

# Broomfield House and Stable Block Stage D Report final 01

for The London Borough of Enfield





**Contents - Report:**

	Page
1.0 Introduction and Executive Summary	03
2.0 Brief	05
3.0 Summary of Outline Proposals: Architectural Structural Civils Engineering Geotechnical Desktop Study Mechanical and Electrical Services Sustainability Landscape Accessibility Operational Waste Management Operational Waste Management	09
4.0 Statutory and other Approvals Planning and Listed Building Consent English Heritage Building Control Secure by Design	17
5.0 Community Engagement	21
6.0 Procurement of Development Partners	23
7.0 Construction Logistics and Programme	25
8.0 Legal - Restrictive Covenant	27
9.0 Health and safety	29
10.0 Risk Management	31
11.0 Cost summary, Valuation and Budget	33

**Contents - Appendices:**

A Design Team Details
B Stage D Proposals - Drawings
C Design and Access Statement
D Services Engineers Report
E Sustainability Consultant Report
F Structural Engineer's Report
G Stage D Cost Plan
H Development Valuation (not yet received)
I Programme
J Surveys: Desktop Archaeology Topographic Survey
K Risk Register
L Community Engagement
M Ecology Report
N Transport Report
O Waste Management Report
P Acoustic Engineer's Report
Q Geotechnical Desktop Study



## Section 1.0 Introduction and Executive Summary

### Introduction

Broomfield House, its landscape and associated stable complex is owned by Enfield Council. The House is a grade II\* listed former country house with a long and complex history dating back to the 16th century, and was the subject of major rebuilding and enlargement in the 17th, early 18th and early 19th centuries. It sits within a Baroque formal landscape, now a public park which is included on the national Register of parks and gardens of special historic interest at grade II. The Stableblock is Grade II\* listed and sits within a walled part of the garden. A terrace of four Park Keepers Cottages were built in the 1960's. The Stableblock, Park Keepers' Cottages and Walled Garden are run down and used as a depot for storing park maintenance equipment.

The house was severely damaged by fires in 1984, 1993 and 1994 and has been derelict since the last fire, which destroyed the roof and much of the interior. Several unsuccessful attempts have been made in the past to find a sustainable new use for the building which would fund its restoration.

It is now proposed to restore the building for use as park amenity (café and meeting room) and together with the conversion of the adjacent stable complex, homes for older people.

The Mayor of London and the London Development Agency (LDA) has announced an 'indicative allocation' for 2010/11 of £5.97 million for this purpose. This has received Ministerial confirmation and final allocation is expected in Spring 2011.

Progress is being monitored by the LDA and following a feasibility study and concept design prepared by Shephard Epstein Hunter it has been agreed that the scheme is developed to Stage D and detailed applications for Planning Permission and Listed Building Consent are prepared.

Enfield Council has commissioned Faithful + Gould to assemble and lead a team to develop the scheme to the next phase and prepare the applications.

### Executive Summary

The proposals contained in this report are to restore and rebuild Broomfield House to provide a mix of community/park cafe use and residential accommodation, restore the Stableblock and the Bothy to provide residential accommodation and to develop a small number of cottages within the walled kitchen. Overall the development creates 20 new homes (8 no. 1 bed, 12 no. 2 bed) and 177m<sup>2</sup> of community/park cafe accommodation. The homes are designed to meet the needs of older people.

During the final development of these proposals the local community and a large number of stakeholders / special interest groups have been consulted. The public exhibitions attracted a high attendance reflecting the importance of the project to the local community. Apart from concerns expressed from a small number of local residents, who would like more community space, there has been widespread support and approval of the scheme.

The proposals have also been discussed with English Heritage, the Conservation Advisory Group and the local planning officer who have all expressed support for the scheme.

The total project costs are predicted to be £8.89m excluding VAT which exceeds the allocated grant of £5.97m by £2.92m. It is anticipated that the Council will enter into an agreement with a registered social landlord to develop and manage the scheme exchanging a long lease in return for a capital investment which will meet the funding gap. Initial market testing with a number of RSL's who operate in the area has been very positive.

The next steps to move the project forward are:

- To confirm the grant is available from the Targeted Funding Stream
- To submit applications for Planning Permission and Listed Building Consent
- To enable the development under the covenant by the process of Appropriation
- To seek a RSL development and management partner through OJEU procurement



## 2.0 Brief

*(from London Borough of Enfield - Project Brief for Broomfield House, Stables and kitchen garden area)*

To take forward the existing Feasibility Study Stage C Report 2009 and prepare detailed planning and listed building consent applications to RIBA Stage D. This will detail further the proposal to restore the House and convert the House, Stables and kitchen garden area to housing for older people possibly on a shared equity basis and provide a park café and meeting room on the ground floor of the House.

### Concept

The Paul Drury Partnership were commissioned in 2008 to assess both the surviving special interest of the House (Part 1) (see Appendix 3) and the viable options for restoration still open to the Council (Part 2) (see Appendix 4). The Part 1 report concluded that while sufficient elements of architectural and historical interest survived for listed status to continue to be justified (though probably at grade II rather than grade II\*), the extent of fire damage was so great that any restoration would effectively be a new building incorporating certain historic elements. It was also concluded that it was essential that some form of building occupy the site in order to provide a focus for the landscape, but this need not be the building in its current (largely early 19th century) form. Indeed the landscape was designed to complement a rather different building. A minimal rebuilding based around the 16th, 17th and early 18th century elements of the building would be as valid, in terms of preserving the architectural and historical significance of the building, as rebuilding the entire structure.

It is, however, envisaged that in order to be viable as housing for older people, it would be necessary for the new building to occupy the entire footprint of the existing structure. Externally the structure should be a facsimile of the building in its early 19th century form, at least on the principal and flank elevations. Internally it should retain all elements identified as being of value in The Paul Drury Partnership's report Part 1 (many of which were removed and put into storage before the last, most damaging fire). This would entail recreating/repairing the main entrance hall and the adjoining 16th century cross wing, but would otherwise allow a reasonable degree of flexibility in terms of plan. Some public use and access would also be necessary. We would envisage that this would consist of a small park café with possibly a meeting room for community use. The entrance hall and stair would form part of this public area.

Conversion of the Stable (with the adjacent wall, also grade II\*) into housing for older people is also envisaged, as is the demolition of the 20th century housing within the walled garden and its replacement with more sympathetic buildings, providing further accommodation. Given that the house is set within a public park vehicular access and parking would need to be confined to the Stable courtyard, with only occasional and carefully controlled vehicle access close to the house itself.

It is also expected that given the high profile of this project and its public accessibility, it will be an exemplar in terms of design and sustainability.

### History and Context

In the past there has been extensive public interest in the fate of Broomfield House. The Council entered into an agreement with Whitbread Plc to restore the house as a Brewer's Fayre Restaurant. This met with considerable public opposition and Whitbread withdrew their proposal in 1998. Negotiations for a similar scheme entered into with Bass also failed to make progress. Enfield Council and the Broomfield House Trust then prepared a scheme for a café, educational and community facility, with a large extension to the south-east of the house. The scheme was prepared by Donald Insall Associates. This would have involved an alteration to the covenant and thus preparations were made to bring a case at the Lands Tribunal. This hearing was scheduled to take place in 2006, however, the Council withdrew from it. A vocal group of local residents objected strenuously to the proposal, principally on the grounds of the increased traffic and noise generated by the proposed use.

### House

The surviving fabric of Broomfield House largely dates from the early 19th century and consists primarily of the outer walls of the building. These are mostly timber-framed and in a poor condition; they only remain standing due to being attached to expanded metal laths added to the building as a base for render in the 1930s. Elements of the 16th and 17th century phases, such as chimney stacks, areas of floor framing and wall framing also survive. A number of early 18th century architectural details from the interior, most notably parts of the stair, wall panelling and the Lanscroon murals lining the stair were rescued during the fire and are stored either in containers or off site.

### Stable Buildings

To the south-east of the house, enclosed by the 16th or 17th century wall, are the stables and walled garden. The stable dates from the early 18th century and is grade II\* listed in its own right. It has been extensively altered internally and externally in the 19th and 20th centuries. There is a terrace of late 20th century houses in the walled garden.

Two of these properties are occupied under secure housing tenancies. At the appropriate time the Council will enter into negotiations with the owners with a view to obtaining vacant possession. Should the consultant be approached by the occupants they should be referred to the Council.

### Landscape/ Park

The Baroque landscape sits to the west of the house and consists mainly of three ponds directly in front of the house, a wall separating what would have been a formal garden around these ponds from the park beyond (listed grade II) and a double avenue of trees (now renewed) in the park. Despite a degree of municipalisation as a result of nearly 100 years use as a public park, the bones of this landscape survive largely intact. A 16th or 17th century wall and gateway enclosing the eastern part of the grounds also survive (also listed grade II).

**Ownership & Tenancies**

The entire site is owned by LB Enfield Council. The majority is in-hand apart from 1 and 3 Park Cottages. The land is also the subject of a restrictive covenant attached to the conveyance by which Southgate Council purchased Broomfield House from R. C. L. Powys-Lybbe, dated 25th March 1903. This states that "the Purchasers shall be at liberty to use the existing buildings or to erect on any part of the said hereditaments and premises not exceeding in the whole five acres any one or more buildings to be used as a Town Hall, Library, or other Municipal buildings but such buildings shall not be used for the purpose of any trade or business or for any purpose which may be of or grows to be an annoyance or injury to the said Broomfield Estate".

It is considered that the proposed uses identified in the Feasibility Study Stage C Report are benign and compatible with the purposes of the park. Should this be challenged, than any amendment to the covenant necessary to accommodate the proposed uses will, under section 84 of the Law of Property Act 1925, necessitate an application to the Lands Tribunal. However, alternative provision exists under to 2008 Planning Act for the Council to appropriate the land for a planning purpose. This would have the effect of quashing third party interests. This action can flow once a planning permission has been given.

**Existing information**

A Feasibility Study Stage C Report was commissioned from Shephard Epstein Hunter in 2009 (see Appendix 2). This report has been put to English Heritage who support the outline designs within. It should form the basis for the detailed application for planning permission and Listed Building Consent.

A report detailing the development of the house and grounds, the extent of survival of historic fabric and the significance of surviving elements was prepared by The Paul Drury Partnership in May 2008 (Part1) (see Appendix 3), along with an assessment of options for the future (completed in May 2009 (Part 2) (see Appendix 4).

