PJ Livesey GROUP

REVISIONS

Rev	Date	Description

AREA OF EXISTING BUILDINGS 2404 m2

EXISTING SURFACE WATER SEWER

OUTFALL TO EXISTING POND

AREA OF EXISTING FOOTPATHS AND HARDSTANDING 4850 m2

EXISTING HARD STANDING AREAS THAT ARE PROVEN TO DRAIN TO OUTFALL =

Existing Paths & Hard standing	4850m²
Existing Buildings	2404m²
Total = ~~7254~~m²	

WARNING
Dimensions must not be scaled from this drawing.
Dimensions required are to be obtained from the drawing office

Site Plan Showing Areas for Flood Risk Drainage Assessment

069/4002

Scale 1:500@A0 Date May 06
Drawn jpc Checked

Essendon Hall,
Bedwell Park,
Essendon,
Herts.

P.J.Livesey (London) Ltd
Ashburton Park
Ashburton Road West
Trafford Park
Manchester M17 1AF
Tel : 0161 873 7878
Fax : 0161 873 8185
design@pjlivesey.co.uk

The P. J. Livesey Group Ltd
www.pjlivesey-group.co.uk

4002 WHOLE SITE TOPO FRA (WSP1).dwg

PJLivesey

REVISIONS

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WELWYN HATFIELD COUNCIL

Council Offices, Welwyn Garden City, Herts, AL8 6AE
Telephone: Welwyn Garden (01707)357000

TOWN AND COUNTRY PLANNING ACT 1990
PLANNING DECISION NOTICE – PERMISSION

S6/2006/365/FP

Conversion of Listed Building into 17 apartments and demolition of modern 1980's extensions; 14 new build dwellings and 28 garage courtyard blocks, together with 40 parking spaces across the site, incorporating new build tennis court house and integral garage, proposed walled garden dwelling and garaging; conversion and extensions to eastern and western walled garden buildings to form swimming pool and storage/greenhouse building, plus associated landscaping

at: BEDWELL PARK, CUCUMBER LANE, ESSENDON, HATFIELD,

Applicant Name And Address

PJ LIVESEY GROUP LTD,
MILLGATE HOMES,
ASHBURTON PARK,
ASHBURTON RD WEST,
TRAFFORD PARK,
MANCHESTER
M17 1AF

In pursuance of their powers under the above mentioned Act and the Orders and Regulations for the time being in force thereunder, the Council hereby **PERMIT** the development proposed by you in your application received with sufficient particulars on 22/03/2006 and shown on the plan(s) accompanying such application, subject to the following conditions:-

1. The development to which this permission relates shall be begun within a period of 3 years commencing on the date of this notice.

REASON
To comply with the requirements of Section 91 of the Town and Country Planning Act 1990. (as amended)

2. Before construction works commence on site, full details or samples of the materials to be used in the external construction of the development hereby permitted shall be submitted to and approved in writing by the Local Planning Authority.

Continuation...

REASON
To ensure that the external appearance of the development is not detrimental to the character of the locality.

3. The development shall only be carried out in accordance with a landscaping scheme which shall be submitted to and approved in writing by the Local Planning Authority before the development commences. The scheme shall show:-
(1) which existing trees, shrubs and hedges are to be retained or removed.
(2) what new planting is proposed, together with details of the species, size and method of planting.
(3) what measures are to be taken to protect both new and existing landscaping during and after development.
The scheme approved shall be implemented and completed in all respects by not later than the planting season following completion of the development, and any trees or plants which within a period of 5 years from completion of the development die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of similar size and species, unless the Local Planning Authority gives written consent to any variation.

REASON
To enhance the visual appearance of the development.

4. Before any other works on site are commenced in relation to the development permitted, a one metre high chestnut pale fence, or other suitable barrier shall be erected around the outer limit of the crown spread of all trees on site shown to be retained on the approved plan. This fencing shall be retained in this position until the whole of the development is completed. During this period no materials whatsoever shall be stored, fires started or service trenches dug within these enclosed areas without the written consent of the Local Planning Authority.

REASON
To ensure that the existing trees shown to be retained, are safeguarded during building operations.

5. No trees shall be felled, lopped, topped, damaged or otherwise destroyed, without the prior consent in writing of the Local Planning Authority.

REASON
The existing trees represent an important visual amenity which the Local Planning Authority consider should be maintained.

Continuation...

6. Notwithstanding any details submitted with the application, prior to the commencement of the development hereby permitted a Schedule of Works and Repair for the principal listed building, former gardener's cottage, wall surrounding the walled garden, boundary wall in front of the principal listed building, Pulhamite rockery as well as all historic brick and stonework including any piers and gates within the site shall be submitted to and approved in writing by the Local Planning Authority. The scheme as may be approved shall be completed prior to the occupation of any part of the development hereby permitted unless otherwise agreed in writing with the Local Planning Authority.

REASON
To safeguard the historic and architectural integrity of the Grade II listed building in accordance with policy R25 of the Welwyn Hatfield District Plan 2005.

7. Notwithstanding the provisions of the Town and Country Planning General Permitted Development Order 1995 (or any order revoking, re-enacting or modifying that Order), no development falling within Classes A, B, C, D, E, F, or H of Part 1 or Class A of Part 2 of Schedule 2 to that Order shall take place without the prior written permission of the Local Planning Authority granted on application.

REASON
To enable the Local Planning Authority to exercise control over the siting and size of any future buildings or structures on the site in the interests of safeguarding the openness of the Green Belt.

8. Notwithstanding the any details submitted with the application, details of all new means of enclosure to be erected within the site or along its boundaries shall be submitted to the Local Planning Authority for its prior approval in writing. The scheme as may be approved shall be completed prior to the occupation of any of the units hereby permitted and retained thereafter, unless otherwise agreed in writing with the Local Planning Authority.

REASON
In the interests of visual amenity.

9. Details of any external lighting to be erected within the site shall be submitted to the Local Planning Authority for its prior written approval.

REASON
To avoid any potential for light pollution, in the interests of visual amenity.

10. No demolition or development shall take place within the application site until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and agreed in writing by the Local Planning Authority. The development shall thereafter be carried out in accordance with the approved scheme.

Continuation...

REASON
To ensure that remains of archaeological importance likely to be disturbed in the course of development are adequately recorded in accordance with policy R29 of the Welwyn Hatfield District Plan 2005.

11. Before any development commences, details of existing and proposed ground levels, finished floor levels of the dwellings and garages, driveways, pathways and parking areas hereby permitted shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out and completed thereafter in accordance with the approved details.

REASON
In the interests of existing trees and the appearance of the development in the Green Belt.

12. Prior to the commencement of work on any building hereby approved, the setting-out and finished floor level of each building shall be inspected and approved by the Local Planning Authority in writing.

REASON
To ensure the satisfactory appearance of the development, and to ensure a satisfactory relationship between features and buildings both on and off the site.

13. Before any development commences, full details of the proposed demarcation and extent of the associated individual curtilages of the six courtyard conversion dwellings, the twelve new courtyard buildings and the detached dwellings on the Tennis Court and Walled Garden shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out and completed in accordance with the approved details.

REASON
To enable the Local Planning Authority to have control over the development of the land having regard to the Green Belt location of the site and in accordance with policies RA1, D1 and D2 of the Welwyn Hatfield District Plan 2005.

14. Before any development commences, full details including levels, sections, constructional and surfacing treatment of the proposed access drives, vehicle parking and turning areas, all pedestrian paths and any means of illumination thereto shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out and completed in accordance with the approved details.

REASON
To ensure a satisfactory standard of development in the vicinity of Grade II Listed Buildings and to protect important tress to be retained as part of the development.

Continuation...

15. Prior to the commencement of the development hereby permitted details of foul and surface water drainage shall be submitted to and agreed in writing with the Local Planning Authority. The scheme shall thereafter be carried out, completed and retained in accordance with the approved details prior to the occupation of the development unless otherwise agreed in writing with the Local Planning Authority

REASON
To ensure the satisfactory drainage of the site

16. Details of bin stores shall be submitted to and approved in writing by the Local Planning Authority and shall be provided prior to first occupation of the units that they will serve and retained thereafter, unless otherwise agreed in writing by the Local Planning Authority

REASON
To prevent the maximum refuse carrying distance being exceeded

17. No works of site clearance, demolition or construction shall take place until (a) details of bat mitigation (as for a DEFRA licence Method Statement) and (b) details of a reptile survey (including mitigation if required) have been submitted to and approved in writing by the Local Planning Authority

REASON
To protect the habitats of birds and reptiles which are protected species under the Wildlife and Countryside Act 1981, and in accordance with policy R16 of the Welwyn Hatfield District Plan 2005.

18. Before the development is commenced an investigation of the site shall be carried out in accordance with BS 10175:2001 British Standards Institution Code of Practice, "The Investigation of Potentially Contaminated Sites" to identify possible contamination, and to assess the degree and nature of any contamination present. If a hazard or hazards are identified on the site from any form of contamination the results of the investigation shall be utilised to carry out a site specific risk assessment to consider risks to future users of the site, water resources, surrounding land and property, wildlife, cultivated trees and plants, building materials, and any other persons who may be affected. If the risk assessment identifies unacceptable risk or risks, a detailed remediation strategy containing measures necessary to remove, neutralise or isolate the contamination shall be provided. Details of such investigation, assessment and remediation measures shall be submitted to and agreed in writing with the Local Planning Authority before development commences and the development shall thereafter proceed and be completed in accordance with the approved details prior to occupation of any of the dwellings unless otherwise agreed in writing with the Local Planning Authority. The presence of any significant unsuspected contamination, which becomes evident during the development of the site shall be brought to the attention of the Local Planning Authority as soon as it is discovered.

Continuation...

REASON
To ensure that any site contamination is dealt with safely in the interests of preventing pollution of the environment, the health and safety of the public and users of the development.

19. All new or replacement rainwater goods shall be in black painted cast iron.

REASON
To ensure the special historic and architectural character and setting of the building is properly maintained, in accordance with policy R25 of the Welwyn Hatfield District Plan 2005.

20. Prior to any building works being first commenced, detailed drawings showing the new brickwork and a precise specification and description of the brick – or a sample of 4 bricks to provide a representative range of he colour and texture of the brick- together with a specification of the mortar mix, pointing profile and finish, jointing width and the bond of the brickwork, shall be submitted to and approved in writing by the Local Planning Authority. Where required, a sample panel of the brickwork using the bond, mortar and jointing/pointing proposed, shall be provided and retained during building works as a reference for the new brickwork.

REASON
To ensure the historic and architectural character and setting of the building is properly maintained, in accordance with policy R25 of the Welwyn Hatfield District Plan 2005.

21. Prior to the commencement of the development hereby permitted all materials to be used for hard surfaced areas within the site including roads, driveways and car parking areas shall be approved in writing by the Local Planning Authority.

REASON
To ensure that the development does not detract from the appearance of the locality and to ensure the historic and architectural character and setting of the building is properly maintained, in accordance with policies D1 and R25 of the Welwyn Hatfield District Plan 2005.

Continuation...

REASON for APPROVAL
It is considered that the proposed development, by reason of the case made for enabling development, constitutes very special circumstances, that justifies a departure to established Green Belt policy, does not have an unacceptably harmful visual impact on the character and appearance of the Green Belt, setting of the listed building, landscape, rural character of the area in which it is located or residential amenity as the development proposed has a limited visual impact on the openness of the Green Belt, landscape and rural character of the site, is acceptable in terms of scale and design and respects the setting of the Grade II Listed Buildings, does not result in unacceptable overlooking or loss of privacy and does not have any unacceptably dominating impact with regard to neighbouring uses.

INFORMATIVE
Your attention is drawn to the need to obtain a Habitats Regulations licence from DEFRA.

SUMMARY OF RELEVANT DEVELOPMENT PLAN POLICIES

Hertfordshire Structure Plan Review 1991- 2011:

Policies 1, 5, 6, 25, 29, 38, 43

Welwyn Hatfield District Plan 2005:

SD1, GBSP1, GBSP2, R15, R16, R25, R26, R27, R29, M2, M14, D1, D2, D5, D8, D11, H2, H5, H6, H7, H8, OS3, RA1, RA2, RA4, RA10, RA17, RA28

Supplementary Design Guidance

Supplementary Planning Guidance

APPROVED PLAN NUMBER(S): 069/1000 & 069/1002 & 069/1010 & 069/1011 & 069/1012 & 069/1013 & 069/1014 & 069/0310 & 069/0311 & 069/0001 & 069/0010 & 069/0011 & 069/0012 & 069/0312 & 069/0014 & 069/1310 & 069/1311 & 069/1312 & 1105 & 1106 & 1107 & 01 & 02 & 03A & 04 & 05 & 06 & 07 & 09 & 10 & 11 & 06 ESS SP01 rev A 06 ESS P1 rev A & 06 ESS P2 & 06 ESS P3 & 06 ESS P4 all received 22-03-2006

Date : 16th February 2007

Chris Conway
Chief Planning and Environmental Health Officer

Our ref: SRW/AJRM/11500653-PF1

30 June 2006

Lisa

PLANNING
DEPARTMENT
- 3 JUL 2006

Lisa Hughes
Development Control
Welwyn Hatfield Council
Council Offices
The Campus
Welwyn Garden City
Hertfordshire
AL86AE

Dear Lisa,

PLANNING APPLICATION REF : S6/2006/365/FP

BEDWELL PARK – CUCUMBER LANE – ESSENDON – AL96HZ

Please find enclosed 6 copies of the Flood Risk Assessment to accompany the above planning application.

We also confirm we have liaised with Peter Thomas of Development Control at the Environment Agency prior to our submission.

Yours sincerely,

Struan Wilson
Engineer
WSP Development and Transportation Ltd

Enc – 6 x Flood Risk Assessment

CC –	Matthew Greavey	PJ Livesey	x 2
	Greg Meier	Millgate Homes	x 2
	Peter Thomas	EA	x 1

WSP Development and Transportation
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Hertford SG13 7NN
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WSP Group plc
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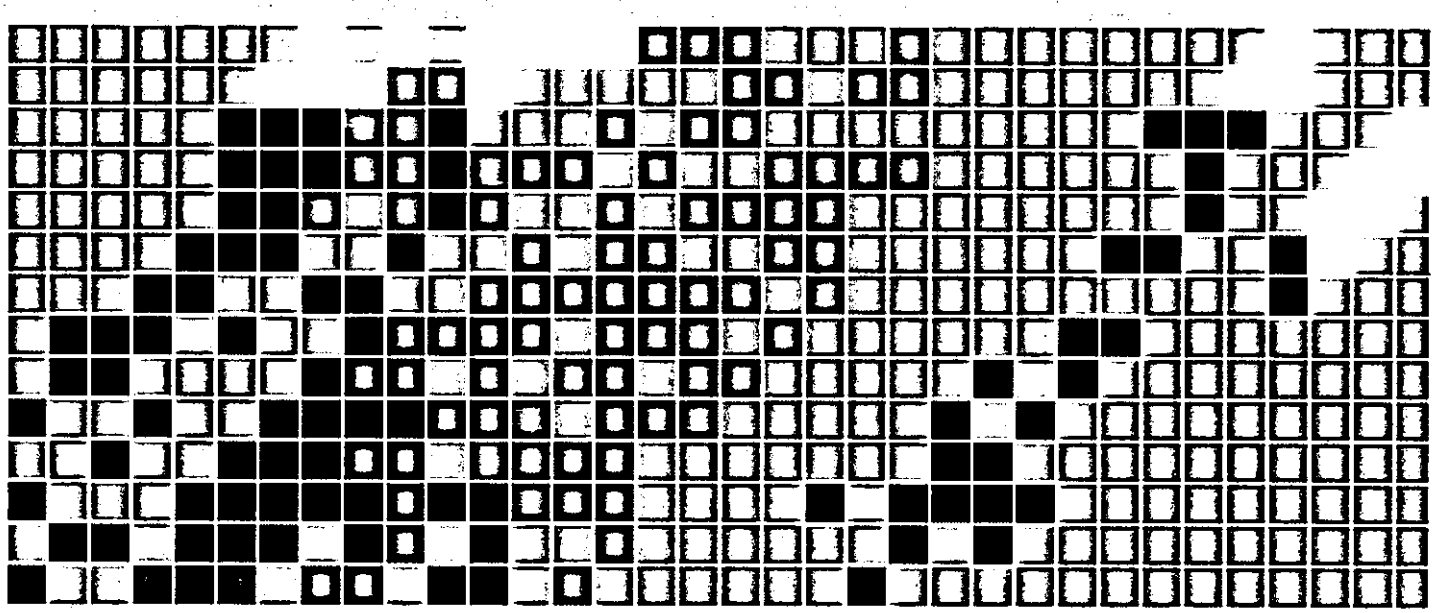

Bedwell Park, Essendon, Hertfordshire
PPG25 Flood Risk Assessment

Millgate Homes.

