantly improve the experience of Crayke Castle. This would also provide justification for the removal of the current staircase within the entrance hall which appears to be a 19th Century adaptation.

In addition to the removal of this staircase, it is also noted that the later infill partition walling across the bottom two storeys should be removed to provide an opportunity to reorganise and re-present these impressive spaces. Exposing the medieval masonry wherever possible will transform these spaces.

The existing fireplaces should also feature heavily within the proposed layouts – in particular the large fireplace on the second floor which is currently located within a corridor. The spaces should be reconfigured to treat this feature as a key component of the original building.

Subject to discussions with English Heritage and the Local Authority, the Victorian wing should be considered for removal. This may involve a complete demolition or partial demolition where the East-facing stone façade is retained and re-used by any new extension structure. This will be explored further throughout the Concept Design stages (Stage 02) – and once more information is known about the sub-terranean archaeological remains.

The precedent of extension building to the North side of the original building (i.e. the Victorian Wing and Conservatory) provides a very real opportunity to develop a contemporary extension in this location which creates additional space as well as an opportunity to enhance the significance of Crayke Castle itself. Any new-build in this location should take full advantage of the spectacular panoramic views which the site is afforded, particularly towards the West.

The main entrance to the building should be re-addressed as the current entrance at basement level is somewhat under whelming given the stature and prominence of the building itself. The entrance should create impact, perhaps with impressive heights. The potential for creating a new entrance within the proposed extension should be considered within the concept design stages – which could take advantage of the amazing views and potential for a new dramatic circulation core.

The existing roof should be considered for adaptation to facilitate a new roof terrace space which allows uninterrupted views of the surrounding landscape.

Building Repair:

Purcell have undertaken a condition survey of Crayke Castle which has identified key risk areas for further deterioration of the existing building (See Appendix D). This is accompanied by a schedule of recommended repair which will be required to breathe new life into this building and mitigate against the risk of further damage taking place.

This document forms an integral part of the strategic brief, and addresses the required upgrade of Crayke Castle to transform this building into the amazing, stunning and long-lasting building that it deserves to be.

Accommodation:

The required accommodation is yet to be determined and is heavily subject to the findings from the Archaeological investigations which will be taking place in the near future.

Nonetheless the below list outlines our understanding of your base requirements. This list is not intended to be exhaustive and will most likely change and adapt as our understanding of the site expands:

-6No. Bedrooms with generous En suite

-Big entrance hall with impact

-Simplified circulation core

-Large Open Plan Reception Rooms

-Multi-media/ Cinema room

-Spa Accommodation (Pool Room/ Sauna/ Steam room)

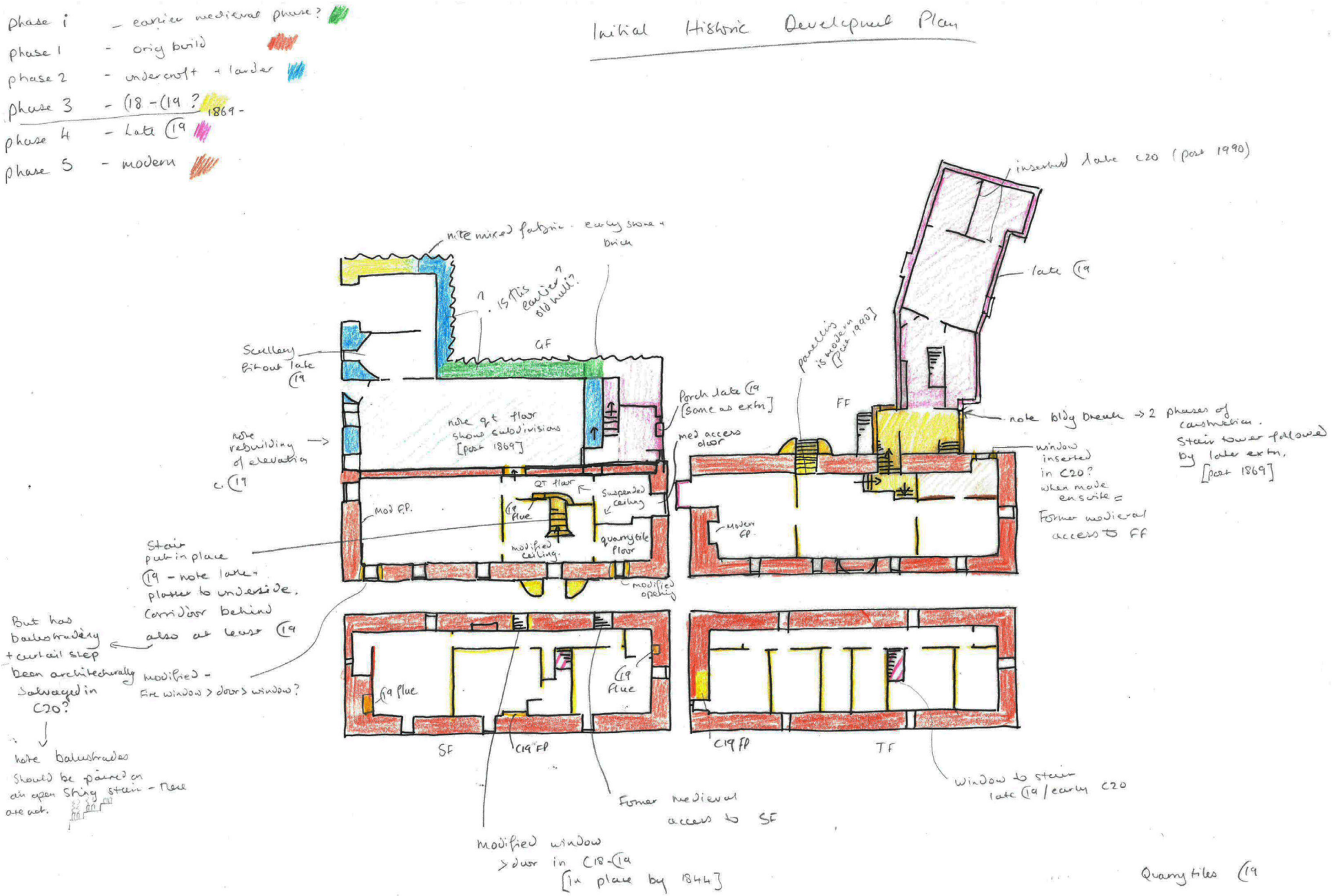
Additional Information:

We understand that a full Archaeological investigation should take place prior to locking down key brief items such as accommodation requirements. Once further information has been provided on the archaeology we will work with yourself to formalise the above brief information into an accommodation schedule which responds to the overall opportunities of the site.

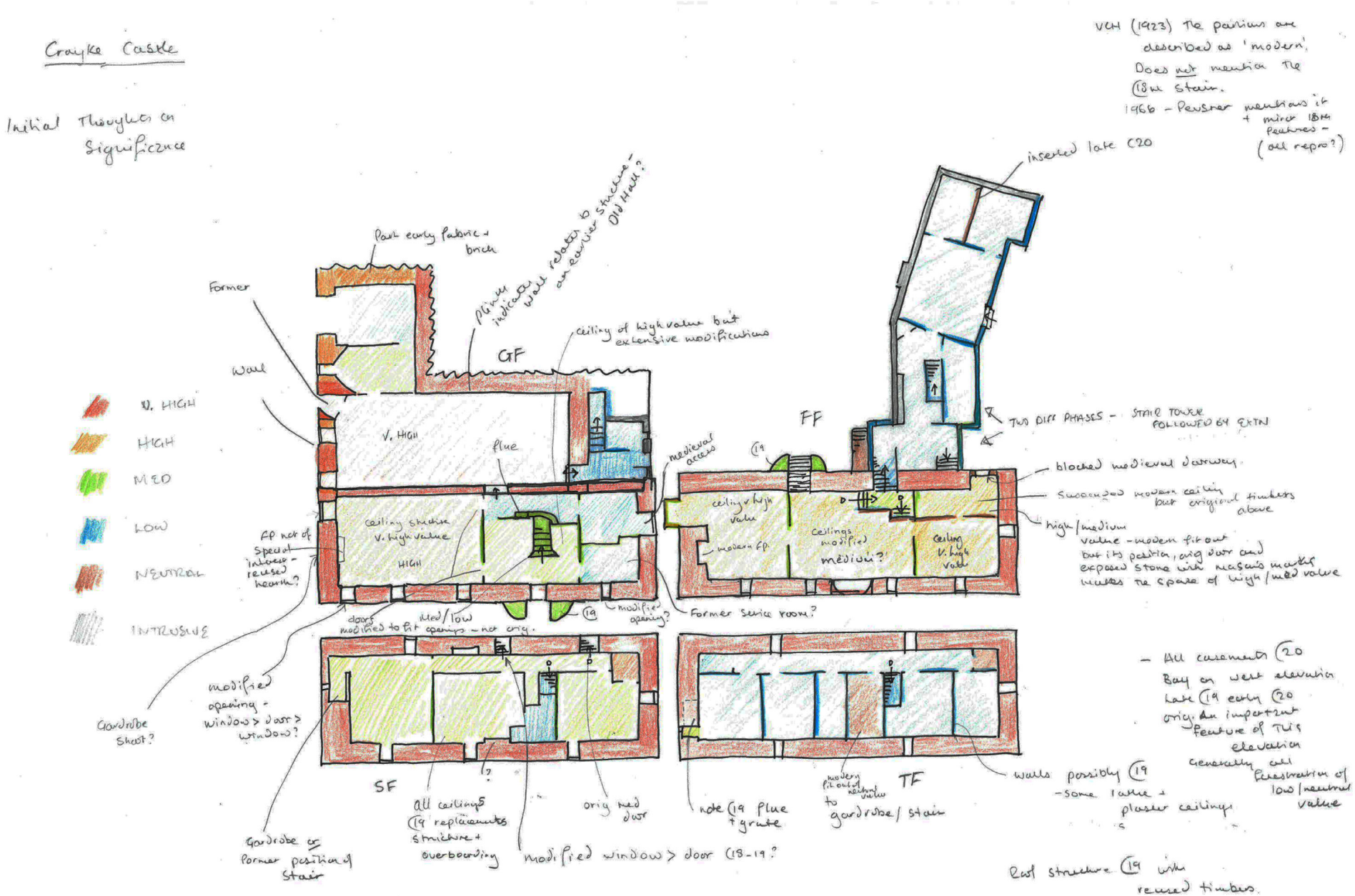
In addition to the above it will be critical to understand the significance of the building, in particular which pieces of the building fabric are afforded more significance than other elements. This will help to sculpt the proposals and define the proposed intervention. An initial review of the Historic Progression of Crayke Castle and a Significance plan is displayed on the next page spread, both of which will feature within the Conservation Management Plan which will be issued in due course by Purcell.

This engagement will also include initial conversations with English Heritage and the Local Authority to understand our options with regards to exposing and incorporating any potential architectural remains into our scheme.

Given the complexity of the site and the level of unknowns it is very difficult to assign time scale to this process, however an indicative programme has been provided as part of this document which outlines the next steps for the project.



Historic Progression Plan


Crayke Castle
Initial Thoughts on Significance
V. HIGH
HIGH
MED
LOW
NEUTRAL
INTRUSIVE
VCH (1923) The partitions are described as 'modern'. Does not mention the (18th Stair.
1966 – Pevsner mentions it + mirror 18th features – (all repro?)
inserted late C20
Part early fabric + brick
Former
Wall
plinth indicates wall related to structure / an earlier Old Hall?
GF
ceiling of high value but extensive modifications
V. HIGH
Flue
ceiling structure V. high value
HIGH
FF
TWO DIFF PHASES – STAIR TOWER FOLLOWED BY EXTN
medieval access
(19
ceiling v high value
modern FP
ceilings modified
medium?
ceiling V. high value
blocked medieval doorway
suspended modern ceiling but original timbers above
high/medium value – modern fit out but its position, orig door and exposed stone with masons marks merits the space of high/med value
FP not of special interest – reused hearth?
doors modified to fit openings – not orig.
med/low
(19
modified opening?
Former service room?
Wardrobe shoot?
modified opening – window > door > window?
SF
TF
All ceilings (19 replacements structure + overboarding
orig med door
modified window > door (18-19?
Wardrobe or Former position of Stair
note (19 flue + grate
modern fit out of neutral value to wardrobe/stair
walls possibly (19 – some value + plaster ceilings
All casements (20
Bay on west elevation
Late (19 early (20 orig. An important feature of this elevation generally and illustration of low/neutral value
Roof structure (19 with reused timbers

DESIGN RESPONSIBILITY MATRIX AND INFORMATION EXCHANGES:

Communication between Design team and Client

The success of the project is reliant upon a number of key interfaces. A strategy of 'open' communication will be adopted with regular contact being maintained throughout the life of the project. The management of specific interfaces will be the joint responsibility of the organizations concerned, with overall coordination being the responsibility of Purcell as lead consultant.

A full communication matrix can be prepared once the key consultants have been appointed ahead of Stage 02. It is recommended that all Consultants are employed directly by yourself rather than through Purcell to ensure clarity in the contractual relationships between you and your Design Team.

As Lead Consultant, Purcell will operate as the conduit for information between you and the Design Team and will be the main interface between the project team and wider consultations such as Planning, Building Control, English Heritage etc. This, however, does not preclude direct conversation and communication between client and individual Design Team Consultants. Please note - all information flows will be electronic.

As part of the initial design period, regular meetings will be held with yourself to update on design progress. It is recommended that these operate on a monthly basis initially during the concept design stages. This will include the whole design team for the most part, although this may not be required for every meeting.

The frequency of the meetings may increase during particularly busy periods within the project such as the lead-up to planning submission, the preparation of tender documentation and indeed the construction period. Regular updates via telephone and email will also form part of the ongoing communication between Purcell and yourself. The meetings will be roughly guided by the following items:

-Design issues and sign-off
-Progress vs programme
-Risk items
-Financial status and cost updates
-CDM updates

Please note the above list is not exhaustive, and project reporting will be developed as the project progresses, responding to the specific issues relating to the project at any given time.

Design Team Responsibilities

Role: Architect
Provider: Purcell Architects
Responsibilities:
Lead Consultant
Lead Design Consultant
Architect & Building Conservation
Construction Project Management

Role: QS
Provider: TBC
Responsibilities:
Cost Control
Procurement Advice (pre and post tender)
Contracts Advice

Role: Structural Engineer
Provider: TBC
Responsibilities:
Structural Design throughout initial stages and through to completion
Structural assessment of existing building

Role: Services Engineer
Provider: TBC
Responsibilities:
Assessment of existing services
Design of new service strategies from initial concepts through to detailed design and completion
Drainage design

Role: CDMC
Provider: TBC
Responsibilities:
Health and Safety (see prev. Section for further information)

It is on this basis that the recommended Consultants will be employed in order to facilitate the next work stage and beyond.

SUMMARY OF NEXT STAGE (CONCEPT DESIGN - STAGE 02)

The following work stage will be roughly compiled of the following pieces of information:

Preparing Concept Design and including Outline Specifications

Providing information for approximate estimate of Construction Costs for inclusion within Cost Information

Contribution to completion of the Final Project Brief

Preparing Stage Report in accordance with agreed Information Exchanges and Submitting to Client

Preparing Sustainability Strategy, Maintenance and Operational Strategy and reviewing Hand over Strategy and Risk Assessments

Assisting with Third Party Consultations, Updating the Project Execution Plan, Preparing the Construction Strategy and Health and Safety Strategies.

14 June 2016

Mr Steve Hill
Walton Old Hall
Walton
Wetherby
LS23 7DF

Dear Steve,

Crayke Castle, Architectural and Heritage Consultancy Services

Following our telephone conversation last week, I am delighted that we have been chosen by you to act as architect and heritage consultant for this very exciting project at Crayke Castle, we look forward to working together with you on this.

I can confirm that I have briefed my team, and would like to bring them to site with me, to meet with you, and see Crayke Castle and begin the heritage assessment and briefing process. Since we first met, Daniel has left the practice, so I am proposing that Helen Cook and Sam Smith support the architectural services and delivery, and Becky Burrows and Bev Kerr, who you have previously met, would lead on the historic building appraisal and desk-top archaeological assessment. My PA Sandra will be in touch to arrange some dates for this site meeting.

We will prepare the formal agreement, which as I proposed is the Standard Agreement 2010 for the appointment of an Architect. In the meantime, I would request that you counter sign and return to me one copy of this letter, retain the other for your records. This will enable us to put the services in fully hand, though as I have said we are now mobilised for the project.

I can confirm that our appointment will be based on:

- Purcell Offer of Fees and Services: Fees and Costs Summary Rev A 1st June 2016
- Draft Standard Agreement 2010 Schedules issued 6th May 2016 by email from C Cotton to S Hill
- Standard Conditions of Appointment of an Architect 2010 (2012 rev.) issued 6th May 2016 by email from C Cotton to S Hill

We have discussed in broad terms to project programme and timescale. This will become more apparent once we have greater clarity on the scope and have assurance of listed building consents in place. We considered that an optimum would be:

Stage 1:	2 months (HBA & Archaeological Assessment - 4 months)
Stage 2:	3 Months
Stage 3:	3 months with allowance 6 months for the Pre Application Consultations Local Authority and Historic England to process and come to a decision on the Application.
Stage 4:	4 months, 3 months for contractor pricing, interview and building contract formation
Stage 5:	12 months on site
Stage 6:	4 months final finishes and interiors fit out

I hope this is clear, and agreeable to you. Please return the signed copy of this letter for our records.

Yours sincerely,

Alison Brown, RIBA, AABC
Partner
On behalf of Purcell®

Agreement

The client, ……wishes to appoint Purcell for the project and Purcell, has agreed to accept the appointment and to perform the services.

The client and Purcell have agreed the terms set out in the Agreement, which comprises this letter of appointment and the attachments referred within it.

This agreement is made on: _____ of 2016

Signed:

Client	***Architect***
Witness Signature ***(As a simple contract)***	***Witness Signature***

APPENDIX B - CONSULTANT FEE PROPOSALS

Sam Smith

From: Richard Quigley <RichardQuigley@thorntonfirkin.com>
Sent: 05 July 2016 11:51
To: Sam Smith
Cc: Michael Crawford
Subject: RE: Crayke Castle - QS and CDM Services - Fee Proposal Request

Categories: Gekko

Sam,

Thank you for the email below and the opportunity to hopefully work alongside Purcell once again.

We confirm that we would be delighted to express an interest in providing QS and Principal Designer services on this project.

We are happy to work with the target fee percentages indicated. Given the nature of works and the project value we are reluctant to go any lower than this assuming that you required a fully resourced quality service.

In relation to the Principal Designer role for this percentage fee based on the project value this would equate to £3,700 + vat or circa 7 days work for the entire duration of the project so this will have to be limited i.e attendance at design team meetings will have to be restricted and site meetings excluded.

Based on the stated project budget of £1,400,000 our proposed fee would be

- QS @ 2.25% + VAT = £31,500 + VAT
- PD @ 0.25% + VAT = £3,500 + VAT

We trust that this is of interest. Should you require any further information on our Practice, our services or our experience, please do not hesitate to contact us.

Regards,

Richard

Richard Quigley
Partner

Thornton-Firkin LLP
Old Brewery Court, 157 Sandyford Road, Newcastle upon Tyne NE2 1XG
T. 0191 2327318 M. 07759 660288
www.thorntonfirkin.com

From: Sam Smith [mailto:Sam.Smith@purcelluk.com]
Sent: 05 July 2016 10:26
To: Richard Quigley <RichardQuigley@thorntonfirkin.com>
Subject: Crayke Castle - QS and CDM Services - Fee Proposal Request

Good Morning, Richard.
I trust you are well.

I am writing regarding a project that I am currently working on in Crayke, North Yorkshire. The project includes the development, refurbishment and repair of Crayke Castle and associated structures onsite, an image of which is attached to this email. The building is a Scheduled Ancient Monument, Grade I Listed castle consisting of a 15th Century four storey tower house and attached outbuildings.

The scope and brief is yet to be determined, however the estimated contract value of the project at this stage is £1,400,000 covering RIBA Stage 0 to RIBA Stage 7.

It would be much appreciated if Thornton Firking could provide a fee quotation for both QS services and CDMC for the project. At this stage we are collating a number of quotes for client comment, with a view to demonstrating the most streamline cost possible for the project. It has been indicated that the following target percentages should be considered:

QS: 2.25%
CDM: 0.25%

If you are interested in the project then please feel free to contact me with any questions you may have. I am onsite with the client on Thursday and it would be great to feedback some costs, if you are indeed interested.

I look forward to hearing from you in the near future.

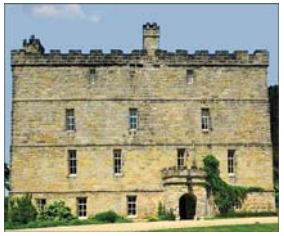
Kind Regards

SAM SMITH
BArch(Hons), MArch, RIBA
Architect

Purcell
T. 01904 465151

sam.smith@purcelluk.com
www.purcelluk.com

Tender Quality Statement
on behalf of
Thornton-Firkin LLP
to
Purcell
for
Crayke Castle



Thornton-Firkin LLP
Chartered Surveyors · Construction Consultants

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INTRODUCTION

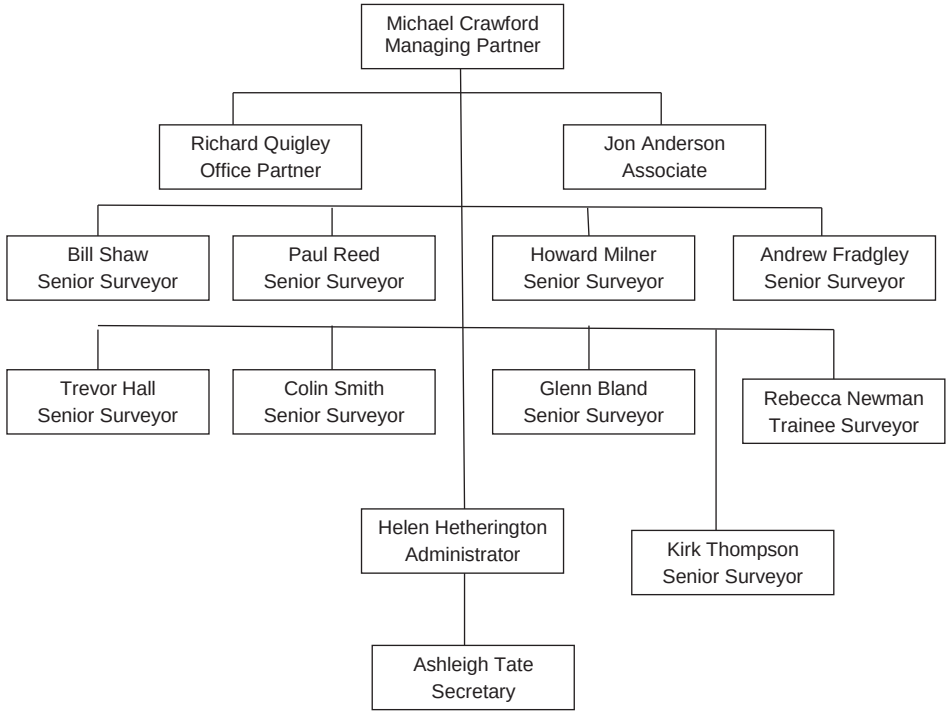
As a way of a brief introduction, Thornton-Firkin are an established national Practice of Project Managers and Quantity Surveyors/Cost Consultants, founded in 1945 offering a full range of professional services to Clients, with five offices throughout the UK with projects in all sectors of the construction industry. The offices are based in Birmingham, Chester Lincoln, London and Newcastle.

The Practice, particularly the Newcastle offices have considerable experience of working on historic and listed buildings.

This section in response to the quality criteria is to demonstrate our suitability in relation to quantity surveying/cost consultancy services. We consider our Practice has significant experience in the heritage sector in relation to Quantity Surveying and Principal Designer Services.

We would confirm that we have sufficient resource within our Newcastle office to deliver this commission and attach an organisation structure of our office.

Newcastle Office Structure



The delivery team will consist of the following nominated members of staff

Richard Quigley BSC Hons MRICS MIHBC - Partner. Richard will provide the overview delivery of the QS/Cost Consultancy Services. Richard is retained as Project Surveyor at Durham Cathedral having recently worked on the £1,359,500 new retail unit and Vestry and is currently working on Phase 1B of a £4,692,000 conservation and development of the ancillary spaces around the Cloister into exhibition spaces which are detailed in the Case Studies. He provided quantity surveying services on numerous listed buildings and heritage projects including the alteration, extension and conversion of the Theatre Royal, Newcastle, Hatfield and Moatside College refurbishments on behalf of the University of Durham as well as the recent successful stage 1 'Old Newcastle' project HLF bid in Newcastle and is currently engaged as Project Surveyor at St Nicholas Cathedral, Newcastle. Also currently working on the HLF funded multi million pound redevelopment of Auckland Castle.

Bill Shaw - Senior Project Surveyor who has gained experience in conservation work on ancient monuments and listed buildings by working for various periods over a number of years for Historic Property Restoration Ltd, the former contracting arm of the Ministry of Works and later English Heritage. Bill has recently worked as project surveyor on the restoration after fire of the Grade I listed St Michael and All Angels Church, Newburn and the conversion of the Grade I listed Grays Court, York into a boutique hotel. Also carried out reconstruction insurance valuations for the mansions and major structures for the National Trust in the North East and Yorkshire Region and recently provided budget estimates for the stabilisation of bastles in Northumberland for English Heritage and the North of England Civic Trust.

Bill has also assisted Richard on the new retail unit and Vestry at Durham Cathedral and assisted pre-contract currently on the Phase 1B of a £4,692,000 conservation and development of the ancillary spaces around the Cloister into exhibition spaces for Durham Cathedral and is currently working on the pre-construction with Richard and Andrew at Auckland Castle project.

Andrew Fradgley MRICS – Senior Project Surveyor within the office has recently acted as project surveyor on the conversion and refurbishment of the Old Low Lights Building in North Shields (a grade II 18th Century lighthouse) into community and catering end use for Tyne & Wear Preservation Trust and the restoration of a Schedule Ancient Monument - Black Fell Hauler House again on behalf of the Tyne and Wear Preservation Trust. Andrew recently worked as project surveyor on Phase 1B of a £4,692,000 conservation and development of the ancillary spaces around the Cloister into exhibition spaces which is detailed in the case study. Currently working on a new build Energy Centre and Welcome Building at Auckland Castle

Rebecca Newman - Trainee Surveyor - Rebecca joined us last year and is currently studying for her degree in Quantity Surveyor at Northumbria University on a part time basis. She has recently finished her first year and is awaiting her results but has gained 1st in all of her assignments throughout the year. Rebecca has assisted Senior Project Surveyors on numerous projects throughout the year such as Auckland Castle, Durham Cathedral, Newcastle Cathedral and Measured Works Surveys for English Heritage to name a few.

Michael Crawford - Managing Partner. A registered Member of the Association for Project Safety and currently working with Purcell as Principal Designer on the refurbishment of Auckland Castle. Great experience of working in existing buildings, many of which remain occupied during the construction works, which required a much more considered approach to the health and safety aspects of both design and construction.

We consider that our Practice has the necessary experience and resources to undertake any necessary consultancy services required.

Richard Quigley

Office Partner
Newcastle

QUALIFICATIONS:

BSc (Hons) in Quantity Surveying
Member of The Royal Institute of Chartered Surveyors
Affiliated Member of Institute of Historic Building Conservation

PROFESSIONAL SERVICES PROVIDED:

Quantity Surveying/Cost Management
Project Management
Contract Administrator

PROJECT EXPERIENCE:

Richard has provided clients with Cost Management Services on many projects listed buildings and structures for numerous Clients. Examples of heritage projects on which Richard has been Project Surveyor are :-

Theatre Royal Newcastle £6 million conversion, fit out and extension of the listed Theatre into a vacant adjacent bank. This involves significant structural works and a high quality fit out of corporate, catering and booking office areas.

Early stage cost advice for the North of England Civic Trust on numerous listed historic buildings, scheduled monuments and structures including Hylton Castle, St Catherines Chapel, Bowes Railway and Ravensworth Castle.

Grade II* Monastic Cell and Tower in the Coquet Island off Northumberland on behalf of English Heritage

University of Durham – Refurbishment of listed Hatfield College student accommodation in the World Heritage site of Central Durham

'Heart of the City' and 'Old Newcastle' HLF bid's comprising the listed buildings St Nicholas Cathedral, Keep and Black Gate in Newcastle upon Tyne. Subsequently appointed as Surveyors on the Development Masterplan for St Nicholas Cathedral.

Currently working within a World Heritage Site on the £6m phase 1 development of the overall Masterplan for Durham Cathedral to open up areas to the public, create indemnified exhibition space, exhibition galleries, new retail facilities and improved entrances to the Cathedral and enhanced DDA access.

Recently appointed on the £8m refurbishment and extension to Auckland Castle, Bishop Auckland to create exhibition space

Provided Project Management on the alteration and refurbishment of Green Howards Museum, Richmond – value £850,000 plus refurbishment schemes for Clients such as catering specialists Delaware North Companies and Northumbria NHS

Bill Shaw

Senior Surveyor
Newcastle

PROFESSIONAL SERVICES PROVIDED:

Quantity Surveying/Cost Management
Project Management
Project Co-Ordination

PROJECT EXPERIENCE:

I have been employed by Engineers, Contractors, House Builders, Sub-Contractors and Chartered Quantity Surveyors since 1964 in a wide variety of most aspects of the construction processes - Initial budgets, procurements, estimating, managing jobs on site and finalising accounts.

I have been involved in cost advice and cost planning to clients and the production of procurement documents in the form of specifications, schedules of works, builders quantities, material schedules and standard house types, estate quantities and liability exercises for volume house builders.

I have also been involved in all aspects of post contract work for sub-contractors, builders and professional quantity surveyors agreeing final accounts and building up claims.

I have gained specialist experience in conservation work of ancient monuments and listed buildings by working for various periods over a number of years for Historic Property Restoration Ltd at North Shields. This firm used to be the contracting arm of the old Ministry of Works and later English Heritage. I was employed as an estimator/surveyor/contract administrator and site agent for numerous projects in the North of England.

Recent historic work - Restoration after fire of the Grade I listed St Michael and All Angels Church, Newburn, and the conversion of the Grade I listed Grays Court, York into a boutique hotel. Carrying out reconstruction insurance valuations for the National Trust in the North East and Yorkshire. Early stage budget estimates for the stabilisation and restoration of a number of bastles in Northumberland on behalf of English Heritage through the North of England Civic Trust. The Phase 1 development at Durham Cathedral to create interpretation and exhibition space.

GENERAL INFORMATION:

Computer literate with spreadsheets, word processing, financial reporting packages

Andrew Fradgley

Project Surveyor
Newcastle

PROFESSIONAL SERVICES PROVIDED:

Employers Agent
Quantity Surveying/Cost Management
Reconstruction Insurance Valuations

QUALIFICATIONS:

First Class BSc (Hons) in Quantity Surveying
MRICS

PROJECT EXPERIENCE:

Andrew is a project surveyor with over 10 years experience providing cost management services for historic, education and commercial projects. Some examples of recent historic projects which Andrew has been a Project Surveyor are :-

Open Treasure, Durham Cathedral - £4.6m : alterations works to create exhibition spaces in the existing Monks Dormitory, Great Kitchen, Rectory library and covey. The works also included significant conservation works to the external facade. The Cathedral is designated as a World Heritage site.

Castle conversion refurbishment, Auckland Castle - £7m : alteration and conversion of the existing Scotland Wing into exhibition space and refurbishment of the other areas of the Castle and conservation works to the external facade. The Castle is a grade 1 listed 13th century building.

Poundstretcher, Blyth - £650k : upgrade and refurbishment to the external envelope of the building comprising shopfront replacement, window replacement and repairs, masonry conservations and repairs, roofing repairs and signage.

Old Low Light, North Shields - £400k alteration and refurbishment of a grade II listed 17th Century navigational building for the Tyne & Wear Building Preservation Trust. The project involved repair, extension, reconfiguration and refurbishment works.

Blackfell Hauler House - £200k ; restoration of a Hauler House at Bowes Railway (a scheduled ancient monument) for Tyne & Wear Building Preservation Trust. The project involved repair, replacement and alteration works. Winner of The Best Rescue of a Historic Industrial Building or Site at the Historic England Angel Awards 2015.

Other historic work Andrew has been involved with are the conversion, fit out and extension of the Theatre Royal in Newcastle, conversion of grade I listed Gray's Court in York into a boutique hotel and carrying out reconstruction insurance valuations for the National Trust in the North East and Yorkshire.

Rebecca Newman

Trainee Surveyor
Newcastle

PROJECT EXPERIENCE:

Rebecca has just completed her first year of her part time degree in Quantity Surveying at Northumbria University, she is currently achieving a first.

Since joining us Rebecca has assisted our Senior Surveyors on the following projects :-

- Auckland Castle, Bishop Auckland
- Durham Cathedral
- Queens Head Hotel, Bishop Auckland
- Dryderdale Hall, Wolsingham
- Newcastle Cathedral
- Keelman's Hospital, Newcastle
- Segadunum, Wallsend
- Life Transformation Church, Newcastle

GENERAL INFORMATION:

Computer literate with spreadsheets, word processing, financial reporting packages

Michael Crawford

Manging Partner
Newcastle office

QUALIFICATIONS:

Member of The Royal Institute of Chartered Surveyors (1986)
Member of Association of Project Safety

PROFESSIONAL SERVICES PROVIDED:

Quantity Surveying/Cost Management
Project Management
Project Co-Ordination
Employer's Agent
CDM Co-Ordination

PROJECT EXPERIENCE

Mike has worked extensively in both public and private sectors and has been with Thornton-Firkin for over 20 years.

Mike has thorough knowledge of construction and contract/legal issues providing strategic advice, project management, quantity surveying and Principal Designer Services.

In his 35 years in the construction industry, Mike has worked in most sectors including commercial, housing, retail and education and leisure. Contract values ranging from £100,000 to £50m with many carried out in 'live' environments requiring significant phasing and temporary works to ensure the effect of the construction works has the least possible impact on the Client's business whilst procuring the most cost effective programme and tender.

Mike has managed and provided cost advice on a wide range of projects utilising a variety of contracts, such as JCT suite, PPC 2000 and NEC3 suite.

Mike also provides the Principal Designer Services within the office after becoming a NOS approved RMaPS.

Project Responsibilities : As Managing Partner of the Newcastle office, Mike is responsible for strategic Client liaison, customer care , quality assurance and overall personnel management.

As a Principal Designer Mike works in many sectors and on projects of varying value for example :-

- Refurbishment/extensions at Auckland Castle, Bishop Auckland
- Refurbishment of The Green Howards Regimental Museum, Richmond
- Refurbishment of former hospital and new student accommodation, Durham
- Conversion of listed house to flats/apartments, Gateshead
- Extension to factory, Northallerton
- Fitting out of Medical Centre, North Tyneside
- Extension/alterations to schools such as :-

  Carmel College, Darlington
  Sacred Heart, Newcastle
  Heighington Primary School, Gateshead
  St Albans, Gateshead
  St Bede's, Darlington

Mechanical and Electrical Works

- PA/VA/FA Middleton Grange Shopping Centre, Hartlepool
- AHU replacements (Phase 1 and 2), Middleton Grange Shopping Centre
- Re-wire English Martyrs, Hartlepool
- Re-wire, St Peters, Gateshead
- Re-wire, St Albans, Gateshead
- Boiler replacement, St Bedes, Gateshead
- Boiler replacement, English Martyrs, Hartlepool
- Kitchen vent replacement, St Albans, Gateshead

Methodology in relation to our Services

In conjunction with the Architect and a structural engineer we will develop a budget estimate in order to give an indicative early stage budget cost for the remedial works identified and any proposed works required. This will be done by utilising information provided in the form of the architects condition survey along with any supplemental structural engineers details or report.

We would envisage that the architectural information may take the form of annotated photos and schedules identifying the works required. This will enable an estimated cost to be presented for any repair works including allocating the costs into the priority of repair. Due allowance will be made for any necessary temporary works, such as scaffolding.

The maximisation and the optimum use of scaffold is a key financial constraint of the project. Scaffolding is in some instances one of the largest significant costs associated with heritage projects and it is essential that this is utilised in the most cost effective manner to achieve the optimum use of the scaffold to the Clients benefits.

We would also make due allowance for any other temporary works required to temporarily make safe or even ensure safe working conditions to allow further repairs to proceed based on our knowledge and experience of historic buildings and also our health and safety awareness through our CDM Co-Ordination/Principal Designer duties on other projects.

As QS/Cost Consultant we will ensure that a robust set of tender documentation is issued for pricing. We will ensure that a fully detailed set of drawings and specification is developed by the design team, and will develop a fully quantified priced schedule of works. We will, if necessary take some additional approximate items with quantities to ensure that rates are established for any future potential works which may become apparent once the building can be fully opened up. While also ensure a realistic level of Provisional Sums is incorporated to cover all necessary works where the design is or cannot be fully ascertained at tender stage.

We will also ensure that only suitable contractors with the relevant experience of working in the heritage sector are invited to tender through an early request of their experience and interest. At post contract we would introduce cost control procedures to ensure effective financial management. We would encourage workshops whereby if the Contractor has raised the instruction via the process then at these meeting we could in conjunction with the Client and the services and structural consultant review risks, options or alternatives and then progress the most cost effective solution.

<u>Brief Schedule of Services at each stage in summary</u>

Stage 1/2 : Concept design Development

- Client brief/site visit
- Initial budget estimate

Stage 2/3 : Detailed design

- A cost plan for the works plus VE proposals
- Advice on procurement route of main contractor
- Prepare a final project cost plan

Section 4 : To Tender

- Prepare and issue tender documentation
- Providing on-going monitoring cost checks
- Administer the process
- Tender report and analysis
- Attend meetings as necessary

Stage 6 : To completion

- Prepare contract documentation
- Attend pre-start meeting
- Prepare valuations/site visits
- Prepare and issue cost reports
- Agree final account

Added Value - How Thornton-Firkin will enhance the Project

Commitment

Our Practice is fully committed to projects from the outset to completion and ensure that the appropriate level of resources is dedicated to every project. It is anticipated the services detailed may actually take longer than the maximum fee indicated but we confirm that we will progress the exercise through to completion with the Partner providing his time as necessary on a speculative basis to ensure the scheme is delivered to the satisfaction of the Client.

Experience

We consider our staff experience is second to none as highlighted in the following section.

Unlike other practices our junior surveyors provide assistance and are not nominated to manage projects. Nor will we reduce our input or commitment if our time allocation for the project has been used. The Client will be given a quality service from inception to completion. We give our juniors surveyors clear and defined training to ensure that the service to the Client is guaranteed.

We are confident that the quality of staff we have nominated above have the experience to understand and interpret the clients brief to ensure that our cost estimates adequately and accurately reflect the out-turn cost of the development.

The Practice employs in excess of 35 surveying staff whose considerable experience and skills are combined to provide the best possible service to our clients. One of our values is to recruit and develop staff to ensure we provide a service of the highest quality. Thornton-Firkin believe our staff to be second to none, reflected in the fact that 80% of our business is repeat business, with frequent recommendation from one Client to another.

Thornton-Firkin give personal attention to projects from a high level within our corporate structure. We only allow senior staff to run project in order to deliver in depth, accessible, professional and personal service to our Clients.

We feel that this seniority of staff and Partner involvement in projects sets us apart from the majority of other Practices and provides the basis for the maintenance of the high standards demanded by our Clients.

We have a very low turnover of staff and success in this tender will enable us to dedicate the nominated staff to ensure continuity of personnel which will provide the Client with a consistent and team focused approach.

We provide a service which is not limited solely to the confines of the written Scope of Services. Clients rely on the provision of more than this and we like to become involved with the whole Client process rather than providing a purely ‘Quantity Surveying’ service. Because of our personnel we are confident of expressing our views in the Client forum.

Looking after our Clients

Thornton-Firkin prides itself on providing an all encompassing service to its many clients :-

- Our service is tailored to meet the precise requirements to each client
- Each project has dedicated partner control
- We are independent, firm and decisive and always courteous
- We seek to provide ‘best value for money’
- We aim to exceed the expectations of our Clients
- We have over 50 years experience in the construction industry
- We have a pro-active approach to problem solving
- We form close relationship with our Clients and over 80% of our business is repeat Business
- We have experience in working with funding agencies, awareness of statutory bodies, the approval process and planning through

Experience in delivering Heritage Project and managing significant budgets

We believe our Practice has significant experience to undertake the role of QS/Principal Designer on this exciting project at Crayke Castle.

We regularly work with the Architect, Purcell and have a very good working relationship. We are currently working on the alteration, conversion and extension to Dryderdale Hall in Hamsterley, Co Durham.

While we have also been involved in a number of other residential conversions or refurbishment schemes on listed buildings.

- Whinney House, Low Fell in Gateshead. Conversion of a listed Grade II listed building into luxury apartments
- North Rawe, Wynding, Bamburgh. An extension and conversion of a building within a conservation area to provide 8 nr luxury apartment with prominent views of the Castle
- 1-4 and 5-8 St James Terrace, Newcastle. Two schemes to convert office properties into 2 or 3 bed flats for young professionals within a conservation area in the centre of Newcastle.

A portfolio of our recent experience on projects in the heritage sector is also attached.

Our Practice were appointed as Cost Consultants to the team preparing the feasibility study for the Durham World Heritage Site procured by Durham City Council on behalf of Durham City Vision. As part of the study it also looked at the development of a suitable location within Durham Cathedral to house the Lindisfarne Gospels as part of the 2013 City of Culture bid.