**Conservation**

In addition to the staircase and other important joinery removed for safe storage from the House prior to the last substantial fire, the Lanscroon murals, that once decorated the main hall, are also in storage off-site. The restoration and reinstatement of these murals will be very expensive but are not immediately essential to the restoration of the House nor its function as housing for older people. They are, therefore, seen as a separate project that could be completed at a later date. However, the reinstatement of the internal architectural details, principally the stair and wall panelling in the entrance hall and ground floor of the cross-wing, as well as the architectural space within which the mural belongs, is seen as an integral part of the project.

**Future Stages**

The Council has received £500,000 from the LDA/GLA to take forward the design stage of the project and the grantor is looking for the Council to achieve Stage D by March 2011. However, the Council is acutely aware of the intense pressures being placed on public sector budgets and there are continuing uncertainties as to the funding from the GLA from 2011/12. Given the above, the Council considers it prudent at this time to only

commission this next phase (Stage D) of the project. Future stages will depend on the securing of the balance of funding from the GLA and the necessary contribution from the selected development partner. It is in light of this funding uncertainty that this brief also requires a Stage A report to advise the Council what other options are viable, should the GLA funding not be secured.

**Public Areas**

The ground floor should be restored and designed to accommodate a café and meeting room, a toilet and the restoration of the hall and staircase (excluding the Lanscroon murals which will be the subject of further grant applications).

**Landscape**

The Council is currently developing projects to restore certain garden features and a bid to the HLF for funding towards the restoration of key elements of the historic and park landscape is proposed for the near future.

**Needs Analysis**

A Housing Market Assessment, which has researched and produced housing needs data is available, as is an emerging strategy for Older People and Vulnerable Persons Accommodation strategy. A survey of sheltered housing needs and provision across the Borough is currently in preparation. When preparing the review of options the consultant should request such information as the Council has in its possession.

**Research**

The consultant should research and present any evidence of successful precedents for similar schemes involving the restoration and conversion of historic buildings to other uses and any lessons learnt. Research on which partnering organisations/commercial interests were involved, how was the design process structured and how was 'hand-over' to service deliverers structured should be undertaken and form key recommendations of the review of options report.

**Design Quality**

Should the project be supported and funding flow there is an expectation that the scheme will be an exemplar in terms of design and sustainability. As a publicly accessible and high profile scheme, the quality of design will underpin its success.

The scheme will need to consider the needs of intended residents. For example, all housing should be designed to lifetime homes standards and, where possible, units should be fully wheelchair accessible in accordance with policy 3A.5 of the London Plan and the Council's own Wheelchair Design Guide. The housing in particular will need to be designed with the needs of older people in mind. Further advice can be found at [www.lifetimehomes.org.uk](http://www.lifetimehomes.org.uk) and in the recent report entitled Housing our Ageing Population: Panel for Innovation.

Design quality will be controlled by the actual processes of briefing and in selecting the scheme architect, ensuring that the project and client group take on design issues as part of their terms of reference, through continual monitoring by the Conservation & Design officers as design details develop and through iterative review by English heritage and other appropriate stakeholders and advisory bodies.

The design management strategy must incorporate heritage and conservation as part of the design approach, as well as the housing for older people needs. Materials, finishes and the sensitivity of the design and landscaping will all need to be considered in detail.

The Council will be required to satisfy a number of key stakeholders in delivering this project that will necessitate very high standards of design; Listed Building Consent will come from the Secretary of State who will take advice from English Heritage. English Heritage will need to be entirely satisfied that the restoration meets its high standards and that new development enhances the setting of the listed buildings. The funding agency, the LDA/GLA, together with the Mayor for London will be looking for an exemplar scheme that will justify the expansion of the Targeted Funding Stream criteria to include heritage. The scheme will be referred to Design for London within the LDA/GLA and CABE for detailed design assessment. The project will, consequently, carry very high design expectations.

#### **Scheme integration**

The consultant should scope and advise on any ascertained parallel/ inter-related elements to better integrate timing and funding issues.

The consultant should consider and identify areas of conflicting criteria relating to the project and present proposals for their resolution and management. In addition to any tensions within the project between housing for older people service needs and the heritage importance, the needs of park users and neighbours should be considered. Public consultation and media management will be important.

#### **Stakeholders and management**

Liaison with the LDA/GLA will be via the Broomfield House Board and the Development Team.

The Council, as Local Planning Authority may give planning permission but, as site owner, it will need to apply to the Secretary of State for listed building consent. The SofS will consult with English Heritage in making his judgement. EH has seen and supports the designs in the Feasibility Stage C Report. The Council's conservation officers will be liaising with it to ensure its involvement and support as the project progresses. Similarly, liaison with DfL and CABE will be conducted by the project manager with Conservation & Design Team officers.

The consultant should liaise closely with the Council's Development Services and scope the range of necessary drawings, statements, reports and other information required to make a satisfactory registerable planning application and listed building consent. The consultant should allow for full engagement with officers as a pre-application process.

#### **Public Consultation**

Once detailed designs are produced discussions will be held with a number of interested parties including the Broomfield House Trust, The Broomfield Historic Buildings Trust, the Conservation Advisory Group, and the Broomfield Residents Associations. The consultant will be required to assist officers in presenting the designs at public meetings.

Further discussions will also be held with English Heritage during the design process.

#### **Costs**

The consultant should cost the main project at Stage D and give a cost estimate for each key element of the project and an assessment of the funding requirement against the LDA/GLA allocation and potential other funders. The consultant should also scope the parameters and basis of the options produced under the review and cost them.

#### **Valuations**

The consultant should provide an opinion of value for key assets for the main project once completed bearing in mind the current economic climate. The Stage A options review should also carry this information.

#### **Legal**

This project will involve extensive procurement, contractual relationships, novations and also many complex contracts between various funding parties. The Council's Legal Services will be closely involved with the project and provide this service in-house.

#### **Phasing**

An analysis of any practical and beneficial phasing should be provided.

#### **Programme & Timeline**

The consultant should consider and provide an analysis of the elements on the critical path and provide an efficient and effective programme and time line for delivery of the project.

It is intended that, in line with the Feasibility Report, a RSL or other development partner will be selected once funding is confirmed. Works on site would be anticipated to beginning during the 2011/2012 financial year and be completed in accordance with the agreed programme.

#### **Implementation & Delivery**

The envisaged delivery model is based on the standard approach in which the Council select a housing development partner to deliver and construct the housing. However, there are some fundamental variations in the proposed model:

Firstly, due to the heritage sensitivity of the project an architect will be selected and a detail design to Stage D will be developed prior to the selection of the housing partner. The selected housing partner will be required to adopt the approved design. A further process will be required at that time to select consultants to take through the project to completion.

Secondly, the Council already owns the land and has an indicative allowance of £5.9 million to put towards construction costs and fees. It is hoped that this will provide a strong incentive for any housing partner to be involved as it considerably reduces the financial risks associated with the project. Any shortfalls funding connected with the project will be have to be made up from the housing partner (possibly through grant from the HCA).

There will be a separate process for the selection of the housing for older people development partner.

#### **Risks**

The Feasibility Study Stage C Report contains a Risk Analysis table. The consultant, in preparing their report, should review this table and consider and report on all ascertained risks to the project. This should include, but not be limited to, the physical deterioration of the assets, the stability and potential of funding in the current economic climate and any political issues that may impact on the project.

#### **Future issues**

The consultant should take a far-reaching view when considering the viability of options and the potential impact of future issues such as further phases of work to the Park, leases and tenures, the future management of housing, the public facilities in the House and the Park, the revenue implications of the project for Council budgets, the maintenance obligations and future periodic repairs.

### 3.0 Summary of Outline Proposals

**Architectural Design** - the following refers to the architectural drawings is in Appendix B. For a more detailed explanation of the reasoning behind the design refer to the design and access statement in Appendix C.

#### Site Plan - Drawing 001

The site plan shows the proposed area of development hatched in red. The area of the development site is 1.68 acres and includes the following areas

- Broomfield House
- The Stable Block and the area within the old stable yard and walled kitchen Garden
- Part of the main drive and an area surrounding Broomfield House - although there is no built development in this area it is included within the site as improvements are proposed to the external works and landscaping.

#### As Existing - Drawings 002 to 009 and 016

These drawings show the site and main buildings as existing - in the case of Broomfield House these reflect what was there before the fire.

#### Proposed Site Plan and Long Sections - Drawing 009 and 018 to 020

The proposed site plan and long sections show the proposed site layout and external works.

Broomfield House is rebuilt / restored to the footprint of the building before the fire. The area around Broomfield House is treated very simply. The hard paving to the south and west is restored once the hoarding and scaffold are removed with a new levelled area adjacent to the Cafe. Planting beds are proposed to the north and east to provide some privacy to the ground floor flats and a new path is taken around the edge of the lawn.

The Stableblock is restored and the rear wing extended, the Bothy is restored and six new cottages are built within the walled garden. In order to maximise space within the site the cottages are built against the enclosing wall - in a similar way to which the Stableblock and Bothy were built originally.

The external areas between the Stableblock, Bothy and Cottages are arranged as a series of intimate courtyards with footpaths and a communal central garden. The existing stableyard is extended to provide a small parking area for the residents providing 20 spaces - 1 space per flat/cottage. A new fob operated gate between the existing brickwork gate piers provides control of the parking area.

A new gate and railings across the main drive allow the park to be secured at night whilst still allowing access to the parking area and via a controlled gate to Broomfield House.

#### Broomfield House - Drawings 010 - 011

Broomfield House is restored / rebuilt to a building similar in appearance and size to how it would have looked in 1820. The historic fabric is retained/restored where possible and the external elevations are repaired brickwork, colour washed render (without the C20 mock Tudor half timbering), Painted softwood windows (existing to be reinstated where possible) and natural Slate roofs with stainless steel gutters and lead/terne coated stainless steel flats

On the Ground Floor a connected series of rooms are restored to their former appearance and the Cafe located in the Tudor Kitchen faces south-west will have a sunny aspect overlooking the ponds and open park beyond. Reformed doorways in the South elevation will enable the Cafe to spill out onto the external paved area. The Baroque hall and staircase is restored and will create a home for the future restoration of the Lanscroon Murals.

