OTFORD PALACE
FEASIBILITY STUDY
SEPTEMBER 2019

PURCELL

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1.0 INTRODUCTION

1.1 PROJECT CONTEXT

In January 2019 Purcell were appointed to undertake a feasibility study exploring options for the architectural development of the former Archbishop's Palace at Otford, a historic village in the heart of the Darent Valley in North-West Kent. Purcell were selected following a competitive tender process, led by the Archbishop's Palace Conservation Trust.

The site of Archbishop's Palace in Otford, Kent, dates back to 821 AD but it was in 1515 AD that Archbishop Warham (Archbishop of Canterbury) built one of the largest palaces in England, comparable in size to Hampton Court. In the 17th Century the buildings fell into disrepair and by 1900 the Palace and its grounds became owned by Castle Farm. Now all that remains is part of the North Range – the North West corner Tower, part of the Northern Gatehouse, and connecting wall which has been turned into a row of three small cottages.

The former Archbishop's Palace at Otford has an incredibly rich history and its exceptional heritage significance is recognised by a number of statutory designations. The site of the Archbishop's Palace with extensive precinct areas to the east and west, the water management features associated with St Thomas a Beckets Well and the reservoir at Castle House, and the ruins of a building said to be a lodge adjacent to it, compromise an extensive designated Scheduled Ancient Monument site. The remaining structures of the Palace are also listed; the Castle Cottages and the surviving part of the former gatehouse at their east end as Grade II*. Castle House and the remains of the buildings of the inner court of the palace around its former south and north sides, including the remains of the tower and the upstanding walls in the front and back gardens of houses on Bubblestone Road are also listed at Grade II.

The remains of the Great Gatehouse

The remains of the Tower

The site, the Tower and the gatehouse are currently owned by Sevenoaks District Council (SDC). In July 1935 the site and the buildings were transferred to Sevenoaks Rural District Council (now Sevenoaks District Council). In the early 1960's following a period of extensive repair work (using unsympathetic cement techniques instead of traditional lime mortar) the site remained untouched until 2015 when, following much-publicised masonry falls, Sevenoaks District Council eventually carried out extensive repairs to prevent any further deterioration. These urgent repair works were completed in 2017, but since then the site has been vacant and unused, with no plans in place for development.

The remains of the corner Tower are on the Historic England Heritage At Risk Register. It is defined as in Poor condition and at Priority A - Immediate risk of further rapid deterioration or loss of fabric; no solution agreed.

The local community would like to see this significant historical building conserved and developed as a focal point for the Darent Valley community. To that end, a Charitable Incorporated Organisation – The Archbishop's Palace Conservation Trust (APCT) was established in 2017, initially to enter into discussions with Sevenoaks District Council and to persuade the Council to transfer or lease the property to the Trust, and then to deliver a project to restore the Palace and operate it as a self-sustaining community heritage resource.

Currently, negotiations are in progress between the Trust and SDC on the precise terms of a 99-year lease. The APCT have developed a Business Plan which demonstrates the feasibility of the proposed project, available on the APCT website at: https://otfordpalace.org/about-the-trust/

The Business Plan defines a strategy for the conservation process and the first two years of its self-sustaining operation. It covers the period from inheriting an empty shell into restoring the buildings into a heritage landmark for the region and creating a self-sustaining hub for the discovery of the Darent Valley, the Tudor period and the role of the Archbishop's Palace. As with all business plans, this is an evolving document that is continually being revised to reflect changing circumstances.

The proposed Capital Project is therefore necessary to conserve the fabric of the Palace remains, establish a beneficial use and ensure its ongoing viability to secure the future of this wonderful heritage asset. It is predicted that with the completion of the new Capital Project the visitor numbers be such as to enable the Palace to be a financially self-sufficient venue.

Building upon the work of the APCT Business Plan this architectural feasibility study is intended to explore key anticipated project objectives and define options for achieving these through carefully considered and sensitively implemented architectural change which will both respect and enhance the history of the building and enable it to meet visitor needs to safeguard its future. The study also sets out next steps to evolve the restoration of Otford Palace.

The Gatehouse and Tower from above

Southern entrance to the Gatehouse with the remains of the lower gallery beyond

The west facade of the Tower

2.0 INITIAL PROJECT BRIEF

2.1 PROJECT BRIEF AND VISION

With its demonstrable long history, Otford Palace, which is designated as a Scheduled Ancient Monument, is unquestionably a heritage site of national significance.

The Archbishop's Palace Conservation Trust vision for Otford Palace is as follows:

To regenerate a fresh awareness of this heritage landmark by restoring it to a heritage building and developing it into a hub of education, discovery and information about the Palace, the Tudors and the Darent Valley.

The Trust want everyone who visits the Archbishop's Palace, Otford to feel welcome and find the experience rewarding and positive. Inconclusiveness and accessibility for all is therefore a key vision for the project.

2.2 PROJECT OBJECTIVES

The following are the key project objectives for the Otford Palace project:

01 The restoration of Otford Palace shall retain (where possible) as much of the significant historic fabric and keep changes to a minimum, while still being effective, sustainable and affordable, and consistent with end use.

02 The restoration of Otford Palace should contribute to, or at least not compromise, the sustainability of future management and maintenance of the heritage landmark, which should be cost neutral.

03 The restoration of Otford Palace will benefit the local community in Otford, the wider community of the Darent Valley, local businesses, schools and other relevant stakeholders (to be identified through this feasibility study) whilst also complimenting the wider heritage value and use.

04 The restoration of Otford Palace should regenerate a fresh awareness of this significant heritage landmark to new audiences, by restoring it to a heritage building and developing it into a hub of education, discovery and information about the Palace, its history, the Tudors, and the Darent Valley.

05 The restoration of Otford Palace should remove the building from Historic England's Heritage At Risk Register.

The Tower from the south

2.3 KEY PROJECT AIMS

The project vision includes a number of key project aims, which have defined the brief for the architectural ideas included within this feasibility study

To regenerate a fresh awareness of this heritage landmark by restoring it to a heritage building and developing it into a hub of education, discovery and information about the Palace, the Tudors and the Darent Valley.

1. Becoming a Hub

The location of the Palace is a natural starting point for exploration of the Darent Valley and the surrounding region. It is located at the intersection of the two major valley routes, the north-south route (now A225) and the east-west Pilgrims Way, the ancient route to Winchester.

Over the coming years, the Darent Valley Landscape Partnership (DVLPS), supported by significant Lottery funding, will seek to enhance the profile and visibility of the valley's major heritage and landscape assets. The DVLPS has the support of the Tourism and Economy Team at SDC together with Kent Downs AONB, and KCC.

By maintaining and enhancing the famous heritage site of the former Archbishop's Palace the APCT propose to develop it as a high-quality interpretation centre, or gateway, to discovering the landscape of the Darent Valley. Providing public access to such an historic building will therefore be of positive benefit and further its aim to continue as one of the Valley's major heritage sites.

The APCT's vision is that the Archbishop's Palace can provide the hub for the discovery of the Darent Valley and its heritage. The Sevenoaks District Local Plan (currently in Regulation 19 examination) notes that "*The District is already a popular tourism destination due to the attractive environment, historic towns and villages, and nationally recognised historic estates*".

The Plan considers the adoption of a policy "*to protect, support and encourage tourism, businesses, visitor accommodation and visitor attractions, including heritage assets*".

This project to develop the Archbishops' Palace speaks directly to that aspiration.

2. For education and information about the Palace and the Tudors

With a vision to re-introduce floors into the Tower, APCT's Business Plan (and the architectural solutions within this feasibility study that respond to the Business Plan) proposes that part of this historic building can be utilised as a repository and library of reference knowledge on the Darent Valley's history and heritage.

Many of the local Darent villages have already collected historical assets, papers and photos of local historical interest. This disseminated knowledge can now be correlated, digitised and centralised and made available for reference and study within the former Archbishop's Palace, and beyond.

The first floor will be a recreation of a Tudor room, while the second floor will be devoted to the English Book of Common Prayer, much of which was written at the Palace.

In the full re-creation of a Tudor room and it is hoped to hold regular Tudor fashion and other period exhibitions within it (whenever possible linking with the school syllabus). The centre will become a familiar venue and learning experience for many local schools.

It is hoped that the gatehouse may be utilised for educational projects as a secure study centre, lecture-room, and base for these study visits. Using the expanse of the former Palace site and courtyard space outside, there are many opportunities for period-themed events: historical re-enactment groups, Son-et-Lumiere performances country fairs and feasts within a running programme of events, tailored for school holidays.

3. For the discovery of the heritage of the Darent Valley

It is intended that the ground floor of the tower provides visitors with an exciting adventure of discovery into the valley's current heritage sites. There will be detailed, scale models and artist's impressions of all the historical buildings within the valley. They will reveal to the visitor the worlds in which our ancestors once lived when these iconic places were newly built. The Trust intends to seek Museum Accreditation within the time-frame of this project.

4. Developing tourism in the Darent Valley

A sustainable future for the former Archbishop's Palace at Otford will be highly reliant on visitor numbers, that will only be possible through wider development of the visitor economy in the Darent Valley.

The APCT has therefore become involved in, and has undertaken, some projects that will encourage and enable the growth of sustainable tourism in the area. These activities are documented within the Business Plan.

The Darent Valley Landscape Partnership (2014) notes that, "*The legacy of the Darent Valley's heritage is considerable: 28 Scheduled Monuments, 5 registered parks and gardens, 16 conservation areas, 13 Grade I listed buildings and several hundred others at lower grades. This is a landscape of considerable time-depth with a complex untold story to tell.*"

As a visitor and interpretation centre for the Darent Valley, the Archbishop's Palace is ideally positioned to provide visitor information for SDC. The APCT propose that it should be open for eight months each year, during the tourist season and for those months it could provide information covering the whole of the Sevenoaks District.

3.0 HERITAGE SIGNIFICANCE

3.1 STATUTORY PROTECTION

The site of the Archbishop's Palace with extensive precinct areas to the east and west, the water management features associated with St Thomas a Beckets Well and the reservoir at Castle House, and the ruins of a building said to be a lodge adjacent to it, comprise an extensive designated Scheduled Ancient Monument site.

Scheduled Monuments are monuments and sites included on a schedule compiled by the Secretary of State for Culture, Media and Sport under the Ancient Monuments and Archaeological Areas Act 1979. Inclusion on the Schedule recognises the national importance of such monuments and affords them statutory protection.

The heritage significance of the remaining structures of the Palace is further recognised by the listing of Castle Cottages and the surviving part of the former gatehouse at their east end as Grade II*. The upstanding walls in the front and back gardens of houses on Bubblestone Road are Grade II listed.

Castle House and the remains of the buildings of the inner court of the palace, around its former south and north sides are also listed in Grade II.

The Palace site (but not the full extent of the Scheduled Monument area) lies within the Otford Conservation Area, which includes the whole historic core of the village, including both courtyards of the Palace.

There are no statutory or non-statutory designated nature conservation sites within the Palace site.

Otford is part of the Kent Downs Area of Outstanding Natural Beauty. The built-up area of Otford forms an 'island' in the Metropolitan Green Belt.

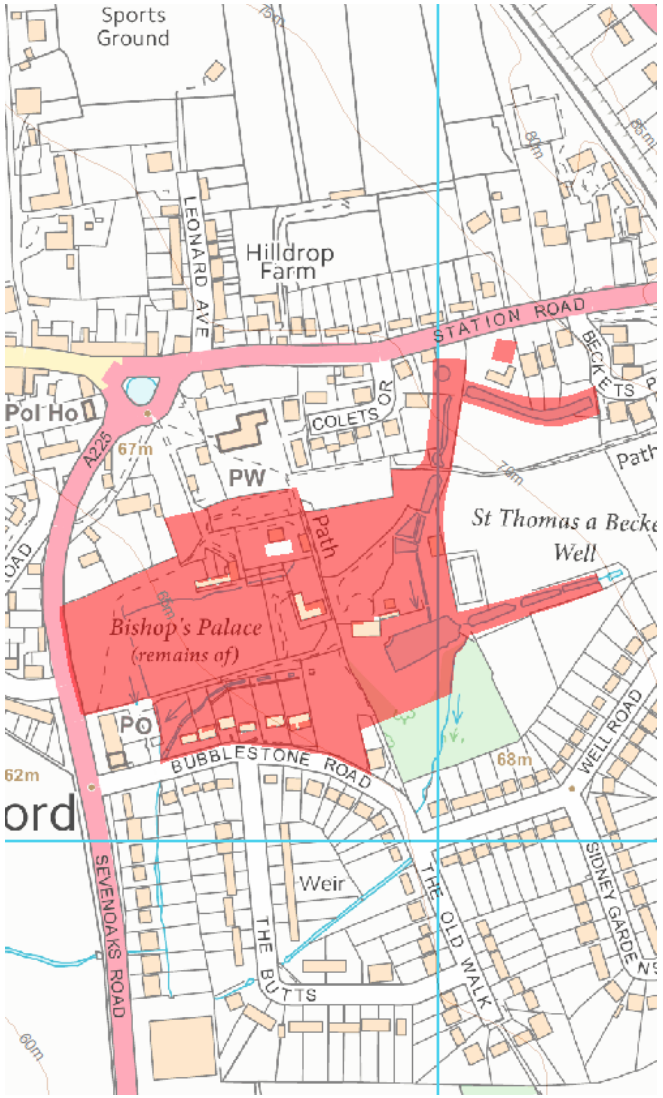
The River Darent rises near Westerham in North-West Kent and flows Northwards to the Thames at Dartford. The Heritage Village of Otford, as far south as the southern side of the outer court of the Palace, is in the centre of the Darent Valley in a designated area of Kent Downs Area of Outstanding Natural Beauty.

Otford is within the jurisdiction of Sevenoaks District Council.

3.2 SCHEDULING DESCRIPTION

Otford Palace is a Scheduled Ancient Monument. List Entry Number: 1005197

https://historicengland.org.uk/listing/the-list/list-entry/1005197.



Reasons for Designation

Bishops' palaces were high status domestic residences providing luxury accommodation for the bishops and lodgings for their large retinues; although some were little more than country houses, others were the setting for great works of architecture and displays of decoration. Bishops' palaces were usually set within an enclosure, sometimes moated, containing a range of buildings, often of stone, including a hall or halls, chapels, lodgings and a gatehouse, often arranged around a courtyard or courtyards. The earliest recorded examples date to the seventh century. Many were occupied throughout the medieval period and some continued in use into the post-medieval period; a few remain occupied today. Only some 150 bishops' palaces have been identified and documentary sources confirm that they were widely dispersed throughout England. All positively identified examples are considered to be nationally important.

Despite later development and disturbance, the remains of Otford Palace survive well. The upstanding remains include some significant architectural details such as Tudor-arched windows, moulded stone arches and fireplaces. Partial excavation has shown that the buried remains, such as the south and east ranges, are well preserved. Much of the original ground plan of the palace is likely to survive, which will provide valuable information regarding the layout and function of bishops' palaces in the medieval period. The site has not been fully excavated and retains a high degree of potential for further investigation. It will contain archaeological and environmental information relating to the construction, use and history of the palace.

Details

The monument includes the medieval palace of the Archbishop of Canterbury surviving as upstanding remains, earthworks and below ground archaeology. It is situated on a west facing slope to the east of the River Darent at the foot of the Darenth Valley.

The early 16th century palace is thought to have covered an area of approximately 134m by 67m. It was centred on two courtyards; an inner and outer court, divided by a central hall. The upstanding remains include part of the northern range of the outer court, the north-west tower and one side of the gatehouse. The north-west tower and gatehouse are constructed of red brick with blue headers and stone quoins and dressings. They have a rubble plinth with moulded stone coping and windows of one or two Tudor-arched lights, many of which are under hoodmoulds. The polygonal tower survives to three storeys high but the roof is now missing. It originally included a crenellated parapet and leaded roof. Some brick diapering is preserved on the south face of the tower and in the interior are fireplaces on each floor and remains of a stair to the south-east. The gatehouse includes two doorways under three-centred and four-centred moulded stone arches. It has a restored tiled roof hipped over half-octagonal ends. At the south-east corner are traces of an entrance arch. Between the tower and gatehouse are Castle Cottages, which are completely excluded from the scheduling, although their gardens are included. Castle Cottages incorporate remains of the palace on the ground floor but the first floor and roof above are modern additions. South of these buildings are further upstanding remains of the palace. In the back gardens of houses on Bubblestone Road is some early 16th century stone walling of the inner court of the palace. It is up to about 1.2m high and largely orientated east-west with some cross walls. Tudor brickwork is also embedded in the north banks of the small brook or culvert at the ends of the gardens. In the front gardens of houses on Bubblestone road is what is thought to be remains of the south precinct wall of the palace. It is early 16th century in date and built of stone rubble with later repair work.

Partial excavation has revealed the buried footings of the south and east range of the palace. These overlie remains of an earlier fortified manor house. The east range includes the foundations of at least four rooms. A drain leads to a series of garderobe shafts in the south range. Between the ranges is a square tower, approximately 13m wide. To the east of Castle Cottages, earthworks survive relating to medieval water management associated with the palace.

Otford Palace was built in about 1518 by Archbishop William Warham. It replaced an earlier manor house on the same site. Henry VIII was apparently entertained at the palace on several occasions. In about 1538 the palace was exchanged by Archbishop Cranmer with the King. In the later 16th century Elizabeth I granted the palace to Sir Robert Sidney. In the 17th century the land was sold to Sir Thomas Smith and passed to his descendants until it was purchased by Robert Parker in the late 18th century. The site was partially excavated in 1968, 1974, 1983 and 1986, and a geo-physical survey was carried out in 2001. The finds included one lead bull of Pope Lucius III (1181-5) and five lead bulls of Pope Urban III (1185-7), found in a medieval sewer on the site.

The north-west tower, remains of the gatehouse and Castle Cottages are Grade II listed. The upstanding walls in the front and back gardens of houses on Bubblestone Road are Grade II listed.*

Further remains survive in the vicinity of this monument but are not scheduled because they have not been formally accessed.

3.3 LISTING DESCRIPTION

The remaining buildings are also Grade II* listed as Castle Cottages and Store Building at East End. List Entry Number: 1273146 with the following listing description:

https://historicengland.org.uk/listing/the-list/list-entry/1273146

1. 5280 OTFORD OTFORD The Green TQ 5259 21/747 Nos 1 to 3 (consec) 10.9.54 (Castle Cottages) and Store Building at East end (Formerly listed as Palace of the Archbishop of Canterbury) II GV*

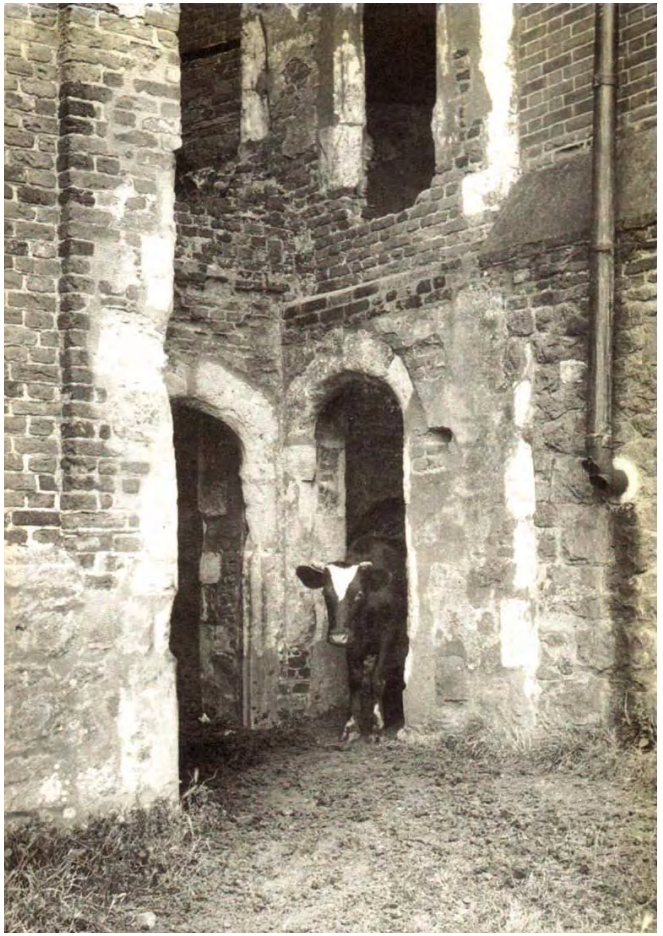
2. These buildings are part of the only surviving range of the palace built by Archbishop Warham in the early C16. The original walls of red brick with blue headers and stone quoins and dressings. High galleted rubble plinth with moulded stone coping. Windows of 1 or 2 Tudor-arched lights, mostly under hoodmoulds. The 2-storey cottages, of 1 or 2 windows' width, have 1st floors rebuilt in brick and rebuilt tiled roofs. Modern casement windows and modern doors, that of No 2 under original, 4-centred stone arch. Storage building (AM) (formerly the chapel) also has renewed tiled roof hipped over half-octagonal ends. 2 doors under moulded stone arches, 1 3-centred and one 4-centred. At west end of the range stands the roofless tower of the palace, now a scheduled AM but visually part of the group.

The ruins covered in ivy circa 1884

© Kent Archaeological Society: https://www.kentarchaeology.org.uk/02/004.htm

Otford Palace circa 1934 with the cottages as today

© Archbishop's Palace Conservation Trust: https://otfordpalace.org/palace-history/



Cow in the ruins of the Tower

© Otford & District Historical Society: http://otford.co.uk/historicalsociety/historic-otford-and-archives/

3.4 UNDERSTANDING OTFORD PALACE'S SIGNIFICANCE

A Conservation Statement was previously undertaken on Otford Palace in January 2017 - February 2018 by Drury McPherson Partnership for Sevenoaks District Council, to inform decisions about the future of the remains and the Palace site.

Much of that Conservation Statement remains relevant and included within it is a summary of Otford Palace's significance as follows (p.47-49 of Otford Palace Conservation Statement by Drury McPherson Partnership).

The values appraised derive from *Conservation Principles, Policies, and Guidance* (English Heritage 2008), so that the significance of Otford Palace is derived from the sum of the identified heritage values of the site.

"The cultural significance of Otford Palace derives from a wide range of factors, but primarily the evidence it provides of the unusual layout and expansive scale of Bishop Warham's rebuilding and expansion of what had until the early sixteenth century been a comparatively modest moated manor house. The adaptive re-use of the north outer court range (and use as agricultural buildings, now cottages) has preserved enough of Warham's building to enable understanding and visualisation of his architectural concept for his last major phase of development at Otford, the entrance court.

Evidential/ Archaeological values

Otford Palace is of *exceptional significance* for the picture it gives, even in our current limited state of knowledge, of one of the outstanding buildings of its generation. The significance of the site includes the archaeological potential, in combination with documentary evidence, more fully to understand the layout and form of its buildings, especially those of the inner courts; as well as the evolution of the manor house that preceded it, and indeed how that was influenced by the exceptional Roman landscape that preceded it. All the surviving upstanding structure and buried archaeological deposits prior to the early 17th century are therefore of exceptional evidential value.

Specifically in relation to the surviving structure of the outer court north range, evidential values lie in the surviving structure and plan form, the evidence for early adaptation and change in the later 16th and early 17th centuries, architectural elements including windows, doors and fireplaces, and the evidence in the structure for missing elements, principally glazing, floor and roof frames, stair treads, and internal wall finishes, despite some of these being to a greater or lesser extent compromised by successive phases of alteration and repair.

The evidential value of later, agricultural changes to the surviving parts of the north range is at best of *some* value in helping to understand the decline of the palace and the pattern of survival.

Architectural/ Aesthetic values

The *exceptional* architectural values of Otford Palace are carried primarily by the surviving 16th century elements of the outer court range, demonstrating the architectural style and detailed form and quality of Warham's outer court. Although variously repaired following stone decay, all the windows and doors in the standing structure survive and some of the windows retain their ferramenta. The only missing element is the parapet and the stair turret which gave access to the roof.

The only other phase substantially represented today is the 1914 reinstatement of an upper floor to the gallery range and re-roofing of the fragment of the gatehouse, both well-mannered interventions which do not detract from the significance of the Tudor work, but in themselves are of *little significance*.

The ensemble has *considerable* fortuitous aesthetic value, enhanced by the pre-war planning scheme which has placed the remains of the north range in a sequence of public open spaces from the Green to Bubblestone Road. The streams which originated in the medieval water management system add to its charm. The domestic gardens on the north side do not detract from this quality, rather they convey some of the incidental charm beloved of 19th century illustrators, of countrymen living among the wreckage of past greatness (or over-weaning ambition). However, it, and the ability to appreciate their formal architectural quality, is seriously compromised by the suburbanisation (one) and total abandonment (two) of the cottage gardens south of the building.

The situation of the upstanding remains of the perimeter walls of the former moated island, bounding gardens of pre- and post-war 'cottage-style' detached houses, the front wall pierced by driveways, is bizarre. The presence of the houses and garden features is *intrusive* both visually and archaeologically (though this is the result of historical accident; no blame attaches to the current owners).

Historic values

The historic interest of Otford derives above all from its ability to illustrate the form and layout of a late medieval episcopal palace of the first rank, comparable with Wolsey's Hampton Court and although fragmentary, not overlain by later buildings of yet greater scale. Alongside the documents, it sheds light on the character and ambition of Archbishop Warham, arguably in competition with Cardinal Wolsey at Hampton Court. This is of *considerable significance*.

The antiquarian concern for the fate of the place, the actions taken (and not taken) both locally and nationally in a range of difficult circumstances, and the physical outcomes in the form of 20th century interventions to the site and its setting, provide a particularly interesting illustration, in conjunction with the archive material (especially in the SPAB files), of the struggle for the conservation of historic places through the twentieth century. This is certainly of *some significance*.

Communal values

When Otford Palace was built it was not only the dominant building in the area but also the most important in social and economic terms, as the centre of the manor and estate. While no longer occupying that role, it nonetheless ranks highly in the identity of Otford and its community today, witnessed by the Otford Heritage Centre, the palace model, and the range of publications on offer. This is of *some to considerable* significance.

Aerial photograph of Otford in the 1930s with the remains visible lower right © Otford & District Historical Society: http://otford.co.uk/historicalsociety/historic-otford-and-archives/

The Tower circa 1950s © Otford & District Historical Society: http://otford.co.uk/historicalsociety/historic-otford-and-archives/

3.5 SUMMARY STATEMENT OF SIGNIFICANCE OF OTFORD PALACE

Otford Palace is of *exceptional* significance for

- The evidence which it provides for the form and architectural character of what was one of the outstanding buildings of early 16th century England.
- Its archaeological potential to yield much more information about that building, particularly on the moat island, and its medieval predecessors.

Otford Palace is of *considerable* significance for

- The evidential value of the adaptation of the north-west range by the Sidney family.
- Its ability to illustrate the form and scale of a late medieval archiepiscopal palace, despite its fragmentary survival.
- The aesthetic qualities, designed and fortuitous, of the north range building in its open space setting.
- The contribution it makes to the character and appearance of Otford Conservation Area.
- The insight it provides into the character and ambition of Archbishop Warham.

Otford Palace is of *some* significance for

- As an illustration, especially with the archive material, of the struggle for the conservation of historic places during the 20th century.
- Its contribution to the identity of Otford and its community today.

4.0 PROPOSED FUNDING STRATEGY

4.1 AFFORDABILITY

The National Lottery Heritage Fund is probably going to need to be a key source of funding for any significant capital improvements beyond the Archbishops Palace Trust's resources that may be proposed for Otford Palace. As the NLHF are very unlikely to contribute more than 60-65% of the overall project funds for Otford Palace due to their priorities and the level of competition for funds, it will be the Trust's ability to raise matching funding/ resources that is most likely to be the key determining factor on the overall budget and hence what might be realistically affordable. A NLHF grant award of 60-65% would require a Trust matching contribution of 35-40%.

The Trust currently has resources understood to be in the region of £25,000 which it could commit. In addition, it could seek to raise additional resources from the local authority, town council, grant giving charities and a local appeal and could include volunteer input as a matching contribution. The NLHF has a mechanism for calculating the value of volunteer contributions which can be included for during the project development period and over a five-year period from a Round 2 HLF grant award.

A realistic scenario for the Trust's matching funding target therefore might be as follows;

• Trust Own Resources	say approx. £110,00 - £200,000

Note: if the Archbishops Palace Conservation Trust do not have this level of reserve then it may be necessary to apply for a Resilient Heritage Fund grant to build this reserve and develop early project stage work.

• Big Lottery	say £100,000
• Local Authority/Town Council/ Other	say £75-100,000
• Grant Giving Charities	say £60-80,000
• Local Appeal	say £50,000
• Volunteer Contribution (say £10k per annum over 5 years)	say £50,000
Total Trust Matching Funds	say £535-580,000

For the Trust to achieve a higher matching funding level would be exceptional even if any substantial private donors could be identified.

On the basis of the Trust contributing matching funding at 35-40% this would imply a total project budget of approximately **£1.53-1.66m**.

The total project construction cost for the works outlined in this feasibility study, as advised by the Quantity Surveyors (at Section 8.2 and the relevant appendix A.3) is approximately £1.82m. Applying an additional 20% for professional fees, statutory fees and other related project costs this brings the total project cost to approximately £1.44m. This is within the project cost range set out above demonstrating that the project is therefore feasible, subject to attaining funding as set out above.

If VAT remains non-reclaimable this figure would have to be inclusive of VAT and it would also be inclusive of the value of the volunteer input. If a higher grant percentage could be justified of say around 70% this might increase the overall project budget to just under £2m. Based on the above estimate of Trust resources the NLHF grant would then be in the region of approximately £1.1-1.4m – a more realistic grant level than a bid closer to the £5m grant ceiling. Clearly, at this level the Trust must consider an architectural scheme which matches its aspirations accordingly. A key issue will therefore be for the Trust to please review what it thinks it can raise by way of matching funding and provide confirmation.

4.2 NATIONAL LOTTERY HERITAGE FUND

The National Heritage Lottery Fund, formerly the Heritage Lottery Fund, has recently in 2019 entered a new five-year strategic plan running until 2024 which has changed the basis and criteria against which grants are now going to be assessed. This in large part reflects the reduction in funding it receives from the National Lottery combined with an increasing number of applicants requesting higher grant levels.

The key changes are summarised in the overview included as Appendix 1 of which the most relevant factors for Otford Palace are as follows:

- Any bid will now be assessed and awarded from a regional budget by the new London and South Region (and its regional committee) which has combined the previous London, South East and South West regions – it will have a grant budget of approximately £66.5m annually over the next five years, but to cover a huge geographic area.

- All grants up to £5m will be dealt with by the regional committee from the regional budget.

- 'Need' as measured by the threat to the heritage asset concerned, is being prioritised and outcomes remain as important as previously with a new 'health & well-being' outcome added.

- A new 'Expression of Interest' preliminary stage replaces the previous 'Project Enquiry Form' stage. This is a simple 1000-word form to complete and is responded to by the NLHF with a formal 'invitation to submit' a Round 1 bid if they think a bid is going to meet their criteria – or a rejection if not. The invitation takes about four weeks from submission of the EOI. There is no restriction on submitting a further 'expression of interest' form for a substantially different proposal if the first approach is rejected. Once an invitation to submit has been made the applicant has a maximum of twelve months to get their Round 1 bid in. (See Appendix 2 for an example EOI text).

- Although not explicit on the NLHF website, the previous Resilient Heritage grant programme continues but as part of the main Heritage Grant programme. This offers grants between £10-250,000 to help organisations undertake work to make their organisation more resilient and to improve sustainability. Grants can be for up to 95% of the proposed project cost. The grants can cover governance studies, organisational review, market, demand and audience development studies, business and development planning and some project related work like surveys and feasibility studies and so may be appropriate for some early work in developing the project towards a new Round 1 bid.

5.0 RECOMMENDED CONSERVATION REPAIRS TO THE STANDING FABRIC

In conjunction with undertaking the architectural improvements described in section 6.0 (or perhaps as part of a separately funded conservation project) the Palace buildings require various conservation repair works, including the following:

5.1 GATEHOUSE

Note: the work described within this section gives a comprehensive (to RIBA Stage 0-1 level of detail) outline scope for conservation repair works necessary to the Gatehouse.

This scope excludes alterations sufficient to achieve the design solutions set out in section 6.0 and so should be read in conjunction with those proposals, and the outline schedule of alteration works provided to QS for costing and included within this report at Appendix A.3.