Following our involvement with the Durham World Heritage Site we have been subsequently recently been appointed by the Cathedral Chapter as Quantity Surveyor on the development Master Plan. We developed a £12,000,000 development cost plan comprising of new choir school, alterations to entrance, exhibition space, catering facilities, visitors experience centre and retail opportunity.

Phase 1A of this Masterplan to provide additional retail and new vestry space within the vaulted undercroft of the Dormitory accessed from the Cloister. We have now prepared a Cost Plan Phase 1B development valued at £5,000,000 to create exhibition space in the former Monks Dormitory (currently a library) and former kitchen (currently a book shop).
The scheme involves sensitive, considerate and careful alterations to Medieval structures to create access and a circulation route between these two locations, as well as a quality exhibition area within a restricted fabric in order the house world renown exhibits and collections. This has recently been completed and open to the public in July 2016.

We have also worked previously in the Centre of Durham for a private Client on the alteration and conversion of a Grade I listed building at 18 Old Elvet Bridge into residential accommodation and also the up-grade and refurbishment of accommodation at Moatside (off Saddler Street) and the listed Hatfield Colleges (North Bailey) for the University of Durham.

We have also been previously appointed on three prestigious historic listed ecclesiastical buildings. Further details of these projects below are given within the Appendix :-

- roof and stone repairs on Grade 1 listed St Andrews Church in Roker described as the ‘Cathedral of the Arts and Crafts’ movement
- to undertake a full service on the alterations and refurbishment of the Grade II listed St Columba’s Church at North Shields which was designed by the renowned architect, John Dobson;
- the Grade I listed St Michaels and All Angels Church at Newburn via the loss adjusters on the rein statement works following a devastating fire. This consisted a two phase contract.


Black Gate


Low Lights, North Shields


Durham Cathedral

We are also frequently engaged by the North of England Civic Trust and have prepared several cost plans for various project, including the projects noted below which require major restoration works in order to provide and end use.

- Bishop Cosins Almshouses, Durham—located off Palace Green
- Kirkleatham Hall Farm
- Ravensworth Castle
- Hylton Castle and St Catherine's Chapel
- Bowes Railway
- Numerous THI projects @ Blyth, Bedlington, Whitehaven

We have also acted as Cost Consultants for the City of Newcastle on a £6m alteration and extension in the adjacent vacant bank of the Grade I listed Theatre Royal in Newcastle upon Tyne to provide new ancillary space for catering facilities, education space, corporate area, booking office as well as providing a stage extension and flying system. The stage extension was carried out in a highly programmed 11 week 'dark' period during which the Theatre was closed. All other works did not affect the running of the Theatre during the remaining 46 week programme.

We have also provided early stage Quantity Surveying Services on the 'Heart of the City'/'Old Newcastle' projects in Newcastle upon Tyne. This involved providing detailed Cost Plans for HLF grant applications which has resulted in a successful stage 1 bid for Stage D funding which subsequently led to us taking the project to Stage E for as part of an architectural led team.

The project comprised :-

- Restoration and landscape enhancement of streetscape
- DDA Improvements to the three main cathedral entrances, Blackgate and the Keep
- Alteration and conversion works to the adjacent cathedral hall to create education, toilets and catering space
- Glazed link to the Cathedral and adjacent hall to provide a retail opportunity and flexible circulation space
- Alteration and refurbishment of Blackgate to a visitor and education centre

This also led us to be appointed by the City of Newcastle for further enhancement works to the Keep and by Cathedral Church of St Nicholas as Cost Consultants on all their projects within their Development Masterplan.

The first of these works at the Cathedral which we have just completed was a lighting upgrade and electrical alteration project , value £500,000 following a successful HLF application. While currently working on the Cost Plan for the Nave flooring and underfloor heating works, value £1,350,000.

A prestigious commission for our office for a major tourist attraction provider is undertaking valuations on Behalf of the National Trust of all their Mansions and listed buildings and structures in the North East and Yorkshire region.

Gibside Hall, National Trust

Cragside Hall, National Trust

We have also been regularly appointed by the Trinity House of Newcastle upon Tyne for over 20 years acting for them on all their redevelopments. We have acted as the Project Cost Advisors on the Live Theatre extension into 29 Broad Chare which was an adjacent listed warehouse. Most recently working on internal alterations to their entrance (shown below).

Trinity House, Newcastle

Hexham Abbey, Hexham

We have been engaged by English Heritage along with the North of England Civic Trust to provide early stage cost plans and budget advice for stabilisation and restoration works to the 4 nr listed bastles in Northumberland. One of which has been approved by English Heritage to enable to works to proceed. This is sited on Coquet Island near Amble, off the Northumberland Coast and the works have just been completed. The works were phased to take into account the weather and bird nesting season. The works to the Monastic Cell and Tower on Coquet Island moved the buildings off English Heritage's Buildings Risk Register.

We have worked on the Newcastle Centre High Junior School at Nazareth House for The Girls Day School Trust. The project involved the internal refurbishment of a Grade II John Dobson designed listed building which had been extended and altered several times during its history. The site works were complicated by a very tight contract period dictated by school term times. It had the added challenge of being within a quiet residential area with unusual planning restrictions.

We consider that our Practice has the necessary experience and resources both at a local and national level to undertake any necessary consultants services required.

thornton-firkin
Project Managers - Cost Consultants

Relevant experiene of historic and listed building projects

REDEVELOPMENT OF THEATRE ROYAL, NEWCASTLE UPON TYNE Alteration, conversion and extension of the Grade I listed Theatre Royal to create an extended stage, new flying system and provision of new commercial, education and catering facilities Contract period: 13 months Value: £6.35 million Contact: Philip Bernays, Chief Executive, Theatre Royal, Grey Street, Newcastle upon Tyne NE1 6BR, T: 0191 2442500.

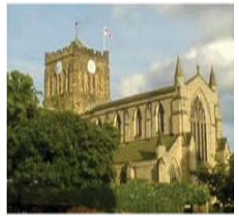
ST MICHAEL AND ALL ANGELS CHURCH, NEWBURN Two phase contract to make safe then renovate the fire damaged grade 1 listed St Michaels and All Angels Church. Phase 1 comprising emergency repair and make safe and weather tight. Phase 2 comprising the renovation and refurbishment to bring the church back to use. Overall Contract Period: 24 months. Value £2,000,000. Contact: Rev John Sinclair, Vicar of St Michael & All Angel Church. The Vicarage, Newburn, Newcastle upon Tyne. NE15 8LQ. T: 0191 2290522

ST ANDREW'S CHURCH, ROKER Phase 1 : Roof Repairs to back transcept of the Grade 1 listed Church - completed. Contract Period: 16 weeks. Value £110,000 Phase 2 : Cost Plan for stone and structural repairs; DDA improvements, window replacement, internal restoration and upgrade works including fire alarm installation. Architect : Mackellar Architecture Ltd,

TRINITY HOUSE/DOG BANK/BROAD CHARE, NEWCASTLE Various refurbishment and alternation schemes to Grade 1 listed building around Courtyard in the past but recently acted as Client Advisor for the Corporation on the £4,000,000 conversion, extension and fit out of the Live Theatre within the Trinity House complex. Contact: Captain Rudd Shipley, Corporation of The Newcastle upon Tyne Trinity House, Trinity House, Broad Chare, Newcastle upon Tyne, NE1 3DQ. T: 0191 2328226

ST NICHOLAS CATHEDRAL, NEWCASTLE - Initial feasibility/Budget Estimate for Stage 1 HLF bid. Improve access to Grade 1 listed Cathedral and alteration/extension to Hall. Now appointed on Masterplan works including heating and new nave floor replacement, electric alterations and lighting upgrade (funded by HLF and currently on site). Contact: The Very Reverend Christopher Dalliston/Canon John Sadler, St. Nicholas Churchyard, Newcastle upon Tyne, NE1 1PF. T: 0191 232 1939

NORTH SHIELDS AMBULANCE STATION - Extension to Grade II listed hospital entrance to create a single bay ambulance station. Contract period: 4 months. Value : £395,500. Contact: Graham Tench, TMA, First Floor, Three Indian Kings House, 31 Quayside, Newcastle upon Tyne, NE1 3DE. T: 0191 2320424



HEXHAM ABBEY VISITORS CENTRE - Cost appraisal exercise for various proposed options for the creation of a visitor attraction centre and early stage budget estimate on the selected and approved option to form basis of an HLF Grant and further funding. Contact : Rector Graham Usher, Hexham Abbey Centre, Beaumont Street, Hexham, Northumberland, NE46 3NB. T: 07841 721447

RAVENSWORTH CASTLE , GATESHEAD - Feasibility/budget estimates for up-grading stone block and preserving the Grade 1 listed Nash tower. Contact: Graham Bell, North of England Civic Trust, Blackfriars, Monk Street, Newcastle upon Tyne, NE1 4XN. T: 0191 2329279

HYLTON CASTLE /ST CATHERINES CHAPEL, SUNDERLAND - Feasibility/budget estimate for restoring and providing a watertight structure for an end user to bring the building back to life. Now commissioned to convert to exhibition space Contact: Graham Bell, North of England Civic Trust, Blackfriars, Monk Street, Newcastle upon Tyne, NE1 4XN. T: 0191 2329279

KIRKLEATHAM HALL FARM, KIRKLEATHAM - Feasibility/budget estimate including schedule of priority repairs. Contact: Graham Bell, North of England Civic Trust Blackfriars, Monk Street, Newcastle upon Tyne, NE1 4XN. T: 0191 2329279

BOWES RAILWAY, GATESHEAD - Early stage feasibility estimate for conversion of listed workshops to visitors attraction. Contact: Steve Palmer, North of England Civic Trust, Blackfriars, Monk Street, Newcastle upon Tyne, NE1 4XN. T: 0191 2329279

ST COLUMBAS CHURCH, NORTH SHIELDS - Alterations to church to improve DDA access; up-grade heating system, general alterations to the Grade II listed John Dobson designed Church and adjacent Church Hall. Contract period: 6 months. Value: £650,000. Contact: Peter Matthew, 12 Portland Gardens, North Shields, Tyne and Wear, NE30 2SS. T: 0191 2577498

GREYS COURT, YORK - Conversion of the Grade II listed Grays Court House in York which is the former residence of the Treasurer to the Minister into a boutique hotel. Budget and tender documentation issued but unfortunately the Client who was also the Architect passed away last year.

NATIONAL TRUST – Commission to undertake reinstatement insurance valuations of all their Mansions and listed buildings in the North East and Yorkshire region. Including Cragside Estate (shown opposite), Gibside Estate, Wallington Estate, Nostell Priory, East Riddlesden Hall. This included the development of a procedure manual and handbook for assessing various elements. Contact Nev Kirby (now left, new contact Brian Rochester,) The National Trust, North East Office, Scots Gap, Morpeth, Northumberland, NE61 4EG. T: 07720 149832

BINCHESTER ROMAN FORT – Feasibility/early stage of cost for creation of associated facilities to improve visitor attraction on behalf of Purcell. Contact: Geoff Holland (now retired – Managing Partner now Chris Cotton), Purcell, 29 Marygate, York, YO30 7WH. T: 01904 644001

HATFIELD COLLEGE, DURHAM – Upgrade of listed student accommodation within the historic heart of Durham. Contract period: 4 months. Value: £1,200,000. Contact Sean Kelly, Durham University, University Office, Green Lane, Durham, DH1 3LA. T: 0191 3346482

MONASTIC CELL AND TOWER, COQUET ISLAND. NORTHUMBERLAND - Provided budget estimate to enable funding to be secured in order to progress tender documentation with the intention of moving this building off the English Heritage's Buildings at Risk register. Subsequently undertook the restoration and conversion of cottage back to living quarted for RSPB. Contract period : 18 months. Value : £180,000. Contact: Graham Bell, North of England, Civic Trust, Blackfriars, Monk Street, Newcastle upon Tyne, NE1 4XN. T: 0191 2329279

DURHAM CATHEDRAL MASTERPLAN : PHASE 1B : EXHIBITION SPACE – Provided for the alteration, conversion of areas within the Cathedral to form an Exhibition space to locate signifiant exhibitions. Value - £5,500,000. Contract 18 months. Contact: Chris Cotton, Purcell, 29 Marygate, York, YO30 7WH. T: 01904 644001

OLD NEWCASTLE', NEWCASTLE UPON TYNE
A successful stage 1 bid for alteration and refurbishment of a Blackgate to create an education and visitors centre while also improving DDA improvements by installation of a glazed external lift with DDA improvements to the Keep. Value : £920,000 (Blackgate). Contract period : TBC. Contact Ian Ayris/Fiona Cullen, Newcastle City Council, Civic Centre, Barras Bridge, Newcastle upon Tyne, NE1 8QS. T: 0191 2777192

OLD LOW LIGHTS, NORTH SHIELDS
Alteration and refurbishment of a grade II 18th Century lighthouse building into a heritage and visitor centre. Providng cost consultant services. Contract period : 6 months. Value : £400,000. Contact : Martin Hulse, Tyne & Wear Preservation Trust. T 0191 260 2133

BLYTH THI – Working in conjunction with North of England Civic Trust in their original successful THI bid. Subsequently worked for the individual landlords on 5 nr properties in the Town Centre to improve the external facade including roofing, stonework and shopfronts. Providing full service. Contact Richard Schofield, The Arch Development Projects) Ltd , Arch Centre for Enterprise , Lintonville Parkway , Ashington, Northumberland , NE63 9JZ. T: 01670 528485

PAULL HOLME TOWER – Undertook an early stage optional appraisal exercise and priced up the structural conditional survey for the building as part of the early stage feasibility and funding application. Contact Sarah Oswald, PLB, Dovecote Stables, Swinton Grange Courtyard, Swinton, Malton, YO17 6QR. T: 01653 698309

COWES PROPERTIES, BERWICK - Undertook an early stage optional appraisal exercise and priced up the structural conditional survey for the building as part of the early stage feasibility and funding application. Contact Graham Bell, North of England Civic Trust, Blackfriars, Monk Street, Newcastle upon Tyne, NE1 4XN. T: 0191 2329279

DURHAM CATHEDRAL PHASE 1A : RETAIL UNIT AND VESTRY
Provide full quantity surveying services on the creation of a new vestry and new retail unit and foyer with improved DDA access Value: £1,380,000. Contact: Philip Davies, Durham Cathedral, Cathedral Offices, The College, Durham, DH1 3EH
T: 0191 374 4077

GREEN HOWARDS MUSEUM: RICHMOND – Provide full quantity surveying and CDM-C Consultancy services on the alterations and refurbishment of the Museum sited within a listed church structure. Value £800,000 Contact: Lynda Powell, Green Howards Museum, Trinity Church Square, Richmond, Yorkshire, DL10 4QN T: 01748 826561

AUCKLAND CASTLE - Appointed to provide Full QS and Principal Designer Service on the restoration, conversion and extension to the Castle to provide exhibition space.
Value : £12,000,000. Contract period : 18 months Contact : David Ronn, Auckland Castle Trust

BLACK FELL HAULER HOUSE - Repair, upgrade, refurbishment and alteration of the shell to create an education space and workshop
Value : £208,817.81 Contract period : 16 weeks
Contact : Martin Hulse, Tyne and Wear Preservation Trust

DRYDERDALE HALL, COUNTY DURHAM -
Refurbishment, conversion and extension to a private house. Appointed to provide full QS and Principal Designer Services. Currently in submit to planning. Value : £5,000,000. Contact : Chris Cotton, Purcell

WELCOME BUILDING - Appointed to provide full QS and Principal Designer services on a new build to provide visitor facilities and viewing tower at the entrance of the site
Value : £2,000,000. Contract period : 12 months
Contact : Simon Davis, Auckland Castle Trust

WHINNEY HOUSE, GATESHEAD - The development comprises the alteration, refurbishment and conversion of an existing detached grade II listed building into eleven residential properties comprising two houses and nine compartments. The development also includes external site works to provide new gardens, footpaths and parking areas
Value : £1,824,618. Contact : Bernard Carney, Saltwell Developments

ST JAMES TERRACE, NEWCASTLE - 1 – 4 and 5 – 8 St James' Street - worked on the initial project last year providing measured quantified bill packages. Currently providing Cost Consultancy Services on the current 5 – 8 St James' Street project
Value : £1,500,000. Contact : Robbie Kalbraier, Tyneside Developments

Sam Smith

From: Dave Crump <dbc@greenwoodprojects.com>
Sent: 05 July 2016 14:29
To: Sam Smith
Cc: Chris Goucher; Steve Hunt
Subject: RE: Crayke Castle - QS and CDM Services - Fee Proposal Request

Categories: Gekko

Hi Sam

I have left you a voice message.

Thanks for thinking of us for this, we'd be delighted to work with you on the project and hope our offer is of interest.

The CDM fee is fine and our quote for this would be 0.23%

The QS is a bit tight with a traditional procurement approach so I suggest we approach it like we would a church project, and prepare a quantified schedule of works rather than a full BQ - this will be fine for a project of this scale. In which case our fee would be 2.19%

Both fees are plus VAT, but include expenses.

Not sure how the project is funded, but if its HLF and there is a requirement for us to prepare HLF submissions/drawdowns etc. then this would be an extra element of works.

We've actually just been looking at a job not that far away in Middleham so it would be great to have another one in your neck of the woods.

Hope this is of interest, let me know your thoughts

Best wishes and thanks again

Cheers

Dave

David Crump BSc(Hons) MBA MRICS
Managing Director

GREENWOODS

The Mount
2 Trent Valley Road
Lichfield
Staffordshire
WS13 6EG

Tel: 01543 414777/Mobile: 07875 763221
Email: dbc@greenwoodprojects.com
www.greenwoodprojects.com

Please consider the environment before printing this email

From: Sam Smith [mailto:Sam.Smith@purcelluk.com]
Sent: 05 July 2016 10:26
To: Dave Crump
Subject: Crayke Castle - QS and CDM Services - Fee Proposal Request

Good Morning, Dave.
I trust you are well.

I am writing regarding a project that I am currently working on in Crayke, North Yorkshire. The project includes the development, refurbishment and repair of Crayke Castle and associated structures onsite, an image of which is

attached to this email. The building is a Scheduled Ancient Monument, Grade I Listed castle consisting of a 15th Century four storey tower house and attached outbuildings.

The scope and brief is yet to be determined, however the estimated contract value of the project at this stage is £1,400,000 covering RIBA Stage 0 to RIBA Stage 7.

It would be much appreciated if Greenwood's could provide a fee quotation for both QS services and CDMC for the project. At this stage we are collating a number of quotes for client comment, with a view to demonstrating the most streamline cost possible for the project. It has been indicated that the following target percentages should be considered:

QS: 2.25%
CDM: 0.25%

If you are interested in the project then please feel free to contact me with any questions you may have. I am onsite with the client on Thursday and it would be great to feedback some costs, if you are indeed interested.

I look forward to hearing from you in the near future.

Kind Regards

SAM SMITH
BArch(Hons), MArch, RIBA
Architect

Purcell
T. 01904 465151

sam.smith@purcelluk.com
www.purcelluk.com

GREENWOODS

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COMPANY PROFILE & HERITAGE PROJECT EXPERIENCE

Introduction

We are delighted to have the opportunity to present our company profile to you and hope it is a useful introduction to the services offered by Greenwoods.

We are experienced providers of Project and Commercial Management and CDM Co-ordination, with a 30 year track record of working for Clients across all sectors of industry and commerce. We have particular expertise in restoration and conservation projects and take great pride in our involvement with projects protecting important buildings for the nation.

Our projects in this field have included unique buildings for various Diocese, individual building preservation trusts, museums, historic visitor attractions, and those for clients with estates encompassing heritage properties such as universities and local authorities.

Projects have included conversion to alternative uses, modern extensions, provision of disabled access in listed buildings, and re-ordering, right up to major restoration works. We have worked on properties with Grade 2, 2star and Grade 1 listing, and scheduled ancient monuments. We are the appointed Quantity Surveyors for Lichfield Cathedral, Hereford Cathedral and Birmingham Diocese.

We do not limit our involvement to construction services, as we understand that the biggest challenge with heritage projects is often identifying and sourcing available funding. We have therefore developed a service which includes project officer support, fundraising advice and guidance and technical help completing grant applications if required. We can help clients through the maze of potential funding opportunities, identifying and securing resources to enable projects to be delivered.

We are therefore familiar with all the major funding organisations and understand their requirements, including Historic England, Heritage Lottery Fund, Architectural Heritage Fund and The Country House Foundation.

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As project managers we can lead the project from inception, assisting on appointment of an appropriate design team and ensuring a robust project programme and budget are set at the initial stages. This helps makes the scheme ultimately achievable and prevents wasted time or cost on inappropriate options appraisals.

As quantity surveyors we provide expert commercial advice, cost planning and estimating. We work with the grant funders and the clients to ensure that they have a mutual understanding of the commercial aspects of the project, cashflow requirements and budget objectives. Project funders have specific requirements in this regard which we can help Client's manage.

We understand that heritage project Clients are often volunteers or community groups and we are well used to working with 'lay' clients to ensure the process is not daunting or unmanageable. We are happy to have meetings out of normal working hours, and provide as much support as is necessary dependent on the Client's experience and understanding.

Heritage projects usually have long gestation periods and are often dependent on the efforts of committed volunteers. Most projects have very limited funding in the early stages and the need to obtain seed funding is very important. We can assist Clients in this regard, preparing low cost feasibility and option appraisals as a basis of initial grant applications.

We prefer to be involved with projects from their inception and we understand that this often means we work at risk, prior to funding streams being established. We are always happy to talk to you about your project with no obligation, to see how we might help in getting the scheme off the ground.

We remain a medium sized company completely focused on our Client's needs. Our size enables us to be responsive and flexible in a rapidly changing market. We maintain real input from the directors of the business at project delivery level, ensuring that not only can we control the process effectively but any issues can be addressed without further recourse to 'head office' or remote managers.

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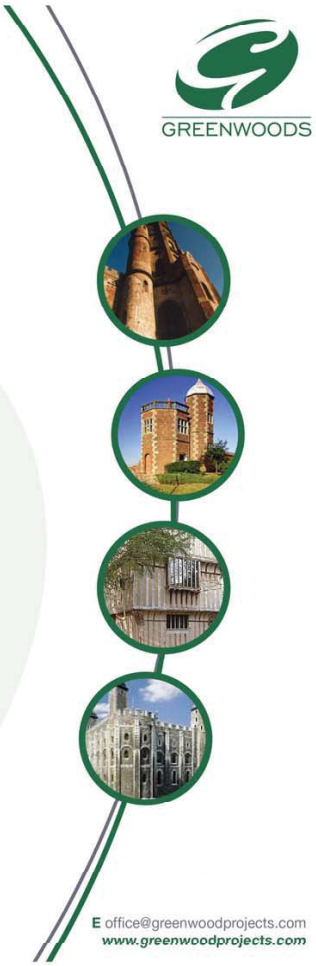
Our team has the reputation of ‘going the extra mile’ for our clients. We are proactive and tackle our projects with enthusiasm and passion.

From our head office in the historic city of Lichfield, and our offices in London and Worcester, we have carried out projects Nationwide and in Northern Europe. Within our heritage portfolio we have a diverse set of clients, working with the military, the church, large governmental bodies and a whole myriad of smaller building preservation trusts nationwide.

If you require any further information please visit our website or contact:

David Crump
Managing Director
The Mount
2 Trent Valley Road
Lichfield
Staffordshire
WS13 6EG

Tel: 01543 414777
Email: dbc@greenwoodprojects.com
www.greenwoodprojects.com



About Us

Greenwoods was established in Solihull in 1986 as ‘Hearn and Greenwood’, a professional practice offering consultancy services to the construction industry. In 2004 the practice became a Limited Company. Since then we’ve continued to grow, reacting to the market by developing Project Management and Health and Safety Management (CDMA) services as well as our core Commercial Management skills.

We have always concentrated on providing a proactive, high quality service to all of our Clients. Most of our business is generated from existing Clients and we have gained a reputation for no-nonsense Project Management and Commercial advice.

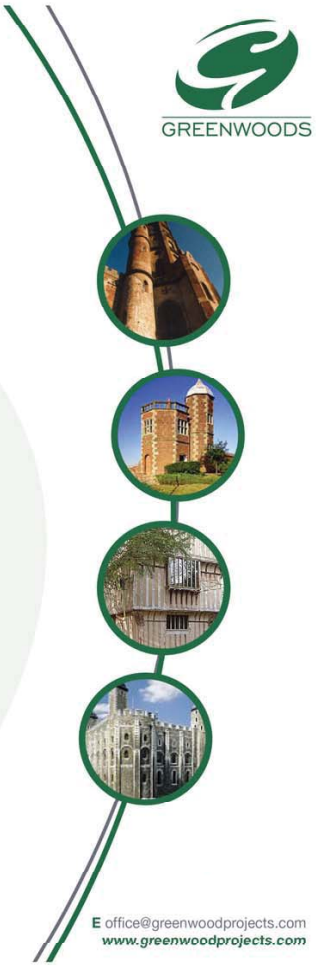
We lead from the front, are proactive and believe that as Project Managers we should control the process, owning the project at all levels, rather than simply ‘managing’ and reporting.

As Commercial Managers we know that we hold the financial security of our Client’s investments in our hands, we must not only manage cost but also be a true commercial support to the process, advising on all aspects of the project from a commercial standpoint. The key to good commercial management is forward projection rather than historical reporting and this is the focus of our approach.

We understand the intricacies of heritage materials and construction techniques and are able to manage both the cost and time implications of using these in practice.

We operate to a recognised QA standard, but we are able to modify our approach and systems to suit each individual client and project. We understand that what may be the right approach for one Client will not suit another. We treat each project and each Client individually, to be approached with a bespoke strategy which has to be developed by the team as a whole.

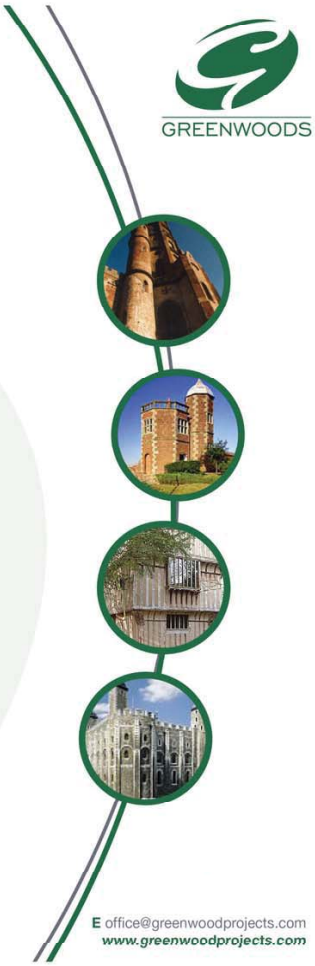
We are able to advise client’s on the wealth of legislation surrounding construction projects, and ensure that this is complied with including:



- European procurement legislation including the OJEU process for larger projects
- Ecology and wildlife protection requirements
- Planning, listed building and DAC approval processes including conservation officer liaison
- Building control application and approval
- Local authority statutory instruments such as demolition notices
- Highway authority requirements, 278 agreements, etc.
- Health and safety requirements including Principal Designer/CDM 2015 legislation
- Environmental requirements including site waste management
- Asbestos identification and management

We offer the following services in house:

- Project Management
- Commercial Management
- Traditional Quantity Surveying
- Procurement Advice
- Funding Identification and Application Services
- Sourcing specialist Heritage, Archaeological and Ecological enabling works
- CDM Advisor/ Principal Designer
- Client business plan preparation support



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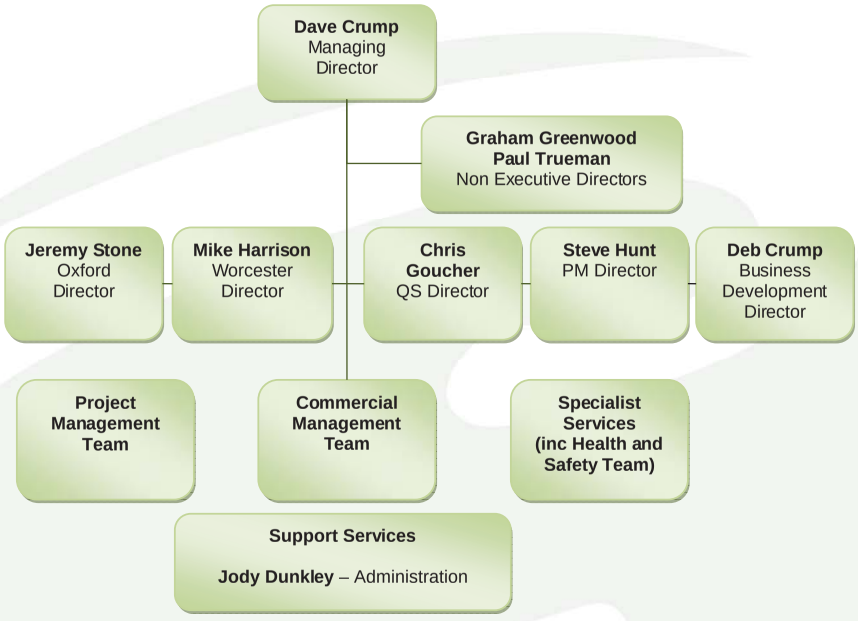
Our company structure



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Understanding Projects

Every project has to start with a clear understanding of the key objectives of the project. Identifying these and then focusing our approach accordingly is the initial task for the team. Once established our entire project approach is then intrinsically linked to these reference points.

Understanding these key issues helps us to assess whether the Client's key drivers are focused on cost, time or quality, and strike the appropriate balance between the three.

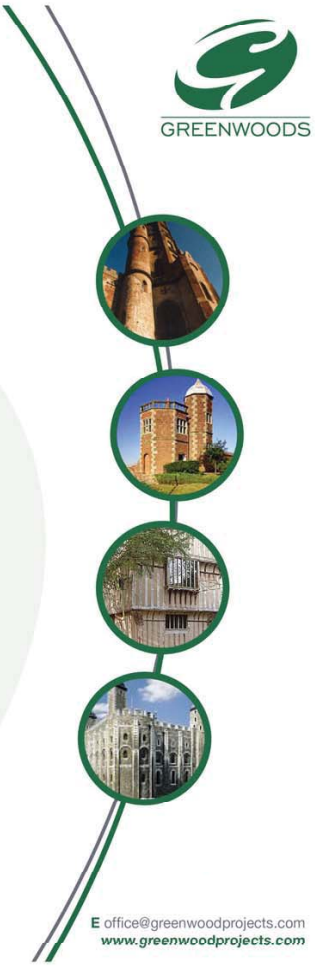
With regard to the Specialist Heritage Market we believe that our core roles include:

1. Offering advice on potential funding and associated applications including demonstrating to potential funders that the project is viable with limited risk and that a well structured, appropriately qualified team is in place to manage the project. This can involve initial cost planning , programming and assessment of the buildings long term sustainable use and the clients expectations

2. Management of the Design Team and associated specialist trades on the client's behalf to ensure that all design information required for funding applications and statutory authority sign off, are in keeping with the key stakeholders' expectations.

3. Development and management of project tools which mitigate the risk of project failure. These include project programmes, risk registers linked to cost estimates, a robust change control procedure and Project Execution Plans defining roles, responsibilities and project objectives.

4. Administering and co-ordinating all queries and clarifications required from key funders and stakeholders, to ensuring that the project timetable can be adhered too and project issues are dealt with appropriately.



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5. Early robust cost advice, usually taking into account 'total project cost', not just capital construction costs. We always seek to ensure that commercial issues such as professional fees, treatment of VAT, etc. are clearly addressed within our cost forecasting to minimise commercial surprises later in the process.

6. Management of the procurement process for both consultants and contractors in compliance with all public sector and funder's procurement governance including the production of all tender documentation.

7. Supporting the client by acting as their representative where required in dealing with all Planning and Listed Building issues.

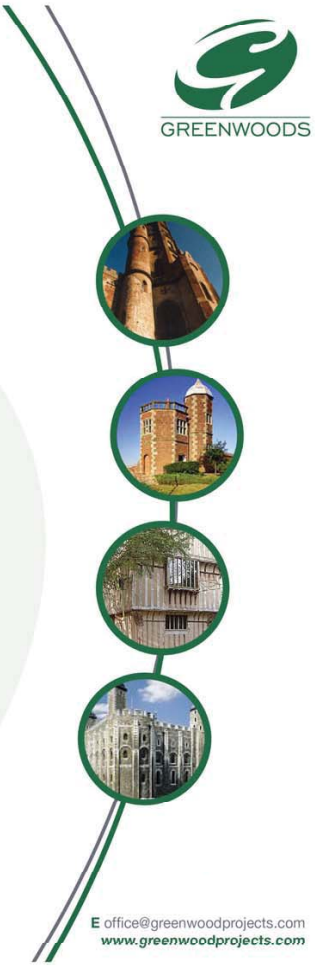
8. Preparing grant drawdown applications and reporting to key funders as required ensuring that all funder's expectations are managed successfully.

9. Indentifying, procuring and managing specialist activities such as archaeology and ecological surveys.

10. Through our CDM advisory service, we can ensure that the client is in compliance with all relevant Health and Safety legislation and give advice on their duties under the 2015 regulations.

11. Project and Cost Management during the post contract delivery stage ensuring that the construction phase is set up in accordance with best practice. Preparing contract documentation and monitoring of the project objectives, change control, risk review and cost management.

12. Successfully closing out the project in line with all key parties' expectations and providing all post project review information to the key funders as required. Assisting and supporting the client over the first few months of the opening of the project as required.



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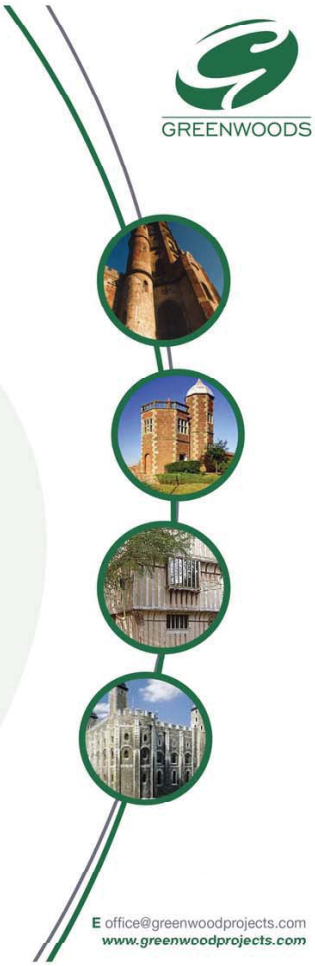
www.greenwoodprojects.com

Project Examples

We include below some example projects we've been lucky enough to be involved with – if you require any further examples, or more details on those included please contact us.



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www.greenwoodprojects.com

References

The following are included as Client referees:

Referee 1:

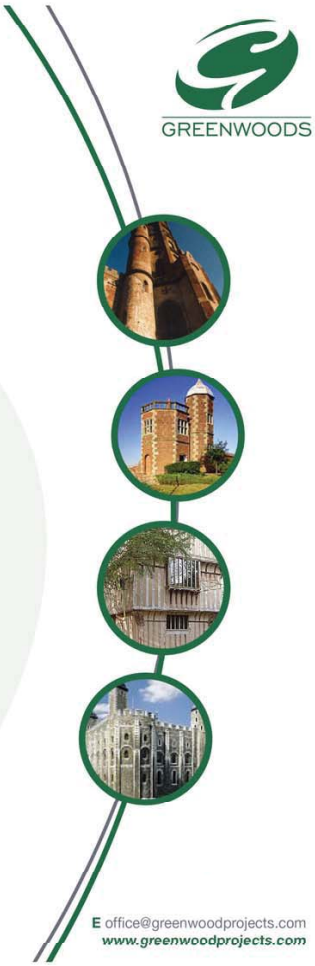
Very Rev. Adrian Dorber
The Dean of Lichfield Cathedral
The Deanery
The Close
Lichfield
Staffordshire

Tel: 01543 306250
Email: adrian.dorber@lichfield-cathedral.org

Referee 2:

Juanita Sangha
Bursar
St Johns Without The Barrs
St Johns Street
Lichfield
Staffordshire

Tel: 01543 251884
Email: bursar@stjohnslichfield.com



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www.greenwoodprojects.com

Referee 3:

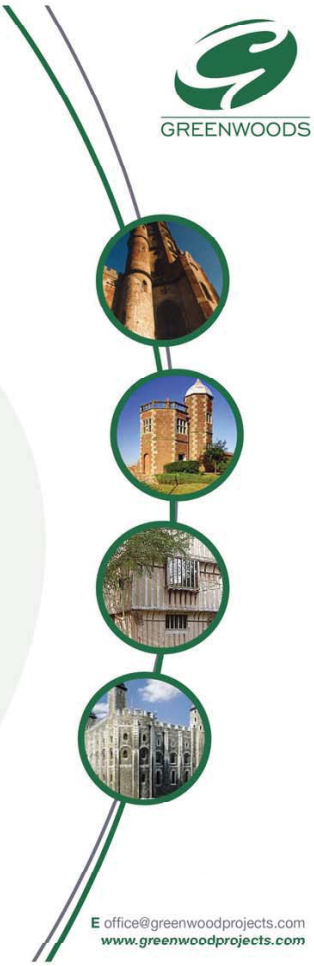
Simon Buteux
Birmingham Conservation Trust
1 Lancaster Circus
Birmingham
B4 7DJ

Tel: 0121 303 2664
Email: simon.a.buteux@birmingham.gov.uk

Referee 4:

Bob Callender
South London Theatre Building Preservation Trust
Old Fire Station
2a Norwood High Street
West Norwood
London
SE27 9NS

Tel: 07932 787897
Email: bob.callender@gmail.com



E office@greenwoodprojects.com
www.greenwoodprojects.com

We include below references received from key clients including those provided as example projects above. Please feel free to contact these clients directly if you so wish:

ST JOHNS HOSPITAL:

St John's

St John's Hospital without the Barrs
St John's within the Close

St John's Hospital
St John Street
LICHFIELD WS13 6PB

Telephone: 01543 251884
Email:stjohn161@clara.co.uk

1 August 2014

To Whom it May Concern

Dear Sir or Madam

I am writing to confirm that for the past twelve months, Dave Crump, and Greenwoods, have been providing St John's with Contract Management Services for our new £3m Building Project at our Almshouses in St John Street, Lichfield. I can also confirm that the Trustees of the Hospital have been very impressed with both the quality of work and the customer service we have received from Mr Crump. They are extremely happy they have engaged him to assist the Charity.

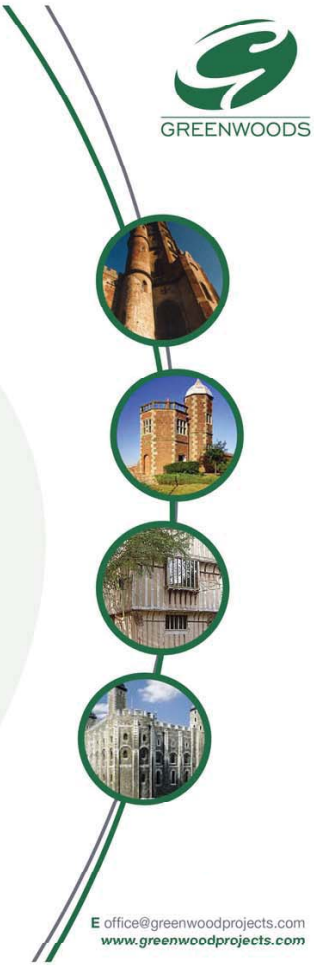
Dave is very attentive to the needs of the Trustees and has provided them with timely information and advice, always ensuring the Charity is protected and that its needs are fully met during meetings with Architects and other service providers. On a personal note, Dave has been extremely helpful and supportive of my role and has taken the time to explain, in a language I can understand, what needs to be done to ensure that the project is continuously moving forward, and on track.

We highly recommend Mr Crump, and Greenwoods, and we are more than happy to provide this reference.

Yours faithfully

Juanita Sangha
Bursar

Registered Charity No. 214794



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THE WALRONDS:

CULLOMPTON WALRONDS PRESERVATION TRUST

Registered Charity Number 1061913 Private Company Limited by Guarantee Number 3328420 VAT Registration Number 984 0018 23 Web site: www.walronds.com
Registered Office: The Walronds, 6 Fore Street, Cullompton, EX15 1JL. Tel: 01884 35934.
Email: walronds1605@btconnect.com

From: Colonel Michael Woodcock OBE Trustee & Company Secretary

GREENWOOD PROJECTS LTD

The Walronds project has been successfully concluded and is now being considered for a Heritage Angels Award. The Walronds, a grade 1 mansion from the beginning of the 17th Century, has been saved from the English Heritage at risk register, fully restored and put back into use for the community. It has cost c. £3.7 million.

Greenwood Projects Ltd have been part of the project from the beginning of the development phase five years ago. They have ensured compliance with international and national regulations for procurement, made complete and accurate estimates of costs and helped with the preparation of major funding applications. For this heritage project, with very detailed and exacting specifications, the production of bills of quantity to provide the basis for tenders was a herculean task on its own.

From the experience of this project, it is my opinion that it would be impossible to manage a similar enterprise without professional support and knowledge and experience of this quality. The requirement for accurate quantity survey, CDMC and project management support is an essential part of the programme.

Greenwoods have the capacity to provide this and I have no hesitation in recommending them.