July 2006

WSP

QM

Issue/revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks	DRAFT			
Date	July 2006			
Prepared by	S Wilson			
Signature				
Checked by	S Purcell			
Signature				
Authorised by	S Purcell			
Signature				
Project number	1150653/PF1			
File reference	D001			

WSP Development and Transportation
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Unit 2, The Chase
John Tate Road
Hertford
Hertfordshire
SG13 7NN

Tel: +44(0)1992 526000
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http://www.wspgroup.com

Reg. No: 2382309

Contents

1 Introduction

1.1 WSP are acting on behalf of PJ Livesey and Millgate Homes Limited with respect to a development proposal and detailed planning application for land at Bedwell Park, Cucumber Lane, Essendon, AL96HN. Refer to Location Plan in Appendix A.

1.2 The development proposals include the conversion of the an existing listed building into 17 new apartments, the removal of modern extensions, 14 new build units associated parking and garage unit.

1.3 This Flood Risk Assessment (FRA) has been prepared to accompany a detailed planning application for the development of the site. A previous application for the site has been submitted and an objection was received on April 19 2006 (ref : NE/2006/014337-1/1). The reason for the refusal was related to the requirement for a flood risk assessment. The preparation of this report seeks to remove this reason for refusal.

1.4 A requirement of the Department of Transport, Local Government and the Regions (DTLR) – "Planning Policy Guidance Note 25 : "Development and Flood Risk" (PPG25) published in July 2001 is that developers, making planning applications on sites that are potentially at risk from flooding, or at risk of exacerbating existing flooding problems, should consult with the Environment Agency (EA) and produce a FRA for their proposals.

1.5 The EA, as a statutory consultee within the planning process, require a FRA to be submitted to accompany the detailed planning application.

1.6 This report has been commissioned to identify the likely flooding issues associated with the above site and the surrounding catchment area and the possible constraints that could be imposed on the development. The emphasis of this report has been geared towards defining a surface water drainage strategy in order to minimise the impact of the development upon flood risk associated with properties and watercourses situated downstream, in accordance with current PPG25 and also takes into consideration ideas brought forward in the review of Draft PPS25. It also highlights how these issues could be addressed through the planning and design process.

1.7 At this stage, this report has concentrated upon providing the necessary information relating to the proposed development layout to demonstrate that the site is deliverable within the context of the detailed planning application.

2 Background

2.1 PJ Livesey and Millgate Homes are posing to redevelop an existing brownfield site, having a total site area of approximately 5.5ha. The Development includes :

- the conversion of a listed building into 17 apartments
- demolition of modern 1980's extensions,
- 14 new build dwellings
- 28 garage courtyard blocks together with 40 parking spaces across the site
- New build tennis court house and integral garage, proposed walled garden dwelling and garaging and associated landscaping.

Refer to topographical survey information in Appendix B for details of the existing site.

2.2 The EA have recently published Flood Zone Maps (FZM), which show areas potentially deemed to be at risk of flooding. The FZM have been produced using appropriate good quality mapping and modelling data, where available, supplemented with data derived from national generalised modelling and appropriate good quality local data which conforms to the EA's acceptable criterion. The nationally generalised modelling utilises a Digital Terrain Model (DTM) which excludes the presence of man made features such as flood defences and road and rail embankments. Fluvial flood zone outlines were produced using a 2D raster floodplain model (Jflow) and shows the probability of flooding without the presence of defences. Whilst the modelling methodology used to produce FZM excludes the presence of flood defences, in order to ensure that the extent of the functional floodplain is delineated, the FZM also show the area of benefit provided by modern flood defences (less than 5 years old) where they are present.

2.3 The EA have confirmed that the site is not currently at risk of fluvial flooding as it is situated in Flood Zone 1. The main risk of flooding to the site has been identified as surface water run-off. The focus of this report shall be towards the proposed surface water drainage scheme and highlighting the reduced run-off volumes and rates due to a reduction in the existing impermeable areas.

3 Requirements of the Flood Risk Assessment

3.1 PPG25 – "Development and Flood Risk", Appendix F sets out the requirements of a Flood Risk Assessment.

3.2 3.2 The PPG25 Appendix F Guidance specifies that the report shall contain the following:

- Location Plan – see Appendix A and Section 4 of this report
- Level Plan – see Appendix B and Section 5 of this report
- Details of existing flood alleviation measures – see Section 6 of this report
- Sources of flooding – see Section 7 of this report
- Floodplain – See Appendix A and Section 8 of this report
- Structures influencing local hydraulics – see Section 9 of this report
- Flood Probabilities – see Section 10 of this report
- Levels of proposed site – see Section 11 of this report
- Flood Progress – see Section 12 of this report
- Sewer Hydraulics – see Appendix E and Section 13 of this report
- Flood Volume Displaced – see Section 14 of this report
- Impact of Displaced Water – see Section 15 of this report
- Impact on Fluvial and Coastal Morphology – see Section 16 of this report
- Climate Change Impacts – see Section 17 of this report
- Residual Risk Assessment –see Section 18 of this report
- Proposed Development Drainage – see Section 19 of this report

4 Site Location

SITE LOCATION & DETAILS

4.1 The site is located at Bedwell Park, Cucumber Lane, Essendon, AL96HN. The site is adjacent to the London Hatfield Golf Course. Refer to Appendix A for details.

4.2 The site is currently derelict and consists of a listed building that was once the club house of the adjacent golf course. The property is currently in a state of disrepair with development proposals seeking to convert the club house into 17 new apartments and associated parking.

4.3 The site covers approximately 5.50 hectare. The proposed redevelopment will incorporate the addition of 14 new build residential units, along with a new tennis court house and proposed redevelopment of the existing walled garden building to the south of the site. The walled garden building will retain the same floorplan and will utilise the existing pond to the south of the site. It will therefore not be considered within this FRA.

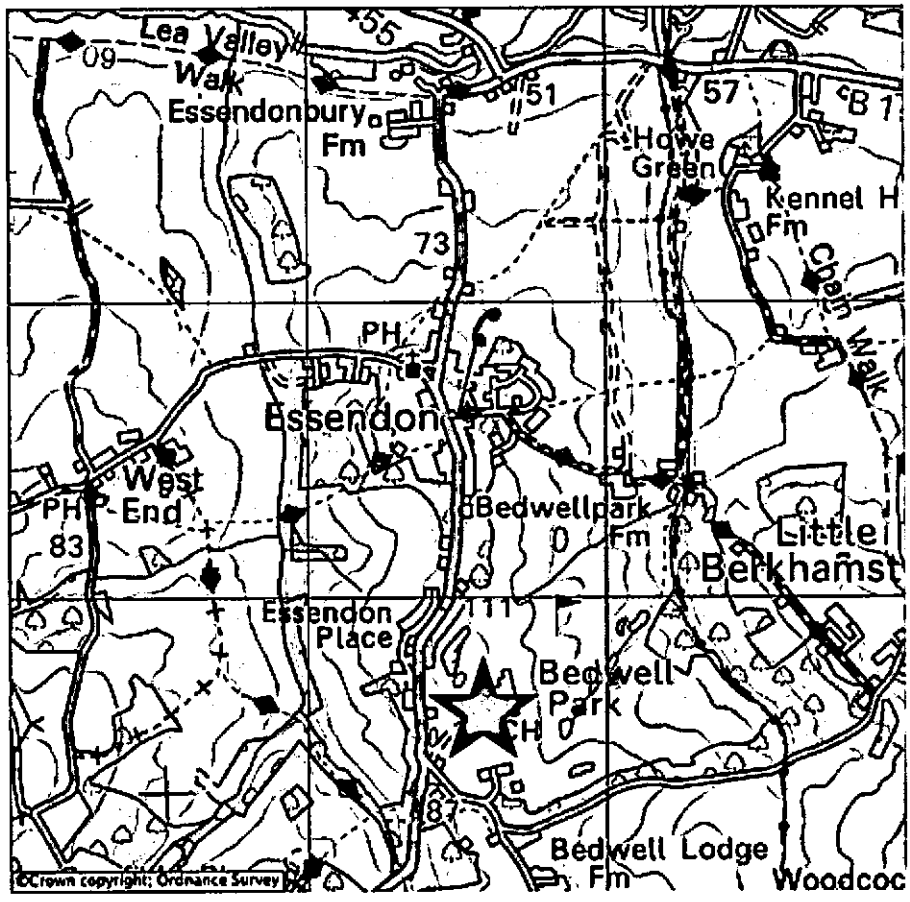
4.4 The surface coverage of the existing brownfield site can be summarised as follows:

Roof areas	0.308ha
Car parking / paved areas	0.709.ha
Permeable (gravel / landscaping) areas	4.482ha

PROXIMITY TO WATERCOURSES

4.5 The River Lea flows approximately 2km north of the site. The existing positive drainage network discharges to a series of ponds that are situated on the golf course.

4.6 This series of ponds join a small watercourse that joins the River Lea to the north of Howe Green.



5 Site Levels

5.1 The existing brownfield site levels generally slope in an easterly direction, from approximately 110mAOD in the south to 104.5mAOD in the north east of the site.

5.2 The golf course slopes steeply away from the site, providing a natural overland flow route to the existing retention ponds on the golf course.

5.3 Liaison with the EA and examination of the flood zone maps has indicated that site has a very low risk with respect of fluvial flooding.

5.4 Topographical survey information for the site can be found in Appendix B.

6 Existing Flood Protection Measures

6.1 The current site is not deemed to be at risk from fluvial flooding and therefore flood protection measures are not considered within this FRA.

7 Sources of Flooding

FLUVIAL/ORDINARY WATERCOURSES

7.1 The site is not shown as being at risk of fluvial (river) flooding on the EA's Indicative Flood Risk Maps (Refer to Appendix A).

SEWERS

7.2 The site is a brownfield site with surface water and foul water draining to a separate foul and surface water system. Historically there has been a large amount of infiltration into the existing foul system with the offsite treatment station situated on the adjacent golf course being unable to cope with the combined flows.

FOUL SEWER

7.2.1 Development proposals seek to refurbish the existing sewerage treatment station and filter beds within the golf course and remove the surface water connections from the treatment facility. This will reduce the strain on the existing treatment facility and ultimately the number of sewer overflows. The EA have granted consent for the treated effluent to be discharged into the ponds to the east of the site. These flows are not deemed to be significant. Copies of the relevant EA consents are included in Appendix C

SURFACE WATER SEWERS

7.2.2 The existing site is serviced by a surface water sewer network, conveying paved and roof run-off to the east of the site, terminating at the ponds that are located on the golf course.

7.2.3 During large storm events the existing system is known to surcharge, however there is a large overland flow route to the existing pond that flows across the steep section of the golf course (Refer to topographical survey in Appendix B)

7.2.4 Drainage design is discussed in detail within Sections 13 and 19 of this report.

GROUNDWATER

7.3 Local topography would dictate that the site is not at risk from groundwater flooding. The site is situated at the top of a hill with the land adjacent to the site falling steeply towards the Lea Valley.

7.4 The site is therefore considered at very minor risk from groundwater flooding.

OVERLAND FLOW

7.5 The site is situated towards the top of a ridge within Essendon and is therefore at minor risk of overland flow.

8 Flood Levels

MODELLED FLOOD LEVELS

8.1 Consultation with the EA and investigation of the EA Flood Zone maps would show the site to not be at risk of flooding for the critical 1 in 100yr event.

HISTORIC FLOOD LEVELS

8.2 There are no historic flood levels associated with the site.

9 Hydraulic Structures

9.1 The site has no hydraulic structures that are associated with the site.

10 Flood Probabilities

10.1 The Environment Agency has requested that the site be protected against the 1:100 year event (1% annual probability flood) as it is in a non-tidal location.

10.2 The site is not at risk of fluvial flooding for the critical 1 in 100 yr event as illustrated in the EA's Flood Zone Maps. (Refer to Appendix A).

11 Existing And Finished Levels

11.1 The existing brownfield site levels are above the critical 1:100 yr design flood level. Finished floor levels will therefore be situated at or above the existing ground level.

12 Flood Progress

12.1 The proposed development is not affected by the 1% annual probability flood and, therefore, is not affected by nor affects any flood progress across the site.

13 Sewerage

13.1 The site is currently served by separate foul and surface water sewer networks, with a combined outfall to the existing ponds to the west of the site, on the adjacent golf course.

FOUL SEWERS

13.2 The development proposals include the addition of a new foul sewer network and refurbishment of the existing treatment system located on the adjacent golf course. (Refer to Topographical Survey in Appendix B for location).

13.3 The proposals include the removal of existing surface water connections to the existing foul network, with these surface water connections being connected to the new surface water sewer system. The removal of the surface water connections will enable a greater capacity at the existing refurbished facility, along with the reduction in the foul sewer overflows.

13.4 These changes will ensure the adequate treatment of the foul sewerage along with ensuring the water quality for the discharge to the surface water ponds.

13.5 The Environment Agency has consented to the foul sewerage discharge. Refer to correspondence included in Appendix C

SURFACE WATER SEWERS

13.6 Details for the surface water drainage strategy are provided in Section 19 of this report.

13.7 The surface coverage of the proposed site can be summarised as follows:

Roof areas	0.483ha
Car parking / paved areas	0.275ha
Permeable (landscaping) areas	4.742ha

13.8 From investigation of the existing impermeable areas and a comparison with those proposed and the inclusion of SuDS systems it can be clearly seen that there will be a significant reduction in surface water run-off rates and volumes.

	Roof Area	Carpark/Paved	Total
Proposed	0.483	0.275	0.758
Existing	0.308	0.709	1.017
% Reduction	-57%	61%	**26%**

13.9 Any future drainage strategy shall be designed not to exacerbate any existing flood risk associated with properties situated upstream, or downstream, of the site. Off-site surface water discharge rates shall be restricted to those discharging from the existing site. Refer to Section 19 for proposed development drainage details.

14 Flood Volume Displaced

14.1 No flood volume will be displaced by the proposed development as the site is not at risk of fluvial flooding from the 1:100 year flood event and no raising of the ground is being proposed.

15 Impact of Displaced Water

15.1 No impact will occur as no flood volume will be displaced by the development proposals.

16 Impact on Fluvial or Coastal Morphology

16.1 The site will have no detrimental impacts on fluvial or coastal morphology.

17 Climate Change Impact

17.1 PPG25, Appendix A, takes into account the impacts that climate change may have on flooding issues.

17.2 The development is situated in Flood Zone one and has over 20m of freeboard from Flood Zone 3, therefore the development will not be affected by Climate Change.

18 Residual Risk Assessment and Mitigation

18.1 The major residual risk for the proposed development is for flood events greater than the current design criteria i.e. a 1:100 year return period. The site topography and landscaping will ensure that any drainage that is unable to be managed by the surface water sewer network will follow existing overland flow routes across the golf course to the off site retention ponds.

19 Proposed Development Drainage

19.1.1 One of the principal conditions to be met for any future drainage strategy is that it is designed not to exacerbate any existing flood risk associated with properties situated upstream, or downstream, of the site.

19.1.2 Surface water discharge rates shall be restricted to existing run-off rates, or less, at rates up to and including the 1 in 100 year event. See Appendix E for micro-drainage calculation illustrating the existing and proposed run-off rates.

19.1.3 Summarised below are the micro-drainage calculations showing that the existing peak flow rates in comparison with those from the proposed development for the 1 in 2 yr storm and the 1 in 100 yr storm.

	1 in 2 yr Discharge rate	1 in 100yr Discharge rate	Combined manhole overflow volume
Existing	107l/s	141l/s	38.40m^3
Proposed	83l/s	137l/s	14.57m^3
Reduction	**22%**	**2.8%**	**62%**

19.1.4 The proposed drainage system will be designed to utilise the existing outfall into the pond on the golf course for all the hard standing and roofed areas with a focus on soft drainage and Sustainable Drainage Systems for paths and access ways.

19.1.5 Sustainable Drainage Systems (SuDS) will be implemented throughout this development scheme. These will take the form of infiltration drainage systems and permeable paving, where subsoil and groundwater conditions allow.

GROUNDWATER SOURCE PROTECTION ZONE

19.1.6 EA's Groundwater Source Protection Zone (SPZ) maps show that the site lies within the "Total Catchment" or Source protection Zone 3. The EA guidance "Policy and Practice for the Protection of Groundwater" states that the public and amenity areas are acceptable for discharge to ground without an interceptor. The majority of paths on site are to be "soft" engineered.

OTHER CONSIDERATIONS

19.1.7 Micro-drainage calculations show that during the critical 1 in 100 yr event, the current system exhibits surface flooding. Excess flows surcharge in manholes and flood the surrounding landscaped areas. Current landscaping would allow excess flows to pass overland, down the steep embankment on the golf course to enter the existing ponds.

19.1.8 The proposed drainage regime reduces the volume of run-off from the site with any excess from the utilisation of the existing positive drainage network, still being able to follow the same overland flow routes.

20 Drainage Strategy

20.1 STRATEGY

20.1.1 Initial proposals indicate that the development will consist of the conversion of the existing clubhouse and the demolition of 2 existing extensions from the 1980's with the inclusion of 14 new development units. A large section of hard standing is to be broken out and landscaped as shown on the proposed development plans in Appendix D.