5.1.1 Works to Exterior of the Gatehouse

Note: this refers to conservation repairs to standing fabric of the Gatehouse only. All new doors, windows and other alterations to affect the proposed new use are described within section 6.0 Design Options.

Preliminaries/ general

- Provide necessary scaffold access to the full height and extent of the Gatehouse, including; hoarding to base, scaffold alarm, scaffold sheeting and debris netting, contractors site set up (welfare accommodation/ WCs/ generator) and reinstatement making good to landscape following removal of above.

- Allow for all necessary protections (hessian sheeting etc) for undertaking lime mortar repairs.

South Elevation and Dovecot

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar. Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing. British Geological Survey analysis to also be undertaken to stonework.
  Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- Allow for removal of all vegetation and bird protection netting.

- To base of doorway jambs, carefully remove cement-based repairs and existing pointing to a depth of 50mm and repoint in traditional lime mortar.

- Allow provisionally for 50% of full brickwork area of south elevation (including returns) from ground to first floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- Close existing hole formed in south dovecot with reclaimed bricks and traditional lime mortar. Allow for new timber wallplate between brick and existing roof.

- Alterations to south elevation to be confirmed in conjunction with design development. Allow:
  - Carefully remove brickwork to ground floor window. All bricks to be carefully salvaged for use in repairs/ alterations.
  - New stone steps up to existing entrance way (after excavation externally).

Otford, Former Archbishop's Palace Gatehouse – South Elevation

West Elevation

- Generally, allow provisionally for 100% of full brickwork area of west elevation from ground to first floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- Allow provisionally for carefully cutting out severely decayed, damaged or eroded bricks and replacing with handmade salvaged bricks, approx. 30 nr bricks under h/l window

- Allow for new projecting stone cill to window to protect brickwork and throw water off masonry below. To area of original brickwork under window (approx. 1.2m width x 1.5m high) apply 1 nr. coat of traditional lime render coat to protect friable brickwork.

- Carefully rake out all cement-based pointing from stonework quoins on north-east corner to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.

- Allow for removal of all vegetation.

- To main first floor window, carefully remove all cement-based mortar to brickwork reveals to a depth of 50mm and repoint in traditional lime mortar,

- To blocked doorway at ground floor level adjacent to garderobe shaft, carefully remove top portion of previous brickwork infill (at approx. 13 courses high from arched head) to accommodate a new window and stone cill. All bricks to be carefully salvaged for use in repairs/ alterations.

Note: extent of blocked openings to be reopened/ altered to be confirmed in conjunction with design proposals.

Otford, Former Archbishop's Palace Gatehouse - West Elevations

North Elevation

- Generally, allow provisionally for 50% of full brickwork area of north elevation from ground to first floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar. Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing. British Geological Survey analysis to also be undertaken to stonework.
  Allow provisionally for 75% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To double light ground floor window surrounds carefully remove previous cement-based repairs (approx. 50%) and allow for lime mortar repairs to original profiles (including s/s armatures).

- Carefully rake out all cement-based pointing from stonework quoins on to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.

- Carefully remove brickwork to 2no. blocked windows at ground floor level. All bricks to be carefully salvaged for use in repairs/ alterations.

Otford, Former Archbishop's Palace Gatehouse - North Elevations

5.1.2 Works to Interior of the Gatehouse

Note: All new doors, windows and other alterations to affect the proposed new use are described within section 6.0 Design Options, though alterations are subject to confirmation in conjunction with development of design proposals.

Preliminaries/ general

- Provide necessary internal scaffold access and site set up to the full height of the Tower, avoiding fixings to the historic wall fabric and including generator for electric power and sufficient water supply to undertake works.

- Allow for all necessary protections (hessian sheeting etc) for undertaking lime mortar repairs.

Floor (Throughout)

Allow for breaking out of existing concrete floor slab throughout and excavation to reduce levels to approx 480mm deep to return the internal floor to original level.

Walls (Main Space)

- Strip all modern vinyl paint from brickwork internally using poultice method.

- Remove concrete 'base plinth' around perimeter of main room approx. 600mm high.

- Generally, allow provisionally for 50% of full brickwork area of walls from ground to u/s roof to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

Note: extent of brick condition in unknown due to modern paint and suspended ceiling. The extent to be confirmed through further inspection.

Walls (Dovecot)

- Generally, allow provisionally for 100% of full brickwork area to original brickwork of walls (north and east walls) from ground to wallplate level to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

Otford, Former Archbishop's Palace Gatehouse - Interior Dovecot

Otford, Former Archbishop's Palace Gatehouse - Interior Main Space

5.2 TOWER

Note: the work described within this section gives a comprehensive (to RIBA Stage 0-1 level of detail) outline scope for conservation repair works necessary to the Tower.

This scope excludes alterations sufficient to achieve the design solutions set out in section 6.0 and so should be read in conjunction with those proposals, and the outline schedule of alteration works provided to QS for costing and included within this report at Appendix A.3.

The scope is also subject to review following confirmation of preferred design option. The scope included here is derived from the Specification & Schedule of Works for Phase II repairs to Otford, Archbishops Palace prepared by Thomas Ford & Partners in June 2016, though the work has been verified and amended through condition survey and to suit current proposals. The work described aligns with the currently proposed (revised lift configuration) design option. Outline marked up drawings/ photographs will be provided within this report once preferred design option is agreed.

5.2.1 Works to Exterior of the Tower

Note: this refers to conservation repairs to standing fabric of the Tower only. All new doors, windows and other alterations to affect the proposed new use are described within section 6.0 Design Options.

Preliminaries/ general

- Provide necessary scaffold access to the full height and extent of the Tower, including; hoarding to base, scaffold alarm, scaffold sheeting and debris netting, contractors site set up (welfare accommodation/ WCs/ generator) and reinstatement making good to landscape following removal of above.

- Allow for all necessary protections (hessian sheeting etc) for undertaking lime mortar repairs.

South Elevation

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar. .
  Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing. British Geological Survey analysis to also be undertaken to stonework.
  Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To band of brickwork above door (approx. 1.5m wide x 10 nr brick courses high), carefully chase out mortar in joint below previous band course to install lead weathering Code 4 flashing drip to protect brickwork and throw water off masonry below.

Otford, Former Archbishop's Palace Tower – South Elevation

- Allow to repoint and make good in traditional lime mortar, including undertaking lime mortar analysis testing to existing mortar in 3 nr locations across brickwork (full elevation area) to confirm specification for repointing.

- To area of brickwork within band course (as noted above, approx. 1.5 width x 5 nr courses high) apply 1 nr. coat of traditional lime render coat to protect friable brickwork.

- To base of doorway jambs, carefully remove cement-based repairs and existing pointing to a depth of 50mm and repoint in traditional lime mortar.

- To brickwork surrounding staircase door opening (to return wall, ground floor level) carefully rake out remove cement-based pointing to depth of 50mm and repoint in traditional lime mortar, full area.

- Allow provisionally for 50% of full brickwork area of south elevation (including returns) from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- Alterations to south elevation of garderobe tower to form new openings to lift tower to be confirmed in conjunction with design development. Allow:
  - Carefully remove brickwork at first floor level between existing mortar straight joints to form opening to first floor, including new structural alterations (to be confirmed). All bricks to be carefully salvaged for use in repairs/ alterations.
  - Carefully form new opening at second floor level as above – to be confirmed.

South West Elevation

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.

- Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- Remove all cement-based mortar repairs to ground floor level window surround and reinstate to original profiles in lime mortar repairs (including s/s armatures), including cill.

- To area of brickwork to upper ground floor/ first floor level (approx. 2 x 2m) carefully rake out and remove cement-based pointing to depth of 50mm and repoint in traditional lime mortar.

- Allow provisionally for 100% of full brickwork area of south west elevation (including returns) from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

Otford, Former Archbishop's Palace Tower – South West Elevation

West Elevation (main Tower and Garderobe)

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar. Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To main two-light window at ground floor level, carefully remove all cement-based mortar repairs to window surround and reinstate to original profiles in lime mortar repairs (including s/s armatures), including cill.

- To quoin stones on main tower, carefully remove previous cement-based repairs (approx. 20% of quoins) and allow for lime mortar repairs to original profiles (including s/s armatures), through full height of tower.

- On main tower area of brickwork (approx. 3 m x 2m area) between ground floor and first floor window and ground floor brickwork, carefully rake out and remove cement-based pointing to a depth of 50mm and repoint in traditional lime mortar.

- Generally, allow provisionally for 50% of full brickwork area of west elevation including garderobe tower from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- To blocked doorway at ground floor level adjacent to garderobe shaft, carefully remove previous cement-based repairs (approx. 50% surround) and allow for lime mortar repairs to original profiles (including s/s armatures).

- To single light ground floor window surrounds at ground floor level adjacent to/ within garderobe shaft, carefully remove previous cement-based repairs (approx. 50% to each surround) and allow for lime mortar repairs to original profiles (including s/s armatures).

Note: extent of blocked openings to be reopened/ altered to be confirmed in conjunction with design proposals

Otford, Former Archbishop's Palace Tower – West Elevation

North West Elevation

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.
  Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To quoin stones on main tower, carefully remove previous cement-based repairs (approx. 20% of quoins) and allow for lime mortar repairs to original profiles (including s/s armatures), through full height of tower.

- Generally, allow provisionally for 50% of full brickwork area of north west elevation from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

Otford, Former Archbishop's Palace Tower – North West Elevation

North Elevation

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.
  Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To double light ground floor window surrounds at ground floor level, carefully remove previous cement-based repairs (approx. 50% surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

- Generally, allow provisionally for 100% of full brickwork area of north west elevation from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- *Note: extent of blocked openings to be reopened/ altered to be confirmed in conjunction with design proposals*

North East Elevation

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.
  Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To double light ground floor window surrounds at ground floor level, carefully remove previous cement-based repairs (approx. 50% surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

- Generally, allow provisionally for 75% of full brickwork area of north west elevation from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- *Note: extent of blocked openings to be reopened/ altered to be confirmed in conjunction with design proposals*

East Elevation

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.
  Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To double light window surrounds at each floor level, carefully remove previous cement-based repairs (approx. 50% to each surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

- Generally, allow provisionally for 100% of full brickwork area of east elevation from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- *Note: extent of blocked openings to be reopened/ altered to be confirmed in conjunction with design proposals*

Otford, Former Archbishop's Palace Tower – East Elevation

Stair Turret (3 Facets)

- Carefully rake out all cement-based pointing from stonework plinth to a depth of approx. 50mm, including to return walls, and repoint in traditional lime mortar.
  Allow provisionally for 50% of full plinth area, including raking out and repointing junction to stone quoins to improve legibility of this historic design detail.

- To double light window surrounds at each floor level, carefully remove previous cement-based repairs (approx. 50% to each surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

- Generally, allow provisionally for 100% of full brickwork area of east elevation from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).

- *Note: extent of blocked openings to be reopened/ altered to be confirmed in conjunction with design proposals.*

Roof & Parapet (and including high level, second floor)

- *Note: alterations to roof and parapet level to be confirmed in conjunction with design development, and once sufficient scaffold access is available for further inspection. We would recommend that some further scaffold access is provided within the next design stages. (Refer section 8.0)*

Otford, Former Archbishop's Palace Tower – Stair Turret (East)

5.2.2 Works to Interior of the Tower

Note: this refers to conservation repairs to the ground floor of the standing fabric of the Tower only.

All new doors, windows and other alterations to affect the proposed new use are described within section 6.0 Design Options, though alterations are subject to confirmation in conjunction with development of design proposals.

Preliminaries/ general

- Provide necessary internal scaffold access and site set up to the full height of the Tower, avoiding fixings to the historic wall fabric and including generator for electric power and sufficient water supply to undertake works.

- Allow for all necessary protections (hessian sheeting etc) for undertaking lime mortar repairs.

South Wall

- Allow provisionally for carefully cutting out severely decayed, damaged or eroded bricks and replacing with handmade salvaged bricks, approx. 50 nr bricks, including remaking joist pockets at every floor level.

- Generally, allow provisionally for 100% of full brickwork area of south wall from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).
  Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing.

- *Note: extent of blocked openings to be reopened/ altered to be confirmed in conjunction with design proposals*

South West Wall

- Allow provisionally for carefully cutting our severely decayed, damaged or eroded bricks and replacing with handmade salvaged bricks, approx. 20 nr bricks, including remaking joist pockets at every floor level.

- Generally, allow provisionally for 50% of full brickwork area of south west wall from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).
  Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing.

- To ground floor window surround, carefully remove previous cement-based repairs (approx. 20% to surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

West Wall

- Generally, allow provisionally for 20% of full brickwork area of west wall from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).
  Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing.

- To ground floor window surround, carefully remove previous cement-based repairs (approx. 10% to surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

North West Wall

- Carefully remove existing render patch.

- Generally, allow provisionally for 20% of full brickwork area of west wall from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).
  Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing.
  In particular, carefully remove areas of cement-based pointing to brickwork around fireplace and repoint.

North Wall

- To 2 nr ground floor window surrounds, carefully remove previous cement-based repairs (approx. 50% to each surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

- Generally, allow provisionally for 20% of full brickwork area of east wall from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research).
  Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing.

North East Wall

- To ground floor window surround, carefully remove previous cement-based repairs (approx. 50% to surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

East Wall

- To ground floor window surround, carefully remove previous cement-based repairs (approx. 50% to surround area) and allow for lime mortar repairs to original profiles (including s/s armatures).

- Generally, allow provisionally for 50% of full brickwork area of east wall from ground to second floor to receive raking out of existing mortar to a depth of 50mm and repointing in traditional lime mortar, and to Tudor bird beak pointing (subject to further historical analysis and research). Undertake lime mortar analysis testing to existing mortar in 3 nr locations across stonework to confirm specification for repointing.

- Allow provisionally for carefully cutting out severely decayed, damaged or eroded bricks and replacing with handmade salvaged bricks, approx. 20 nr bricks, including remaking joist pockets at every floor level.

Note: Works to stair turret and garderobe interior to be confirmed in conjunction with design development.

Otford, Former Archbishop's Palace Tower – North West Elevation

Otford, Former Archbishop's Palace Tower – North West Elevation

6.0 DESIGN OPTIONS

6.1 INTRODUCTION

This section outlines the results of the exploration behind the design ideas for the Otford Palace buildings. It has been broken down into three elements; the Wider Context, the Tower and the Gatehouse, with the former linking the two elements together spatially.

For more details on the background thinking and design development, refer to Section A.4 in the appendices.

6.2 THE WIDER CONTEXT

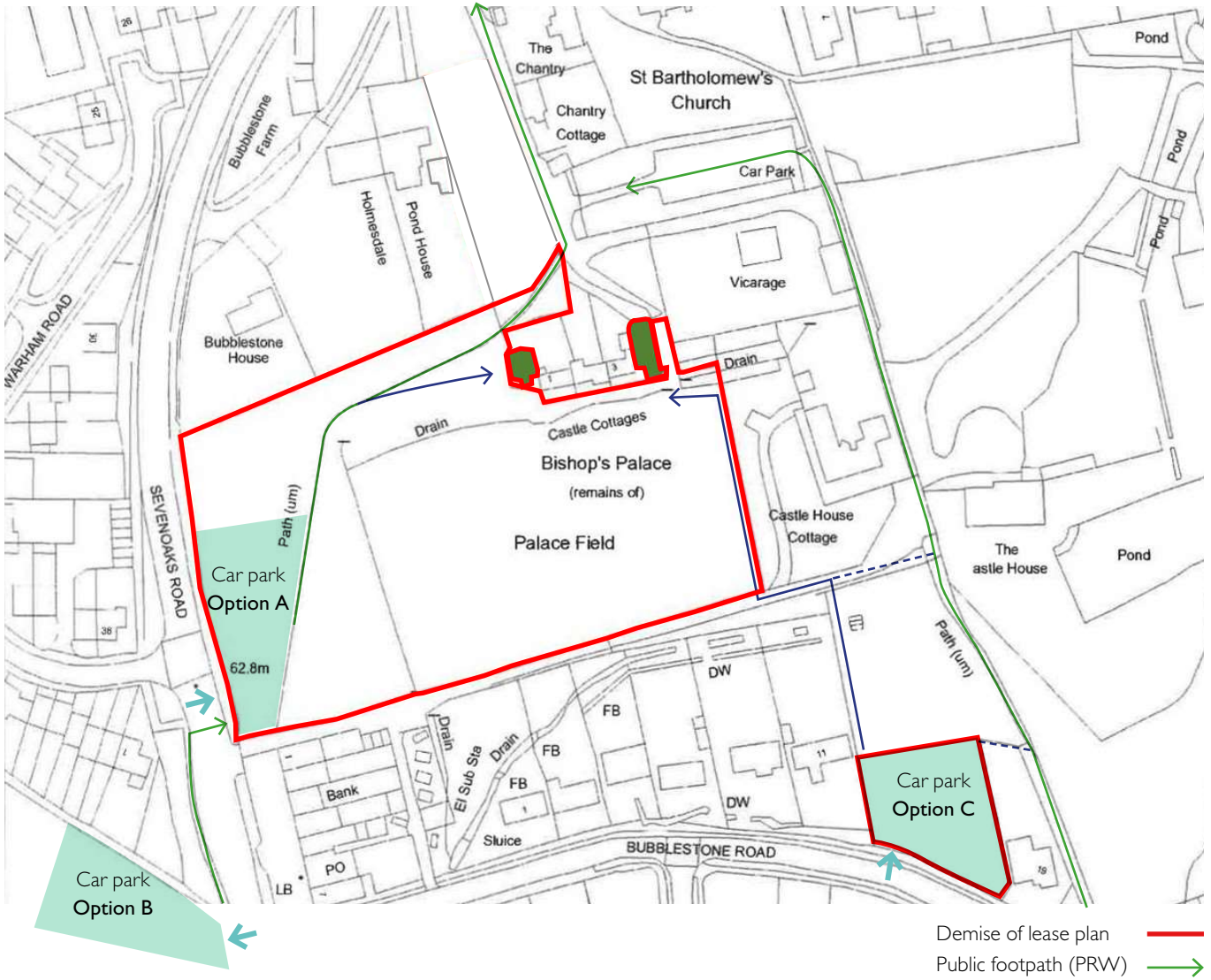
The ruins of Otford are located south of the main High Street and east of Sevenoaks Road. The site demise incorporates the ruined buildings, but not the three cottages in between, and wraps around Palace Field and an area of grass and trees to the north.

Three possible car park locations were considered by the Trust.

The car park would be for cars and bikes only. Coaches (for example delivering and collecting school parties) would stop in the bus lay-bys provided on Sevenoaks Road and then go elsewhere to park up.

In order to prevent the site being used as a long-term car park, charges will be introduced which make long-term parking prohibitive. The car park site will be monitored by an independent company to ensure fees are paid.

Car park Option C was taken forward for this study as the Trust's preferred option, which would require consent from KCC Highways, Scheduled Monument Consent and Planning Permission.



Site Plan

Proposals for the Wider Context include creating a new car park in car park Option C with a new entrance off Bubblestone Road. The carpark is proposed to be created out of a new cast on site cellar concrete system that enables grass to grow through, minimising hard landscaping.

Access from the carpark to the Gatehouse and Tower would be via an existing PRW footpath northwards.

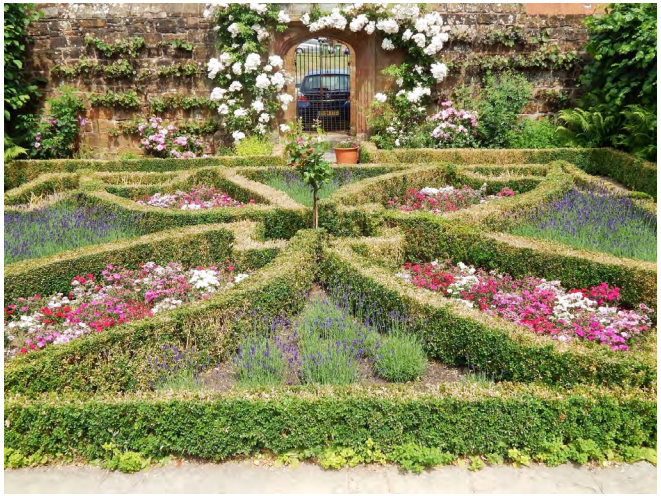
A path from the site, running North towards Otford already exists as a PRW (SR49). It is metalled to facilitate vehicular traffic to the Church car park, but use is restricted to those visiting the Church, residents of the three cottages, Chantry Cottage and The Chantry.

An existing PRW footpath runs through Palace Field adjacent through the existing Heritage Orchard on the west of the site, adjacent to Sevenoaks Road, which would be retained.

View facing south of the existing footpath through the Heritage Orchard

Other aspirations of the Wider Context include the planting and creation of a Tudor Knot garden. Palace Field will continue to be maintained with the potential to host events and marquees. Interpretation boards will be placed around the site to inform visitors of the original Archbishop's Palace buildings and associated lifestyle of the inhabitants.

The Tower with Palace Field in the foreground and where it is thought the original privy garden was, to the left



Example of Tudor knot gardens.
Clockwise from top left: Layer Marney, Garden Museum in Lambeth, Kenilworth Castle, Sudeley Castle

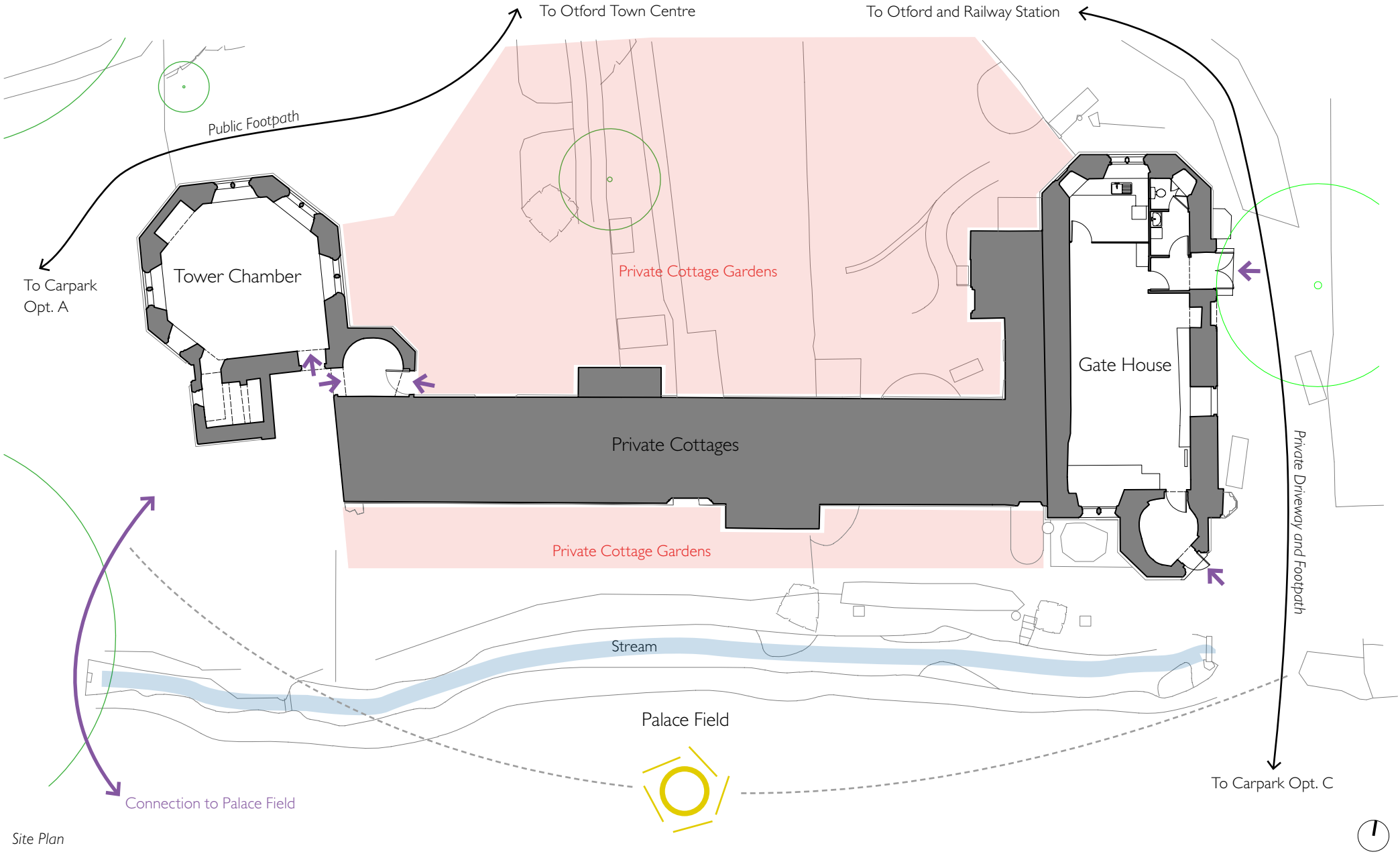
6.2.1 OTFORD PALACE BUILDINGS

The principal surviving remains of Otford Palace are the Tower (originally the north-west tower) and the Great Gatehouse, which bottom storey remains with a later roof addition.

Between the two buildings is part of the lower gallery that has been converted into private cottages, which is out of the site ownership. In front of the buildings to the south is the Palace Field where the large Entrance Court once was.

Public footpaths currently provide access close to both buildings, with Palace Field open to the public.

View of the Otford Palace buildings from the south


To Otford Town Centre
To Otford and Railway Station
Public Footpath
To Carpark
Opt. A
Tower Chamber
Private Cottage Gardens
Gate House
Private Cottages
Private Cottage Gardens
Private Driveway and Footpath
Stream
Palace Field
Connection to Palace Field
To Carpark Opt. C

Site Plan

6.3 THE TOWER

The Tower is an empty shell, approximately 12.2m high with a temporary roof installed in 2016. Other repair works such as temporary supports, stone replacement and lead flashings were also undertaken.

View of the Tower from the west

Internal view of the roof and blocked historic openings

Tudor brickwork with 2016 repairs

Historic fireplace opening

6.3.1 USES AND REPRESENTATION

The Tower is proposed to be reinhabited as primarily exhibition space and museum. It will contain various exhibitions on the history of the building, people associated with it, and the surrounding area. The missing floors are proposed to be reinstated and a new roof to replace the temporary roof added. New windows and doors will make the building watertight.

Existing Tower: Opportunities

- Reinstate floors within Tower to create extra floor plate
- Create links between existing stair, garderobe and tower chamber
- Reinhabit the structure and bring new uses

Existing Tower GF: Possible Uses

- Exhibition Space - Darent Valley Interpretation Centre
- WC facilities
- Store
- Shop

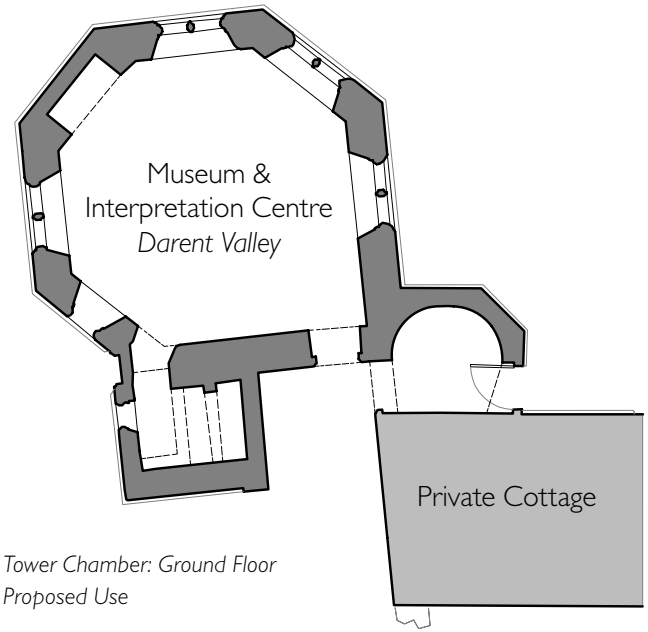
Existing Tower 1F: Possible Uses

- Exhibition Space and museum - The Tudor Room
- WC facilities
- Office

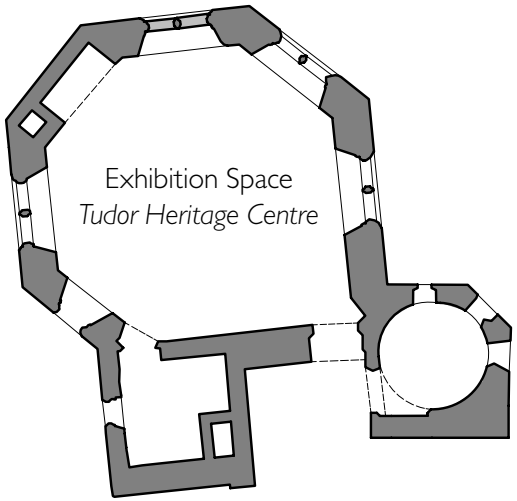
Existing Tower 2F: Possible Uses

- Exhibition Space - English Prayer Book
- Library
- Reading Room
- Cafe

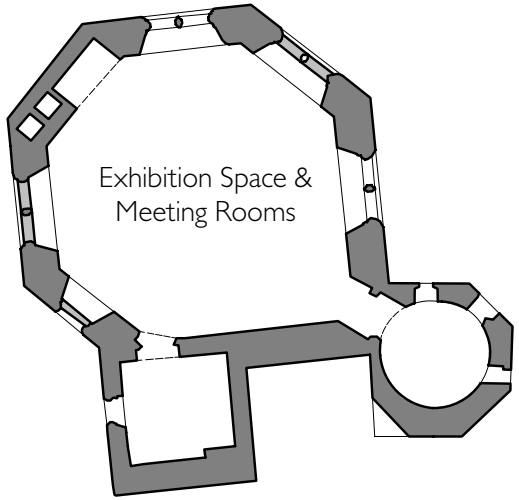
Some historical features are proposed to be reinstated, such as the historic fireplaces. The representation of the spaces will be somewhere between historical reproduction (informed by similar buildings/interpretation) and contemporary insertions which are clearly differential from the old. The building's current ruinous state is part of its history, and therefore should be celebrated and not fully restored.



Tower Chamber: Ground Floor
Proposed Use



Tower Chamber: First Floor
Proposed Use



Tower Chamber: Second Floor
Proposed Use

Examples of Different Representation Styles

Contemporary with ruinous juxtaposition

Historic with ruinous juxtaposition

Contemporary with ruinous juxtaposition

6.3.2 APPROACH AND ACCESS

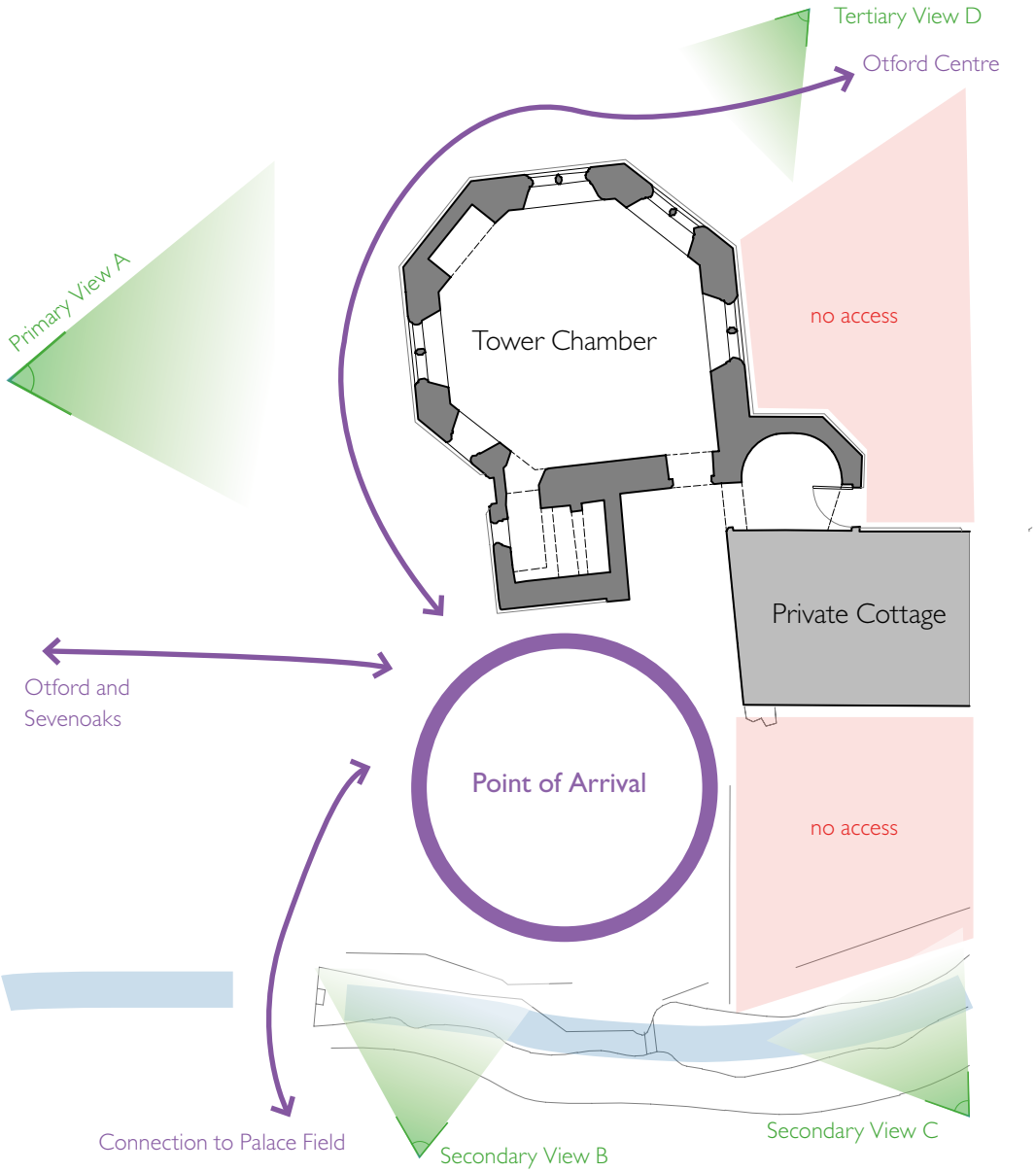
APPROACH

Currently there are three routes to approach the Tower. From the north from Otford, south east along Palace Field, and west from Sevenoaks Road. All three approaches are via foot.