The remainder of the house is restored / rebuilt to provide two flats overlooking the lawn area on the Ground Floor. On the First Floor a further five flats are created.

#### The Stableblock - Drawings 012 - 013

The Stableblock is restored and extended to create six flats. The present rear extension is adapted to provide a staircase and lift to the first floor flats. The rear cottages wing is extended to create slightly more generous units along Broomfield Lane. The Brickwork of the existing buildings will be repaired and the new extensions will be finished in brickwork and weather boarding. The first floor gallery is open. Roofs will be covered in new handmade (Keymer) plain clay tiles. External rainwater goods will be cast aluminium all all openings will be provided with natural oak or new painted softwood windows.

#### The Bothy - Drawing 014

The Bothy is restored to create a small two storey house. The roof is raised slightly (300mm) to give more internal headroom. The Bothy will retain its present appearance with elevations in repaired brickwork / weather boarding, re-using existing clay tiles, cast aluminium rainwater goods and new painted softwood windows.

#### Kitchen Garden Cottages - Drawing 023 - 025

Six new 2 bedroom single storey cottages are built in the former walled kitchen garden. Two of the cottages are designed for wheelchair users. The cottages will be built in new multi stock brickwork (Bovingdon Bricks / lime mortar) with high performance painted softwood windows, clay pantiles and cast aluminium rainwater goods.

Overall the development creates 20 homes - 12 two bedroom units and 8 one bedroom units and where possible the internal layouts are designed in accordance with the London Housing Design Guide.

**Broomfield House Restoration / Repair Strategy - Drawings 021-022 and 031-035**

Key Objectives:

- Retain as much of the surviving historic fabric as possible
- Recreate the building volume and external appearance of the house back to as it was in 1820
- Reconstruct the Baroque hall and staircase and create a future home for the Lanscroun Murals
- Reconstruct the Regency Dining Room
- Reconstruct the Panelled Study
- Reconstruct the Tudor Kitchen
- Reconstruct the bay of timber frame on the First Floor
- Put the fabric of the Building into good repair to facilitate its future maintenance.

Retain as much of the surviving historic fabric as possible

- Historic Core timber frame
  - Survey and record surviving structure
  - Carefully take apart the timber frame as necessary to establish condition of surviving timbers.
  - Where existing timbers are missing or no longer structurally sound replace with new green oak timbers
  - Rebuild timber frame incorporating as much of the original structure as possible
- Historic Core Masonry / Brickwork - Chimney stack
  - Survey and record existing structure
  - Stabilise brickwork by cutting out and replacing damaged brickwork and re-pointing as necessary
- North Wing:
  - Survey and record existing structure
  - Stabilise brickwork by cutting out and replacing damaged brickwork and re-pointing as necessary
- Other Chimney Stacks:
  - Survey and record existing structure
  - Stabilise brickwork by cutting out and replacing damaged brickwork and re-pointing as necessary

Recreate the building volume and external appearance of the house back to as it was in 1820

- Remove and store building elements - windows and frames, doors and door cases that can be reused
- Survey and record details of features such as windows, window frames, doors, door cases, architraves, skirtings dado rails, picture rails, panelling etc. before demolition
- Re-construct the new building volume around the retained fabric using appropriate modern method of construction to meet current building regulation standards.
- External finishes:
  - Retained brickwork
  - Painted render
  - Painted timber windows and doors
  - Natural slate roofs
- Internal finishes

- Painted plaster walls and ceilings
- Painted woodwork
- Hierarchy of internal mouldings

Reconstruct the Baroque hall and staircase and create a future home for the Lanscroun Murals and restore the other principle rooms:

- Survey the surviving material retained in the two containers and establish the extent of what can be re-used
- Record mouldings and details for construction new elements as necessary
- Reconstruct staircase and hallway in locations of Lanscroun Murals provide removable plaster panels

Put the fabric of the Building into good repair to facilitate its future maintenance.

- Use good quality external materials / finishes
  - Where visible these should reflect the qualities of the original - lime render on external elevations
  - Where hidden use most appropriate material - eg valley gutters in stainless steel rather than lead.
- Avoid building in maintenance issues - hidden valley gutters

**Structural**

The report in Appendix F concerns the structural design philosophy developed during the scheme design for Broomfield House. Broomfield House and adjoining stables are Grade II\* listed historic buildings, located in Broomfield Park, Enfield. The proposed scheme is to renovate the derelict house, stables and Bothy and create a number of additional single-storey cottages. Together this will create some 20 residential units, a cafe and community room. Ramboll UK has been appointed to provide Structural, Geotechnical, Civil, MEP Services, and Sustainability & Renewables consultancy.

The buildings sit within the large recreational area of Broomfield Park, in which the boundary of the development extends 0.68 Hectares. The site incorporates the main house, the stable block, the Bothy and surrounding private access routes. The proposed development provides a design for all of the buildings within the site boundary.

The main building was damaged in multiple fires throughout the latter part of the 20th Century and is now disused and considered in a poor state of repair. The stable building and Bothy escaped fire damage but are showing indications of disrepair. The team have made assumptions regarding how much of the existing fabric can be re-used, and these assumptions should be confirmed by a visual structural appraisal of the existing building. We recommend the structural appraisal is undertaken in the near future and integrity tests of the existing structural materials undertaken later in the design development.

We propose that existing foundations are to be re-used where possible, and new strip foundations introduced where none currently exist. We assume all existing foundations will require remedial works, including underpinning, but there may be scope to reduce this following their inspection and appraisal at some point in the future. The loads applied on these foundations are within the economical ranges of this proposal for the foundations. Future design work should ensure that differential displacement between foundation elements does not substantially impact the building.

Ground floors in new buildings and over existing cellars are to be composed of pre-cast beam and block elements, spanning between foundation strips. The locations of new foundations incorporate the requirements of this element choice. Elsewhere the ground floor will be composed of in-situ ground bearing reinforced concrete slabs.

As far as possible, existing timbers are to be retained and re-used in the proposed structure. Remedial work and new replacement timbers may be required to supplement these existing timbers. Where the use of existing timbers is not possible, the first floors are to be composed of steel beams typically spaced at 3000mm centres. These steel beams support timber joists aligned perpendicularly and centred at 400mm along the beam's length. The steel beams are to be connected through recessed padstones in brick or block walls.

Existing brick walls are to be retained where possible. New external walls are composed of load-bearing timber stud, single leaf masonry or cavity walls of out leaf brickwork and inner leaf load-bearing stud as determined by architectural, sustainability, historical and structural considerations. New load-bearing internal walls are to be composed of light-weight block.

Roofs are typically new timber trussed rafters centred at 600mm. Exceptions exist where double-height space over the living spaces is required, and in the main building which utilises a steel frame with timber infill over the largest of its three distinct roof areas. It may be possible to re-use the roof timbers in the Stable building and Bothy subject to future inspection and appraisal.

For Structural Engineer's report refer to Appendix F

### **Civils Engineering**

This report concerns the below ground drainage design philosophy developed during the scheme design for Broomfield House and should be read in conjunction with all other Ramboll engineering reports.

The redline boundary covers an approximate area of 6800m<sup>2</sup> of which Block A (Broomfield House) is approximately 465m<sup>2</sup> and Block's B to H, including external hard standing, with associated area of approximately 3070m<sup>2</sup>. The measured area to be redeveloped is approximately 3535m<sup>2</sup>. The existing site is approximately 45% impermeable. The proposed impermeable area has been measured to be approximately 60%, an increase by 15%.

The existing surface water outfall location(s) is currently unknown, however, it is assumed that the site currently drains towards the nearby ponds to the west or to the nearby public surface water sewers in Broomfield Lane to the east of the site.

In line with Code for Sustainable Homes (CfSH) Category 4, Peak Rate of Runoff and Volume of Runoff will need to be addressed as a mandatory requirement. Due to envisaged poor infiltration rates, it is expected that the proposed redevelopment would have to meet with the limiting discharge flow rate of 5 litres per second per hectare (l/s/h).

In addition to the CfSH, The London Plan Supplementary Planning Guidance (SPG) for Sustainable Design and Construction (Mayor of London, 2006) Clause 2.4.4 states that Sustainable Drainage Systems (SUDS) measures should be used wherever practical; and at least a 50% attenuation of the undeveloped site's surface water runoff at peak times should be achieved. However, the CfSH requirement has been noted to be the more stringent.

Based on the site boundary area of 6800m<sup>2</sup> and a limiting discharge flow rate of 5 l/s/h, the calculated attenuation storage required will be 458m<sup>3</sup>. This volume will need to be provided onsite by the implementation of SUDS. A SUDS Management Train matrix has been produced for the redevelopment and it is proposed that porous car parks & paving (storage only) and attenuation tanks will offer the most suitable form of attenuation.

All surface water runoff from the road and paved footway areas will be collected by road gullies, channel drainage systems and/or filtrate through porous car parks & paving and be carried by gravity to an attenuation tank, before discharge into the nearby ponds and/or public surface water sewer in Broomfield Lane. The discharge and outfall strategy will need to be agreed with the Environment Agency, Thames Water Utilities and the Local Authority.

The foul water outfall location(s) is currently unknown however it is assumed that the site currently drains towards the nearby public foul water sewers in Broomfield Lane.

Foul water from above ground will be collected at the ground level and discharged directly into the separate foul water manhole located around the perimeter of each building. Foul water from the basement level will be collected at the basement level and discharged into a pump sump. Foul water will be pumped up to the nearby foul water pipeline where it will discharge via gravity in to the public foul water sewer in Broomfield Lane.

Given that the redevelopment is similar to the existing, it is envisaged that Thames Water Utilities will not have any restriction on the proposed foul water peak foul water.

### Geotechnical Desktop Site Appraisal

The aim of the report in Appendix Q is to identify geotechnical ground based hazards that may potentially impact on the proposed development at the Broomfield House site.

#### Site Information

Grid Reference TQ 304 926 Site Area (approx.) 0.51 hectares

**Current Site Description:** Broomfield House Site is currently occupied by Broomfield House to the north and the stable complex and walled garden to the south. The site is bordered to the south and southeast by Broomfield Lane, by three ponds to the west and northwest, and by parkland and recreational grounds beyond these to the west, north and northeast. The area south of the site consists of residential usage, mostly semi-detached houses.