20.1.2 The strategy involves utilising the existing outfall to the pond within the golf course. This pipe is currently operating at or near capacity with the amount of impermeable area that is currently connected to the drainage network. The capacity of the discharge pipe is 141l/s. The proposed regime will reduce the flow to the existing outfall to ensure minimal surcharging and surface water flooding for the critical 1 in 100 yr flood event.

20.1.3 The entrance to the existing site consists of a large area of metalled carpark and associated landscaping. The hard-standing area is positively drained to the retention ponds located within the golf course. A large area of this hard standing will be removed by the development proposals.

20.1.4 Based upon the micro-drainage simulation, surface flooding occurs during the 1 iin 100 yr event in the developed state. Such flooding will be managed with overland flow routes provided to soft landscaped areas.

20.1.5 Refer to Drawings in Appendix D and calculations in Appendix E for proposed and existing drainage layouts and illustration of impermeable areas.

21 Conclusions

21.1 The existing site is not deemed to be at risk from fluvial flooding with the site level in the region of 20 m above the existing ponds and watercourse.

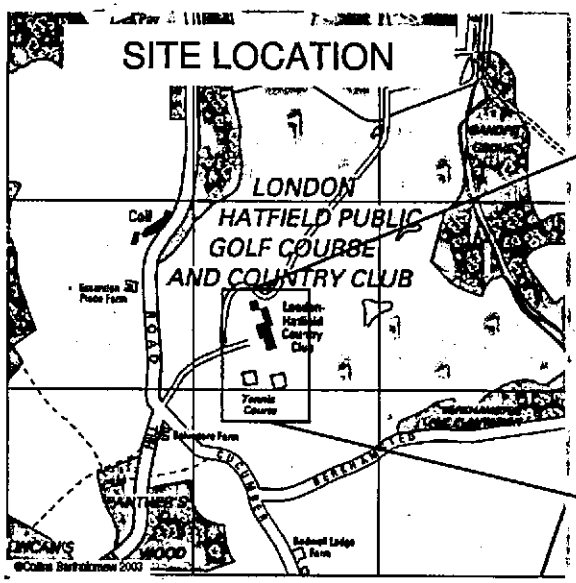
21.2 This Flood Risk Assessment report determines that the site can be delivered within the land under its control and identifies some points of detail that need to be incorporated into the detailed design of the development. At this stage, the report has concentrated upon providing the necessary information relating to the proposed drainage scheme to demonstrate that the site is deliverable.

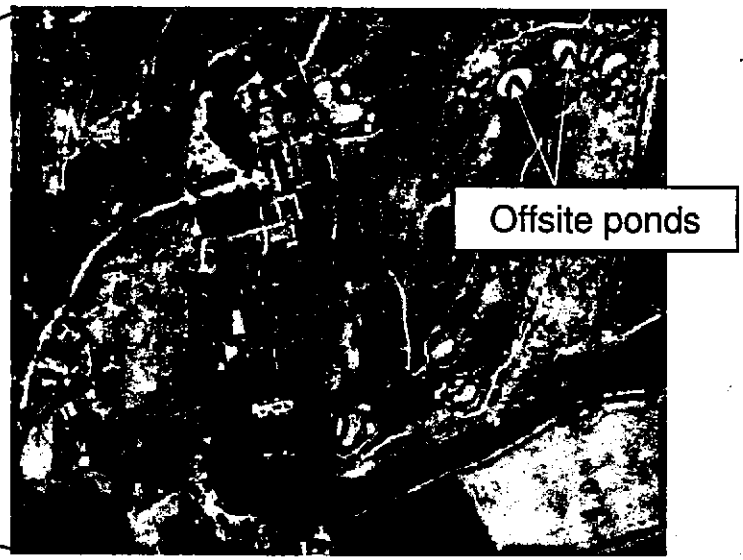
21.3 Any future drainage strategy shall be designed not to exacerbate any existing flood risk associated with properties situated upstream, or downstream, of the site. Off-site surface water discharge rates shall be restricted to those discharging from the existing site, or less.

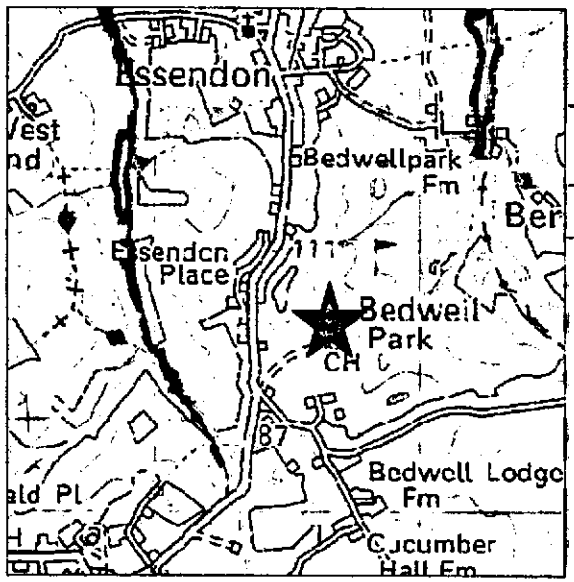
21.4 The proposed development will reduce the impermeable area by removing a large section of hard standing at the east of the site. This reduction in impermeable area will lead to a reduction in run rates and volume from site.

21.5 The site is presented as sustainable in terms of flood risk.

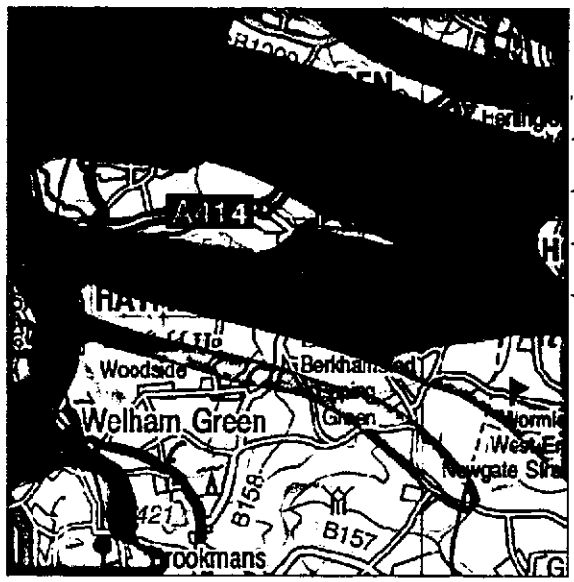
Appendix A Site Location Plan, Flood Zone maps and EA Source protection maps.







- Flooding from rivers or sea without defences
- Extent of extreme flood
- Flood defences
- Areas benefiting from flood defences



- ☑ Groundwater source protection zones
  - Inner zone
  - Outer zone
  - Total catchment
  - Special interest

Appendix B Topographical Survey

Appendix C Environment Agency Correspondence

Copy to JS.

creating a better place

Environment Agency

Our Ref: N/WR 1073
Date: 28 April 2006

Millgate Homes
Millgate House
Ruscombe Lane
Ruscombe
Twyford
Berks
RG10 9JT

Dear Sir or Madam

Water Resources Act 1991 Schedule 10 (as Amended by the Environment Act 1995) Consent to Discharge Secondary Treated Sewage Effluent from Essendon Hall, Cucumber Lane, Essendon, Herts, AL9 6HN

Please find enclosed the Consent to discharge under Schedule 10 of the Water Resources Act 1991 (as amended by the Environment Act 1995), in respect of your received application on 23 February 2006. You are now the holder of this Consent and should ensure that the conditions of the Consent are complied with at all times.

Should you be dissatisfied with the conditions specified in the Consent, you may appeal to the Secretary of State for the Environment by writing to the Planning Inspectorate, Environmental Appeals Administration, 4/19 Eagle Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol BS1 6PN, within three months of its issue.

This Consent is an important document. The right to discharge effluent may be valuable to you. The document should be kept safe, probably with the Deeds of the property where appropriate.

Please take careful note that if the holder of the consent changes, you should inform the Agency **IN WRITING** as soon as possible of the name of the new holder (certificate and transfer form attached). This is to ensure that the rights and charges associated with the Consent are transferred to the new holder. If you do not inform us of the change within 21 days, an offence will have been committed that may result in prosecution.

Where the holder dies or is served with a bankruptcy order, different rules and timescales govern these changes. In these situations, the executors or trustees should contact us promptly for further guidance.

If you want to revoke, or vary the Consent in any way, please contact the us. Similarly, if you change your contact address while continuing to hold the Consent please contact us.

We have adopted a scheme whereby all consented discharges, except those of sewage effluent of 5 cubic metres per day or less, shall be subject to an annual charge. Under our current scheme of charges, this consented discharge will attract an annual charge. The charging will begin once the holder notifies us of the date that the discharge will commence.

This Consent covers water quality considerations only. It does not give any right or permission to discharge where land is not owned by the applicant. In addition, for discharges to watercourse, it does not imply the suitability, with regard to volumetric capacity, of the receiving watercourses. It is the responsibility of the applicant to identify and negotiate, with the riparian owners as necessary, any requirement for downstream improvement works. Failure to do so could result in a Common Law action by the riparian owner.

Please ensure that the sample point for this discharge is maintained so that it is accessible to officers of the Agency and that a direct sample of the effluent may be readily and safely taken at all times.

Details of this Consent and associated application are placed on a public register, kept by us and open for inspection by the public.

Yours faithfully

K. Wiseman

Kate Wiseman
Regulatory Officer (Water Quality)
Direct Dial: 01707 632459
Direct Fax: 01707 632533

ENVIRONMENT AGENCY

Consent to Discharge

Water Resources Act 1991 (as amended by the Environment Act 1995)

Consent Holder(s)

Millgate Homes
Millgate House
Ruscombe Lane
Ruscombe
Twyford
Berks
RG10 9JT

Consent to Discharge from

Essendon Hall
Cucumber Lane
Essendon
AL9 6HN

Consent Number **N/WR1073**

Environment Agency Thames Region
Apollo Court, 2 Bishops Square Business Park, St Albans Road West, Hatfield, Herts AL10 9EX

Consent to D[illegible]charge
Water Reso[illegible]s Act 1991
Section 88 [illegible]hedule 10
(as amend[illegible]by the
Environm[illegible] Act 1995)

ENVIRONMENT AGENCY

Consent to Discharge

Consent Number
N/WR1073

To:
Millgate Homes ("the Consent Holder")
Millgate House
Ru[illegible]ombe Lane
Ruscombe
Twyford
Berks
RG10 9JT

The Environment Agency ("the Agency") in pursuance of its powers under the Water Resources Act 1991(as amended by the Environment Act 1995) hereby consents to the making of a discharge:

Of:
Secondary treated sewage effluent containing no trade effluent ("the Discharge")

From:
The sewage treatment plant serving 37 domestic properties

At:
Essendon Hall, Cucumber Lane, Essendon, AL9 6HN

To:
Lake Tributary of the River Lee

Subject to the conditions set out in this notice of Consent to Discharge.

Subject to the provisions of Paragraphs 7 and 8 of Schedule 10 of the Water Resources Act 1991(as amended by the Environment Act 1995), no notice shall be served by the Agency, altering this consent, without the agreement of the Consent Holder, during a period of 4 years from the date this notice is issued.

This Consent is issued on: 28 APRIL 2006
This Consent takes effect on: 28 APRIL 2006.

Signed

Isley

Team Leader Regulatory Water Quality

1 Conditions of Consent for secondary treated sewage effluent containing no trade effluent

1.1 Nature

1.1.1 The Discharge shall consist solely of secondary treated sewage effluent containing no trade effluent.

1.2 Place of Discharge

1.2.1

The Discharge shall be made in the manner and at the place specified as:

a discharging to Lake Tributary of the River Lee;

b at National Grid Reference TL 27951 07717;

c shown marked "Outlet" on Site Plan attached to this consent.

1.3 Sampling Point Requirements

A sample point shall be provided and maintained at National Grid Reference TL 27799 07657as shown marked "Sample Point" on the Site Plan attached to this consent, so that a representative sample of the Discharge may be obtained. The Consent Holder shall ensure that all constituents of the Discharge pass through the said sampling point at all times and in any legal proceedings it shall, for the purposes of Section 10 of the Rivers (Prevention of Pollution) Act 1961, be presumed, until the contrary is shown that any sample of the Discharge taken at the said sampling point is a sample of what was discharging into controlled waters.

1.4 Volume

1.4.1 The volume of the Discharge shall not exceed 24 cubic metres per day.

1.5 Flow Measurement

1.5.1

a At the request of the Agency, the Consent Holder shall install, operate and maintain a means of flow measuring to a specification and at a location required by the Agency, to enable the daily volume and/or instantaneous flow of sewage through the sewage treatment plant to be recorded.

b The Consent Holder shall calibrate, operate and maintain the flow monitoring and recording system to a standard agreed or specified by the Agency. The flow and maintenance records shall be provided to the Agency as and when requested.

1.6 Composition

1.6.1 The Discharge shall not contain more than:

a 30 milligrammes per litre of biochemical oxygen demand (measured after 5 days at 20°C with nitrification suppressed by the addition of allyl-thiourea)

b 10 milligrammes per litre of ammoniacal nitrogen (expressed as N)

c 45 milligrammes per litre of suspended solids (measured after drying at 105°C)

1.6.2 As far as is reasonably practicable, the sewage treatment plant shall be operated so as to prevent the Discharge from containing any significant trace of visible oil or grease.

1.7 Urban Waste Water Treatment Regulations

1.7.1

a The Consent Holder shall comply with the Urban Waste Water Treatment (England and Wales) Regulations 1994 ('the Regulations').

b For the purpose of condition 1.7.2 below, interpretations and references to a numbered regulation or Schedule shall have the meaning as in the Regulations, unless otherwise indicated.

1.7.2

a The Discharge derives from an agglomeration with a population equivalent of less than 2,000 discharging to freshwaters.

b The Consent Holder shall inform the Agency in writing of any change, or proposed change, to the population equivalent such as would make a material change to the application of the Regulations and shall, on request, inform the Agency in writing of the actual population equivalent.

c The Discharge shall be subject to Regulation 5(7) and satisfy the requirements of Regulation 5(8)(a).

1.8 Priority Substances

1.8.1

a The quantity of Copper or Zinc in the Discharge shall not increase above the levels in the Discharge on the date of effect of this consent where no specific level is authorised; and

b notwithstanding a above, the Discharge shall not contain quantities Copper or Zinc such as to cause or contribute to the concentration of that substance in the receiving water exceeding the relevant Environmental Quality Standard (EQS).

1.9 Works Operation

1.9.1

a The sewage treatment plant shall be operated and the effluent shall be treated in a manner which, so far as reasonably practicable, minimises the polluting effects of the Discharge made from the sewage treatment plant on controlled waters.

b This condition does not require any alteration of the sewage treatment plant or a change in the type of treatment used from that specified in the application.

1.10 Maintenance

1.10.1 The sewage treatment plant shall be operated and maintained in accordance with good operational practice such that:

a it remains fully operational except at times of unavoidable mechanical or electrical breakdown which shall be attended to, and the Agency informed of the failure, as soon as practicable after the failure;

b following a failure all equipment shall be returned to normal operation as soon as practicable;

c tanks shall be desludged at sufficient frequency and in such a manner to prevent excessive carryover of suspended solids.

1.11 Recording and Reporting

1.11.1

a The Consent Holder shall establish and operate a documented maintenance programme and record all non-routine actions undertaken that may have adversely affected effluent quality. Copies of the programme shall be made available for inspection by the Agency's officers at all reasonable times.