The private cottages mean that access is limited from the east, and views of the Tower are somewhat restricted.

The primary (View A) and most full view of the Tower is from the west, where it is unobstructed and framed by the existing trees. Secondary views (Views B & C) are from the south/east, where the Tower is revealed behind the cottages from the Palace Field. A third approach (View D) from the north gives an obstructed, but intriguing view of the top storey only.

Therefore, it is considered that the best approach is from the west along View A, which delivers the visitor directly in front of the Tower, with the point of arrival best placed to the south to also take advantage of the secondary views.



Approaches to the Tower

Primary view and approach A

Secondary view and approach B

Area adjacent to the 'Point of Arrival'

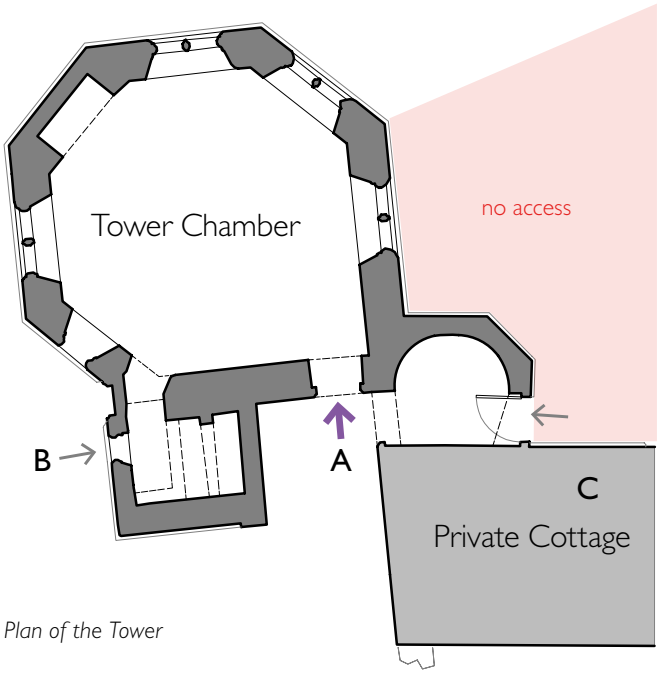
Secondary view and approach C

Tertiary view and approach D

ENTRANCE

Three possible entrances into the Tower were considered that were all historic, but were either currently open, or previously blocked up. It was not considered necessary to create a new aperture through the existing fabric at ground floor level due to these options.

Position 'A' was the chosen entrance, as it is approximately 900mm wide and adjacent to the point of arrival identified for the Tower. Some levelling of the ground will be required to ensure level access is achieved.



Plan of the Tower

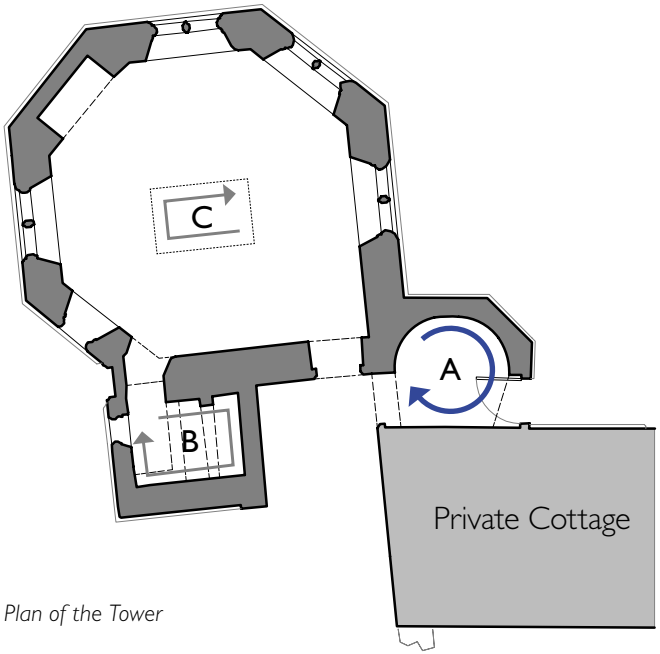
Entrance A into the Tower Chamber on the left

Possible Entrance B - blocked up

STAIRCASE

Three staircase locations were considered; within the existing stair tower, within the garderobe tower and within the main area of the Tower Chamber itself.

The existing stair tower, position 'A' was considered the most logical place. It presents the opportunity to reuse the existing apertures and connections between the main Tower chamber, and also reinstate the original use of the stair tower, albeit in a contemporary manner. There would be restrictions to overcome of reinstating a stair within the existing confines of the space, and it is likely the stair will not comply with modern regulations.



Plan of the Tower

Existing stair chamber

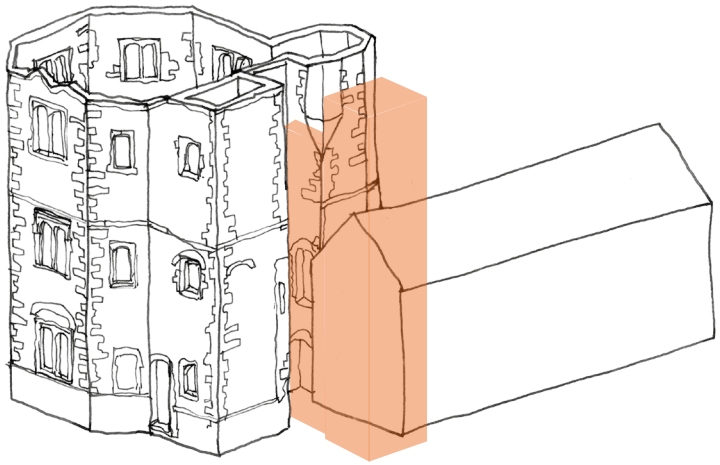
Existing garderobe tower

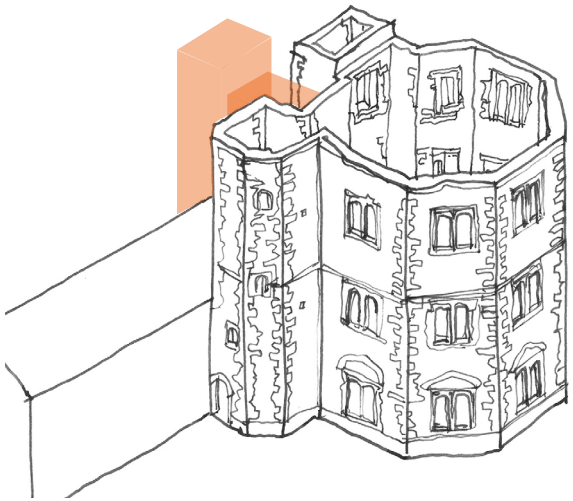
LIFT

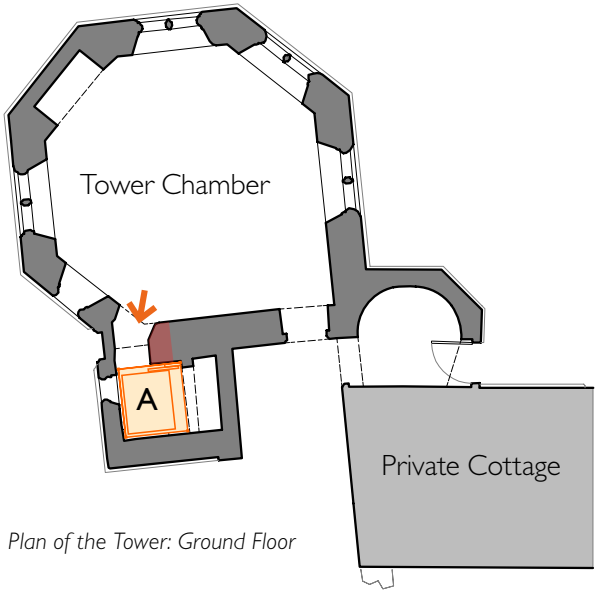
A lift is considered necessary if the Tower is occupied by public use at all floors.

Three general locations were explored; two within the existing fabric, the garderobe, and stair towers and one independent to the existing fabric, to the south. The two former locations would be very restrictive and inserting a lift would likely result in too much alteration to the original fabric.

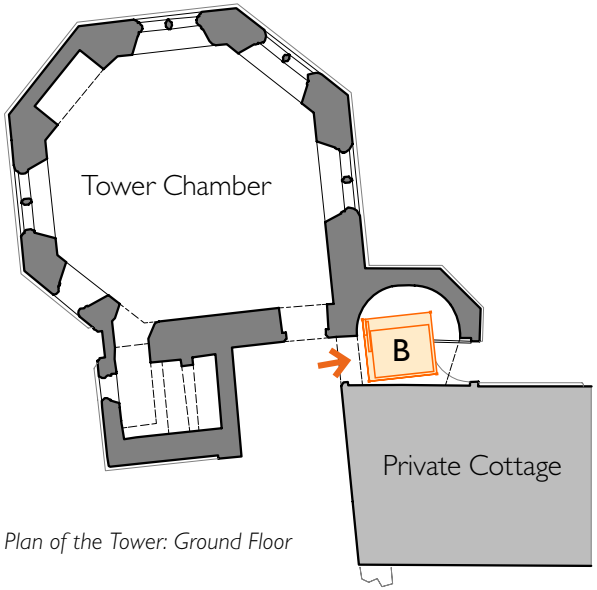
Therefore, position 'C' - locating the lift to a position somewhere south of the Tower as an independent structure, was chosen as preferred.



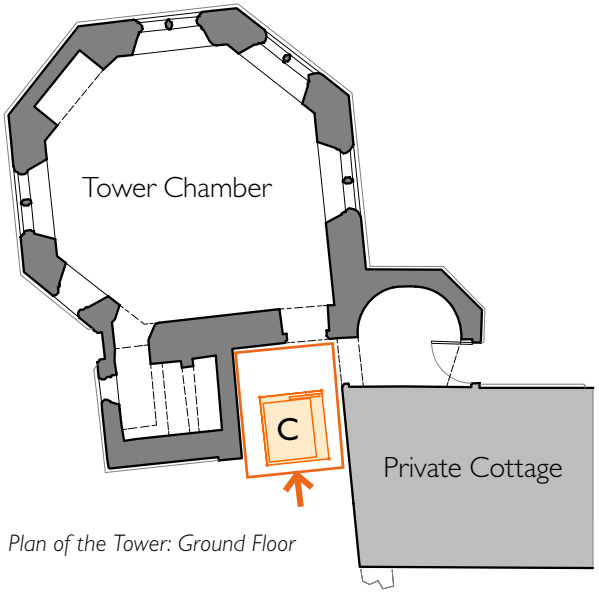




Plan of the Tower: Ground Floor



Plan of the Tower: Ground Floor



Plan of the Tower: Ground Floor

6.3.3 GROUND FLOOR ENTRANCE EXTENSION

To accommodate additional aspirational uses, as well as creating a new, legible point of arrival, a ground floor entrance extension is proposed. The primary functions will be to enhance the visitor's experience and provide facilities such as a ticket desk space, shop and to link the proposed circulation cores of the lift and stairs at ground and first floors.

An approximate accommodation schedule with occupancy numbers suggests around 45m^2 of new footprint.

Entrance Extension: Opportunities

- Create a sense of arrival
- Connecting between the tower and the Palace Field
- Create a contemporary statement feature
- South facing sun
- Extra floor plate
- Create a link between existing stair and tower chamber
- Possibly more than one storey
- Create a link for a new core
- Absorb Otford Heritage Centre

Entrance Extension: Possible Uses

- Ticket desk / reception
- Shop
- Gathering space
- WC facilities including accessible WC
- Staff facilities
- Storage
- Terrace on roof with views over Palace Field

Accommodation Schedule:

Function	Occupancy	Area (sqm)
Ticket Desk	1	2
Shop	6	12
WC Accessible	1	3.3
WC Uni-sex (with Baby Change)	1	2.2
Storage	n/a	2
Staff Locker	n/a	1
Staff Tea Point & Rest Area	1	5
Cleaning Cupboard	n/a	1
Draught Lobby	n/a	2.8
Lift Core	n/a	2.7
Stair Core	n/a	4.3
Circulation / Gathering (@15% overall)	n/a	5.745
Total		**44.045**

REFERENCING THE HISTORIC FORM

When the Palace was built, there was a two storey privy gallery to the south of the Tower that extended rights to the Great Chamber.

The proposed footprint for the entrance extension could reference the previous built footprint and utilise the original openings and connections into the Tower.

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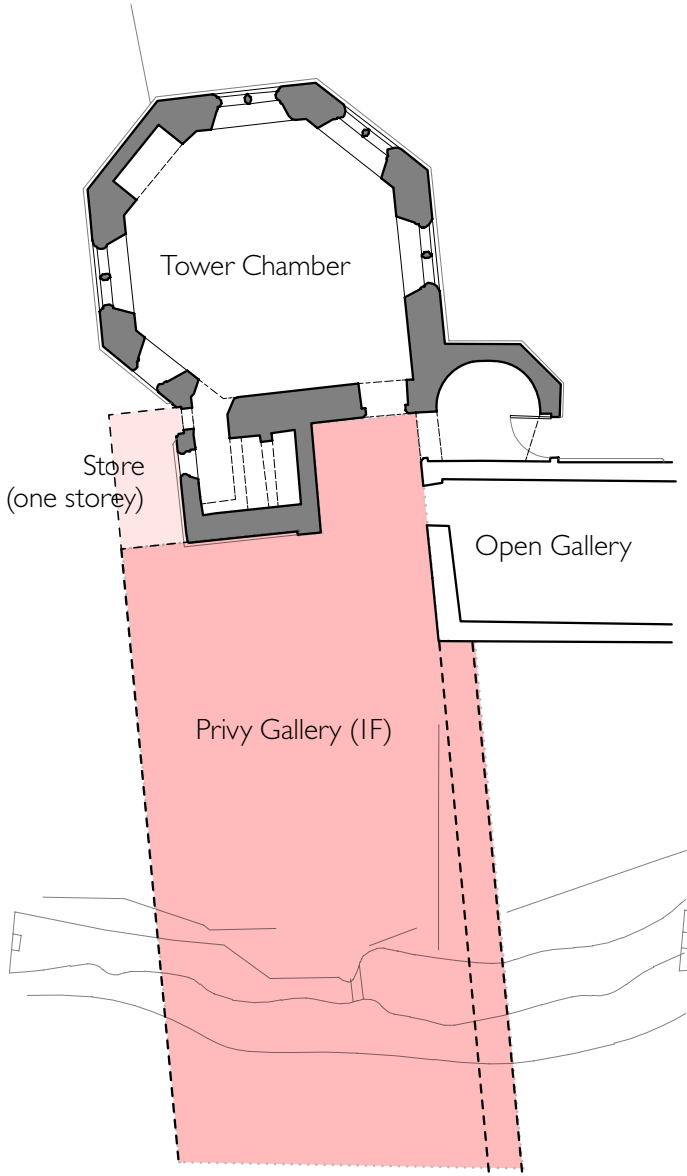
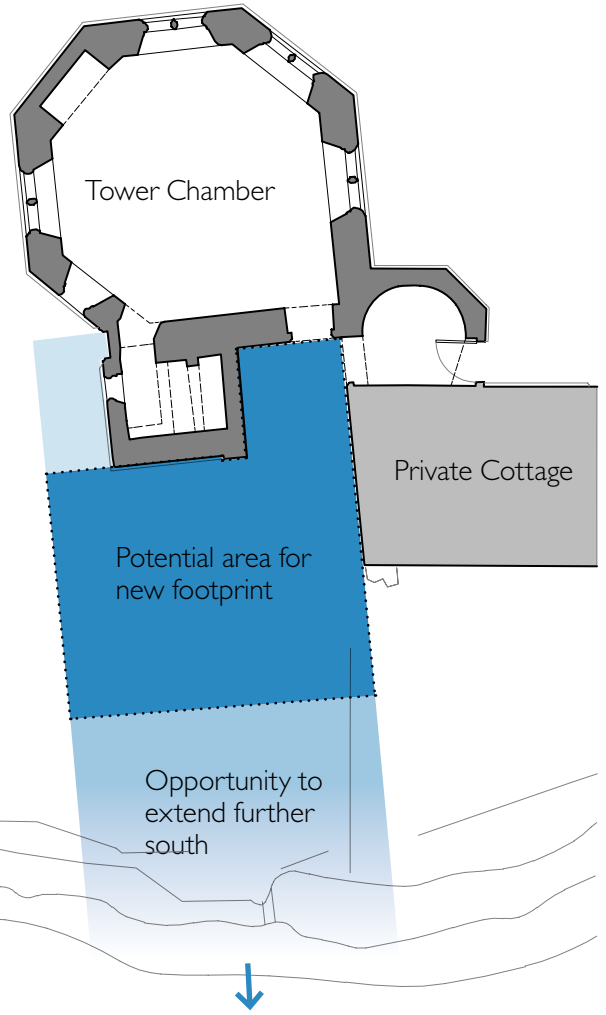


Historic footprint



New footprint opportunity (to the historic)

There are two distinct phenomena when considering the existing Tower fabric. The stone string courses and base plinth create strong building lines, or datums. Although only temporary, the roof line also creates a strong visual line. These elements make it easier to identify the hexagonal plan form of the Tower.

There is also a 'language of towers'. The most dominant is the main Tower Chamber, but there are two more functional towers attached on the south side, one for circulation (stairs) and the other for toilets (garderobe). This creates a composition of subsidiary, more utilitarian towers attached to the main, more elaborate tower.

Strong building lines - West view

Strong building lines - North-east view

Language of towers - South view

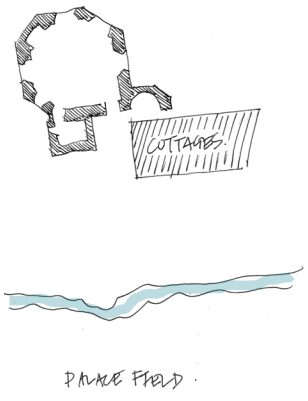
Language of towers - South-west view

NEW ENTRANCE EXTENSION MASSING

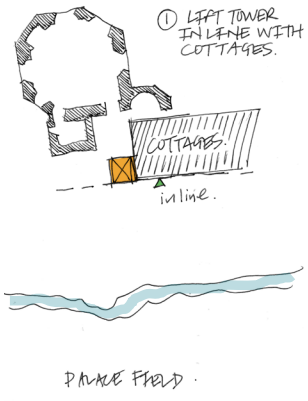
The massing of the new entrance extension is informed by the historic in terms of footprint and form. It references the existing building lines and language of towers, and responds to the surrounding context by framing views and allowing the visitors to get close to the ornate Tudor brickwork.

Strong building lines - with a sketch massing option

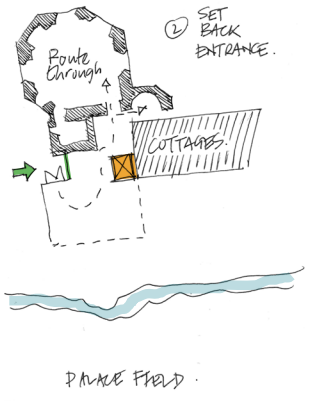
Language of towers - with a sketch massing option



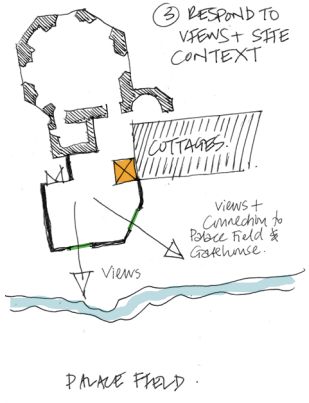
As Existing



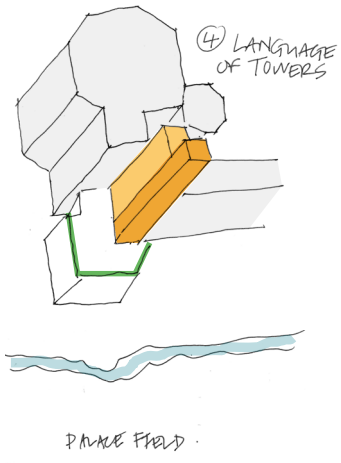
1 - Addition of lift in line with cottage wall



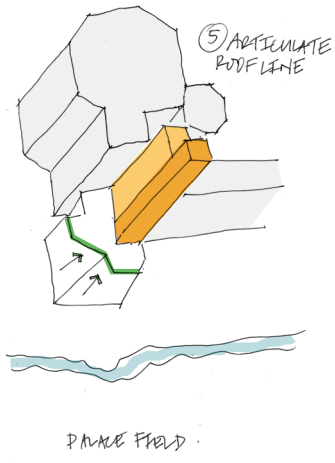
2 - Set back new entrance from historic wall line



3 - Form envelope and apertures towards views and connections



4 - Create new towers to compliment existing towers



5 - Articulate new roof line to compliment existing

6.3.4 MATERIALITY

The materiality of the proposed entrance should be distinctly different from the historic fabric so it can be clearly distinguishable as a later, contemporary addition.

It takes its cue from the Tudor architectural vernacular, but reinterpreted in a contemporary manner. Traditional materials such as timber frames to provide structure and create strong linear rhythms can be referenced into the new building, using contemporary equivalents in material and construction methods.

Painted render and brickwork also characterise the Tudor architectural vernacular, and can also be referenced in the new building to subtly root it to the historic.

The Tudor building vernacular

Strong linear rhythms punctuated by windows and doorways

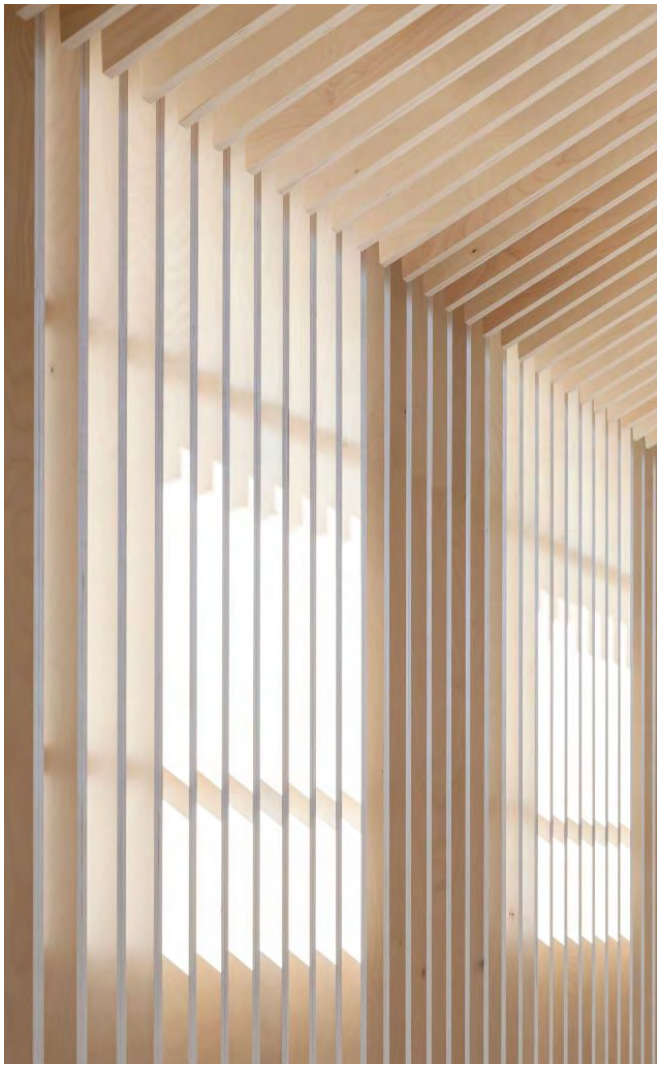
The most prominent and characteristic material found in many Tudor buildings is timber. Timber also has the benefit of being lightweight, low cost and sustainable. To be subservient to the main Tower's heavy and solid appearance due to being constructed of masonry brickwork and stone, the contemporary addition should feel more lightweight and possibly more temporary. Due to the 'busy' nature of the existing Tower façades (different colour and shaped bricks creating patterns, stone plinths, different sized windows) the extension could be a contrasting by using a single material to express its form.

There are many contemporary examples of how timber can be used structurally to provide the main support for buildings or more decoratively as a cladding or to express form. The language of timber as a material could also carry on through the internal additions to the Tower such as the floors and new spiral stair.

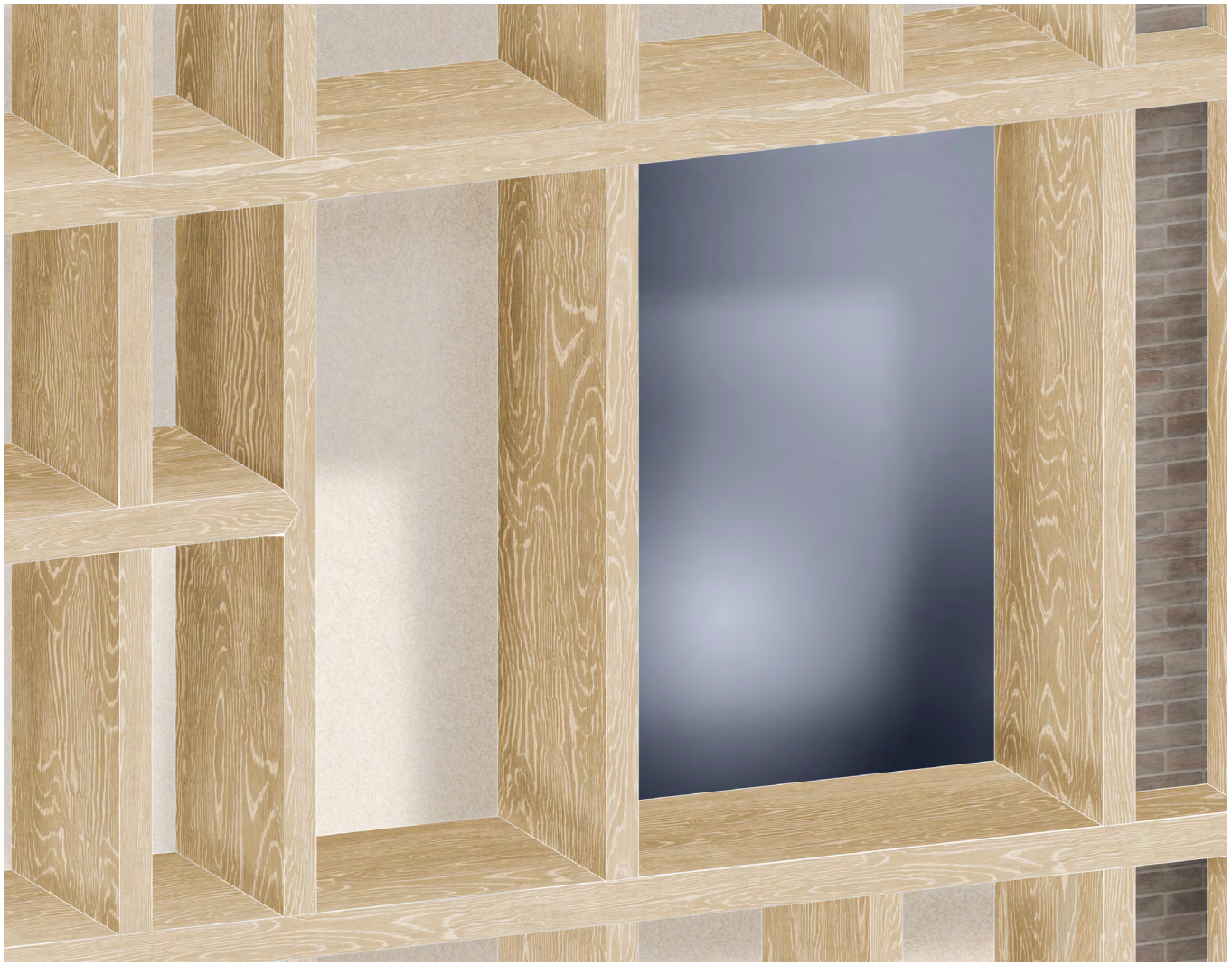
Timber with glass expressed internally

Timber to express form of a building

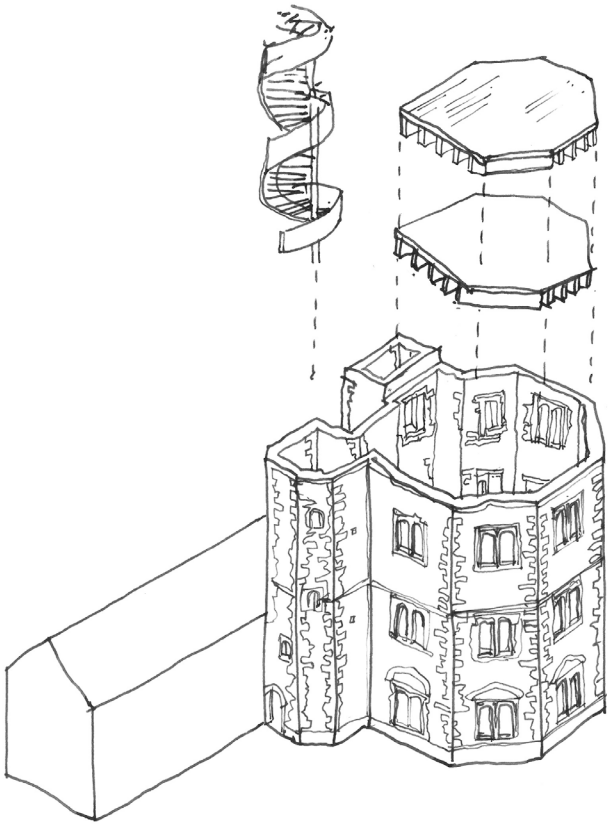
Timber cladding to provide external protection and interest



Timber providing structural support, form and allow light through



Visualisation of an example of a contemporary material palette, referencing the Tudor vernacular for the new extension: Timber (Birch plywood), lime render, glass window, contrasting brick to the existing



Lightweight insertions into the existing fabric

6.3.5 TOWER EXTENSION PROPOSALS

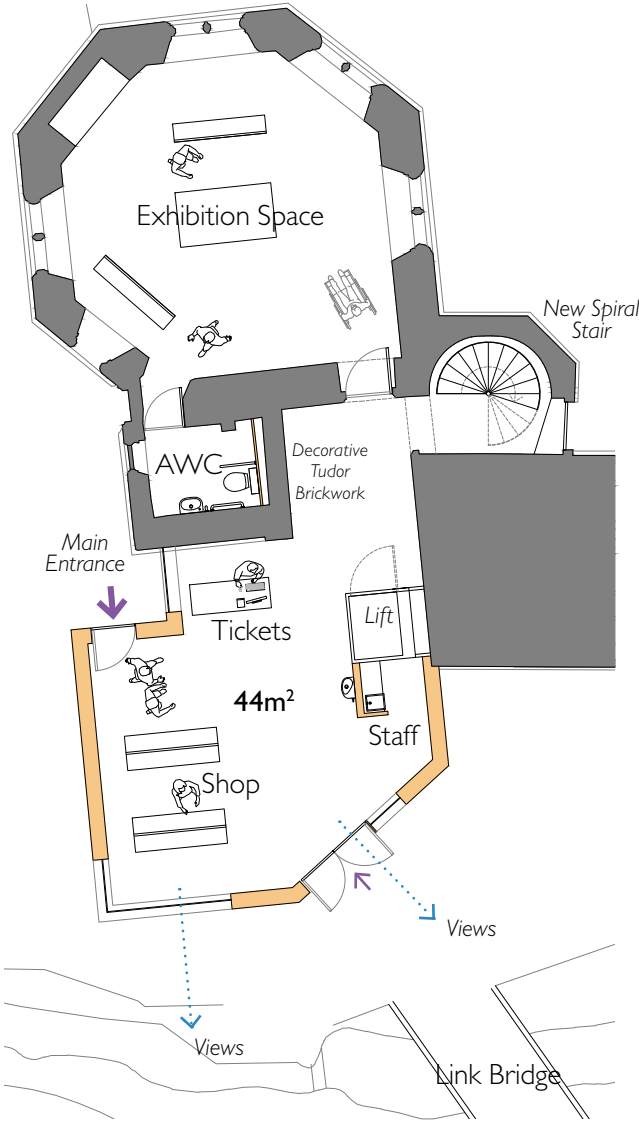
Two options have been included within this chapter of the feasibility study. Both options occupy a similar footprint and the same accommodation, but vary in form and expression of materials. The main difference and driver between the two options is the position of the new lift core.