**History:** Historical maps indicate that no significant development has taken place on the site since 1867. A few small buildings have been added to the stable area between 1936 and 1977, but apart from this, the site has remained as the original House, stable complex and walled garden.

#### Ground Conditions

**Geology:** The geology on site is anticipated to consist of Made Ground and Boyn Hill Gravel, overlying London Clay, Lambeth Group, Thanet Sands and Chalk.

**Ground and Surface Waters:** The groundwater regime on site has not been established; however a perched water table in the Made Ground and/or Gravel is likely.

**Ground Contamination:** An environmental risk assessment is outside the scope of this report. However, current and historic usage on site and in the locality may have resulted in residual contamination.

**Underground Structures:** Low or Medium pressure gas apparatus is in the vicinity of the site. The Health and Safety Executive will need to be consulted regarding approval for the proposed development. Other services that may run under the site include water, electricity and telecommunications. At the time of writing responses have not been received regarding locations of these services.

#### Consultation

**Authorities and Utilities:** Ramboll UK has started correspondence with the various utilities and communications companies that supply the area. Responses have not yet been received from all contacted parties.

#### Recommendations

**Scope of Work for Future Study and Investigation:** Based on the information summarised in this desktop site appraisal report, a supplementary ground investigation including laboratory and in-situ testing should be carried out in order to:

- Determine the geotechnical design parameters of the underlying shallow geology;
- Identify groundwater levels;
- Determine the chemical characteristics of the ground and groundwater regime on the site.

#### Mechanical and Electrical Services

Separate metered utility supplies will be provided to each of the following:

- Residential units
- Common landlords areas of each unit
- Community facility & care area.

The residential and landlords areas will be in alignment with the building regulations and NHBC recommendations. Low energy lighting will be utilised throughout with photovoltaic's being provided for some units in alignment with the energy strategy.

Gas Fired condensing combination boilers shall provide space heating and domestic hot water heating to each dwelling.

A dedicated system boiler shall provide space heating and domestic hot water heating to the community hall and cafe area. Heating to the respective zones shall be delivered via an under floor heating system. Heating to the landlords areas (corridors, etc) shall be provided via electric panel heaters.

Ventilation to each dwelling in Broomfield House shall be achieved via a whole house mechanical ventilation system with heat recovery (providing supply and extract ventilation). Ventilation to the remaining apartments/houses shall be provided via a continuous extract fan, with makeup air provided via trickle vents.

Ventilation to the commercial areas (Cafe, Regency room, etc) of Broomfield house shall be achieved via natural means via openable windows and vents sized to meet the meet the Building Regulations minimum requirements.

A single unmetered water supply shall be provided to serve Broomfield House. Check meters shall be provided within the riser which would serve the cafe/commercial area, the landlord's area and each residential flat/apartment. A single unmetered supply shall also be provided to serve the Stable Block, with

check meters located within the ground floor water meter room. The Garden cottages and the Bothy shall be served via dedicated metered supplies.

Individual metered gas supply connections shall be provided to serve the commercial area of Broomfield House and each individual flat/apartment.

The rainwater drainage and soil waste drainage above ground level will be served by a gravity system.

Lifts will be provided in Broomfield House and the stable blocks.

Video door entry systems will be provided in the apartment blocks.

TV distribution will be provided for all residencies.

Broadband communications will be provided for all residencies.

### Sustainability

The Report in Appendix E presents the sustainability, energy efficiency and renewable energy design features of the Broomfield House development. This sustainability strategy has been compiled to respond to and improve on the planning requirements and Design Guide criteria of the GLA and of London Borough of Enfield.

A renewable energy feasibility study has been carried out for the development, and Photovoltaics panels have been found to be the most suitable option for the renewable energy supply of the development. These PV modules will be installed on all the new dwellings and on the roof of some of the refurbished units (Broomfield House). The masterplan has been optimised to allow for efficient use of Photovoltaics on these dwellings.

This renewable energy strategy (73 m<sup>2</sup> of PV) is anticipated to lead to approximately 4.0% renewable energy on site and to 7.3% CO<sub>2</sub> emission reduction across the residential part of the development and 3.6% renewable energy contribution and 6.6% CO<sub>2</sub> emission reduction across the entire development. We estimate approximately 230m<sup>2</sup> of PV would be needed to achieve 20% CO<sub>2</sub> emission reduction across the whole site (not practical).

The main sustainable features of the Broomfield House development include:

- Very energy efficient design: Through optimised energy efficient building fabric, air tightness, and heating system efficiency and controls, an improvement over PartL 2010 of 23% or more will be achieved for each new unit. The addition of renewable energy system will lead to an improvement of 46% or more the new unit.

- Refurbished dwellings will meet and exceed the building fabric element standards of Part L1B-2010 wherever possible taking into account the heritage constraints of some elements
- Code for Sustainable Homes level 4 will be achieved for the new dwellings of the development (72.3% score at pre-assessment), particularly with a very good score in the energy, management section and health and wellbeing section;
- EcoHomes Very Good will be achieved for the refurbished dwellings of the development (61.54% score at pre-assessment);
- The majority of the construction materials will have an A or A+ rating according to the BRE online Green Guide to Specification;
- All structural timber will be FSC or PEFC certified; and the majority of the material manufacturers will have environmental certification such as ISO14001, BES6001 or EMAS;
- Water efficient features will be installed in all dwellings.
- PV panels will be installed on approximately 40% of the development (all the new units and some of the refurbished). These renewable energy systems are expected to lead to 3.6% on site renewable energy for the development as well as 6.6% reduction of CO<sub>2</sub> emissions emission reduction across the whole development (7.3% CO<sub>2</sub> emission reduction achieved across the residential part of the development).

These features will enable Broomfield House to be a sustainable development which balances heritage constraints with sustainable progress.

### Landscape - see drawings 041 - 043

Within the setting of a richly aged, extensive and significant area of park landscape, new planting is required to surround two sides of the restored Broomfield House.

The proposed design comprises fragments of a swirling motif indicated in yew hedging, and some of these swirls will enclose pockets of single species of herbaceous plants. The planting designed here represents a new interpretation of a baroque garden and is based on evidence from the geophysical survey.

The plants used in this scheme are either native and growing in the park [yew, hornbeam] or were introduced to UK before 1700 [ie before the Lanscroun murals were added to the house] Although very few people are aware of when what are now regarded as everyday plants first came into the country, this very restricted selection and sparse use of plants should feel comfortable with the history of the building and the spirit of the place.

From a distance and for much of the year the yew hedge will present a formal edge to the building and it will be clipped annually to maintain 90cm ht. gravel will be used as a mulch throughout; a geotextile membrane will be used where there is no herbaceous planting to prevent weed growth and reduce maintenance.

During the summer months the herbaceous plants will flower and will offer a reminder of how rare and treasured individual plants were regarded - as can be seen to great effect in the restored baroque gardens of Het Loo and the Privy Gardens at Hampton Court.

#### Kitchen Garden

The planting associated with the new and refurbished buildings in the former kitchen garden includes a range of useful and edible plants, fosters a participation in cultivation, and actively seeks to encourage neighbourliness through shared activities and spaces.

The edible plants are selected for their good flavour and other plants for their good form, colour and fragrance. The style of planting plants arranged in straight rows and blocks is intended to be reminiscent of this area as a kitchen garden. In time of course some of this definition will go as the plants grow, but that will not compromise the idea or the character of this part.

#### Accessibility

The proposed development will provide as much accessibility as practical within the heritage context and natural ground levels.

##### Broomfield House - Flats:

- Ground Floor flats will have level access through the common entrance
- First Floor flats will have level access via a platform lift
- Where differences in existing building levels exist provision will be made for the future installation of a stair / platform lift.

##### Broomfield House - Community Room:

- Level access through the main front door ( requires replanning of approach to avoid stepped approach)
- Provision of a disabled WC

##### Broomfield House - Cafe:

- Level access through the new Cafe entrance

##### Stableblock Flats:

- Level access to ground floor flats through common entrance
- Level access to First Floor flats via platform lift

##### Cottages:

- Level access to single level cottages

- Two cottages are designed for wheelchair users
- Provision of four disabled parking bays for flats

#### Operational Waste Management Strategy Summary

Two bin stores will be provided on site for the storage of residual waste and recycling; one adjacent to Bromfield House and the other close to the kitchen garden cottages and stables.

Based on the British Standards requirement for waste storage to provide storage of 5 litres per sale for a fast food style venue, it is estimated there will be 900 litres per day of waste generated by the cafe. This quantity is 50% waste and 50% recycling and will be stored in 660 litre Eurobins, one for recycling and one for residual waste. These bins will be located in the bin store adjacent to Broomfield House.

The London Borough of Enfield's Household Waste and Recycling Storage Policy Guidance sets out how many bins are required based on the number of households in a development, which is served by a communal collection system.

Based on these requirements there will be a need to provide one 1,100 litre Eurobin for waste and one 1,280 litre Eurobin for recycling in the bin store adjacent to Broomfield House.

The kitchen garden cottages and stables bin store will require two 1,100 litre Eurobins for waste and one 1,280 litre eurobin for recycling.

The size of the two bin stores has been calculated to be sufficient to store all the required bins shown above.

In order to fulfil requirements for Code for Sustainable Homes 2010 in the kitchen garden cottages and Ecohomes assessment in the other buildings, adequate internal storage will also be provided for recycling as well as a compost system in the communal gardens.

Waste will be collected from the site by London Borough of Enfield using a specialist small vehicle for restricted access sites, due to the height and width restrictions that the archway at the entrance to the site imposes.

#### Site Waste Management Strategy Summary

The requirement to produce a Site Waste Management Plan (SWMP) was introduced by the Site Waste Management Plan Regulations 2008.

Part of the plan is required to show how waste has been reduced in the design stage and estimate how much waste will be generated and how the waste will be managed e.g. re-used on or off site, recycled on or off site, recovered or landfilled.

The Broomfield House redevelopment is currently at planning stage and therefore does not need a full SWMP at this stage; however summaries are provided for the designing out waste actions and estimated quantities of waste from the demolition and construction phase as well as the estimated rates of recycling.

Designing out waste actions include the use of beam and block floors which can be prefabricated off site and can incorporate cement replacement materials such as pulverised fly ash which prevents this from becoming a waste. Where possible easily recyclable materials have been chosen for the project such as timber for window frames.