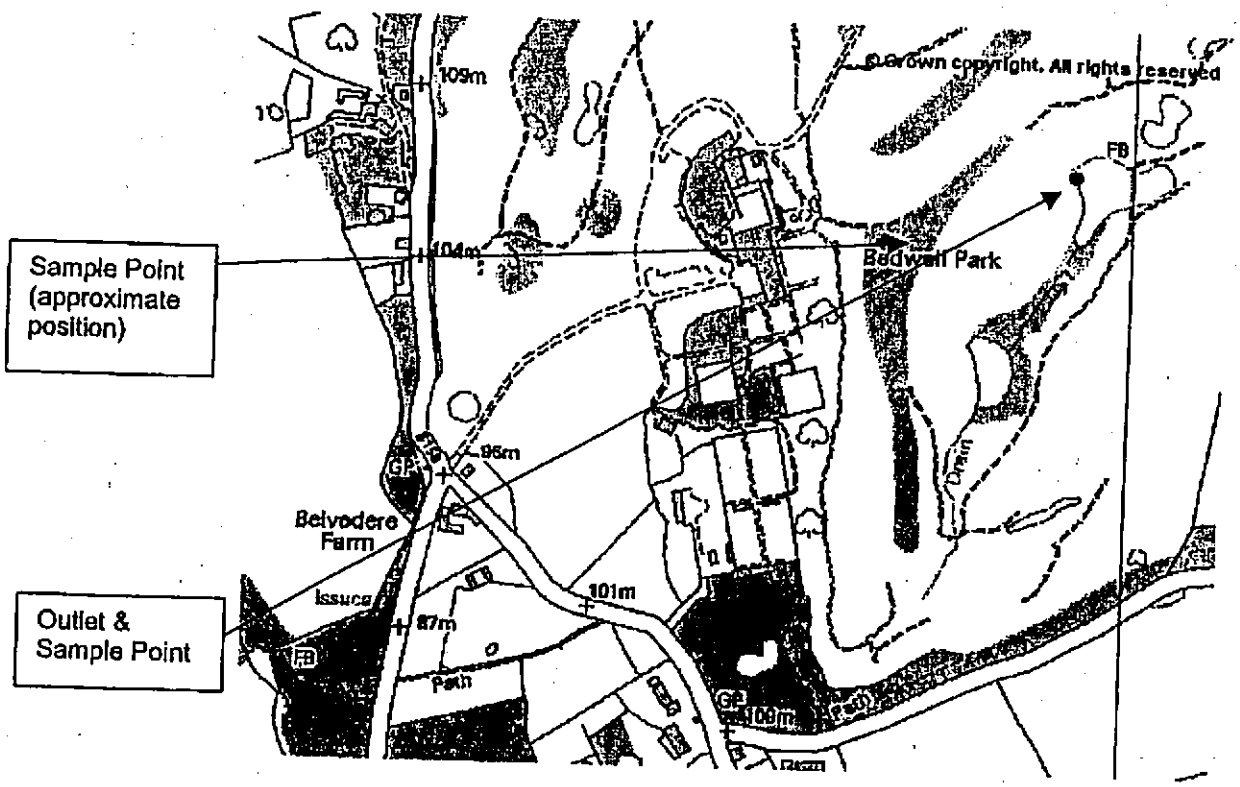
b On request the Consent Holder shall supply the Agency with a written report on the maintenance and all non-routine actions that may have adversely affected effluent quality.

c The Consent Holder shall as soon as reasonably practicable report to the Agency all non-routine actions that may have adversely affected effluent quality.

1.12 28 Day Notice

The consent holder shall notify the Agency's Regulatory Water Quality Team Leader, N.E. Area, Thames Region, in writing at least twenty eight days prior to the commencement of the discharge being made in pursuance of this consent.

2 # Site plan


Sample Point (approximate position)
Outlet & Sample Point
© Crown copyright. All rights reserved
109m
104m
95m
101m
87m
108m
Belvedere Farm
Badwell Park
FB
GP
Path

creating a better place

Environment Agency

Our Ref: RHA.06.03.06
Your Ref: RPH/cvm/2773
Date: 06 March 2006

RICHARD HATTON ASSOC

- 8 MAR 2006

Mr R Hatton
Richard Hatton Associates
3 Drapers Way
Stevenage
Herts
SG1 3DT

Dear Mr Hatton,

WATER RESOURCES ACT 1991 (AS AMENDED BY THE ENVIRONMENT ACT 1995) PROPOSED DISCHARGE OF SURFACE WATER RUN OFF FROM WALLED GARDEN HOUSE AT BEDWELL PARK, ESSENDON, HERTS TO NEARBY POND

Further to your enquiry regarding the discharge of surface water runoff please be advised that the Environment Agency is satisfied that you may discharge this water without formal Consent to Discharge under the Water Resources Act 1991 (as amended by the Environment Act 1995). This is because the discharge will be of rainfall dependent run-off from roofs and hard-standing areas that would be classed as uncontaminated water and is considered of low risk. We have checked the surrounding area and have not found anything that means a consent to discharge is required.

Thank you for consulting us about this discharge. If in the future you plan to make other discharges from this or other sites you should still consult us, as the type of discharge or its location may mean that a consent to discharge is required.

Yours sincerely

K. Wiseman

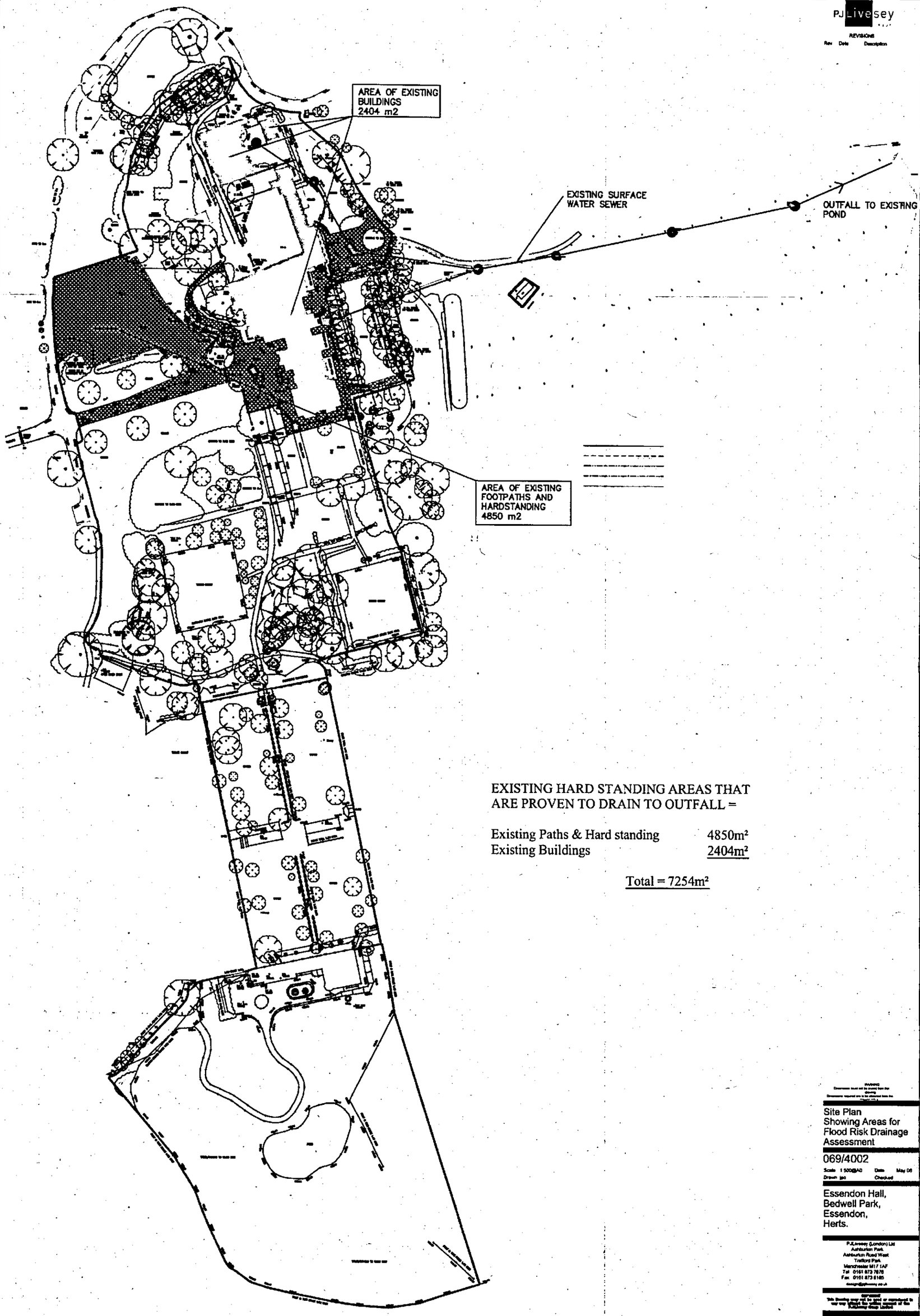
Kate Wiseman
Regulatory Officer (Water Quality)
Direct Dial: 01707 632459

Appendix D Development Proposals and Sewer layout

PJ Livesey

REVISIONS

Rev	Date	Description



EXISTING HARD STANDING AREAS THAT ARE PROVEN TO DRAIN TO OUTFALL =

Existing Paths & Hard standing	4850m²
Existing Buildings	2404m²
Total =	7254m²

WARNING
Dimensions must not be scaled from this drawing.
Dimensions required are to be obtained from the figured work.

Site Plan Showing Areas for Flood Risk Drainage Assessment

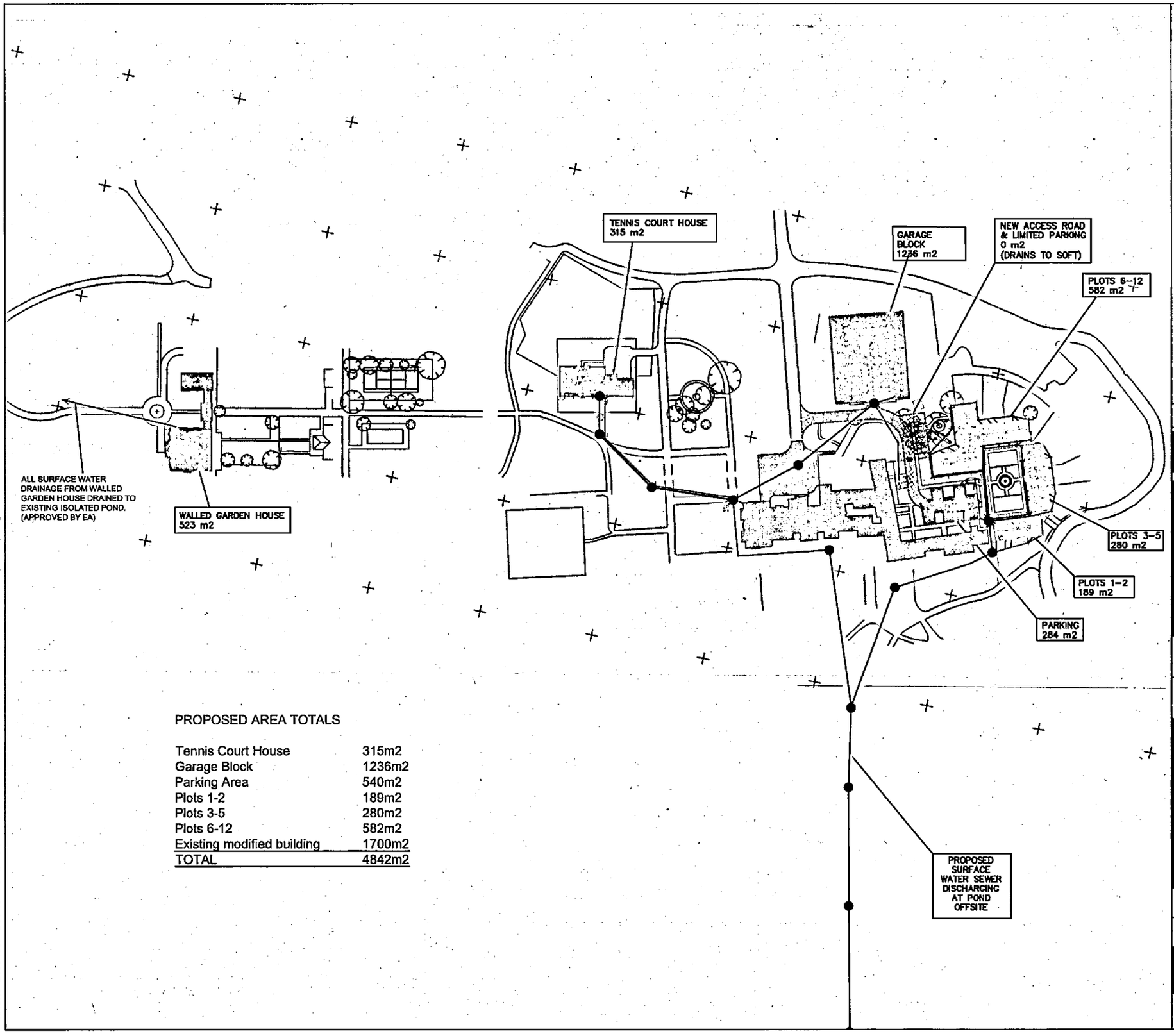
069/4002

Scale 1:500@A0 Date May 06
Drawn jpc Checked

Essendon Hall, Bedwell Park, Essendon, Herts.

P.J.Livesey (London) Ltd
Ashburton Park
Ashburton Road West
Trafford Park
Manchester M17 1AF
Tel 0161 873 7878
Fax 0161 873 8185

www.pjlivesey.com.au



PROPOSED AREA TOTALS

Tennis Court House	315m2
Garage Block	1236m2
Parking Area	540m2
Plots 1-2	189m2
Plots 3-5	280m2
Plots 6-12	582m2
Existing modified building	1700m2
TOTAL	4842m2

DO NOT SCALE

REV	DATE	BY	DESCRIPTION	CHK	APD

DRAWING STATUS.

WSP

WSP House, The Chase, John Tate Road
Foxholes Business Park, Hertford SG13 7NN
Tel: +44 (0)1992 526000 Fax: +44 (0)1992 526001
http://www.wspgroup.com

CLIENT: Millgate Homes

ARCHITECT:

PROJECT:
Bedwell Park
Essendon

TITLE:
Proposed development Layout
Impermeable Areas

SCALE @ A3:	CHECKED:	APPROVED:
	SP	SP
CAD FILE:	DESIGN-DRAWN:	DATE:
Site topo FRA (WSP1)	SW	22/06/06
PROJECT No:	DRAWING No:	REV:
11500653.PT1	0001	a

N:\Herts, Essendon, Bedwell Park\INCOMING\OTHER SOURCES\4002 WHOLE SITE TOPO FRA (WSP1).dwg 27 Jun, 2006 - 11:16am

Appendix E Micro Drainage Calculations

Summary Wizard of "CRITICAL BY RETURN PERIOD"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30
Return Period(s) (years) 1, 2, 30, 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	2	1	1/15 Summer	30/15 Summer			8
1.001	15 Winter	2	1	2/15 Summer				
1.002	15 Winter	2	1	30/15 Summer				
1.003	15 Winter	2	1	30/15 Summer				
2.000	15 Winter	2	1	30/15 Summer	100/15 Winter			
2.001	15 Winter	2	1	30/15 Summer				
2.002	15 Winter	2	1	2/15 Summer	30/15 Summer			8
1.004	15 Winter	2	1	30/15 Summer				
1.005	15 Winter	2	1	100/15 Summer				
1.006	15 Winter	2	1	30/15 Summer	30/15 Summer			4
1.007	15 Winter	2	1	30/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	106.518	0.193	0.000	1.18	0	56	SURCH'ED
1.001	106.100	0.075	0.000	1.16	0	55	SURCH'ED
1.002	105.732	-0.053	0.000	0.93	0	55	O K
1.003	105.144	-0.081	0.000	0.72	0	91	O K
2.000	107.490	-0.030	0.000	0.83	0	9	O K
2.001	106.499	-0.041	0.000	0.63	0	9	O K
2.002	103.949	0.129	0.000	1.01	0	16	SURCH'ED
1.004	100.841	-0.074	0.000	0.78	0	107	O K
1.005	98.326	-0.089	0.000	0.68	0	107	O K
1.006	93.217	-0.078	0.000	0.76	0	107	O K
1.007	88.954	-0.071	0.000	0.80	0	107	O K

Summary Wizard of "CRITICAL BY RETURN PERIOD"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years) 1, 2, 10, 30, 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	2	1	30/15 Summer				
1.001	15 Winter	2	1	10/15 Summer	30/15 Summer			9
2.000	15 Winter	2	1	10/15 Summer				
2.001	15 Winter	2	1	30/15 Summer				
2.002	15 Winter	2	1	10/15 Summer	100/15 Summer			1
1.002	15 Winter	2	1	10/15 Summer				
1.003	15 Winter	2	1	10/15 Summer				
1.004	15 Winter	2	1					
3.000	15 Winter	2	1	30/15 Summer				
3.001	15 Winter	2	1	100/15 Summer				
1.005	15 Winter	2	1	100/15 Summer				
1.006	15 Winter	2	1					
1.007	15 Winter	2	1	100/15 Winter				
1.008	15 Winter	2	1	100/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	107.070	-0.105	0.000	0.54	0	24	O K
1.001	106.679	-0.106	0.000	0.55	0	33	FLD RISK
2.000	108.115	-0.035	0.000	0.75	0	6	O K
2.001	107.754	-0.046	0.000	0.56	0	6	O K
2.002	106.693	-0.027	0.000	0.86	0	6	O K
1.002	106.139	-0.061	0.000	0.82	0	39	O K
1.003	105.991	0.031	0.000	1.03	0	60	SURCH'ED
1.004	105.285	-0.115	0.000	0.48	0	60	O K
3.000	106.909	-0.067	0.000	0.59	0	27	O K
3.001	103.801	-0.069	0.000	0.56	0	26	O K
1.005	100.742	-0.098	0.000	0.61	0	83	O K
1.006	98.231	-0.109	0.000	0.53	0	83	O K
1.007	93.165	-0.100	0.000	0.59	0	83	O K
1.008	88.900	-0.095	0.000	0.62	0	83	O K