Option A was the proposal that was taken forward for costing. For further design development, ideas and additional drawings, refer to Section A.4 in the appendices.

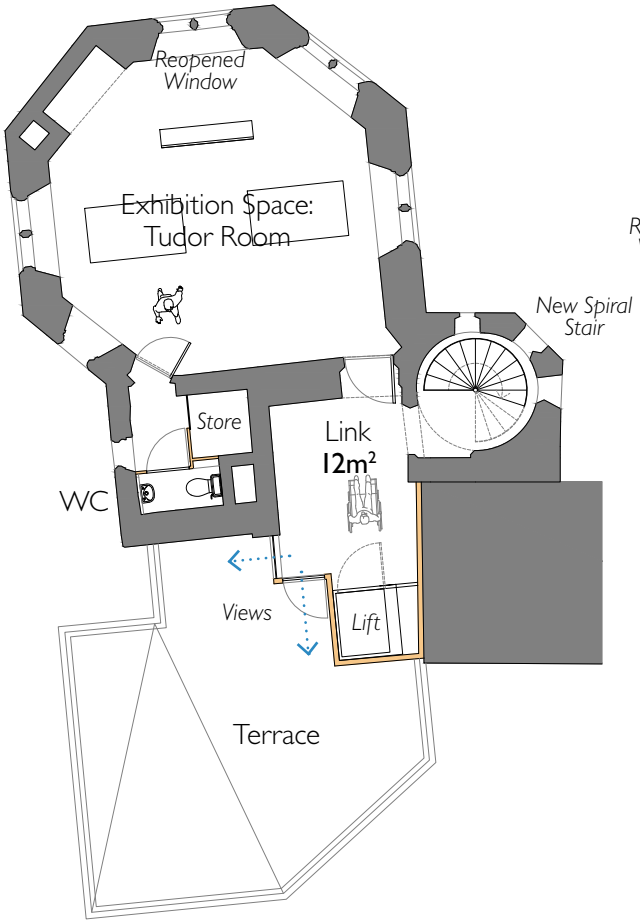
TOWER EXTENSION PROPOSAL - OPTION A

This option locates the new lift adjacent to the private cottages on the east side of the site. The form and expression of the materials externally take direct referencing from the Tower in terms of a plinth base line and the corner of the roof pitching upwards to the south west.

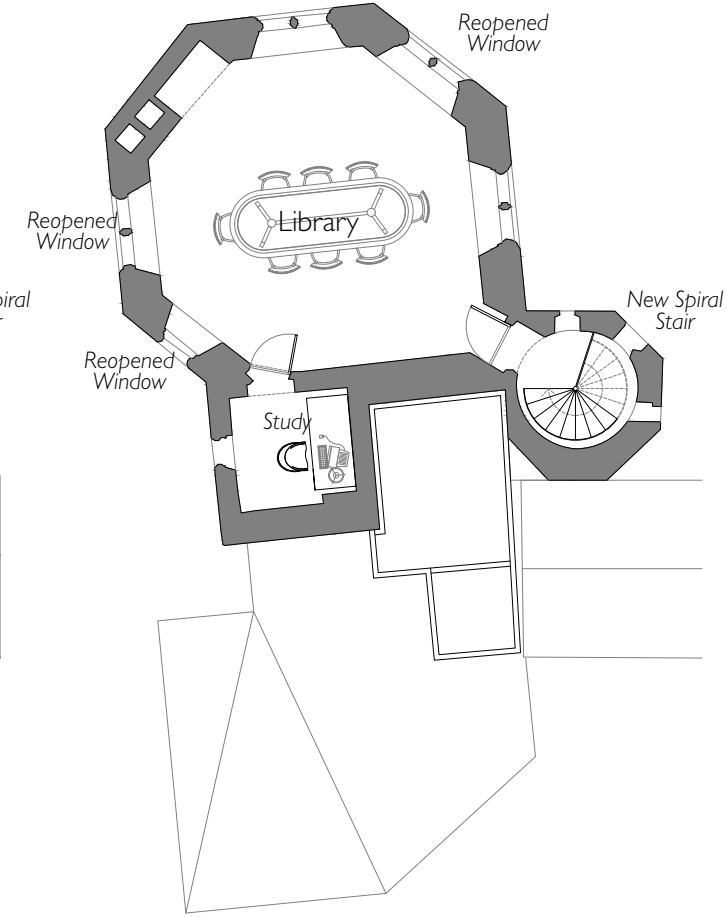
Visual of the New Entrance Extension Option A



Proposed Ground Floor Plan - Option A



Proposed First Floor Plan - Option A



Proposed Second Floor Plan - Option A

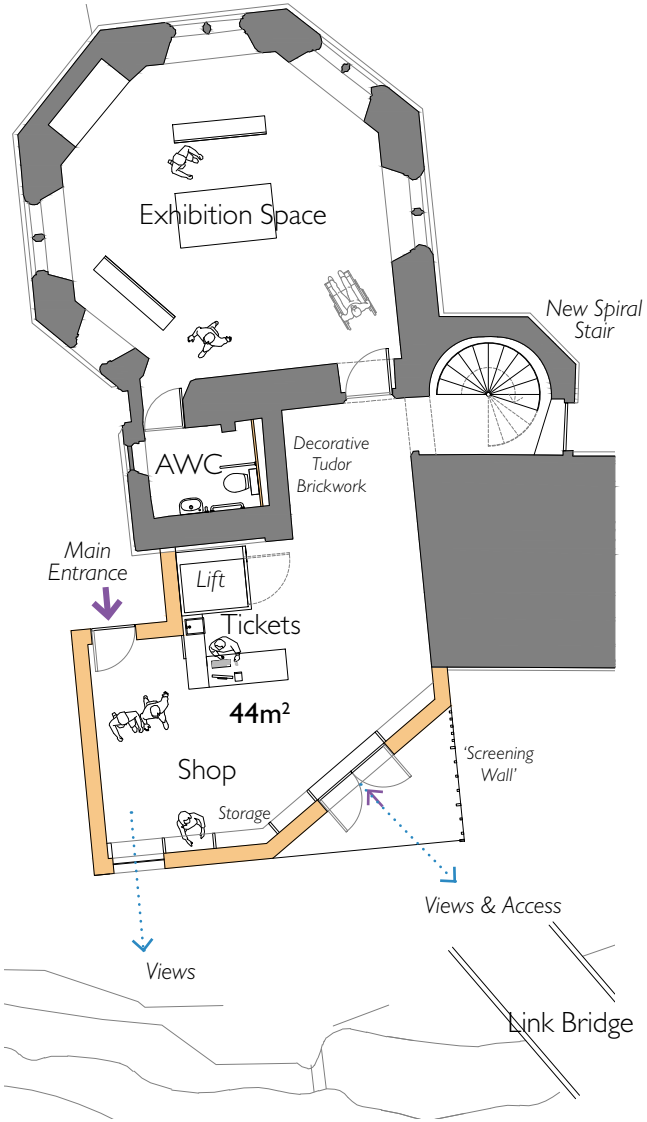
TOWER EXTENSION PROPOSAL - OPTION B

Another arrangement of the lift - directly south and in-line with the Garderobe Tower was explored. This option potentially blocks more of the existing fabric. However, it creates a more consolidated massing of new-build element, with the lift and upper viewing terrace being more connected to the link way at first floor.

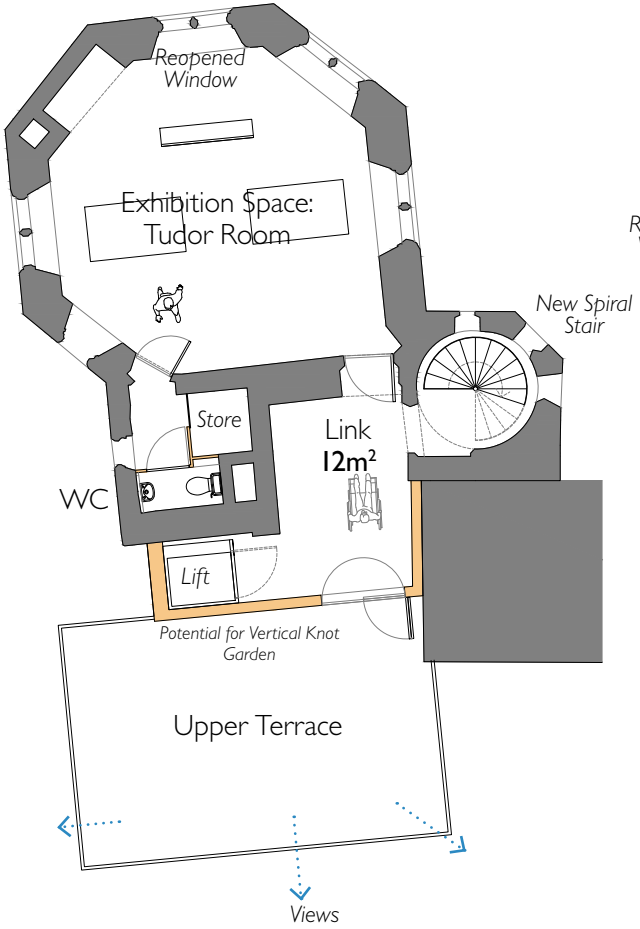
The ground floor massing also appears more simpler in form, but retains elements such as the chamfered wall facing the Palace Field. Issues of overlooking for privacy with the private cottage directly to the east could be mitigated using screened walls. In general, the timber cladding is more uniform and less 'fussy' than Option A, which is a deliberate contrast to the business of the Tower façades.

There were security concerns of having a knot garden within the grounds of the ruins. An idea to avoid this would be the inclusion of a 'vertical knot garden' at first floor on the upper terrace that could rise up the wall facing south (not shown on the visual, but plans adjacent). This could tie the terrace more into the landscape through planting at first floor level, and provide the benefit of securing the knot garden out of hours.

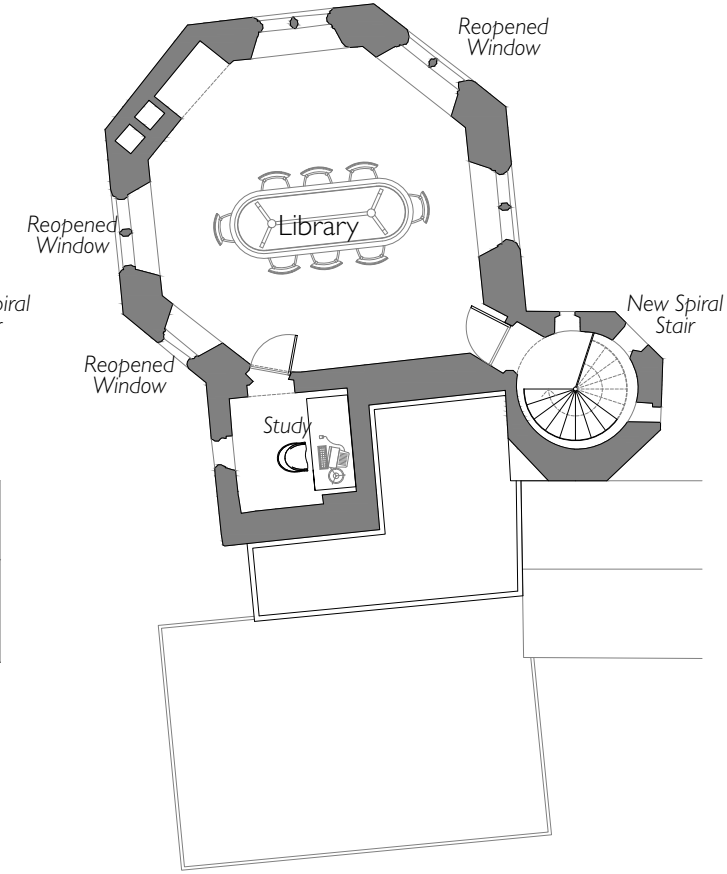
Visual of the New Entrance Extension Option B



Proposed Ground Floor Plan - Option B



Proposed First Floor Plan - Option B



Proposed Second Floor Plan - Option B

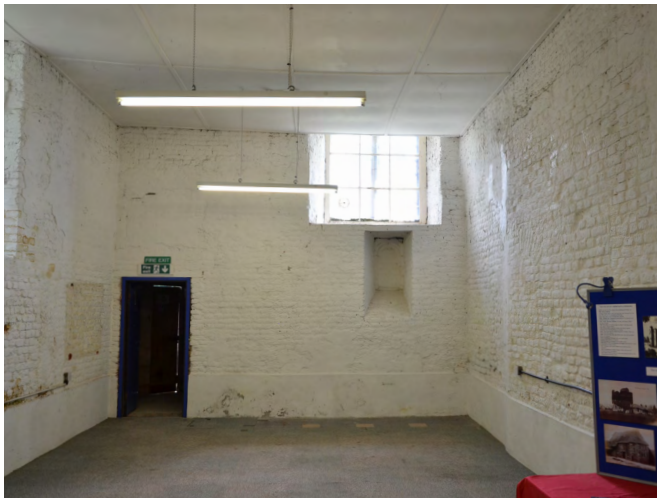
6.4 THE GATEHOUSE

The Great Gatehouse remains are to the east of the site. Originally five storeys, only the bottom storey remains, with a tiled, hipped roof added later. There are numerous recent changes such as a new window and door opening on the east facade and a poured concrete floor internally.

A number of original windows and the original doorway have been bricked up.

The internal brick walls have been painted over in white in the main space with modern vinyl paint.

Gatehouse from the north



Internal view looking south

Gatehouse from the south

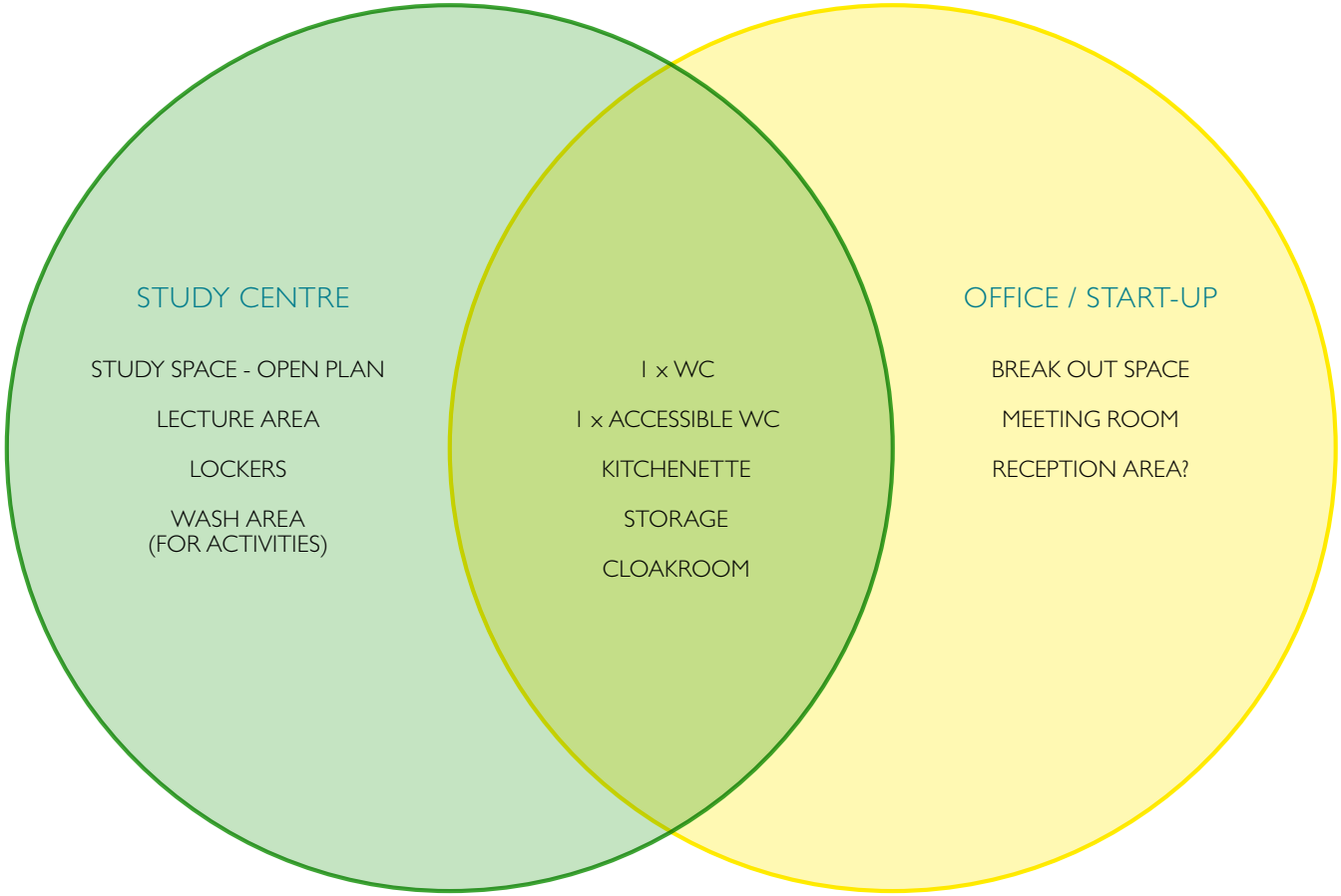
Internal view of the dovecot roof

6.4.1 USES AND REPRESENTATION

The ambition for the Gatehouse is for a new Study Centre for field activities and group learning linked to the history of the site.

For financial viability, the Gatehouse is likely to be used as an office/ start-up space to provide income in the short term.

The programme of uses will therefore change, but there will be some 'baseline' uses that are required for both functions. The space will be designed to be as flexible as possible with the Study Centre as its ultimate use.



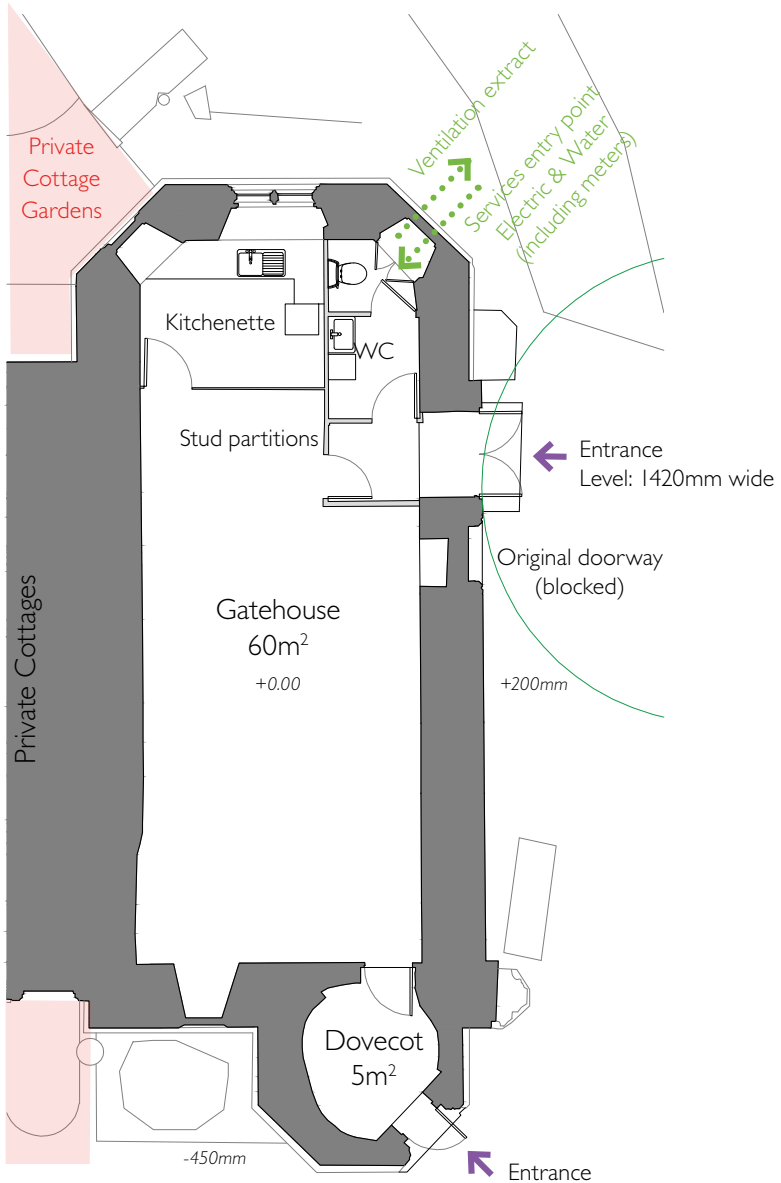
6.4.2 EXISTING BUILDING ANALYSIS

There are two existing entrances into the Gatehouse. An original entrance on the east side has been bricked up due to floor level changes between internal and external, in part because of a newer poured concrete floor.

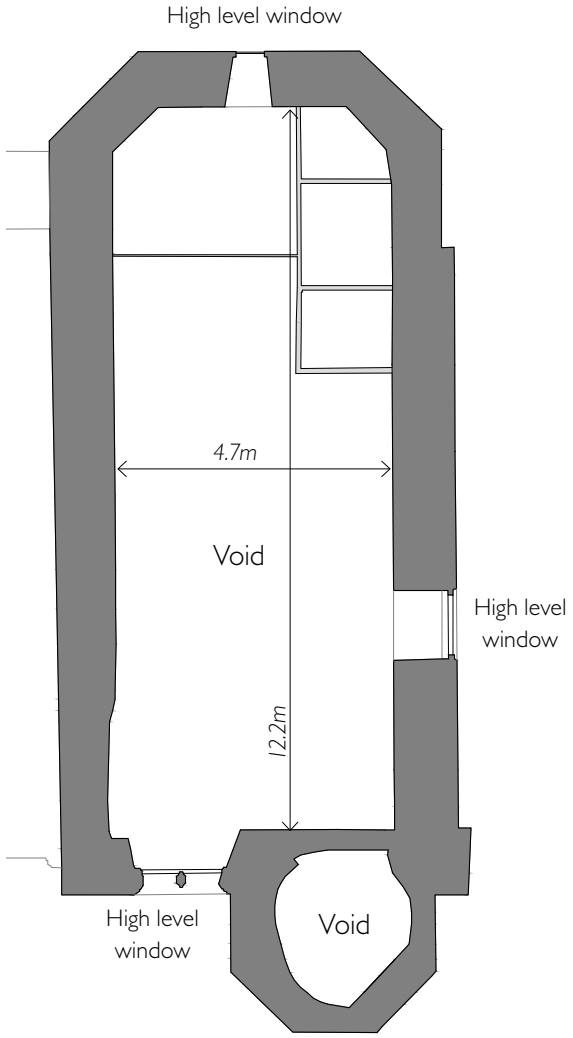
Modern partitions form a kitchenette and WC to the north side.

Currently, electric and water services with meters enter the building through a bricked up window on the north east side.

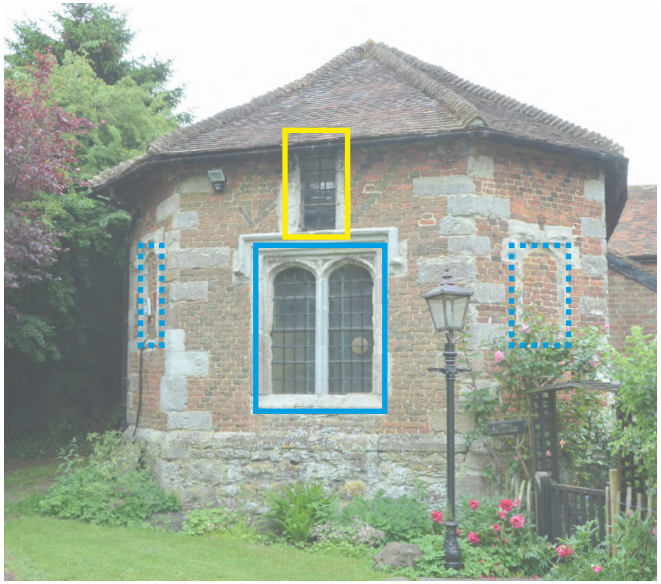
The west wall forms a party wall with the private cottage and has no windows.



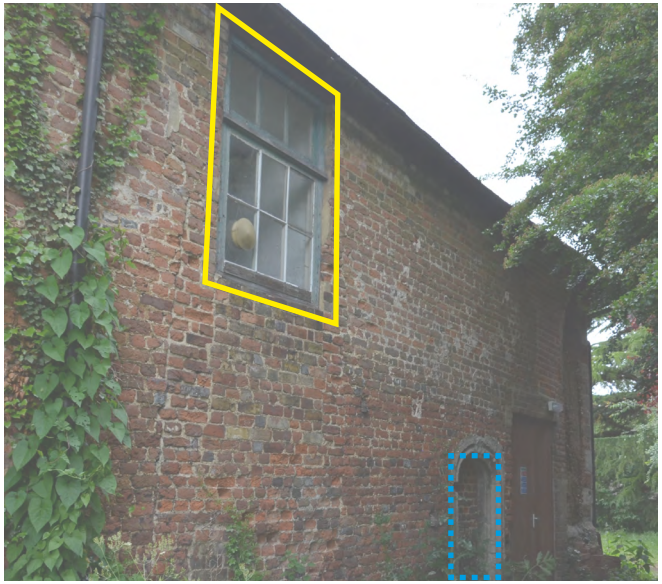
Ground Floor Plan



High Level Plan



View of the North Elevation



View of the East Elevation

View of the South Elevation

EXISTING WINDOWS

The windows are at higher and lower levels across the façades. There are two large original windows, one on the north and one on the south. An opening on the east appears to be a more recent window at higher level.

There are currently three smaller blocked windows at lower level.

Ground Floor Window

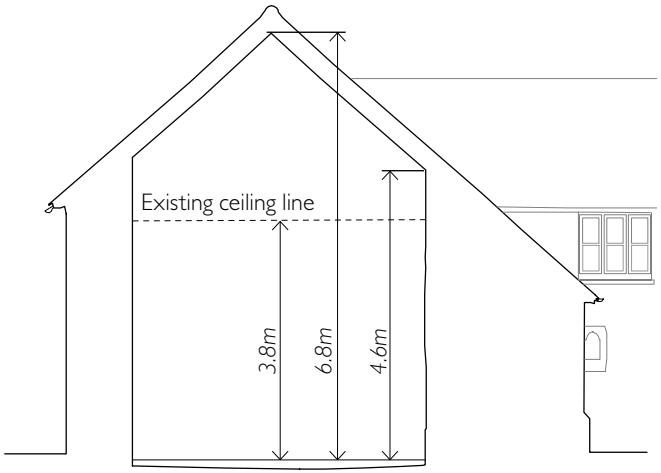
Ground Floor Window/Door (Blocked)

First Floor Window

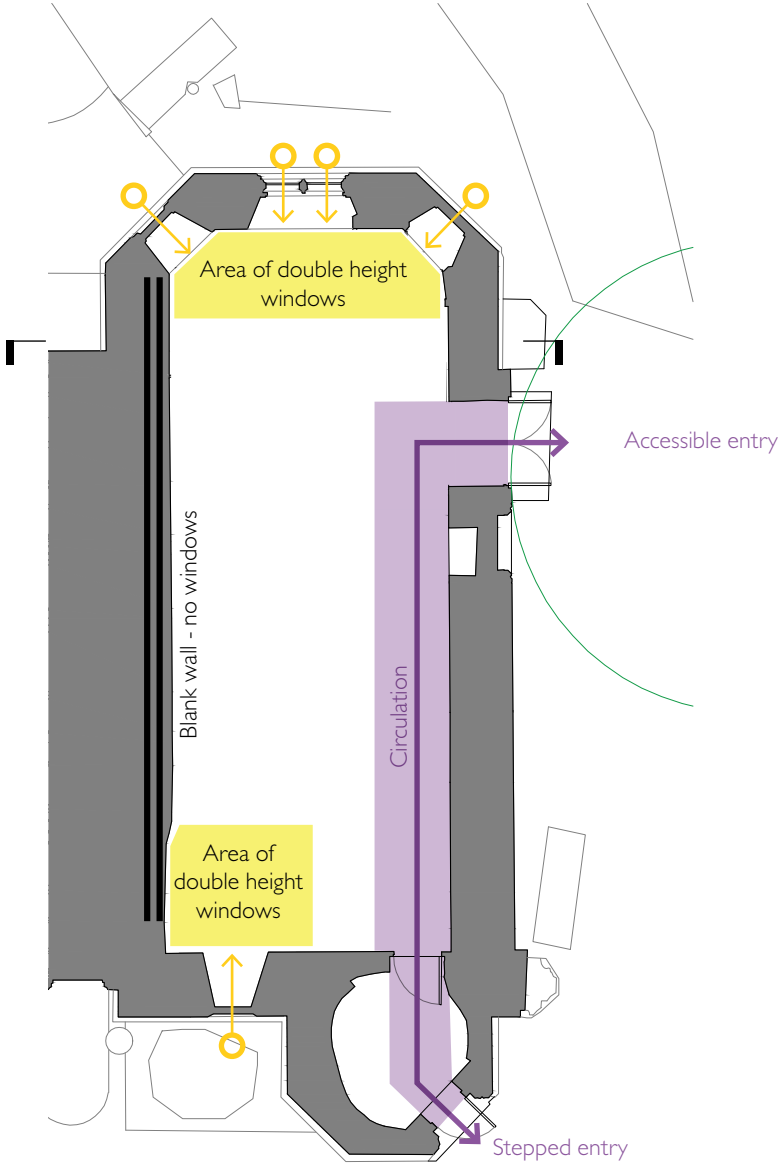
6.4.3 GATEHOUSE PROPOSALS

In order to increase floor space in the Gatehouse, insertion of a new mezzanine floor is proposed. Other ambitions are to reopen all the original window apertures and create accessible entry on the east side, as there is currently a stepped threshold to the south.