Based on a Waste and Resource Action Programme (WRAP) case study it is estimated that the demolition and site clearance/enabling phase of the project will generate 975 tonnes of waste. It is expected that much of this waste will reach a 90-95% recycling rate, with the exception of the asbestos removed from the garages and any other asbestos found during works.

Based on indices from Building Research Establishment (BRE) it is estimated that the construction phase of the project could generate 224 tonnes of waste. As with the demolition waste it is expected that this will have a 90-95% recycling rate.

Based on the information above on the quantities of waste expected from the demolition and construction work and the assumed areas for car parks, hard surfaces and construction (4,519 m<sup>2</sup>) a target of 2.7 tonnes/m<sup>2</sup> is set for waste from the demolition and construction phase in total.



## 4.0 Statutory and Other Approvals

### Planning Permission and Listed Building Consent

Applications - separate applications for Planning Permission and Listed Building Consent will be made. The content of the two applications will be the same.

An initial discussion has been held with David Warden, London Borough of Enfield Planning Department's planning officer for the development. The main points of the discussion were:

Parking provision - David Warden advised that although there could be arguments for providing fewer spaces it is often found that people in the older age group have relatively high levels of car ownership. Subject to advice from LBE Highways David Warden felt that the level of parking shown was about right.

Pre-Planning Public Consultations - A community engagement specialist Green Issues has been appointed to manage the consultation process. The consultations were completed in January 2011 and a summary report of the consultations will be included with the planning application. Reports of the Community Engagement are in Appendix L

Sustainability - As the designs are being progressed on the basis of the latest version of the London Housing Design Guide it is intended to aim for Code for Sustainable Homes Level 4 for the new build and EcoHomes Very Good for the refurbished units. In addition London Borough of Enfield require new developments to provide 20% on-site renewable energy generation. It was acknowledged that this may be difficult on this type of scheme in a heritage setting.

Reports to support planning application - David Warden advised that the reports that should accompany the planning and listed building applications are:

- Design and Access Statement
- including designing to LHDG standards which are higher than LBE's present standards
- amount of and mix of development
- amenity space
- refuse provision
- Design Stage Assessment for CfSH Level 4 + renewable energy strategy
- Heritage Statement
- Noise Impact assessment + mitigation (of Broomfield Lane traffic on new dwellings)
- Transport statement - not a detailed report but a 1 page summary in D+A statement
- Ecology / Biodiversity report (agree details/extent with LBE bio-diversity officer Giles Sutton)
- Enabling development calculation using the English Heritage template and including proposed on-going maintenance provision

Overall View - David Warden advised that from a planning perspective:

- The proposed use - for elders housing is the most benign use possible.
- The scale of the proposed development is appropriate - especially as initial costings have shown that there is still a shortfall after receiving the LDA grant.
- The arrangement of the new cottages - built against the existing walls creates an intimate series of small courtyards.

### Heritage - Listed Buildings PPS5 Statement (Paul Drury Partnership)

The development proposals for Broomfield House will require substantial interventions in the listed house, its outbuildings and setting, but they will conform to the key principles of Planning Policy Statement 5; Planning for the Historic Environment (PPS5) and can be justified against its policies. The scheme takes into account the guidance contained in the associated Historic Environment Practice Guide (hereafter, the Practice Guide).

The historic buildings and their setting affected by the proposals are designated heritage assets in the terms of PPS5. The house is listed grade II\*. The east wall and stables are separately listed at grade II\* (the latter principally because attached to the wall). The south and inner walls (to which the bothy is attached), and the west walls of the park are listed grade II. The park is included on the English Heritage Register of Historic Parks and Gardens at grade II. The proposals would affect the principal house, the stable block and east wall, the "internal walls" including the bothy, the setting of these listed structures as they are seen from within and outside the park, and the character and appearance of the park. The proposals will not have a significant impact on the setting of the Lakes Conservation Area to the north and east of the park.

PPS5: HE6.2 requires that the significance of the heritage assets and the impact of the proposals should be set out. The scope of the proposal is set out in the application drawings and at 3.0 above. Its principal impact on the heritage assets, taking into account the relative significance of the various parts of the complex, will be the demolition and reconstruction of substantial parts of the fire-damaged principal house and the conversion and extension of the stable block; both of which are listed grade II\*. The impact on the grade II listed walls and the attached bothy will be more minor. The new housing in the former walled garden and the associated works have been designed to minimize their impact on the setting of the house and on the appearance of the listed park.

The significance of the heritage assets has been described in the report Broomfield House, Enfield: The Significance of the House and Park (The Paul Drury Partnership, July 2009). In addition, the archaeological significance of the site has been assessed in reports of various dates: see Greater London Historic Environment Record, refs. MLO59796; MLO82666; MLO81942; MLO82750; MLO82751.

In line with PPS5:HE7.3, the application will take into account the outcome of extensive consultation with the local community (see Appendix L). Options for the future of the house and stable yard were considered on the basis of the assessment of significance, and set out in the report, Broomfield House, Enfield: Options or

the Future (The Paul Drury Partnership, July 2009). The current proposals have been developed from the conclusion of the options appraisal, which identified housing for the elderly as the option best suited to the conservation of the historic buildings.

As required by PPS5: HE7.4 and HE7.5, the proposals will make a "positive contribution" to the "conservation of heritage assets". They will deliver substantial heritage benefits in line with those set out in the Practice Guide, para. 79. By repairing Broomfield House and its outbuildings, and returning them to viable use the proposals will "sustain and enhance the significance of", "remove risks to" and "support ... long-term conservation of" the heritage assets. The removal of the incongruous modern houses and garages from the stable yard will also be a significant enhancement. The scheme will make a positive contribution to economic viability and sustainable communities by providing new housing, a café, and community space. It will be designed in an appropriate and sensitive manner (see restoration/repair strategy, above). It will provide for public access to the most significant parts of the house including the stair hall and surviving 16th century timber frame.

As required by PPS5: HE7.5; HE9.5 and HE10, and in line with para. 80 of the Practice Guide, the new-build parts of the development will be designed in context with their historic surroundings. The scale and massing of the new housing will ensure that it is a discreet and respectful neighbour to the adjacent historic structures, and it will be screened in views from the historic park and the public realm. It will not have a significant impact on any significant views across, into or out of the park, or of the principal house. The layout of the new housing will be defined by the historic form and enclosures of the garden and courtyard areas. Facing materials will be chosen so as to be in keeping with their context and the spaces between the buildings will be landscaped and surfaced appropriately.

Policy PPS5: HE9 sets out the requirement to justify loss or harm to the significance of heritage assets against a general presumption in favour of their conservation. The proposals for Broomfield House involve the demolition of elements of the grade II\* listed buildings that may be regarded as causing "substantial harm" in the terms of PPS5:HE9, and as such "should be wholly exceptional". However, despite the radical nature of the intervention in some areas, it is the minimum necessary to achieve the public benefits that the scheme will deliver: the conservation of the most significant heritage assets and a viable new use for them.

The condition of the principal house is such that much of its fabric is beyond viable repair, and additionally, the relative significance of some surviving fabric is low. The scheme provides for the conservation and repair of significant historic fabric wherever possible. Where it is proposed that historic fabric be demolished or replaced, this can clearly be justified in order to secure viable reuse of the house. The most significant historic fabric (such as the 16th and 17th century timber framing) will be retained even where it has lost its structural integrity and must be supported by a new structure. The demolition of elements within the principal house has been dictated almost entirely on the basis that they are beyond repair, as set out in Figs. 23 and 24 of the 2007 Significance report. With reference to PPS5: HE9.2(ii)(c), the scheme depends on substantial public subsidy, without which it would not be viable. The repair strategy set out for the house (above) will generally apply to the other listed structures but the standard later 19th century stable fittings will be removed to allow for its conversion.

In line with PPS5: HE10, the repair of Broomfield House will enhance the park by reinstating the house as its historic and visual focus. The new build elements of the scheme will be designed in response to their historic context, to enhance the setting of the listed buildings.

### **English Heritage**

An initial discussion was held with Dorian Crone and Mike Dunn - English Heritage on Thursday 10.02.11

Following a review of the Stage D drawings and a description of the proposed scheme (which loosely followed the Design and Access Statement) both Dorian Crone and Mike Dunn were very pleased with the emerging scheme for Broomfield House and supported the principles behind the project.

Dorian Crone listed a few aspects of the scheme which he would like to discuss and explore in greater depth with Shephard Epstein Hunter during the application phase. However, these aspects are fairly minor:

- Landscaping - details not shown on drawings discussed
- Treatment of the ramped entrance/ access to Broomfield House
- Treatment of windows in the principle rooms to Broomfield House
- Treatment of joinery within Broomfield House
- Refuse store to Broomfield House
- Repositioning of the new railings and entrance gate across the main drive - suggestion that it should be in-line with the original line of the garden wall
- Fenestration treatment of the Stableblock
- Servicing - provision of the WCs for the public / community use areas of Broomfield House
- Treatment of the foundations - especially in proximity to the historic walls

Mike Dunn stated that he would happily submit a letter of support from English Heritage to Enfield Council when needed.

## Building Control

A meeting with Enfield Building Control was held on 25.01.11

Following a brief description of the proposals the subsequent discussion covered the following points:

Part L - Conservation of Energy: As previously discussed with Jan Bienek the various elements of the development will be designed to the following parts of Part L

- New build cottages in the walled garden - L1A 2010
- Refurbished Stableblock (and Bothy) - L1B 2010
- Restored Broomfield House - although a high proportion of the restored Broomfield House will be new construction there is a significant amount of surviving fabric that must be retained (Listed Grade II\*). For elements such as windows and doors which are beyond repair English Heritage will require that the new elements reproduce the mouldings and details.
  - Flats - L1
  - Community/public pace L2B 2010

Part B - Fire Safety and Means of Escape:

Broomfield House (10094/010c)

- Compartmentation between residential areas and communal areas - walls and floors 1 hour
- Occupancy of individual community/cafe rooms is less than 60 - means of escape in a single direction and travel distances are OK
- Doors onto Historic Hall should be FD30s
- Ground floor flats - arrangement as shown is OK providing that
  - front doors are FD30s
  - there is a ½ hour protected hall within each flat (internal doors FD30)
- First floor flats - arrangement as shown is OK providing that
  - An additional FD30s door and screen is provided to divide the residential landing into two parts
  - Front Doors to flats are FD30s
  - there is a ½ hour protected hall within each flat (internal doors FD30)
  - the residential stair has 1 m2 openable ventilation
  - windows from flat access across the historic landing should be 'escape' windows
  - door between historic landing and residential corridor needs to be FD30s and fitted with a fail safe magnetic lock.