Summary Wizard of "CRITICAL"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30
Return Period(s) (years) 1, 2, 30, 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	100	1	1/15 Summer	30/15 Summer			8
1.001	15 Winter	100	1	2/15 Summer				
1.002	15 Winter	100	1	30/15 Summer				
1.003	15 Winter	100	1	30/15 Summer				
2.000	15 Winter	100	1	30/15 Summer	100/15 Winter			
2.001	15 Winter	100	1	30/15 Summer				
2.002	15 Winter	100	1	2/15 Summer	30/15 Summer			8
1.004	15 Winter	100	1	30/15 Summer				
1.005	15 Winter	100	1	100/15 Summer				
1.006	15 Summer	100	1	30/15 Summer	30/15 Summer			4
1.007	15 Winter	100	1	30/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	106.891	0.566	30.615	1.43	0	67	FLOOD
1.001	106.784	0.759	0.000	1.36	0	64	FLD RISK
1.002	106.700	0.915	0.000	1.10	0	64	FLD RISK
1.003	106.565	1.340	0.000	1.08	0	136	FLD RISK
2.000	108.420	0.900	0.172	1.30	0	15	FLOOD
2.001	106.956	0.416	0.000	0.90	0	13	SURCH'ED
2.002	104.726	0.906	5.943	1.14	0	18	FLOOD
1.004	101.501	0.586	0.000	1.11	0	152	SURCH'ED
1.005	98.456	0.041	0.000	0.96	0	151	SURCH'ED
1.006	93.772	0.477	1.674	1.01	0	142	FLOOD
1.007	89.454	0.429	0.000	1.06	0	141	FLD RISK

Summary Wizard of "CRITICAL"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years) 1, 2, 10, 30, 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	100	1	30/15 Summer				
1.001	15 Winter	100	1	10/15 Summer	30/15 Summer			9
2.000	15 Winter	100	1	10/15 Summer				
2.001	15 Winter	100	1	30/15 Summer				
2.002	15 Winter	100	1	10/15 Summer	100/15 Summer			1
1.002	15 Summer	100	1	10/15 Summer				
1.003	15 Winter	100	1	10/15 Summer				
1.004	15 Summer	100	1					
3.000	15 Winter	100	1	30/15 Summer				
3.001	15 Winter	100	1	100/15 Summer				
1.005	15 Winter	100	1	100/15 Summer				
1.006	15 Summer	100	1					
1.007	15 Winter	100	1	100/15 Winter				
1.008	15 Winter	100	1	100/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	107.539	0.364	0.000	1.27	0	57	SURCH'ED
1.001	106.875	0.090	14.576	0.89	0	54	FLOOD
2.000	108.715	0.565	0.000	1.37	0	11	SURCH'ED
2.001	108.171	0.371	0.000	0.89	0	10	FLD RISK
2.002	107.321	0.601	0.616	1.22	0	9	FLOOD
1.002	106.798	0.598	0.000	1.30	0	61	FLD RISK
1.003	106.813	0.853	0.000	1.57	0	92	FLD RISK
1.004	105.318	-0.082	0.000	0.73	0	92	O K
3.000	107.467	0.491	0.000	1.07	0	48	FLD RISK
3.001	103.934	0.064	0.000	1.01	0	48	SURCH'ED
1.005	100.879	0.039	0.000	1.01	0	138	SURCH'ED
1.006	98.279	-0.061	0.000	0.88	0	138	O K
1.007	93.289	0.024	0.000	0.98	0	138	SURCH'ED
1.008	89.198	0.203	0.000	1.03	0	137	SURCH'ED

Highway and Transportation Consultants

GAF/3247/1

May 2006

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BEDWELL PARK, ESSENDON
TRAFFIC COMPARISON REPORT

On behalf of

P. J. LIVESEY

S6/2006/365/FP

CONTENTS

1.0 INTRODUCTION

1.1 This report has been prepared on behalf of P. J. Livesey in respect of redevelopment proposals at Bedwell Park, Cucumber Lane, Essendon, Hatfield and updates the Bellamy Roberts report of June 2003.

1.2 The previous use of the site has been as a golf clubhouse. However, in January 2002 planning consent was granted for a conversion of the existing buildings and some new build to provide a mixed scheme containing leisure facilities, studio apartments, small office suites and conference facilities. Subsequent to that, planning consent was granted in 2004 for the construction of the following .

10 residential units (flats) - main house conversion
8 residential units (houses) – courtyard
7 residential units (cottages).

1.3 This report considers revised residential development proposals for the site and a comparison of the traffic generation pattern between these proposals and the 2002 and 2004 consents.

2.0 CONSENTED USE (2002)

On 23rd January 2002 planning consent was granted for alterations to the Country Club buildings plus an extension to provide:

- 9 studio flats
- 1151m^2 gfa leisure facilities
- 6 small office suites
- conference facilities (120 delegates approx).

3.0 CONSENTED USE (2004)

3.1 In 2004 planning consent was granted for:

- 10 residential units (flats) (main house conversion).
- 8 residential units (houses) (courtyard)
- 7 residential units (cottages).

4.0 PROPOSED USE (2006)

4.1 Current development proposals envisage a replacement to the above consent to provide:

- 17 flats within the main listed building/courtyard
- 14 houses.

5.0 COMPARISON OF TRAFFIC GENERATION

5.1 In June/July 2003 this practice prepared a Traffic Comparison Report on behalf of the then site developers to support their planning application a total of 25 residential units (see para 3.1). Details of the TRICS data used at this time along with part of the supporting text is reproduced below. In order to make an assessment/comparison of the traffic generation from the earlier consented and the proposed uses, the TRICS database (Version 5.2) has been interrogated where relevant. We have used our own data for conference facilities in the absence of information in TRICS.

2002 Consent

5.2 For the residential element of the consented option, all surveyed sites in the "residential flats privately owned" category were looked at. Unfortunately, the majority of the sites did not have the same locational characteristics as the site then currently under consideration but the nature of the dwellings were similar in that the 2002 consented development was for 1-bedroom studio apartments. Therefore, in order to secure a robust assessment the survey with the highest daily trip rate was selected. Details of this are reproduced at **Appendix 1.**

5.3 In respect of the leisure element, all sites in the "sports centre" category of the "Leisure" section were looked at in the TRICS database. From these the top ranked daily trip rate site was discarded as it appeared to provide an abnormal figure. From the remaining sites, the average trip rate was determined for which a printout is contained at **Appendix 2.**

5.4 The 6 small offices comprised a total of approximately 250m^2. The 'Office' category of the 'Employment' section of TRICS was used, from which data for small offices of less than 1000m^2 gross floorspace was selected. A copy of the TRICS printout is attached at **Appendix 3.**

5.5 No data was available in TRICS for freestanding conference facilities. However, we had carried out surveys at a number of such developments from which we could derive trip rates per delegate. These figures are those which have been incorporated into Table 1 below, but it should be noted that these relate to a conference centre for 300 delegates which provided 120 bedrooms. On the basis that some delegates stayed overnight, these trip rates will underestimate the traffic generation from a facility with no

overnight accommodation, as in this case. That makes the comparison even more robust.

5.6 Details of the trip rates are set out below in **Table 1.**

Trip Rates for 2002 Consented Development

Development	AM Peak		PM Peak		Daily	
	Trip Rate	Veh No	Trip Rate	Veh No	Trip Rate	Veh No
Residential (Flats)	0.42	4	0.20	2	3.31	30
Leisure (Sports)	0.88	10	2.0	23	21.69	250
6 Offices (250m^2)	3.15	8	1.91	5	18.89	47
Conference (120 persons)	0.19	23	0.22	26	1.23	148
Total Veh		**45**		**56**		**475**

(Per 100m^2 for leisure and offices, per residential unit for flats and per delegate for conference)

2004 Consented Development

5.7 For the 2004 consented residential development we have used the same trip rate for flats as for the houses and cottages. That is a different assumption from the one adopted for the 2002 consented development and reflects the change in character of the flats. Those included in the 2004 consent were all reasonably large, 3-bedroom flats, and therefore it was considered that they would have trip generation characteristics more akin to a conventional house.

5.8 For the proposed cottages and houses, the "Houses, privately owned" category from TRICS was adopted. From the numerous surveys available only those with low access to public transport were selected to ensure that a

robust trip rate was secured. The TRICS printout is contained at **Appendix 4.**

5.9 Set out below in **Table 2** are the TRICS based trip rates for the 2004 consented development proposals of 10 flats and 15 houses/cottages.

Table 2

Trip Rates for 2004 Consented Development

Development	AM Peak		PM Peak		Daily	
	Trip Rate	Veh No	Trip Rate	Veh No	Trip Rate	Veh No
Residential (10 Flats)	0.92	9	0.80	8	8.46	85
Residential (8 Houses)	0.92	7	0.80	6	8.46	68
Residential (7 Cottages)	0.92	6	0.80	6	8.46	59
Total		**22**		**20**		**212**

(Per residential unit)

6.0 PROPOSED DEVELOPMENT

6.1 Details set out above at para 4.1 indicate that the current proposals for this site are to construct 17 flats within the current listed building and courtyard along with a further new build of 14 houses making a total of 31 residential units.

6.2 In order to maintain a level of conformity and consistency in the traffic generation assessment and analysis it is considered that the trip rates used in the Bellamy Roberts Traffic Comparison Report of June/July 2003 should be utilised.

6.3 As in the case of the analysis at that time the proposed flats have been treated as houses for the purpose of determining a peak hour and daily trip rate. Therefore based on the above criteria, Table 3 below has been produced.

Table 3

Trip Rates for Proposed Residential Development

Development	AM Peak		PM Peak		Daily	
	Trip Rate	Veh No	Trip Rate	Veh No	Trip Rate	Veh No
Residential (17 Flats)	0.92	16	0.80	14	8.46	144
Residential (14 Houses)	0.92	13	0.80	11	8.46	118
Total		**29**		**25**		**262**

(Trip rate per residential unit)

6.4 It should be noted that the above assessment is robust insofar as it treats the flats in the same way as the residential units and follows the format of the earlier report which is understood to have been acceptable.

7.0 COMPARISON

7.1 It can be seen from the contents of Tables 1, 2 and 3 that during the weekday peak hours (08:00-09:00 and 17:00-18:00) that the 2002 consented development was predicted to generate in the order of 45 vehicle movements in the a.m. peak and 56 in the p.m. The 2004 residential consent lowered those predicted movements to 22 and 20 respectively.

7.2 The current development proposals, as can be seen from Table 3 estimate that the peak hour flows will still be substantially below that of the 2002

consent and with only 7 additional movements in the a.m. peak and 5 extra p.m. peak hour movements than for the 2004 consented residential scheme.

7.3 Over a typical weekday it is predicted that the new proposals will still generate substantially less vehicle movement than the 2002 (around 45% lower) albeit the additional dwelling units proposed in comparison with the 2004 consent will naturally engender some increased flows, up to 50 movements (25 in and 25 out) per day.

7.4 However, this anticipated increase in daily flows over the 2004 consent must be seen in context insofar as it related to flows over a 24 hour day and is still substantially below that which would have been generated by the 2002 consented development.

8.0 CONCLUSIONS

8.1 It is clear from the comparison that the current proposals will give rise to traffic flows which are substantially below the figures which would result from implementation of the 2002 planning consent and in terms of peak hour flows only marginally above the 2004 consented development.

APPENDICES

APPENDIX 1

Bellamy Roberts Turnpike House, 16 Church Road Fleet, Hampshire Licence No: 200601

TRIP RATE for Land Use RESIDENTIAL/FLATS PRIVATELY OWNED
Calculation Factor: 1 HHOLDS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	108	0.04	1	108	0.26	1	108	0.30
08:00 - 09:00	**1**	**108**	**0.01**	**1**	**108**	**0.41**	**1**	**108**	**0.42**
09:00 - 10:00	1	108	0.09	1	108	0.16	1	108	0.25
10:00 - 11:00	1	108	0.10	1	108	0.08	1	108	0.19
11:00 - 12:00	1	108	0.11	1	108	0.09	1	108	0.20
12:00 - 13:00	1	108	0.16	1	108	0.16	1	108	0.31
13:00 - 14:00	1	108	0.10	1	108	0.13	1	108	0.23
14:00 - 15:00	1	108	0.07	1	108	0.10	1	108	0.18
15:00 - 16:00	1	108	0.21	1	108	0.11	1	108	0.32
16:00 - 17:00	**1**	**108**	**0.31**	1	108	0.06	1	108	0.38
17:00 - 18:00	1	108	0.17	1	108	0.04	1	108	0.20
18:00 - 19:00	1	108	0.18	1	108	0.16	1	108	0.33
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Daily Trip Rates:			1.56			1.76			3.31

Parameter Summary

Trip Rate Parameter Range Selected:	70 - 108 (units:)
Survey Date Date Range:	01/01/94 - 16/06/98
Number of Weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	NO
Surveys Manually Removed from Selection:	9

APPENDIX 2

TRIP RATE for Land Use LEISURE/SPORTS CENTRES

Calculation Factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS No. Days	ARRIVALS Ave. GFA	ARRIVALS Trip Rate	DEPARTURES No. Days	DEPARTURES Ave. GFA	DEPARTURES Trip Rate	TOTALS No. Days	TOTALS Ave. GFA	TOTALS Trip Rate
00:00 - 01:00	5	5800	0.00	5	5800	0.00	5	5800	0.01
01:00 - 02:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
02:00 - 03:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
03:00 - 04:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
04:00 - 05:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
05:00 - 06:00	5	5800	0.01	5	5800	0.01	5	5800	0.01
06:00 - 07:00	6	5767	0.08	6	5767	0.01	6	5767	0.09
07:00 - 08:00	17	6842	0.33	17	6842	0.14	17	6842	0.47
08:00 - 09:00	17	6842	0.50	17	6842	0.38	17	6842	0.88
09:00 - 10:00	17	6842	0.77	17	6842	0.38	17	6842	1.15
10:00 - 11:00	17	6842	0.67	17	6842	0.53	17	6842	1.20
11:00 - 12:00	18	6559	0.56	18	6559	0.69	18	6559	1.26
12:00 - 13:00	19	6530	0.68	19	6530	0.73	19	6530	1.41
13:00 - 14:00	19	6530	0.62	19	6530	0.69	19	6530	1.30
14:00 - 15:00	19	6530	0.53	19	6530	0.54	19	6530	1.07
15:00 - 16:00	19	6530	0.72	19	6530	0.59	19	6530	1.31
16:00 - 17:00	19	6530	0.86	19	6530	0.77	19	6530	1.63
17:00 - 18:00	19	6530	1.16	19	6530	0.84	19	6530	2.00
18:00 - 19:00	**19**	**6530**	**1.22**	19	6530	0.94	19	6530	2.16
19:00 - 20:00	17	6200	1.14	**17**	**6200**	**1.10**	**17**	**6200**	**2.24**
20:00 - 21:00	17	6200	0.61	17	6200	1.04	17	6200	1.64
21:00 - 22:00	16	6479	0.26	16	6479	0.81	16	6479	1.07
22:00 - 23:00	9	6052	0.08	9	6052	0.52	9	6052	0.59
23:00 - 24:00	5	5800	0.02	5	5800	0.17	5	5800	0.19
Daily Trip Rates:			10.80			10.89			21.69

Parameter Summary

Trip Rate Parameter Range Selected:	1696 - 19750 (units: sqm)
Survey Date Date Range:	01/01/94 - 27/06/02
Number of Weekdays (Monday-Friday):	19
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	NO
Surveys Manually Removed from Selection:	1

APPENDIX 3

Bellamy Roberts Turnpike House, 16 Church Road Fleet, Hampshire Licence No: 200601

TRIP RATE for Land Use EMPLOYMENT/OFFICE

Calculation Factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS No. Days	ARRIVALS Ave. GFA	ARRIVALS Trip Rate	DEPARTURES No. Days	DEPARTURES Ave. GFA	DEPARTURES Trip Rate	TOTALS No. Days	TOTALS Ave. GFA	TOTALS Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	593	0.22	3	593	0.11	3	593	0.34
07:30 - 08:00	3	593	0.17	3	593	0.11	3	593	0.28
08:00 - 08:30	3	593	1.35	3	593	0.17	3	593	1.52
08:30 - 09:00	**3**	**593**	**1.46**	3	593	0.17	**3**	**593**	**1.63**
09:00 - 09:30	4	695	0.22	4	695	0.29	4	695	0.50
09:30 - 10:00	4	695	0.25	4	695	0.18	4	695	0.43
10:00 - 10:30	4	695	0.32	4	695	0.36	4	695	0.68
10:30 - 11:00	4	695	0.50	4	695	0.36	4	695	0.86
11:00 - 11:30	4	695	0.29	4	695	0.22	4	695	0.50
11:30 - 12:00	4	695	0.47	4	695	0.36	4	695	0.83
12:00 - 12:30	4	695	0.36	4	695	0.72	4	695	1.08
12:30 - 13:00	4	695	0.36	4	695	0.76	4	695	1.12
13:00 - 13:30	4	695	0.68	4	695	0.47	4	695	1.15
13:30 - 14:00	4	695	0.50	4	695	0.32	4	695	0.83
14:00 - 14:30	4	695	0.54	4	695	0.29	4	695	0.83
14:30 - 15:00	4	695	0.36	4	695	0.29	4	695	0.65
15:00 - 15:30	4	695	0.36	4	695	0.18	4	695	0.54
15:30 - 16:00	4	695	0.43	4	695	0.18	4	695	0.61
16:00 - 16:30	4	695	0.18	4	695	0.29	4	695	0.47
16:30 - 17:00	4	695	0.18	4	695	0.43	4	695	0.61
17:00 - 17:30	3	593	0.06	3	593	0.73	3	593	0.79
17:30 - 18:00	3	593	0.17	**3**	**593**	**0.96**	3	593	1.12
18:00 - 18:30	3	593	0.11	3	593	0.51	3	593	0.62
18:30 - 19:00	3	593	0.06	3	593	0.34	3	593	0.39
19:00 - 19:30	2	686	0.07	2	686	0.22	2	686	0.29
19:30 - 20:00	2	686	0.07	2	686	0.15	2	686	0.22
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Daily Trip Rates:			9.75			9.14			18.89