Yours faithfully

Colonel Michael Woodcock OBE

Conservation work supported by

ENGLISH HERITAGE · LOTTERY FUNDED · AHF The Architectural Heritage Fund · In partnership with Devon County Council · Mid Devon District Council · The Monument Trust · J Paul Getty Jnr Charitable Trust · The Pilgrim Trust

The Garfield Weston Foundation, The Mercers' Company, The Leathersellers' Company, Awards for All, The Society for the Protection of Ancient Buildings, Cullompton United Charities, and other private companies and individuals

E office@greenwoodprojects.com
www.greenwoodprojects.com

HADLOW TOWER:

The Garden Barn
Wellbrook Manor
Peterchurch
Hereford HR2 0SS

call 0845 090 2212
outside the UK call 00 44 1981 550 753
email enquiries@vivat-trust.org

VIVAT TRUST

June 2012

Reference for Greenwood Projects Limited

I am on leave this week as you say, but wanted to reply immediately to your request because I feel so strongly about the candidate.

David Crump and Greenwoods have transformed how we, as Vivat Trust, can operate. They are totally trustworthy, very honest (even when you don't want to hear it!) and always there for you. I have never known a firm go so far beyond the accepted mile as Greenwoods.

We have used Dave, Steve Crichton and Jeremy Stone as project managers through development and construction phases. Because they can all call on each other we have always had first class service in the management of projects, their cashflow, their programme and, when necessary, the cost cutting often required from our kind of heritage project. The team listen and ensure they understand before moving forward which is exactly what we want and means that all understand where we are going.

The two projects we are currently on site with are being managed through Greenwoods. Both are Grade one, both are grant funded by English Heritage - bringing their own views and restrictions. They are both doing well and on schedule for a timely finish. Both have community groups involved with them and, in both cases, the Greenwood staff are expert in a gentle touch with the community. It's their ability to listen and compute what they hear that sets them above the average. English Heritage in the South East certainly are big fans through the work they are doing for us at Hadlow Tower.

Simply, I cannot speak highly enough of them. To underline this, I think it is fair to say the Trustees would only want to use them for our Project Management throughout the UK and see them as a partner in our projects.

I would be delighted to talk with you on the 11th when I am back in the UK if you want me to expand on any of the above. You would be well served, and would sleep soundly, if you appoint them.

Best wishes

Laura Norris
Trust Director
The Vivat Trust

vivat-trust.org

THE VIVAT TRUST LTD Reg. Charity No. 282921 Reg. No. 1568948 England SC041369 Scotland
REGISTERED OFFICE The Garden Barn | Wellbrook Manor | Peterchurch | Hereford HR2 0SS
VAT NO. 609433149

E office@greenwoodprojects.com
www.greenwoodprojects.com

DONCASTER MINSTER:

DONCASTER MINSTER

Thursday 6th November 2014

Reference for Matt McTaggart, Greenwood Projects

Matt McTaggart has been our main point of contact at Greenwood Projects on the North Transept restoration project at Doncaster Minster during 2014. A large proportion of the funding for this restoration project has come from the English Heritage RGPOW programme.

The quality of information and guidance provided by Matt has been high and very precise, which are helpful to us as the client. Matt has demonstrated a pro-active approach to managing issues which have come up during the lifetime of the project and has communicated the issues to us clearly as we have gone along. Matt has also been able to challenge decisions and to offer alternative solutions as necessary.

Matt has demonstrated an understanding and knowledge of relevant heritage techniques and materials which are essential to a project such as this on a Grade 1 listed building.

Please do not hesitate to contact us if you require any further information,

Yours Sincerely

Clive Howarth, Churchwarden

Doncaster Minster

Church Street, Doncaster, DN1 1RD

Office; 01302 323 748

E-mail; churchwarden@doncasterminster.org.uk

GREENWOODS




E office@greenwoodprojects.com
www.greenwoodprojects.com

SHAKESPEARE BIRTHPLACE TRUST:

Shakespeare birthplace trust

The Shakespeare Centre, Henley Street, Stratford-upon-Avon, Warwickshire CV37 6QW
t +44 (0) 1789 204 016 f +44 (0) 1789 296 083
www.shakespeare.org.uk

Direct line + 44 (0) 1789 201 016 Extension 204 email Jule.Crawshaw@shakespeare.org.uk

Dear Sirs

Reference for Greenwoods

I am delighted to be able to commend Greenwoods to your organisation. I have been working with them since February this year on the *Shakespeare New Place* project; a £5.2m mix of heritage and new build. They have assisted me through a stage 2 HLF bid and I have been delighted with the timeliness and quality of the work produced. In addition, the common sense and calm approach to the work has proved to be a genuine added benefit.

Yours sincerely

Julie Crawshaw PP
New Place Project Manager.

GREENWOODS




E office@greenwoodprojects.com
www.greenwoodprojects.com

Giving Something Back

For many years we have built our reputation on projects which bring benefits to the community. This has been our core business and our clients include charitable organisations, building preservation trusts, individual community groups and housing associations.

One of the key aims for many of our projects is to ensure social inclusion by offering extended services to the local community. We were one of the first practices to be involved in self build residential schemes and were involved in projects at Castle Vale Estate, Bordesley Green and Walsall, working with self build groups to regenerate these deprived areas.

We have worked with Bournville Village Trust and many housing associations, including Accord, Servite and Orbit, for twenty years. We are heavily involved with the North Solihull Partnership, a £1.8 billion 15 year regeneration programme improving a deprived area of Birmingham by not only redeveloping building stock, but by also establishing new ways of engaging with communities and creating social links by intelligent building design and shared services.

As a practice we endeavour to support our own local community whenever possible. We carry out a degree of pro-bono work for community groups as well as actively fundraising for our company charities on an ongoing basis.

Recently we supported the following charities and organisations:

SENSE
The Brittle Bone Foundation
The George Coller Memorial Fund (for childhood asthma)
MacMillan Nurses
St Giles Hospice, Whittington

GREENWOODS





E office@greenwoodprojects.com
www.greenwoodprojects.com

Company Information

The following information is provided as may be required by the Client's procurement team.

Company Name

Greenwood Projects Limited

Contact Details

Correspondence address

The Mount
2 Trent Valley Road
Lichfield
Staffordshire
WS13 6EG

Contact name

David Crump – Managing Director

Telephone numbers

Office: 01543 414777
Mobile: 07875 763221

GREENWOODS





E office@greenwoodprojects.com
www.greenwoodprojects.com

Electronic Contacts

David Crump – dbc@greenwoodprojects.com
General – office@greenwoodprojects.com
www.greenwoodprojects.com

Legal and Commercial Information

Company Registration Number

5240282

Year and place of registration

Company Formation (Hearn and Greenwood) – 1986 Birmingham
Registration as a Limited Company (Greenwood Projects Ltd) – 2004 Birmingham

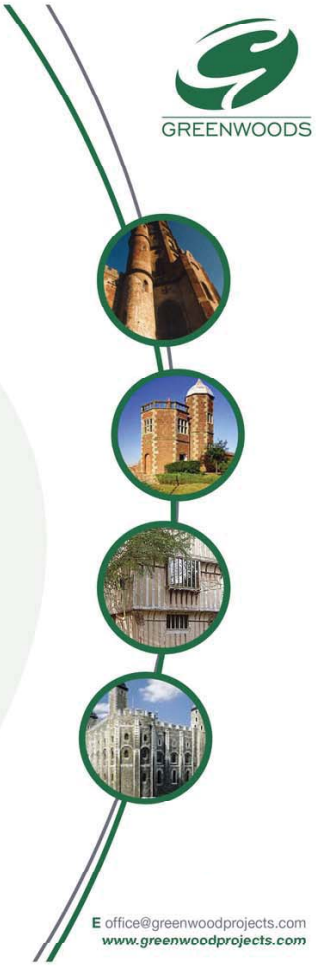
VAT number

846472110

Banker's address and relevant details for banker's reference

HSBC Bank
49 Market Street
Lichfield
Staffordshire
WS13 6LA

References should be addressed to Rebecca Steel, Business Manager



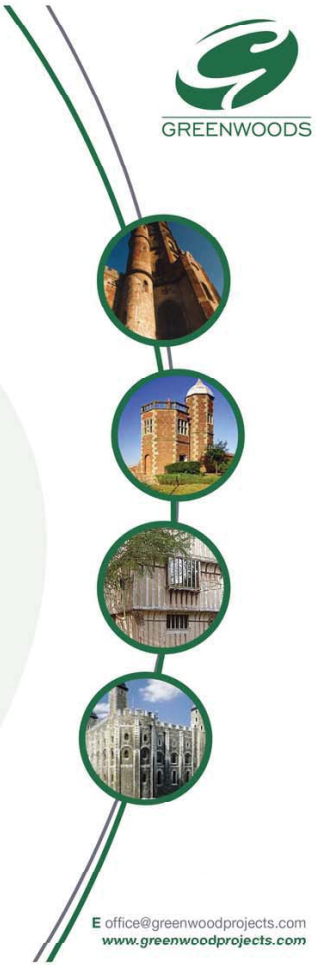
Company Policies

We have an established Health and Safety Policy, and Environmental Policy. For the sake of brevity we have not included them herein; however both are available on request. We are also accredited to ISO 9001 Quality Standard.

Insurances

We carry the following levels of insurance:

Professional Indemnity:	£ 10million
Public Liability:	£ 5million
Employer's Liability:	£ 10million



GREENWOODS

Client	A SPACE ARTS
Project	God's House Tower Restoration including New Exhibition & Gallery Space
Value	£1.4 million
Role	Project Manager Quantity Surveyor CDM Coordinator
Procurement	Traditional with Bills of Quantities
Duration	26 Months

PROJECT MANAGERS
QUANTITY SURVEYORS
CDM CO-ORDINATORS
DEVELOPMENT ADVISORS

T 01543 414777
E office@greenwoodprojects.com
www.greenwoodprojects.com

The Mount, 2 Trent Valley Road
Lichfield, Staffordshire WS13 6EG

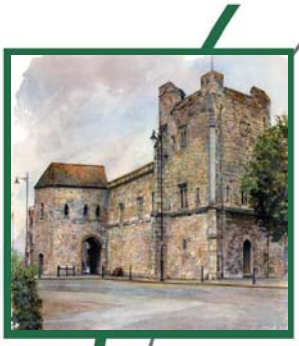
God's House Tower (GHT) is a Scheduled Ancient Monument and Grade II listed building located at the southeast corner of Southampton's medieval town walls. It is thought to be the oldest purpose-built artillery tower in the country.

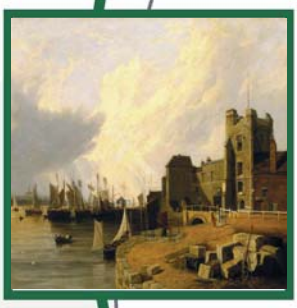
The Project Aims are:

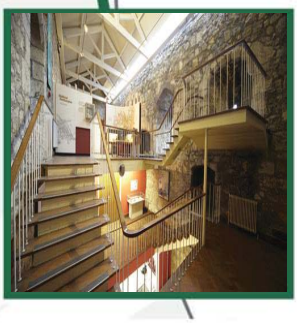
- Reopen GHT, breathing new life into the building through appropriate architectural interventions, including a new entrance, ground floor extension, lift and café.
- Reanimate GHT through a unique mix of contemporary arts and heritage activities including a stunning digital interpretation scheme and exhibitions programme along with fixed interpretation.
- Deliver a wide range of new learning and participation activities inspired by the buildings rich history that engage the local community and create new volunteering opportunities.
- Offer all visitors the chance to understand the buildings heritage and participate in its future.
- Create a sustainable business model, generating income to support the buildings future operation, management and maintenance.
- Establish new connections with major cultural developments in the city and enable GHT to play a prominent role in the city's future.

A partnership between the Heritage Lottery Fund (HLF) and 'a space arts' will reanimate GHT to create a mixed-use heritage, arts, education and events venue. This new chapter in the life of GHT will breathe life back into the monument and re-engage it with the people of Southampton.

Greenwood Projects provided project and cost management services and CDM Co-ordination on this project. Greenwoods also acted as contract administrators for this project.







GREENWOODS

Client	National Trust
Project	Powis Castle
Value	£400,000
Role	Quantity Surveyor CDM Advisor
Procurement	Traditional
Duration	Seven months

PROJECT MANAGERS
QUANTITY SURVEYORS
CDM CO-ORDINATORS
DEVELOPMENT ADVISORS

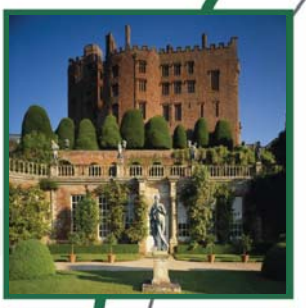
T 01543 414777
E office@greenwoodprojects.com
www.greenwoodprojects.com

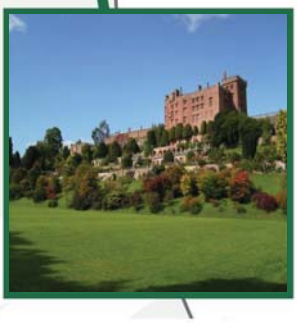
The Mount 2 Trent Valley Road
Lichfield Staffordshire WS13 6EG

Greenwoods are currently working with the National Trust on a project to improve the visitor experience at Powis Castle. The scheme includes extensive works to the public realm, external entrances and pathways, provision of a new lift to facilitate disabled access and associated hard and soft landscaping.

Greenwoods are appointed as Quantity Surveyor and CDM Advisor to the Principal Designer.

The Castle has remained in use throughout the project, and we have worked closely with designers and contractors to establish a programme and logistics plan which facilitates minimum disruption to the ongoing operation of the site.





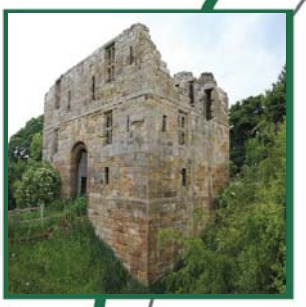
GREENWOODS

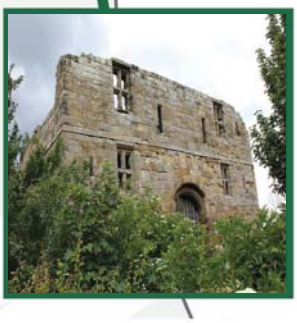
Client	Vivat Trust
Project	Whorlton Gatehouse
Value	Anticipated as £ 1 million
Role	Project Manager & CDMC
Procurement	Traditional
Duration	Anticipated as 20 months

Greenwoods are providing Project Management support and CDM Co-ordination to the Vivat Trust on the restoration of Whorlton Gatehouse, which is situated on the Northern edge of the Yorkshire Moors National Park.

Through careful, considered repair and conversion, this project's aim is to enable the re-use of the important Scheduled Ancient Monument and listed buildings on this complex site. This will ensure a long term, sustainable and financially viable future for the building whilst also allowing wide public access and a greater appreciation of the site as an important heritage asset.

Greenwoods are initially supporting Vivat in their funding application and managing the project through to detailed design proposals. On further funding being secured, Greenwoods will manage the project through to completion, transforming the building into spectacular holiday accommodation and community space.





PROJECT MANAGERS
QUANTITY SURVEYORS
CDM CO-ORDINATORS
DEVELOPMENT ADVISORS

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E office@greenwoodprojects.com
www.greenwoodprojects.com

The Mount 2 Trent Valley Road
Lichfield Staffordshire WS13 6EG

constructionline RICS

GREENWOODS

Client	Vivat Trust
Project	Hadlow Tower
Value	£4 million
Role	Project Manager Quantity Surveyor CDM Co-ordinator
Procurement	Traditional
Duration	24 Months

Hadlow Tower is a Grade I listed gothic tower located in Kent. The tower itself stands fifty three metres high and is the tallest surviving Victorian gothic structure in Britain. The tower has been badly affected by years of neglect and weather damage and is now in a dangerous condition.

The project restored the exterior of the tower to its former splendour and provides holiday accommodation for up to six people with wheelchair access up to the third floor. The ground floor is converted into a permanent exhibition space that showcases the historical and architectural merit of this fascinating building.

The project is funded in part by a grant from the Heritage Lottery Fund. Greenwood Projects provided advice at all stages of the application process including cash flow and drawdown procedures.

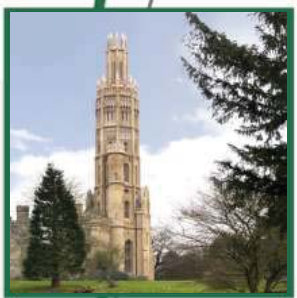
Greenwood Projects also provided project and cost management as well as CDM Co-ordination services on this project. Greenwoods have also undertaken the procurement of the design team via a formal OJEU process on behalf of the Client.

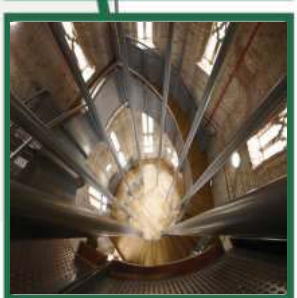
The project was stunning and recently won the RICS South Heritage Project of the Year Award, and two English Heritage Angel Awards in the categories of 'Best Craftsmanship' and 'The People's award'

The project was funded by a range of organisations as follows:

- Heritage Lottery Fund
- English Heritage
- Country House Foundation
- Kent County Council
- Architectural Heritage Fund

THE ENGLISH HERITAGE ANGEL AWARDS





PROJECT MANAGERS
QUANTITY SURVEYORS
CDM CO-ORDINATORS
DEVELOPMENT ADVISORS

T 01543 414777
E office@greenwoodprojects.com
www.greenwoodprojects.com

The Mount 2 Trent Valley Road
Lichfield Staffordshire WS13 6EG

constructionline RICS

Sam Smith

From: Gez Pegram <gez.pegram@masonclark.co.uk>
Sent: 05 July 2016 18:55
To: Sam Smith
Subject: RE: Crayke Castle - Structural Services - Fee Proposal Request
Attachments: CV-Gez Pegram-2016.04-MCA-Heritage.pdf

Categories: Gekko

Hi Sam

Thanks for this, it is much appreciated. I drove past it today! Looks very impressive, now the trees have been cleared.

Please note – we are Mason Clark Associates (York) now, no longer Dossor MCA!

We could certainly work within that target percentage for this size of project. We really need to understand the scope of structural works and commitment to investigations, design meetings, progress meetings and site inspections.

Do you have any feel to the degree of significant interventions requiring structural input?

I'll try to call you tomorrow.

Best regards

Gez Pegram *BSc(Hons) CEng FICE MIStructE*
Director *Engineer Accredited in Building Conservation (CARE)*

Direct: 01904 435971
Mobile: 07983 493274

masonclarkassociates

Partnership House, Monks Cross Drive, York, YO32 9GZ
Tel: +44(0) 1904 438005

Visit our website: www.masonclark.co.uk

From: Sam Smith [mailto:Sam.Smith@purcelluk.com]
Sent: 05 July 2016 10:26

To: Gez Pegram <gez.pegram@masonclark.co.uk>
Subject: Crayke Castle - Structural Services - Fee Proposal Request

Good Morning, Gez.
I trust you are well.

I have been given your contact by my colleague, Helen Cook. I hope you don't mind the direct contact.

I am writing regarding a project that I am currently working on in Crayke, North Yorkshire. The project includes the development, refurbishment and repair of Crayke Castle and associated structures onsite, an image of which is attached to this email. The building is a Scheduled Ancient Monument, Grade I Listed castle consisting of a 15th Century four storey tower house and attached outbuildings.

The scope and brief is yet to be determined, however the estimated contract value of the project at this stage is £1,400,000 covering RIBA Stage 0 to RIBA Stage 7.

It would be much appreciated if Dossor MCA could provide a fee quotation for Structural services for the project. At this stage we are collating a number of quotes for client comment, with a view to demonstrating the most streamline cost possible for the project. It has been indicated that the following target percentages should be considered:

Structural Services: 1.25%

If you are interested in the project then please feel free to contact me with any questions you may have. I am onsite with the client on Thursday and it would be great to feedback some costs, if you are indeed interested.

I look forward to hearing from you in the near future.

Kind Regards

SAM SMITH
BArch(Hons), MArch, RIBA
Architect

Purcell
T. 01904 465151

sam.smith@purcelluk.com
www.purcelluk.com

GEZ PEGRAM

BSc (Hons) CEng FICE MIStructE
Engineer Accredited in Building Conservation (CARE)
DIRECTOR

masonclarkassociates
civil and structural engineering consultants

Qualifications
Fellow of the Institute of Civil Engineers (2013)
Conservation Accreditation for Engineers (CARE - 2008)
Member of the Institution of Civil Engineers (1998)
Member of the Institution of Structural Engineers (1997)
BSc Honours Civil and Structural Engineering (graduated 1992)

Contact
Office: 01904 435971
Mobile: 07983 493274
gez. pegram@masonclark.co.uk

CAREER HISTORY

As a Chartered Structural Engineer, Fellow of the Institution of Civil Engineers and an Engineer Accredited in Building Conservation, I have over twenty three years of experience on a diverse and challenging range of construction projects.

My passion is for historic structures, conservation and heritage projects. I am also enthusiastic to explore new technologies and traditional techniques used in a modern setting, such as green oak framing, straw bale construction and limecrete floors.

Director	**Mason Clark Associates, York: January 2014 – Present**
Senior Engineer / Associate / Office Director	Alan Wood & Partners, York: June 2004 – January 2014
Visiting lecturer	University of Sheffield: 2004 – 2008
Principal Engineer	Gifford, York: June 1999 – June 2004
Senior Engineer	Gifford, Southampton: June 1997 – June 1999
Site Engineer	Taylor Woodrow Construction: June 1996 – June 1997
Project Engineer	Gifford, Southampton: June 1992 – June 1996

EXPERIENCE

My particular experience and current roles include:

- Leading our York team with responsibility for the office financial performance and delivery of its portfolio of projects.
- Expert in all major materials including timber, masonry, steelwork, prestressed and reinforced concrete design.
- Structural reports, feasibility studies, investigations and conservation assessments.
- Staff training and mentoring.
- Supervising Civil Engineering and Mentor for the ICE.
- Team management, design overview and quality review for projects from concept stage to completion on site.
- Sympathetic approach to the conservation of historic buildings with expertise in traditional and modern approaches to interventions, repairs and strengthening.

GEZ PEGRAM

BSc (Hons) CEng FICE MIStructE
Engineer Accredited in Building Conservation (CARE)
DIRECTOR

masonclarkassociates
civil and structural engineering consultants

PROJECTS SPECIFIC TO HERITAGE / CONSERVATION / REFURBISHMENT

Ormsby Hall – inspections and monitoring	National Trust	Grade I
East Riddlesden Hall – inspections and repairs	National Trust	Grade I
Georgian Theatre Richmond – ceiling strengthening	Georgian Theatre Royal	Grade I
Remaking Beamish HLF Project	Beamish Living Museum	N/A
Leeds Town Hall – internal reconfiguration	Leeds City Council	Grade I
First White Cloth Hall, Leeds – feasibility study	Leeds City Council	Grade I
St Mary's Church, Whitby	Whitby and Ruswarp PCC	Grade I
All Saints Church, Wistow	WASHA	Grade I
Oswaldkirk Hall, North Yorkshire	Private	Grade II*
Church of St Wilfid, South Kilvington	South Kilvington PCC	Grade II*
Calverley Old Hall, Leeds – fabric repairs	Landmark Trust	Grade I
Brandsby Church – repairs to cupola	All Saints Church PCC	Grade II*
Studley Royal – Rough Bridge	National Trust	Grade II
How Hill Tower, Fountains Abbey	National Trust	Grade II*
This Exploited Land	North York Moors	
(Industrial heritage of Rosedale)	National Parks Authority	Grade II
Ledston Hall, Castleford, Leeds	Wheler Foundation	Grade I
Botlon Abbey Hall – Dining Hall Vaults	Chatsworth Estate	Grade II*
Kirklees Priory Gatehouse, Huddersfield	Private	Grade II*
Victoria Mills, Grimsby	NE Lincs CC	Grade II
St Vincent's Church, Caythorpe	St Vincent PCC	Grade I
Bishopthorpe Palace – Canopy / Chapel ceiling	C of E Commissioners	Grade I
Howsham Mill Restoration	Renewable Heritage Trust	Grade II
Liverpool Central Library – Picton Hall	Shepherd Construction	Grade II*
Dock Tower, Grimsby	ABP	Grade I
Yorkshire Sculpture Park – Bridges & Features	YSP	Grade II*
Nunnington Hall – New footbridge & repair works	National Trust	Grade I
Bootham School, John Bright Library	Bootham School	Grade II*
Nostell Priory, Restoration of Druids Bridge	National Trust	Grade I
Hadrian's Wall – Milecastle 49 bank stabilisation	English Heritage	Sch. Mon.
Lambton Castle, Chester-le-Street	Grays Property Services	Grade II*
Creative Industries Centre, Scarborough	Scarborough BC	Grade II
Rotunda Museum, Scarborough	Scarborough BC	Grade II*
Bishopthorpe Palace, York – refurbishment works	C of E Commissioners	Grade I
Norwood House, Beverley – fire damage	East Riding York	Grade I
Cliffords Tower, York – parapet stability	English Heritage	Sch. Mon.
Gibson Mill, Hebdon Bridge	National Trust	Grade II
Quarry Bank Mill, Styal, Manchester	National Trust	Grade II*
Newstead Abbey - inspections	Nottingham CC	Grade I
Nostell Priory, Muniments Room	National Trust	Grade I
Beningbrough Hall, York	National Trust	Grade I
North Yorkshire Monuments - access	English Heritage	Sch. Mons.
Ormesby Hall – investigation to floor	National Trust	Grade I
Nostell Priory, Repairs to Perron	National Trust	Grade I

Sam Smith

From: Mark Turner <M.Turner@patrickparsons.co.uk>
Sent: 05 July 2016 14:26
To: Sam Smith
Cc: Leon Walsh
Subject: RE: Crayke Castle - Structural Services - Fee Proposal Request

Categories: Gekko

Sam,

In principle, we could work to a fee of 1.25% of £1.4million, which would equate to £17,500 + VAT, so long as the scope of works and attendance at meetings / site inspections was limited to work within that amount. I appreciate that the scope has not necessarily been firmed up as yet, so we would have to revisit our fees once the scope has been determined.

It may be more appropriate to take a two stage approach, where we review initial proposals based on a desk top review of the existing and proposed drawings, followed by intrusive opening up where appropriate. This will allow the team to develop the design sufficiently for a tender package to be produced (albeit it's possible that there will still be some caveats/provisional sums). We could then cover the construction phase works on an hourly rate where the client only paid us for whatever site inspections etc were necessary. Might this be of interest to the client?

Regards,

Mark

From: Sam Smith [mailto:Sam.Smith@purcelluk.com]
Sent: 05 July 2016 11:08
To: Mark Turner <M.Turner@patrickparsons.co.uk>
Subject: RE: Crayke Castle - Structural Services - Fee Proposal Request

Thanks Mark,

The brief is very much in abeyance at the moment, however initial discussions have included the following items:

- Remove later infill partitions at ground and first floors and remove plaster to reveal original medieval walls
- New ground to first floor circulation, externally to the castle, reinstating what may have been the original stair location
- Achieve 6-8 high quality reconfigured bedrooms with appropriate high quality bathroom accommodation
- Create flexibility for possible other uses (events/ weddings etc)
- Improve access to roof as a viewing platform
- Remove modern conservatory/ removal or significant adaptation of nineteenth century wing with accommodation that benefits from the views
- Create a garden office in the partially ruined castle structure in the garden

Apologies if this is vague at this time, however we hope to consolidate the brief in the coming days/ weeks.

Many thanks

Sam

From: Mark Turner [mailto:M.Turner@patrickparsons.co.uk]
Sent: 05 July 2016 10:43
To: Sam Smith <Sam.Smith@purcelluk.com>
Cc: Leon Walsh <L.Walsh@patrickparsons.co.uk>
Subject: RE: Crayke Castle - Structural Services - Fee Proposal Request

Sam,

Could you send anything through that would give us an idea of the likely scope of works?

Thanks,

Mark

Mark Turner BEng(Hons) CEng MICE MIStructE
Director

Patrick Parsons
T: +44 191 2619000
M: +44 7795 816282
E: M.Turner@patrickparsons.co.uk
W: www.patrickparsons.co.uk

London **Newcastle** Glasgow Huddersfield Manchester Chester Birmingham Guildford Dubai Sydney

From: Sam Smith [mailto:Sam.Smith@purcelluk.com]
Sent: 05 July 2016 10:26
To: Leon Walsh <L.Walsh@patrickparsons.co.uk>; Mark Turner <M.Turner@patrickparsons.co.uk>
Subject: Crayke Castle - Structural Services - Fee Proposal Request

Good Morning, Mark/Leon.
I trust you are well.

I am writing regarding a project that I am currently working on in Crayke, North Yorkshire. The project includes the development, refurbishment and repair of Crayke Castle and associated structures onsite, an image of which is attached to this email. The building is a Scheduled Ancient Monument, Grade I Listed castle consisting of a 15th Century four storey tower house and attached outbuildings.

The scope and brief is yet to be determined, however the estimated contract value of the project at this stage is £1,400,000 covering RIBA Stage 0 to RIBA Stage 7.

It would be much appreciated if Patrick Parsons could provide a fee quotation for Structural services for the project. At this stage we are collating a number of quotes for client comment, with a view to demonstrating the most streamline cost possible for the project. It has been indicated that the following target percentages should be considered:

Structural Services: 1.25%

If you are interested in the project then please feel free to contact me with any questions you may have. I am onsite with the client on Thursday and it would be great to feedback some costs, if you are indeed interested.

I look forward to hearing from you in the near future.

Kind Regards

SAM SMITH
BArch(Hons), MArch, RIBA
Architect

Purcell
T. 01904 465151

sam.smith@purcelluk.com
www.purcelluk.com

METHODOLOGY WORKSHEET
Project: **Example - Grade II***
Job No: **T1606**
Date: **7th March 2016 Rev: A**

Structural & Civil Consultants Ltd

ITEM	**NW SERVICE WING – BEDROOM 8 ROOF STRUCTURE**	
Status	**Structural timber at this position has LOW historic significance. It is hidden and extremely common.** From the added beams and cellar structure, it would appear that the adjacent main house was not part of the original construction, but was taken from the Service Wing to enlarge the Billiard Room.	
Drawings	**T1606/N/101 and 103**	
Problems to existing structure	a. The existing roof was not designed for two storeys and has suffered decay. b. Trusses have been cut & removed. c. Although there is no eaves spread, the raised ceiling is too high. d. The ridge beam is not strong enough and bears onto a corbelling chimney. e. Two dormer roofs on the E. side are not adequately framed. f. Around 10% of the common rafters and ceiling ties are decayed, often at mid span or ¼ point and particularly against the north gable. g. At leak zones, the laths in the lath & plaster have decayed and are gone.	   Partial (ie fake inserted) truss in S dormer and N dormer with no frame at all.
Recommended Option 1 (Minimum intervention). Note that partial replacement of common rafters or ceiling ties is not recommended on this roof.	Strengthening & repair a. Install stiff purlins timber ridge beam below the existing. This will involve removal of 1 or 2 rafters and internal bricks to slide the beam back and forth, with making-good the bearings. b. Replace or supplement 10% approx of common rafters & ceiling ties where damaged. c. Replace lath & plaster where laths are decaying. d. All existing timber to be treated in situ. All new timber to be vacuum treated softwood.	 Purlins have to avoid the corbelled chimney stack  Decay in common rafters, wall plate and lath & plaster. Note the cut end of a truss tie beam.
Damage to be avoided	**The stone facades and gables should not be disturbed as visually sensitive. Lath and plaster to be kept where sound.**	

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Purcell
Marygate
York

Our Ref: V/T1
25th July 2016

Dear Sam

Crayke Castle – Consideration of Conservation Engineer and Fees

Thank you for your email dated 21st July. It was good to see Chris Cotton at Wallington. We confirm that Structural & Civil Consultants Ltd would be pleased to be considered for the role of Conservation Engineer. For projects such as this, I tend to work closely with a colleague Alice Bowers (IEng MICE) who tends to act as project engineer on a day to day basis. She is currently preparing a submission for Accredited Engineer (CARE). We have seven other engineers with different skills in the office at Northallerton.

As requested, we have prepared the following comments on approaches to fees, although we have no concept yet of the works at Crayke Castle.

Percentage Based Fees

We occasionally work with percentage based fees work for new areas of construction. However, for conservation, where the aim is to justify keeping the existing structure and minimising new works, there should ideally be an inverse correlation between engineering fees and construction costs, but no such system is known. We have firm examples that indicate that linking engineers fees to total cost as a percentage provides exceptionally poor value for clients and contentious engineers :-

1 We are currently working on a C17th domestic property for a very wealthy but cost-conscious client. We had declined two years ago to compete on a percentage basis with fees, but were subsequently asked to take over the conservation aspects after a major collapse during works specified by the first engineer. We immediately stopped the underpinning works that were 90% complete and which were being excavated with a Kango Hammer through rock! We could never have competed on a percentage basis, yet we would have saved the client many tens of thousands on the total costs.

2 We often find that time spent in the office assessing an old floor or a roof can exceed the time by a carpenter on site carrying out minor interventions to improve the capacity. If fees are on a percentage basis, it is not viable to spend time justifying negligible works.

3 We have a low-cost monitoring system that saves enormously on both time and cost if foundation movement is suspected. At Appleby Castle, it was assumed by Historic England that the SW tower, which was suffering most distress, would need to be underpinned. Our monitoring system took just 6 weeks to prove that the SW tower was the one moving the least. After 8 weeks, we found that all movement had ceased, and cracks had similarly stopped moving. We can now state confidently that the tower has suffered negligible movement for over two years.

4 At Wallington, the National Trust decided to mothball first floor rooms, pending budget allocation after our report on old decay and after visitors caused deterioration to the stucco ceilings below. At Crayke Castle, there may be areas of work that the client may wish to excluded from the main works if our inspection indicates relatively little cost-benefit and little risk if the works are postponed.

5 Conversely, at Hylton Castle, the design team have elected to use an expensive steel frame founded on piled RC caps. In such an instance, a fee percentage could be appropriate.

6 At Castle Howard, the prices submitted by the contractors for the actual strengthening of a domed roof have little relationship to the engineering aspects. Most costs appear to relate to scaffolding access, crash decks and over-roofing.

Fee Budget Option

The most logical approach involves us providing a budget for each area of work. We then let the client know if/why there is likely to be an overrun.

The other option is to provide a fixed fee, which results in us having to add contingencies that may not be required, so clients do not generally like that approach.

Conversely, where inadequate contingencies have been allowed, then cuts in professional structural services are rarely in the client's interest.

Methodology Sheets

The traditional approach has been for an engineer's inspection report to be prepared. However, more recently we have realised that Clients, Architects and Conservation Officers prefer areas of work to be broken down and "Methodology" sheets prepared. These can be easily changed to fit the Client's budget and aspirations. These versatile sheets can be used for gaining planning consents, right through to construction if the works are straightforward. We enclose a typical sheet for Sockburn Hall where the client started with the servants wings.

Fees

We generally work at the following rates:

Director	£70/hour
Chartered Structural Engineer	£55/hour
Incorporated Engineer	£50/hour
Graduate Engineer	£45/hour
Technician	£30/hour

I hope this is of interest and that our proximity to the site will be considered an advantage.

Yours sincerely

Robert Thorniley-Walker
MA(Oxon) CEng CEnv FICE FIStrucE CIHT IHBC FRSA
Conservation Accredited Engineer
Director
RTW@Structural.org.uk

Historic Building Experience

Historic, Listed and World Heritage Sites Throughout the United Kingdom

SERVICES: MEP & INFRASTRUCTURE ENGINEERING DESIGN

OVERVIEW: Over the past 14 years PrestonBARBER LLP have completed or are currently employed on a number of projects involving works to Historic and Listed buildings; below we outlined a concise sample of these:

- **Wentworth Castle, Barnsley (Grade I Listed - 1151065)**
  Client: Northern College
  Ongoing review and design related to energy reduction schemes within the Main House such as electrical refurbishments, heating replacements, etc.

Picture 1 — Wentworth Main House

- **Stable Block, Wentworth Castle, Barnsley (Grade II Listed - 1191779)**
  Client: Northern College
  General modifications to the existing building services within the block including energy conversation.

- **The Mansion House, Doncaster (Grade I Listed - 1151426)**
  Client: Doncaster MBC
  The works involved the re-modelling of various areas for DDA compliance and replacement of the existing lift.

- **Manningham Mills, Bradford (Grade II* Listed - 1314426)**
  Client: City of Bradford MDC
  Formation and fit-out of a Community Cafe and Community Centre within Ground Floor space of the Lister Mills Building.

- **The Burton Gallery, York Art Museum, York (Grade II Listed - 1257852)**
  Client: York Museums Trust
  The works included the refurbishment of the existing portrait gallery including new lighting, heating and ventilation systems.

- **Richmond Railway Station Visitor Centre (Grade II* Listed - 1157668)**
  Client: Richmond Station Trust
  The formation of new office areas within the existing roof space.

Picture 2 — Burton Gallery

SERVICES PROVIDED:

Mechanical
- Heating Services
- Domestic Water Services
- Mechanical Ventilation
- Comfort Cooling Services

Electrical
- General & Decorative Lighting
- Small Power Installations
- Fire Alarms Installations
- Lightning Protection

Public Health
- Above Ground Soil & Waste
- Above Ground Rainwater
- Below Ground Drainage
- Sprinkler Installations

HISTORIC BUILDINGS CONSERVATION

TYPE: CONSERVATION

VALUE: VARIOUS

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LOW CARBON CONSULTANTS

BRE Certification Limited
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Certificate Number ERC3057

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SERVICES: MEP & INFRASTRUCTURE ENGINEERING DESIGN

HISTORIC BUILDINGS CONSERVATION

TYPE: CONSERVATION

VALUE: VARIOUS

- **Huddersfield Railway Station, Huddersfield (Grade I Listed - 1277385)**
  Client: Trans Pennine Express
  These works required the installation of new ticketing barriers.

- **Marble Hall, Derby (Grade II Listed - 1393116)**
  Client: Derby City Council
  The conversion of the original Rolls Royce offices into a mixed use development of doctors surgery, business centre and day care nursery for use by the community, however the central 'marble' hall had to be protected and conserved.

Picture 3 — The Marble Hall, Derby

- **Tower Works, Leeds (Grade II Listed - 1256289)**
  Client: Tower Works
  The production of an energy efficiency report.

- **Hull Railway Station, Hull (Grade II* Listed - 1218434)**
  Client: Trans Pennine Express
  The refurbishment of existing ticketing office and waiting room.

- **Toft Green, York (Grade II Listed - 1256410)**
  Client: Network Rail
  The refurbishment of the existing building to incorporate modern services sympathetic to the original building

Picture 4 — Toft Green, York

- **Scarborough Market, Scarborough (Grade II Listed - 1273090)**
  Client: Scarborough BC
  The restoration, refurbishment and extension of the original market hall to include new 'historic' market stalls and a replacement of the Victorian mezzanine level with new to accommodate more retail space.

- **Lillycroft School, Manningham, Bradford (Grade II Listed - 131442)**
  Client: City of Bradford MDC
  The refurbishment of the existing school building including all services.

SERVICES PROVIDED:

Mechanical
- Heating system replacements
- Energy performance analysis and insulation upgrades
- General Mechanical Services

Electrical
- General & Decorative Lighting
- Small Power Installation
- Site wide Fire Alarms
- Lightning Protection

Infrastructure
- Site wide energy analysis
- Feasibility study into de-centralisation of boiler plant
- Renewable technology study

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Historic Building Experience

Historic, Listed and World Heritage Sites Throughout the United Kingdom

SERVICES: MEP & INFRASTRUCTURE ENGINEERING DESIGN

HISTORIC BUILDINGS CONSERVATION

TYPE: CONSERVATION

VALUE: VARIOUS

- **The Gun Room, Wentworth Castle (Grade I Listed - 11151066)**
  Client: Wentworth Castle Trust
  The works would involve the refurbishment of the derelict former gun store back to its original use as a 17th century summer family pavilion with the intention of utilising the space for small events;

  The original storage space to the rear would be converted into a small catering kitchen, all of which would provide a modern use for the restored building.

Picture 5 — The Gun Room, Wentworth Castle

- **St Edwards Church, York (Grade II Listed - 1256466)**
  Client: St Edwards Church
  Works to refurbish and modernise the existing church hall and link building to the main church.

- **St Johns Church, Dukinfield (Grade II Listed - 1068017)**
  Client: St Johns Church
  The construction of a new community centre and link building into the existing main church.

- **Captain Cook Schoolhouse Museum, Great Ayton (Grade II Listed - 1294452)**
  Client: Captain Cook Museum Trust
  The refurbishment and remodelling of existing museum to incorporate additional exhibits.

- **Belle Vue Terrace, Worcester (Grade II Listed - 1302948)**
  Client: Severn Capital (Marydene) Limited
  The conversion of the listed building from a semi-derelict state into a mixed use retail and residential development.

- **Kirkgate Market, Leeds (Grade I Listed - 1255765)**
  Client: Interserve Building Services
  Consultancy works concerning the existing rainwater installation, including historic design criteria to be utilised by the contractor during the refurbishment of the Market Hall roof.

Picture 6 — The Old Water Tower, Huddersfield

- **The Old Water Tower, Huddersfield (Grade I Listed - 1277385)**
  Client: ACoRP
  The restoration & conversion into 'low energy' offices of an existing railway structure for a charity.

SERVICES PROVIDED:

Mechanical
- Heating system replacements
- Energy performance analysis and insulation upgrades
- General Mechanical Services

Electrical
- General & Decorative Lighting
- Small Power Installation
- Site wide Fire Alarms
- Lightning Protection

Infrastructure
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SERVICES: MEP & INFRASTRUCTURE ENGINEERING DESIGN

- **Shipley College, Saltaire, Bradford (World Heritage Site - 1000099)**
  Client: Shipley College
  The construction of a new purpose built college facility within the World Heritage Site, boarding directly Saltaire village, the was the first new building constructed in the area for over 100 years.