Stableblock

Ground floor flats

- doors to access gallery will be FD30 - gallery is open to external
- none of the inner halls require to be fire rated

First Floor

- doors to access gallery will be FD30 - gallery is open to external
- only the inner hall to the furthest flat is required to be fire rated

Cottages and Bothy - No Issues

Other General Points:

- All houses / flats will require local fire alarm - smoke detector in hall
- Communal / Cafe Area will need a linked fire alarm system to BS 5839 with call points at final exits
- Residential common area (corridor and staircase) require emergency lighting
- Communal / Cafe areas require emergency lighting on escape routes and in any enclosed space >8 m2
- Provision should be made for fire engine access to within 45m of any point in any of the dwellings.
  - This will not be a problem if fire engine access can be achieved to outside Broomfield House and the stable yard parking area (marked FE1 and FE2).
  - If fire engine access cannot be achieved within Broomfield Park and the engine has to stop on Broomfield Lane (marked FE3 and FE4) then most of the homes are beyond this distance
  - It may be possible to mitigate increased distances if domestic sprinkler systems are installed (these can be gravity fed off a tank or pumped directly from the mains)

Part K - Protection from Falling:

- The handrail is to be restored using elements of the original staircase which were salvaged following the first fire. However the original handrail is low - approximately 790mm. AG commented that this is likely to be acceptable in view of the heritage and that the staircase does not serve any public spaces.

Part H - Refuse

- Communal refuse storage is to be provided in two separate refuse storage areas - one to the side of Broomfield House and one in the corner of the stableyard parking area. AD H suggests that the maximum distance that residents should carry their waste should normally be 30m. (A post meeting check on distances shows that for some of the units in the stable yard the distances are slightly further than this - but mitigated by the management of refuse in a single central location.)

### Secure by Design

A meeting was held with CPDA Enfield Officers (Secure By Design) on 18.01.11, Following a brief presentation of the proposals the subsequent discussion covered the following points:

Secure by Design Certification - the scheme will adopt principles of Secure by Design wherever possible. Where the heritage nature of the existing buildings (Both Broomfield House and the Stable Block are separately listed Grade II\*, the park/gardens are listed and the historic wall is listed) conflicts with SBD requirements MS confirmed that through dialogue they would accept alternative ways of achieving equivalent security.

#### Broomfield House:

- install sash locks to all windows
- install laminated glass to all ground floor windows - where this isn't practical (restored existing windows) acceptable alternatives would be laminated secondary glazing or solid timber shutters
- if party walls are timber studwork they should be lined with plywood
- internal doors to flats should be PAS24
- if possible incorporate a low railing (900mm high) around the planting beds to prevent an easy step over and create a zone of defensible space - alternatives to railings could be a dense yew hedge.
- avoid taking the path up to the French doors to the flat
- provide low level lighting around the rear of Broomfield House

#### Stable Block

- install sash/casement locks to all windows
- install laminated glass to all ground floor windows - where this isn't practical (restored existing windows) acceptable alternatives would be laminated secondary glazing or solid timber shutters
- if party walls are timber studwork they should be lined with plywood
- windows and front doors to flats should be PAS24 (this will be difficult due to heritage requirements which will require one-off designed windows - equivalent security measures may be acceptable)
- the arched gate in the corner to Broomfield Lane should be locked and only used by residents

#### Cottages and Bothy:

- install sash/casement locks to all windows
- install laminated glass to all ground floor windows
- windows and front doors to cottages should be PAS24 (this will be difficult due to heritage requirements which will require one-off designed windows - equivalent security measures may be acceptable)
- provide an additional window to the rear of cottage opposite refuse store - to improve natural surveillance.

## 5.0 Community Engagement

For the full Community Engagement Report refer to Appendix L

### Overview

In December 2010, Enfield Council embarked on a full programme of community consultation on its proposals for Broomfield House. In order to ensure that the community consultation programme was as thorough as possible, Enfield Council appointed Green Issues Communications, a specialist consultation company, to facilitate the consultation programme on the restoration of Broomfield House.

The public consultation culminated in two workshops and a two-day public exhibition. The workshops focused on the local groups which have been involved with Broomfield House for many years and those residents who will be included in Enfield Council's Statutory Consultation on any proposals to restore Broomfield House. The exhibition focused on the wider public within the Palmers Green area.

There was widespread agreement with the principle of the proposed restoration at both the workshops and the public exhibition. Broadly speaking, the feedback received at the exhibition was more positive than that received from local groups at the workshops, with a large percentage of attendees expressing general or qualified approval for the proposals.

In addition to the public consultation, the project team met with key local elected representatives. A list of those met with can be found below.

### Public Exhibition

Invitations to the exhibition were sent to over 9,000 local households and businesses, along with key political representatives and all councillors representing Enfield Borough Council. Each attendee was encouraged to complete a feedback form and return it to Green Issues Communications, either at the exhibition itself or by freepost afterwards.

The exhibition was attended by a minimum of 283 local residents. As at 23 February 2011, 205 completed feedback forms had been returned. This represents a response rate of 72.5% of attendees, which is very high. Green Issues Communications also received 109 individual signed supporter cards at the exhibition and following the exhibition by post. This represents a significant amount of strong support for the restoration of Broomfield House.

Overall, 165 respondents made some form of positive comment about the proposals. Expressed as a percentage of the total respondents who completed a feedback form, this shows a very high percentage (80.5%) of respondents were generally in favour of the proposals.

In addition to the public exhibition, the project team ran an exhibition preview session for elected representatives in the Council Chamber at Enfield Civic Centre. Seven councillors chose to attend this session.

Enfield Council is pleased with the high turnout at the public exhibition and believes that this high turnout reflects how strongly local residents feel about the future of Broomfield House. It is also pleased that so many attendees showed their support for the emerging proposals for the restoration of Broomfield House. More information on the public exhibition can be found in the Exhibition Report drafted by Green Issues Communications and appended to this document.

### Workshops

The workshops on the emerging proposals for Broomfield House were designed to facilitate dialogue between those residents who live closest to Broomfield House and who would be involved in Enfield Council's Statutory Consultation and local groups which had a history of involvement with Broomfield House. In addition to the local residents invited, members of the following local groups received an invitation to the workshops:

- Age Concern Enfield
- Bromfield Residents' Association
- Broomfield House Trust
- Enfield Over 50s Forum
- Enfield Society
- Fox Lane & District Residents' Association
- Federation of Enfield Residents' and Allied Associations
- Friends of Broomfield Park
- Group for the protection of the Broomfield Covenants
- Improving Our Place
- Lakes Estate Conservation Area
- Southgate Civic Trust

The purpose of running these workshops was to provide an update to local residents who were involved in Enfield Council's workshops relating to the Stage A proposals, to explain the emerging Stage D proposals, to gain feedback on the emerging proposals and to answer questions that residents had on the emerging scheme.

The workshops opened with a short presentation on the emerging proposals for the restoration of Broomfield House given by Enfield Council, Shephard Epstein Hunter and Green Issues Communications. Following this presentation, residents split into groups to discuss the details of the proposals in greater depth with members of the project team. This allowed a question and answer session to take place between small groups of residents and the project team.

As was generally the case at the public exhibition, attendees did not raise concerns about the principles of the scheme. However, at the workshops residents raised concerns about the scheme's details. Full details of the feedback received during the workshops can be found in the Workshop Report, compiled by Green Issues Communications and appended to this report.

#### **Consultation with Elected Representatives**

The following elected representatives were met with as part of this consultation programme:

##### Enfield Council

- Cllr Doug Taylor (Labour, Leader)
- Cllr Bambos Charalambous (Labour, Member for Young People & Culture, Leisure, Sports and the Olympics)
- Cllr Achilleas Georgiou (Labour, Deputy Leader)
- Cllr Del Goddard (Labour, Member for Regeneration)
- Cllr Alan Barker (Conservative, site ward: Southgate Green)
- Cllr Henry Lamprecht (Conservative, site ward: Southgate Green)
- Cllr Ann Zinkin (Conservative, site ward: Southgate Green)

##### Member of Parliament

- Mr David Burrowes MP (Conservative, Enfield, Southgate)

##### Greater London Assembly

- Ms Joanna McCartney (Labour, Enfield & Haringey)

## 6.0 Procurement of Development Partners

The procurement of suitable Registered Social Landlords (RSLs) to lead on the development of Broomfield House will be dictated by the OJEU process. The value of the contract will exceed both that of the Services threshold most commonly associated with RSL procurement (£156,442 in 2010), and (due to the need for the RSL to manage the refurbishment works), would also trigger that threshold for Works (£3.9 million).

The OJEU process is mandated by European law for contracts anticipated to be over the above thresholds. The process involves in simple terms the publication of an electronic notice on the online European Journal, and then a tender period which consists of specific time periods, also governed by European law. There are three specific models of the contract which can be applied. The most likely to apply in this instance is the use of the OJEU Restricted procedure, which is the standard model most Local Authority procurements follow at OJEU level. This allows for the selection of a shortlist of bidders following an initial pre-qualification questionnaire

The process can be summarised as follows:

- Issue of OJEU notice - Pre-Qualification Questionnaires available to bidders
- Submission of PQQs (37 calendar day period)
- Review of PQQs and selection of shortlist (timescales to be agreed)
- Submission of tenders by bidders (40 calendar day period)
- Selection of contractor (timescales to be agreed)
- OJEU Standstill period (10 days allowing challenges by unsuccessful bidders)

This means the process would require a minimum of 87 statutory calendar days under the OJEU guidelines, in addition to any internal review time required. One major factor in this is that the OJEU process places all responsibility for ensuring the relevant contractor's submissions are suitable on the client and their consultants, and thus detailed submissions such as health and safety information, sustainability, design, etc. will need to be reviewed for all contractors to ensure their compliance.