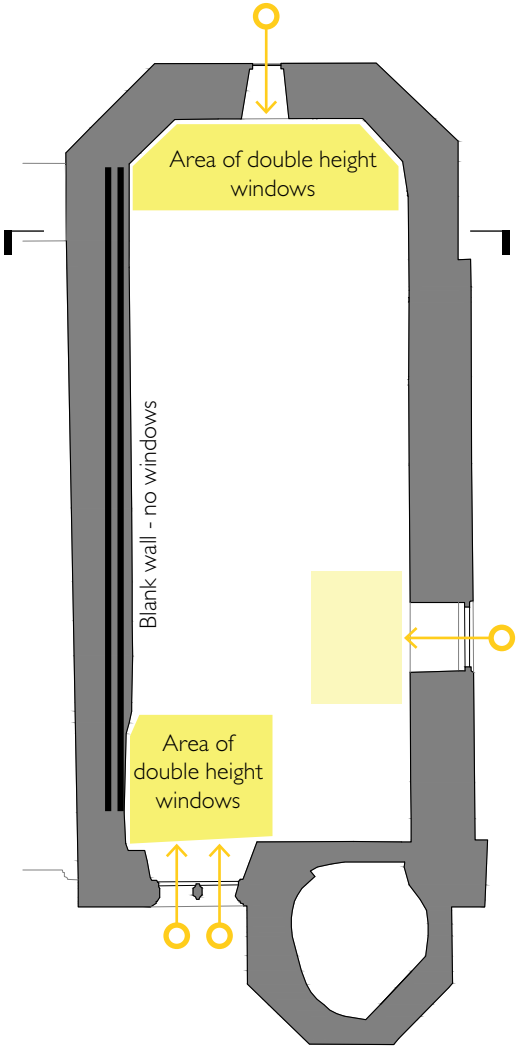
The position of the entrances means it would be logical to have a circulation route on the east side of the plan.



Section (assumed roof internal line)



Ground Floor Plan



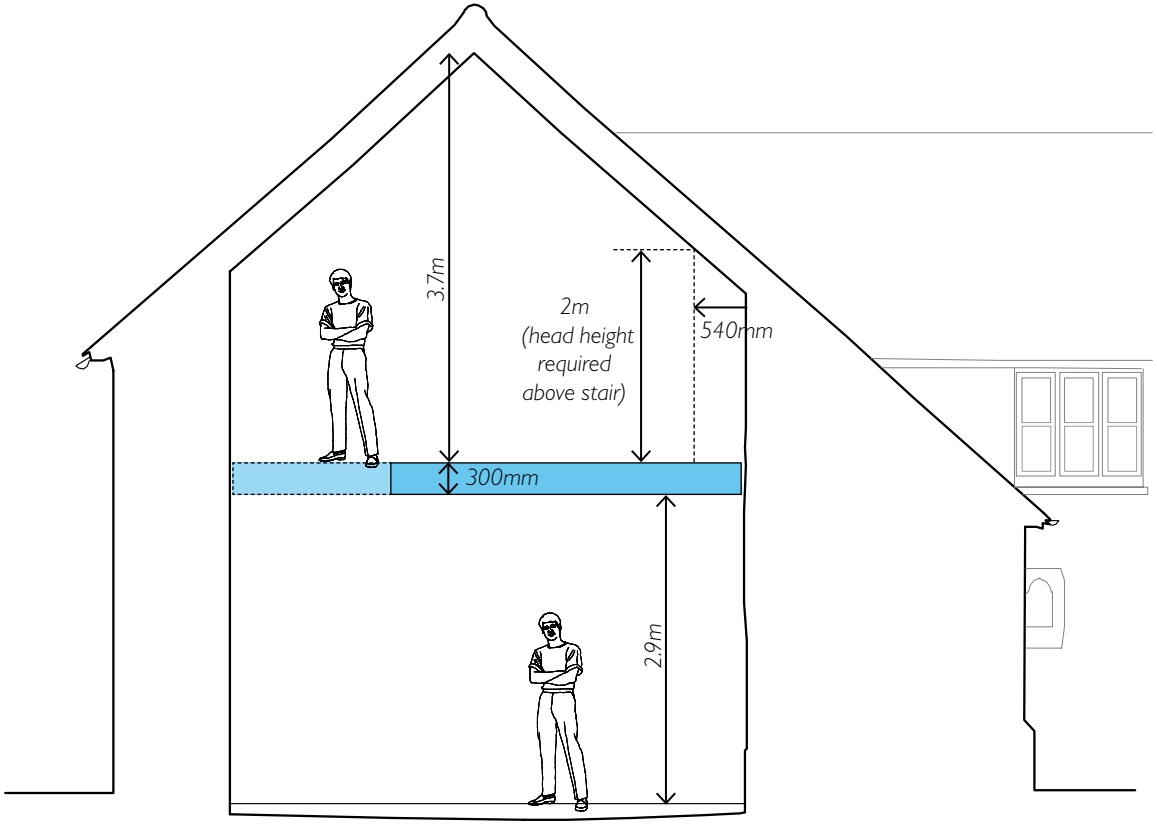
High Level Plan

By reopening the windows, there are two areas of double height window to the north and south. Therefore, it would be preferable for any new floor plate not to obstruct these windows in order to take full advantage of the double height light, and so that the new floor isn't visible through the windows.

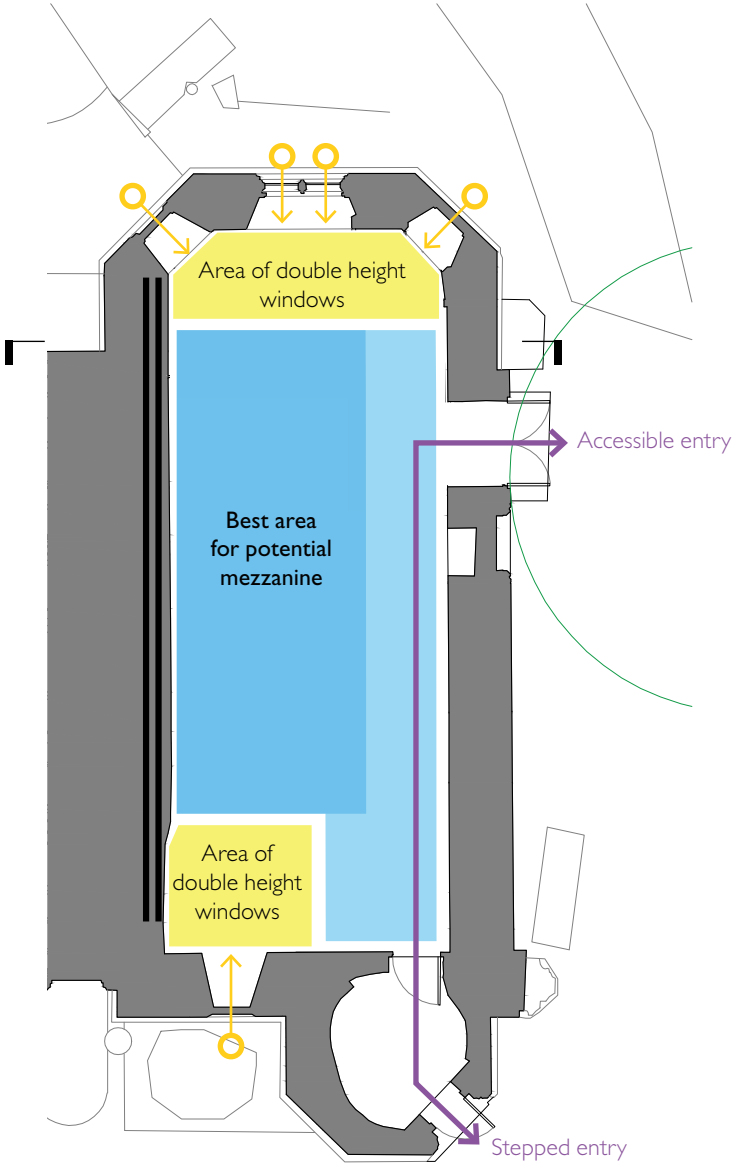
Due to the blank party wall on the west, the best place for a mezzanine would be against this wall, pulled back from the windows.

2m head height is required above the stairs up, so these would have to be offset by circa 540mm if along the west wall.

It is proposed that the existing roof remains, as it is in good condition, but new conservation rooflights could be inserted.



Section - Proposed Mezzanine Levels (assumed roof internal line 310mm build up)



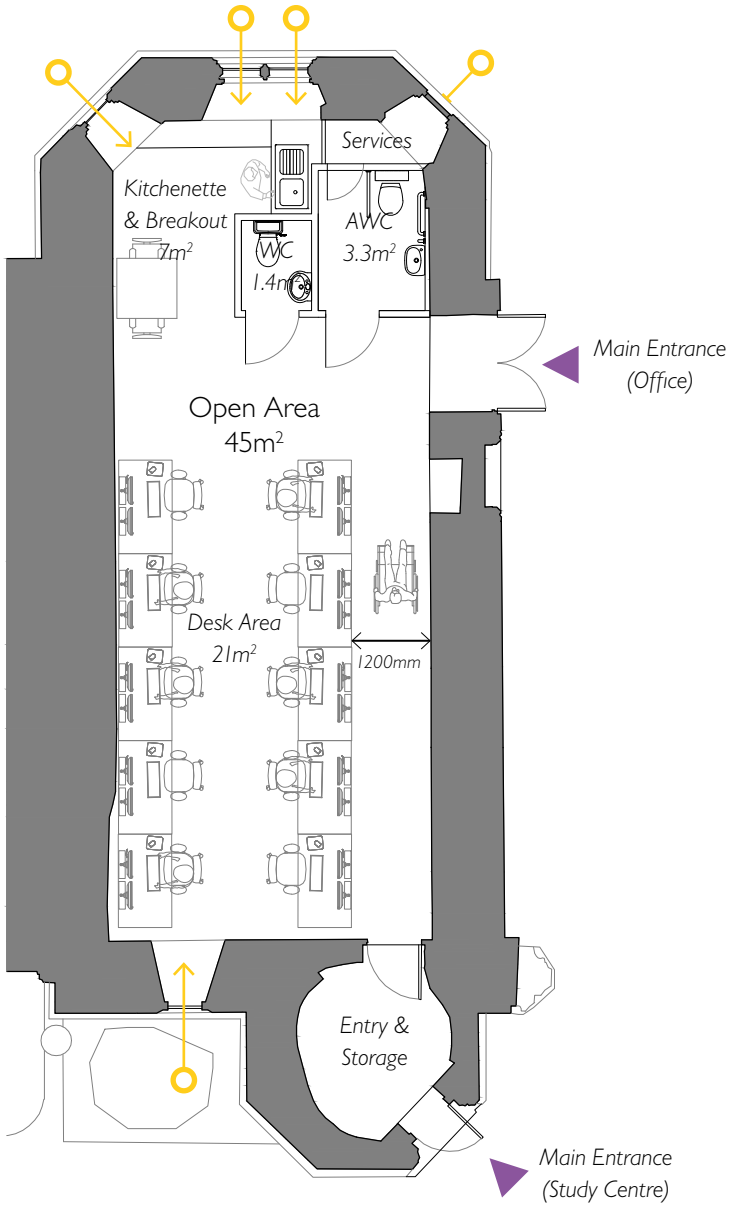
Ground Floor Plan

GATEHOUSE - OPTION 01

This option explores the possibility of the Gatehouse without a mezzanine. It keeps the services in the existing location (and therefore does not unblock the north east window) and provides a new kitchenette.

Option 1: No Mezzanine
Potential for 10 desks
Total: 65m² Floor Area

+ Less cost
+ Services remain in same location
- No new floor area created
- Small kitchenette and breakout space
- Small and restricted wash area for activities
- Obstruction to north windows
- Limited space for storage



Desk sizes shown:
1400mm wide x 800mm deep
1800mm minimum between desks

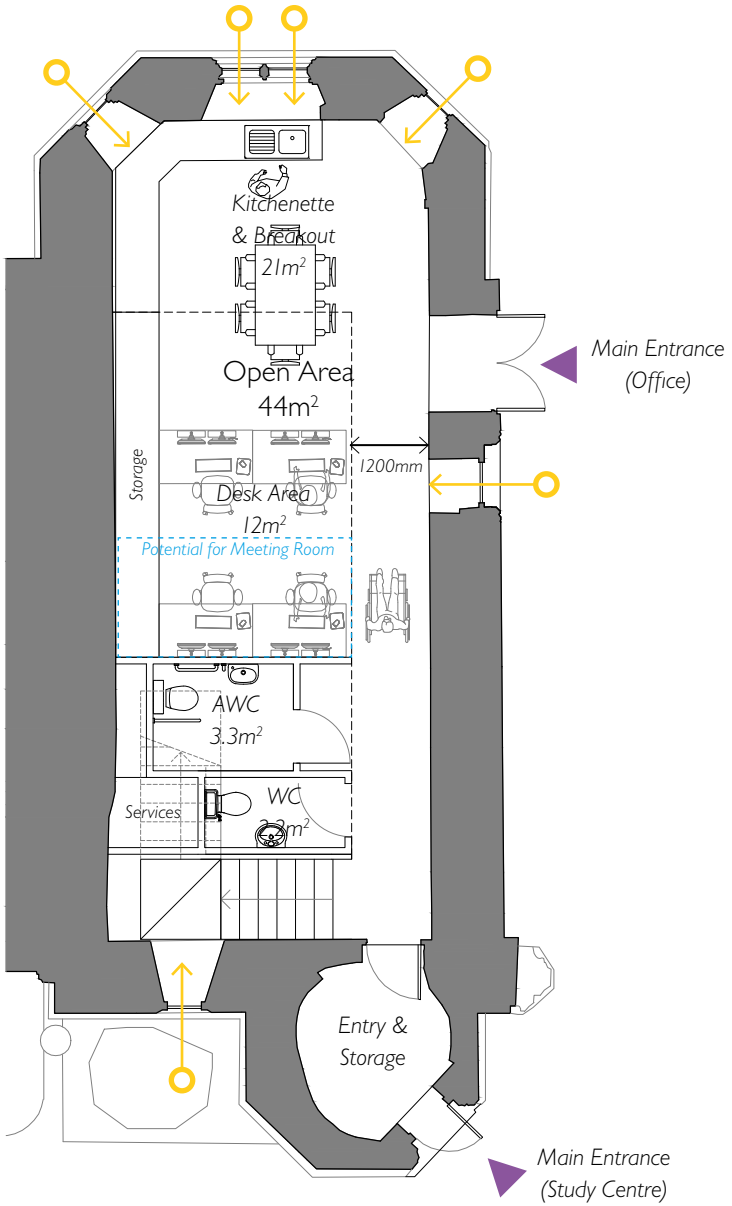
GATEHOUSE - OPTION 02

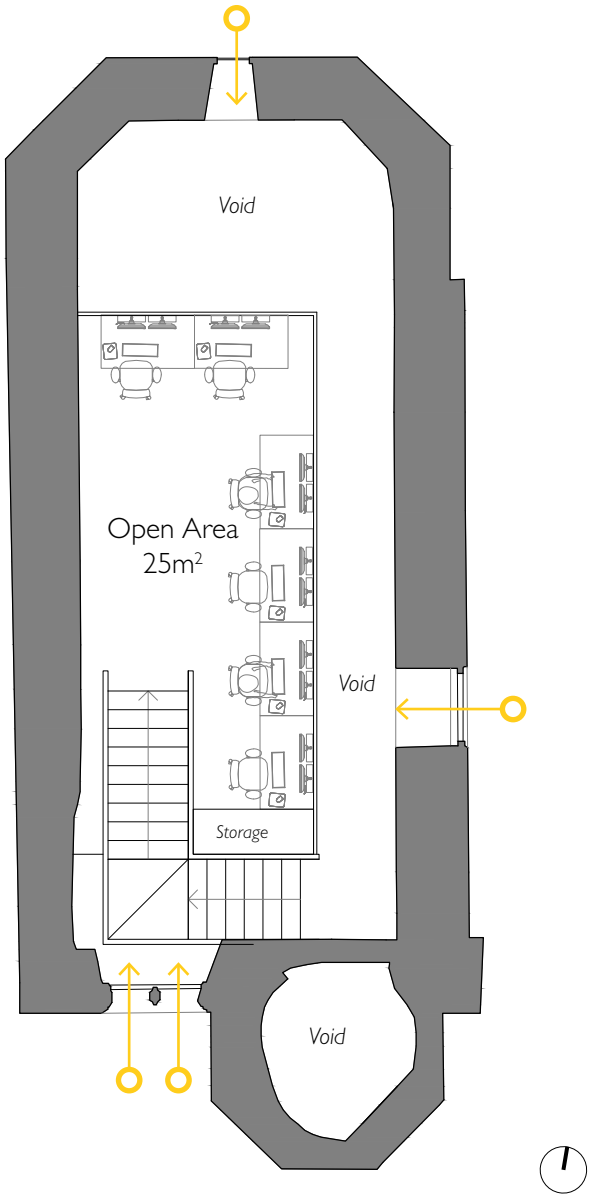
This option is based around a new mezzanine along the west wall, that is pulled back at higher level away from the windows, to maximise light. The stair is on the south side which slightly obstructs the windows, but could be pulled back to still allow light in. A generous new kitchenette and breakout is to the north with the potential for a meeting room adjacent to the WCs located under the mezzanine. A storage 'spine' wall could run along the west wall that could incorporate service runs and lockers.

Option 2: Small Mezzanine
Potential for 10 desks
Total: 90m² Floor Area

+ Double height window areas open
+ No obstruction to windows
+ Generous double height space
+ 25m² extra floor area created
+ Large kitchenette and breakout space
+ Large area for activities
+ Generous storage provision
+ Potential for a meeting room
- Services will need to be diverted (cost)
- Cost of creating mezzanine

Desk sizes shown:
1400mm wide x 800mm deep
1800mm minimum between desks





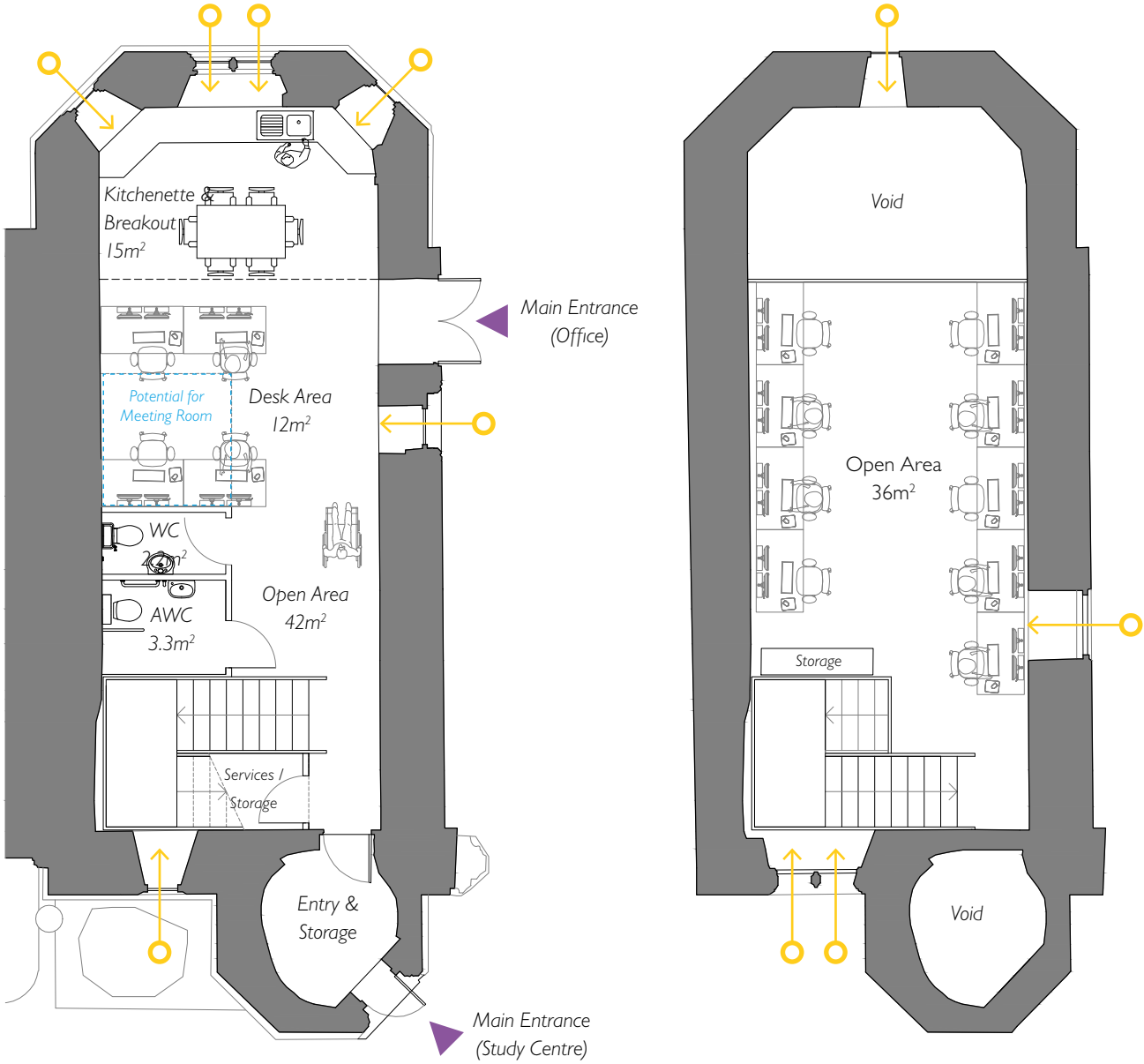
GATEHOUSE - OPTION 03

This option is similar to Option 02, but explores a mezzanine across the full width of the Gatehouse with a dog-leg stair to the south.

Option 3: Large Mezzanine
Potential for 13 desks
Total: 101m² Floor Area

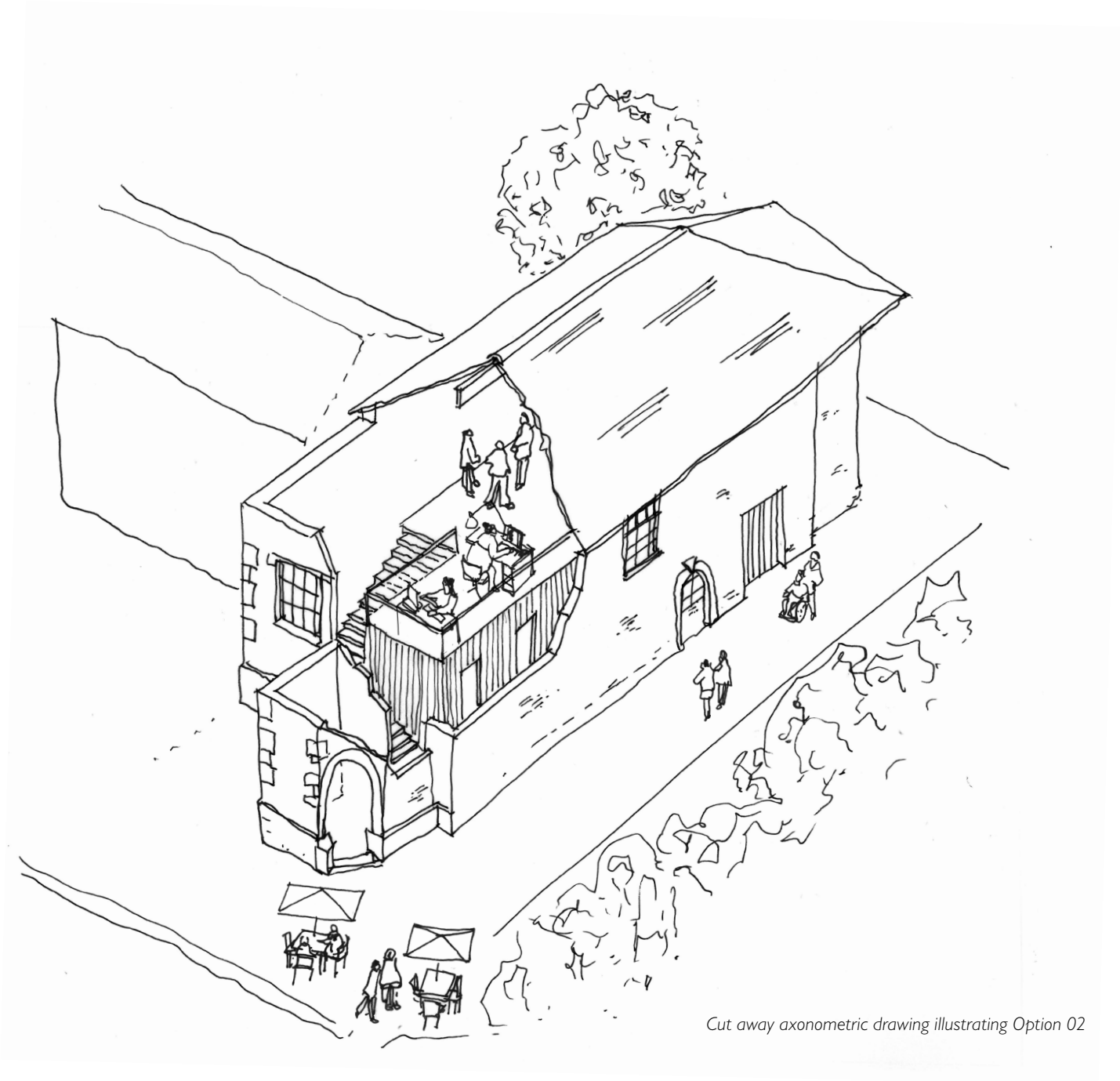
+ Double height window areas open
+ No obstruction to windows
+ 36m² extra floor area created
+ Large kitchenette and breakout space
+ Large area for activities
+ Storage provision
+ Potential for a meeting room
- Services will need to be diverted
- Small double height area
- Cost of creating mezzanine

Desk sizes shown:
1400mm wide x 800mm deep
1800mm minimum between desks



The addition of the mezzanine would provide more floor space and could relate to the Tower in terms of materiality, i.e. timber boarding.

Further to the new additions, recent additions to the interiors such as the concrete floor and modern paint finish would be removed and reinstated with new fabric that respects and protects the historic fabric, rather than causing a detrimental effect as is the current situation.



Cut away axonometric drawing illustrating Option 02

7.0 OUTLINE INTERPRETATION STRATEGY

The former Archbishop's Palace at Otford, including the historic environment of the Palace buildings and its grounds in Otford, has an incredibly rich history which has contributed greatly to the common heritage of Kent, Britain and the wider European context. Some key moments in the history of the site which inspire the proposed heritage interpretation strategy for the site are as follows (a more detailed history timeline is available on the APCT website https://otfordpalace.org/palace-history/):

821 This land was first gifted to the Archbishop Wulfred by Offa, King of Mercia. A large moated manor house was built here and enlarged over the next 600 years by 52 subsequent archbishops. Those who came, lived or visited here include:

1066 William the Conqueror recuperated at The Ruined tower during his march on London 1162 – 1170 Thomas a Becket, it is said, particularly liked staying at Otford.

1315 The chapel (18 metres long) was built in the Decorated style with 'a lavish interior'

1348 Edward III brought his whole court here to spend Christmas away from the Plague in London.

1382 The Great Hall (31 metres long and 12 metres wide) was built to seat 200 at dinner

1500 The Court roll stated that Otford was 'one of the grandest houses in England'

1515 Archbishop Warham built one of the largest palaces in England covering 1.16ha (about 4 acres), comparable in size to Hampton Court.

1518 Erasmus and Holbein were regular guests

1520 Henry VIII and Katherine of Aragon stayed here en route to the Field of Cloth of Gold

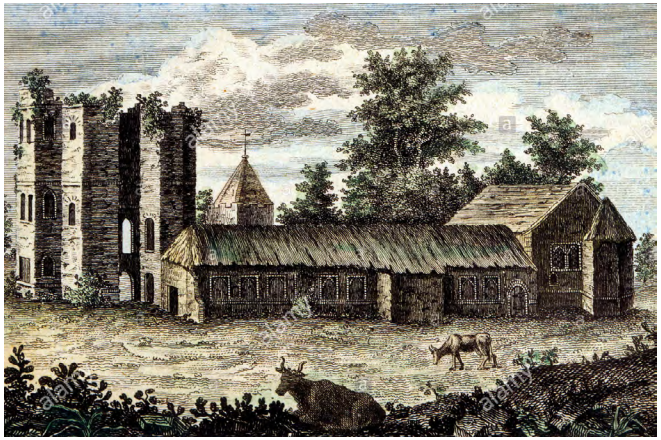
1532 Princess (later Queen) Mary stayed here over two summers.

1534 Archbishop Cranmer began work on his Book of Common Prayer at the palace.

1537 Henry VIII became its owner and spent lavishly on it. However, in time, he decided that he preferred Knole a few miles away in Sevenoaks, because it was less damp away from the River Darent.

1547 After Henry's death, the Palace fell gradually into disrepair until, by the 17th Century, it was largely a ruin.

As set out in sections 2.0 and 6.0 of this feasibility study the following objectives and ideas for interpretation are currently being developed as part of the project:



'Otford, Kent: remains of the archbishop's palace Date: circa 1750'
https://www.alamy.com/otford

Artist's impression of Otford Palace
© Archbishop's Palace Conservation Trust

Museum & Darent Valley Interpretation Centre

It is intended that the ground-floor of the tower will provide visitors with an exciting adventure of discovery into the Darent Valley's current heritage sites. There will be detailed, scale models and artist's impressions of all the historical buildings within the valley. They reveal to the visitor the worlds in which our ancestors once lived when these iconic places were newly built. The model of Otford Palace (populated by over 100 miniature figures) provides a fascinating insight into how life in the palace was lived in 1520.

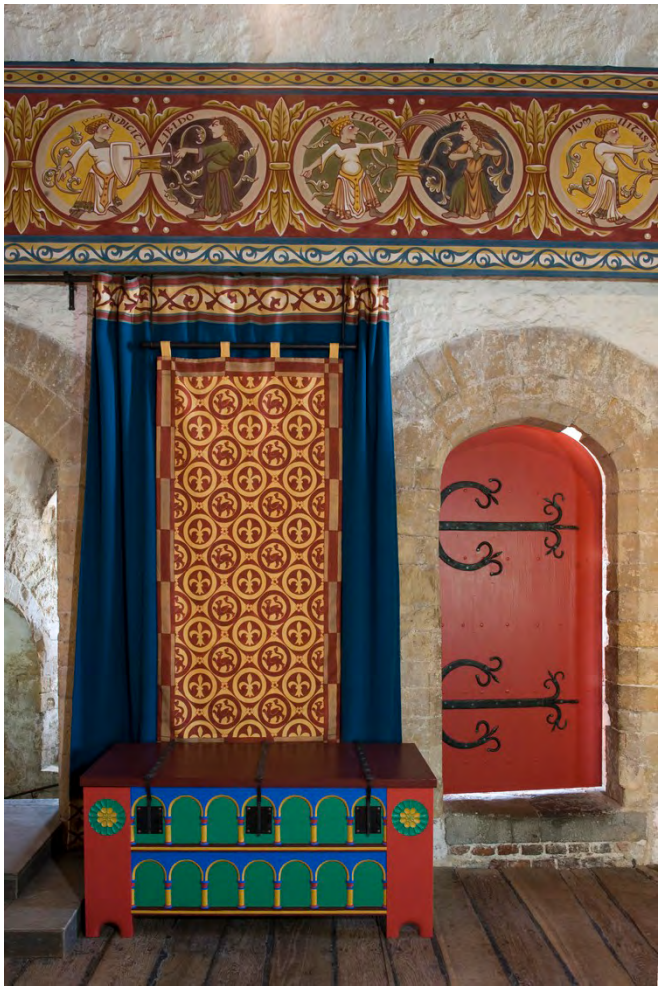
This model of Otford, and representations of other local assets will be supported by interactive information points. But more importantly, these stories and the memory of what once was, will now remain with all these visitors, young and old, as they take the short journey to each site. It is a perfect precursor to their journeys ahead. The exhibition intends to include inter-active displays on the heritage locations and places of interest to be discovered in the valley.

Tudor Room

The first floor of the restored Tower is intended as a full re-creation of the Tudor room as it may have looked in 1538. To inform this approach and the proposed design of the room, further focused heritage research will need to be undertaken during the design development stages of the project.

Within section 5.0 of this feasibility study options have been explored for the architectural approaches that might be adopted within this space.

Whichever architectural approach is taken forward, interpretation to explore the Tudor history of the Palace and Tudor heritage more generally will be explored in this space. It is also intended to hold regular Tudor exhibitions of different types within this area (whenever possible linking with the school syllabus).