- **Caretaker Cottage, Green Lane School (Grade II Listed - 1265259)**
  Client: Green Lane Primary School
  The refurbishment of the derelict caretaker cottage into a language skills centre for the primary school.

- **Green Lane School, Bradford (Grade II Listed - 1133607)**
  Client: City of Bradford MDC
  The refurbishment of the derelict former swimming pool and kitchen block into multi classroom and dinning facility for the school; the block was originally constructed as the first purpose built school kitchen in the UK.

- **Silk Mill, Derby (Grade II Listed - 1287508 & World Heritage Site - 1000100)**
  Client: Derby Museums
  We are currently engaged in the refurbishment of reputedly the world's first purpose built factory. The scheme involves the restoration and refurbishment of the building in a £17M overall scheme to bring new life to the mill.

  Full MEP Services to be provided as part of the HLF scheme.

Picture 7 — The Silk Mill, Derby

- **Beamish Museum, Beamish, County Durham**
  Client: Beamish Museum
  Although the scheme does not comprise any listed buildings certain ones will be translocated into the museum and restored to their original status, therefore the buildings will require to be treated as listed in terms of modern services concealment.

  The overall scheme has a value of £16M and is subject to HLF funding with PrestonBARBER providing full MEP services.

SERVICES PROVIDED:

Mechanical
- Heating system replacements
- Energy performance analysis and insulation upgrades
- General Mechanical Services

Electrical
- General & Decorative Lighting
- Small Power Installation
- Site wide Fire Alarms
- Lightning Protection

Infrastructure
- Site wide energy analysis
- Feasibility study into de-centralisation of boiler plant
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Preston BARBER Building Services Consultants

Our Ref: P4116 / 1CL001Pgrb

6th July 2016

Mr Sam Smith
Purcell Architects
29 Marygate
YORK
North Yorkshire, YO30 7WH

Dear Sam

CRAYKE CASTLE, NORTH YORKSHIRE

With reference to your recent email dated 5th July 2016 please find below our fee proposal for undertaking the design of the Mechanical, Electrical and Plumbing (MEP) Services for the refurbishment Crayke Castle, Crayke, North Yorkshire.

I would like to thank you for giving PrestonBARBER LLP the opportunity to provide you with a fee for this project and I hope that you find the information contained herein acceptable.

1 Services to be provided

The fee proposal has been based upon the contents of your initial and subsequent e-mails, plus attachments, dated 5th July 2016. I have assumed that the scope of works to be undertaken by PrestonBARBER LLP at this stage will include the following duties:

RIBA Stages 1& 2

1.1 Assess the utility records (water, electric, telecoms, street lighting, CCTV, overhead power lines, etc) for any necessary diversions that may be required

1.2 Undertake a preliminary services load assessment for the proposed refurbishment

1.3 Undertake preliminary discussions with Utility Providers as to the serviceability of the site from the existing networks surrounding the site

1.4 Obtain quotations from Utility Providers with regard to the upgrade of existing incoming supplies, diversions and reinforcements as necessary

1.5 Assess servicing strategies for the MEP Services and agree proposals / sign off with client

1.6 Attend 1No design team meeting on site (to undertake a project familiarisation survey)

RIBA Stage 3

1.7 Attend 2No design team meetings in York to review high-level servicing strategies

1.8 Provide details of servicing strategy / operational strategies for discussions and agreement with the Client

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1.9 Assist in high-level review of budgets costs for MEP installations

1.10 Commence dynamic thermal modelling of the building

RIBA Stage 4

1.11 Produce tender design drawings, as necessary for the relevant mechanical services, including heating, comfort cooling (as necessary), domestic water services, mechanical ventilation, etc for the refurbished building. Drawings scaled at 1:50.

1.12 Produce tender design drawings, as necessary for the relevant electrical services, including general internal lighting, external lighting, small power, telephone, data, fire alarms and security for the refurbished building. Drawings scaled at 1:50.

1.13 Produce tender design drawings, as necessary for the relevant plumbing services, including above ground soil & waste drainage for the refurbished building. Drawings scaled at 1:50.

1.14 Produce tender design drawings indicating any new incoming utility services, external lighting, power and water services as necessary. Drawings scaled at 1:100.

1.15 Produce calculations for all MEP services as necessary for design purposes and in order to support any Building Regulations submission

1.16 Produce a Specification of Works, including equipment schedules, to cover the design as shown on the Tender Drawings

1.17 Attend 3No design team meetings in York

1.18 Issue design package of above items for tender purposes

RIBA Stage 5 & 6

1.19 Assess tender returns and make comment

1.20 Issue updated tender information to Contract Status

1.21 Attend monthly progress meetings on site during the construction period whilst MEP works are being undertaken.

1.22 Review workmanship of services installations during the monthly progress meetings

1.23 Undertake defects inspections prior to completion of works

The following duties have been excluded from the fee but they could be included within a revised fee or undertaken at the time charge rates as listed within section 4 of this letter.

i. All fees associated with utility services applications

ii. Any specialist survey required for planning submissions (Acoustics, etc)

iii. All works associated with above ground rainwater drainage.

iv. All works associated with the below ground foul and surface water drainage

v. All works associated with flood risk analysis

vi. All works relating to foul and surface water pumping and / or on-site retention

vii. The production of working or fabrication drawings

viii. Attendance for testing and commissioning of the installed works

ix. Any requirements related to fire engineering or sprinkler design

2 Fee Agreement

Based on the above level of duties our fee proposal for these works would be **1.9%** of the total construction cost for the refurbishment of Crayke Castle, which we understand at present as being assessed as being in the order of £1.4M; this equates to a fee £26,600.00 (twenty six thousand, six hundred pounds) excluding VAT.

We understand that at present, the scope of works is not fully defined and therefore we have assumed a reasonable level of services works when compared to the total construction costs; when the scheme progresses we can revisit the above figure if necessary.

The above fee is *inclusive* of reasonable disbursements and shall comprise of the following:

i. Telephone and fax charges
ii. Postage charges *within the UK*
iii. Travel from our offices to meeting venues

However, PrestonBARBER LLP reserve the right to charge for any disbursements that constitute greater than normal project expenses, such additional monies will be discussed with the Client prior to their submission.

Please note that the fee proposal has been based on all information being issued electronically either by email or interactive CD Rom. No external issue printing and / or reproduction costs have been allowed for other than that stated within item 1 of this letter. **Any requested paper copies of either drawings or specifications shall be charged as additional disbursements at the rates stated in item 4 of this letter together with associated administration costs.**

I have based the fee proposal on PrestonBARBER being employed in accordance with ACE Schedule of Services Part G (b) M&E Non Lead Consultant, with the duties adjusted to reflect those stated above.

3 Basis of Fee Proposal

We acknowledge that Crayke Castle is a Scheduled Ancient Monument and Grade I listed.

We acknowledge that the brief for the project is not fully defined and subject to change, we have made allowance for this within our fee proposal but we would be happy to re-visit the above quoted figure once the scheme scope has been signed off by the Client.

We assume that works would not commence until Client sign-off has been achieved.

Preston BARBER
Building Services Consultants

4 Schedule of Rates for Time Charges Works

In the event that the project requirements exceed the criteria set out above our charge-out rates and disbursement costs would be as follows:

Partner	£80.00 / hr	
Senior Engineer	£65.00 / hr	
Engineer	£50.00 / hr	
Junior Engineer	£37.50 / hr	
CAD Technician	£30.00 / hr	
Admin	£25.00 / hr	
Mileage Rate	£0.75 per mile	
Paper Copies	A4	£0.10 per copy
	A3	£0.50 per copy
	A2	£2.00 per copy
	A1	£3.00 per copy
	A0	£5.00 per copy

The above rates are fixed until December 2016, after which we reserve the right to review the fee proposal.

I trust the above is self-explanatory and of interest to you, however if you require to discuss any of the above please do not hesitate to contact me.

Yours Sincerely

Graham Barber

Graham R Barber
For and on behalf of PrestonBARBER LLP

Enc

PrestonBARBER LLP Standard Terms and Conditions of Engagement

1. The following "Conditions of Engagement and Contract" shall apply to all of the "Works" carried out by the Company on behalf of the Client. They shall constitute the sole contract between PrestonBARBER LLP and the Client until such time as they are replaced by a written, agreed, signed and subsequent "Contract of Engagement."
2. The "Works" shall mean the Scope of Services, Duties and Activities provided by the Company to the Client and, as defined, within the attached covering letter.
3. The Company shall mean the PrestonBARBER LLP and whose title appears on the attached covering letter.
4. The Client is the person, company, authority or other body who instructs the Company to carry out the work. The Contract is between the Client and the Company.
5. The Client shall mean the addressee detailed on the attached covering letter.
6. The Client confirms that it is entering into this Agreement wholly on its own behalf and not on behalf of or for the benefit of any other party and agrees that in the event of any claim for breach of contract arising out of or in connection with this Agreement it shall be entitled to recover from the Company only the losses, if any, it has itself suffered.
7. The Appointment will be in accordance with the current Association of Consulting Engineers Agreement detailed on the attached letter. It shall include all latest revisions and amendments, save for fees and services, which are detailed on the attached letter. A copy of this document is available for inspection by arrangement at the Company's office as designated upon the attached covering letter.
8. In the event of any conflict of the ACE terms of engagement and PrestonBARBER LLP terms and conditions, PrestonBARBER LLP terms and conditions shall prevail.
9. The scope, nature and requirement of the Company's works shall be strictly limited to that detailed upon the attached covering letter. All works not included within the foregoing shall be regarded as additional and the Company reserves the right to charge for these additional works. Charges shall be recoverable on a time charge basis levied at the Company's non-discounted "hourly charge out rates by staff grade." The current schedule of "hourly charge out rates" is available from the Company and can be supplied upon request.
10. Recoverable fees shall be as detailed within the attached letter. All monies due to the Company are to be paid in £UK sterling, unless specifically declared otherwise.
11. The scale of hourly charge out rates will be amended annually, but the Company reserves the right to amend these at an interim date should exceptional circumstances so require.
12. In addition to the fee, invoices will include reimbursable costs and expenses associated with the work for travel, accommodation, subsistence, printing, computing and any other reasonable expenses unless otherwise agreed between the Company and the Client.
13. Invoices will be submitted monthly unless otherwise agreed by the Company.
14. Where third party services are contracted for by the Company in order to complete the work for the Client, the Company reserves the right to submit interim invoices to recharge the cost and management of third party services to the Client.
15. Value Added Tax (VAT) will be applied at the prevailing standard rate on all invoices rendered.
16. Payment is due on the date of invoice and accounts must be settled in full within twenty-eight days of the date of invoice.
17. Where payment is unduly delayed the Company reserves the right to charge interest on overdue invoices to be calculated at an annual rate of 2% above the Base Rate of the Company's bank, currently HSBC Bank plc.
18. The liability of the Company for any claim or claims arising out of or in connection with pollution and contamination is excluded.
19. The liability of the Company for each claim or series of claims arising from the same original cause shall not exceed the sum of £2,000,000. This figure may however vary according to the level of Professional Indemnity (PI) cover required by the Client under each contract but shall not excess £1 million. Clarification shall be sort prior to the signing of any contract and / or warranties.
20. The period of the Company's liability is from the effective date hereof to six years after this date.
21. The amount of Professional Indemnity Insurance to be carried by the Company for each claim or series of claims arising from the same original cause shall be £5,000,000.00
22. The period for which Professional Indemnity Insurance is to be maintained shall be from the effective date hereof to six years after this date provided that such cover is available at reasonable commercial rates and terms.
23. The amount of Public Liability Insurance to be carried by the Company is £10,000,000.00
24. The Company's "Duty of Care" to the Client shall be to exercise reasonable skill, care and diligence in the delivery of the scope of services defined within the attached covering letter.
25. Unless specifically stated to the contrary, any budgetary or programming opinion offered by the Company is to be regarded by the Client as broad guidance only and shall not be relied upon in any material issue by the Client. It must be reiterated that PrestonBARBER LLP are Building Services Engineers and NOT Quantity Surveyors or similar.
26. In the event of a dispute, which proves irresolvable by discussion and negotiation, the Company and Client hereby jointly agree to an initial process of Mediation, which, if unsuccessful, is to be followed by Adjudication under the statutory scheme. All costs, other than legal costs associated with the process, shall be borne in equal share by the Company and Client.
27. The Client and Company jointly accept that the conditions of the "Housing Grants Construction and Regeneration Act 1996" shall apply to this agreement.
28. The Company and Client jointly agree to adopt the principles, process and requirements of "the Construction and Engineering Dispute Pre-action Protocol".
29. All intellectual property rights and copyright associated with the Company's services shall remain vested in and the property of the Company. The Company may grant a specific licence for use. Any such licence is to be strictly limited to issues associated with the project or works. The Company will not accept any liability whatsoever for any use of the materials to which the licence is granted for any purpose other than the original intent. In the event that the Client is in default of payment of monies due to the Company such licence agreed is to be immediately withdrawn and revoked.
30. Nothing within these standard Terms and Conditions shall be regarded as a commitment by the Company to accept, adopt or participate in the novation or transfer of this agreement to any third party.
31. This agreement is for the sole benefit of the parties. Any terms, conditions and/or other provisions of this agreement which make reference to third parties shall not confer benefits and are not to be construed as conferring benefits upon such third parties pursuant to the Contracts (Rights of Third Parties) Act 1999. It is not the intention of the parties that any term or condition of this agreement should be directly enforceable by any person other than the parties to this agreement.
32. By receipt and in the absence of a written declaration to the contrary, these initial "Standard Terms and Conditions of Engagement," all as scheduled above, are accepted by the Client and deemed to constitute a contract between the Client and the Company for the delivery of the Works.
33. If any term or condition of this agreement is for any reasons held to be illegal, invalid, ineffective, inoperable or otherwise unenforceable, it shall be severed and deemed to be deleted from this agreement and the validity and enforceability of the remainder of this agreement shall not be affected or impaired thereby.
34. This agreement shall be governed by and construed in accordance with English law.
35. The parties hereby submit to the non-exclusive jurisdiction of the English courts.

Crayke Castle

Profile outlining TGA Consulting Engineers' approach and experience

July 2016

tga CONSULTING ENGINEERS
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TGA Consulting Engineers LLP are building services consulting engineers offering national coverage from offices in Durham, Newcastle, London and Hertfordshire. The Practice is owned by the Members of the LLP who are personally involved in all commissions.

We aim to maintain a diverse Client base and project experience in a range of market sectors including:

- Education (schools, colleges and universities)
- Healthcare (hospitals and health centres)
- Residential (individual, high quality premises and buildings with multiple units)
- Historic buildings
- Community and Leisure
- Industrial
- Museums and Galleries

TGA have a strong working relationship with Purcell Architects

Please Note: This document is intended to be printed in colour, double sided at A4, landscape and arranged "as a book"

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tga CONSULTING ENGINEERS

The Grace Darling Museum, RNLI, Bamburgh, Northumblerand

Contents

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Cartwright Hall Art Gallery, Bradford

Introduction to TGA

Quick Facts

- £2.5m Turnover
- 50 staff
- Low Carbon Consultants
- IIP Accredited
- In House BIM

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Introduction to TGA

TGA Consulting Engineers LLP is an expert provider of professional design and advice in the fields of Building Engineering Services and Building Sciences, and has been for over fifty years.

We were established as T G Armstrong and Partners in Durham in 1962 and are now based in offices on the outskirts of the city with easy access to the A1(M) and within walking distance of Durham railway station. Our office is a approximately 60 miles from Crayke Castle. TGA are currently working, with Purcell, at Auckland Castle and Durham Cathedral and have recently completed a significant private residential project in Harrogate.

We currently employ approximately 50 staff, all directly employed in the delivery of building services, based in our offices in Durham, Newcastle, London and Hertfordshire.

Our experience covers many sectors including healthcare, education (schools, colleges and universities), leisure, residential (both high quality individual properties and large multi-occupancy buildings), commercial offices, historic buildings, laboratories, industrial developments, museums and galleries, retail accommodation, hotels and others. We work on a wide range of project types including new build and refurbishments, procured via traditional design team led commissions and via design and build contractors.

As a wholly owned private limited liability partnership, a Director is actively involved in every project and is directly accessible throughout the course of the project.

Our engineers strive to understand your needs and expectations, and to create environments for improved performance, comfort and efficiency.

Our success is borne from our ability to adapt in a continually changing environment, staying abreast of the latest technology, legislation and, of course, by maintaining close relationships with our Clients.

Why TGA

- Locally based practice with local resource based in Newcastle and Durham
- Amongst the largest Mechanical and Electrical Design resource in the region
- Long term view to appointments; we attract the majority of our work (>85%) through repeat instructions
- Extensive experience of working in historic buildings and consequent understanding of the associated issues and their potential solutions
- Experience of working in high quality residential projects and appreciation of the available technologies and the necessary attention to detail
- Proven working relationship with Purcell
- Strong record of staff retention – offers continuity over lengthy projects
- Low Carbon Consultants – can generate innovative solutions to achieve sustainable outcomes
- Genuine Director level involvement in all projects
- TGA Core Team Structure – allows substantial resources controlled via a compact, manageable communications interface
- Aim to be a constructive and proactive member of the wider design team
- Long established Practice – formed in Durham in 1962
- Full technical capability including building modelling
- In house BIM and 3D Coordination capability using Revit Premium Suite

Harperley Hall, Co Durham

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North Bailey - Durham

Cabapilities

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Capabilities

Relevant services offered by TGA Include:

Concept Stage

- M&E Cost Advice & Budget Development
- Renewable Energy Studies
- Early Modelling & Input into Building form, glazing etc.
- Feasibility Studies
- Existing Services - Survey and Report
- Part L 2013
- Design development by M&E Lead engineers – gives holistic design
- Substantial experience of projects in Historic Buildings

Detailed Design Delivery Stage

- Substantial, flexible design resource
- Effective design management processes – TGA Core Team Structure
- Efficient and consistent communications interfaces with wider design team

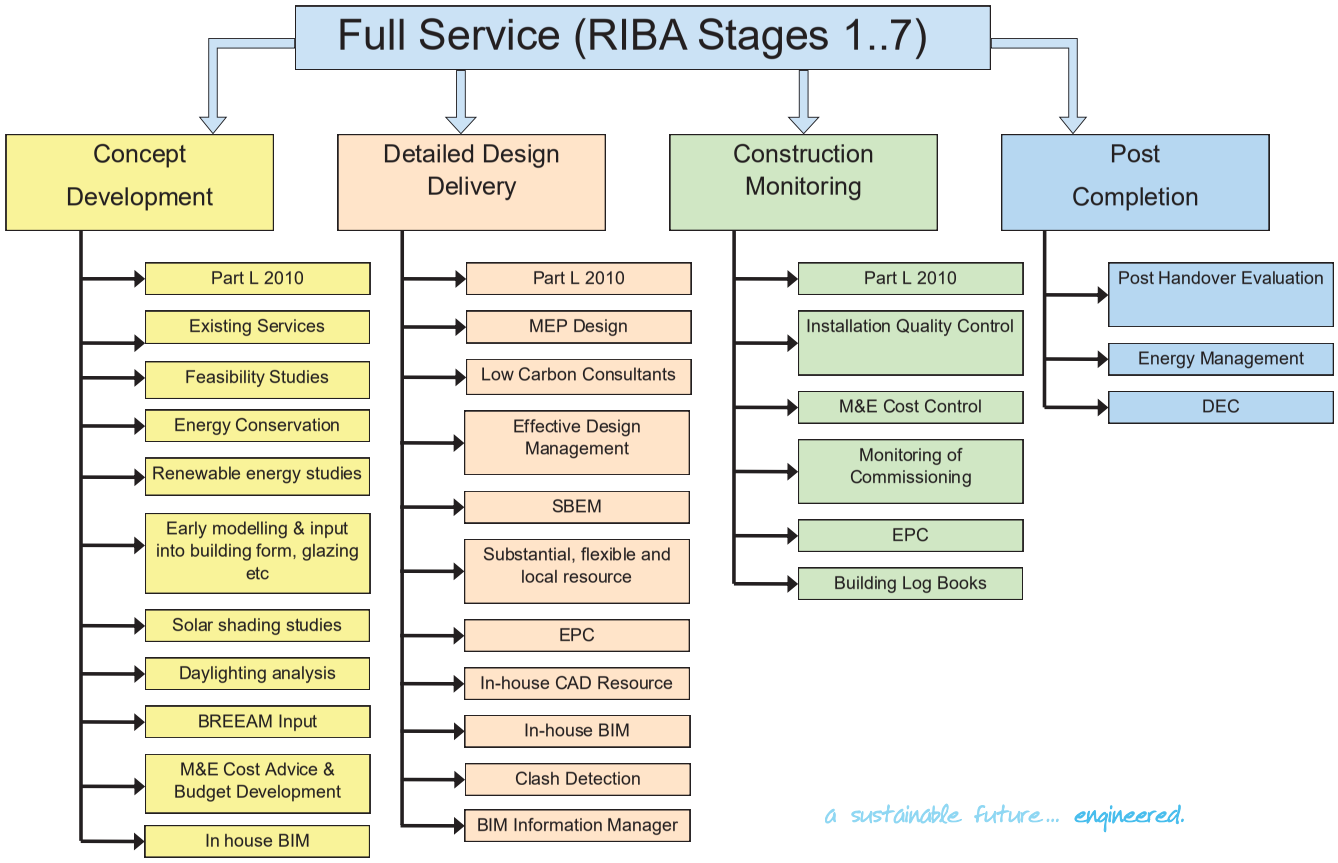
Construction Monitoring Stages

- Installation Quality Control by TGA design engineers and M&E Inspectors
- M&E Cost Control
- Monitoring of M&E Commissioning

Post Completion

- Post Handover evaluation
- Energy Management

tga CONSULTING ENGINEERS



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Bowes Museum

Introduction to TGA

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Building Engineering Services

Our origins are vested in traditional mechanical and electrical engineering services design disciplines.

TGA has many specialism's and is proud of its experience in the refurbishment of general building stock, but particularly historic and listed properties. This experience compliments our new build portfolio.

TGA provide consultancy services on projects with an average construction value of £0.5m to £20m, but we undertake a wide range of instructions from modest values up to £100m and above.

A diverse range of projects and expertise, through the ages:

Above: *Iona Abbey (c. 1200);*
Above right: *The British Museum (c. 1852);*
Right: *Maxim Park (2009)*

Low and Zero Carbon Technology

TGA has, for many years, advocated a reduction in energy consumption, carbon and particulate emissions. We consider this one of the normal duties and responsibilities of professional engineers.

Our background in the delivery of mechanical and electrical building engineering services over the last half century provides the solid and sound basis for effective and appropriate technology integration.

At concept, feasibility or design stage, TGA can develop a strategy for carbon reduction specifically for your site.

Right:

CEREB (The Centre for Efficient and Renewable Energy in Buildings) occupies the top floor of the new Keyworth Building at LSBU (London South Bank University). Technologies include Ground Source Heat Pump, Solar Thermal Array, Photovoltaics, Solar Fibre Optics, Wind Power, Tri-Generation and Phase Change Materials.

Left:

HMP Nottingham central energy centre which includes wood pellet boiler, gas fired boilers and gas fired CHP

The CHP plant installation at HMPS Nottingham has been confirmed as the largest CHP installation in use within Ministry of Justice Prison facilities.

Low and Zero Carbon Technology

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Passive Building Design

Building form, function, orientation and construction can be developed specifically to reduce energy demand.

Key benefits of TGA designs have been passive solar design, earth tubes, analysis of airflow paths around buildings to maximise natural ventilation and thermal mass to maintain stable internal conditions.

The ability of a building to interact with its environment means it can be less vulnerable to the instability experienced in many structures, avoiding extreme or rapidly changing internal and external environments that result in cyclic operation of internal conditioning systems. The result is less energy input, less frequently, to maintain comfort during winter, or to avoid overheating in summer.

TGA has provided thermal modeling and computational fluid dynamics on many projects, including schools, theatres and galleries.

TGA also provides Energy Performance Certificates (EPC's) to level 5, requiring DSM for 'most complex buildings'.

Above:

Gallery 40 in the British Museum. TGA carried out detailed modelling of Gallery 40, as well as Galleries 38 and 39 adjacent, which resulted in an innovative environmental control system which utilises free night cooling and optimises plant space while providing an effective system for visitor comfort and the protection of artefacts

Passive Building Design

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Experience

TGA can demonstrate extensive experience in a wide range of market sectors. It is our policy to maintain such diversity to protect us from sudden changes in individual sectors, while our size enables us to develop genuine expertise in many of the sectors in which we operate.

TGA specialise the design of mechanical and electrical building engineering services. Unlike many of our national competitors we do not carry other disciplines such as civil and structural engineering. As such, our experience and our resources are not distorted by the inclusion of projects or engineers associated with other disciplines.

On the following pages we have provided a brief summary of our experience in a range of sectors, relevant to the refurbishment of Crayke Castle including:

- Historic buildings
- Residential (individual premises and buildings with multiple units)

We can provide further details of our experience in any of the above sectors.

The examples given are directly attributable to our Durham office and do not, unless stated otherwise, include experience gained in Stevenage.

We also have a proven track record of working successfully with Purcell, including on many of the projects listed.

Ledston Hall - nr Castleford, Yorkshire

Experience

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Historic Buildings

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Historic Buildings

TGA have developed a specialism in the design of modern building services within historic buildings.

We are retained on a framework agreement at the British Museum where we have delivered over 250 projects over the last 20 years. We have subsequently built upon this experience through projects at Iona Abbey for Historic Scotland, in Durham Castle and other historic buildings for Durham University, in St Nicholas' Cathedral in Newcastle, at Durham Cathedral, at the Black Gate in Newcastle, at Bowes Museum in County Durham and at Hexham Abbey among others.

Our experience, detailed in the case studies which follow, of working in such environments is vested in current TGA staff based in our Durham office.

Above, left:

The Black Gate, Newcastle. TGA recently completed this project to utilise the Black Gate for exhibition purposes.

Below:, right:

St Nicholas' Cathedral, Newcastle. TGA have recently completed a project to renew electrical wiring systems throughout the Cathedral including providing new lighting installations inside the building and to the famous lantern. We are now starting on

Auckland Castle

TGA Consulting Engineers LLP were commissioned by the Auckland Castle Trust as part of a team led by Purcell Architects to design and supervise the Mechanical & Electrical Services associated with a £14m HLF funded refurbishment project.

The project will involve the refurbishment, conservation and remodelling of several areas of the historic Castle buildings which have been occupied by the Bishop of Durham for over 800 years.

The project will deliver new exhibition spaces within the principle rooms of the Castle as well as visitor amenities including a café, retail facilities, kitchens, cloakrooms and toilets.

Within the historic buildings, environmental control will be delivered using heating systems controlled on conservation heating principles with a view to controlling relative humidity. In certain areas, additional controls will be implemented with a view to achieving conditions required for loans covered by the Government Indemnity Scheme.

A new extension will also be constructed which will be provided with close control air conditioning in order to enable loans of sensitive objects from national and international institutions to be displayed. The environment in this building will be controlled in accordance with the requirements of BS5454:2000.

A new Welcome Building will also be constructed at the entrance to the site providing ticketing and orientation facilities, along with a new Energy Centre which will serve the whole site, enabling mechanical and electrical services infrastructure to be taken out of important historic spaces.

A geothermal heat source will be used to provide heat energy to the whole site via the new Energy Centre, whilst high efficacy lighting systems will be provided throughout with DALI based controls in exhibition spaces.

Experience

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Durham Cathedral

Experience

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TGA were commissioned by the Dean and Chapter of Durham Cathedral to design the M&E building services associated with their Open Treasure project.

This includes the development of a series of major spaces in which the historic treasures of Durham Cathedral can be displayed to the public in environmental conditions which are conducive to their conservation.

In order to achieve this TGA have carried out extensive modelling of the environments in various spaces and have explored means by which such design criteria can be achieved with the minimum impact on the historic fabric and the aesthetic qualities of the buildings.

In addition to this, the works are to be delivered within a live church environment.

Phase 1a of the project, including the provision of new retail (pictured below) and vestry facilities has been completed.

Phase 1b includes the refurbishment of the Monk's Dormitory, the Great Kitchen, the Refectory Library to provide new exhibition and interpretation spaces. This has recent opened to the public.

Works also include the development of a new energy centre and a new substation to serve the whole Cathedral precinct all located within the mediaeval buildings of Durham Cathedral in its' World Heritage site.

Hexham Abbey

TGA Consulting Engineers LLP were engaged as part of a team led by Purcell Architects to act as mechanical and electrical consulting engineers on the £2m HLF funded refurbishment of the former monastic buildings at Hexham Abbey.

These buildings, which incorporate significant medieval structures, have been used in recent years by Northumberland County Council, Northumbria Police and the Court Service as offices, cells and a courtroom.

The project created a new facility for the use of the Abbey including a museum in which artefacts held by the Abbey can be displayed and interpreted and in which the story of the Abbey Church can be told.

The refurbished spaces incorporate a café for the use of visitors to be Abbey, education spaces for the use of school parties and the community, toilet facilities, office spaces and a series of meeting rooms for use by the church community.

Finally, a substantial reception space was formed in the former ballroom which has, in the intervening period, been used as a courtroom.

The project incorporates modern building engineering services provided in an manner which compliments the aesthetics of this important building whilst minimising the impact on the historic fabric.

Museum spaces include facilities to provide appropriate environmental conditions both for the comfort of visitors and for the conservation of artefacts displayed within them.

New systems were designed to make maximum use of the inherent properties of the massive and ancient building structure whilst incorporating modern, renewable technologies wherever possible.

The project was completed in the summer of 2014.

Experience

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Bowes Museum

Bowes Museum - Silver Gallery

Experience

TGA Consulting Engineers LLP were commissioned by The Bowes Museum to design and supervise the Mechanical & Electrical Services and Lift Installations associated with the £3.6m Access to Collections project.

The project involved the refurbishment and remodelling of several areas of the building including visitor amenities, Entrance Hall and Reception, Education Suite, Silver and Precious Objects Gallery, Textile and Dress Gallery, Function Suite, Central Stores and Library, Archive and Study Centre.

In addition to the normal range of mechanical and electrical services, the project also included many elements of work which were specific to the protection and display of precious and delicate artefacts.

The main challenge to the design team was the provision of a modern public facility within the constraints of an historic building.

The incorporation and routing of the new M&E services into a building of this type required careful consideration and detailed planning in order to conceal the services in the building fabric. The appearance and finish of services which needed to be visible were selected to complement the architectural aesthetic of the respective areas.

The successful completion of this project has lead to a further commission to refurbish several more galleries and additional visitor amenities.

The Bowes Museum has won the Conservation category at the 2010 RICS North East Renaissance Awards, as a result of these recent projects.

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The British Museum

TGA have been continuously engaged at the British Museum for over 20 years, most recently via a series of framework agreements which are now in their third generation.

In this time we have delivered over 250 projects, including single and multiple gallery and public space refurbishments as well as creating new public spaces from former back of house areas. We have also been engaged in projects to refurbish and remodel of staff facilities throughout the site.

We have designed a series of projects to provide storage for artefacts ranging from coins and medals, feather headdresses to mummified human and animal remains.

TGA have also been continually developing the mechanical and electrical infrastructure services around the site, including central boiler plant, chillers, switchgear and risers.

Above, right:

The PDF Gallery

Below, right

The East Stair, refurbished as part of Galleries 49..53

Experience

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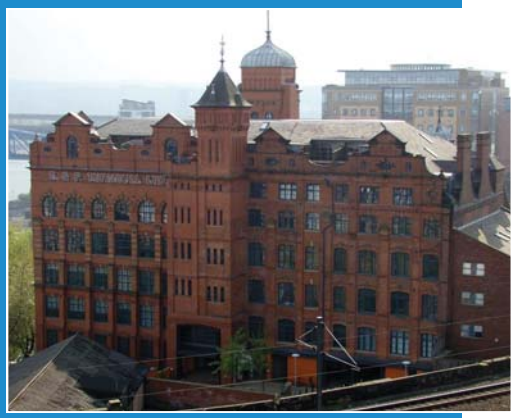
Residential Property



The Turnbull Building, Newcastle

Experience

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TGA Consulting Engineers have worked on a range of residential projects including individual residences and multi-occupancy developments.

Examples of the former include Flass Vale House in Durham, and a number of individual properties in Princes Gate adjacent the Royal Albert Hall in London, in Westminster, Hampstead, Canonbury Square, London and a large private property in Northamptonshire. The latter were all designed by our Stevenage office. We have also recently completed a large, high quality private residence in Harrogate. And are currently working on another in Weardale.

Notable multi-occupancy developments include the Turnbull Building overlooking the River Tyne in Newcastle, the Sovereign Building in Newcastle and the Walkergate Development in the centre of Durham.

TGA are also retained by the HCA (Homes and Communities Agency) as part of a team with Campbell Reith (Civil and Structural Engineers) on a national framework agreement through which we have been commissioned on a range of major infrastructure development projects associated with residential projects. We are, for example, currently engaged in the renewal of heating and hot water systems in Camden, London, for a 24 storey tower block and on a series of similar projects in Islington as well as a 19 storey new build development near Paddington station.

High Quality Residential Property

TGA recently provided mechanical and electrical engineering and sustainability services for a cutting edge residential development in the heart of rural South Northamptonshire. Designed by James Gorst Architects, the development includes a centre piece mansion house constructed around a courtyard which looks back to adjacent classic car accommodation, staff accommodation and farm office buildings. A central boiler house uses a biomass boiler powered by fuel derived from the farm and provides energy to all of the buildings on the main site.

The overall floor area of the main house was 2,818m2.

A fully integrated automatic controls system was provided to control the engineering services installations. This was integrated with an extensive home automation system that used Crestron and Lutron technology to provide full control of lighting, scene setting, ventilation, openings, blinds, curtains and audio visual installations.

Facilities within the main house included one of the most advanced non-commercial cinema installations in the world within a dedicated basement theatre, swimming pool and spa, gymnasium, tatami room, library, games room, snooker room, dance hall, staff quarters and other general living facilities.

Basement areas were ventilated using low energy heat recovery units connected to earth tubes which precool or preheat supply air, depending upon season. A central stack is used to promote buoyancy driven ventilation throughout the house. An automated high level opening, again controlled by the home automation system, controls airflow and temperature.

Sustainability was a key element of the project. Locally sourced stone was used to clad the building, recycled glass insulation manufactured by Foamglas provided high thermal performance with low embodied energy. Extremely high performance glazing was used, selected to specifically reduce solar gain on southern and western facades and maximise passive solar heating in other areas.

Hotel George V, Paris

Experience

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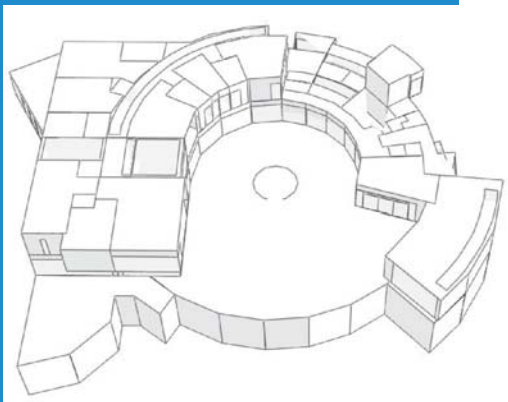

Image from thermal model

Experience

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High Quality Residential Property

TGA have recently completed a large high quality residential property in Harrogate, Yorkshire for a private Client. The building incorporates a basement garage for the Client's car collection and a curved swimming pool.

The new build property is naturally ventilated with external opening windows and high level openable roof lights. Thermal energy generation utilises condensing boilers and a Combined Heat and Power Unit (CHP) which heats the property via underfloor heating provided complete with zoning control via manifolds

Lighting systems include internal LED lighting and feature lighting complete with DALI ballasts for total Lutron Control. Feature 'exhibition' lighting has been provided in the basement garage which also incorporates positive pressure ventilation systems to avoid the transfer of odours and fumes and a sprinkler system designed in accordance with Ordinary Hazard 2.

Security systems including intruder detection, access control and CCTV systems, whilst automatic fire detection systems are provided incorporating aspirating devices and concealed sounders.

There is a rain water harvesting system with by-pass arrangement, a roof mounted photovoltaic array and complies with the Code for Sustainable Homes Level 4

It also has a complete Home Automation system using Lutron Graphic Eye (lighting, blind and curtain control) and a deparate Building Management System (BMS) to control main plant with an interface to the Home Automation system

The Home Automation system has a Central Control Unit (fixed touch screen device) as well as an interface allowing control via a tablet or smart phone.

The building also features a home office suite and meeting room facilities as well as a large commercial kitchen for outside catering.

How we work

Approach

- TGA aim to establish a compact "core design team" who are supplemented as required during the project
- Our Project Director has an ongoing involvement in Project
- Project managed on day to day basis by Project Leader
- Project Directror and Project Leader attend all TGA design review meetings
- TGA have low turn-over of professional staff and aim to build long term "partnering" relationships with Clients
- All staff employed locally

Summary of Roles

Project Director

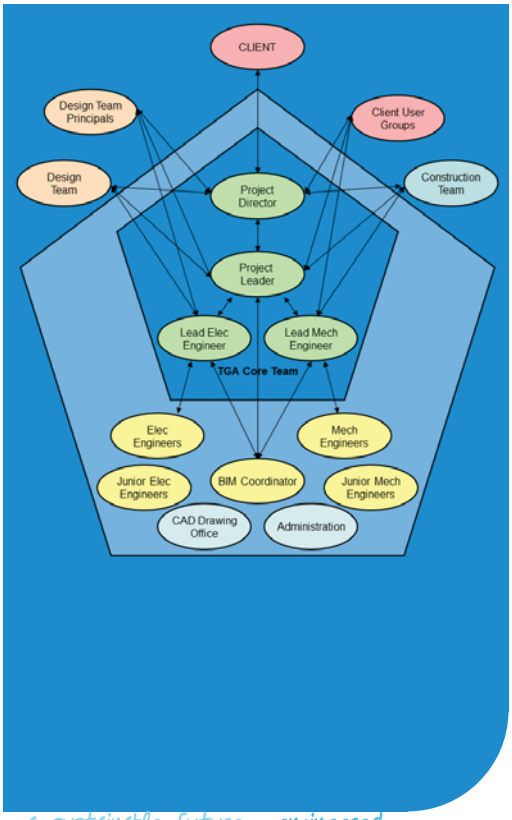
- Responsible for the project
- Liaison with principals within the Client's organisation and those of our fellow design team and construction team members.

Project Leader

- Senior Engineer or Associate
- Responsible for the management of the project or Framework within the office
- Ensures that the project is adequately resourced
- Implements the Practice's Quality Management System
- Chairs project review meetings
- Monitor the project throughout all architectural stages.

Lead Project Engineer

- Usually one mechanical and one electrical
- Senior Engineers
- Lead Engineers roles in their technical discipline for the project



Our Heritage

Our Heritage

The Practice was formed in Durham in 1962 by the late Tom Armstrong as T G Armstrong and Partners and incorporated as an LLP in 2007.

TGA is wholly owned and managed by its Directors and Members, who are individually involved in every commission. Our Durham Office is managed by Graeme Carr and Jason Jobes, whilst Mike Waugh oversees the Newcastle Office, Stevenage is run by Alex Maguire and London by Stephen Olley and Stewart Park.

Our ownership structure has delivered steady growth over the last 50 years with the practice expanding out of Durham into Newcastle, Stevenage and London via Welwyn and York whilst encouraged stability among our staff with a high proportion remaining with the Practice for many years. This has enabled us to build enduring relationships with our Clients, through offering them a reliably good service delivered by consistent personnel.

We have evolved a culture which recognises that the success of the Practice is only achievable through the collective efforts of our team. We thus seek to offer our staff the opportunity to work in a stimulating environment which encourages them to grow and develop both academically and in terms of work experience.

This approach is exemplified by the high proportion of engineering staff who join us as trainees or CAD technicians and then progress through day release education at college and university to occupy senior positions, as well as by our strong performance in Investors in People assessments.

We have recently established an apprenticeship programme in which we have established links with local secondary schools, recruiting capable students into our business. Apprentices initially join our CAD Team before moving into engineering through a combination of "on the job" training, mentoring and formal university based education.

Staff Resources

We recognise the need to attract and retain high quality staff. We thus aim to develop sustainably whilst attaining the position of "Employer of Choice" within the regions from which we recruit staff.

To this end, TGA Consulting Engineers will:-

- Fulfill its social responsibilities towards its employees and the communities in which it operates.
- Seek to recruit staff to meet long term needs, thus minimising the risk of developing a "hire and fire" reputation
- Seek to recruit, generally, at a relatively junior level, thus enabling new staff to learn our ethos before attaining high profile, Client facing positions. We will seek to recruit at engineer level and below with posts at senior levels (Senior Engineer and Associate) being filled through internal promotion
- Offer structured training to all staff to enable them to develop to the mutual benefit of the individuals and the Practice
- Maintain Investors in People Status

By following the above, we aim to maintain a consistent, sizeable and flexible staff resource which can be managed, through the application of our Core Team structure, to deliver projects ranging from small to large in a variety of different environments.