However, it should be noted that a number of Local Authorities have utilised the longer, competitive dialogue procedure for selection of RSLs due to the complicated nature of the services to be provided. This carries no statutory timescales on the latter stages of the process, but is generally longer in length than the standard processes. The process can be summarised as follows:

- Issue of OJEU notice - Pre-Qualification Questionnaires available to bidders
- Submission of PQQs (37 calendar day period)
- Review of PQQs and selection of shortlist (times to be agreed, but usually 15 days)
- Dialogue Phase (timescales to be agreed, but usually minimum 60 days)
- Submission of final tenders (timescales to be agreed)
- Selection of contractor (timescales to be agreed)
- OJEU Standstill period (10 days allowing challenges by unsuccessful bidders)

Given the scale of the project, and the need to progress the works, it may be preferable to opt for the restricted process, rather than adopting the competitive dialogue route.



## 7.0 Construction Logistics and Programme

The constraint of the Broomfield House site and its location with a public park poses a number of issues regarding construction logistics. The contractor should be encouraged to consider the logistics at tender stage. This would ensure that they have the necessary expertise to complete the project, and are made aware of the site specifics. The key issues are summarised below:

- Access to Site
- Site Security and Safety
- Internal Logistics of Site
- Demolition works on listed site.

### Access to site

The main access to site is immediately off Broomfield Lane, and through an existing archway in the 16-17th century boundary wall, which is grade II listed. Access through the archway is limited, the maximum width being 3.390m and maximum height being 3.701m. Plant is likely to be able to access the site through the archway, but extreme caution would need to be exercised with full time bankman utilised.

Potential approaches to managing the access to the site would include:

- Use of crane to lift large delivery items over the wall. This could potentially be a cost prohibitive approach, as unless the contractor were able to time all the planned works to maximum effectiveness, then the crane would need to be on location for an extended period of time. The crane would still require smaller deliveries and plant to utilise the archway. There is a potentially risk over damage to the wall and therefore some form of protection over the swing line would be required. Alternatively, a tower crane can be set in the kitchen garden area, although same level of protection will be required to the wall.
- Restriction of delivery sizes and vehicles to fit restrictions of archway. This could potentially reduce the risk of damage to the archway, but could prolong the programme due to longer timescales need for delivery, and greater amounts of time and staff required for handling of materials. There is also the risk that this could restrict any potential for off site construction of the new build elements, due to the height restrictions of the archway.
- Alternative access routes to the site exist through the public park utilising existing footpaths, but would pose greater risk to the general public and closure of existing paths for use as access roads. It is also anticipated that the use of these pathways could lead to further costs regarding widening and strengthening the surfaces, and remedial works post construction.
- Utilising the existing pathways elsewhere in the park would need to be resolved prior to the construction tender being carried out, as both processes could take time to reach a resolution, and could delay construction if undertaken post tender. However, if both these options were rejected, then the use of crane or smaller delivery vehicles could be posed to potential contractors so as to understand their approach and costings.

### Site Security and Safety

The site is well protected on all boundaries due to the presence of the existing 16-17th century wall. However, there are open walkways between the park and the Broomfield House demise. It is therefore to be considered both from a site security and public safety perspective what measures should be taken to ensure the site boundary was secure. It is proposed that the bidding contractors should be queried on how they would address this issue, and what physical security measures should be put in place.

#### Internal Logistics of Site

It is currently envisaged that the works on the site will form a number of discreet packages of work, such as those to Broomfield House itself, the demolition of the existing cottages and construction of new properties, and the restoration and conversion of the Stable Block. It is also anticipated that these packages will proceed in parallel during the construction phase.

The nature of the site, and existing garden areas to be preserved within it, therefore the space available for the main site compound and materials storage will be mostly limited to a central corridor running from the archway to the rear of the site. This limits the spaces available, may result in materials for the three separate elements being stored centrally, and could restrict access to Broomfield House itself if the compound were not managed effectively.

It is proposed therefore that the contractor be asked as part of the tender to set out their proposed methodology for managing the site, its layout, and internal access issues.

#### Demolition works on listed site.

Demolition works on listed sites are always subject to extended scrutiny and care due to the need to ensure features to be retained are not subject to any damage resulting from the demolition process. This can lead to extended demolition periods, as additional time may be required for careful demolition by hand. This could potentially be the case with at least one of the existing cottages, due to its proximity to the Stable Block. Further issues on demolition are apparent with Broomfield House itself, where it is currently anticipated that the removal of the existing scaffolding will require the demolition of unsafe elements of the structure prior to work being carried out to retain and restore what can be preserved. It is anticipated that the level of care and methodology employed in this demolition will need to be of the highest level, to ensure the risk of any damage to the remaining sections is at a minimal level.

Further care will be required during the demolition stage of the project to protect the park and it's users from the debris, in particular special consideration should be given protecting the ponds from contamination. Given the potential impact careful demolition could have on the project from both cost and project timescale perspectives, it is proposed that this form another specific query for bidders to respond to as part of the tender process.

**Programme** (See Appendices I)

The programme for Broomfield House redevelopment is based on the initially procuring a development partner and design team, whilst the planning process is undertaken. Detail design is then completed prior to procurement of a contractor. The anticipated construction programme will be 20 months.

## **8.0 Legal / Covenants**

LBE Legal Department has sought Counsel's advice on the possible way forward so that the proposed development can proceed unencumbered by the restrictive covenant on the title.

Counsel is of the opinion that Broomfield Park could be appropriated by the Council for planning purposes thereby overriding the restrictive covenant.

The Planning Act 2008 has extended the powers under sec 237 of the Town and Country Planning Act 1990 so that now user created by contract can be overridden. The Council would need to seek authority for the appropriation of Broomfield Park for planning purposes under section 122 of the Local Government Act 1972. The Park is clearly open space for the purposes of the consultation requirements laid down by section 122(2A) of the 1972 Act.

If this course were to be followed (and it should be remembered that it is a new and untested piece of legislation) then compensation would be payable to the persons affected (i.e those with properties to the south of Broomfield Park). Professional valuation advice would need to be sought. Because it is new legislation, it would be prudent to go back to Counsel for further advice.



## 9.0 Construction (Design And Management) Regulations 2007

The Construction (Design and Management) Regulations 2007 (CDM Regulations) places duties upon clients, designers and contractors to ensure health and safety is taken into account and then co-ordinated and managed effectively throughout all stages of a project; from conception, design and planning throughout to the execution of works on site, subsequent maintenance, repair and eventual demolition.

The key objectives of CDM are:

- A realistic project programme with adequate time allowed for planning, preparation and the work itself
- Early appointment of key roles in the project team
- Competent duty holders with sufficient resources to meet their legal duties
- Early identification and reduction of risks
- Provision of health and safety information from the start of the design, through construction, maintenance and demolition
- Co-operation between duty holders
- Effort and resources proportionate to the risk and complexity of the project to be applied when managing health and safety issues

Designers in particular must consider the health and safety implications of the actions they take and to show that where options were available to them they used health and safety as one of the selection criteria. The designer duties are qualified by that which it is reasonable for a designer to do at the time the design is prepared and by what is reasonably practicable to implement. In determining what is reasonably practicable, the risk to health and safety produced by a feature of the design has to be weighed against the cost of excluding that feature by:

- Designing to avoid risks to health and safety
- Tackling the causes of risks at source; or if this is not possible
- Reducing and controlling the effects of risk by means aimed at protecting anyone at work who might be affected by the risk and so yielding the greatest benefit

The designer(s) has a significant contribution to designing out risk and by working with the CDM Co-ordinator. Attention will be given to the following:

- Co-ordination of the design process
- Establishing the process of hazard identification and design risk assessment
- Establishing health and safety objectives and priorities of the design team
- Understanding how the structure will be demolished/constructed
- Understanding the required phasing of the project and temporary works
- Interfaces and separation of the works from public areas
- Cleaning, maintenance and access strategy
- Architectural design
- Structural design

- Civil design
- Geotechnical design
- M&E design
- Co-ordination with other works in the vicinity

The following are the priorities of the HSE for the construction industry and the design team will give careful consideration to them as the design develops from this point forward:

- Working at height
- Hand arm vibration syndrome (HAVS)
- Noise
- Scaffolding and access requirements
- Transport (plant, vehicles and pedestrians)
- Manual handling
- Asbestos
- Lifting operations
- Specifying less hazardous materials eg solvent free
- Avoiding processes which create hazardous fumes, vapours, dust, noise or vibration
- Considering pre-fabrication off site
- Early installation of staircases
- Welfare

Specific Design Considerations for Broomfield House

Surveys

The structure as it stands is currently very unsafe and will need to be fully structurally surveyed prior to any other intrusive surveys taking place such as for ground conditions, services and asbestos. This includes the Stable Block although is not felt in such poor condition.

It is believed that the client has an initial existing Structural Survey but that this may require updating. Other localised surveys around the site have been carried out for Ecology, Transport and Topographical and enquiries are ongoing regarding utilities. Further surveys will be instructed as the project progresses and once the structure/site is safe.

Demolition

It is currently believed that most of the Broomfield House main building structure will be demolished prior to the restoration along with parts of the Stable block. With the building currently being unsafe and also Grade 2 listed, demolition will need to be carried out in a highly controlled and logical manner and by competent contractors.

Main historic features of both buildings will however remain in place which will also present a challenge to the demolition design and will be considered further as the project progresses.

#### Asbestos

The structures contain asbestos. A 'refurbishment and demolition' survey will be carried out once the building have been fully structurally surveyed and deemed safe but in any case in advance of any works on site.

If applicable a management plan will need to be devised however it is thought that much if not all of the asbestos will be removed from the sites.

#### Waste and Environment

The project will be subject to the Site Waste Management Plan Regulations 2008 and waste may be of mixed types including hazardous (asbestos). Baring in mind the proximity of the buildings to a public park, considerations will need to be given on many levels as to the removal and storage of waste on site as well as the disposal.

Where feasible, material re-use will be encouraged and an initial Site Waste Management Plan detailing how much and the type of waste expected to be produced during the project has been devised By WS Atkins PLC.

Care will also need to be taken to ensure the pond adjacent to the site is not subject to any waste or effluent from the site contaminating it or any of the wildlife that live around or within the pond. This includes the effect of dust which can affect humans as well as ecological systems and construction processes will need to be thought about by the designers along with the time of year for the works during the next stage of project.