Purcell's representation of the Great Tower at Dover Castle includes interpretation and presentation of historic rooms with replica furnishings, an introductory exhibition, the incorporation of Pepper's Ghosts technology and the fabrication of a significant number of large and small artefacts including furniture, textiles, paintings on canvas and other artefacts

The Angevin atmosphere within the Great Tower is enlivened by re-enactors of historic scenes, inviting intrigue and sometimes participation from visitors

Purcell led the restoration of Base Court at Hampton Court Palace with Historic Royal Palaces, which included the installation of a fully working replica of King Henry VIII's wine fountain and other installations, informed by detailed historic archival research

Archbishop Cranmer room

We intend to develop this room to tell the story of the writing of The English Prayer Book, 1549.

It is hoped that, in association with the Province of Canterbury and the Prayer Book Society, we can, for the first time, bring some of this early work to public scrutiny.

The rich story of the Kent's numerous Archbishop's palaces and the role of the Medieval peripatetic archbishops will be another area of discovery for visitors. We also hope to contain extensive photographic and documentary archive, historical material on the villages of the valley

In addition, the APCT Business Plan also explores several options for possible special exhibitions, community and schools engagement activities, and programming within the existing and proposed landscape surrounding the Palace.

Interpretation at Tudor House Museum. Purcell led a comprehensive repair and regeneration project with an interactive, state-of-the-art exhibition fit-out

The restoration at Fulham Palace, one of London's outstanding examples of Tudor architecture by Purcell. The scheme has doubled the size of the museum, which has been completely reinterpreted and includes historic rooms never-before opened to the public. The visitor experience has been enhanced extensively by enabling continuous access and visibility throughout the site

8.0 RECOMMENDATIONS & NEXT STEPS

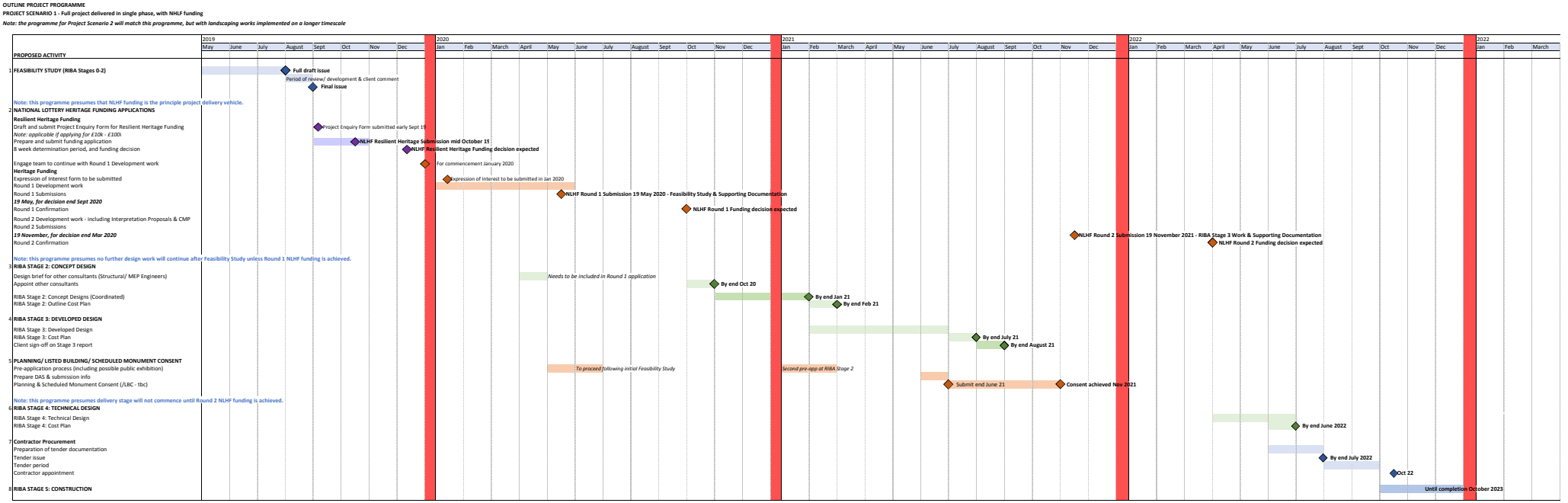
8.1 PROJECT SCENARIO OPTIONS

Project Scenario 1

- Full project to Palace site, including gaining Resilient Heritage Funding, then NHLF funding towards full project implementation.

Full project

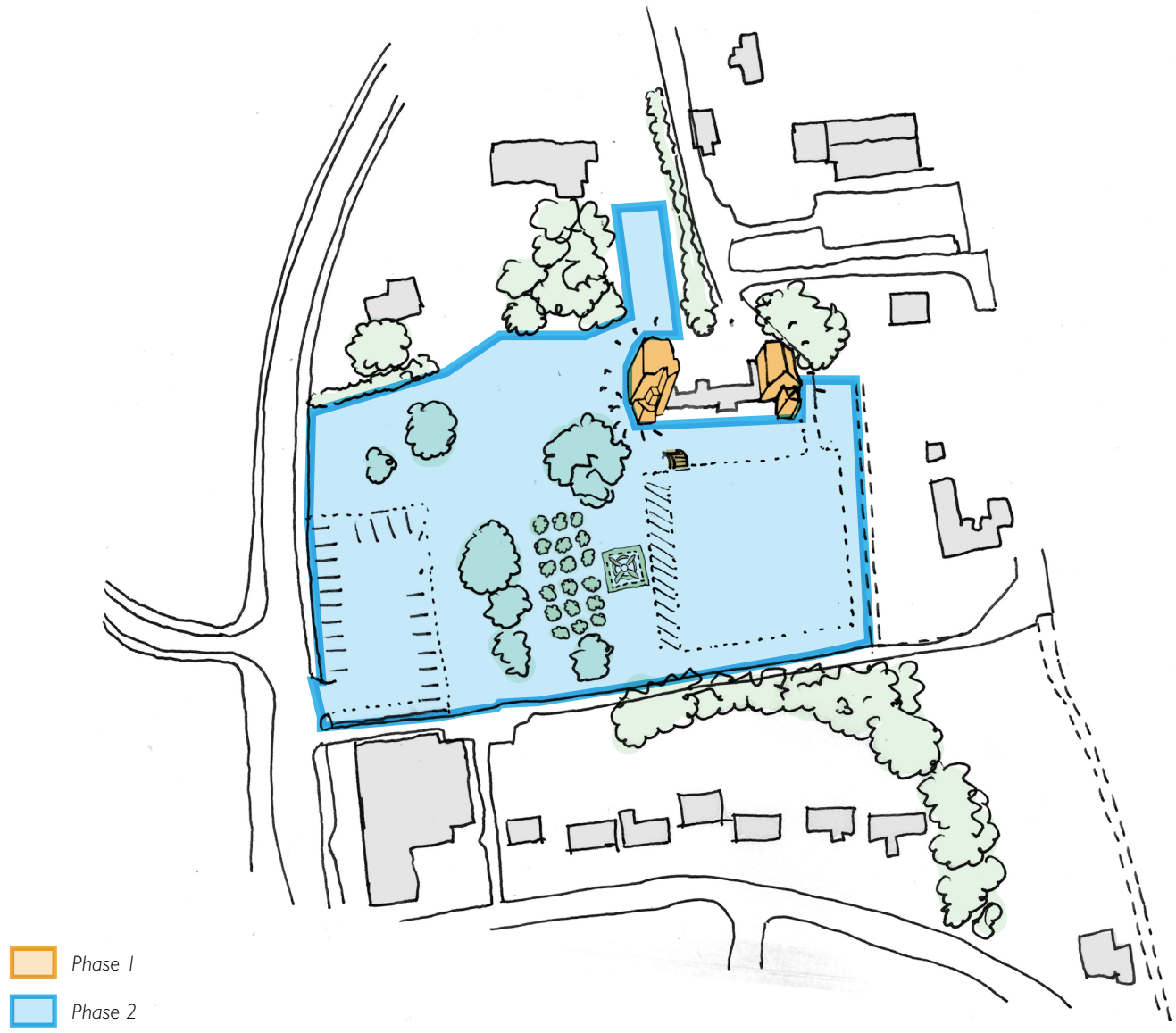
Outline Project Programme - Scenario 1



Project Scenario 2

- Phase 1: as above, but buildings only, including tower extension.

- Phase 2: wider implementation of landscape works including car park and Tudor knot garden.

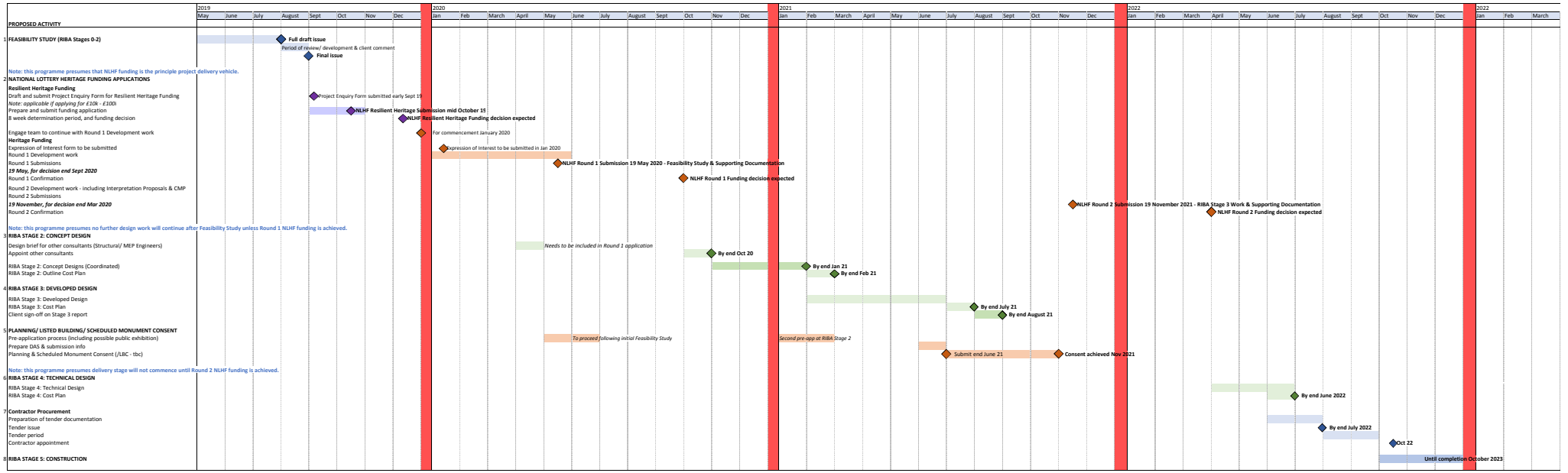


Outline Project Programme - Scenario 2

OUTLINE PROJECT PROGRAMME

PROJECT SCENARIO 1 - Full project delivered in single phase, with NHLF funding

Note: the programme for Project Scenario 2 will match this programme, but with landscaping works implemented on a longer timescale

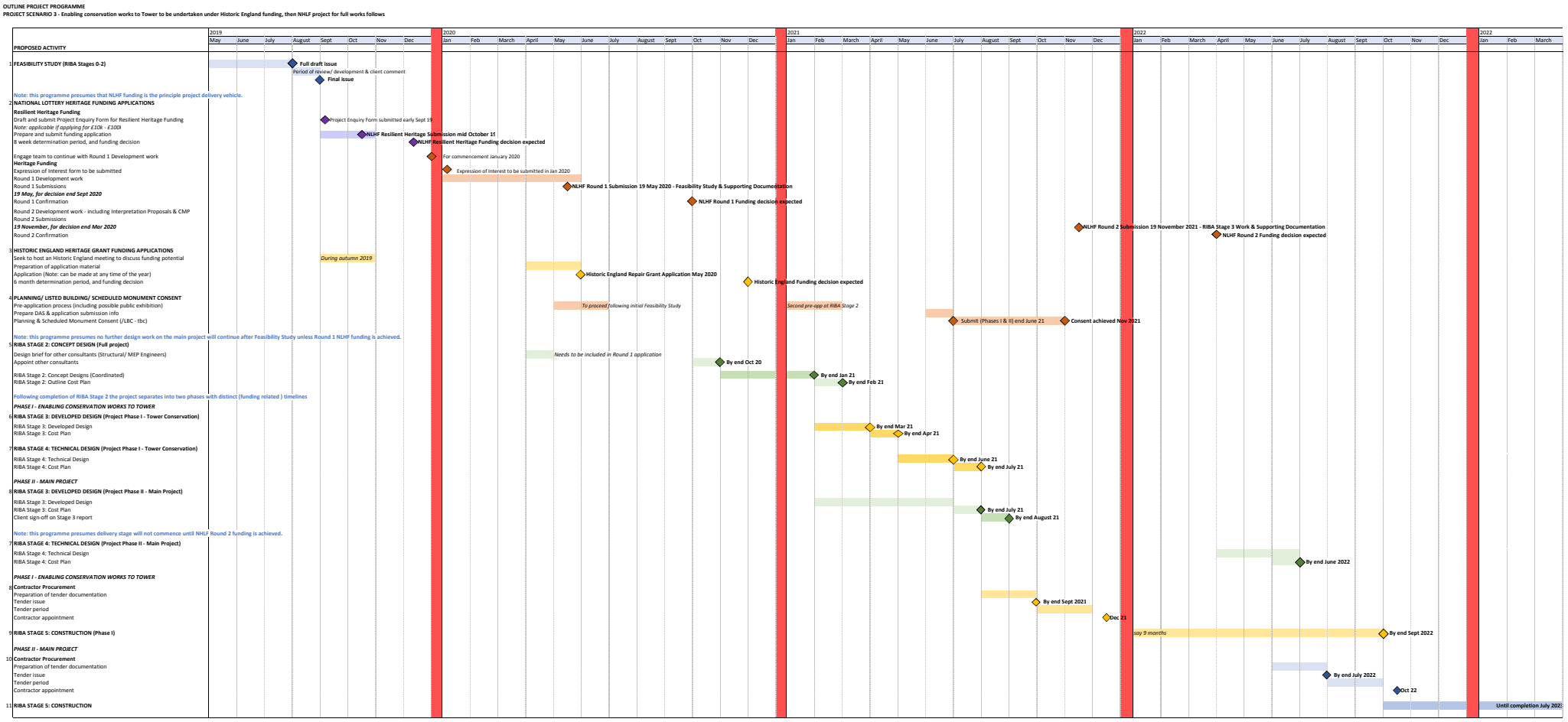


Project Scenario 3

- Phase 1: Gain Historic England grant funding for conservation/ infrastructure/ enabling work only to Tower, fully scope/ design and implement.

- Phase 2: On a longer timescale, develop and implement an NHLF project across the wider Palace site, including tower extension.
  Note: even if this project it would be possible to phase works so that gatehouse, tower, extension and landscape ran on independent phased timescales.

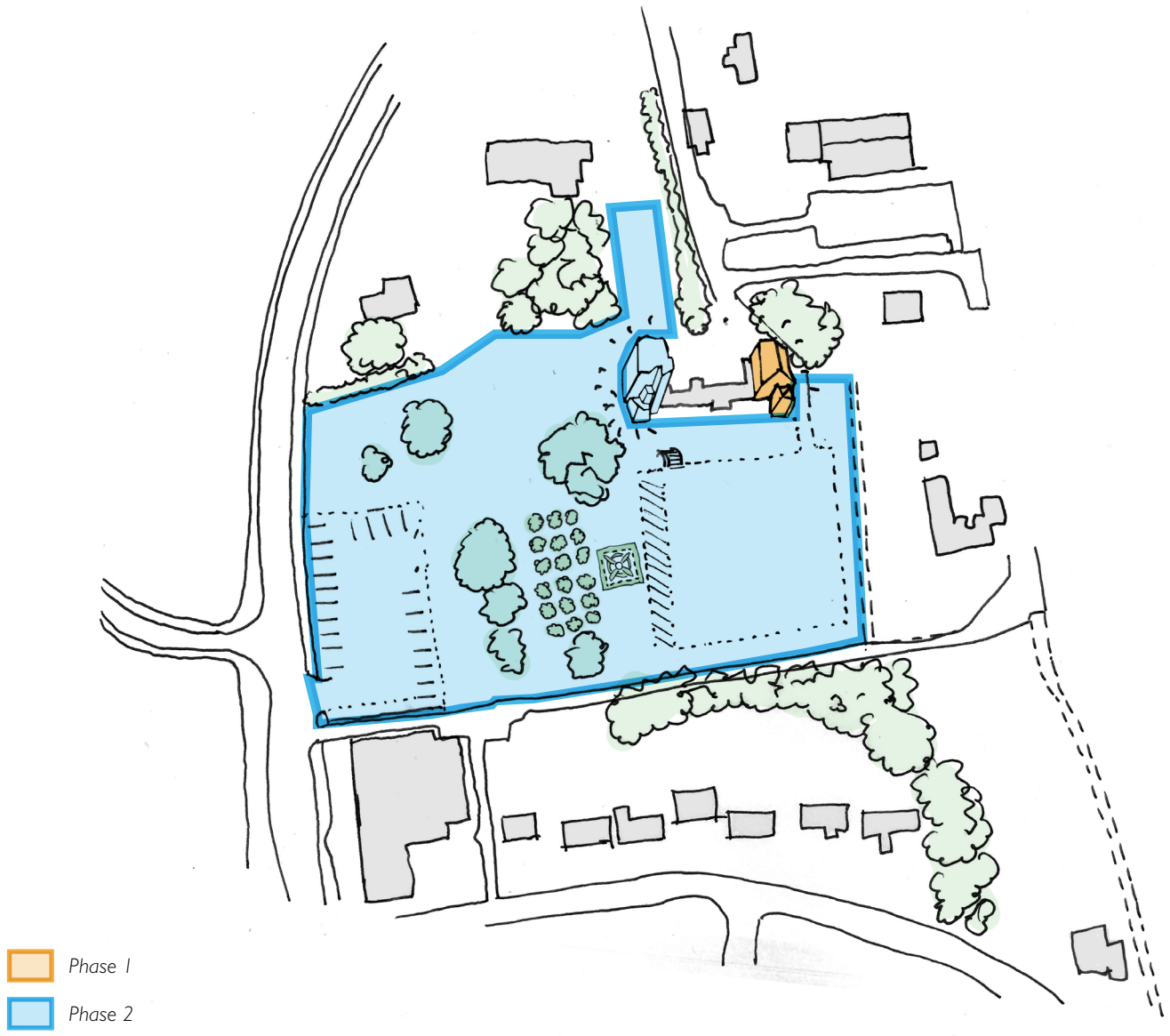
Outline Project Programme - Scenario 3



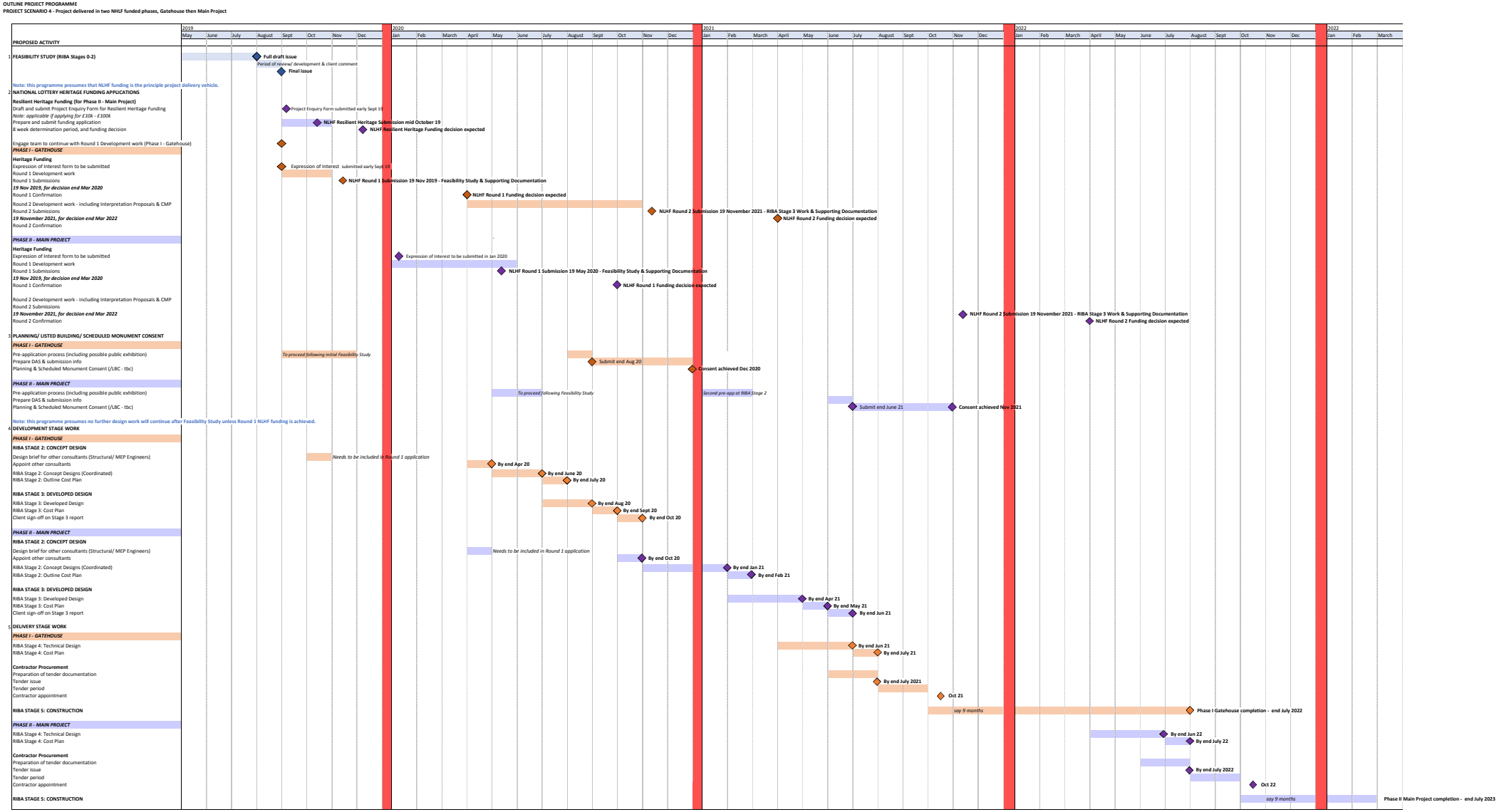
Project Scenario 4

- Phase 1: Full project to Gatehouse, including gaining Resilient Heritage Funding, then NHLF funding towards project implementation.

- Phase 2: On a longer timescale, develop and implement an NHLF project across the wider Palace site (including Tower, extension and landscape)
  Note: even if this project it would be possible to phase works so that tower and landscape ran on independent phased timescales.



Outline Project Programme - Scenario 4



Project Scenario 5

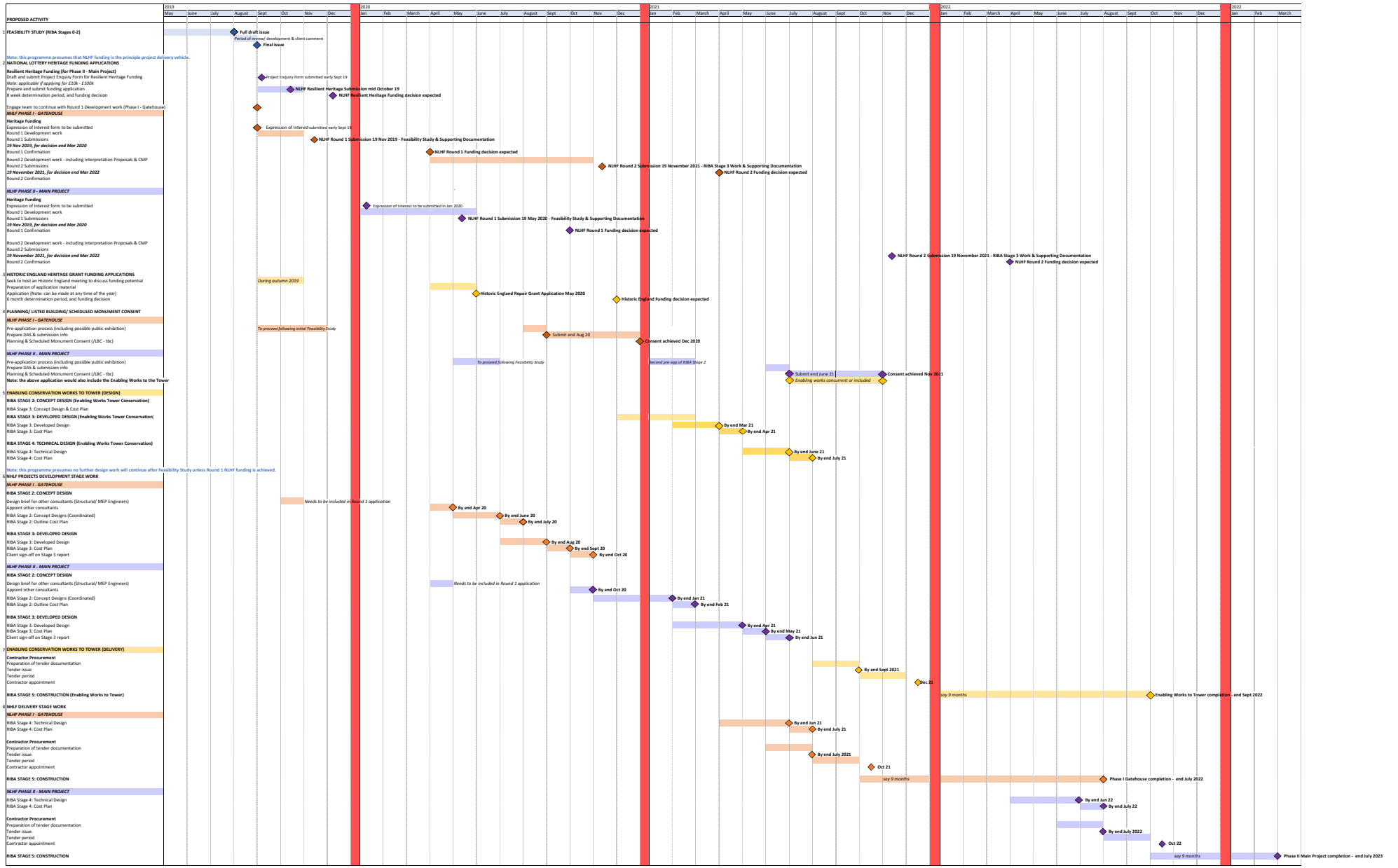
- Phase 1: Full project to Gatehouse, including gaining Resilient Heritage Funding, then NHLF funding towards project implementation

- Concurrent with above, also in Phase 1, develop and implement a parallel project to gain Historic England grant funding for conservation/ infrastructure/ enabling work only to Tower, fully scope/ design and implement.

- Phase 2: On a longer timescale, develop and implement an NHLF project across the wider Palace site including completion of full works to tower and extension, and landscape.
  Note: even if this project it would be possible to phase works so that tower and landscape ran on independent phased timescales.

Our recommendation is **Project Scenario 5.**

Outline Project Programme - Scenario 5



8.2 COSTS

The following is the initial cost estimate from D R Nolans based on a schedule of works provided for Gatehouse Option 02, rehabilitation of the Tower and new entrance, and the wider context with the new car park at Option A.

The costs have been produced to align with Project Scenario 5, the preferred option. For the full itemised cost estimate, refer to Section A.3 in the appendices.

Phase 1 - Full project on the Gatehouse concurrent with repairs to the Tower only:

Repairs to the Tower	£84,466
Rehabilitation works to Tower (to make weather-tight)	£54,700
Repairs to the Gatehouse	£26,337
Rehabilitation and fit-out to the Gatehouse	£162,674
Total	**£460,730**
incl. 12.5 % Preliminaries, 10% Contingencies and inflation	

Phase 2 - Tower inhabitation scheme including the new extension and the wider context works.

Rehabilitation and fit-out to the Tower	£244,728
New extension works to the Tower	£140,550
Wider context works	£100,815
Total	**£721,126**
incl. 12.5 % Preliminaries, 10% Contingencies and inflation	

TOTAL PROJECT CONSTRUCTION COST	**£1,181,856**

8.3 RECOMMENDATIONS & NEXT STEPS

It is our recommendation that the project should now proceed broadly in accordance with Project Scenario 5, which includes the following next steps:

- Agreement of continued appointment of Purcell (fee proposal to be provided separately)

- Submission of a Resilient Heritage Grant Project Enquiry Form in September/ October 2019, to support the growth of the Archbishop's Palace Trust's own project funding reserves and operational capability, primarily focused on the development of a Business Plan and Activity Plan/ audience development work.

Note: NLHF have recently published guidance reflecting on the first batch of funded project opportunities following the revised funding regimes. This guidance suggests that for any projects which receive Resilient Heritage Funding should spend approximately one calendar year building their operational capability prior to submitting Round 1 applications for funding under the Heritage Grant scheme. This would therefore prolong the programme by an additional year in the NLHF funded Main Project items lines.

- Submission of an Expression of Interest for NLHF funding for the whole project in September/ October 2019. Subject to feedback on the Expression of Interest and receipt of an invitation to submit for Round 1 funding, a decision should be made as to whether to proceed with a Round 1 application concurrent with, or in lieu of, a Resilient Heritage Grant funding application. This decision will be entirely dependent on level of the Trust's own financial reserves. If the decision is made to commence with a Round 1 funding application in lieu of a Resilient Heritage Grant then instruction should be given to Purcell to commence preparation of documentation to Round 1 requirements, for submission in March 2020.

- Initial contact with Historic England during Autumn 2019, and then instruction to Purcell to commence preparation of documentation to make a Repair Grant for a project construction cost of approx. £140,000.

A.0 APPENDICES

A.1 FUNDING INFORMATION

National Lottery Heritage Fund
Notes on Strategic Changes Published 30 January 2019

Introduction
The Heritage Lottery Fund has recently published its 'Strategic Funding Framework 2019-2024 which sets out how it will distribute its share of the income from the National Lottery over the next five years. During this period it expects to distribute £1.2bn of funds (approximately £240m per year) and so will be the major contributor to the care of our heritage for the foreseeable future. The key changes made in the Strategic Funding Framework are therefore very important to Purcell given the importance of heritage funding to our main working sectors but particularly heritage/culture, public buildings and places of worship.

Although the documentation is now available on the HLF website for you all to look at a synopsis of the key changes and their implications are set out below to help you assist your clients in finding a way through the maze and assess whether or not they have a project likely to be funded.

Name & Organisational Changes
The Heritage Lottery Fund has now changed its name to the National Lottery Heritage Fund. The number of regions (and hence committees) through which the funds are administered are being reduced from twelve to six as follows;

- London & The South
- The Midlands and East of England
- The North
- Scotland
- Wales
- Northern Ireland

Funding & Grant Structure
All grants up to a value of £5m will be now decided by the new regional committees.

During the strategic framework period there will only be two rounds of competitive funding applications for grants of over £5m. These will be in 2020-21 and 2022-23 and will be determined by the national committee trustees. Workshops for prospective major batch applicants to be held in Summer 2019. EoI's accepted from October/November 2019.

Applications for up to £250,000 will be single stage.

Applications for £250,000 to £5,000,000 will be three stage with a new initial 'Expression of Interest' stage after which an application to go forward to Round 1 will receive an 'invitation' to proceed or not. Applicants receiving an invitation to submit a Round 1 bid will have twelve months to do so. The first stage application form is not openly available on the website at present and you can only access it on-line by inventing a project and setting up a log in. A word copy of the form is attached for your information.

The Round 1 & 2 applications are very much as previous but with the exception that a business plan (or Red Book Valuation for Heritage Enterprise grants) will now be required to support a Round 1 bid.

The distribution of funds through the new regions and their effective annual grant budgets assuming overall grant funding of £240m per year will be as follows;

London & The South	35% say £84m per year (£66.5m)
The Midlands & East of England	25.3% say £61m per year (£46.1m)
The North	23.7% say £57m per year (£45m)
Scotland	8.4% say £20m per year (16.0m)
Wales	4.8% say £11.5m per year (9.1m)
Northern Ireland	2.9% say £7m per year (5.5m)

In addition to grants there will be an increased focus on 'repayable finance interventions' or in other words loans and social investments to get greater leverage from the HLF funding available but precise details are vague. However, one initiative in this area is the NLHF's contribution to the Architectural Heritage Fund's new Heritage Investment Fund which will add longer period loans (over 5 years) to their shorter-term loan programme.