TGA Coast to Coast Challenge—Arriving at Tynemouth

Staff Resources

Key Facilities

TGA's Durham Office

Key Facilities

Description

- Professional Indemnity Insurance cover: £10,000,000
- Employers Liability Cover: £10,000,000
- Public Liability Cover: £10,000,000
- Quality Management System: Externally audited to BS EN ISO 9001 : 2008
- Environmental Policy: : Externally audited to BS EN ISO 14001 : 2004
- Drawing Production: AutoCAD 2014
- In house laser plotting and printing facilities up to A0
- Computer Aided Design: IES Virtual Environmental Building Analysis Software, HevaComp Mechanical and Electrical Design Suite, Amtech CableMaster (Electrical), Dialux Lighting Design Software
- Part L Compliance: IES Suite of software packages offering full / Thermal Modeling: Thermal Modeling and CFD analysis
- Standards Information: On Line internet based, provided by IHS
- Investors in People: Accredited
- Constructionline: Registered
- CHAS: Registered as compliant designers
- Low Carbon Consultants Registered
- Energy Assessors (EPCs) Qualified
- Full BIM Capability / 3D Coordination - Autodesk Building Design Suite 2014
- Clash Detection
- Information Manager Role

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Summary

- Substantial, local resources based in Durham
- Dedicated to M&E Design
- Full, detailed design service
- Varied relevant experience including:
  - Historic Buildings
  - High Quality Residential
- Long term view to appointments (>90% of commissions are repeat appointments)
- Strong record of staff retention
- Low Carbon Consultants
- Genuine Director level involvement
- TGA Core Team Structure
- Long established Practice – 1962
- Full technical capability including in house building modelling
- In house 3D Coordination and full BIM capability
- BIM Information Manager
- Clash Detection

TGA Consulting Engineers LLP

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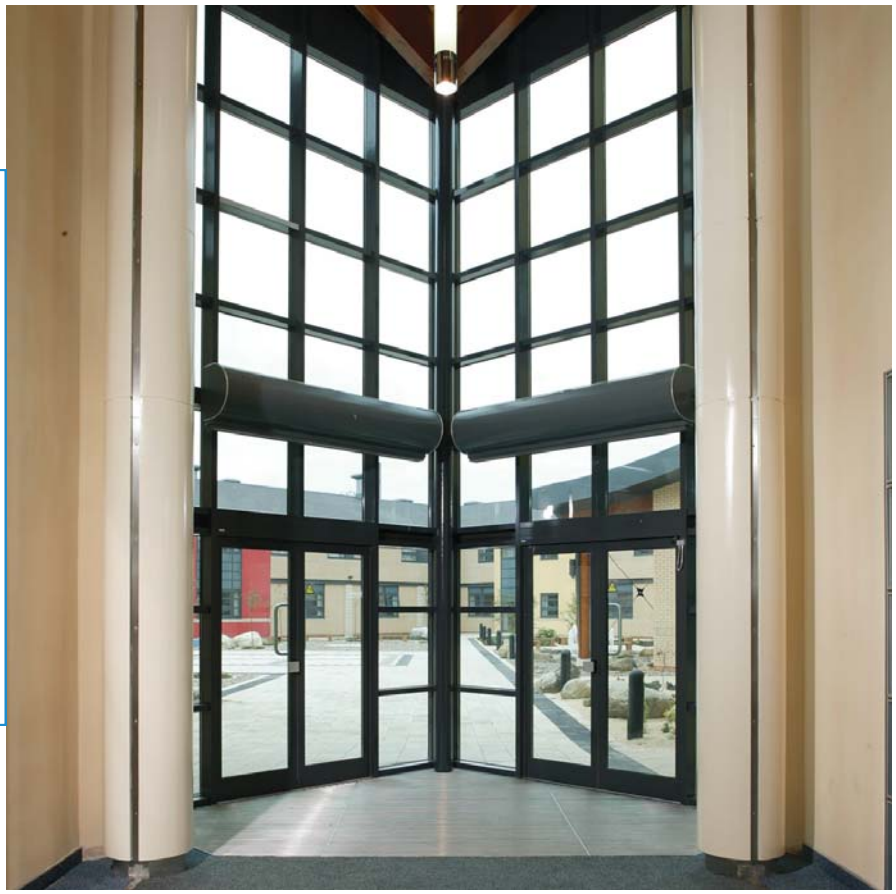


Sam Smith

From: Graeme Carr <Graeme.Carr@tgace.co.uk>
Sent: 05 July 2016 11:09
To: Sam Smith
Cc: Jason Jobes
Subject: RE: Crayke Castle - M&E Services - Fee Proposal Request
Attachments: Knight Frank brochure.pdf

Categories: Gekko

Good morning Sam,

Thank you for your e-mail.

Would I be correct in assuming that this would be residential project for use as a home (along the lines of Dryderale Hall, although probably without the scope for extensions) rather than a commercial refurbishment for museum purposes or similar (such as Auckland Castle or Hexham Abbey for example).

I did a quick online search and came up with Knight Frank sales brochure (copy attached) for the building which is quite useful as it contains some internal photo's and even floor plans.

Assuming this to be the case, then yes, we would very much like to be considered to join your team.

In terms of fees, the 2.0% you have outlined is broadly in line with fees that we have adopted in previous projects in similar environments. I am, however, aware that we currently know almost nothing of the M&E scope for this project and thus what we would need to deliver for this fee. For your information, 2.0% of £1.4m equates to, broadly, 5 weeks of time for 2 No. Engineers (1 M and 1 E) over the life of a project.

I wonder if we might consider thinking about establishing a fee basis now for the initial design stages (say, to RIBA Stage 2) at which time we will have a much better feel for the M&E scope, allowing our fees to be more closely aligned to it for the more intensive stages which follow. This might equate to 0.4% or, using the above figures, £5,600 ex VAT. We may then find that the M&E scope is greater or less that reflected by a 2% overall fee, enabling us to fine tune our fees accordingly, but on an objective and open basis.

Of course, I appreciate that you may not wish to present this approach to your Client, in which case, we would be happy to proceed on the basis of 2.0%, but suggest that we still go through the above exercise with a view to informing both us and you for the benefit of future bids of this type.

I hope that this answers your question, but if you need any further information or backup materials then please let me know.

Finally, as an aside, could you please let me know where we stand re Dryderdale Hall? Everything seems to have gone very quiet of late.

Regards,

Graeme

Graeme Carr
Director
T: 0191 3862314
E: graeme.carr@tgace.co.uk
W: www.tgace.co.uk

From: Sam Smith [mailto:Sam.Smith@purcelluk.com]
Sent: 05 July 2016 10:26
To: Graeme Carr <Graeme.Carr@tgace.co.uk>
Subject: Crayke Castle - M&E Services - Fee Proposal Request

Good Morning, Graeme.
I trust you are well.

I am writing regarding a project that I am currently working on in Crayke, North Yorkshire. The project includes the development, refurbishment and repair of Crayke Castle and associated structures onsite, an image of which is attached to this email. The building is a Scheduled Ancient Monument, Grade I Listed castle consisting of a 15th Century four storey tower house and attached outbuildings.

The scope and brief is yet to be determined, however the estimated contract value of the project at this stage is £1,400,000 covering RIBA Stage 0 to RIBA Stage 7.

It would be much appreciated if TGA could provide a fee quotation for M&E services for the project. At this stage we are collating a number of quotes for client comment, with a view to demonstrating the most streamline cost possible for the project. It has been indicated that the following target percentages should be considered:

M&E Services: 2%

If you are interested in the project then please feel free to contact me with any questions you may have. I am onsite with the client on Thursday and it would be great to feedback some costs, if you are indeed interested.

I look forward to hearing from you in the near future.

Kind Regards

SAM SMITH
BArch(Hons), MArch, RIBA
Architect

Purcell
T. 01904 465151

sam.smith@purcelluk.com
www.purcelluk.com

Met Geo Environmental Ltd
Southgate House
Pontefract Road
Stourton Leeds
West Yorkshire
LS10 1SW

T : + (0)113 200 8900
F : + (0)113 200 8901
E : admin@metgeoenvironmental.com

www.metgeoenvironmental.com

13 July 2016

By Email Only

Our Ref: 11726/131

Mr Sam Smith
Architect
Purcell
29 Marygate
York
YO30 7WH

Dear Sam

Re: Crayke Castle, Crayke Lane, Crayke, York

Thank you for the invitation to quote for survey work at the above site in accordance with your enquiry of 8 July 2016.

Further to our conversation this morning I have estimated a budget for the topographical survey. I have done this on the basis of your description that the tree area to the north of the building having been cleared of trees but elsewhere there being a substantial level of undergrowth that would impede access to various areas. These areas have to be surveyed as a 2 man team rather than clear areas where a 1 man team using robotic instruments is adequate.

Based on the above, my budget estimate to undertake the survey is £1,600.00 plus VAT. Our current lead-time is approximately 2 working days and we would expect the final drawings to be in your possession approximately 5 working days from commencement on site.

You stated that the client may well have some clearance works undertaken on the site and if this is the case it will likely allow a reduction in the above sum but the level of reduction will depend upon the extent of the clearance.

Our fee to undertake a utility survey would be £1,540.00 plus VAT, to include lifting and recording all inspection covers, tracing utilities using electromagnetic location techniques and ground penetrating radar scanning of hardstanding areas. We require clear walking access to be able to scan the ground therefore areas of dense vegetation would be excluded from the survey area. Our current lead-time for utility surveys approximately 10 working days and we would expect the final drawings to be in your possession approximately 5 working days from commencement on site.

Our fee to undertake a magnetic gradiometer survey of suitable areas for archaeological remains within the fields to the north of the developed site would be £980.00 plus VAT. We have assumed that grass and vegetation is cut short in these areas as long grass and dense vegetation would restrict the area available for survey.

If successful, could you please forward with your authorisation letter, all details for access arrangements plus the name, address and telephone number of who should be invoiced for the work. If you need us to include a PO number on your invoice, please supply us with this information prior to commencement of the works.

We confirm that Met Geo Environmental Ltd has Public Liability and Employers' Liability cover of £10 million and Professional Indemnity cover of £5million. Our integrated Environmental & Quality Management System is certificated to ISO14001/ISO9001 by NQA. We are a CHAS accredited company and also hold Link-Up v2 accreditation.

I trust this meets with your approval but if I can be of any further assistance please do not hesitate to call.

Yours sincerely

Chris Jones
Director

For and on behalf of Met Geo Environmental Ltd

For a complete guide to our Terms & Conditions please download from:
http://www.metconsultancygroup.com/downloads/MetGeoEnv_Survey_Terms.pdf

Met Geo Environmental Ltd VAT Registration No. 828218422 Registered in England No. 3587140 Southgate House, Pontefract Road, leeds LS10 1SW

Silkstone
Surveys
www.silkstoneenvironmental.co.uk
Land & Measured Building Surveyors

7 Hall Annex
Thorncliffe Park
Chapeltown
Sheffield
S35 2PH

Tel: 0114 2573487
Fax: 0114 2573459

Mr. Sam Smith
Purcell UK Ltd.
21 Marygate
York
YO30 7WH

Our Ref: 16123

sam.smith@purcelluk.com

14th July 2016

Dear Sam,

CRAYKE CASTLE
TOPOGRAPHICAL & MEASURED BUILDING SURVEY

With regards to the above, your telephone call and subsequent email on 11th July 2016, please see below our fee proposal for the work.

- Topographical survey of all features (including building / ruin outlines) within the area outlined in red on the plans provided. The survey will include each individual tree. The eave heights of the stable / garage building in the south-east of the grounds will also be provided.

- Measured building survey of the main castle building including floor plans (4no.), elevations and cross sections.

- Measured building survey (where possible and practical) of the large ruin adjacent to the main castle building. A floor plan of the ground floor will be provided plus the second floor if accessible. Cross sections and elevations will also be provided if possible.

- Provision of drawings in AutoCAD 2D and 3D DXF format. Hard copies can be provided on request.

TOTAL FEE: £4,800.00 + VAT

If you do not want us to survey each individual tree we can just survey the tree canopy's and provide an outline of the area of trees on the drawing. There will be a price difference of minus £170.00 + VAT if you wish to go for this option.

As discussed on the telephone we will be able to survey the underground reservoir for you if required. A separate price for this work will be provided on request once we have assessed the area.

The survey will be tied into National Grid and datum using GPS where possible. We assume that we will have uninterrupted access to all areas requiring survey on arrival to site.

If you have any further queries relating to this quote, please don't hesitate to contact me.

Yours sincerely

Richard Lord BSc (hons) TMICE Eng Tech
Senior Engineer
Silkstone Environmental Ltd.

iema INSTITUTE OF ENVIRONMENTAL MANAGEMENT & ASSESSMENT

Registered Office: 7 High Street, Silkstone, Barnsley, S75 4JJ
Silkstone Environmental Limited
Registered in England no 3984219

ace consultancy engineering business environment

11th July 2016

Our Ref: Purcell/4912-2/CT
Your Ref: CC/EML

Purcell Architects
29 Marygate
York YO30 7WH

Dear Sirs,

Measured building survey, Crayke Castle, Crayke, North Yorkshire.

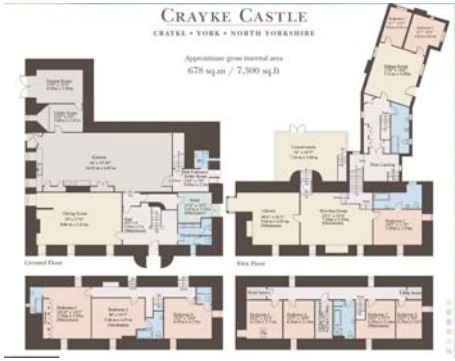
Thank you for your enquiry for a measured building survey at the above location. We can confirm our price of £1,990.00 plus VAT for providing the information as requested in your email.

NOTES

Our quotation is based on the following

- Our price includes for the internal floor plans and external elevations of the main building only (as pictured below). The other buildings on site have not been included in our price.
- We will use laser survey equipment to capture the building's detail from various points on site. All detail will be located from ground/floor level only; **any part of the building that is obscured from view will be omitted from our drawing. This may include the roof which may not be visible from ground level.**
- We have assumed that the whole building is safe to enter without the need of additional health and safety requirements.
- Any detail above a suspended or fixed ceiling will be omitted from our drawings. Due to the Health & Safety risk to our surveyors, enclosed loft spaces will not be surveyed.
- Our price has been based on the plans as pictured and includes for 4 levels from ground to 3rd floor.
- All necessary parties to be notified of our presence on site to allow free access for our survey teams
- Unless specified all survey work is to be carried out between the hours of 8.00am to 5pm Monday to Friday. Any work required outside these parameters would incur a further charge (available on request)
- We have assumed free and unhindered access to all areas specified within the survey brief. Any revisits to site that may be required due to lack of access, etc. or other problems that are out of the control of CT Surveys Ltd will be charged for at £80.00 per hour.
- We have assumed that there is power and lighting in the building or as a minimum enough natural light to be able to carry out the survey.

SITE PLAN



Registered Office Address:
The Old Mill, Highfield, Tingley, Wakefield, WF3 1LA

Director: Chris Tutin **t** : 0113 259 7023 **m** : 07949 195764 **e** : mail@ct-surveys.com **w** : www.ct-surveys.com
CT Surveys Ltd is Registered in England No.5124766 V.A.T. Registration Number 842 696300

PROGRAM OF WORKS

We anticipate being able to attend site within 10-15 days following your acceptance of our price. We will confirm our programme of works once we have received your purchase order or letter/email of intent on company headed paper. If you require our survey data by a particular date, please inform us of this and we will do our best to comply.

TERMS AND CONDITIONS

- Our conditions of contract are on page 3 of this document.
- Our payments terms are 30 days from invoice date

INVOICING

Please complete and return our attached order form if you wish to instruct our services. We request that the correct company name, address, phone numbers and Purchase Orders be forwarded to us at the point of order. Failure to correctly complete the order form will result in us pursuing the recipient for payment.

We trust you will find the above acceptable. However, if we are unsuccessful with our quotation, could you please inform us of the price accepted so that we can remain competitive with future projects.

Should you require any further clarification on the above or discuss any other requirements of the survey, please do not hesitate to contact me.

Yours faithfully,

Chris Tutin

Registered Office Address:
The Old Mill, Highfield, Tingley, Wakefield, WF3 1LA

Director: Chris Tutin **t** : 0113 259 7023 **m** : 07949 195764 **e** : mail@ct-surveys.com **w** : www.ct-surveys.com
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Terms and Conditions of Supply

1. Terms

The following words shall have the following meanings in these Conditions of Supply

1.1 "Company" means CT Surveys Ltd

1.2 "Client" means any person or organisation who employs the Company, thus making a contract, which includes those acting as Agent for a Third Party.

1.3 "Services" means any Air, Land, Hydrographic, Building, Underground Survey, Setting Out or any other service provided by the Company to the Client.

1.4 "Plans" means the drawings, disks, reports or any media to be supplied as products of the services.

1.5 "Price" means the agreed fee or scale of charges for the Services.

2. Price & Payment

2.1 The Price is the quoted price, and if accepted is the agreed fee or scale of charges for the Services provided by the Company. All prices quoted exclude VAT and amounts become due 30 days after the date of invoice.

2.2 The quoted Price stated by the Company is fixed for a period of 90 days from the date of quotation.

2.3 The Company will charge 4%, above BLR, per month on a daily basis on overdue accounts until settled and will invoice all costs generated by Courts, Solicitors and/or Debt Collection Agencies in the recovery of such overdue accounts.

2.4 Where the execution of the Services extends into more than one calendar month, the company shall arrange interim valuations to be carried out at the end of each calendar month. The amount of the valuation shall be invoiced and is to be paid by the Client to the Company 30 days after the date of invoice.

2.5 The Company's quotation is based on the information provided by the Client. It may be subject to a re-quote should further information be provided or made apparent. If the additional costs cannot be agreed, we retain the right to refuse or cancel any orders or letters of intent arising out of the Company's offer.

2.6 The Client shall make all payments due under the Contract in full and without any deduction whether by way of set-off, counterclaim, discount, abatement or otherwise unless the Client has a valid court order requiring an amount equal to such deduction to be paid by the Surveyor to the Client.

3. Acceptance

3.1 The Client is the person or organisation that instructs the Company to carry out the Services. It is this Client who will be charged for the Services provided unless the Company has (in writing) a third party name and address for invoicing prior to the commencement of any Services.

3.2 Acceptance of arrival on site, the Plans or quotation/tender (verbal or written) for the Services by the Client, shall be deemed to be acceptance of these Terms and Conditions. The Client shall not cancel the contract without compensating the Company for work done to the time of cancellation plus 20% of the Price remaining. Any cancellation of instruction by the Client must be in writing, and agreed as cancelled also in writing by the Company.

4. Health & Safety

4.1 The Client shall ensure that the Site is safe and the Client shall comply with all statutory requirements as regards health and safety at work and any other relevant rules and regulations.

4.2 It is the Client's responsibility to supply the Company and its employees with safety helmets, protective clothing and all other safety equipment necessary for the safe completion of the Services and to ensure that such Safety Equipment is well maintained and complies with all relevant statutory requirements.

5. Access to the site

For the duration of the contract, the Client grants the Company and its employees, agents and sub-contractors a right of access and as necessary to occupy the site for the purposes of carrying out its obligations under the contract.

6. Sub-contractors

6.1 The Company may sub-contract the supply of the Services to a responsible and experienced sub-contractor.

6.2 Where any Services are supplied by a sub-contractor the Company shall be wholly responsible for the acts and omissions of such sub-contractor as though they were its own acts and omissions.

7. Delivery

7.1 Effective delivery shall be delivery to the Client, or by instruction, to a Third Party. The Company shall not be liable for any consequential loss due to late delivery of it's Plans or Services.

7.2 Where delivery is refused or where the Company is unable to deliver due to circumstances beyond it's control then the Company is entitled to treat the Contract as being fulfilled and invoice the Client accordingly as in Clause 2.1 – a non exhaustive list of such circumstances would include Act of God, weather conditions, flying or shipping restrictions, riot, International or National Government action.

8. Time

Any time stated or agreed by the Company for delivery or completion, either in it's quotation or by any other means is not the essence of any contract. Such times are given by way of general information only, and in the event that delivery or completion is not made for any reason whatsoever at the time so stated, the Company shall not be liable for any loss or damage sustained by the Client.

9. Rectifications

The Company shall be informed, within 60 days of delivery, in writing, of any items requiring rectification at the Company expense. If it is found that no error can be attached to the Company, any costs generated are to be reimbursed by the Client. The Client shall not be entitled to reject the Plans in whole or in part after this 60-day period.

10. Liability

The Company shall hold or effect policies of Insurance to cover Public Liability (£5M), Employers' Liability (£10M), and Professional Indemnity (£1M).

11. Copyright

The Copyright of the Plans shall remain the property of the Company who will grant an irrevocable licence for use by the Client once payment has been received in full. The Company may provide Plans prior to the issue of an invoice under a temporary licence agreement extending no more than 30 days from the issue of a subsequent invoice. A breach of Copyright will occur should payment not be made within this due period.

Proposal for the Provision of Topographical, Measured Building and Geophysical Survey

Crayke Castle

Reference: Q120716 – Purcell Architects

Dated: 12th July 2016

Prepared for :

Sam Smith
Purcell Architects
29 Marygate
York
YO30 7WH

Prepared by :
LandScope Engineering Limited
The Chart House
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SY6 6NT

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Registered in England ref. 5178492 Director : Martin J Berry BSc(Hons) MCinstCES MRICS

DOCUMENT CONTROL & REVISION STATUS

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Project	Proposal for the Provision of Topographical and Measured Building Survey
Client	Purcell Architects
Quotation No.	Q120716
Document Ref	server1:\....\Quotations\Q120716 – Purcell Architects
Submitted by	email

Document Control	Copy Number	Distributed to	Date
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	3		

	Revisions	Date	Originator	Checked by	Approved by	Client
0	Draft for IDR (Internal Document Review)	12/07/16				
1	Issue to client	12/07/16	ABA	TCA	MBE	

Signatory Legend

MBE	M.Berry
CWH	C.Whiteley
ABA	A.Bardoe

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CONTENTS

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1. INTRODUCTION TO LANDSCOPE ENGINEERING LIMITED

LandScope provides survey services to the engineering, built infrastructure and environmental sectors. The experience profile of LandScope has been developed to ensure that the right solution is found to your specific requirement. Given the assurance that our work is performed with the latest available systems and techniques you will be confident that your data is safeguarded, best utilised and readily transportable to its future application. Emphasis on project planning and in-field quality control ensures that the project campaign is designed to be efficient, provide rapid processing and reporting and avoid any duplication of effort. Clearly this all translates in to increased cost efficiencies for your organisation.

Established customers include:

- ✓ Laing O'Rourke
- ✓ Balfour Beatty
- ✓ Environment Agency
- ✓ Mouchel
- ✓ London Borough of Richmond upon Thames
- ✓ Lend Lease
- ✓ Carillion plc
- ✓ Thames WaterTesco
- ✓ Spence
- ✓ Amec
- ✓ WYG
- ✓ Pell Frishmann
- ✓ Galliford Try
- ✓ JN Bentley
- ✓ BCM Construction
- ✓ Rotherham District Council
- ✓ Nottingham Trent University
- ✓ Kier Group
- ✓ Serco
- ✓ TfL
- ✓ Waterman Group
- ✓ Parsons Brinckerhoff
- ✓ BAE Systems
- ✓ Grontmij
- ✓ Norwest Holst
- ✓ Black & Veatch
- ✓ Bilfinger Berger
- ✓ Port of London Authority
- ✓ Cowlin Construction
- ✓ Seddon Construction
- ✓ Amey
- ✓ Halcrow
- ✓ Oxford Council
- ✓ Babcock Rail
- ✓ Mansell
- ✓ Arup
- ✓ Atkins
- ✓ CA Blackwell
- ✓ Asda
- ✓ Raynesway Construction
- ✓ Lafarge Tarmac
- ✓ Ringway Jacobs
- ✓ Colas
- ✓ English Heritage
- ✓ Stewart Milne Homes
- ✓ Birmingham City Council
- ✓ Carmarthenshire County Council
- ✓ Ceredigion Council
- ✓ Statkraft
- ✓ Wates Construction
- ✓ William Grant & Sons
- ✓ Bouygues UK
- ✓ Bovis Lend Lease
- ✓ Barhale
- ✓ Wirth Research
- ✓ Westshield

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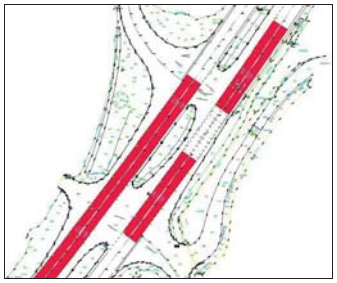
Having reviewed the requirement of Purcell Architects we are available to support your project requirements in the fields of :

1. **Topographical Survey**
2. **Measured Building Survey**
3. **Geophysical Survey**

Topographical Survey



Latest technology and systems available for deployment include :

- ✓ ***Trimble***® real-time kinematic (RTK) R10 GNSS
- ✓ ***Trimble***® **S8 & S6** Reflector-less and Robotic Total Stations
- ✓ ***Trimble® TX8*** and ***Faro Focus 3D*** Laser Scanning systems
- ✓ ***Leica Cyclone and Faro Scene*** processing software
- ✓ ***Autodesk® Building Design Suite 2015*** software solutions

These latest technologies revolutionise the land survey operation in delivering increased efficiencies (e.g. single person survey operations with RTK GNSS and Robotic total stations) in quality controlled data gathering and display, and subsequent processing and delivery. This means faster turn-around of data with less operational expense.

Autodesk® Civil 3D 2016 is the preferred data processing and drawing system. This latest release of *'industry standard'* AutoCAD® software designed specifically for the civil engineering and survey industry is immensely powerful and allows LandScope to read and generate data in all industry recognised formats (including Ordnance Survey MasterMap® GML), perform complex surface modelling and volumetric computation and produce the highest quality digital or paper based deliverable. The philosophy of a Geographical Information System (GIS) is at the heart of all services performed by LandScope is fundamental to the company philosophy. The spatial data management capability provided through the GIS is the common link between all elements of LandScope activity. Project data may be reviewed, analysed, manipulated and delivered from a single source whilst maintaining the highest level of 2D and 3D geographic position integrity.

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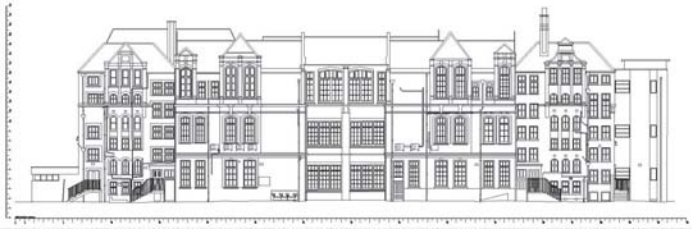
Measured Building Survey



The measured building survey services provided by LandScope offers a choice of deliverables. By utilising a range of laser scanners to provide accurate and detailed 3D point clouds the surveyor and end user are provided with the capability to extract vector distances, create 2D and 3D drawings, elevations or cross sections directly from the measurement domain. The outside-in approach means LandScope can provide you with any additional geospatial visualisation you require including:

- 2D Elevations, floorplans and sections
- 3D models
- 3D photo-draped models
- 3D rendered / parametric models
- BIM ready 3D Models

Our sophisticated laser scanning capabilities can provide for all your external and internal drawing and modelling needs.

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Geophysical Survey

LandScope provides an integrated, non-intrusive geophysical survey service with emphasis on campaign design, in order that your project benefits from a robust technical approach. Our geophysical surveys deploy a wide range of complementary geophysical sensors to ensure maximum value is derived from the data. We specialise in most aspects of geophysics including Ground Penetrating Radar (GPR), resistivity, magnetic, electromagnetics and microgravity. LandScope replaces traditional time consuming gridding and rope alignment with real-time positioning and the simultaneous use of complementary sensors. We also deliver a scientific approach to locating and characterising your targets of interest and will develop test and model new methods to satisfy specific requirements.

Applications include:

- Underground infrastructure mapping
- Environmental and ecological survey
- Engineering survey
- Archaeological investigation
- Hydrological

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2. SCOPE OF WORK & OUTLINE SURVEY METHODOLOGY

The proposed survey service has been designed around the Purcell Architects enquiry and the associated documentation dated 8th July 2016.

The proposed survey is required to address the need of Purcell Architects to produce:

- Topographical survey
  - To include all external areas within the property boundary
  - Levels to be collected at 10m centres
- Measured building survey
  - To include elevations and floor plans of main house and cottages
- Geophysical survey
  - To aid identification of potential archeological remains

To complete the survey in a professional and timely manner we have proposed to use the following technologies:

- *Trimble RTK-GNSS R10* and *Trimble S6* Total Station
- *Trimble TX8* and *Faro Focus 3D* Laser Scanners
- *GF Instruments CMD Explorer* Electromagnetic Conductivity Meter
- *GSSI SIR3000 GPR* with 400MHz Antenna

Measured Building and Topographic Survey

In order to expedite the topographic survey and measured building survey fieldwork, in addition to the traditional survey instrumentation, we have proposed the use of a Laser Scanning system which offers considerable advantages:

- Faster data acquisition
- Several orders of magnitude more data which allows for:
  - Greater quality control of data / drawings
  - A permanent model record of the buildings – this can be re-visited at a later stage to extract further detail – say for example the particular architectural detail of roofing, fenestration etc..
  - Facilitation and ambiguity removal during the CAD drawing process

The laser scanning equipment would provide a fast and efficient solution to the survey requirement. Future end users may return to the 3D point cloud model at any time in the future and take additional detailed measurements if and as required.

The proposed outline methodology is:

a) Install survey control with traditional traverse and GNSS equipment

b) Utilising the Trimble S6 total station, collect topographic survey data across the site as specified

c) Install laser scan reference objects (reference spheres and chequerboards) and coordinate with Trimble S6 total station

d) Acquire laser scan data of all building elevations and floorplans as specified

e) Augment internal laser scanner survey with Leica Distomat / MBS

f) Complete topographical survey of the site as specified with total station

g) Register laser scan point cloud data and import to Autodesk Recap and AutoCAD 2017.

h) Utilising *Autodesk AutoCAD 2017* :
   a. Import survey and associated attribute data in to drawing model
   b. Import Ordnance Survey GML data in to drawing model, as required
   c. Edit data and complete cartographic presentation

i) Delivery of survey model – floor plans, elevation, section drawings and topographical survey - and associated documentation to Purcell Architects

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Geophysical Survey

To provide the most suitable survey for archaeological investigation, we propose the use of electrical conductivity supported by ground penetrating radar.

Electrical conductivity meters represent large family of contactless geophysical instruments for fast assessment of ground conductivity and of inphase (susceptibility). Single or multi depth probes designed for 0.25m – 9 m depth range allow single or multi layer mapping in classic or GPS positioning modes including vehicle applications.

Ground penetrating radar uses a wide frequency range of radar pulses to image the subsurface. By selecting the most appropriate frequency for depth and resolution, an interpretation of the subsurface can be made identifying a range of archaeological features.

Given the nature of the site, it is proposed that data over the entirety of the site be captured via the CMD electromagnetic conductivity meter. Once this data has been acquired and post processed, a targeted campaign of ground penetrating radar (GPR) acquisition can be completed dependent on the results from the electromagnetic conductivity survey.

The proposed outline methodology is:

a) Mobilise with *CMD* connected to *Trimble R10* RTK-GNSS

b) Collect data by walking in straight lines across the survey area circa every 2m

c) Post process the data to identify any features of particular interest

d) Mobilise with the GPR to targeted areas within the site

e) Post process the GPR data and prepare a report

f) Deliver to Purcell Architects

3. SURVEY PROCEDURES & HSE

LandScope Engineering would comply with all established H&SE policies and procedures.

If successful then we would provide detailed method statements and project risk assessments prior to site survey works.

Each member of any LandScope survey team is emergency first aid trained and familiar with site safety briefings / toolbox talks.

Each LandScope Engineering operative holds a CSCS (Construction Skills Certification Scheme) accreditation. LandScope Engineering Ltd operates a robust H&S management system which has been accredited by CHAS.

Each team is equipped with comprehensive first aid systems.

LandScope Engineering Ltd is accredited to the Constructionline pre qualification scheme – registration number: 67812

The Chart House
Picklescott
Church Stretton
Shropshire SY6 6NT

(t) 01694 731930 (f) 01694 751343
enquiries@land-scope.com
www.land-scope.com

Patch Park Farm
Ongar Road
Abridge
Essex RM4 1AA

Registered in England ref. 5178492 Director : Martin J Berry BSc(Hons) MCinstCES MRICS

4. RESOURCES

The following resources would be deployed to the project :

Personnel

1 of Senior Laser Scanning Surveyor
1 of Topographic Surveyor
1 of Assistant Surveyor
2 of Geophysical Surveyor

1 of Laser Scan Surveyor (Office based) – point cloud registrations and control
1 of CAD Technician – model production and topographical survey
1 if Geophysical Surveyor (Office based) – post processing and report writing

Equipment

Topographical and Measured Building Survey - Field

1 of *Faro Focus 3D* Laser Scanner
1 of *Trimble TX8* Laser Scanner
2 of Laser Scanning reference sphere kit
1 of *Trimble S6* Robotic Total Station

Geophysical Survey - Field

1 of *GF Instruments CMD Explorer* Electromagnetic Conductivity Meter
1 of *GSSI SIR3000* Ground Penetrating Radar
1 of 400MHz antenna

Post Processing - Office

1 of *Trimble Business Centre* software
1 of *Trimble RealWorks* software
1 of Autodesk *Infrastructure Design v.2016*
3 of Workstations
1 of A0 format Plotter+

Logistics

2 of Survey Vehicle

Please refer to Appendix B for Equipment Specifications

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5. PROJECT TIMING

Topographic and Measured Building Survey

Based on four field survey personnel, as detailed above, we estimate that the field survey would require three working days.

Subsequent office based registration, data processing and drawing production would require a further five days.

Geophysical Survey

Based on two field survey personnel, as detailed above, we estimate that the CMD field survey would require two working days.

Subsequent office data processing and report production would require a further three days.

We estimate that there could be two days of GPR survey to be conducted once the electromagnetic conductivity survey had been completed.

We generally require a minimum of five working days notice to mobilize a crew to site.

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6. SCHEDULE OF FEES

Prices are quoted in UK Pounds Sterling (£) and are subject to LandScope Engineering Ltd Standard Terms and Conditions until such time a mutually agreed contract is signed.

Topographical and Measured Building Survey
Crayke Castle

Ref	Description	£	
1.	Mobilisation	£ 225	Lump Sum
1.	Topographical Survey - Fieldwork	£ 2,650	Lump Sum
2.	Measured Building Survey – Fieldwork at main house and cottages	£ 3,975	Lump Sum
3.	Topographical Survey – Office Processing & Plan Production	£ 750	Lump Sum
4.	Measured Building Survey – Office Processing & Elevation, Floor Plan and Section Drawing	£ 1,875	Lump Sum
	TOTAL	**£ 9,475**	**Lump Sum**
	OPTIONAL		
5.	Geophysical survey CMD - Fieldwork	£ 3,690	Lump Sum
6.	Geophysical survey CMD – Office Processing and Report Production	£ 1,195	Lump Sum
7.	Geophysical Survey GPR – Fieldwork *(estimate 2 days)*	£ 1,625	Per Day
8.	Geophysical Survey GPR – Office Processing *(estimate 3 to 4 days)*	£ 425	Per Day

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Essex RM4 1AA

7. QUALIFICATIONS

8.1. Proposal is subject to LandScope Engineering Limited Standard Terms and Conditions of Hire until such time that a mutually agreed contract is signed

8.2. Offer is valid for a period of 60 days. Notice required for mobilisation is a minimum of five working days unless stated otherwise above

8.3. Prices are exclusive of VAT unless stated otherwise

8.4. Payment terms are strictly 30 days from receipt of invoice. Interest charges to apply thereafter

8.5. Additional expenses including non-routine survey related consumables, not detailed in the above proposal, incurred at the specific request of Purcell Architects will be recharged at cost plus 10%

8.6. A daily field standby rate plus associated logistical costs to apply for any periods when the survey, mobilisation or demobilisation is delayed or postponed due to reasons beyond LandScope control, including but not limited to the following :

- ✓ Purcell Architects instruction (eg variation order)
- ✓ Waiting on permits and permission to work
- ✓ Waiting on clearance of site, suitable for survey works

8.7. LandScope Engineering Ltd has provided a reasonable allowance within the fee schedule for the completion of a site induction process. In cases where site induction exceeds 30 minutes we reserve the right to charge additional time at a standby rate

8.8. LandScope Engineering Ltd has provided for a reasonable allowance within the fee schedule for the generation of method statements, risk assessments and pre-start-up documentation. In cases where this process is extended and more onerous we reserve the right to charge additional office time to prepare such

8.9. Purcell Architects is responsible for the application and provision of permits to access and work at site. Any revisits to site that may be necessary due to lack of access or other reasons beyond the control of LandScope Engineering will be charged

8.10. Unless specified otherwise all survey work will be scheduled between the hours of 8am and 5pm Monday to Friday. Any work required outside of these hours will incur additional fees – *details available upon request*

8.11. Vehicle parking facilities at site to be provided by Purcell Architects. External parking fees and associated transit charges to be recharged at cost plus 10%

8.12. The site is to be clear of all obstructions that may hinder the progress of the proposed survey. Inspection and man-hole covers are assumed to be available for visual inspection access and deployment of radio sonde, where applicable

8.13. Ground where geophysical survey is to be completed should be free from obstructions and vegetation.

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8. APPENDIX A - SERVICE INFORMATION SHEETS

9. APPENDIX B – EQUIPMENT SPECIFICATIONS

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APS
archaeological
project services

www.apsarchaeology.co.uk

LAND AT
CRAYKE CASTLE
CRAYKE
NORTH YORKSHIRE

FEE PROPOSAL and
TERMS AND CONDITIONS
for
GEOPHYSICAL SURVEY (T6821)

PREPARED FOR
PURCELL

SEPTEMBER 2016

APS provides a comprehensive range of archaeological services

- *Advice*
- *Heritage Statements*
- *Environmental Impact Assessments*
- *Desk-based Assessments*
- *Geophysical Survey*
- *LIDAR*
- *Building Recording*
- *Evaluation*
- *Monitoring and Recording*
- *Mitigation Strategies*
- *Excavation*
- *Finds analysis*

The Old School,
Cameron St, Heckington,
Sleaford, Lincs
NG34 9RW

T: 01529 461618
E: info@apsarchaeology.co.uk
W: www.apsarchaeology.co.uk

SSIP SAFETY SCHEMES IN PROCUREMENT
A Worksafe Contractor (SSIP)

CIfA REGISTERED ORGANISATION
Chartered Institute for Archaeologists
Registered Organisation

ARCHAEOLOGICAL PROJECT SERVICES

Client Name:	Purcell		
Project Title:	Land at Crayke Castle, Crayke, North Yorkshire		
Project Type:	Geophysical survey		
APS Reference number:	T6821	**Date:**	21/09/2016

FEE PROPOSAL

1 ..... GEOPHYSICAL SURVEY (approx. 22ha)
Duration..... Approx 3 days on site; approx. 4 days for reporting (total c. 7 days)

COST ..... £3, 172.00 EXCLUSIVE OF V.A.T.

NOTES TO ACCOMPANY PROJECT COSTS

The quote assumes that detailed digital mapping of the site can be supplied by the client for the purposes of the survey and reporting.

The quotation is for the detailed magnetometer survey of the specified area. Unless otherwise specified there will not be reductions to the fee in respect of areas that cannot be surveyed.

The **Duration** figures given in the quotation are times that have been estimated that it will take for completion of the fieldwork and subsequent analysis and reporting aspects of the investigation. They are not person days, nor days for each individual person detailed in the staff lists.

ARCHAEOLOGICAL PROJECT SERVICES

Client Name:	Purcell		
Project Title:	Land at Crayke Castle, Crayke, North Yorkshire		
Project Type:	Geophysical survey		
APS Reference number:	T6821	**Date:**	21/09/2016

AGREEMENT OF COSTS, TERMS AND CONDITIONS

No work on the project can commence without the receipt of a written order and return of one signed copy of this agreement, including an address for invoicing.

Payment will be required in the following manner. At the end of each calendar month and at the end of the fieldwork all works carried out up to and including that date will be invoiced. Payment will be due within 30 days. On completion of the project a Draft Report will be sent to the Planning Archaeologist for approval. Final submission and distribution of the approved report will be on payment of the final invoice.

Archaeological Project Services will require free and unrestricted access to the entire area of the site for the purposed of archaeological works.

Archaeological Project Services will not be responsible for any costs arising from damage to crops or gardens or other objects incurred during the site operations. As far as practicable Archaeological Project Services will leave the site in the condition it was before fieldwork. Archaeological Project Services will not be responsible for any special backfilling, compaction, making good, resurfacing restoration of surfaces or reseeding.

Before commencement of work, Archaeological Project Services will require notification and copies of any relevant drawings showing the location of any services or other hazards.

Archaeological Project Services will require two weeks notice to be able to mobilise staff and specialists. If our programme of works permits, this period may be reduced.

All artefacts recovered during the investigation belong to the landowner. However, as these objects form an essential part of the archive, Archaeological Project Services request that, after consideration and before commencement of work, the landowner agrees, in principle, to donate all artefacts unconditionally to the appropriate receiving museum for long-term storage and curation. Final confirmation of this will be required in writing, by the landowner or their representative, on completion of the work.

Should the confirmed start date be delayed through no fault of Archaeological Project Services, and staff and other resources cannot be transferred to other projects, Archaeological Project Services will recover all reasonable costs incurred from the Client.

If the Local Planning Authority requires a revision of the brief necessitating further work then the extra costs for this work will be agreed between the Client and Archaeological Project Services and the cost incurred will be invoiced accordingly.

VAT will be applied at the prevailing rate at the date of the invoice.

The costs detailed here apply for a period of 90 days following the submission of this schedule, this day 21st September 2016.