#### Working in Public Spaces and Traffic

Broomfield House and Stables are located within a Public Park which will remain open throughout the project. High consideration will be given to public protection measures at all stages of the project bearing in mind children will play and be in the general vicinity of the project. This will include fencing of a high security standard such as closed board fencing with vision panels.

Traffic management will also need to be considered within the park and surrounding areas due to again persons using the park for leisure activities, roads within the park not being of the required width for construction vehicles and the vicinity to residential areas. Speed should be considered at all times with relevant measure in place including ensuring construction vehicles are clean when leaving site.

A Transport Plan has been devised by WS Atkins PLC and which will have been submitted within this Stage D report. This has identified one key issue in that the access space for Fire Appliances through the man access route is limited and that alternative routes and access arrangements will need to be put in place. This will form part on the on going design process.

#### Cleaning and Maintenance

The completed structures will be required to be maintained and cleaned and as such the design will need to incorporate the necessary features to perform these tasks both inside and out bearing in mind the Grade 2 listed status of the building and the need for discreet equipment where specified. The Cleaning and Maintenance Strategy will form part of the handover documentation to the client at project completion and will especially need to encompass the original historic features.

#### Designer Risk Assessments and Competency

This is an ongoing process throughout the design but the designers have been requested to make an early start on this process in line with CDM (Design and Management) Regulations 2007 and to look at designing out all significant and unusual risks and where this is not possible, mitigating them to an acceptable level.

The designers have also provided their competency statements in line with Appendix 4 of the CDM (Design and Management) Regulations 2007.

## 10.0 Risk Management

There are a number of a risks which have been associated with this project, they are summarised in the risk register presented in the appendices of this Stage D report. Some of the key risk which is likely to have an impact of this project is highlighted below.

### Funding

The project is to receive funding £5.97 million from Greater London Authority (GLA), however, due to current economic climate and the pressures on public sector budgets. It may not prove possible for GLA to fully or partly honour their commitment to fund the project. Mitigation strategy is to review the stage A report and Paul Drury options report and produce a new report detailing a range of further viable options that do not depend on public subsidy.

### Registered Social Landlords

Due to the nature of the site and listed building status there is a risk that the project may not attract the required interest from Registered Social Landlord (RSL). The strategy agreed is to soft test the market with key RSL's who currently operates in the borough or are interested in operating in the borough. The RSL's targeted should have previous experience in independent living for older people and experience of developing and maintaining historic buildings.

### Covenants

There is a risk that the covenants placed on the site could potentially block the proposed development and uses of Broomfield House and Stables. LBE legal to advise the development team on the full impact of the covenants and the proposed approach required to develop the site. Bearing in mind that the previous scheme was going to land tribunal but withdrawn at the last moment. Subject to legal advice, appropriation may be the best way forward.

### Budget

The stage C cost plan is circa £7 million, there will be funding gap of circa £2 million pounds. Through early discussion with RSL's, an estimation of possible gap funding from Homes and Communities Agency will need to be assessed. In addition, as the scheme includes community space, there may be the option for Heritage Lottery Funding.

### Sustainability.

The scheme will be required to meet Code for Sustainable Homes (level 4) for all new developments and Ecohomes assessment for the buildings that will be refurbished. The risk of the assessment is that due to the constraints around the building and limitation due to historical features the required levels may not be reached. To meet the required standard, costly introduction of energy saving measures and renewable could exceed the project budget.

### Utilities

Insufficient capacity of local infrastructure to support the proposed development, in particular the requirement for a sub-station. The services consultant to make early enquires from utilities companies to assess whether infrastructure improvement works will be required.

### Structural Stability

There is a risk that due to continual deterioration of the site, some of the historic features may have deterioration and the historical significance has decreased. There is also significant risk that that on strike the scaffold part of the Broomfield House will collapse. Careful consideration will be required in construction methodology.

### Emergency Access

The grade II listed arched entrance will restrict fire appliances from entering the site of Broomfield House and Stable Gardens. Alternative access subject to modifications via Aldermans Hill will be possible. However, there is a risk that building control or fire officer may insist on the design incorporating sprinkler system.

### Vacant Possession

There is a risk that the current occupants of cottages in stable gardens will not vacate the cottages, resulting in delay in commencing work on site. London Borough of Enfield housing department have commenced early dialogue to ensure vacant possession is offered to the development partner in timely manner.



## 11.0 Cost Summary, Valuation and Budget

### Cost Summary and Budget

The following provides a summary of the construction costs, professional fees and Client costs for the project. The detailed Cost Plan is included as an Appendix.

Reference should be made to the Cost Plan for details of the drawings used in the preparation of the costs.

The construction period has been assumed to be 20 months with commencement on site in 1st Quarter 2012.

It is assumed the project budget is the total construction, professional fees and LBE client costs included within the Stage C Report, as £8,000,212 excluding VAT. A summary of the main changes between Stage C and D costs is included in the Cost Plan within the Appendix.

The following provides a summary of the project costs.

Item	Stage D (£)	Stage C (£)
Demolitions	71,726	160,031
Broomfield House	3,068,662	2,814,506
The Bothy	250,572	245,181
Stable Block	1,294,187	1,273,358
Kitchen Garden Cottages	1,289,292	1,168,552
Landscaping & External Works	763,301	338,549
Construction Total £	6,737,740	6,000,177
Professional Fees	1,347,548	1,200,035
LBE Client costs	800,000	800,000
<b>Project Total £</b>	<b>8,885,288</b>	<b>8,000,212</b>

The following Assumptions and Exclusions apply to the costs, in particular the exclusion of VAT.

Assumptions:-

- All works undertaken through a Main/Principal Contractor
- Works to be undertaken during normal working hours
- The buildings will not be occupied for the duration of the works
- All works subject to Planning Approval/Listed Building Consent
- Construction commences in 1st Quarter 2012, with a 20 month construction period

Exclusions:

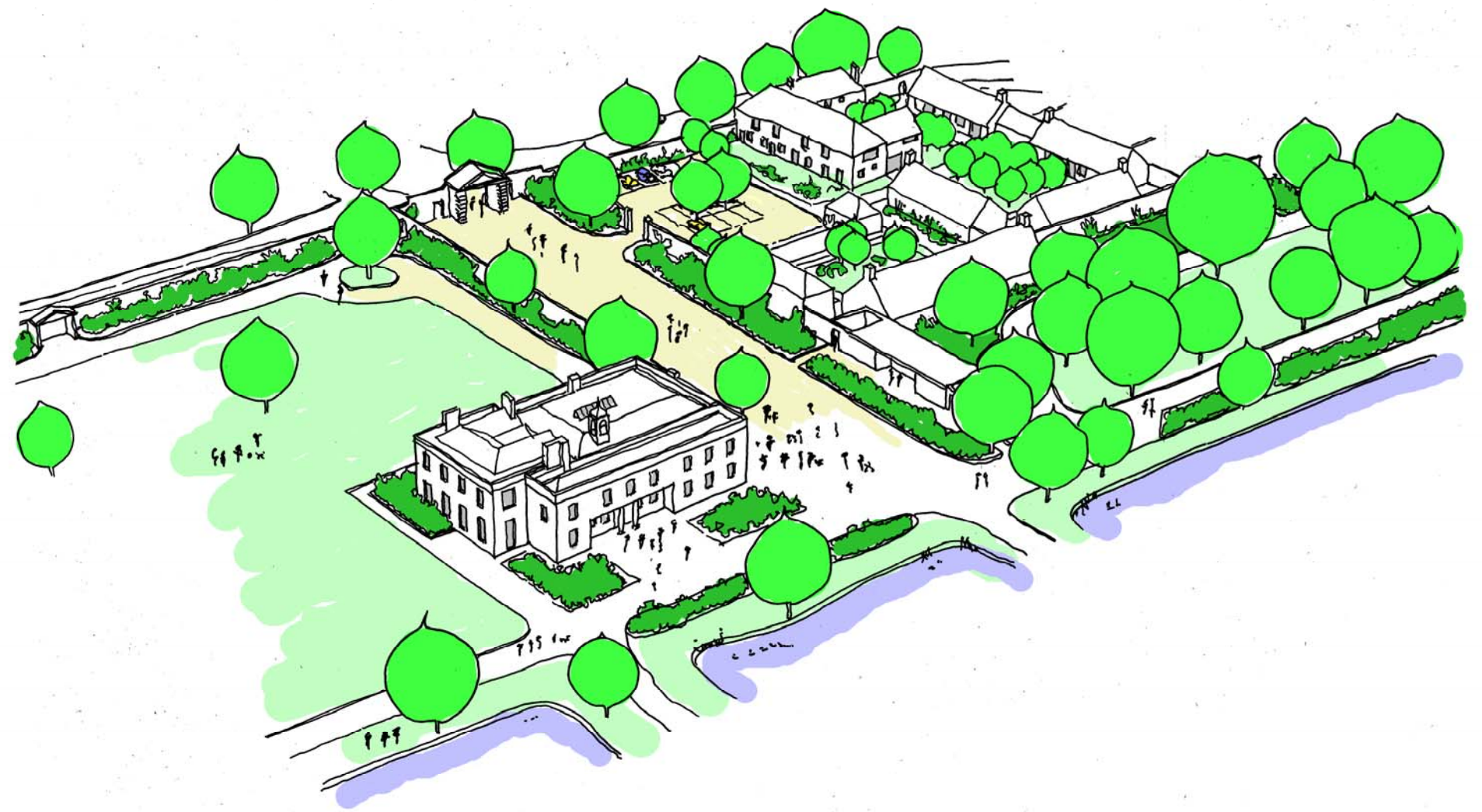
- Planning and Building Regulations fees and charges
- Value Added Tax
- Project insurances including non negligent insurance
- Finance charges
- Contributions to Statutory Authorities
- Capital Allowances
- Client contingency
- Land cost and legal fees
- Agency fees
- Site surveys and investigations
- Remediation and removal of contaminated materials
- Abnormal ground conditions
- NHBC registration
- Archaeological costs
- Highway enabling works
- Offsite services infrastructure upgrades
- Asbestos surveys and removal, except removal of roof sheeting containing asbestos to Garages and Stable Block which is included
- Loose furniture, fittings and fixtures

### Valuation

Valuation not yet received







back cover: aerial view over the restored broomfield house towards the stable block  
front cover: present view of broomfield house over the ponds