Parameter Summary

Trip Rate Parameter Range Selected:	408 - 999 (units: sqm)
Survey Date Date Range:	01/01/94 - 24/06/02
Number of Weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	NO
Surveys Manually Removed from Selection:	0

APPENDIX 4

TRIP RATE for Land Use RESIDENTIAL/HOUSES PRIVATELY OWNED

Calculation Factor: 1 HHOLDS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate
00:00 - 01:00	12	85	0.03	12	85	0.02	12	85	0.05
01:00 - 02:00	12	85	0.02	12	85	0.01	12	85	0.03
02:00 - 03:00	12	85	0.00	12	85	0.00	12	85	0.01
03:00 - 04:00	12	85	0.01	12	85	0.00	12	85	0.01
04:00 - 05:00	12	85	0.01	12	85	0.01	12	85	0.02
05:00 - 06:00	12	85	0.01	12	85	0.04	12	85	0.06
06:00 - 07:00	12	85	0.04	12	85	0.12	12	85	0.16
07:00 - 08:00	13	81	0.09	13	81	0.42	13	81	0.52
08:00 - 09:00	13	81	0.18	**13**	**81**	**0.74**	**13**	**81**	**0.92**
09:00 - 10:00	13	81	0.20	13	81	0.24	13	81	0.43
10:00 - 11:00	13	81	0.14	13	81	0.17	13	81	0.32
11:00 - 12:00	13	81	0.19	13	81	0.19	13	81	0.38
12:00 - 13:00	13	81	0.21	13	81	0.20	13	81	0.42
13:00 - 14:00	13	81	0.18	13	81	0.17	13	81	0.34
14:00 - 15:00	13	81	0.17	13	81	0.17	13	81	0.33
15:00 - 16:00	13	81	0.30	13	81	0.26	13	81	0.55
16:00 - 17:00	13	81	0.34	13	81	0.19	13	81	0.53
17:00 - 18:00	**13**	**81**	**0.57**	13	81	0.23	13	81	0.80
18:00 - 19:00	13	81	0.48	13	81	0.32	13	81	0.80
19:00 - 20:00	12	85	0.37	12	85	0.27	12	85	0.64
20:00 - 21:00	12	85	0.29	12	85	0.21	12	85	0.50
21:00 - 22:00	12	85	0.18	12	85	0.13	12	85	0.31
22:00 - 23:00	12	85	0.14	12	85	0.07	12	85	0.21
23:00 - 24:00	12	85	0.08	12	85	0.04	12	85	0.13
Daily Trip Rates:			4.24			4.22			8.46

Parameter Summary

Trip Rate Parameter Range Selected:	9 - 4334 (units:)
Survey Date Date Range:	01/01/94 - 18/12/98
Number of Weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	YES
Surveys Manually Removed from Selection:	0

Lisa

PJ Livesey GROUP

ASHBURTON PARK BEACON ROAD TRAFFORD PARK MANCHESTER M17 1AF

Our ref: MG/LJT
Your ref: S6/2006/365/FP

30 May 2006

Development Control
Welwyn Hatfield Council
Council Offices
The Campus
Welwyn Garden City
Hertfordshire
AL8 6AE

For the attention of Ms Lisa Hughes

Dear Madam

RE: FORMER MANOR HOUSE, BEDWELL PARK, CUCUMBER LANE
ESSENDEN, HATFIELD
TRAFFIC COMPARISON REPORT

Further to the recent email communications between our Matthew Greavey and Vetti Vettivelui of Hertfordshire County Council regarding the above, please find enclosed 10 copies of the "Traffic Comparison Report" document prepared by Bellamy Roberts.

You will note that Mr Vettivelui has accepted that the works associated to the current application will present no significant difference to the earlier approved schemes of 2002 and 2004, and as such he is happy to support our application.

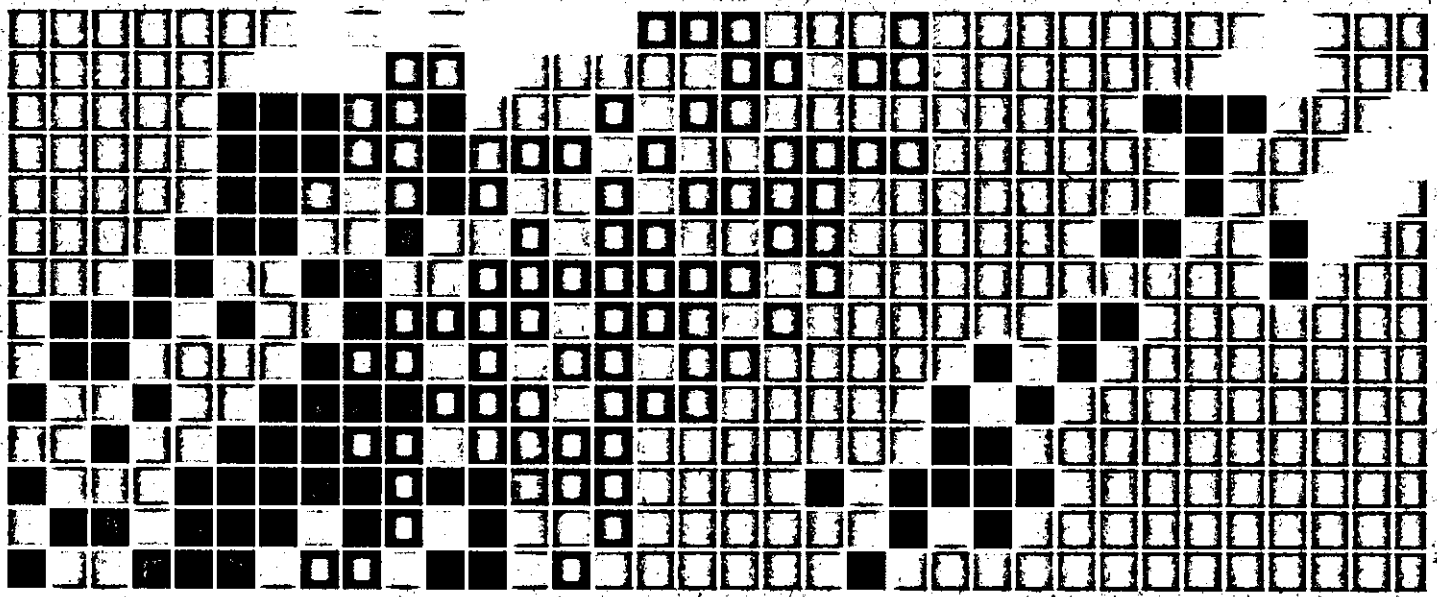
Should you require any further information or there is a reason why you will be unable to support our application, we would be grateful if you could contact the undersigned.

Yours faithfully

Matthew Greavey, RIBA
For and on behalf of
P J LIVESEY (LONDON) LIMITED

cc *James Woodmansee, PJL*
Nick Jackson, Millgate
Greg Meier, Millgate

PULLVerse



Bedwell Park, Essendon, Hertfordshire
PPG25 Flood Risk Assessment

Millgate Homes.

July 2006

WSP

Issue/revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks	DRAFT			
Date	July 2006			
Prepared by	S Wilson			
Signature				
Checked by	S Purcell			
Signature				
Authorised by	S Purcell			
Signature				
Project number	1150653/PF1			
File reference	D001			

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Contents

1 Introduction

1.1 WSP are acting on behalf of PJ Livesey and Millgate Homes Limited with respect to a development proposal and detailed planning application for land at Bedwell Park, Cucumber Lane, Essendon, AL96HN. Refer to Location Plan in Appendix A.

1.2 The development proposals include the conversion of the an existing listed building into 17 new apartments, the removal of modern extensions, 14 new build units associated parking and garage unit.

1.3 This Flood Risk Assessment (FRA) has been prepared to accompany a detailed planning application for the development of the site. A previous application for the site has been submitted and an objection was received on April 19 2006 (ref : NE/2006/014337-1/1). The reason for the refusal was related to the requirement for a flood risk assessment. The preparation of this report seeks to remove this reason for refusal.

1.4 A requirement of the Department of Transport, Local Government and the Regions (DTLR) – "Planning Policy Guidance Note 25 : "Development and Flood Risk" (PPG25) published in July 2001 is that developers, making planning applications on sites that are potentially at risk from flooding, or at risk of exacerbating existing flooding problems, should consult with the Environment Agency (EA) and produce a FRA for their proposals.

1.5 The EA, as a statutory consultee within the planning process, require a FRA to be submitted to accompany the detailed planning application.

1.6 This report has been commissioned to identify the likely flooding issues associated with the above site and the surrounding catchment area and the possible constraints that could be imposed on the development. The emphasis of this report has been geared towards defining a surface water drainage strategy in order to minimise the impact of the development upon flood risk associated with properties and watercourses situated downstream, in accordance with current PPG25 and also takes into consideration ideas brought forward in the review of Draft PPS25. It also highlights how these issues could be addressed through the planning and design process.

1.7 At this stage, this report has concentrated upon providing the necessary information relating to the proposed development layout to demonstrate that the site is deliverable within the context of the detailed planning application.

2 Background

2.1 PJ Livesey and Millgate Homes are posing to redevelop an existing brownfield site, having a total site area of approximately 5.5ha. The Development includes :

- the conversion of a listed building into 17 apartments
- demolition of modern 1980's extensions,
- 14 new build dwellings
- 28 garage courtyard blocks together with 40 parking spaces across the site
- New build tennis court house and integral garage, proposed walled garden dwelling and garaging and associated landscaping.

Refer to topographical survey information in Appendix B for details of the existing site.

2.2 The EA have recently published Flood Zone Maps (FZM), which show areas potentially deemed to be at risk of flooding. The FZM have been produced using appropriate good quality mapping and modelling data, where available, supplemented with data derived from national generalised modelling and appropriate good quality local data which conforms to the EA's acceptable criterion. The nationally generalised modelling utilises a Digital Terrain Model (DTM) which excludes the presence of man made features such as flood defences and road and rail embankments. Fluvial flood zone outlines were produced using a 2D raster floodplain model (Jflow) and shows the probability of flooding without the presence of defences. Whilst the modelling methodology used to produce FZM excludes the presence of flood defences, in order to ensure that the extent of the functional floodplain is delineated, the FZM also show the area of benefit provided by modern flood defences (less than 5 years old) where they are present.

2.3 The EA have confirmed that the site is not currently at risk of fluvial flooding as it is situated in Flood Zone 1. The main risk of flooding to the site has been identified as surface water run-off. The focus of this report shall be towards the proposed surface water drainage scheme and highlighting the reduced run-off volumes and rates due to a reduction in the existing impermeable areas.

3 Requirements of the Flood Risk Assessment

3.1 PPG25 – "Development and Flood Risk", Appendix F sets out the requirements of a Flood Risk Assessment.

3.2 3.2 The PPG25 Appendix F Guidance specifies that the report shall contain the following:

- Location Plan – see Appendix A and Section 4 of this report
- Level Plan – see Appendix B and Section 5 of this report
- Details of existing flood alleviation measures – see Section 6 of this report
- Sources of flooding – see Section 7 of this report
- Floodplain – See Appendix A and Section 8 of this report
- Structures influencing local hydraulics – see Section 9 of this report
- Flood Probabilities – see Section 10 of this report
- Levels of proposed site – see Section 11 of this report
- Flood Progress – see Section 12 of this report
- Sewer Hydraulics – see Appendix E and Section 13 of this report
- Flood Volume Displaced – see Section 14 of this report
- Impact of Displaced Water – see Section 15 of this report
- Impact on Fluvial and Coastal Morphology – see Section 16 of this report
- Climate Change Impacts – see Section 17 of this report
- Residual Risk Assessment –see Section 18 of this report
- Proposed Development Drainage – see Section 19 of this report

4 Site Location

SITE LOCATION & DETAILS

4.1 The site is located at Bedwell Park, Cucumber Lane, Essendon, AL96HN. The site is adjacent to the London Hatfield Golf Course. Refer to Appendix A for details.

4.2 The site is currently derelict and consists of a listed building that was once the club house of the adjacent golf course. The property is currently in a state of disrepair with development proposals seeking to convert the club house into 17 new apartments and associated parking.

4.3 The site covers approximately 5.50 hectare. The proposed redevelopment will incorporate the addition of 14 new build residential units, along with a new tennis court house and proposed redevelopment of the existing walled garden building to the south of the site. The walled garden building will retain the same floorplan and will utilise the existing pond to the south of the site. It will therefore not be considered within this FRA.

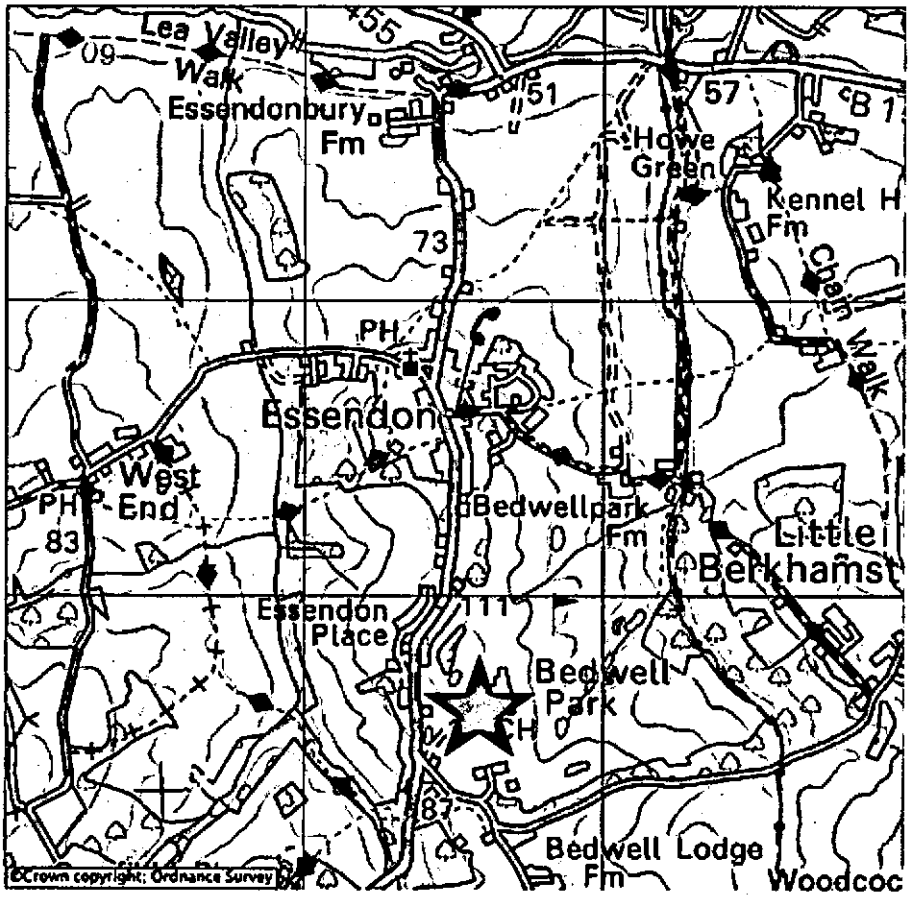
4.4 The surface coverage of the existing brownfield site can be summarised as follows:

Roof areas	0.308ha
Car parking / paved areas	0.709.ha
Permeable (gravel / landscaping) areas	4.482ha

PROXIMITY TO WATERCOURSES

4.5 The River Lea flows approximately 2km north of the site. The existing positive drainage network discharges to a series of ponds that are situated on the golf course.

4.6 This series of ponds join a small watercourse that joins the River Lea to the north of Howe Green.



5 Site Levels

5.1 The existing brownfield site levels generally slope in an easterly direction, from approximately 110mAOD in the south to 104.5mAOD in the north east of the site.

5.2 The golf course slopes steeply away from the site, providing a natural overland flow route to the existing retention ponds on the golf course.