ARCHAEOLOGICAL PROJECT SERVICES

Client Name:	Purcell		
Project Title:	Land at Crayke Castle, Crayke, North Yorkshire		
Project Type:	Geophysical survey		
APS Reference number:	T6821	**Date:**	21/09/2016

INVOICE ADDRESS:

Name: ……

Organisation: ……

Address: ……

……

……

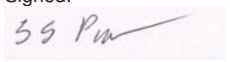
Postcode: ……

telephone: ……

email: ……

fax: ……

Agreement of costs, terms and conditions:

for Archaeological Project Services	for the Client
Name: Sean Parker	Name:
Signed: 	Signed:
… ……	……
Dated: 21st September 2016	Dated:
……....	……....

PLEASE SIGN BOTH COPIES OF THE AGREEMENT, ONE TO BE RETAINED AND ONE TO BE RETURNED TO:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Lincolnshire
NG34 9RW

Email: info@apsarchaeology.co.uk

Tel: 01529 461618

ARCHAEOLOGICAL SERVICES
DURHAM UNIVERSITY

Crayke Castle
nr Easingwold
North Yorkshire

geophysical survey
fee proposal DH16.471

on behalf of Purcell

1. Introduction

1.1 Purcell have requested a fee proposal for conducting a detailed geophysical survey on land at Crayke Castle in North Yorkshire. The site boundary covers approximately 2.4ha, of which up to approximately 1.8ha may be suitable for geomagnetic or earth electrical resistance survey; in this instance, unsuitable areas would include standing buildings, wooded areas, ponds and hard surfaces.

1.2 The survey will be undertaken in accordance with instructions from the client and with national standards and guidance (below).

1.3 This document comprises our fee proposal together with a summary of our proposed fieldwork methodology, information regarding our capability and experience, standards and other operational information.

1.4 The overarching aim of the survey will be to assess the nature and extent of any sub-surface features of potential archaeological or historic significance.

1.5 Given the local geology, and the anticipated nature and depth of targets, fluxgate gradiometry and earth resistance survey are both appropriate and complementary techniques in this instance. It is proposed that geomagnetic survey is conducted over all suitable areas and that resistance survey is conducted on the grassed areas close to the castle and other standing buildings.

Brief methodology

1.6 It is understood that Purcell will confirm ground conditions and access prior to survey.

1.7 A 20m grid will be established across each survey area and tied-in to known, mapped Ordnance Survey points using a Leica GS15 global navigation satellite system (GNSS) with real-time kinematic (RTK) corrections typically providing 10mm accuracy.

1.8 Measurements of vertical geomagnetic field gradient will be determined using Bartington Grad601-2 dual fluxgate gradiometers. A zig-zag traverse scheme will be employed and data logged in 20m grid units. The instrument sensitivity will nominally be 0.03nT, the sample interval will be 0.25m and the traverse interval will be 1m, thus providing 1,600 sample measurements per 20m grid unit.

1.9 Measurements of electrical resistance will be determined using Geoscan RM15D Advanced resistance meters with twin probe arrays and MPX15 multiplexers. A mobile twin probe

separation of 0.5m will be used to log data at a theoretical depth of 0.75m. A zig-zag traverse scheme will be employed and data logged in 20m grid units. The instrument sensitivity will be set to 0.1ohm, the sample interval to 1m and the traverse interval to 1m thus providing 400 sample measurements per 20m grid unit.

1.10 Data will be downloaded on site into a laptop computer for verification, initial processing and storage, and subsequently transferred to a desktop computer for further processing, interpretation and archiving. Geoplot software will be used to process and interpolate the geomagnetic data to form arrays of regularly-spaced values at 0.25m intervals and to produce continuous-tone greyscale images and 'X-Y' trace plots of the raw (unfiltered) data. Plots of filtered data will be provided if appropriate.

1.11 The data will be presented by importing greyscale images directly into digital plans of the area. Palette bars relating the greyscale/trace intensities to anomaly values in nanoTesla/ohm will be included with each image as appropriate. Other types of plots may also be provided, if they aid presentation or interpretation. Colour-coded geophysical and archaeological interpretation plans will be provided. The survey report will also include a discussion and interpretation, explaining the likely nature of the anomalies, along with their implications. Modern services and other potential hazards will be clearly distinguished.

1.12 Two hard copies of the report will be provided to the client; a digital copy will be provided in pdf format. Further copies will be deposited with the HER and OASIS.

Research

1.13 Research objectives are built into developer-funded archaeological projects, as a result of the English Heritage national policy framework and its objectives, as outlined within *Exploring Our Past* (English Heritage 1991), *Frameworks for our Past* (English Heritage 1996), the *Research Agenda* (English Heritage 1997) and the *Policy Statement on implementation* (1999). This survey has the potential to address research priorities set out in the *Yorkshire Archaeological Research Framework: research agenda*, RFRA 2936 (Roskams, S, & Whyman, M, 2007), particularly with regard to the medieval and post-medieval periods.

2. Capability statement

Archaeological Services

2.1 Archaeological Services Durham University have previously conducted many geophysical surveys in the region. We have an established record of working with Purcell, Historic England, Historic Scotland, CADW, Ministry of Defence, the Highways Agency, Natural England, The National Trust (NT/NTS), National Park Authorities, County and City Councils and many private corporations, developers, architects and environmental consultants.

2.2 We have considerable experience in managing and conducting projects of any scale, and have successfully completed over 4,000 projects during the last 20 years.

2.3 Archaeological Services is structured to provide a complete archaeological service for our clients. This frequently involves staged programmes of work, incorporating consultancy, assessment, evaluation and final schemes of excavation and recording. Schemes often incorporate many different facets of archaeological works, and to this end, we provide an integrated range of in-house specialist services and laboratories, which are also regularly contracted by numerous external archaeological and environmental organisations. These are benchmarked against the high standards associated with the University and comprise the

Geophysical Survey Service, Environmental Archaeology Service, Conservation Service, and Historic Buildings Service.

Geophysical Survey Services

2.4 We undertake geophysical surveys for a wide variety of clients throughout the UK and abroad. We conduct several hundred hectares of geophysical survey each year for research projects and proposed development schemes.

2.5 We have recently completed 286ha of survey over a Neolithic site in Ukraine, conducted surveys in the Rub' al Khali desert for the Dubai Municipality and undertaken surveys at several World Heritage Sites in both Nepal and Bangladesh for UNESCO (ongoing).

2.6 Other recent and ongoing research-led geophysical surveys include Westgate Castle, Tarset Castle, Dunstanburgh Castle, Scarborough Castle, Seaton Delaval Hall, Felton Park, Bramham Park, Forcett Park, Muggleswick Grange, Kirkleatham walled garden, Coldingham abbey, Auckland Castle walled garden, Wynyard Hall walled garden, Gibside walled garden restoration, St Botolph's Chapel in Frosterley, Holy Island, Long Meg & Her Daughters, Great Chilton, the Nine Standards, The Udal North Uist, Broadsands chambered tomb, Roman settlement at East Park Sedgefield, Housesteads and Birdoswald Roman fort environs (both for English Heritage), Hadrian's Wall Milecastles Project, Lanchester Roman fort and vicus, Binchester Roman fort and vicus, Whitley Castle Roman fort and vicus (for English Heritage), the North East Yorkshire Mesolithic Project, the Yarrow/Glebe/Warrior Stones, Boldron village green, Elwick village green, Bamburgh Castle Bowl-hole Anglian cemetery, Bede's World, Catcote settlement Hartlepool, the buried Neolithic landscapes of Jethou and Herm in the Channel Islands and ancient Sais in Egypt.

2.7 Other recent surveys include:

- A1 Dishforth to Barton road improvement, 344ha
- Dogger Bank Offshore Wind Farm (Teesside), 80ha
- Dogger Bank Offshore Wind Farm (East Yorkshire), 170ha
- Highthorn, Widdrington, 295ha
- Callerton Park, Newcastle upon Tyne, 102ha
- White Hill Gas Storage Project, East Yorkshire, 78ha
- Whessoe Grange, Darlington, 80ha
- Northallerton Flood Alleviation Scheme, 90ha
- A5 Western Transport Corridor, N Ireland, 167ha
- White Hill Woods, County Durham, 73ha
- Down Ampney Estate, Gloucs/Wilts, 186ha
- East Swindon Development, Phases 1-3, Wilts, 82ha
- Alconbury, Cambridgeshire, 115ha
- Wilburton, Cambridgeshire, 78ha
- Dallington Grange, Northampton, 100ha
- Kent International Gateway, 93ha

2.8 Our UK survey reports are available in county Historic Environment Record (HER) offices and through OASIS (the Online AccesS to the Index of archaeological investigationS project); some are also published in journals, monographs and books.

Personnel

2.9 The service is managed by Duncan Hale BA MCIfA (Senior Archaeologist), an expert in works of this type, who has conducted over 1,000 geophysical survey projects during the past 25 years throughout the UK and abroad.

2.10 Duncan was a consultant for the Historic England geophysical survey guidelines (2008) and a contributor to the Chartered Institute for Archaeologists *Standard and Guidance for archaeological geophysical survey* (2014).

2.11 Duncan is a founder member of the CIfA Geophysics Special Interest Group and is also an active member of ISAP, the International Society for Archaeological Prospection.

2.12 Duncan is assisted by Richie Villis BA (Senior Geophysicist), Mark Woolston-Houshold BA and Patricia Voke MA MA (Project Archaeologists), who have each been conducting surveys of this type for at least six years. These project leaders are supported by additional experienced members of our team, using state-of-the-art field instruments and software.

Standards

2.13 All our geophysical work is carried out in accordance with Historic England guidelines, *Geophysical survey in archaeological field evaluation* (David, Linford & Linford 2008); the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for archaeological geophysical survey* (2014); the CIfA Technical Paper No.6, *The use of geophysical techniques in archaeological evaluations* (Gaffney, Gater & Ovenden 2002); and the Archaeology Data Service & Digital Antiquity *Geophysical Data in Archaeology: A Guide to Good Practice* (Schmidt 2013).

3. Insurance

3.1 Durham University is a member of UM Association Limited and maintains the following covers:

• Employer's liability	£25,000,000	Cert. no. Y016458QBE0110A/050
• Public & products liability	£25,000,000	Cert. no. UM050/00
• Professional indemnity	£10,000,000	Cert. no. UM050/00

4. Health & Safety

4.1 Archaeological Services abides by the 1974 *Health and Safety Act*, its subsequent amendments, and the 2015 *Construction Design and Management Regulations*. All Archaeological Services field projects are carried out in accordance with the Federation of Archaeological Managers & Employers' (FAME) manual *Health and Safety in Field Archaeology* (2010), and with Durham University's *Health and Safety Policy* and *Code of Practice for Safety in Fieldwork*.

4.2 Archaeological Services provides health and safety training for all our field personnel in first aid, manual handling, cable detection, site safety and risk assessment. Archaeological Services ensures that all personnel pass the CITB Construction Skills Health and Safety Test and subsequently become CSCS card-carriers (Construction Skills Certification Scheme).

4.3 Archaeological Services will provide qualified First Aiders and first aid supplies at all times during work. All personnel are supplied with appropriate safety clothing and equipment. A Risk Assessment will be completed before works commence, and all personnel will receive an appropriate Health and Safety induction talk before starting on site.

5. Programme

5.1 Archaeological Services can usually undertake the works at any time, subject to receipt of a written order for the work and confirmation of site access and ground conditions.

5.2 It is anticipated that these surveys would be completed over two working days.

5.3 Interim results can be provided as the survey progresses and within two working days of completion of fieldwork.

5.4 A draft report can be submitted for approval within three weeks of completion of fieldwork.

5.5 An alternative programme can be arranged.

6. References

CIfA 2014 *Standard and Guidance for archaeological geophysical survey*. Chartered Institute for Archaeologists

David, A, Linford, N, & Linford, P, 2008 *Geophysical Survey in Archaeological Field Evaluation*. Historic England

Gaffney, C, Gater, J, & Ovenden, S, 2002 *The use of geophysical techniques in archaeological evaluations*. CIfA Technical Paper 6, Chartered Institute for Archaeologists

Roskams, S, & Whyman, M, 2007 *Yorkshire Archaeological Research Framework: research agenda*. RFRA 2936

Schmidt, A, 2013 *Geophysical Data in Archaeology: A Guide to Good Practice*. Archaeology Data Service & Digital Antiquity, Oxbow

7. **Fee proposal** (overleaf)

Crayke Castle· North Yorkshire· geophysical surveys· fee proposal DH16.471· September 2016

7. Fee proposal

Confidentiality

7.1 This financial proposal is confidential; this part of the document should not be passed to any third party without prior consultation with Archaeological Services.

Fees

7.2 The fee proposal below is valid for four months from the date of this document. The figures are inclusive of all expenses and reporting and exclusive of VAT. Payment is required within 30 days of the date of issue of the invoice.

Geomagnetic and earth resistance surveys, as above £ 1,960

Duncan Hale BA MCIfA
Senior Archaeologist
21st September 2016

Durham University

Archaeological Services Durham University
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CRAYKE CASTLE, CRAYKE, NORTH YORKSHIRE

PROPOSAL FOR ECOLOGY SERVICES

PURCELL (YORK)

JULY 2016

Prepared By:
Surface

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Registered in England & Wales No. 5644976

1 SCOPE OF SERVICES:

Surface was invited to provide a fee proposal for undertaking an Extended Phase 1 Habitat Survey and Ecology Report to support a planning application for proposed works (the Development) at Castle Crayke, Crayke. All work will be undertaken and reviewed by ecologists holding membership of the Chartered Institute of Ecology and Environmental Management (CIEEM) and working to its professional code of conduct. All works will be undertaken by full time employees of Surface Property, with no sub-contractors utilised.

1.1 Desk study

The site will be subject to a desk study to ensure that our assessment and report are based on accurate and up-to-date information. This is in accordance with Paragraph 165 of the National Planning Policy Framework, which states that 'planning policies and decisions should be based on up-to-date information about the natural environment and other characteristics of the area'.

A search for designated sites on, and in the vicinity of, the Development will be undertaken using publicly available data. Records of Local Wildlife Sites and notable and protected species will also be requested from the North & East Yorkshire Ecological Data Centre. Data centres often recommend additional consultation with local record providers (Bat groups, Reptile and Amphibian groups, etc.). The need for further consultation would be determined on a case-by-case basis and would be agreed with Purcell prior to undertaking the work.

1.2 Survey

An Extended Phase 1 Habitat survey will be conducted by our in-house botanist/specialist to classify and map habitats within the Development site and immediate surrounds (access permitting) and to assess their potential to support protected species; notably badgers, bats and great crested newts. Assessments of potential will be carried out in line with prevailing best practice and by suitably qualified and licenced ecologists. The survey will include a visual inspection of features (buildings, habitats and trees) and would require full access to any buildings on site.

An assessment of the potential of on-site buildings to support bat roosts would be conducted by a Natural England licenced bat ecologist to record evidence of bats or features that could provide potential roosting opportunities. The survey will be carried out following the guidelines produced by the Bat Conservation Trust (Collins 2016). A thorough internal and external examination of the buildings will be carried out, with potential access points and internal roof voids/spaces, where present and safely accessible, checked for evidence of bats. This initial bat roost assessment would inform whether or not further activity surveys would be required to assess the impact of the Development on bats.

In the event that the survey results suggest the need for further surveys (e.g. for certain protected species), the need for and scope of such surveys would be communicated to Purcell as soon as possible.

1.3 Report

An Ecology Report will be produced suitable for submission to the Local Planning Authority (LPA). The report will include a review of desk study data, details of survey methods and results, and an assessment of likely impacts from the Development.

A Phase 1 Habitat Map would be produced in conjunction with this report (with any features of value target noted). Recommendations for further survey work or mitigation would be agreed with Purcell before their inclusion in the report.

The report with associated figures and appendices would be provided as an electronic draft for client comment and approval.

Once approved, a PDF version of the report would be issued. Hard copies of the report would be available upon request.

1.4 Costs and Timing

As the full scope of the Development works have not yet been decided, with work likely to focus on the castle and immediate surrounds, for this work we propose a fee range of £750–£850 (excluding associated expenses and VAT); if the site is of low sensitivity/complexity this would be at the lower end of the fee range.

We would be able to complete the work within two to three weeks from commission; however, we are happy to review this upon appointment to ensure we meet your deadlines.

1.5 Assumptions and Exclusions

- Fees are exclusive of VAT which would be charged at the prevailing rate;
- Fees exclude expenses such as data acquisition costs, travel (£0.55 per mile), subsistence, printing and other reasonable expenses;
- All information required to undertake the survey work, including access arrangements and relevant Health & Safety information, will be available at the time of receiving an instruction to proceed; and
- The work will be undertaken in accordance with our standard terms and conditions, a copy of which is attached.

Standard Conditions of Contract for the Supply of Services in Relation to Work Undertaken by Surface Property ("Surface")

1 All work carried out and/or performed and/or goods supplied by Surface for a Client ("a Project") shall be carried out and performed subject to these conditions of Contract ("the Conditions"). The Client acknowledges that it has had an opportunity to negotiate changes to these Conditions prior to the commencement of the Services and has agreed to these Conditions.

2 The Conditions shall in relation to a Project supersede any earlier conditions relating to work previously performed by Surface for the Client and shall apply to the exclusion of any terms of conditions stipulated by the Client and (in so far as permissible) shall over-ride any terms or conflicting conditions which would otherwise be applied under common law or by operation of statute.

3 Any offer to carry out a Project may automatically be withdrawn without notice to the Client three calendar months after it is made. Any acceptance of any offer must be made in writing.

4 (a) Save where Surface has specifically agreed in writing to accept a fixed fee, Surface will be entitled to charge for its services on the basis of the current charge rates (available on request) together with expenses incurred.

(b) Surface does not warrant that it will be possible to comply with any estimate given of the likely duration or cost of a Project or any delivery date agreed.

(c) Where an estimate of the likely duration or cost of a Project is given or any delivery date is agreed or when a Client stipulates a maximum limit for duration or costs, Surface shall notify the Client if it becomes impossible to deliver or to complete a Project within such estimate delivery date or limit. Upon such notification, the Client shall be entitled within seven days to instruct Surface to continue the Project beyond such estimate limit or delivery date. If at the end of seven days the Client has not instructed Surface to continue the Project Surface may forthwith discontinue the Project and invoice the Client for charges in respect of work done, services performed and expenses incurred up to date of such discontinuance.

(d) Without prejudice to the foregoing provisions of this clause Surface shall have no liability for any delays arising by circumstances beyond its reasonable control.

(e) Where a fixed fee has been agreed, and circumstances arise which were, or additional work is required which was, unforeseen at the date on which the fixed fee was agreed, then Surface shall notify the Client who shall seek to agree an appropriate adjustment to the fixed fee.

(f) Where applicable VAT shall be payable in addition to the fee and expenses.

5 (a) Surface shall, unless otherwise agreed, be entitled to invoice the Client:-

(i) any agreed down payment forthwith upon a contract for a Project being concluded;

(ii) the fees and expenses for work carried out prior to the date of such invoice, on the last day of each calendar month; and

(iii) the balance of fees and expenses upon submission of its Final Report.

(b) Where it is agreed that a payment of fees is to be made prior to commencement of any work, Surface shall be entitled to defer commencement of work until payment is made in full.

(c) Unless otherwise agreed all invoices shall be submitted and paid in pounds sterling.

(d) All invoices shall be paid within thirty days of issue, unless otherwise agreed in advance.

(e) If the Client fails to pay any sums due to Surface within 30 days of the issue of the invoice, or the period otherwise agreed in advance, Surface shall be entitled to charge interest on the balance outstanding at the UK statutory interest rate (currently 8%) above the Barclays Bank plc's base rate for the period in excess of 30 days, or the period otherwise agreed in advance.

6 No member, employee or agent of Surface shall be required to undertake any work which involves risk of personal injury or illness and the Client shall take all reasonable care to see that, where a Project calls for work to be carried out outside Surface, the conditions of work are safe.

7 (a) Nothing in this Condition shall purport to exclude or restrict Surface' liability for death or personal injury resulting from negligence.

(b) Surface warrants that it will carry out its duties in respect of a Project with reasonable care and skill and this warranty shall be the only warranty given in respect of such duties. All other conditions and warranties expressed or implied by statute or common law or otherwise are hereby excluded.

(c) If Surface shall not comply with the warranty given in Condition 7.(b) Surface will at is option and expense:-

(i) take such steps as Surface considers necessary to comply with such warranty; or

(ii) refund the whole or an appropriate part of the fees charged for its services or goods supplied hereunder.

Performance of any one of the above options shall constitute discharge of Surface' entire liability under the said warranty.

(d) Surface shall not under any circumstances be liable for loss of profit, use or goodwill or (subject to Condition 7.(e)) for any indirect or consequential loss of any kind whether caused by negligence or otherwise howsoever and whether or not such a loss has been suffered by the Client or by some third party to whom the Client may be liable.

(e) Notwithstanding Condition 7.(c) above if Surface has failed to comply with the warranty given in Condition 7.(b) hereof and as a result the Client suffers loss or damage in respect of which Surface has effected insurance indemnity Surface' liability in respect of such loss or damage shall not exceed the greater of (i) the amount of the payment made by the Client to Surface in respect of Surface' charges for the Project and (ii) the amount (if any) paid to it under such policy PROVIDED THAT if the Client fails to notify Surface immediately of any loss, damage or circumstances which may give rise to a claim under such policy and Surface is thereby prevented from claiming under such policy Surface' liability shall be no more than set out in Condition 7.(e)(i).

(f) The Client will in no circumstances make any claim against any member, employee or agent of Surface in respect of anything done or omitted to be done in respect of or in relation to a Project.

(g) Should Surface incur any liability whatsoever or howsoever arising to a third party in consequence of the implementation or advice or opinions of Surface or the data and information produced by a Project or in respect of any goods supplied by Surface for which Surface is not liable or in excess of Surface' liability under these Conditions the Client will indemnify Surface in full against such liability or such excess liability (as the case may be).

(h) Should any member, employee or agent of Surface incur any liability whatsoever or howsoever arising to any person whatsoever in consequence of the implementation of advice or opinions of Surface or the data and information produced by a Project or in respect of any goods supplied by Surface the Client will indemnify the member, employee or agent against such liability. Should the Client fail to indemnify the member, employee or agent as aforesaid, Surface (without prejudice to any other rights or remedies it may have) shall be entitled itself to indemnify the member, employee or agent against the said liability and to recover the costs of so doing from the Client to the extent that such cost is not a liability of Surface under these conditions.

(i) The Client warrants to Surface that all data and information supplied by it to Surface for the purpose of a Project shall be full and accurate when given and that it will notify Surface promptly of any changes therein.

(j) It shall not be a breach of the warranty contained in Clause 7.(b) where Surface in good faith relies on data tests and information supplied or published by third parties or its sub-contractors.

(k) The foregoing provisions of this Contract shall apply notwithstanding that the act or omission giving rise to the liability in question constitute a fundamental breach of contract on the part of Surface.

8 (a) Any confidential information in connection with a Project shall not be disclosed to any third party without the prior consent in writing of the party from whom such confidential information was obtained and the party to whom such information belonged save that where Surface employs outside consultants or obtains independent advice or assistance in relation to any Project it shall be entitled to make such disclosure of confidential information as it deems desirable to the consultant or person providing aid or assistance and shall take reasonable steps to ensure that the same is kept confidential by such person.

9 All reports drawings advice and other information prepared by Surface and/or provided to the Client and the copyright therein and all intellectual property in respect of a Project shall become and remain the property of Surface but the Client shall be entitled to have use of the information contained in the Reports for those purposes referred to in those Reports subject to the terms of the other conditions herein contained.

10 (a) Should any of the following events occur namely:-

(i) the commission of any act of bankruptcy or the liquidation or winding up (other than for the purposes of amalgamation or reconstruction), or the appointment of a receiver on account of the insolvency of the Client;

(ii) failure of the Client to make payment to Surface of any sums payable pursuant to Clause 5 within one calendar month of the due date; then Surface may forthwith terminate any agreement with the Client by notice in writing. Termination shall take effect without prejudice to any rights or remedies of Surface or the Client accrued at the date of termination.

(b) Without prejudice to its rights under Condition 10.(a) Surface may suspend a Project if any of the events referred to in Condition 10.(a)(i) and (ii) shall occur.

11 The legal and beneficial ownership of Surface in any goods to be supplied by Surface shall not pass until payment in full has been made in respect of those goods or the Project in respect of which the supply of those goods forms a part.

12 Any dispute arising between Surface and the Client shall be determined by an arbitrator to be appointed by the President of the London Court of International Arbitration. Such arbitration shall be conducted in accordance with the Rules of the London Court of International Arbitration.

13 This Contract is governed by the Law of England.

APPENDIX D - CDMC CLIENT BRIEFING NOTES

CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015

CLIENT BRIEFING NOTE

1.0 INTRODUCTION

1.1 The Construction (Design and Management) Regulations 2015 apply to all building and construction projects, regardless of the size, duration and nature of the work.

1.2 Under the Regulations, clients are obliged to ensure that a construction project is set up so that it adequately controls risks to health and safety of those who may be affected from start to finish. The client has overall responsibility and the Principal Designer and Principal Contractor provide support in different phases of the project.

1.3 Complying with CDM 2015 helps to ensure that people are not harmed during construction work and that the completed building is safe to use and maintain.

1.4 CDM 2015 is not about creating unnecessary paperwork and processes. It is about appointing the right team and helping them to work together to ensure health and safety.

2.0 WHO IS A CLIENT?

2.1 A client is the organisation or individual for whom the construction project is carried out. This includes local authorities, project originators of PFI projects and charities.

3.0 DOMESTIC CLIENTS

3.1 Domestic clients procuring work on their own home are now included within the CDM Regulations, but special arrangements apply; for advice in this connection, contact Keegans.

4.0 WHAT CLIENTS MUST DO FOR ALL PROJECTS

4.1 Make suitable arrangements for managing a project so that health, safety and welfare are secured. Suitable arrangements should focus on the needs of the project and be proportionate to the size of the project and risks arising from the work.

4.2 Assemble the project team, appointing Designers (including the Principal Designer) and Contractors (including the Principal Contractor) and ensure that the roles, functions and responsibilities of the team are clear.

4.3 Ensure sufficient resources and time are allocated for each stage of the project.

4.4 Ensure effective mechanisms are in place for members of the project team to communicate and cooperate with each other and coordinate their activities.

4.5 Take reasonable steps to ensure that the Principal Designer and Principal Contractor comply with their duties.

4.6 Set out the means to ensure that the health and safety performance of Designers and Contractors is maintained throughout the project.

4.7 Ensure that construction workers are provided with suitable welfare facilities for the duration of the construction work.

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CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015

CLIENT BRIEFING NOTE

5.0 NOTIFIABLE PROJECTS

5.1 A project is notifiable if the construction work on a construction site is scheduled to last longer than 30 working days and have more than 20 workers working simultaneously at any time or exceed 500 person days.

5.2 Where the project is notifiable, the client must give notice in writing to the Health and Safety Executive (or other relevant enforcing authority) as soon as is practicable before the construction phase begins; the notice must include prescribed information.

5.3 The client must ensure that a copy of the notice is displayed in the construction site office so that it is accessible to anyone working on the site.

6.0 FURTHER DUTIES OF THE CLIENT

6.1 Provide Pre Construction Information to Designers and Contractors at the earliest opportunity; the Information is to include relevant information which the client may have or may reasonably obtain.

6.2 Check that the Principal Designer is carrying out his or her duties and that arrangements made for managing health and safety during the Pre-Construction Phase are working successfully.

6.3 Ensure that the Principal Contractor produces a Construction Phase Plan, setting out how they shall manage health and safety on site during the Construction Phase, which is adequate for the work. The Plan should be project specific, take into account the Pre Construction Information provided and be proportionate to site risks.

6.4 Ensure that the arrangements made for management of health and safety during the Construction Phase are working successfully.

6.5 As the project nears its end, the client should check arrangements for its completion and handover. For partial possession, ensure that agreed measures are in place to ensure the health and safety of those in the areas that have been handed over.

6.6 After the Construction Phase, obtain and maintain the Health and Safety File and provide the information in the File to those carrying out future construction, demolition, cleaning or maintenance work on the building or structure. There is an ongoing obligation to keep the File up to date and provide it to new owners or leaseholders.

7.0 FURTHER GUIDANCE

7.1 The Construction Industry Advisory Committee has produced guidance for clients and this is available from the Construction Industry Training Board http://www.citb.co.uk/

7.2 The legal (L) series guidance on the legal requirements of the CDM Regulations 2015 is available from the HSE http://www.hse.gov.uk/pubns/priced/l153.pdf

7.3 Some of the guidance does differ from the requirements of the Regulations and it is recommended to consult the Regulations, which are available from http://www.legislation.gov.uk/uksi/2015/51/contents/made

Further information and advice on all aspects of CDM 2015 are available from Purcell.

CM CONSTRUCTION (DESIGN & MANAGEMENT) REGULATIONS 2015 17.06.16

PURCELL

STEVE HILL
CRAYKE CASTLE, CRAYKE NORTH YORKSHIRE

CRAYKE CASTLE - CONDITION SURVEY

PURCELL ARCHITECTS

PURCELL

EXECUTIVE SUMMARY

Instructions were received from Steve Hill on 16th June 2016 to undertake RIBA stage 0-6 for the re-imagining of Crayke Castle in North Yorkshire into a spectacular residential property. Under the agreed services set out within Stages 0-1 it was confirmed that a Heritage Condition Survey and Repair Schedule be undertaken to ascertain the current condition of the Grade I listed building.

The purpose of this report is to provide a high-level review of the condition of Crayke Castle with recommendations for repair and future maintenance of the building, as well as to inform the overall project Cost Plan for the design project which will be undertaken at the end of Stage 1 and throughout the subsequent RIBA stages.

Our inspection was carried out in September 2016. At the time of the survey the conditions were generally good with sunshine and temperatures ranging from 15-25 degrees.

Surveyors

Sam Smith BArch(hons) MArch PGDip RIBA and
Emily Horne BSc MSc MArch

The building was unoccupied at the time of the site investigations. Fixtures, fittings, wall and floor finishes were in situ at the time of the survey which limited to a degree the extent of the internal surveys.

The survey was an unobtrusive visual survey of the building fabric. No floor finishes were lifted or other parts of the building were opened up for inspection. Service installations were not tested. Roof and Elevation inspections were undertaken from ground floor level.

Methodology

The building has been separated into the following elements for the purposes of this study; External Elevations, External Walls, Roof, Ground Floor, First Floor, Second Floor and Third Floor. The data sets are cross referenced with relevant photography which are appended at the end of each section.

Limitations

The survey covers all accessible external elevations, roofs and rooms. The survey covered inspection of the built fabric of each element and the internal state of repair of fixed decoration and fittings. Loose furniture and general items of redecoration (such as specific items caused by wear and tear) are not covered by this report.

Structures

The Conditions Survey is not intended as a fully structural survey. No load tests or assessment of the actual loadings have been made. No investigations have been made to ascertain the type or condition of the foundations. Only very limited inspection of the roof, ceiling, floor voids, drainage and service ducts, etc has been carried out, where safe access was available.

We have not inspected parts of the structure which were covered or inaccessible and we are, therefore, unable to report that such parts are structurally sound, free from rot, beetle or other defects.

Concerns over structural integrity or structural issues have been noted in the defects table and will benefit from inspection by a structural engineer to assess these area in more detail.

Services

Services within the building have not been assessed as part of this survey. A separate full M&E report should be used for understanding the condition of these items in detail.

Fire

The survey has not considered the resistance of the building to fire. Service dates of equipment such as fire extinguishers have not been checked as part of the survey. General consideration was given to fire escape, fire stopping and fire doors but the survey has not inspected or considered Fire Compartmentation of the building comprehensively nor the requirement of the Fire Prevention Officer/ RRO, as these fall outside the scope of our report.

Surveys Required

1. Asbestos demolition and refurbishment survey to be carried out. Asbestos to be removed from all buildings prior to any works commencing.
2. Ecology scoping survey has been carried out. Consideration should be made for the works to be carried out at suitable times in relation to ecology and seasons. This needs to be revised annually.
3. Allowance should be made to carry out a full damp survey of the existing structure.
4. To all existing chimneys, sweep, smoke test and line where required.

External Works

1. Cement mortar used throughout the building resulting in damage to a number of stone elevations. Allow for all cement pointing to be raked out and re pointed to joints between bricks and ashlar stone using lime mortar, specification TBC (unless otherwise stated within condition survey).
2. All works to be undertaken internally and externally to be agreed with Local Authority, and any changes to the existing design will require Listed building consent and Planning approval due to the heritage status of the buildings and grounds.
3. A number of walls to be cleaned with doff system to remove surface soiling, carbon sulphation and algae growth. Allow for assessment following preliminary clean to assess it further cleaning required. Appropriate treatment to be developed through practical trials and approval of conservation officer. Trials of all cleaning methods should be carried out prior to works and methodologies approved by the conservation officer and architect.
5. All rainwater goods to be cleared regularly as a matter of course to ensure all blockages are removed to prevent leaks from guttering and down-pipes.

External Windows

1. Windows appear sound generally, although majority of frames require a light refurbishment involving rubbing down existing frames externally and redecorate to match existing.
2. Where elements of the frames have become rotten, it is recommended that the affected areas are cut out and new timber spliced into the frame to match existing and redecorated to match.
3. As part of the scope for redevelopment it is assumed that all windows will be removed and upgraded, subject to Listed Building Consent.

Internal Walls, Windows and Doors

1. All rooms to be stripped of existing fixtures and fittings including shelves, boards, furniture, boxing out and sanitary ware. Sanitary ware to be replaced with new to match existing. Floor and walls to be made good following removal of fittings.
2. Floor structures to be assessed by a Structural Engineer; trial areas to be undertaken to ensure no damage to the building fabric.
3. Decoration to be carried out to all joinery, walls and ceilings to manufacturer recommendations. Ensure all existing paint is stripped back to substrate before redecoration and breathable paint is used where specified.
4. Areas of the existing buildings have been re plastered with gypsum plaster and decorated with non-breathable paint which has started to cause damage in some areas. It is recommended that all gypsum plaster is carefully removed and replaced with a lime based plaster (specifications to be Confirmed). It is also recommended that all non breathable paint is stripped and redecorated using a breathable paint to improve the performance of the building fabric (specification to be confirmed).
5. Ease and adjust doors, lubricate ironmongery.
6. Areas of ceiling have been concealed with suspended plasterboard or lay-in grid ceilings and as such a full condition survey of the structural soffit has been impossible to undertake. Further intrusive investigations will be required to assess the condition of these spaces.

Services and Drainage

1. Replace all existing plastic gutters and down pipes with cast-iron. Once removed review location of existing down pipes to move to more appropriate locations. Apply shoes to all down pipes to prevent water splashing back.
2. Due to the age of the underground system, it is likely existing drainage is of sub-standard infrastructure. Allow for a review of existing below Ground Drainage.
3. All lightening conductors to be assessed by specialist and upgraded. Conductors to be reinstated with appropriately designed locations etc.
4. Allow to upgrade the existing fire-strategy to comply with current regulations.
5. All services including gas, electricity, water and telecoms to be assessed by a services engineer

CONTENTS

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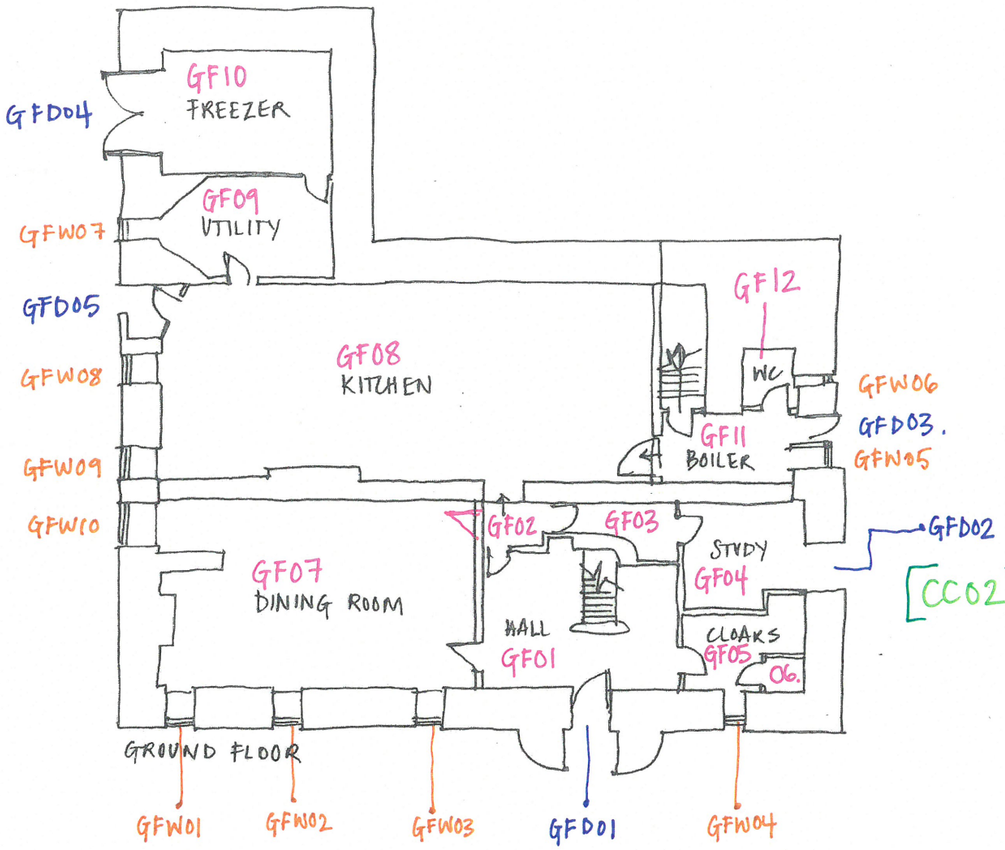
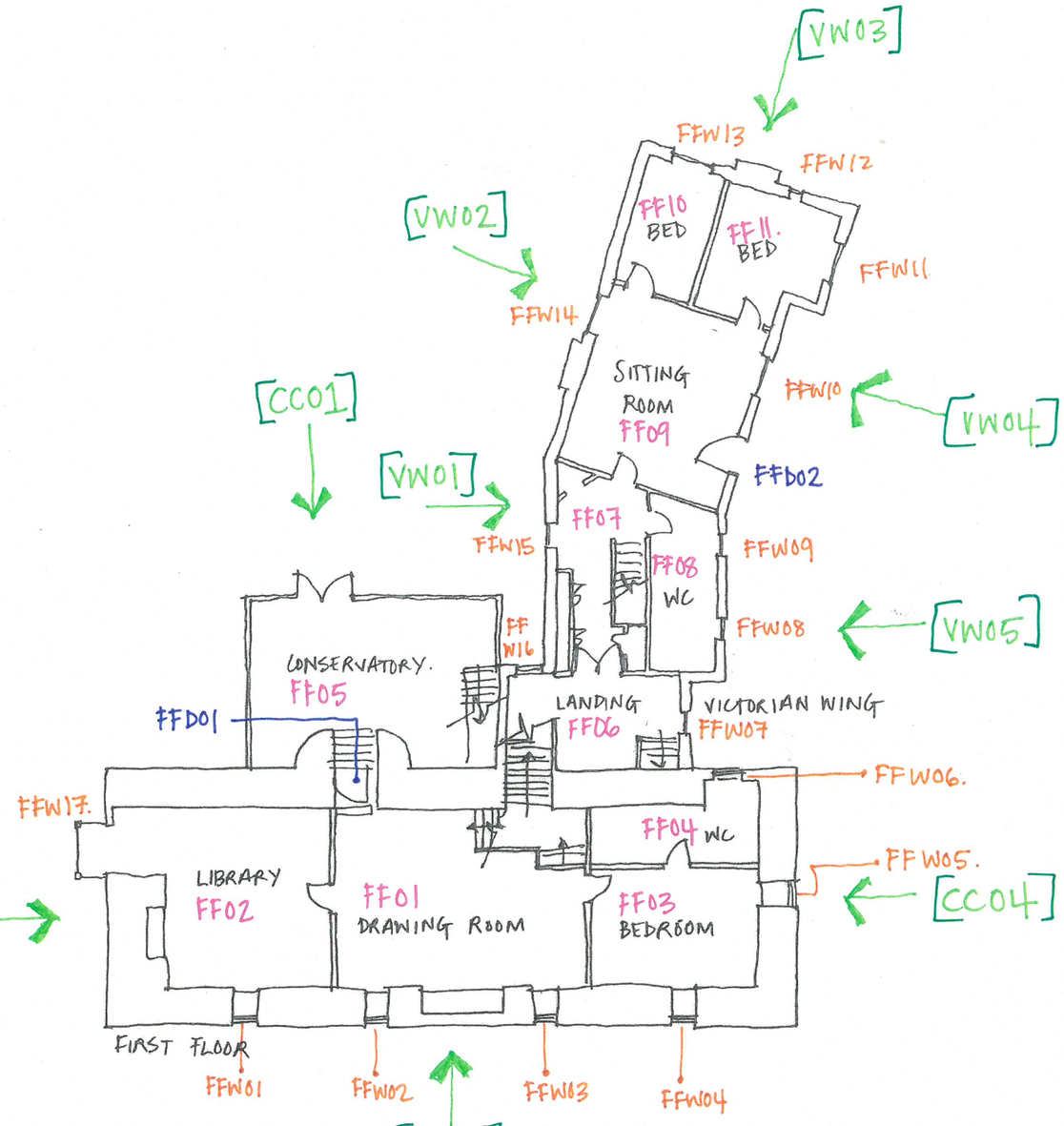
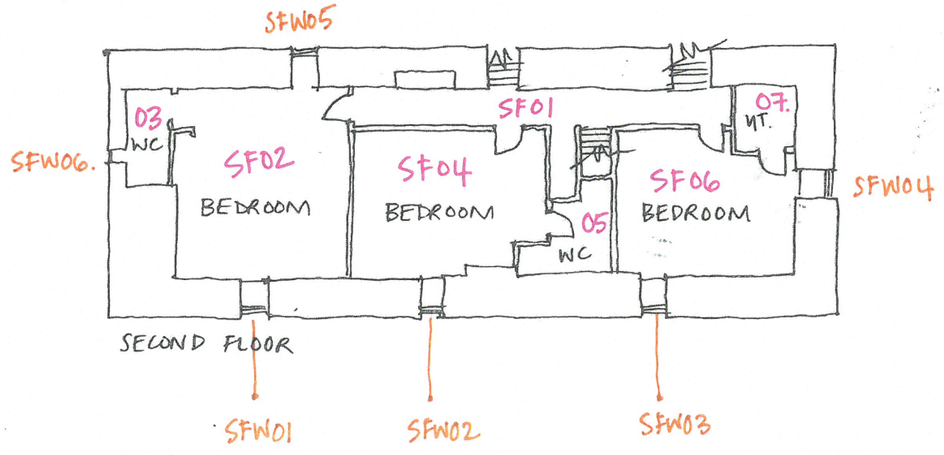
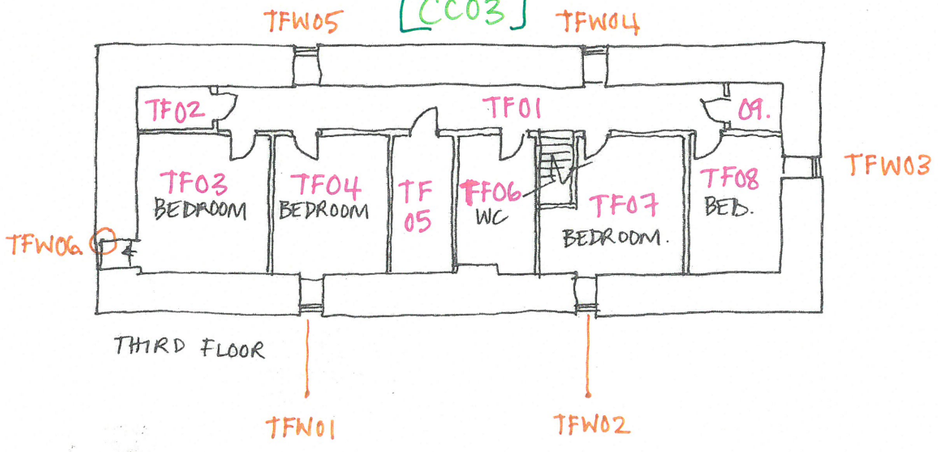
Existing Layouts