Key Priorities
Need
An important element of the new strategic framework is its emphasis on 'heritage at risk' which is defined as;

- Heritage likely to be lost, damaged or forgotten
- Heritage designated as 'at risk'
- Physical heritage sites that are decaying or neglected
- Heritage at risk due to financial difficulty
- Intangible heritage and cultural practices that may be lost
- Important habitats and species in decline

This emphasis on actual need (as opposed to desirability) is going to be a strong focus on the NLHF decision making and in its assessment of applications

Capacity Building & Resilience
Continuation of the current strategy through the Heritage Resilience and Catalyst grant programmes with a new campaign launched in 2019.

Enterprise
The focus on enterprise will be strengthened further and existing Heritage Enterprise grants and application process will continue. Partnerships with non-profit and for-profit commercial organisations will be encouraged including allowing for-profit organisations to lead partnership bids. Social enterprise bids will be encouraged and prioritised.

Environment
Applications will now need to demonstrate that they are good for the environment not simply that they do not damage the environment. Particular emphasis will be placed on how sustainability contributes to resilience.

Housing
More explicit interest and encouragement of small scale, community led housing as part of wider and mixed-use regeneration schemes where this involves and improves heritage condition and place making (see below).

Place
Encouraging the investment in heritage where it makes a significant contribution to place making and the wider benefits of economic regeneration, quality of life and well-being, learning and education and where investment can be linked to other strategic place making partnerships and investment.

Public Involvement
Increased emphasis on public involvement in NLHF decision making and through applicants increased public engagement at all stages of projects needs to be highlighted in bid submissions.

Outcomes
There is little change in the outcomes which applicants must demonstrate will arise from NLHF grants. A new outcome of 'Well-Being' has been introduced to link investment in heritage to the impact of the investment in 'well-being' through improvements in health, physical activity, mental health etc.

Regional Emphasis and Targeted Areas
The move to a more regional structure means the actual focus of grant spend in each region will now be prioritised by the region in the four countries of the UK and the documentation highlights the following likely areas of emphasis;
Scotland – prioritisation of natural heritage followed by community heritage and built heritage and a commitment to engage excluded communities.
Wales – focus on putting heritage and culture at the heart of the sustainable regeneration process and community resilience especially for the poorest communities.
Northern Ireland – focus on developing historical narratives through partnerships with museums and other heritage organisations and with an increased emphasis on oral and maritime history and urban and rural place making.
England – focus on better heritage management, improved accessibility and more acute interpretation and their importance in reinforcing a sense place across all heritage assets and communities

There will be programmes of targeted grants for 13 UK areas where HLF funding has been low in the past but deprivation levels are high as follows;
Brent (London)
Enfield (London)
Newham (London)
Luton
Corby
Tendring (Essex)
Walsall
Knowsley (Liverpool)
North East Lincolnshire
Inverclyde
North Lanarkshire
Neath Port Talbot
Rhondda Cynon Taff

Campaigns
During the five-year framework period there will also be a number of targeted campaigns each with an allocated funding pots as follows;
2019-21 Building Resilience
2019-21 Digital Capabilities
2020-21 Health & Heritage – collaborative partnerships focused on well-being
2020-21 Dynamic Collections
2021-22 Place

As yet the allocated funding and basic campaign details are not available

Submission Dates
The deadlines for funding bids and decisions for the next year will be as follows;
- Submission by 5 March 2019 for a June 2019 decision
- Submission by 28 May 2019 for a September 2019 decision
- Submission by 20 August 2019 for a November 2019 decision
- Submission by 19 November 2019 for a March 2020 decision

It is not yet clear from the information available if these are new co-ordinated regional committee dates or national committee dates and if and how the two will relate.

Implications
From the information released to date, the new NLHF website and informal discussions with NLHF staff, the implications of the new strategy for potential client applicants can probably be summarised as follows;

- Overall the current constrained grant budget level will increase over the strategic plan period but not to its 2015-16 levels which means competition will remain very strong.
- There is a clear emphasis on 'need' as being a key element of a successful bid – so the extent to which the heritage of the bid is actually and demonstrably at risk will be important to NLHF decision making.
- Larger bids in the smaller regions may struggle to get funded if the region's budget is allocated for quarterly spend – for example, if the grant budget for Wales is divided equally between each quarter the funding available for a single meeting will be in the region of £2.8m, meaning a larger

Welsh project looking for a grant over say £3m will require the allocation of the entire regional budget for that quarter. There may be a mechanism for resolving this but at present it is not clear.

- The arbitrary threshold for regional bids, previously at £2m then £1m, has gone and all bids from £250k up to £5m will go now go through the same regionally run process. This means applicants do not have to make a decision about where to pitch their bid relative to a regional threshold.
- Heritage Grants and Heritage Enterprise grants remain the main funding programmes and other programmes, such as Parks for People and Places of Worship seem to be subsumed within them.
- Applications that do not have 100% of their matching funding in place for the Round 2 development stage will have a very high risk of failing at Round 1.
- Applications will be much more likely to be favourably considered if at Round 1 they can demonstrate significant Round 2 matching funding has been secured – increasing the importance of securing early commitments from local authorities, LEP's etc rather than using the HLF Round 1 decision to encourage or trigger matching funding commitments.
- The new initial expression of interest stage and the subsequent 'invitation' to submit a Round 1 bid will give an early indication of projects unlikely to be successful before too much resource has been committed.
- Overall the application process has not significantly reduced in the work, resources and effort needed and with the reduction in committee meeting frequency the overall application timescale has probably very slightly lengthened and certainly not shortened.

National Lottery Heritage Fund – Heritage Horizons

Last week the NLHF announced its new Heritage Horizon grant programme which will offer grants of over £5m to applicants in 2020/21. It has set aside £50m for the programme. This will be the only opportunity for projects to obtain major grants of over £5m until 2023/24.

Information on the new programme is available on the NLHF website.

There are some particularly interesting changes compared to previous major grant programmes that make this a very relevant option for any Third Sector clients leading major heritage projects.

The application process will commence over this summer and early autumn with regional workshops for potential applicants – the dates and locations have not been announced yet but should be on the website soon.

Formal Expressions of Interest (EoI) have to be submitted by those interested in making an application by 11 October 2019. The EoI will be only 1000 words long and so will be very quick and simple to pull together and submit. Following the submissions each application will have to make a presentation to the NLHF – details of these presentations are also not announced yet but they will not be unduly onerous.

Following the EoI's and presentations, in December 2019 the NLHF will invite between 10-12 of those who applied to make a Round 1 submission and envisage between 4-6 will be successful at Round 1 - assuming bids will average between £9-13m. This means if successful in being invited to submit a Round 1 bid applicants will therefore have a 1 in 2 or 3 chance of success – which are excellent odds compared to previous major grant programmes where the success rate was around 1 in 6/7 and worse. If not invited to make a submission, unsuccessful applicants can then go immediately forward and submit Round 1 bids for grants under £5m.

Those invited will have to submit their full Round 1 bids by August 2020 and will have a Round 1 Decision by December 2020 followed by a two-year deadline to complete and submit their final Round 2 bid.

The NLHF have made very clear that the funds will be allocated to projects involving;

- Landscape & Nature
- Heritage at Risk

This means that projects and organisations like the major national museums or organisations are unlikely to succeed under the Heritage Horizons programme if they cannot demonstrate very high levels of real risk to their heritage assets. Smaller projects potentially stand stronger chances.

So, if you have major Grade 1 and 2* landscapes or buildings which are already on the Buildings at Risk Register which need grants of over £5m to be successful then they should be considering a Heritage Horizon bid this autumn. The costs of getting through to the bid invitation stage will be very low – the NLHF are deliberately structuring the programme to ensure bidders costs are limited during the initial sifting stage.

Architectural Heritage Fund – Transforming Places Through Heritage

The AHF have been given a large lump (£55m) of the Government's Future High Streets funding for the regeneration of our high streets to allocated to town and city centre High Street heritage projects and have set up a new programme called 'Transforming Places Through Heritage'. Details are on the AHF's website now.

The programme is only available to projects in England and in places where strategic regeneration programmes are being planned or are underway – such as Townscape Heritage Areas or Heritage Action Zones. Places of worship are not eligible unless they are no longer in use.

The programme is quite complex and grants will be available broadly as follows;

- Project Viability grants – up to £15K.
- Project Development Grants – up to £100K – potentially very important for our clients who are looking to make a Round 1 NLHF grant bid and need the matching funding.
- Transformational Project Grants - up to £350K for capital works
- Crowd Funding Challenge Grants – up to £25K to match project crowd funding from the public.
- Community Shares Booster Grants – no limit announced but to match investments made by the community through community share ownership schemes.

A.2 DRAFT EXPRESSION OF INTEREST

Note: this will be developed once an agreed design/ project direction has been established and initial feasibility costings understood.

Example of a draft Expression of Interest NLHF Round 1 Bid prepared by Purcell for another project, which resulted in a successful invitation to apply for Round 1 funding:

Abingdon Abbey Buildings (word count 888)

Draft Expression of Interest NLHF Round 1 Bid

Heritage Focus

Abingdon Abbey Buildings are a group of early medieval buildings, a Scheduled Ancient Monument and Grade 1 listed, that formed part of the domestic buildings of the great Abbey complex in Abingdon, an early Benedictine monastery mostly demolished in the C16 during the Dissolution. They have been owned by the Friends of Abingdon Civic Society since 1944 who rescued them from demolition and opened them to the public as a local heritage visitor asset – currently the buildings are open for four afternoons a week between the beginning of May and the end of September. The Abbey buildings sit in attractive gardens accessible from the town centre and adjacent to a mill race drawing water from the Thames nearby.

What Will The Project Do

Our project will bring the Abbey Buildings back into good condition, carefully repairing their fabric and sensitively adding new facilities and upgrading their facilities and services bringing them back into a wider range of community and heritage uses, securing their future sustainability. Alongside the physical works we will extend our long-standing programme of activities, outreach and community engagement to bring in new audiences especially schools, increase our successful volunteering programmes, help people learn new skills and contribute to the economic, social and community life of the town.

Programme Outcomes

The outcomes we wish to achieve at the Abbey Buildings are as follows;

- We will bring the Abbey Buildings back into a good state of repair and fit for year-round use
- We will bring more people to the buildings to enjoy, learn about and use the and especially through the provision of disabled access, attracting wider, more diverse audiences through a wider range of inclusive activities
- We will make significant improvements to the way we tell the story of the Abbey Buildings and precinct to all
- We will create new opportunities for people to directly engage in the heritage of the Abbey Buildings, to volunteer and to learn new skills
- The Abbey Buildings will contribute to the town's economy and visitor profile as part of the proposed new heritage/ cultural quarter
- The revitalised Abbey Buildings and new activities will expand public use of the Abbey Gardens in the heart of the town, bringing enhanced health and well-being benefits
- The Abbey Buildings will be more resilient and sustainable in the future through increased use and lower running & maintenance costs

Why Do You Want to Do This Project

Abingdon Abbey Buildings have been lovingly looked after and used by our community for over 75 years. However, apart from the initial works of conversion including the delightful Unicorn Theatre conversion undertaken in the 1950's and reactive repairs and maintenance since, there has been little funding available to update the building to meet contemporary standards and user expectations or to invest in widening and diversifying audiences, improving accessibility and providing the standard of facilities now increasingly necessary to attract users. Consequently, the income generated by the Abbey Buildings has been falling whilst the costs of maintenance/repair have been increasing, steadily reducing reserves to a critical point. FoACS consider that without significant change and improvement there is no longer a sustainable future for the buildings, the decline in their condition will accelerate and fewer users will be attracted reducing income further – a vicious spiral of decline.

With an HLF Resilient Heritage grant FoACS commissioned as series of studies to identify a strategy for securing the future of the Abbey Buildings and now wish to move to the next stage of implementation.

Work Done So Far

To date the FoACS have made considerable progress completing the following tasks;

- A Governance Review and implementation of its conclusions
- An Architectural Options Appraisal including surveys, a Conservation Statement and comparative costs
- A Business Development Plan
- A Stakeholder Engagement Plan and an extensive programme of stakeholder/community consultations testing the proposals against public/community interests, concerns, needs and aspirations
- A Fundraising Plan and initiated a number of encouraging high level discussions with potential funders including the local authority, OXLEP, Historic England, the Architectural Heritage Fund and others
- A Summary Strategy Document drawing all the above together in a comprehensive holistic strategy for the future of the Abbey Buildings in and at the heart of their community.

Timescales

We anticipate the following timescales;

NLHF Round 1 Submission	August 2019
NHLF Round 2 Submission & Determination	August 2021
Tender & Commencement of Capital Works	Spring 2022
Completion of Capital Works & Fit Out	Autumn 2023
Re-Opening to the Public	Late 2023

Overall Costs

The studies undertaken into the future of the Abbey Buildings have identified a budget for the project as follows;

• Fabric Repairs, Alterations & Upgrading	£2,029,110
• New works	£ 650,890
• Contingency & Inflation	£ 698,000
• Professional Fees	£ 495,000
• Exhibitions, Fit out & Activities	£ 620,000
Total Project Budget (excluding volunteer time)	£4,493,000
	Say £4,500,000

A.3 INITIAL COST ESTIMATE

The following is the initial cost estimate from D R Nolans based on a schedule of works provided for Gatehouse Option 02, rehabilitation of the Tower and new entrance, and the wider context with the new car park at Option A.

The fabric repairs have been split to correspond to the different packages in Project Scenario 5, the preferred phasing for the project:

Phase 1 - Full project on the Gatehouse (including fit-out) concurrent with repairs to the Tower only.
Phase 2 - Tower inhabitation scheme with the new extension and the wider site works.

The repairs for both the Tower and Gatehouse have been split out as separate packages, and then incorporated into the Phase 1 and 2 Cost Plans as a separate line item.

D.R. NOLANS & CO
CHARTERED QUANTITY SURVEYORS

The Archbishop's Palace, Otford

Cost Plan	**Quantity**	**Unit**	**Rate**	**Amount**
Gatehouse - External				
South Elevation and Dovecot				
Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	3.01	m2	65	195.65
Carry out lime mortar analysis testing to existing mortar to confirm specification for repointing and British geological survey analysis to be carried out on existing stonework	3	nr	166.75	500
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth length about 500mm	6	nr	10	60
Allow to remove all vegatation and bird netting to area	1	nr	200	200
Carefully cut away cementitious repairs and existing pointing to door jambs to a depth of 50mm and repoint in lime mortar	1	No	250	250
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	10.20	m2	65	663
Piece in reclaimed bricks to close hole and point in lime mortar overall size about 600 x 200mm	1	nr	250	250
Allowance for new timber wall plate and make fixings good	1	nr	300	300
Allowance for carefully cutting away brickwork to window and set aside for re-use	1	No	400	400

Carefully cut away stone steps overall size 750 x 200mm and make good	1 nr	500	500	
				3,318.71

East Elevation

Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	30.11 m2	65	1,957	
Provisional allowance for carefully cutting away decayed/damaged/eroded bricks and renew with handmade salvaged bricks and point with lime mortar	30 nr	35	1,050	
Cut away defective and piece in new stone cill and point and reinstate size 200 x 1200 x 60 mm	1 nr	400	400	
Apply traditional lime render to area of friable brickwork about 1200 x 1800 mm	1 No	175	175	
Carefully rake out cementitious pointing to stone quoins and repoint in traditional lime mortar	3.2 m	30	96	
Remove all vegatation	1 nr	750	750	
Carefully rake out cementitious mortar to brickwork reveals to a depth of 50mm and repoint in lime mortar for an area about 200 x 1500 mm	2 No	200	400	
				4,828.15

North Elevation

Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	14.46 m2	65	940	
Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	11.83 m2	65	769	
Carry out lime mortar analysis testing to existing mortar to confirm specification for repointing and British geological survey analysis to be carried out on existing stonework	3 nr	200	600	
Provisional allowance to rake out and repoint stone plinth	11.25 m2	65	731	
Carefully cut away cementitious repairs to window surround and repoint in lime mortar width about 200mm include for S/S armatures	2.55 m	250	638	
Carefully cut away brick work to blocked window and point remaining brickwork overall size about 1200 x 600mm	2 nr	200	400	
				4,077.55

Gatehouse - Internal

Carefully cut away stone plinth and make good height about 600 mm	56.37 m	75	4,228	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	116.23 m2	65	7,555	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	35.834 m2	65	2,329	

Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	14.46 m2	65	940	
Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	11.83 m2	65	769	
Carry out lime mortar analysis testing to existing mortar to confirm specification for repointing and British geological survey analysis to be carried out on existing stonework	3 nr	200	600	
Provisional allowance to rake out and repoint stone plinth	11.25 m2	65	731	
Carefully cut away cementitious repairs to window surround and repoint in lime mortar width about 200mm include for S/S armatures	2.55 m	250	638	
Carefully cut away brick work to blocked window and point remaining brickwork overall size about 1200 x 600mm	2 nr	200	400	
				4,077.55
Gatehouse - Internal				
Carefully cut away stone plinth and make good height about 600 mm	56.37 m	75	4,228	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	116.23 m2	65	7,555	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	35.834 m2	65	2,329	
			14,112.13	
		Total	26,336.54	

D.R. NOLANS & CO
CHARTERED QUANTITY SURVEYORS

The Archbishop's Palace, Otford

Cost Plan	**Quantity**	**Unit**	**Rate**	**Amount**
Tower - External				
South elevation				
Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	8	m2	45	367
Carry out lime mortar analysis testing to existing mortar to confirm specification for repointing and British geological survey analysis to be carried out on existing stonework	3	nr	166.75	500
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth	4	m	10	36
Carefully chase out mortar joint and install lead weathering code 4 flashing drip and turn in to masonry and repoint in lime mortar	1.5	m	35	53
Apply 1nr coat of traditional lime render to area of brickwork to protect friable surface	0.57	m2	30	17
Provisional allowance for isolated brickwork repairs and renewals say	50	No	25	1,250
Ditto but isolated area of take down and rebuild masonry where found to be defective	5	m2	350	1,750
Carefully remove cementitious repairs and existing pointing to a depth of 50mm and repoint in traditional lime mortar to doorway jamb	1	nr	50	50
Carefully rake out and remove cementitious mortar pointing to a depth of 50mm and repoint full in traditional lime mortar to	5	m2	45	234

Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	39 m2	65	2,504	
Carefully cut away and remove brickwork to form new door opening at 1st flr level including new structural alterations - Bricks to be salvaged and used in repairs/alterations	1 No	1500	1,500	
Ditto but to 2nd flr level	1 No	1500	1,500	
				9,761.50

South West Elevation

Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm.including return to walls and repoint in traditional lime mortar	3 m2	45	126	
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth height about 0.4m	3 m	10	28	
Remove all cementitious mortar repairs from GF w/w surround and reinstate original profiles including SS armatures in lime mortar repairs and repoint	3 m	250	825	
Ditto but to cill	1 m	250	250	
Carefully rake out and remove cementitious pointing to depth of 50mm and repoint in traditional lime mortar	4 m2	45	180	
Provisional allowance for isolated brickwork repairs and renewals say	20 No	25	500	
Ditto but isolated area of take down and rebuild masonry where found to be defective	3 m2	350	1,050	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	22 m2	65	1,433	
				4,392.25

West Elevation

Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm repoint in traditional lime mortar	2 m2	45	97	
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth height	1 m	10	14	
Remove all cementitious mortar repairs from GF w/w surround and reinstate original profiles including SS armatures in lime mortar repairs and repoint	17 m	250	4,200	
Ditto but to cill	5 m	250	1,200	
Carefully remove cementitious repairs to quoins and provisional allowance for lime mortar repairs to original profiles including SS armatures as required (To 20% of quoins)	4 m	250	1,000	
Carefully remove cementitious point to a depth of 50mm and repoint in traditional lime mortar	6 m2	45	270	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	13 m2	65	845	
Provisional allowance for isolated brickwork repairs and renewals say	20 No	25	500	
Ditto but isolated area of take down and rebuild masonry where found to be defective	3 m2	350	1,050	

Carefully remove previous cementitious repairs from door surround and allow for lime mortar repairs to original profiles including SS armatures as required	3 m	250	625	
Ditto but window surround	2 m	250	388	
				10,188.70

North West Elevation

Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm repoint in traditional lime mortar	3 m2	45	113	
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth	3 m	10	28	
Carefully remove cementitious repairs to quoins and provisional allowance for lime mortar repairs to original profiles including SS armatures as required (To 20% of quoins)	4 m	250	1,000	
Provisional allowance for isolated brickwork repairs and renewals say	20 No	25	500	
Ditto but isolated area of take down and rebuild masonry where found to be defective	3 m2	350	1,050	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	13 m2	65	853	
				3,543.63

North Elevation

Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	5 m2	45	205	
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth	3 m	10	28	
Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	6 m	250	1,400	
Provisional allowance for isolated brickwork repairs and renewals say	20 No	25	500	
Ditto but isolated area of take down and rebuild masonry where found to be defective	3 m2	350	1,050	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	32 m2	65	2,051	
				5,234.60

North East

Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	2 m2	45	92	
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth	1 m	10	14	
Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	3 m	250	700	
Provisional allowance for isolated brickwork repairs and renewals say	20 No	25	500	
Ditto but isolated area of take down and rebuild masonry where found to be defective	3 m2	350	1,050	

Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	18 m2	65	1,141	
				3,496.55

East Elevation

Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	2 m2	45	108	
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth	1 m	10	14	
Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	11 m	250	2,800	
Provisional allowance for isolated brickwork repairs and renewals say	20 No	25	500	
Ditto but isolated area of take down and rebuild masonry where found to be defective	3 m2	350	1,050	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	31 m2	65	2,028	
				6,500.00

Stair Turret (3 Facets)

Carefully rake out all cementitious pointing from stonework plinth to depth of approximately 50mm and repoint in traditional lime mortar	2 m2	45	95	
Provisional allowance for raking out and re-pointing junction to stone quoins at full plinth	1 m	10	14	
Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	9 m	250	2,250	
Provisional allowance for isolated brickwork repairs and renewals say	50 No	25	1,250	
Ditto but isolated area of take down and rebuild masonry where found to be defective	6 m2	350	2,100	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	48 m2	65	3,152	
				8,860.35

Tower - Internal

South Wall

Provisional allowance for carefully cutting away eroded bricks and replaced with salvaged bricks and repoint (including for remaking joist pockets at every floor level)	50 nr	25	1,250	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	15 m2	65	975	
Carry out lime mortar analysis testing to existing mortar to confirm specification for repointing and British geological survey analysis to be carried out on existing stonework	3 nr	166.75	500	
				2,725.25

South West Wall

Provisional allowance for carefully cutting away eroded bricks and replaced with salvaged bricks and repoint (including for remaking joist pockets at every floor level)	20 nr	25	500	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	4 m2	65	254	
Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	1 m	250	230	
				983.50

West Wall

Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	2 m2	65	101	
Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	1 m	250	190	
				291.40

North West Wall

Carefully remove render patch and make good area	1 nr	75	75	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	1.5 m2	65	98	
Carefully remove cementitious point and repoint in lime mortar	1 nr	150	150	
				322.50

North wall

Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	4 m	250	1,000	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	1.56 m2	65	101	
				1,101.40

North East Wall

Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	4 m	250	900	
				900.00

East Wall

Carefully remove previous cementitious repairs from window surround and allow for lime mortar repairs to original profiles including SS armatures as required	4 m	250	900	
Provisional allowance for raking out to a depth of 50mm and repoint in traditional lime mortar followed by Tudor bird beak pointing finish	6.75 m2	65	439	

Provisional allowance for carefully cutting away eroded bricks and replaced with salvaged bricks and repoint (including for remaking joist pockets at every floor level)	20 nr	25	500	
				1,838.75
Internal Repairs above are for GF only. Add for 1st and 2nd flrs say				16,325.60
Add for additional structural repairs not noted in the above say	1 No	10000		10,000.00
Preliminaries and Scaffolding allowances are including on the main estimate tab				
			Total	86,465.98

D.R. NOLANS & CO
CHARTERED QUANTITY SURVEYORS

The Archbishop's Palace, Otford

Cost Plan	**Quantity**	**Unit**	**Rate**	**Amount**	
Tower					
QQ repairs as separate tab				86,465.98	86,466
Tower - Rehabilitation Works					
Alterations and Demolitions					
Demolition of temporary roof	45	m2	20	900.00	
Re-opening of windows and make good	7	nr	500	3,500.00	
Allowance for tower access via scaffolding	624	m2	25	15,600.00	
					20,000
Shell and Core Construction					
Roof Deck and insulation	40	m2	30	1,200.00	
Code 5 Sand Cast lead finish to roof	40	m2	275	11,000.00	
Installation of double glazed windows incl. bespoke oak frames	15	nr	1,500	22,500.00	
					34,700
External Works and Services					
Cast iron downpipes	24	m	115	2,760.00	
Cast iron hoppers from outlets	2	No	350	700.00	
Extra for gulleys	2	No	300	600.00	
Extra for forming outlets from roof	2	No	200	400.00	
Gatehouse					
Repairs as separate tab				26,336.54	26,337
Alterations and Demolitions					
Provisional allowance for site clearance	88	m2	25	2,187.50	
Strip vinyl paint from brickwork using poultice method (incl for trials). Prepare surface and redecorate in limewash paint.	140	m2	50	7,000.00	

Provisional allowance for breaking out existing concrete slab and make good and dispose off site	65	m2	55	3,575.00	
Excavate to reduce levels at 480mm deep overall dispose excavated materials off site	10	m3	55	554.40	
Demolish existing non-load bearing partitions and dispose off site and make area good	15	m2	45	655.20	
Remove all suspended ceiling tiles and supports associated. Dispose off site and make area good	55	m2	15	828.00	
Remove all existing fixtures and fittings and dispose off site	1	nr	1,500	1,500.00	
Demolish existing brickwork to open up blocked windows, dispose off site and make good	4	nr	500	2,000.00	
Excavate to reduce levels to match existing pathway at 480mm deep overall and dispose of excavated materials off site	38	m3	55	2,112.00	
					20,412

Sub-Structure Works

Construct new sub structure comprising of a Limecrete slab, geotextile interlayer, recycled foamed glass gravel substrate and geotextile over prepared ground	65	m2	105	6,825.00	
Construct new floor comprising of joisted C16 SW @ 500mm, waxed pine engineered board with ventilated void	65	m2	180	11,700.00	
Extra for vent bricks installed to internal walls	10	No	75	750.00	
Extra for wall plate	24	m2	75	1,800.00	
					21,075

Shell & Core Construction

Provide and install new bespoke oak secure double entrance door size overall size about 1400 x 2300mm including decorations and ironmongery to both sides	1	nr	2,500	2,500.00	
Provide and install new bespoke oak secure entrance door	1	nr	2,000	2,000.00	
Provide and install new double glazed windows including bespoke oak frame including ironmongery and decoration to both sides	4	nr	1,750	7,000.00	
Create opening by carefully removing existing roof tiles and linings for new rooflights including new trimmer joists and code 4 lead flashing details and make area good	3	nr	2,000	6,000.00	
Construct new timber staircase to mezzanine	1	nr	5,000	5,000.00	
Extra over to last for decoration	1	nr	750	750.00	
Construct new deck to mezzanine level comprising of joisted timber and exposed timber columns for support	30	m2	190	5,700.00	
Install stud partition and decs to form AWC and WC	40	m2	132	5,227.20	
Install timber balustrading to mezzanine and make good	25	m	125	3,125.00	
Provisional allowance for above ground drainage	1	nr	3,000	3,000.00	
Install insulation to existing roof including new timber batten framing	72	m2	20	1,440.00	
Provisional allowance for plasterboard lining system including decoration to underside of existing roof	72	m2	35	2,520.00	
					44,262

Fitting Out Works

Provide and install Birch plywood wall lining system including integrated shelves/lockers height about 3m and decs	15	m2	96	1,440.00	
Provide and fix Birch plywood timber cladding	20	m2	45	877.50	
Provide and install birch plywood full height shelving	18	m2	45	810.00	
Construct floor finish comprised of waxed pine engineered board	25	m2	115	2,875.00	
Provisional allowance for floor box and make local area good	4	nr	250	1,000.00	
Install retractable curtain about 5 m	1	nr	2,500	2,500.00	
Installation of internal timber door set including ironmongery and decoration to both sides	3	nr	1,000	3,000.00	
Install full set of sanitary fittings to WC	1	nr	1,250	1,250.00	
Ditto for AWC	1	nr	1,500	1,500.00	
					15,253

External Works and Services

Installation of French drain comprising of the installation of field drain pipe, 50mm gravel shingle infill and geotextile outer lining and make area good	37	m	150	5,475.00	
Internal access say	1	No	1,500	1,500.00	
					6,975
Mechanical					
Install central heating system comprising of flat panel radiators and combi boiler including appropriate ventilation as necessary	108	m2	125	13,437.50	
Install new hot and cold water supplies from mains connection and include insulated pipework where necessary	1	nr	5,000	5,000.00	
Install below ground drainage including connection to mains sewer, connections to sanitary/kitchen installations, SVP's and manhole with steel cover box at junction	1	nr	5,000	5,000.00	
Provisional allowance for diverting existing services within floor void and make good	1	nr	3,000	3,000.00	
Ventilation - included in allowance above	0	nr	3,000	0.00	
Sundry/Commissioning	1	nr	1,500	1,500.00	
BWIC @ 10%				2,793.75	
					30,731
Electrical					
Upgrade existing electrical supply to enable 3 phase with metering including fuse cupboard and full electrical supply to office and 20 nr double sockets	1	nr	7,500	7,500.00	
Provide and install lighting including Pendant lighting on 2 way switching, illuminated statutory signage and external lighting to entry/exit doors.	108	m2	60	6,450.00	
Illuminated statutory signage	1	nr	750	750.00	
External lighting to entry and exit doors	1	nr	750	750.00	
Install data/Wi-Fi connection	108	m2	15	1,612.50	
Provide and install security alarm	108	m2	15	1,612.50	
CCTV	108	m2	15	1,612.50	
Sundry/Commissioning	1	nr	1,500	1,500.00	
BWIC @ 10%				2,178.75	
					23,966

	330,177
Add for Preliminaries and temporary installations @ 12.5%	41,272
	371,449
Add for Contingencies@ 10%	37,145
	408,594
Works expected to be on site from October 2021 to July 2022. Forecast inflation as information provided by the BCIS:- 3QTR 2019 337 - 2Q2022 380 = 12.76%	52,137
Total Cost Of Works	**£ 460,730**

NB:-
Overheads and profit are included in the rates contained herein

VAT has not been allowed for in these costs
Professional Fees are not included in the above and will need to be added

Condition report information was not used in the preparation of these costs. These allowances need to be considered and added to the above to provide the full extent of the works required and relative costs.
Inflationary allowances have been included in the above costs

D.R. NOLANS & CO
CHARTERED QUANTITY SURVEYORS

The Archbishop's Palace, Otford

Cost Plan	**Quantity**	**Unit**	**Rate**	**Amount**	
Tower - Rehabilitation Works					
Alterations and Demolitions					
Allowance for site clearance	45	m2	35	1,575.00	
Allowance for localised excavation at ground floor level to remove soil and dispose off site	45	m2	55	2,475.00	
Sub-structure Works					
Geotextile over prepared ground	45	m2	5	225.00	
Recycled foamed glass gravel substrate	45	m2	40	1,800.00	
Geotextile interlayer	45	m2	5	225.00	
Installation of new limecrete slab (by Ty Mawr)	45	m2	55	2,475.00	
C16 SW 400mm joisted floor with waxed pine engineered board and ventilated board	45	m2	150	6,750.00	
Installation of vent bricks to external walls	20	nr	75	1,500.00	
					17,025
Shell and Core Construction					
Installation of steel primary beams (say 1 no. to each floor	1.76	T	5,000	8,775.00	
Installation of C16 SW timber beams say	28	m	65	1,820.00	
New concrete padstones	4	No	225	900.00	
Install insulation	80	m2	15	1,200.00	
Boarded ceiling with an allowance for exposed SW joists and hangers etc.	80	m2	75	6,000.00	
Plasterboard and skim ceiling fixed to underside of existing roof joists including insulation	40	m2	45	1,800.00	
Allowance for above ground drainage	1	nr	5,000	5,000.00	
					25,495
Fitting Out Works					
Installation of plasterboard wall lining system	20	m2	66	1,320.00	
Installation of lightweight stud wall partitions and decs	28	m2	117	3,276.00	
Allowance for waxed pine boarded floors	120	m2	115	13,800.00	
Allowance for floor boxes	12	nr	250	3,000.00	
Installation of FR oak doors with vision panels	3	nr	1,750	5,250.00	
Installation of internal door sets	4	nr	1,000	4,000.00	
Installation of AWC full sanitary set	1	nr	1,250	1,250.00	
Installation of WC full sanitary set	1	nr	1,250	1,250.00	
Extra for tiling say	2	nr	500	1,000.00	
Allowance for oak spiral stair with oak clad steel core and timber treads 2m diameter 3 storeys high	1	nr	20,000	20,000.00	
Allowance for exhibition fitout and interpretation incl. lighting to Ground floor and First floor	1	nr	20,000	20,000.00	
Allowance for simple library/meeting room facilities in Second floor	1	nr	10,000	10,000.00	
					84,146
External Works and Services					
Allowance for soft landscaping around tower	1	nr	2,000	2,000.00	
Allowance for lightning protection	1	nr	3,500	3,500.00	
Mechanical					
Central heating system with flat panelled radiators and combi boiler with appropriate ventilation	117	m2	125	14,625.00	
New hot and cold water supplies from mains connection incl. insulated pipework as necessary	1	nr	5,000	5,000.00	
Allowance for solar thermal panels and installation	1	nr	20,000	20,000.00	
Allowance for rainwater harvest of grey-water systems	1	nr	10,000	10,000.00	
New below ground drainage connection to mains sewer, incl. above ground connections to new sanitary installations, SVP's and manhole with steel cover box at junction	1	nr	10,000	10,000.00	
Ventilation	1	nr	3,500	3,500.00	
Sundry/Commissioning	1	nr	1,000	1,000.00	
BWIC @ 10%	1			6,412.50	
					70,538
Electrical					