5.3 Liaison with the EA and examination of the flood zone maps has indicated that site has a very low risk with respect of fluvial flooding.

5.4 Topographical survey information for the site can be found in Appendix B.

6 Existing Flood Protection Measures

6.1 The current site is not deemed to be at risk from fluvial flooding and therefore flood protection measures are not considered within this FRA.

7 Sources of Flooding

FLUVIAL/ORDINARY WATERCOURSES

7.1 The site is not shown as being at risk of fluvial (river) flooding on the EA's Indicative Flood Risk Maps (Refer to Appendix A).

SEWERS

7.2 The site is a brownfield site with surface water and foul water draining to a separate foul and surface water system. Historically there has been a large amount of infiltration into the existing foul system with the offsite treatment station situated on the adjacent golf course being unable to cope with the combined flows.

FOUL SEWER

7.2.1 Development proposals seek to refurbish the existing sewerage treatment station and filter beds within the golf course and remove the surface water connections from the treatment facility. This will reduce the strain on the existing treatment facility and ultimately the number of sewer overflows. The EA have granted consent for the treated effluent to be discharged into the ponds to the east of the site. These flows are not deemed to be significant. Copies of the relevant EA consents are included in Appendix C

SURFACE WATER SEWERS

7.2.2 The existing site is serviced by a surface water sewer network, conveying paved and roof run-off to the east of the site, terminating at the ponds that are located on the golf course.

7.2.3 During large storm events the existing system is known to surcharge, however there is a large overland flow route to the existing pond that flows across the steep section of the golf course (Refer to topographical survey in Appendix B)

7.2.4 Drainage design is discussed in detail within Sections 13 and 19 of this report.

GROUNDWATER

7.3 Local topography would dictate that the site is not at risk from groundwater flooding. The site is situated at the top of a hill with the land adjacent to the site falling steeply towards the Lea Valley.

7.4 The site is therefore considered at very minor risk from groundwater flooding.

OVERLAND FLOW

7.5 The site is situated towards the top of a ridge within Essendon and is therefore at minor risk of overland flow.

8 Flood Levels

MODELLED FLOOD LEVELS

8.1 Consultation with the EA and investigation of the EA Flood Zone maps would show the site to not be at risk of flooding for the critical 1 in 100yr event.

HISTORIC FLOOD LEVELS

8.2 There are no historic flood levels associated with the site.

9 Hydraulic Structures

9.1 The site has no hydraulic structures that are associated with the site.

10 Flood Probabilities

10.1 The Environment Agency has requested that the site be protected against the 1:100 year event (1% annual probability flood) as it is in a non-tidal location.

10.2 The site is not at risk of fluvial flooding for the critical 1 in 100 yr event as illustrated in the EA's Flood Zone Maps. (Refer to Appendix A).

11 Existing And Finished Levels

11.1 The existing brownfield site levels are above the critical 1:100 yr design flood level. Finished floor levels will therefore be situated at or above the existing ground level.

12 Flood Progress

12.1 The proposed development is not affected by the 1% annual probability flood and, therefore, is not affected by nor affects any flood progress across the site.

13 Sewerage

13.1 The site is currently served by separate foul and surface water sewer networks, with a combined outfall to the existing ponds to the west of the site, on the adjacent golf course.

FOUL SEWERS

13.2 The development proposals include the addition of a new foul sewer network and refurbishment of the existing treatment system located on the adjacent golf course. (Refer to Topographical Survey in Appendix B for location).

13.3 The proposals include the removal of existing surface water connections to the existing foul network, with these surface water connections being connected to the new surface water sewer system. The removal of the surface water connections will enable a greater capacity at the existing refurbished facility, along with the reduction in the foul sewer overflows.

13.4 These changes will ensure the adequate treatment of the foul sewerage along with ensuring the water quality for the discharge to the surface water ponds.

13.5 The Environment Agency has consented to the foul sewerage discharge. Refer to correspondence included in Appendix C

SURFACE WATER SEWERS

13.6 Details for the surface water drainage strategy are provided in Section 19 of this report.

13.7 The surface coverage of the proposed site can be summarised as follows:

Roof areas	0.483ha
Car parking / paved areas	0.275ha
Permeable (landscaping) areas	4.742ha

13.8 From investigation of the existing impermeable areas and a comparison with those proposed and the inclusion of SuDS systems it can be clearly seen that there will be a significant reduction in surface water run-off rates and volumes.

	Roof Area	Carpark/Paved	Total
Proposed	0.483	0.275	0.758
Existing	0.308	0.709	1.017
% Reduction	-57%	61%	**26%**

13.9 Any future drainage strategy shall be designed not to exacerbate any existing flood risk associated with properties situated upstream, or downstream, of the site. Off-site surface water discharge rates shall be restricted to those discharging from the existing site. Refer to Section 19 for proposed development drainage details.

14 Flood Volume Displaced

14.1 No flood volume will be displaced by the proposed development as the site is not at risk of fluvial flooding from the 1:100 year flood event and no raising of the ground is being proposed.

15 Impact of Displaced Water

15.1 No impact will occur as no flood volume will be displaced by the development proposals.

16 Impact on Fluvial or Coastal Morphology

16.1 The site will have no detrimental impacts on fluvial or coastal morphology.

17 Climate Change Impact

17.1 PPG25, Appendix A, takes into account the impacts that climate change may have on flooding issues.

17.2 The development is situated in Flood Zone one and has over 20m of freeboard from Flood Zone 3, therefore the development will not be affected by Climate Change.

18 Residual Risk Assessment and Mitigation

18.1 The major residual risk for the proposed development is for flood events greater than the current design criteria i.e. a 1:100 year return period. The site topography and landscaping will ensure that any drainage that is unable to be managed by the surface water sewer network will follow existing overland flow routes across the golf course to the off site retention ponds.

19 Proposed Development Drainage

19.1.1 One of the principal conditions to be met for any future drainage strategy is that it is designed not to exacerbate any existing flood risk associated with properties situated upstream, or downstream, of the site.

19.1.2 Surface water discharge rates shall be restricted to existing run-off rates, or less, at rates up to and including the 1 in 100 year event. See Appendix E for micro-drainage calculation illustrating the existing and proposed run-off rates.

19.1.3 Summarised below are the micro-drainage calculations showing that the existing peak flow rates in comparison with those from the proposed development for the 1 in 2 yr storm and the 1 in 100 yr storm.

	1 in 2 yr Discharge rate	1 in 100yr Discharge rate	Combined manhole overflow volume
Existing	107l/s	141l/s	38.40m^3
Proposed	83l/s	137l/s	14.57m^3
Reduction	**22%**	**2.8%**	**62%**

19.1.4 The proposed drainage system will be designed to utilise the existing outfall into the pond on the golf course for all the hard standing and roofed areas with a focus on soft drainage and Sustainable Drainage Systems for paths and access ways.

19.1.5 Sustainable Drainage Systems (SuDS) will be implemented throughout this development scheme. These will take the form of infiltration drainage systems and permeable paving, where subsoil and groundwater conditions allow.

GROUNDWATER SOURCE PROTECTION ZONE

19.1.6 EA's Groundwater Source Protection Zone (SPZ) maps show that the site lies within the "Total Catchment" or Source protection Zone 3. The EA guidance "Policy and Practice for the Protection of Groundwater" states that the public and amenity areas are acceptable for discharge to ground without an interceptor. The majority of paths on site are to be "soft" engineered.

OTHER CONSIDERATIONS

19.1.7 Micro-drainage calculations show that during the critical 1 in 100 yr event, the current system exhibits surface flooding. Excess flows surcharge in manholes and flood the surrounding landscaped areas. Current landscaping would allow excess flows to pass overland, down the steep embankment on the golf course to enter the existing ponds.

19.1.8 The proposed drainage regime reduces the volume of run-off from the site with any excess from the utilisation of the existing positive drainage network; still being able to follow the same overland flow routes.

20 Drainage Strategy

20.1 STRATEGY

20.1.1 Initial proposals indicate that the development will consist of the conversion of the existing clubhouse and the demolition of 2 existing extensions from the 1980's with the inclusion of 14 new development units. A large section of hard standing is to be broken out and landscaped as shown on the proposed development plans in Appendix D.

20.1.2 The strategy involves utilising the existing outfall to the pond within the golf course. This pipe is currently operating at or near capacity with the amount of impermeable area that is currently connected to the drainage network. The capacity of the discharge pipe is 141l/s. The proposed regime will reduce the flow to the existing outfall to ensure minimal surcharging and surface water flooding for the critical 1 in 100 yr flood event.

20.1.3 The entrance to the existing site consists of a large area of metalled carpark and associated landscaping. The hard-standing area is positively drained to the retention ponds located within the golf course. A large area of this hard standing will be removed by the development proposals.

20.1.4 Based upon the micro-drainage simulation, surface flooding occurs during the 1 iin 100 yr event in the developed state. Such flooding will be managed with overland flow routes provided to soft landscaped areas.

20.1.5 Refer to Drawings in Appendix D and calculations in Appendix E for proposed and existing drainage layouts and illustration of impermeable areas.

21 Conclusions

21.1 The existing site is not deemed to be at risk from fluvial flooding with the site level in the region of 20 m above the existing ponds and watercourse.

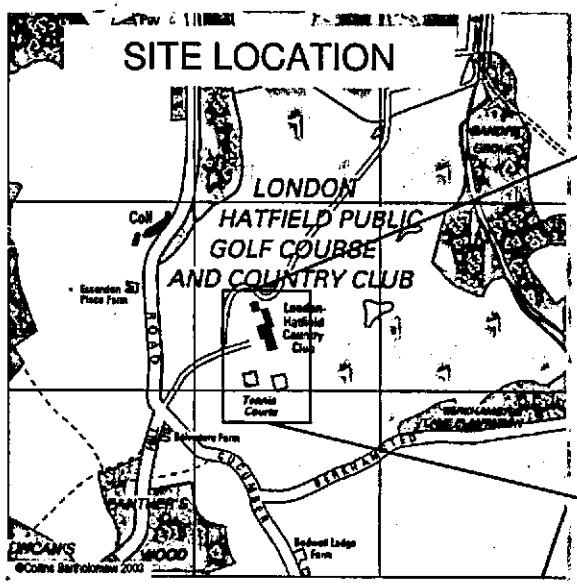
21.2 This Flood Risk Assessment report determines that the site can be delivered within the land under its control and identifies some points of detail that need to be incorporated into the detailed design of the development. At this stage, the report has concentrated upon providing the necessary information relating to the proposed drainage scheme to demonstrate that the site is deliverable.

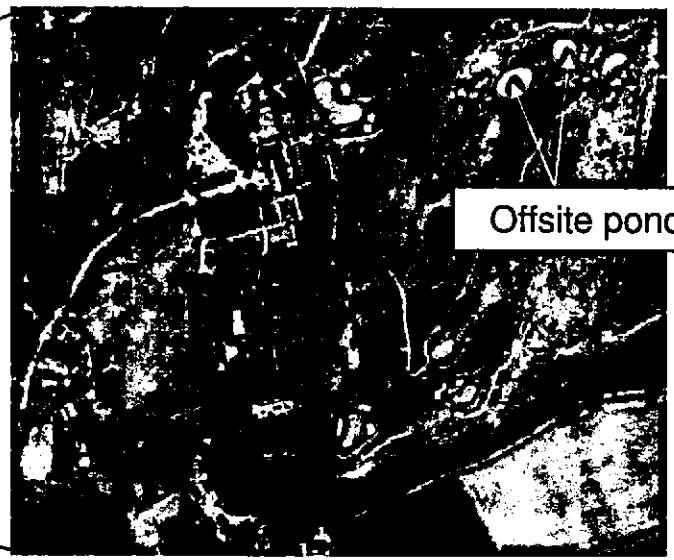
21.3 Any future drainage strategy shall be designed not to exacerbate any existing flood risk associated with properties situated upstream, or downstream, of the site. Off-site surface water discharge rates shall be restricted to those discharging from the existing site, or less.

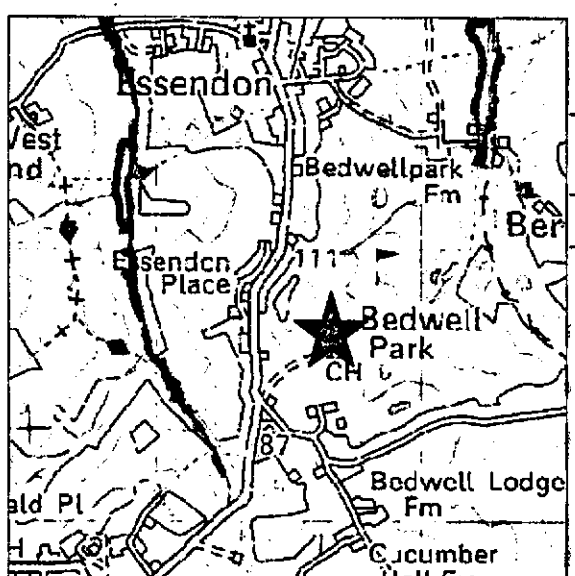
21.4 The proposed development will reduce the impermeable area by removing a large section of hard standing at the east of the site. This reduction in impermeable area will lead to a reduction in run rates and volume from site.

21.5 The site is presented as sustainable in terms of flood risk.

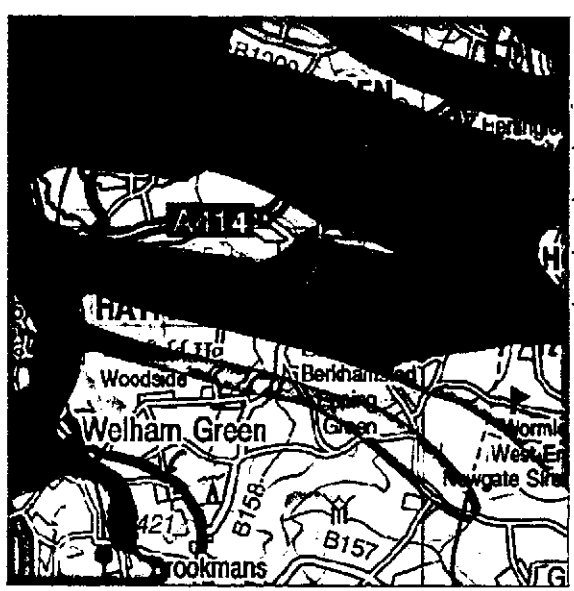
Appendix A Site Location Plan, Flood Zone maps and EA Source protection maps.







- Flooding from rivers or sea without defences
- Extent of extreme flood
- Flood defences
- Areas benefiting from flood defences



- Groundwater source protection zones more
  - Inner zone
  - Outer zone
  - Total catchment
  - Special interest

Appendix B Topographical Survey

Appendix C Environment Agency Correspondence

Copy to JS.

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Environment Agency

Our Ref: N/WR 1073
Date: 28 April 2006

Millgate Homes
Millgate House
Ruscombe Lane
Ruscombe
Twyford
Berks
RG10 9JT

Dear Sir or Madam

Water Resources Act 1991 Schedule 10 (as Amended by the Environment Act 1995) Consent to Discharge Secondary Treated Sewage Effluent from Essendon Hall, Cucumber Lane, Essendon, Herts, AL9 6HN

Please find enclosed the Consent to discharge under Schedule 10 of the Water Resources Act 1991 (as amended by the Environment Act 1995), in respect of your received application on 23 February 2006. You are now the holder of this Consent and should ensure that the conditions of the Consent are complied with at all times.

Should you be dissatisfied with the conditions specified in the Consent, you may appeal to the Secretary of State for the Environment by writing to the Planning Inspectorate, Environmental Appeals Administration, 4/19 Eagle Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol BS1 6PN, within three months of its issue.

This Consent is an important document. The right to discharge effluent may be valuable to you. The document should be kept safe, probably with the Deeds of the property where appropriate.

Please take careful note that if the holder of the consent changes, you should inform the Agency **IN WRITING** as soon as possible of the name of the new holder (certificate and transfer form attached). This is to ensure that the rights and charges associated with the Consent are transferred to the new holder. If you do not inform us of the change within 21 days, an offence will have been committed that may result in prosecution.

Where the holder dies or is served with a bankruptcy order, different rules and timescales govern these changes. In these situations, the executors or trustees should contact us promptly for further guidance.

If you want to revoke, or vary the Consent in any way, please contact the us. Similarly, if you change your contact address while continuing to hold the Consent please contact us.

We have adopted a scheme whereby all consented discharges, except those of sewage effluent of 5 cubic metres per day or less, shall be subject to an annual charge. Under our current scheme of charges, this consented discharge will attract an annual charge. The charging will begin once the holder notifies us of the date that the discharge will commence.

This Consent covers water quality considerations only. It does not give any right or permission to discharge where land is not owned by the applicant. In addition, for discharges to watercourse, it does not imply the suitability, with regard to volumetric capacity, of the receiving watercourses. It is the responsibility of the applicant to identify and negotiate, with the riparian owners as necessary, any requirement for downstream improvement works. Failure to do so could result in a Common Law action by the riparian owner.