Building/Element: Elevation CC01							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Roof (chimney)		Inappropriate/failing cementitious render to side of chimney		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	2m^2	**See Images: CC01 (19)**
2	Roof (chimney)		Deeply voided joints		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4	0.5m^2	
3	Roof (chimney)		Evidence of structural movement; chimney appears to be leaning		Allow for the removal rebedding of top 2 no. courses of chimney stack, repoint with an NHL lime mortar.	2 no. courses	**See Images: CC01 (2); CC01 (19)**
4	Roof (chimney)		Severly decayed string course stones		Renew in approved sandstone worked to match existing	6 no. units	**See Images: CC01 (3); CC01 (6); CC01 (19)**
5	Rainwater Goods		Peeling/failing surface decoration to timber gutter and cast iron downpipe	Recommend full review of rainwater drainage by specialist consultant	Strip coatings and redecorate with approved paint treatments	6 linear m.	**See Images: CC01 (20); CC01 (9)**
6	Rainwater Goods		Cracked/damaged section to timber gutter	Recommend full review of rainwater drainage by specialist consultant	Renew damaged section and decorate	6 linear m.	**See Images: CC01 (20)**
7	Rainwater Goods		Defective missing/outlet provisions; 2 no. inappropriately dressed lead outlets resulting in minor damage to stone	Recommend full review of rainwater drainage by specialist consultant	N/A	N/A	**See Images: CC01 (13)**
8	Rainwater Goods		Defective missing/outlet provisions; 2 no. defective hoppers requiring replacement and resulting in excessive water to stonework in far right hand side corner	Recommend full review of rainwater drainage by specialist consultant	N/A	N/A	**See Images: CC01 (20)**
9	Masonry		Parapet stones appear to be mobile		Lift off and re-bed top 3 no. courses and coping stones; repoint with NHL lime mortar	3 no. courses	**See Images: CC01 (3); CC01 (13)**
10	Masonry		Sulphation to localised area of stone caused by chimney stack		Clean off using DOFF system	12m^2	**See Images: CC01 (1); CC01 (3)**
11	Masonry		Surface decay to dressed/moulded stone unit		Dress back by hand to sound surface and key, apply lime putty mortar repair	10m^2 max.	**See Images: CC01 (8); CC01 (12)**
12	Masonry		Severe decay to dressed/moulded stone unit; significant damage to left hand side of stone porch - assumed cause is expansion of iron cramps		Renew in approved sandstone worked to match existing	2 no. units	**See Images: CC01 (4)**
13	Masonry		Failed/open joints to coping stones of stone porch		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	2 no. units	**See Images: CC01 (6)**
14	Masonry		Cementitious pointing across whole elevation		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar		**See Images: CC01 (1)**
15	Windows		1 no. window blocked to allow for construction of terrace				**See Images: CC01 (10); CC01 (11)**
16	Windows		All timber sash windows requiring easing and overhaul; 1no. 6 pane, side hung; 1no. 4 pane, side hung		Replace all windows with new to match existing	3 no.	**See Images: CC01 (1)**
17	Door		Peeling/flaking/damaged paintwork		Remove failing paintwork back to sound surface; prime and paint with selected external eggshell breathable paint system	2 no.	
18	Services		Redundant cabling		Remove and make good scarring	10 linear m	

Building/Element: Elevation CC02 A							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Roof		Loose/slipped slates		Re-fix slates	20 no.	**See Images: CC02a (1); CC02a (6); CC02a (7)**
2	Roof		Broken/missing slates		Provide new slates to match existing	20 no.	**See Images: CC02a (1); CC02a (6); CC02a (7)**
3	Roof		Deflection/distortion in roof covering requiring further investigation	Recommend full review of structural timbers by conservation structural engineer	N/A	N/A	**See Images: CC02a (1)**
4	Roof		Defective lead detailing allowing water collection/penetration		Renew lead section to improved detail		
5	Roof		Cementitious pointing to leadwork		Remove cement and re-point min. 35mm depth in NHL lime mortar		
6	Masonry (brick)		Biological growth to brickwork to left hand side of garage		Remove loose by hand with wooden scrapers and brush down	14 linear m.	**See Images: CC02a (1); CC02a (4); CC02a (5); CC02a (6)**
7	Rainwater Goods		Peeling/failing surface decoration to cast iron downpipe and plastic gutter	Recommend full review of rainwater drainage by specialist consultant	Strip coatings and redecorate with approved cast iron paint treatment	7 linear m.	**See Images: CC02a (10); CC02a (11); CC02a (12)**
8	Rainwater Goods		Cracked/damaged section to plastic gutter	Recommend full review of rainwater drainage by specialist consultant	Capacity insufficient. Replace with new to match existing with greater capacity	8 linear m.	**See Images: CC02a (6);**
9	Rainwater Goods		Cracked/damaged section to cast iron downpipe	Recommend full review of rainwater drainage by specialist consultant	Renew damaged section and decorate	4 linear m.	**See Images: CC02a (5); CC02a (8) CC02a (9); CC02a (11)**
10	Rainwater Goods		Defective missing/outlet provisions	Recommend full review of rainwater drainage by specialist consultant	Drainage details to be reviewed	N/A	
11	Masonry (brick)		Severely decayed brick unit		Renew in selected hand made brick bonded to match existing	Allow 30 no.	**See Images: CC02a (4)**
12	Masonry (brick)		Surface decay to brick unit; large areas of effloresence around area next to garage		Dress back by hand to sound surface and key, apply lime putty mortar repair pigmented to match clay brick background	3 m^2	**See Images: CC02a (4)**
13	Masonry (brick)		Evidence of significant structural movement; major distortion and cracking across left hand side of brick face of retaining wall resulting in deeply voided joints	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: CC02a (1); CC02a (4)**
14	Masonry (stone)		Cementitious pointing across entire elevation		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar		**See Images: CC02a (1)**
15	Masonry (stone)		Deeply voided joints surrounding broken cast iron downpipe		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4	0.5m^2	**See Images: CC02a (10)**
16	Masonry (stone)		Cementitious pointing to rubble stone to turret and right hand side of elevation	To assess again once cementitious pointing has been removed.	N/A	N/A	**See Images: CC02a (2)**
17	Masonry (stone)		Surface decay to dressed/moulded stone units on stone wall above lean-to roof		Dress back by hand to sound surface and key, apply lime putty mortar repair	Allow 3m^2	**See Images: CC02a (7)**
18	Masonry (brick and stone)		Significant vegetation growth to existing walls		Removal of vegetation/plants	5m^2	**See Images: CC02a (3); CC02a (16); CC02a (17)**
19	Masonry (stone)		Evidence of significant structural movement; diagonal cracking to right hand side of stone turret has been repointed in cement	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: CC02a (2)**
20	Window		Timber windows requiring easing and overhaul; 2 pane, side hung.		Replace all windows with new to match existing	3 no.	**See Images: CC02a (9); CC02a (16); CC02a (17);**
21	Doors		Extended rot to softwood sections of garage doors		Remove and replace garage doors	1 no.	**See Images: CC02a (8)**
22	Doors		Peeling/flaking/damaged paintwork		Remove and replace garage doors; prime and paint with selected external eggshell breathable paint system	1 no.	**See Images: CC02a (8)**

Building/Element: Elevation CC02 A							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	Location on building	Element	Condition	Further Investigation	Recommendations	Quantity	Comments
23	Doors		Rusting ironmongery		Remove and replace garage doors; fit new ironmongery and decorate in selected durable paint finish	1 no.	**See Images: CC02a (8)**
24	Services		Redundant light/alarm fitting		Remove and make good scarring	1 no.	
25	Services		Redundant cabling		Remove and make good scarring	15 linear m	

Building/Element: Elevation CC02 B							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No:
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Rainwater Goods		Defective missing/outlet provisions; incorrectly dressed outlets from roof resulting in weathering to surrounding stonework	Recommend full review of rainwater drainage by specialist consultant	N/A	N/A	**See Images: CC02b (1)**
2	Masonry		Surface decay to dressed/moulded stone unit; mainly concentrated to parapet and top levels of building		Dress back by hand to sound surface and key, apply lime putty mortar repair	5m^2	**See Images: CC02b (6)**
3	Masonry		Cementitious pointing across entire elevation		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar		**See Images: CC02b (1)**
4	Masonry		Evidence of structural movement; stone lintel to GFW10 bowing in middle with historic iron support		Structural pinning	N/A	**See Images: CC02b (7)**
5	Windows		Timber sash windows requiring easing and overhaul; 1no. 3 pane, side hung; 2no. 1 pane, side hung		Replacement of window with new to match existing	3 no.	**See Images: CC02b (1)**
6	Window		Extended rot to softwood sections and hardwood units to FFW17		Replacement of entire window with new to match existing	1 no.	**See Images: CC02b (2)**
7	Masonry (chimney)		Surface decay to dressed/moulded stone units of chimney		Dress back by hand to sound surface and key, apply lime putty mortar repair	2m^2	**See Images: CC02b (6)**
8	Masonry (chimney)		Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	12m^2	**See Images: CC02b (6)**
9	Masonry (chimney)		Failed/open joints		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	1m^2	**See Images: CC02b (6)**
10	Masonry (chimney)		Evidence of structural movement	Further assessment by conservation structural engineer required.	N/A	N/A	
11	Trees		Extensive vegetation in direct conflict with structure		Investigate and remove	5m^2	**See Images: CC02b (1); CC02b (3)**

Building/Element: Elevation CC03							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	Location on building	Element	Condition	Further Investigation	Recommendations	Quantity	Comments
1	Rainwater Goods		No drainage outlet from parapet on Victorian porch resulting in excessive damage to parapet brickwork and stonework	Recommend full review of rainwater drainage by specialist consultant	Introduce outlet provision and appropriate rainwater goods to drain roof	N/A	**See Images: CC03 (8)**
2	Masonry (stone)		Minor surface decay to turret porch stonework in particular where connected to main building. Efflorescence present throughout stonework on porch		Dress back by hand to sound surface and key, apply lime putty mortar repair	Allow 3m^2	**See Images: CC03 (7); CC03 (8); CC03 (9); CC03 (10)**
3	Masonry (stone)		Severe alveolar decay to stone units		Renew in approved sandstone worked to match existing	Allow 5 no. units	**See Images: CC03 (10)**
4	Masonry (stone)		Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	Entire elevation	**See Images: CC03 (1); CC03 (2); CC03 (3); CC03 (4); CC03 (5); CC03 (6)**
5	Masonry (stone)		Failed/open joints predominantly to parapet stone and localised areas across elevation		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	Approx. 25m^2	**See Images: CC03 (4)**
6	Masonry (stone)		Deeply voided joints at crenellated stonework to porch		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as R4	5m^2	**See Images: CC03 (8); CC03 (21)**
7	Masonry (brick)		Surface decay to brick units to parapet of turret porch		Dress back by hand to sound surface and key, apply lime putty mortar repair pigmented to match clay brick background	Allow 3m^2	**See Images: CC03 (8)**
8	Masonry (stone)		Evidence of significant structural movement; large historic crack running vertically and centrally through stonework and joints	Further assessment by conservation structural engineer required	N/A	Full height of elevation	**See Images: CC03 (1); CC03 (15); CC03 (18)**
9	Masonry (stone)		Evidence of structural movement; vertical cracking through joints between FFW01 and SFW01	Further assessment by conservation structural engineer required	Remove cementitious pointing. Allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min. depth 35mm. Monitor.	6 linear m	**See Images: CC03 (4)**
10	Masonry (stone)		Evidence of structural movement; vertical cracking above SFW03	Further assessment by conservation structural engineer required	Remove cementitious pointing. Allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min. depth 35mm. Monitor.	1 linear m	
11	Masonry (stone)		Evidence of structural movement; vertical cracking through lintel stone of FFW03	Further assessment by conservation structural engineer required	Remove cementitious pointing. Allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min. depth 35mm. Monitor.	0.5 linear m	
12	Masonry (stone)		Evidence of significant structural movement; vertical cracking through joints above SFW01 up to parapet. Severe cracking to lintel above SFW01 requiring urgent attention. Crack has previously been repointed with cement but evidence of further cracking	Immediate attention by conservation structural engineer required	N/A	N/A	**See Images: CC03 (15)**
13	Masonry (brick)		Inappropriate/failing cementitious render to parapet of turret porch		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	Allow 6m^2	**See Images: CC03 (8)**

Building/Element: Elevation CC03							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
14	Masonry		Cementitious render used throughout porch elevation		Extra-over allowance for making good to masonry following coating/render removal.	Allow 6m^2	**See Images: CC03 (8); CC03 (21)**
15	Masonry (stone)		Small localised areas of cementitious mortar repair to damaged stonework		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	5m^2	**See Images: CC03 (3); CC03 (6)**
16	Masonry (stone)		Surface decay to string course directly below parapet		Dress back by hand to sound surface and key, apply lime putty mortar repair	Allow 5m^2	**See Images: CC03 (1)**
17	Masonry (stone)		Inappropriate/failing cementitious render; internal environment of porch has cementitious mortar and non-breathable paint, damaged in areas due to water ingress. Salting causing bubbling of paintwork throughout		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	20m^2	**See Images: CC03 (11); CC03 (12); CC03 (13)**
18	Window		All timber sash windows requiring easing and overhaul; 6 pane, side hung.		Replacement of all windows with new to match existing	13 no.	
19	Door		Peeling/flaking/damaged paintwork		Remove failing paintwork back to sound surface; prime and paint with selected external eggshell breathable paint system	1 no.	**See Images: CC03 (13)**
20	Services		Redundant light/alarm fitting		Remove and make good scarring	3 no. light fittings	
21	Services		Peeling/failing paintwork to cast iron svp		Remove defective coatings and redecorate with selected cast iron paint system	3 no.	
22	Services		Redundant cabling		Remove and make good scarring	15 linear m	**See Images: CC03 (25)**
23	Roof (chimney)		Failing/cementitious pointing to chimney stack		Remove cement and re-point min. 35mm depth in NHL lime mortar	15m^2	
24	Roof (chimney)		Evidence of significant structural movement; central chimney stack appears to be leaning	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: CC03 (1)**
25	Trees/planting		Minor biological growth to tower and parapet requiring cleaning		Remove loose by hand and brush down	10 m^2	**See Images: CC03 (1)**

Building/Element: Elevation CC04							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Roof (chimney)		Failing/cementitious pointing to chimney stack		Remove cement and re-point min. 35mm depth in NHL lime mortar	12m^2	**See Images: CC04 (9)**
2	Roof (chimney)		Evidence of significant structural movement; central chimney stack appears to be leaning	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: CC04 (1); CC04 (9)**
3	Rainwater Goods		Peeling/failing surface decoration to timber gutter	Recommend full review of rainwater drainage by specialist consultant	Strip coatings and redecorate with approved timber paint treatment	5m	**See Images: CC04 (10); CC04 (12); CC04 (13)**
4	Rainwater Goods		Damaged metal fixings to timber gutter	Recommend full review of rainwater drainage by specialist consultant	Renew/replace fixings and decorate	7 no.	**See Images: CC04 (8)**
5	Rainwater Goods		Cracked/damaged section to timber gutter	Recommend full review of rainwater drainage by specialist consultant	Renew damaged section and decorate	5m	**See Images: CC04 (8)**
6	Rainwater Goods		Defective missing/outlet provisions; inadequately dressed outlet for roof drainage resulting in damaged stone	Recommend full review of rainwater drainage by specialist consultant	N/A	N/A	**See Images: CC04 (9)**
7	Rainwater Goods (return elevation)		Peeling/failing surface decoration to timber gutter	Recommend full review of rainwater drainage by specialist consultant	Strip coatings and redecorate with approved timber paint treatment	5m	**See Images: CC04 (10)**
8	Rainwater Goods (return elevation)		Damaged metal fixings to timber gutter	Recommend full review of rainwater drainage by specialist consultant	Renew/replace fixings and decorate	20 no.	**See Images: CC04 (10)**
9	Rainwater Goods (return elevation)		Cracked/damaged section to timber gutter	Recommend full review of rainwater drainage by specialist consultant	Renew damaged section and decorate	5m	**See Images: CC04 (12)**
10	Rainwater Goods (return elevation)		Defective missing/outlet provisions; inadequately dressed outlet for roof drainage resulting in damaged stone	Recommend full review of rainwater drainage by specialist consultant	N/A	N/A	**See Images: CC04 (12)**
11	Masonry (stone)		Surface decay to dressed/moulded stone unit		Dress back by hand to sound surface and key, apply lime putty mortar repair	5m^2	**See Images: CC04 (5)**
12	Masonry (stone)		Severe decay to dressed/moulded stone unit; stone above hopper appears eroded.		Renew in approved sandstone worked to match existing	2 no.	**See Images: CC04 (10)**
13	Masonry (stone)		Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	whole elevation	**See Images: CC04 (1); CC04 (2); CC04 (3); CC04 (5); CC04 (10)**
14	Masonry (stone)		Cementitious pointing; localised mortar repairs in cementitious mortar		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	4m^2	**See Images: CC04 (2); CC04 (5)**

Building/Element: Elevation CC04							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
15	Masonry (stone)		Evidence of structural movement; signs of slight movement across parapet	Further assessment by conservation structural engineer required.	Lift off and re-bed top 3 no. courses and coping stones; repoint with NHL lime mortar	3 no. courses	**See Images: CC04 (1); CC04 (7); CC04 (8); CC04 (9); CC04 (13)**
16	Masonry (stone)		Failed/open joints across parapet		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	5m^2	**See Images: CC04 (9)**
17	Masonry (stone)		Deeply voided joints		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as R4	less than 1m^2	
18	Masonry (stone)		Extensive biological growth caused by faulty rainwater goods on elevation CC04 and return elevation	Recommend full review of rainwater drainage by specialist consultant	Clean affected stone with DOFF system and repoint locally with NHL lime mortar	40m^2	**See Images: CC04 (2); CC04 (4)**
19	Masonry (stone)		Inappropriate cementitious render to underneath of window FFW06		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	2m^2	**See Images: CC04 (11)**
20	Window		All timber sash windows requiring easing and overhaul; 6 pane, side hung.		Replacement of all windows with new to match existing	4 no.	
21	Door		Peeling/flaking/damaged paintwork		Remove failing paintwork back to sound surface; prime and paint with selected external eggshell breathable paint system	1 no.	**See Images: CC04 (5)**
22	Services		Redundant cabling		Remove and make good scarring	60 linear m	**See Images: CC04 (6)**

Building/Element: Elevation VW01							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Roof		Loose/slipped slates		Re-fix slates	30 no.	**See Images: VW04 (1)**
2	Roof		Broken/missing slates		Provide new slates to match existing	20 no.	**See Images: VW04 (1)**
3	Roof		Clear deflection/distortion in roof covering requiring further investigation	Recommend full review of structural timbers by conservation structural engineer	N/A	N/A	**See Images: VW04 (1)**
4	Roof		Defective lead detailing allowing water collection/penetration		Renew lead section to improved detail		
5	Roof		Inappropriate cementitious flashing between roof tiles and crenellated wall		Remove and replace with appropriate lead flashing. Requires LBC.		**See Images: VW04 (1)**
6	Rainwater Goods		Failing bedding and pointing to ridge	Recommend full review of rainwater drainage by specialist consultant	Lift ridge units, remove old mortar and re-bed on NHL lime mortar		
7	Rainwater Goods		Guttering capacity appears inadequate	Recommend full review of rainwater drainage by specialist consultant	Replace to match existing with higher capacity goods.		**See Images: VW04 (1); VW04 (3)**
8	Masonry		Cementitious render used throughout elevation		Extra-over allowance for making good to masonry following coating/render removal	Whole elevation	**See Images: VW04 (1); VW04 (3); VW04 (5); VW04 (6)**
9	Masonry		Evidence of significant structural movement; vertical cracking above and below FFW15	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: VW04 (3)**
10	Masonry		Evidence of structural movement; vertical cracking to far right hand side from eaves to floor		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	4 linear m	**See Images: VW04 (5)**
11	Window		Severe rot to softwood and hardwood sections		Replacement of window with new to match existing	1 no.	**See Images: VW04 (2)**

Building/Element: Elevation VW01 A							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Masonry		Cementitious render used throughout elevation; evidence of moisture egress through render to crenellated parapet		Extra-over allowance for making good to masonry following coating/render removal.		**See Images: CC01 (16); CC01 (18)**
2	Masonry		Evidence of significant structural movement; horizontal cracking through render to crenellated parapet	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: CC01 (16); CC01 (18)**
3	Masonry		Deeply voided joints to quoin details		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4	7m^2	**See Images: CC01 (15); CC01 (16)**
4	Masonry		Surface decay to quoin details		Dress back by hand to sound surface and key, apply lime putty mortar repair	7m^2	**See Images: CC01 (18)**
5	Window		Severe rot to softwood and hardwood sections		Replacement of window with new to match existing	1 no.	**See Images: CC01 (16)**

Building/Element: Elevation VW02							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Roof		Loose/slipped slates		Re-fix slates	50 no.	**See Images: VW02 (1); VW02 (7)**
2	Roof		Broken/missing slates		Provide new slates to match existing	30 no.	**See Images: VW02 (1); VW02 (7)**
3	Roof		Clear deflection/distortion in roof covering requiring further investigation	Recommend full review of structural timbers by conservation structural engineer	N/A	N/A	**See Images: VW02 (1)**
4	Roof		Defective lead detailing allowing water collection/penetration		Renew lead section to improved detail. Requires LBC.	10 linear m	**See Images: VW02 (7)**
5	Roof		Inappropriate cementitious flashing between roof tiles and crenellated wall		Remove and replace with appropriate lead flashing. Requires LBC.	10 linear m	**See Images: VW02 (1)**
6	Roof		Failing bedding and pointing to ridge		Lift ridge units, remove old mortar and re-bed on NHL lime mortar	15 linear m	**See Images: VW02 (1); VW02 (7)**
7	Rainwater Goods		Guttering capacity appears inadequate	Recommend full review of rainwater drainage by specialist consultant	Replace to match existing with higher capacity goods.		**See Images: VW02 (1); VW02 (7)**
8	Masonry		Cementitious render used throughout elevation		Extra-over allowance for making good to masonry following coating/render removal	Whole elevation	**See Images: VW02 (1); VW02 (2); VW02 (9); VW02 (10); VW02 (11)**
9	Masonry		Evidence of significant structural movement; significant diagonal and horizontal cracking above FFW14 tracking below window down to floor	Further assessment by conservation structural engineer required	N/A	N/A	**See Images: VW02 (2)**
10	Masonry		Evidence of significant structural movement; horizontal crack above at low level	Further assessment by conservation structural engineer required	N/A	N/A	**See Images: VW02 (5)**
11	Masonry		Evidence of structural movement; vertical hairline cracks to left hand side of elevation through render		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	4 linear m	**See Images: VW02 (1)**
12	Masonry		Evidence of structural movement; vertical hairline cracks through chimney stack		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	2 linear m	**See Images: VW02 (6); VW02 (8)**
13	Masonry		Deeply voided joints to exposed brickwork (assumed across elevation)		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4	Whole elevation	**See Images: VW02 (9)**
14	Masonry		Severe decay to exposed brick units (assumed across elevation)		Renew in selected hand made brick bonded to match existing	Whole elevation	**See Images: VW02 (9); VW02 (10)**
15	Window		Severe rot to softwood and hardwood sections		Replacement of window with new to match existing	1 no.	**See Images: VW02 (2); VW02 (3); VW02 (4)**
16	Masonry (chimney)		Inappropriate/failing cementitious render; failing and cracking render to top section of chimney stack		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	$5m^2$	**See Images: VW02 (6)**
17	Masonry (chimney)		Surface decay to exposed brick units (assumed entire chimney stack)		Dress back by hand to sound surface and key, apply lime putty mortar repair pigmented to match clay brick background.		
18	Services		Redundant cabling		Remove and make good scarring	3 linear m	
19	Services		Redundant light/alarm fitting		Remove and make good scarring	1 no. light fitting	

Building/Element: Elevation VW03							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Masonry (stone)		Surface decay to dressed/moulded stone unit; early stages of aveolar decay with minor scaling		Dress back by hand to sound surface and key, apply lime putty mortar repair	12m^2	**See Images: VW03 (1); VW03 (4); VW03 (7)**
2	Masonry (stone)		Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar		**See Images: VW03 (1); VW03 (4); VW03 (7)**
3	Masonry (stone)		Inappropriate/failing cementitious render; poorly executed previous repairs with cementitious mortar		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish		**See Images: VW03 (1); VW03 (3); VW03 (4); VW03 (6)**
4	Masonry (stone)		Inappropriate/failing cementitious render; clear water damage to top of render on chimney stack. Evidence of efflorescence throughout render.				
5	Masonry (stone)		Cementitious render used throughout elevation		Extra-over allowance for making good to masonry following coating/render removal		**See Images: VW03 (1); VW03 (2)**
6	Masonry (stone)		Evidence of significant structural movement; vertical crack to right hand side corner of chimney	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: VW03 (6); VW03 (8)**
7	Masonry (stone)		Evidence of significant structural movement; vertical crack to right hand side return of chimney stack above parapet stone	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: VW03 (6)**
8	Masonry (stone)		Evidence of structural movement; horizontal cracking to chimney stack 2.5m above ground level		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	2 linear m	**See Images: VW03 (1)**
9	Masonry (stone)		Evidence of structural movement; minor cracks to coping stones and top courses of chimney stack		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	1 linear m	**See Images: VW03 (1); VW03 (7); VW03 (8)**
10	Masonry (stone)		Rotating parapet stone and minor vegetation growth		Lift affected stones and re-bed using an NHL lime mortar	Allow 5 no.	**See Images: VW03 (1)**
11	Window		All timber sash windows requiring easing and overhaul; 2no. 2 pane, fixed; 1no. 6 pane fixed		Replacement of all windows with new to match existing	3 no.	**See Images: VW03 (1); VW03 (2)**
12	Window		Evidence of structural movement; crack to top right hand side of FFW12		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	0.5 linear m	**See Images: VW03 (3)**

Building/Element: Elevation VW04							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Masonry (stone)		Severe decay to dressed/moulded stone unit; far right hand side top 10 courses to parapet showing signs of significant aveolar decay		Renew in approved sandstone worked to match existing	10 no.	**See Images: VW04 (10); VW04 (13)**
2	Masonry (stone)		Surface decay to dressed/moulded stone unit; predominantly scaling		Dress back by hand to sound surface and key, apply lime putty mortar repair	10 m^2	**See Images: VW04 (17); VW04 (7)**
3	Masonry (stone)		Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	Whole elevation	**See Images: VW04 (5); VW04 (16); VW04 (17)**
4	Masonry (stone)		Failed/open joints		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	15m^2	
5	Masonry (stone)		Failed/open joints to string course below parapet		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	3m^2	**See Images: VW04 (5); VW04 (14)**
6	Masonry (stone)		Inappropriate/failing cementitious render surrounding ventilation grate		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	1m^2	**See Images: VW04 (15)**
7	Masonry (stone)		Deeply voided joints; severly degraded mortar joints to base rubble stone courses		Remove failed pointing material by hand and deep tamp with nhl lime mortar before putty lime mortar pointing as r4	1m^2	**See Images: VW04 (9)**
8	Masonry (stone)		Inappropriate/failing cementitious render applied to window reveals		Carefully remove and replace with lime putty mortar	1m^2	
9	Masonry (stone)		Severely decayed rubblestone unit; minor stepped crack through joints beneath parapet string		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	1 linear m	**See Images: VW04 (13)**
10	Window		All timber sash windows requiring easing and overhaul; 2no. 16 pane, fixed		Replacement of all windows with new to match existing	2 no.	**See Images: VW04 (5)**
11	Door		Peeling/flaking/damaged paintwork		Remove failing paintwork back to sound surface; prime and paint with selected external eggshell breathable paint system	1 no.	
12	Services		Redundant 1 no. light fitting		Remove and make good scarring	1 no.	
13	Steps (concrete)		Concrete steps pulling away from wall despite historic repointing in cement		Construct new steps using selected sandstone units. LBC may be required.	5 no. steps	**See Images: VW04 (4)**
14	Steps (concrete)		1 no. crack to concrete threshold unit				**See Images: VW04 (2)**
15	Steps (stone)		Severe weathering to stone units on side walls of steps		Dismantle steps and rebuild side walls using NHL lime mortar.	3m^2	**See Images: VW04 (3)**
16	Steps (stone)		Crude cementitious pointing to side walls; cracked in places and disconnecting from main wall.				**See Images: VW04 (3); VW04 (4)**
17	Trees		Historic binder plant across elevation		Remove and dispose	10m^2	**See Images: VW04 (6); VW04 (7)**

Building/Element: Elevation VW05							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Rainwater Goods		Defective missing/outlet provisions; inadequately dressed outlet	Recommend full review of rainwater drainage by specialist consultant	N/A	N/A	**See Images: VW05 (1)**
2	Rainwater Goods		Inappropriate rainwater goods design resulting in severe vegetation growth	Recommend full review of rainwater drainage by specialist consultant	N/A	N/A	**See Images: VW05 (9); VW05 (7); VW05 (12); VW05 (13)**
3	Rainwater Goods		Peeling/failing surface decoration to cast iron rainwater goods	Recommend full review of rainwater drainage by specialist consultant	Strip coatings and redecorate with approved cast iron paint treatment		**See Images: VW05 (14)**
4	Masonry (brick)		Inappropriate/failing cementitious render; evidence of decay to brickwork behind render		Localised removal of render to investigate brickwork underneath	20m^2	**See Images: VW05 (7)**
5	Masonry (stone)		Surface decay to dressed/moulded stone unit		Dress back by hand to sound surface and key, apply lime putty mortar repair	5m^2	
6	Masonry (stone)		Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	20m^2	**See Images: VW05 (4)**
7	Masonry (stone)		Failed/open joints across parapet including coping stones		Lift and re-bed all coping stones to parapet. Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar.	5m^2	**See Images: VW05 (6)**
8	Masonry (stone)		Evidence of significant structural movement; vertical cracking above FFW08 also tracking down beneath window	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: VW05 (3); VW05 (4)**
9	Masonry (stone)		Deeply voided joints to RHS of lean-to roof		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4	7m^2	**See Images: VW05 (3)**
10	Masonry (stone)		Cementitious render used throughout elevation		Extra-over allowance for making good to masonry following coating/render removal. [add description for pointing, brickwork, stone etc.]		**See Images: VW05 (1); VW05 (7); VW05 (8)**
11	Masonry (brick)		Severely decayed brick unit; bulging and cracking to lean-to building with evidence of decay to brickwork under render. Damage to brick cill of GFW06		Renew in selected hand made brick bonded to match existing	Whole elevation	**See Images: VW05 (8)**
12	Windows		All timber sash windows requiring easing and overhaul; 2no. 6 pane, side hung; 1 no. 1 pane, side hung		Replacement of all windows with new to match existing	3 no.	**See Images: VW05 (1)**
13	Roof (lean-to)		Loose/slipped slates		Re-fix slates	Allow 15no.	**See Images: VW05 (8); VW05 (9); VW05 (14)**
14	Roof (lean-to)		Broken/missing slates		Provide new slates [specify type]	Allow 15no.	**See Images: VW05 (8); VW05 (9); VW05 (14)**
15	Roof (lean-to)		Biological growth to roof covering		Remove loose by hand with wooden scrapers and brush down	2m^2	**See Images: VW05 (9); VW05 (13)**
16	Roof (lean-to)		Defective lead detailing allowing water collection/penetration; decayed lead flashings		Renew lead flashings to improved detail	6 linear m	**See Images: VW05 (14)**
17	Rainwater Goods (lean-to)		Cracked/damaged section to cast iron gutter resulting in inadequate water drainage		Renew damaged section and decorate	5 linear m	
18	Plants		Binder plant in conflict with structure		Remove and dispose	20m^2	**See Images: VW05 (9); VW05 (13)**

Building/Element: External Walls							
						Job No: 236929	
Surveyed by: Sam Smith, Emily Horne						Rev No: -	
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	**CC04** (Retaining wall in front of lean-to)	Masonry	Severely decayed rubblestone units		Renew in approved sandstone worked to match existing	30 no.	
2		Masonry	Deeply voided joints; throughout wall		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4	Allow all	
3		Masonry	Evidence of structural movement; bulging to retaining wall	Further investigation required by Conservation Structural Engineer	Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	N/A	
4		Masonry	Decay of mortar throughout wall resulting in movement and decay of coping stones		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar. Lift and rebed coping stones with an NHL lime mortar	Whole wall	
5	**CC01** (External walls)	Masonry	Inappropriate/failing cementitious render		Allow removal of area to assess condition of brick underneath	16m^2	
6		Masonry	Severely decayed rubblestone units		Renew in approved sandstone worked to match existing	20 no.	
7		Masonry	Deeply voided joints		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4		
8		Masonry	Section of wall appears structurally unsound		Dismantle and rebuild top 1.5m		
9		Masonry	Evidence of structural movement; hairline cracks throughout		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.		
10		Masonry	Decayed coping stones		Replace in approved sandstone to match existing	3 no.	
11		Masonry	Cementitious pointing to whole wall		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	whole wall	
12		Masonry	Evidence of significant structural movement; cracking and structural lean	Further investigation required by Conservation Structural Engineer	N/A	N/A	
13		Masonry	Vegetation causing damage to stone		Remove all vegetation and replace 1 no. coping stone	1 no. unit	

EXTERNAL ELEVATIONS

CC01 (1)

CC01 (2)

CC01 (3)

CC01 (4)

CC01 (5)

CC01 (6)

CC01 (7)

CC01 (8)

CC01 (9)

CC01 (10)

CC01 (11)

CC01 (12)

CC01 (13)

CC01 (14)

CC01 (15)

CC01 (16)

CC01 (17)

CC01 (18)

EXTERNAL ELEVATIONS CONTINUED

CC01 (19)

CC01 (20)

CC01 (21)

CC01 (22)

CC02a (1)

CC02a (2)

CC02a (3)

CC02a (4)

CC02a (5)


CC02a (6)


CC02a (7)


CC02a (8)


CC02a (9)


CC02a (10)


CC02a (11)


CC02a (12)


CC02a (13)


CC02a (14)

EXTERNAL ELEVATIONS CONTINUED

CC02a (15)

CC02a (16)

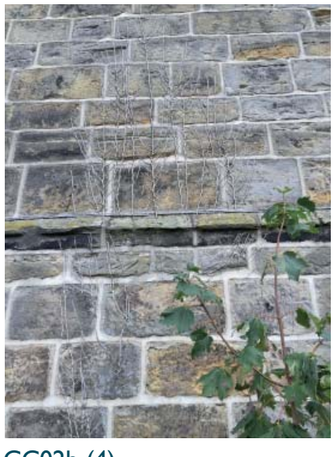
CC02a (17)

CC02a (18)

CC02b (1)

CC02b (2)

CC02b (3)



CC02b (4)

CC02b (5)

CC02b (6)

CC02b (7)

CC03 (1)

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CC03 (3)

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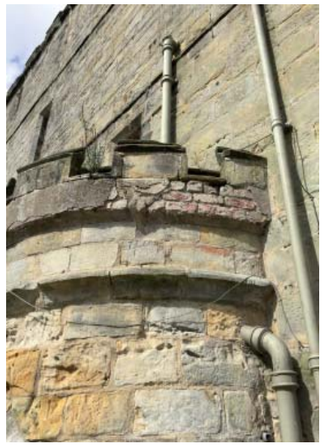
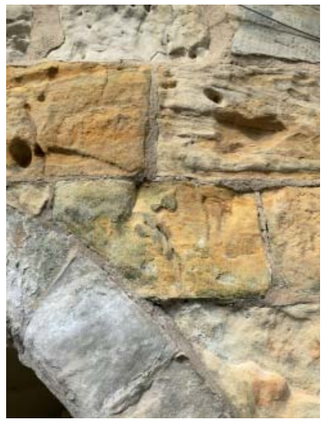
CC03 (7)

EXTERNAL ELEVATIONS CONTINUED



CC03 (8)

CC03 (9)



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CC03 (19)


CC03 (20)


CC03 (21)


CC03 (22)


CC03 (23)


CC03 (24)


CC03 (25)

EXTERNAL ELEVATIONS CONTINUED

CC03 (26)

CC03 (27)

CC04 (1)

CC04 (2)

CC04 (3)

CC04 (4)

CC04 (5)

CC04 (6)

CC04 (7)

CC04 (8)

CC04 (9)

CC04 (10)

CC04 (11)

CC04 (12)

CC04 (13)

CC04 (14)

VW01 (1)

VW01 (2)

EXTERNAL ELEVATIONS CONTINUED

VW01 (3)

VW01 (4)

VW01 (5)

VW01 (6)

VW02 (1)

VW02 (2)

VW02 (3)

VW02 (4)

VW02 (5)

VW02 (6)

VW02 (7)

VW02 (8)

VW02 (9)

VW02 (10)

VW02 (11)

VW03 (1)

VW03 (2)

VW03 (3)

EXTERNAL ELEVATIONS CONTINUED

VW03 (4)

VW03 (5)

VW03 (6)

VW03 (7)

VW03 (8)

VW04 (1)

VW04 (2)

VW04 (3)

VW04 (4)

EXTERNAL ELEVATIONS CONTINUED

VW04 (5)

VW04 (6)

VW04 (7)

VW04 (8)

VW04 (9)

VW04 (10)

VW04 (11)

VW04 (12)

VW04 (13)

EXTERNAL ELEVATIONS CONTINUED

VW04 (14)

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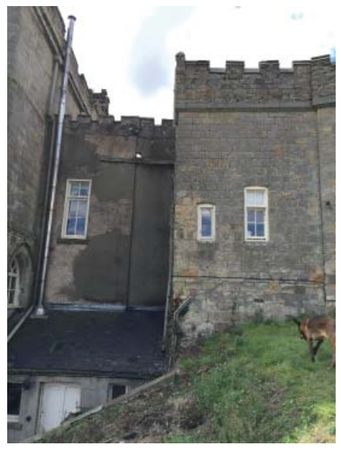
VW04 (16)

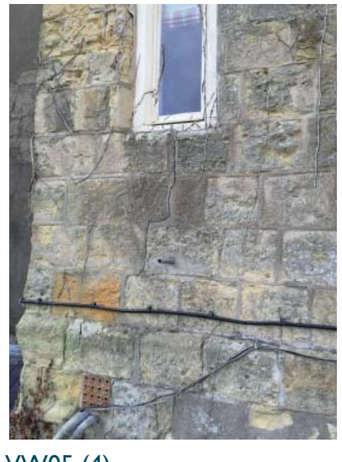
VW04 (17)



VW05 (1)

VW05 (2)

VW05 (3)



VW05 (4)

VW05 (5)

VW05 (6)

VW05 (7)

VW05 (8)

VW05 (9)

VW05 (10)

VW05 (11)

VW05 (12)

VW05 (13)

VW05 (14)

EXTERNAL ELEVATIONS AND EXTERNAL WALLS

VW05 (15)

CC01-W (1)

CC01-W (2)

CC01-W (3)

CC01-W (4)

CC01-W (5)

CC01-W (6)

CC01-W (7)

CC01-W (8)

CC01-W (9)

CC01-W (10)

CC01-W (11)

CC01-W (12)

CC01-W (13)

CC01-W (14)

CC01-W (15)