Allowance for new electrical supply to ensure 3 phase with metering and fuse cupboard	1	nr	15,000	15,000.00	
Small Power	117	m2	35	4,095.00	
Pendant lighting on 2 way switching	117	m2	55	6,435.00	
Allowance for external lighting to tower	1	nr	2,000	2,000.00	
Illuminated statutory signage	1	nr	750	750.00	
External lighting to entry and exit doors	1	nr	750	750.00	
Data and Wi-Fi connection incl. sockets	117	m2	15	1,755.00	
Installation of security alarm	117	m2	15	1,755.00	
Installation of CCTV around tower	117	m2	15	1,755.00	
Sundry/Commissioning	1	nr	1,000	1,000.00	
BWIC @ 10%	1			3,529.50	
					38,825
Other Considerations					
Internal birdcage scaffold	360	m3	20	7,200.00	
Allowance for archaeological desk-based assessment, subject to findings, an archaeological watching brief during construction phases	1	nr	1,500	1,500.00	
					8,700
Tower - New Extension Works					
Alterations and Demolitions					
Allowance for site clearance and levelling of ground	45	m2	25	1,125.00	
					1,125
Sub - Structure Works					
Provision for excavation and disposing off site and including necessary earthwork support and propping to Tower foundations	45	m2	20	900.00	
Extra for earthwork support and propping to Tower Foundations	1	No	1,000	1,000.00	
Formation of Piles	10	nr	900	9,000.00	
Formation of raft foundation with Reinforced concrete floor slab	45	m2	65	2,925.00	
C16 SW 400mm joisted floor with waxed pine engineered board and ventilated board	45	m2	155	6,975.00	
Installation of vent bricks to external walls	10	nr	75	750.00	
					21,550
Shell and Core Construction					
Installation of cavity insulated block work to ground floor and first floor	70	m2	115	8,093.99	
Extra for two coat plaster to internal face and decs	70	m2	46	3,237.60	
Brick plinth with timber framing	23	m	75	1,725.00	
Render to outer face blockwork	70	m2	65	4,574.86	
Installation of automated single leaf entrance door size 950 x 2300mm	1	nr	1,500	1,500.00	
Installation of double glazed windows with timber frame size 3500 x 1200mm	1	nr	3,000	3,000.00	
Installation of double glazed door with timber frame size 1050 x 2200mm	1	nr	1,200	1,200.00	
Side light to the above size 750 x 1200mm	1	nr	800	800.00	
Installation of full height window size 1200mm wide	1	nr	1,600	1,600.00	
Installation of double glazed slot window on first floor size 550 x 1500mm	1	nr	1,100	1,100.00	
Installation of timber clad single-leaf door onto terrace on first floor 950 x 2300mm	1	nr	1,250	1,250.00	
Allow for timber joisted roof including joists, insulation, plasterboard and skim ceiling, decs and ply deck	45	m2	131	5,895.00	
Extra for forming hidden gutters	31	m	75	2,325.00	
Installation of single ply roof covering to ground floor and first floor roof	45	m2	110	4,950.00	
Allow for timber roof decking on pedestals	45	m2	30	1,350.00	
Forming floor in link	12	m2	90	1,080.00	
Installation of platform lift with single swing door	1	nr	15,000	15,000.00	
Installation of lightweight stud wall partitions and decs	13	m2	117	1,497.60	
Allowance for above ground drainage	1	nr	2,500	2,500.00	
					62,679
Fitting Out Works					
Installation of wall lining system in birch ply to 1.2m above FFL and plasterboard above and decs	70	m2	89	6,228.85	
Installation of plasterboard ceiling on fixing channels and decs	56	m2	41	2,296.00	
Allowance for waxed pine boarded floors	57	m2	115	6,555.00	
Allowance for floor boxes	6	nr	250	1,500.00	
Installation of staff tea/coffee facilities	1	nr	1,250	1,250.00	

Birch plywood ticket desk with ticket facilities	1	nr	4,000	4,000.00	
Shop display units on casters with built in storage at low level size 1800 x 700mm	2	nr	3,000	6,000.00	
					27,830
External Works and Services					
Mechanical					
Central heating system with flat panelled radiators and hot and cold water installations	64	m2	150	9,637.50	
Below ground drainage connection to mains sewer, including below and above ground connections to all new sanitary installations	1	nr	3,000	3,000.00	
New hot and cold water supplies from mains connection incl. insulated pipework as necessary - Say included in Tower allowance above	0	nr	5,000	0.00	
Allowance for new rainwater goods including ground connection to below ground drainage rainwater system	1	nr	2,500	2,500.00	
Ventilation - included in above allowance	0	nr	3,500	0.00	
Sundry/Commissioning	1	nr	1,500	1,500.00	
BWIC @ 5%	1			831.88	
					17,469
Electrical					
Allowance for connection to electrical supply in tower	1	nr	2,000	2,000.00	
Pendant lighting on 2 way switching	64	m2	55	3,533.75	
Data and Wi-Fi connection incl. sockets	64	m2	15	963.75	
Installation of security alarm	64	m2	15	963.75	
Installation of CCTV	64	m2	15	963.75	
Sundry/Commissioning	1	nr	1,000	1,000.00	
BWIC @ 5%	1			471.25	
					9,896
Wider Context					
Car Park					
Provisional allowance for site clearance	125	m2	25	3,125.00	
Take up existing top soil, break out hardstanding areas as required and excavate for new car park	50	m3	30	1,500.00	
Dispose of all excavated material	50	m3	25	1,250.00	
Construct new car park comprising hardcore sub base, styrene void former and grasscrete reinforced cellular paving system	125	m2	70	8,750.00	
Low level shrub planting	1	nr	2,500	2,500.00	
Low level bollard lighting including running cabling and all BWIC	125	m2	45	5,625.00	
Surface water drainage	125	m2	25	3,125.00	
Traditional painted steel fencing with gated car park entrance	100	m	125	12,500.00	
Extra over last for provision of new gated entrance to match fencing with and including support posts etc. and concrete bases and BWIC say	1	No	3,500	3,500.00	
Provisional allowance for construction of new junction entry to car park incl. dropped kerbs, road surface/sub base to match highway, signage entry and fee agreement with local authority	1	nr	15,000	15,000.00	
Provisional allowance for tree removal at proposed entry	1	nr	500	500.00	
Provisional allowance for provision and installation of new signage to car park including construction structure for siting etc.	1	nr	2,000	2,000.00	
Provisional allowance for provision and installation of stainless steel bike stand including all bases and BWIC say	4	nr	500	2,000.00	
					61,375
Landscaping					
Take up existing top soil, break out hardstanding areas and excavate as required for new path	12	m3	30	360.00	
Dispose of all excavated material	12	m3	25	300.00	
Construct new pathway comprising membrane to base of excavation, hardcore infilling and gravel and slate finish	60	m2	38	2,280.00	
Brick edging detail to path bedded and pointed as required	80	m	25	2,000.00	
Construct new lightweight treated softwood FSC timber Kit-bridge	1	nr	2,500	2,500.00	

Extra over last for construction of brickwork plinth to side of stream including excavating as required, disposal of material, levelling and compacting and providing membrane and suitable sub-base for brickwork structure	2 nr	1,500	3,000.00	
Construct Tudor knot garden including all excavation, disposal, provision of membrane, infilling, formation of gravel, brick paths and provision of hedges and planting etc.	64 m2	250	16,000.00	
Allowance for archaeological investigation to reveal historic wall lines of palace	1 nr	5,000	5,000.00	
Provisional allowance for provision and installation of new interpretation signage to site including construction structure for siting etc.	4 nr	2,000	8,000.00	
				39,440
				486,093
Add for Preliminaries and temporary installations @ 12.5%				60,762
				546,854
Add for Contingencies@ 10%				54,685
				601,539
Works expected to be on site from October 2022 to July 2023. Forecast inflation as information provided by the BCIS:- 3QTR 2019 337 - 2Q2022 404 = 19.88%				119,586
Total Cost Of Works				**£ 721,126**

NB:-
Overheads and profit are included in the rates contained herein

VAT has not been allowed for in these costs
Professional Fees are not included in the above and will need to be added

Condition report information was not used in the preparation of these costs. These allowances need to be considered and added to the above to provide the full extent of the works required and relative costs.
Inflationary allowances have been included in the above costs

A.4 DESIGN DEVELOPMENT

The following pages include extracts of the design development undertaken throughout the feasibility study that helped inform the proposals.

Rooftop Extension & Massing Options

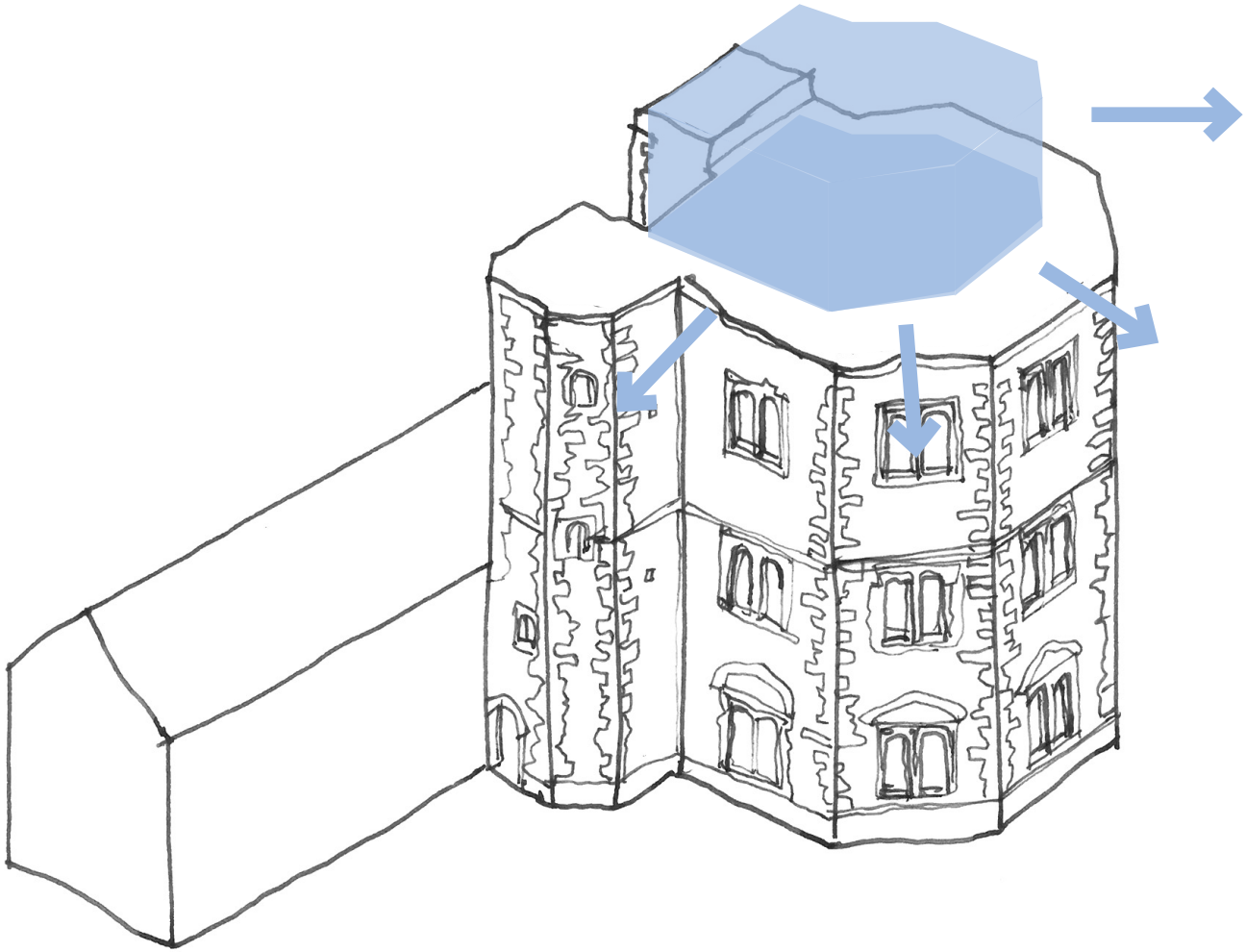
A rooftop extension was explored which would give the following opportunities:

- *Make use of views over Otford and towards the Darent River Valley*
- *Create a contemporary statement feature*
- *Experience the tower from a different perspective*
- *Sense of 'destination' at the top of the tower*
- *Extra floor plate*
- *Easier access for future maintenance*

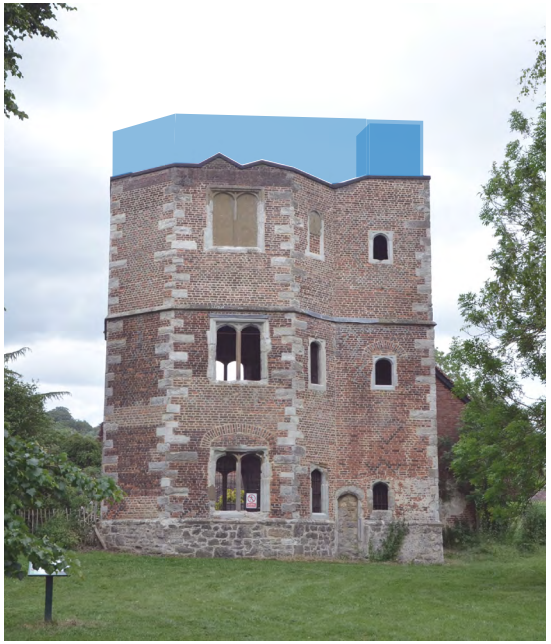
With the following possible uses:

- *Viewing platform*
- *Exhibition space with outdoor terrace*
- *Reading Room for library below*
- *Renewable energy - eg: PV panels*
- *Ecology - eg: beehives*

However, any rooftop extension would have to be carefully considered so as to not cause a negative effect on the existing historic fabric. Aside from the cost, there are also access issues, which would be via the new stair or the lift.



Roof Extension: Core Only



Roof Extension: Full Extension

Aerial view - Lift up to Second Floor with

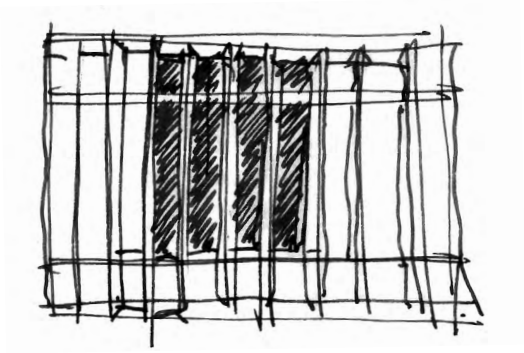
Massing Option: View from the east

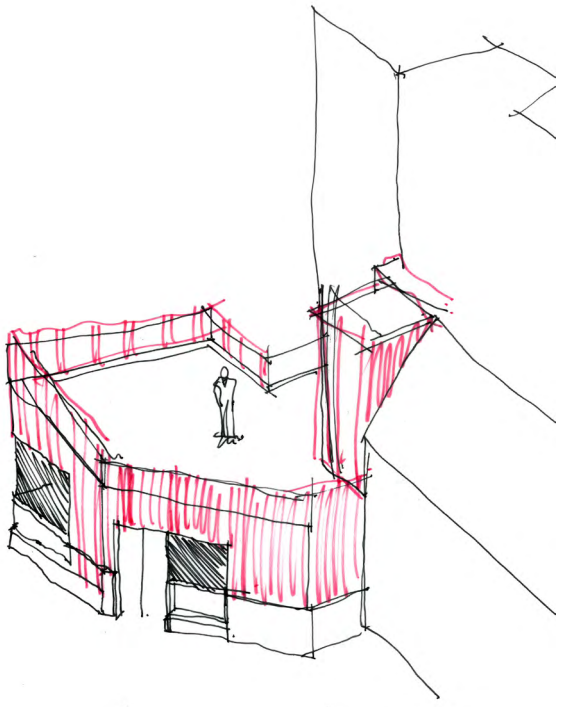
Massing Option: View from the south-west

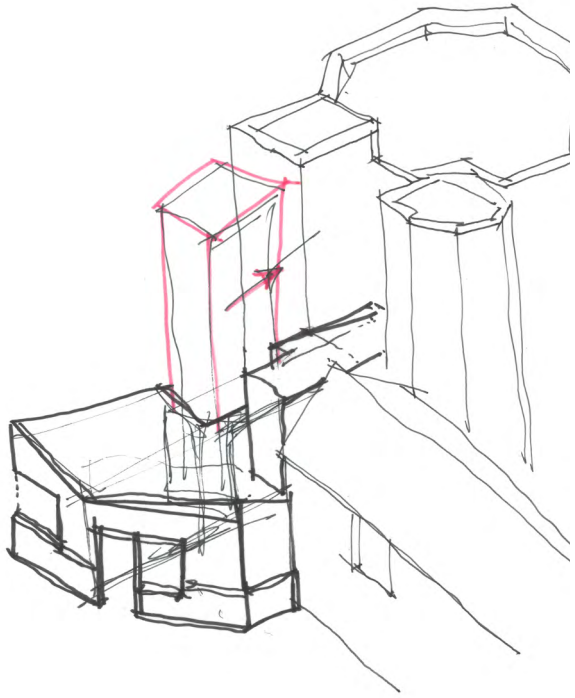
Aerial view - Lift up to Second Floor

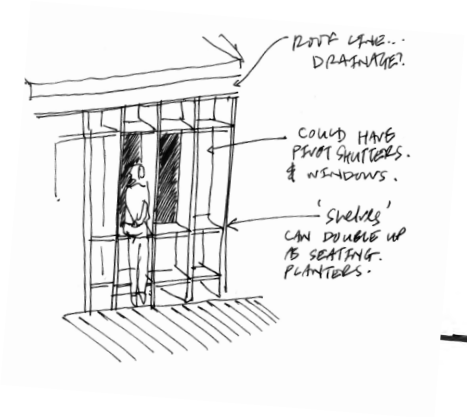
Massing Option: View from the east

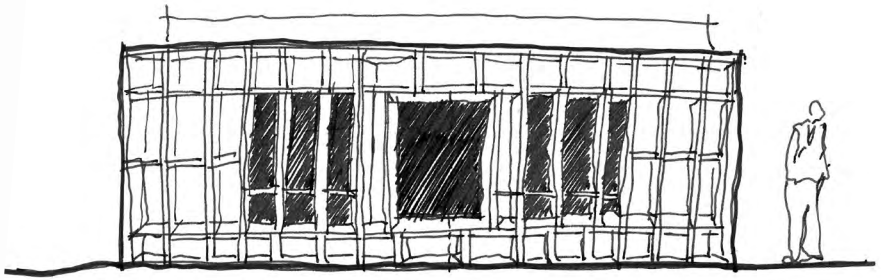
Massing Option: View from the south-west

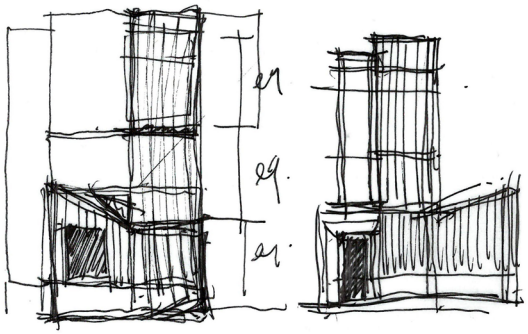








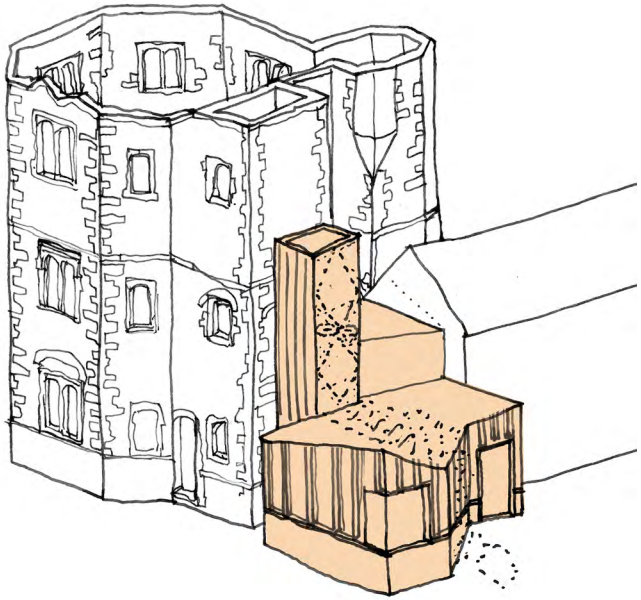




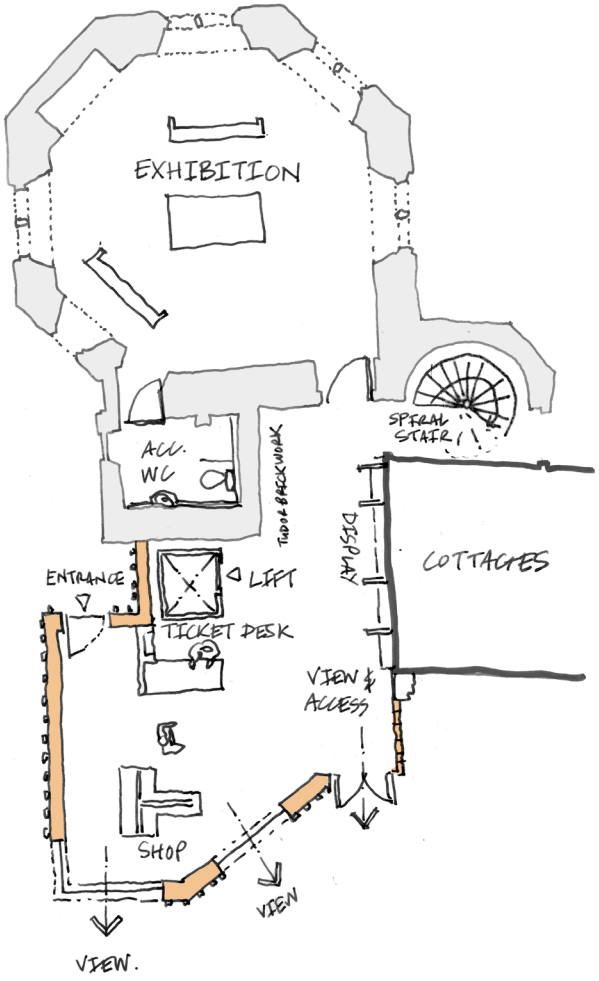
Initial concept sketches exploring form and materiality

Massing Options with Materials - Taller Lift Tower

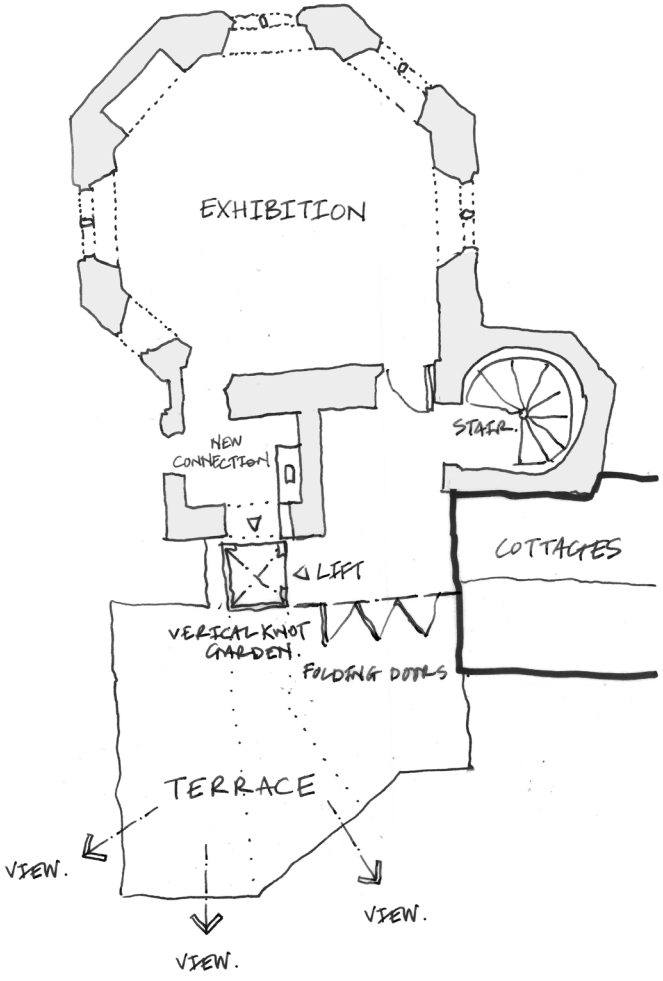
Sketch plans and massing of lift adjacent to Garderobe Tower - part of the design development of Proposed Option B.



Sketch Massing



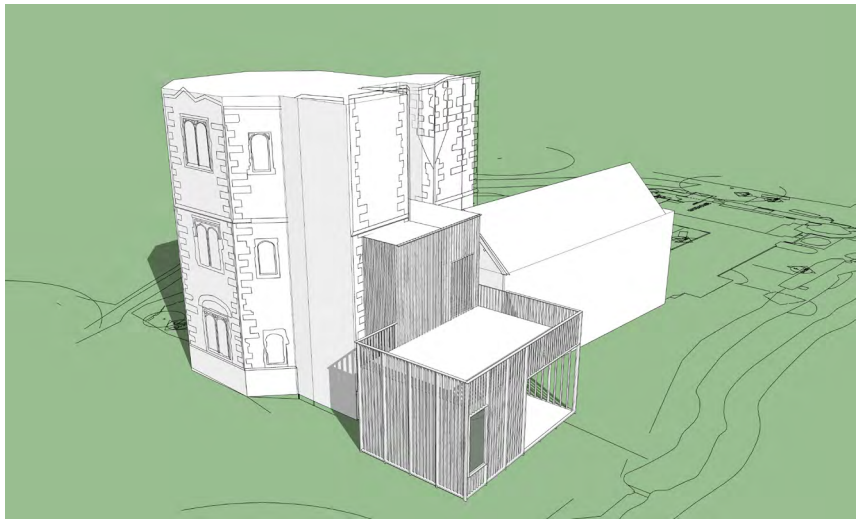
Sketch Ground Floor Plan

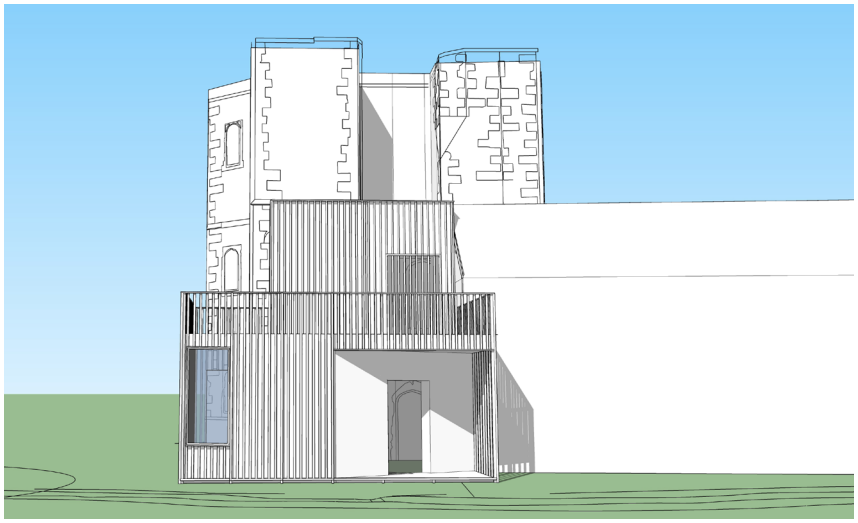


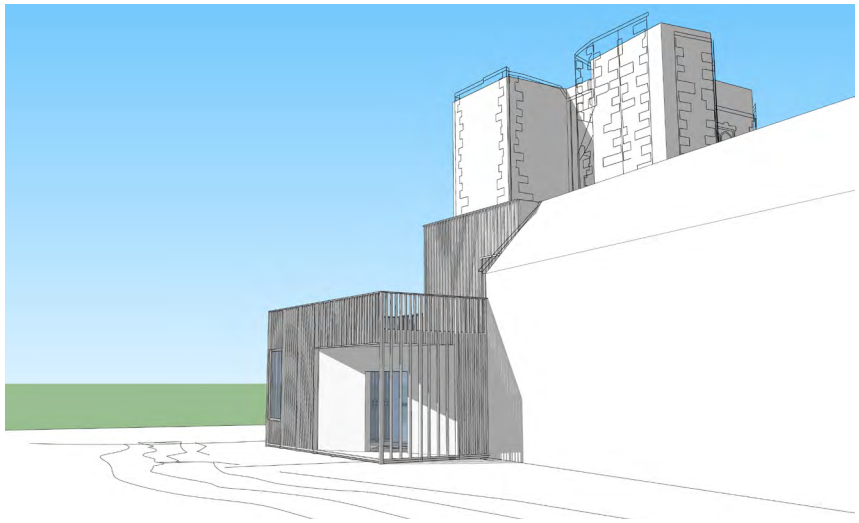
Sketch First Floor Plan

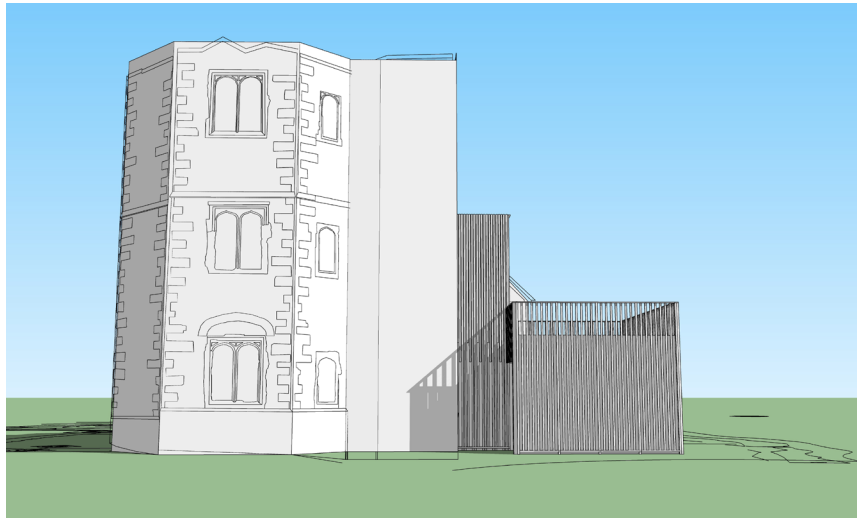
Contemporary Form and Materiality Precedents
Clockwise from above:

Knole House Gatehouse, Knole, Kent
Peacock House, Aldeburg
Trancoso Castle, Portugal
Shingle House, Dungeness
Howe Farm, Buckinghamshire









Sketch Computer Massing Model of Tower Extension Proposal - Option B