WALLS (1)

WALLS (2)

EXTERNAL WALLS CONTINUED

WALLS (3)

WALLS (4)

WALLS (5)

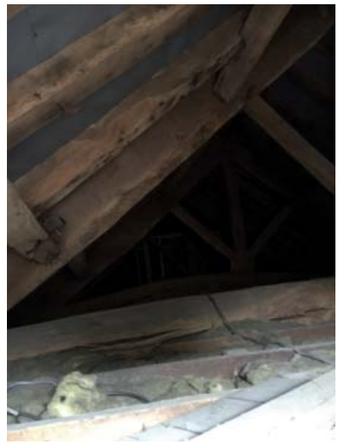
WALLS (6)

WALLS (7)

Building/Element: Roof							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	Roof (chimney)	Chimney 1	Evidence of significant structural movement; significant cracking through stonework and joints	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: ROOF (5)**
2	Roof (chimney)	Chimney 1	Severe decay to dressed/moulded stone unit		Renew in approved sandstone worked to match existing	Allow 6 no.	**See Images: ROOF (8); ROOF (9)**
3	Roof (chimney)	Chimney 1	Deeply voided joints		Remove failed pointing material by hand and deep tamp with NHL lime mortar before putty lime mortar pointing as r4	5m^2	**See Images: ROOF (5)**
4	Roof (chimney)	Chimney 1	Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	Allow 40m^2	**See Images: ROOF (7); ROOF (8)**
5	Roof (chimney)	Chimney 1	Broken/missing terracotta chimney pots; 2 no.		Renew with selected chimney pots to match	2 no.	**See Images: ROOF (10); ROOF (11)**
6	Roof (chimney)	Chimney 1	Decay to stonework and mortar joints with evidence of structural movement in areas.		Allow for the removal rebedding of top 2 no. courses of chimney stack	2 no. courses	**See Images: ROOF (5); ROOF (10); ROOF (11)**
7	Roof (chimney)	Chimney 1	Inappropriate/failing cementitious render		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	1m^2	**See Images: ROOF (10); ROOF (11)**
8	Roof (chimney)	Chimney 1	Evidence of significant structural movement; additional vertical crack running from flaunching down to roof level	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: ROOF (5)**
9	Roof (chimney)	Chimney 1	Failing cement flaunching to head of chimney		Remove cement and renew in NHL lime mortar	1m^2	
10	Roof (chimney)	Chimney 2	Inappropriate/failing cementitious render		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	20m^2	**See Images: ROOF (12); ROOF (40); ROOF (41)**
11	Roof (chimney)	Chimney 2	Surface decay to dressed/moulded stone unit		Dress back by hand to sound surface and key, apply lime putty mortar repair	10m^2	**See Images: ROOF (12)**
12	Roof (chimney)	Chimney 2	Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	40m^2	**See Images: ROOF (12)**
13	Roof (chimney)	Chimney 2	Decay to stonework and mortar joints with evidence of structural movement in areas.		Allow for the removal rebedding of top 2 no. courses of chimney stack, repoint with an NHL lime mortar.	2 no. courses	**See Images: ROOF (12)**
14	Roof (chimney)	Chimney 2	Extensive splits/tears in leadwork		Lift existing and renew in code 6 lead.	1m^2	
15	Roof (chimney)	Chimney 2	Failing cement flaunching to head of chimney		Remove cement and renew in NHL lime mortar	1m^2	
16	Roof (chimney)	Chimney 3	Inappropriate/failing cementitious render		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	30m^2	**See Images: ROOF (18); ROOF (19); ROOF (22)**
17	Roof (chimney)	Chimney 3	Deeply voided joints; visible where render has been removed - assumed across entire chimney		Remove render to investigate fully	N/A	**See Images: ROOF (18); ROOF (19)**
18	Roof (chimney)	Chimney 3	Severely decayed brick unit; visible where render has been removed - assumed across entire chimney		Remove render to investigate fully	N/A	**See Images: ROOF (19)**
19	Roof (chimney)	Chimney 3	Surface decay to dressed/moulded stone unit		Allow for the removal and rebedding of top 2 no. courses of chimney stack	5m^2	**See Images: ROOF (18)**
20	Roof (chimney)	Chimney 3	Extensive splits/tears in leadwork; leadwork has deteriorated and pulled away from stonework		Lift existing and renew in code 6 lead.	6m^2	**See Images: ROOF (20)**
21	Roof (chimney)	Chimney 3	Failing cement flaunching to head of chimney		Remove cement and renew in NHL lime mortar	1m^2	

Building/Element: Roof							Job No: 236929
Surveyed by: Sam Smith, Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
22	Roof (chimney)	Chimney 4	Inappropriate/failing cementitious render		Remove cementitious render by hand and replace with NHL lime render with selected limewash finish	Allow 30m^2	**See Images: ROOF (46); ROOF (47); ROOF (48); ROOF (49)**
23	Roof (chimney)	Chimney 4	Evidence of structural movement; minor cracking to head of chimney		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	1 linear m	**See Images: ROOF (47)**
24	Roof (chimney)	Chimney 4	Surface decay to dressed/moulded stone unit		Dress back by hand to sound surface and key, apply lime putty mortar repair	3m^2	
25	Roof (chimney)	Chimney 4	Failing cement flaunching to head of chimney		Remove cement and renew in NHL lime mortar	1m^2	
26	Roof (chimney)	Chimney 4	2no. broken/missing terracotta chimney pots		Renew with selected chimney pots to match	2 no. pots	
27	Roof (chimney)	Chimney 4	Extensive splits/tears in leadwork		Lift existing and renew in code 6 lead.	6m	**See Images: ROOF (46)**
28	Roof (chimney)	Chimney 4	Decay to stonework and mortar joints with evidence of structural movement in areas.		Allow for removal and rebedding of top 2 no. courses of masonry	2 no. courses	**See Images: ROOF (46)**
29	Roof (slate roof covering)	Slate	Ridge units bedded onto cementitious mortar		Lift ridge units, remove old mortar and re-bed on NHL lime mortar		**See Images: ROOF (27); ROOF (53); ROOF (58); ROOF (59)**
30	Roof (slate roof covering)	Slate	Loose/slipped slates		Re-fix slates	50%	**See Images: ROOF (26); ROOF (35); ROOF (61)**
31	Roof (slate roof covering)	Slate	Broken/missing slates		Provide new slates to match existing	25%	**See Images: ROOF (25); ROOF (26); ROOF (27); ROOF (35); ROOF (61)**
32	Roof (slate roof covering)	Slate	Deflection/distortion in roof covering requiring further investigation; extensive deflection to slate roof covering	Recommend full review of structural timbers by conservation structural engineer	N/A	N/A	**See Images: ROOF (24)**
33	Roof (slate roof covering)	Slate	Biological growth to roof covering		Remove loose by hand with wooden scrapers and brush down		**See Images: ROOF (14); ROOF (28); ROOF (59); ROOF (60)**
34	Roof	Access hatch	Localised split in leadwork to access hatch		Patch repair with solder and code 6 lead		**See Images: ROOF (58)**
35	Roof	Access hatch	Timber to access hatch degrading due to insect/woodworm		Allow for the removal and replacement of the roof access hatch	1 no.	**See Images: ROOF (58)**
36	Roof	Masonry			Remove and re-bed top 2 no. courses of masonry to parapets	2 no. courses	**See Images: ROOF (29); ROOF (31); ROOF (32); ROOF (33); ROOF (34); ROOF (36); ROOF (38); ROOF (45)**
37	Roof	Lead gutters		Recommend full review of rainwater drainage by specialist consultant	Overhaul and re-lay to new falls		**See Images: ROOF (29); ROOF (30); ROOF (33); ROOF (41); ROOF (42); ROOF (43); ROOF (44); ROOF (61);**

ROOF



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ROOF (3)

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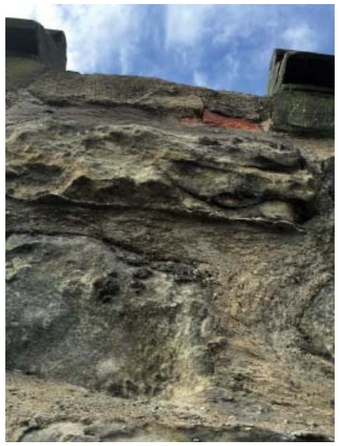
ROOF (10)

ROOF (11)

ROOF (12)



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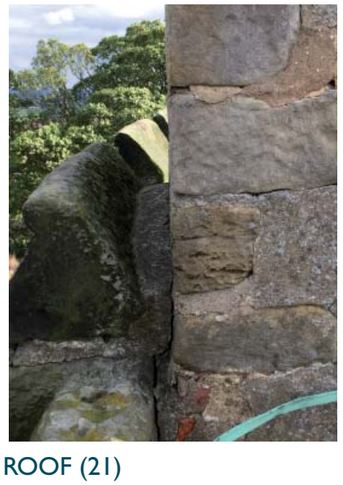

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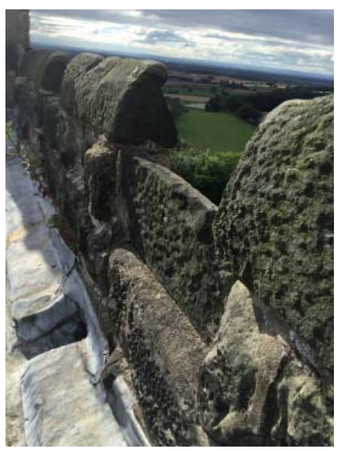

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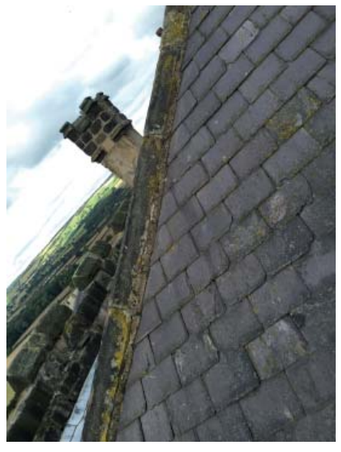
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ROOF (63)

Building/Element: Ground Floor							Job No: 236929
Surveyed by: Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	**GF01**	Timber roof beams	Signs of minor insect damage to structural timber beyond sapwood	Recommend full review of structural timbers by conservation structural engineer	Repair/support to structural engineer's design	To be specified	**See Images: GF01 (3)**
2		Ceiling	Appears in sound condition; inappropriate gypsum plaster and non-breathable paint		Remove existing coating back to sound substrate; prime and redecorate with appropriate breathable paint	Whole ceiling	
3		Walls	Peeling/damaged decorative finish; inappropriate gypsum plaster and non-breathable paint showing signs of deterioration and damage due to moisture		Remove and replace with appropriate lime plaster and breathable paint	Whole room	
4		Walls (timber panelling)	Significant black discolouration to timber wall paneling		Strip coating to timber wall panelling and redecorate to match	12m^2	**See Images: GF01 (1)**
5		Floor	Timber floor boards appear in sound condition with minor soiling. (*Unable to survey entire floor due to plastic boxes)*		Allow for sanding of floor boards. Prime and redecorate in selected timber paint	Whole floor	**See Images: GF01 (2)**
6		Staircase (timber)	In sound condition generally; minor splits/broken timber balusters; re-decoration required		Renew timber balusters in selected timber; redecorate whole staircase		**See Images: GF01 (4)**
7		Services	Exposed heating pipes running through room	Recommend full review of services by services engineer	Remove and install appropriate heating system with concealed pipework	N/A	**See Images: GF01 (2)**
8		Radiator	Peeling/failing decorative paint finish to 1no. radiators		Remove defective coatings back to sound substrate; prime and redecorate with selected paint finish.	1 no.	**See Images: GF01 (2)**
9	**GF02**	Ceiling	False ceiling has been partially removed resulting in exposed pipework. Original beams are visible through void and appear in sound condition.		Remove damaged false ceiling and make good existing lath and plaster ceiling and structural timber beams	Whole ceiling	**See Images: GF02 (3); GF02 (4)**
10		Services	Heating pipework visible due to existing false ceiling being partially removed.		Remove and install appropriate heating system with concealed pipework	N/A	
11		Walls	Damaged/missing gypsum plaster with peeling/damaged decorative finish; salting causing bubbling of paintwork at lower levels.		Remove and replace with appropriate lime plaster and breathable paint. See notes on external elevations regarding removal of cementitious pointing	Whole room m2	**See Images: GF02 (2)**
12		Door	Significant black discolouration to timber door		Remove and replace with new to match existing	1 no.	
13	**GF03**	Walls	Peeling/damaged decorative finish		Remove defective coatings back to sound substrate; prime and redecorate with appropriate breathable paint finish		
14	**GF04**	Ceiling	Peeling/failing decorative finish; historic timber beams visible through hatch in false ceiling		Remove existing coating back to sound substrate; prime and redecorate with appropriate breathable paint		**See Images: GF04 (6)**

Building/Element: Ground Floor							Job No: 236929
Surveyed by: Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
15		Ceiling	Damaged/missing gypsum plaster to false ceiling		Remove defective material and patch repair. Redecorate to match existing	$2m^2$	
16		Walls	Peeling/damaged decorative finish; significant salting causing bubbling of paintwork throughout		Remove defective coatings back to sound substrate; apply appropriate lime plaster and prime and redecorate with breathable paint	Whole room	**See Images: GF04 (4); GF04 (5)**
17		Walls	Significant water ingress to door reveal causing salting, cracking and failing of plasterwork and paintwork	To be investigated further	Allow for removal of defective material and replace with new to match existing	N/A	**See Images: GF04 (1); GF04 (2); GF04 (3)**
18		Floor	Timber floor boards appear in sound condition with minor soiling.		Allow for sanding of floor boards. Prime and redecorate in selected timber paint	Whole floor	
19		Joinery	Damage/loss to skirting		Piece-in missing softwood detail with mouldings to match	Whole room	
20		Services	Redundant cabling		Remove and make good scarring	5 linear m	**See Images: GF04 (2); GF04 (3)**
21		Door	1 no. missing door		Replace to suit existing opening	1 no.	
22	**GF05/GF06**	Ceiling	Peeling/failing decorative finish due to water ingress		Remove failing coatings back to sound substrate; prime and redecorate with appropriate breathable paint	whole ceiling	**See Images: GF05 (4)**
23		Timber roof beams	Signs of minor insect damage to structural timber beyond sapwood	Recommend full review of structural timbers by Conservation Structural Engineer	Repair/support to structural engineer's design	To be specified	
24		Walls	Peeling/damaged decorative finish; inappropriate gypsum plaster and non-breathable paint showing signs of deterioration and damage due to moisture		Remove and replace with appropriate lime plaster and breathable paint	Whole room	**See Images: GF05 (1); GF05 (6)**
25		Floor	Worn/loss of tile surface finish		Take up and replace with selected finish	Whole floor	**See Images: GF05 (3); GF05 (5)**
26		Doors	2 no. missing doors		Replace to suit existing openings	2 no.	**See Images: GF05 (1)**
27		Timber sink unit	Black discolouration/mould to timber. Broken cupboard door.		Remove and replace to match existing	2.5x0.6x 1m	**See Images: GF05 (2)**
28	**GF07**	Timber roof beams	Signs of minor insect damage to structural timber beyond sapwood	Recommend full review of structural timbers by conservation structural engineer	Repair/support to structural engineer's design	To be specified	**See Images: GF07 (2)**
29		Ceiling	Appears in sound condition; inappropriate gypsum plaster and non-breathable paint		Remove existing coating back to sound substrate; prime and redecorate with appropriate breathable paint	Whole ceiling	**See Images: GF07 (3); GF07 (10)**

Building/Element: Ground Floor							Job No: 236929
Surveyed by: Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
30		Walls	Peeling/damaged decorative finish; inappropriate gypsum plaster and non-breathable paint showing signs of deterioration and damage due to moisture		Remove and replace with appropriate lime plaster and breathable paint	Whole room	**See Images: GF07 (4)**
31		Walls	Peeling/damaged decorative finish; area showing signs of water ingress where fireplace/chimney has been blocked up.	Note: Full review of chimneys required	Remove and replace with appropriate lime plaster and breathable paint	2m^2	**See Images: GF07 (4)**
32		Walls	Evidence of structural movement; vertical crack above window GFW02 running from ceiling to window head.	Further assessment by Conservation Structural Engineer required	Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	2 linear m	**See Images: GF07 (6)**
33		Floor	Timber floor boards appear in sound condition with minor soiling.		Allow for sanding of floor boards. Prime and redecorate in selected timber paint	Whole floor	**See Images: GF07 (7)**
34		Floor	3 no. split timber floor boards.		Take up and replace with new timber floor boards to match existing	3 no.	**See Images: GF07 (8)**
35		Door	Broken/damaged ironmongery; 1 no. door handle missing		Remove existing and renew to match if not redundant	1 no.	
36		Windows	All timber sash windows requiring easing and overhaul; 3 no. 6 pane, side hung; 1 no.		Replacement of all windows	4 no.	
37		Radiator	Peeling/failing decorative paint finish to 2no. radiators		Remove defective coatings back to sound substrate; prime and redecorate with selected paint finish.	2 no.	**See Images: GF07 (5)**
38		Stone fireplace	Sulphation to localised area of stone caused by chimney stack		Clean off using DOFF system	0.5m^2	**See Images: GF07 (9)**
39		Services	Exposed heating pipes running through room		Remove and install appropriate heating system with concealed pipework	N/A	**See Images: GF07 (4); GF07 (8)**
40	**GF08**	Rooflights	Broken/missing pane to 1 no. rooflight		Renew rooflight	1no.	
41		Ceiling	Peeling/failing decorative finish due to water ingress		Remove failing coatings back to sound substrate; prime and redecorate	Whole ceiling	**See Images: GF08 (2)**
42		Walls	Extensive biological growth on wall opposite fireplace caused by water ingress	Recommend full review of site drainage by Drainage Engineer	To be investigated further to determine cause	Whole wall	**See Images: GF08 (4); GF08 (5)**
43		Walls	Sulphation to localised area of stonework caused by chimney stack		Clean off using DOFF system	10m^2	**See Images: GF08 (8)**
44		Walls	Cementitious pointing; to localised area of wall		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	10m^2	**See Images: GF08 (6); GF08 (7)**
45		Floors	*(Unable to survey entire floor due to rubble/debris*) Client has removed contemporary tile floor surface to reveal historic tiled floor finish, appears in sound condition; heavily soiled.		Clean tiles using appropriate method	Whole floor	
46		Services	Exposed heating pipes running through room	Recommend full review of services by services engineer	Remove and install appropriate heating system with concealed pipework	N/A	
47	**GF09**	Ceiling	Significant damaged/missing gypsum plaster to ceiling due to moisture ingress		Further investigation required to determine cause	N/A	**See Images: GF09 (1); GF09 (2)**
48		Walls	Extensive biological growth caused by significant water ingress	Recommend full review of site drainage by Drainage Engineer	To be investigated further to determine cause.	N/A	**See Images: GF09 (3); GF09 (4); GF09 (5); GF09 (6)**

Building/Element: Ground Floor							Job No: 236929
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Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
49		Walls	Inappropriate/failing cementitious render		Remove cementitious render by hand. To be investigated further to determine cause.	1 no retaining wall	**See Images: GF09 (3); GF09 (4)**
50		Floor	Heavily soiled tile floor finish with biological growth due to moisture ingress	Recommend full review of site drainage by Drainage Engineer	Clean tiles using appropriate method. To be investigated further to determine cause of moisture ingress	whole floor	**See Images: GF09 (7)**
51		Windows	Timber window requiring easing and overhaul; 2 pane, side hung.		Replace window	1 no.	
52		Services	Exposed heating pipes running through room	Recommend full review of services by services engineer	Remove and install appropriate heating system with concealed pipework	N/A	
53	**GF10**	Ceiling	Significant damaged/missing gypsum plaster to ceiling due to moisture ingress	Recommend full review of site drainage by Drainage Engineer	Further investigation required to determine cause	N/A	**See Images: GF10 (3); GF10 (4)**
54		Walls	Extensive biological growth to stonework caused by significant water ingress	Recommend full review of site drainage by Drainage Engineer	To be investigated further to determine cause.	N/A	**See Images: GF10 (1)**
55		Walls	Surface decay to brick unit; large areas of effloresence		Dress back by hand to sound surface and key, apply lime putty mortar repair pigmented to match clay brick background	8m^2	**See Images: GF10 (2)**
56		Walls	Evidence of significant structural movement; major distortion and cracking across brick face of retaining wall resulting in deeply voided joints	Further assessment by conservation structural engineer required.	N/A	N/A	**See Images: GF10 (2)**
57		Walls	Evidence of structural movement; cracking through joints to brickwork to wall between garage and utility room		Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	6 linear m	**See Images: GF10 (5); GF10 (6)**
58	**GF11**	Ceiling	Peeling/failing decorative finish		Remove failing coatings back to sound substrate; prime and redecorate	Whole ceiling	
59		Walls	Peeling/damaged decorative finish; salting causing blistering of paintwork		Remove defective coatings back to sound substrate; prime and redecorate with non-breathable paint finish	2 no. walls	**See Images: GF11 (1)**
60		Walls	2 no. stone walls appear in sound condition with painted/decorated surface finish		Remove/clean off painted/decorated surface finish to stonework	2 no. walls	**See Images: GF11 (2); GF11 (3)**
61		Walls	Area of cementitious render to exposed internal masonry		Remove cementitious render by hand. Repoint with a lime based mortar	2m^2	**See Images: GF11 (5)**
62	**GF12**	Ceiling	Damaged/missing traditional lath and plaster		Remove defective material and patch repair allowing three coat lime plaster finish	1m^2	**See Images: GF12 (1)**
63		Walls	Cementitious pointing to internal glazed brickwork		Remove cementitious pointing back to sound lime mortar; re-point min. depth 35mm in lime putty mortar	2 no. walls	**See Images: GF12 (2)**
64		WC	Damaged sanitaryware; victorian WC with modern cistern appears that to be in non-working order		Renew with selected sanitaryware	1 no.	**See Images: GF12 (3)**

Building/Element: First Floor							Job No: 236929
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Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	**FF01**	Ceiling	Minor cracking through traditional lath and plaster		Clean out crack and fill with lime filler	2 linear m.	**See Images: FF01 (4)**
2		Ceiling	Appears in sound condition; inappropriate gypsum plaster and non-breathable paint		Remove existing coating back to sound substrate; prime and redecorate with appropriate breathable paint	Whole ceiling	**See Images: FF01 (3)**
3		Timber roof beams	Appear in sound condition; 2 no. beams have been boxed in	Remove boxing to original beams to allow for further investgation	N/A	16 linear m.	**See Images: FF01 (4)**
4		Walls	Cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	1 no. wall	**See Images: FF01 (1); FF01 (2); FF01 (7); FF01 (8)**
5		Walls	Damaged/peeling wallpaper finish due to signs of water ingress		Remove defective area to allow for further investigation	1 no. wall	**See Images: FF01 (5); FF01 (6)**
6		Walls	Sulphation to localised area of stone caused by chimney stack		Clean off using DOFF system	3 m^2	**See Images: FF01 (2)**
7		Walls	Cracking through paint finish to moulded stones at top of wall		Remove defective coatings back to sound substrate	16 linear m.	**See Images: FF01 (9); FF01 (10)**
8		Services	Exposed heating pipes running through room	Recommend full review of services by services engineer	Remove and install appropriate heating system with concealed pipework	N/A	**See Images: FF01 (5)**
9	**FF02**	Ceiling	Cracking through traditional lath and plaster		Clean out crack and fill with lime filler. Redecorate to match existing	4 linear m.	**See Images: FF02 (1)**
10		Ceiling	Damaged/missing lime plaster		Remove defective material and patch repair allowing three coat lime plaster finish	Allow 3m^2	**See Images: FF02 (2)**
11		Walls	Peeling/damaged decorative finish; inappropriate non-breathable paint showing signs of deterioration and blistering due to moisture ingress	Further investigation required to determine cause of water ingress	Remove and replace with appropriate lime plaster and breathable paint	whole room	**See Images: FF02 (5); FF02 (6); FF02 (7)**
12		Walls	Wall to left hand side of window FFW17 has had lath and plaster finish removed; cementitious pointing		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	12m^2	**See Images: FF02 (8); FF02 (9)**
13		Walls	Evidence of structural movement; cracks vertically in stonework above window FFW01	Further investigation required by Conservation Structural Engineer	Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	1 linear m.	**See Images: FF02 (3)**
14		Window	Timber sash windows requiring easing and overhaul; 6 pane, side hung.		Replacement of window	1 no.	
15		Window	Extended rot to softwood sections and hardwood units to FFW17		Replacement of entire window	1 no.	
16	**FF03**	Walls	Damaged/peeling wallpaper finish		Remove to carry out further investigation to determine cause of water ingress	whole room	**See Images: FF03 (1); FF03 (2)**
17		Walls	Peeling/damaged decorative finish; inappropriate non-breathable paint showing signs of deterioration to window reveals due to moisture ingress	Further investigation required to determine cause of water ingress	Remove and replace with appropriate lime plaster and breathable paint	whole room	**See Images: FF03 (3); FF03 (4)**
18	**FF04**	Walls	Cementitious pointing to stonework in arched opening over window FFW06		Remove cementitious pointing by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	Allow 2m^2	**See Images: FF04 (1)**
19		Walls	Failed/open joints within internal stonework		Remove failed pointing material by hand back to sound historic lime mortar min. depth 35mm and re-point in putty lime mortar	1 no. wall	**See Images: FF04 (2); FF04 (3)**
20		Walls	Timber panelling to 3 no. walls appears in sound condition	Remove timber panelling to assess stonework behind	N/A	N/A	

Building/Element: First Floor							Job No: 236929
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Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
21	**FF05**	Conservatory	*Has been removed completely by client*		N/A	N/A	
22	**FF06**	Ceiling	Peeling/failing decorative finish to timber ceiling boards due to moisture ingress		Overhaul of roof required. Allow for re-laying of roof tiles, clearing of rainwater goods and introduction of roofing felt to prevent further water ingress	Whole roof	
23		Walls	Peeling/damaged decorative finish; salting and damage to internal wall finish caused by moisture ingress	Further investigation required to determine cause of water ingress	Remove defective coatings back to sound substrate; prime and redecorate with breathable paint finish	whole room	
24		Walls	1 no. stone arch appear in sound condition with painted/decorated surface finish		Remove/clean off painted/decorated surface finish to stonework	$2m^2$	
25	**FF07**	Walls	Peeling/damaged decorative finish; signs of signifcant water ingress to top of wall and right hand side of window FFW15 and wall to staircase causing severe cracking and blistering of painted surface		Remove defective coatings back to sound substrate; prime and redecorate with appropriate breathable paint finish	whole room	**See Images: FF07 (1); FF07 (2); FF07 (3); FF07 (4)**
26	**FF08**		Appears in sound condition throughout		N/A	N/A	
27	**FF09**	Ceiling	Minor peeling/failing decorative paint finish		Remove failing coatings back to sound substrate; prime and redecorate with appropriate breathable paint	whole roof	**See Images: FF09 (3)**
28		Ceiling	Cracking through traditional lath and plaster; 3 no. horizontal cracks running whole length of rooms		Clean out crack and fill with lime filler	20 linear m.	**See Images: FF09 (5); FF09 (6); FF09 (7); FF09 (8); FF09 (9)**
29		Walls	Damaged/missing lime plaster; missing area of plasterwork where new section of pipe has been installed; staining from water ingress visible		Remove defective material and patch repair allowing three coat lime plaster finish	0.5 m^2	**See Images: FF09 (1); FF09 (2)**
30		Walls	Peeling/damaged decorative finish; cracking and deterioration of paintwork to top of wall with FFW14		Remove defective coatings back to sound substrate; prime and redecorate with breathable paint finish	1 no. wall	**See Images: FF09 (1); FF09 (3); FF09 (4)**
31		Walls	Evidence of structural movement; vertical crack above window FFW14	Recommend assessment by Conservation Structural Engineer	Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	0.5 linear m	**See Images: FF09 (4)**
32	**FF10**	Ceiling	Peeling/failing decorative finish		Remove failing coatings back to sound substrate; prime and redecorate	Whole ceiling	**See Images: FF10 (1); FF10 (2)**
33		Walls	Peeling/damaged decorative finish; significant water ingress causing staining and blistering of paintwork to right hand side of FFW13 at top and corner of wall	Further investigation required to determine cause of water ingress, which seems to align with defects to chimney stack. Recommend assessment by Conservation Structural Engineer	Remove defective coatings back to sound substrate; prime and redecorate with selected paint finish	$15m^2$	
34		Walls	Evidence of significant structural movement; significant vertical crack in left hand corner of room	Further assessment by conservation structural engineer required.	N/A	2 linear m.	**See Images: FF10 (3); FF10 (4)**
35	**FF11**	Ceiling	Cracking through traditional lath and plaster		Clean out crack and fill with lime filler	4 linear m.	**See Images: FF11 (1)**
36		Walls	Peeling/damaged decorative finish; significant water ingress causing staining and blistering of paintwork to left hand side of FFW12 at top corner of wall	Further investigation required to determine cause of water ingress, which seems to align with defects to chimney stack. Recommend assessment by Conservation Structural Engineer	Remove defective coatings back to sound substrate; prime and redecorate with selected paint finish	$4m^2$	**See Images: FF11 (2); FF11 (3); FF11 (4)**

Building/Element: Second Floor							Job No: 236929
Surveyed by: Emily Horne							Rev No: -
Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	**SF01**	Walls	Staining to localised area of paintwork above fireplace		Remove defective coatings back to sound substrate; prime and redecorate with breathable paint finish	1 no. Wall	**See Images: SF01 (1); SF01 (2)**
2	**SF02**	Walls	Peeling/damaged decorative finish; flaking paintwork to wall left of en-suite door		Remove defective coatings back to sound substrate; prime and redecorate with selected paint finish	1m^2	
3		Walls	Evidence of structural movement; vertical cracks above SFW01		Further assessment by conservation structural engineer required.	1 linear m.	**See Images: SF02 (1); SF02 (2)**
4		Walls	Damaged/missing gypsum plaster; fireplace has been removed leaving damage to plaster		Remove defective material and patch repair	9m^2	**See Images: SF02 (3); SF02 (4)**
5	**SF03**	Floor	False/built up floor to en-suite		Remove to assess floor beneath	Whole floor	
6	**SF04**	Walls	Evidence of structural movement; 1 no. hairline crack to wall above radiator		Clean out crack and fill with lime filler	1.5 linear m.	
7		Walls	Evidence of structural movement; 1 no. hairline crack above door to ensuite		Clean out crack and fill with lime filler	1 linear m.	
8		Walls	Evidence of structural movement; 2 no. hairline cracks above SFW02		Clean out crack and fill with lime filler	1 linear m.	**See Images: SF04 (1); SF04 (2)**
9	**SF05**		Appears generally sound; no obvious defects noted		N/A	N/A	
10	**SF06**	Walls	Damaged/peeling wallpaper finish; showing signs of water ingress	Remove to carry out further investigation to determine cause of water ingress	N/A	N/A	**See Images: SF06 (1)**
11		Walls	Evidence of structural movement; 1 no. vertical hairline crack above SFW03		Clean out crack and fill with lime filler	0.5 linear m	**See Images: SF06 (1)**
12		Walls	Peeling/damaged decorative finish; paintwork to stone band at top of wall deteriorating due to visible signs of moisture ingress	Remove to carry out further investigation to determine cause of water ingress	N/A	perimeter of room	**See Images: SF06 (3); SF06 (4)**
13	**SF07**	Walls	Damaged/peeling wallpaper finish; showing signs of water ingress		Remove to carry out further investigation to determine cause of water ingress	whole room	**See Images: SF07 (1); SF07 (2)**

Building/Element: Third Floor							Job No: 236929
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Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
1	**TF01**	Walls	Stonework around windows TFW04 and TFW05 appear in sound condition with painted/decorated surface finish		Remove/clean off painted/decorated surface finish to stonework	10 m^2	**See Images: TF01 (1); TF01 (2)**
2		Walls	Evidence of structural movement; cracking in stonework above TFW05	Further investigation required by Conservation Structural Engineer	Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	1 linear m.	**See Images: TF01 (2)**
3		Ceiling	Peeling/failing decorative finish; hairline cracks to painted ceiling finish		Remove failing coatings back to sound substrate; prime and redecorate with breathable paint finish	Whole ceiling	
4	**TF02**	Ceiling	Peeling/failing decorative finish; 1 no. hairline crack to painted ceiling finish		Remove failing coatings back to sound substrate; prime and redecorate with breathable paint finish	Whole ceiling	**See Images: TF02 (1)**
5		Walls	Peeling/damaged decorative finish; inappropriate non-breathable paint showing signs of deterioration due to moisture ingress	Further investigation required to determine cause of water ingress	Remove and replace with appropriate lime plaster and breathable paint	whole room	**See Images: TF02 (2); TF02 (3)**
6		Walls	Damaged/missing lime plaster; localised area of missing plaster to left hand side of ladder		Remove defective material and patch repair allowing three coat lime plaster finish	0.5m^2	**See Images: TF02 (3)**
7		Walls	1 no. stone wall with painted/decorated surface finish		Remove/clean off painted/decorated surface finish to stonework	7m^2	
8	**TF03**	Walls	Damaged/peeling wallpaper finish; removal of fireplace resulting in exposed brickwork and damage to wallpaper finish		Remove defective area and apply new selected wallpaper	whole room	**See Images: TF03 (1)**
9		Rooflight	Bioloogical growth to glazing of 1 no. velux rooflight		Remove loose by hand and brush down	0.5 m^2	
10	**TF04**	Walls	Evidence of structural movement; cracks in stone lintel above TFW01	Further investigation required to determine cause of water ingress	Remove cementitious pointing. allow for deep tamping in NHL lime mortar followed by re-pointing in lime putty mortar along crack path min.depth 35mm. Monitor.	1 linear m.	**See Images: TF04 (1)**
11		Walls (masonry)	Stonework surrounding window TFW01 has painted/decorated surface finish		Remove/clean off painted/decorated surface finish to stonework	1 m^2	**See Images: TF04 (1)**
12		Walls	Peeling/damaged decorative finish; damaged wallpaper finish		Remove defective area and apply new selected wallpaper	Whole room	**See Images: TF04 (2)**
13		Walls (masonry)	Surface decay to dressed/moulded stone unit; 2 no. stone units in lintel		Dress back by hand to sound surface and key, apply lime putty mortar repair	2 no. units	**See Images: TF04 (1)**
14	**TF05**	Walls	Evidence of significant structural movement; cracking of wall surface tracking vertically and diagonally throughout room	Further investigation required by Conservation Structural Engineer	N/A	N/A	**See Images: TF05 (1); TF05 (2); TF05 (3); TF05 (4); TF05 (5); TF05 (6); TF05 (7)**
15	**TF06**		Appears generally sound; no obvious defects noted		N/A	N/A	
16	**TF07**	Walls	Peeling/damaged decorative finish; inappropriate non-breathable paint showing signs of deterioration and blistering due to moisture ingress to right hand side of window TFW02 reveal	Further investigation required to determine cause of water ingress	Remove and replace with appropriate lime plaster and breathable paint	4m^2	**See Images: TF07 (3)**
17		Walls	Peeling/damaged decorative finish		Remove defective coatings back to sound substrate; prime and redecorate with breathable paint finish	Whole room	**See Images: TF07 (1)**
18		Floor	Water ingress visible to carpet directly below window TFW02	Lift carpet to enable further investigation of cause.	Take up and replace with selected finish	Whole floor	**See Images: TF07 (2)**

Building/Element: Third Floor							Job No: 236929
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Item No.	**Location on building**	**Element**	**Condition**	**Further Investigation**	**Recommendations**	**Quantity**	**Comments**
19	**TF08**	Walls	Peeling/damaged decorative finish; inappropriate non-breathable paint showing mild staining due to moisture		Remove and replace with appropriate lime plaster and breathable paint	Whole room	**See Images: TF08 (1); TF08 (2)**
20	**TF09**	Ceiling	Peeling/failing decorative finish; inappropriate non-breathable paint showing signs of deterioration		Remove failing coatings back to sound substrate; prime and redecorate with breatable paint	Whole ceiling	**See Images: TF09 (2)**
21		Walls	Peeling/failing decorative finish; inappropriate non-breathable paint showing signs of deterioration		Remove failing coatings back to sound substrate; prime and redecorate with breathable paint	Whole room	**See Images: TF09 (1); TF09 (3)**

GROUND FLOOR

GF01 (1)

GF01 (2)

GF01 (3)

GF01 (4)

GF02 (1)

GF02 (2)

GF02 (3)

GF02 (4)

GROUND FLOOR CONTINUED

GF04 (1)

GF04 (2)

GF04 (3)

GF04 (4)

GF04 (5)

GF04 (6)

GF05 (1)

GF05 (2)

GF05 (3)

GF05 (4)

GF05 (5)

GF05 (6)

GF07 (1)

GF07 (2)

GF07 (3)

GF07 (4)

GF07 (5)

GF07 (6)

GROUND FLOOR CONTINUED

GF07 (7)

GF07 (8)

GF07 (9)

GF07 (10)

GF08 (1)

GF08 (2)

GF08 (3)

GF08 (4)

GF08 (5)

GF08 (6)

GF08 (7)

GF08 (8)

GF08 (9)

GF09 (1)

GF09 (2)

GF09 (3)

GF09 (4)

GF09 (5)

GROUND FLOOR CONTINUED

GF09 (6)

GF09 (7)

GF10 (1)

GF10 (2)

GF10 (3)

GF10 (4)

GF10 (5)

GF10 (6)

GF10 (7)

GF11 (1)

GF11 (2)

GF11 (3)

GF11 (4)

GF11 (5)

GF12 (1)

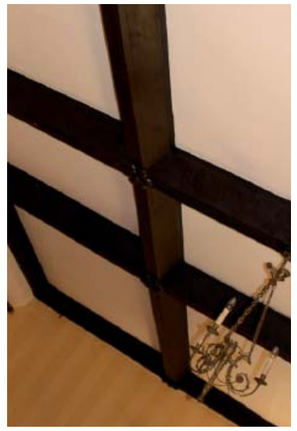
GF12 (2)

GF12 (3)

FIRST FLOOR

FF01 (1)

FF01 (2)



FF01 (3)

FF01 (4)

FF01 (5)

FF01 (6)

FF01 (7)

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FF01 (10)

FF02 (1)

FF02 (2)

FF02 (3)

FF02 (4)

FF02 (5)

FF02 (6)

FF02 (7)

FF02 (8)

FIRST FLOOR CONTINUED

FF02 (9)

FF03 (1)

FF03 (2)

FF03 (3)

FF03 (4)

FF03 (5)

FF04 (1)

FF04 (2)

FF04 (3)


FF07 (1)


FF07 (2)


FF07 (3)


FF07 (4)


FF09 (1)


FF09 (2)


FF09 (3)


FF09 (4)


FF09 (5)

FIRST FLOOR CONTINUED

FF09 (6)

FF09 (7)

FF09 (8)

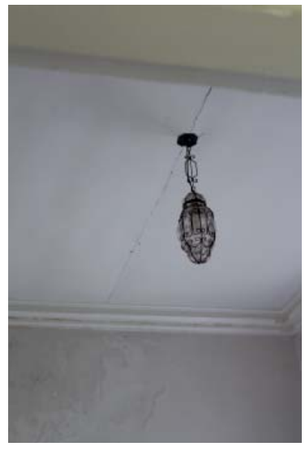
FF09 (9)

FF10 (1)

FF10 (2)

FF10 (3)

FF10 (4)



FF11 (1)

FF11 (2)

FF11 (3)

FF11 (4)

SECOND FLOOR

SF01 (1)

SF01 (2)

SF02 (1)

SF02 (2)

SF02 (3)

SF02 (4)

SF04 (1)

SF04 (2)

SF06 (1)

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SF06 (3)

SF06 (4)

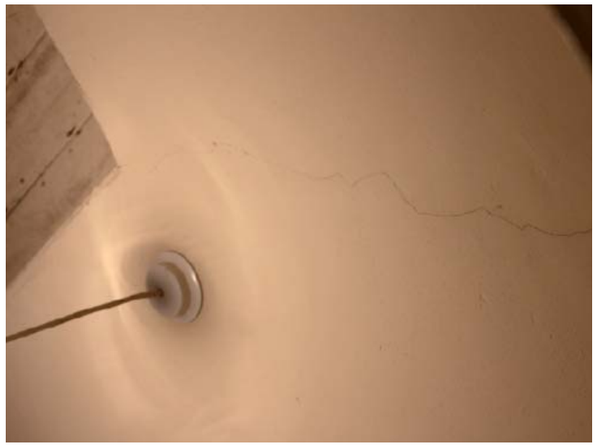
SF07 (1)

SF07 (2)

THIRD FLOOR

TF01 (1)

TF01 (2)



TF02 (1)

TF02 (2)

TF02 (3)

TF03 (1)

TF04 (1)

TF04 (2)

TF05 (1)


TF05 (2)


TF05 (3)


TF05 (4)


TF05 (5)


TF05 (6)


TF05 (7)


TF08 (1)

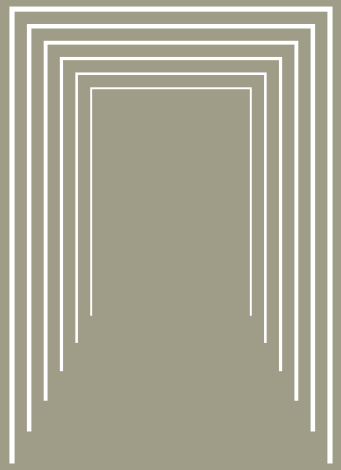

TF08 (2)


TF09 (1)

THIRD FLOOR CONTINUED

TF09 (2)

TF09 (3)



PURCELL