Please ensure that the sample point for this discharge is maintained so that it is accessible to officers of the Agency and that a direct sample of the effluent may be readily and safely taken at all times.

Details of this Consent and associated application are placed on a public register, kept by us and open for inspection by the public.

Yours faithfully

Kate Wiseman
Regulatory Officer (Water Quality)
Direct Dial: 01707 632459
Direct Fax: 01707 632533

ENVIRONMENT AGENCY

Consent to Discharge

Water Resources Act 1991 (as amended by the Environment Act 1995)

Consent Holder(s)

Millgate Homes
Millgate House
Ruscombe Lane
Ruscombe
Twyford
Berks
RG10 9JT

Consent to Discharge from

Essendon Hall
Cucumber Lane
Essendon
AL9 6HN

Consent Number **N/WR1073**

Environment Agency Thames Region
Apollo Court, 2 Bishops Square Business Park, St Albans Road West, Hatfield, Herts AL10 9EX

Consent to D[illegible]charge
Water Resou[illegible]s Act 1991
Section 88 [illegible]hedule 10
(as amend[illegible]by the
Environm[illegible] Act 1995)

ENVIRONMENT AGENCY

Consent to Discharge

Consent Number
N/WR1073

To:
Millgate Homes ("the Consent Holder")
Millgate House
Ru[illegible]ombe Lane
Ruscombe
Twyford
Berks
RG10 9JT

The Environment Agency ("the Agency") in pursuance of its powers under the Water Resources Act 1991(as amended by the Environment Act 1995) hereby consents to the making of a discharge:

Of:
Secondary treated sewage effluent containing no trade effluent ("the Discharge")

From:
The sewage treatment plant serving 37 domestic properties

At:
Essendon Hall, Cucumber Lane, Essendon, AL9 6HN

To:
Lake Tributary of the River Lee

Subject to the conditions set out in this notice of Consent to Discharge.

Subject to the provisions of Paragraphs 7 and 8 of Schedule 10 of the Water Resources Act 1991(as amended by the Environment Act 1995), no notice shall be served by the Agency, altering this consent, without the agreement of the Consent Holder, during a period of 4 years from the date this notice is issued.

This Consent is issued on: 28 APRIL 2006
This Consent takes effect on: 28 APRIL 2006.

Signed

Isley

Team Leader Regulatory Water Quality

1 Conditions of Consent for secondary treated sewage effluent containing no trade effluent

1.1 Nature

1.1.1 The Discharge shall consist solely of secondary treated sewage effluent containing no trade effluent.

1.2 Place of Discharge

1.2.1 The Discharge shall be made in the manner and at the place specified as:

- **a** discharging to Lake Tributary of the River Lee;
- **b** at National Grid Reference TL 27951 07717;
- **c** shown marked "Outlet" on Site Plan attached to this consent.

1.3 Sampling Point Requirements

A sample point shall be provided and maintained at National Grid Reference TL 27799 07657as shown marked "Sample Point" on the Site Plan attached to this consent, so that a representative sample of the Discharge may be obtained. The Consent Holder shall ensure that all constituents of the Discharge pass through the said sampling point at all times and in any legal proceedings it shall, for the purposes of Section 10 of the Rivers (Prevention of Pollution) Act 1961, be presumed, until the contrary is shown that any sample of the Discharge taken at the said sampling point is a sample of what was discharging into controlled waters.

1.4 Volume

1.4.1 The volume of the Discharge shall not exceed 24 cubic metres per day.

1.5 Flow Measurement

1.5.1

- **a** At the request of the Agency, the Consent Holder shall install, operate and maintain a means of flow measuring to a specification and at a location required by the Agency, to enable the daily volume and/or instantaneous flow of sewage through the sewage treatment plant to be recorded.
- **b** The Consent Holder shall calibrate, operate and maintain the flow monitoring and recording system to a standard agreed or specified by the Agency. The flow and maintenance records shall be provided to the Agency as and when requested.

1.6 Composition

1.6.1 The Discharge shall not contain more than:

- **a** 30 milligrammes per litre of biochemical oxygen demand (measured after 5 days at 20°C with nitrification suppressed by the addition of allyl-thiourea)
- **b** 10 milligrammes per litre of ammoniacal nitrogen (expressed as N)

c 45 milligrammes per litre of suspended solids (measured after drying at 105°C)

1.6.2 As far as is reasonably practicable, the sewage treatment plant shall be operated so as to prevent the Discharge from containing any significant trace of visible oil or grease.

1.7 Urban Waste Water Treatment Regulations

1.7.1

a The Consent Holder shall comply with the Urban Waste Water Treatment (England and Wales) Regulations 1994 ('the Regulations').

b For the purpose of condition 1.7.2 below, interpretations and references to a numbered regulation or Schedule shall have the meaning as in the Regulations, unless otherwise indicated.

1.7.2

a The Discharge derives from an agglomeration with a population equivalent of less than 2,000 discharging to freshwaters.

b The Consent Holder shall inform the Agency in writing of any change, or proposed change, to the population equivalent such as would make a material change to the application of the Regulations and shall, on request, inform the Agency in writing of the actual population equivalent.

c The Discharge shall be subject to Regulation 5(7) and satisfy the requirements of Regulation 5(8)(a).

1.8 Priority Substances

1.8.1

a The quantity of Copper or Zinc in the Discharge shall not increase above the levels in the Discharge on the date of effect of this consent where no specific level is authorised; and

b notwithstanding a above, the Discharge shall not contain quantities Copper or Zinc such as to cause or contribute to the concentration of that substance in the receiving water exceeding the relevant Environmental Quality Standard (EQS).

1.9 Works Operation

1.9.1

a The sewage treatment plant shall be operated and the effluent shall be treated in a manner which, so far as reasonably practicable, minimises the polluting effects of the Discharge made from the sewage treatment plant on controlled waters.

b This condition does not require any alteration of the sewage treatment plant or a change in the type of treatment used from that specified in the application.

1.10 Maintenance

1.10.1 The sewage treatment plant shall be operated and maintained in accordance with good operational practice such that:

a it remains fully operational except at times of unavoidable mechanical or electrical breakdown which shall be attended to, and the Agency informed of the failure, as soon as practicable after the failure;

b following a failure all equipment shall be returned to normal operation as soon as practicable;

c tanks shall be desludged at sufficient frequency and in such a manner to prevent excessive carryover of suspended solids.

1.11 **Recording and Reporting**

1.11.1

a The Consent Holder shall establish and operate a documented maintenance programme and record all non-routine actions undertaken that may have adversely affected effluent quality. Copies of the programme shall be made available for inspection by the Agency's officers at all reasonable times.

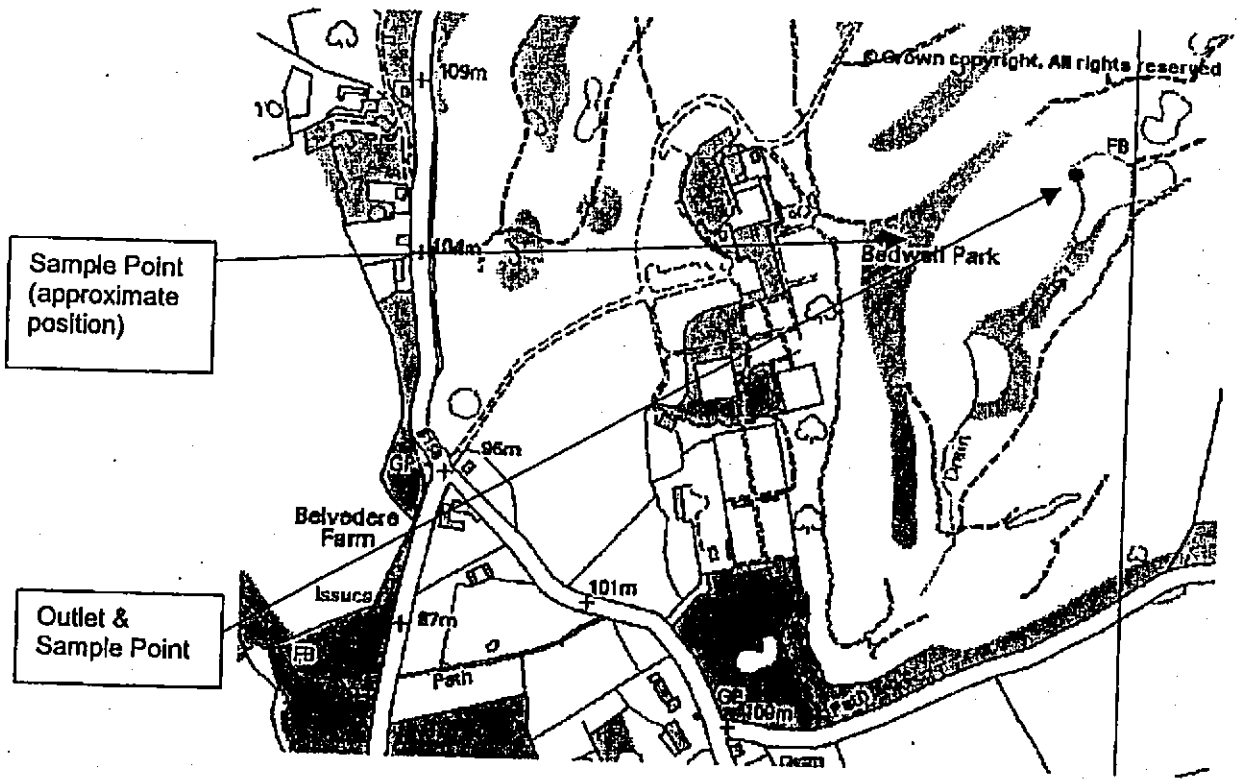
b On request the Consent Holder shall supply the Agency with a written report on the maintenance and all non-routine actions that may have adversely affected effluent quality.

c The Consent Holder shall as soon as reasonably practicable report to the Agency all non-routine actions that may have adversely affected effluent quality.

1.12 **28 Day Notice**

The consent holder shall notify the Agency's Regulatory Water Quality Team Leader, N.E. Area, Thames Region, in writing at least twenty eight days prior to the commencement of the discharge being made in pursuance of this consent.

2 # Site plan


Sample Point (approximate position)
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109m
104m
96m
101m
97m
100m
Belvedere Farm
Issues
Path
Bedwell Park
FB
GP

creating a better place

Environment Agency

Our Ref: RHA.06.03.06
Your Ref: RPH/cvm/2773
Date: 06 March 2006

RICHARD HATTON ASSOC

- 8 MAR 2006

Mr R Hatton
Richard Hatton Associates
3 Drapers Way
Stevenage
Herts
SG1 3DT

Dear Mr Hatton,

WATER RESOURCES ACT 1991 (AS AMENDED BY THE ENVIRONMENT ACT 1995) PROPOSED DISCHARGE OF SURFACE WATER RUN OFF FROM WALLED GARDEN HOUSE AT BEDWELL PARK, ESSENDON, HERTS TO NEARBY POND

Further to your enquiry regarding the discharge of surface water runoff please be advised that the Environment Agency is satisfied that you may discharge this water without formal Consent to Discharge under the Water Resources Act 1991 (as amended by the Environment Act 1995). This is because the discharge will be of rainfall dependent run-off from roofs and hard-standing areas that would be classed as uncontaminated water and is considered of low risk. We have checked the surrounding area and have not found anything that means a consent to discharge is required.

Thank you for consulting us about this discharge. If in the future you plan to make other discharges from this or other sites you should still consult us, as the type of discharge or its location may mean that a consent to discharge is required.

Yours sincerely

K. Wiseman

Kate Wiseman
Regulatory Officer (Water Quality)
Direct Dial: 01707 632459

Appendix D Development Proposals and Sewer layout

Appendix E Micro Drainage Calculations

Summary Wizard of "CRITICAL BY RETURN PERIOD"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30
Return Period(s) (years) 1, 2, 30, 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	2	1	1/15 Summer	30/15 Summer			8
1.001	15 Winter	2	1	2/15 Summer				
1.002	15 Winter	2	1	30/15 Summer				
1.003	15 Winter	2	1	30/15 Summer				
2.000	15 Winter	2	1	30/15 Summer	100/15 Winter			
2.001	15 Winter	2	1	30/15 Summer				
2.002	15 Winter	2	1	2/15 Summer	30/15 Summer			8
1.004	15 Winter	2	1	30/15 Summer				
1.005	15 Winter	2	1	100/15 Summer				
1.006	15 Winter	2	1	30/15 Summer	30/15 Summer			4
1.007	15 Winter	2	1	30/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	106.518	0.193	0.000	1.18	0	56	SURCH'ED
1.001	106.100	0.075	0.000	1.16	0	55	SURCH'ED
1.002	105.732	-0.053	0.000	0.93	0	55	O K
1.003	105.144	-0.081	0.000	0.72	0	91	O K
2.000	107.490	-0.030	0.000	0.83	0	9	O K
2.001	106.499	-0.041	0.000	0.63	0	9	O K
2.002	103.949	0.129	0.000	1.01	0	16	SURCH'ED
1.004	100.841	-0.074	0.000	0.78	0	107	O K
1.005	98.326	-0.089	0.000	0.68	0	107	O K
1.006	93.217	-0.078	0.000	0.76	0	107	O K
1.007	88.954	-0.071	0.000	0.80	0	107	O K

Summary Wizard of "CRITICAL BY RETURN PERIOD"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years) 1, 2, 10, 30, 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	2	1	30/15 Summer				
1.001	15 Winter	2	1	10/15 Summer	30/15 Summer			9
2.000	15 Winter	2	1	10/15 Summer				
2.001	15 Winter	2	1	30/15 Summer				
2.002	15 Winter	2	1	10/15 Summer	100/15 Summer			1
1.002	15 Winter	2	1	10/15 Summer				
1.003	15 Winter	2	1	10/15 Summer				
1.004	15 Winter	2	1					
3.000	15 Winter	2	1	30/15 Summer				
3.001	15 Winter	2	1	100/15 Summer				
1.005	15 Winter	2	1	100/15 Summer				
1.006	15 Winter	2	1					
1.007	15 Winter	2	1	100/15 Winter				
1.008	15 Winter	2	1	100/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	107.070	-0.105	0.000	0.54	0	24	O K
1.001	106.679	-0.106	0.000	0.55	0	33	FLD RISK
2.000	108.115	-0.035	0.000	0.75	0	6	O K
2.001	107.754	-0.046	0.000	0.56	0	6	O K
2.002	106.693	-0.027	0.000	0.86	0	6	O K
1.002	106.139	-0.061	0.000	0.82	0	39	O K
1.003	105.991	0.031	0.000	1.03	0	60	SURCH'ED
1.004	105.285	-0.115	0.000	0.48	0	60	O K
3.000	106.909	-0.067	0.000	0.59	0	27	O K
3.001	103.801	-0.069	0.000	0.56	0	26	O K
1.005	100.742	-0.098	0.000	0.61	0	83	O K
1.006	98.231	-0.109	0.000	0.53	0	83	O K
1.007	93.165	-0.100	0.000	0.59	0	83	O K
1.008	88.900	-0.095	0.000	0.62	0	83	O K

Summary Wizard of "CRITICAL"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30
Return Period(s) (years) 1, 2, 30, 100

PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	100	1	1/15 Summer	30/15 Summer			8
1.001	15 Winter	100	1	2/15 Summer				
1.002	15 Winter	100	1	30/15 Summer				
1.003	15 Winter	100	1	30/15 Summer				
2.000	15 Winter	100	1	30/15 Summer	100/15 Winter			
2.001	15 Winter	100	1	30/15 Summer				
2.002	15 Winter	100	1	2/15 Summer	30/15 Summer			8
1.004	15 Winter	100	1	30/15 Summer				
1.005	15 Winter	100	1	100/15 Summer				
1.006	15 Summer	100	1	30/15 Summer	30/15 Summer			4
1.007	15 Winter	100	1	30/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	106.891	0.566	30.615	1.43	0	67	FLOOD
1.001	106.784	0.759	0.000	1.36	0	64	FLD RISK
1.002	106.700	0.915	0.000	1.10	0	64	FLD RISK
1.003	106.565	1.340	0.000	1.08	0	136	FLD RISK
2.000	108.420	0.900	0.172	1.30	0	15	FLOOD
2.001	106.956	0.416	0.000	0.90	0	13	SURCH'ED
2.002	104.726	0.906	5.943	1.14	0	18	FLOOD
1.004	101.501	0.586	0.000	1.11	0	152	SURCH'ED
1.005	98.456	0.041	0.000	0.96	0	151	SURCH'ED
1.006	93.772	0.477	1.674	1.01	0	142	FLOOD
1.007	89.454	0.429	0.000	1.06	0	141	FLD RISK

Summary Wizard of "CRITICAL"(Rank 1 by Max Level)
Results for Design Storms

Margin for Flood Risk warning (mm) 300 Inertia Status OFF
DVD Status OFF Analysis Time Step Fine

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years) 1, 2, 10, 30, 100

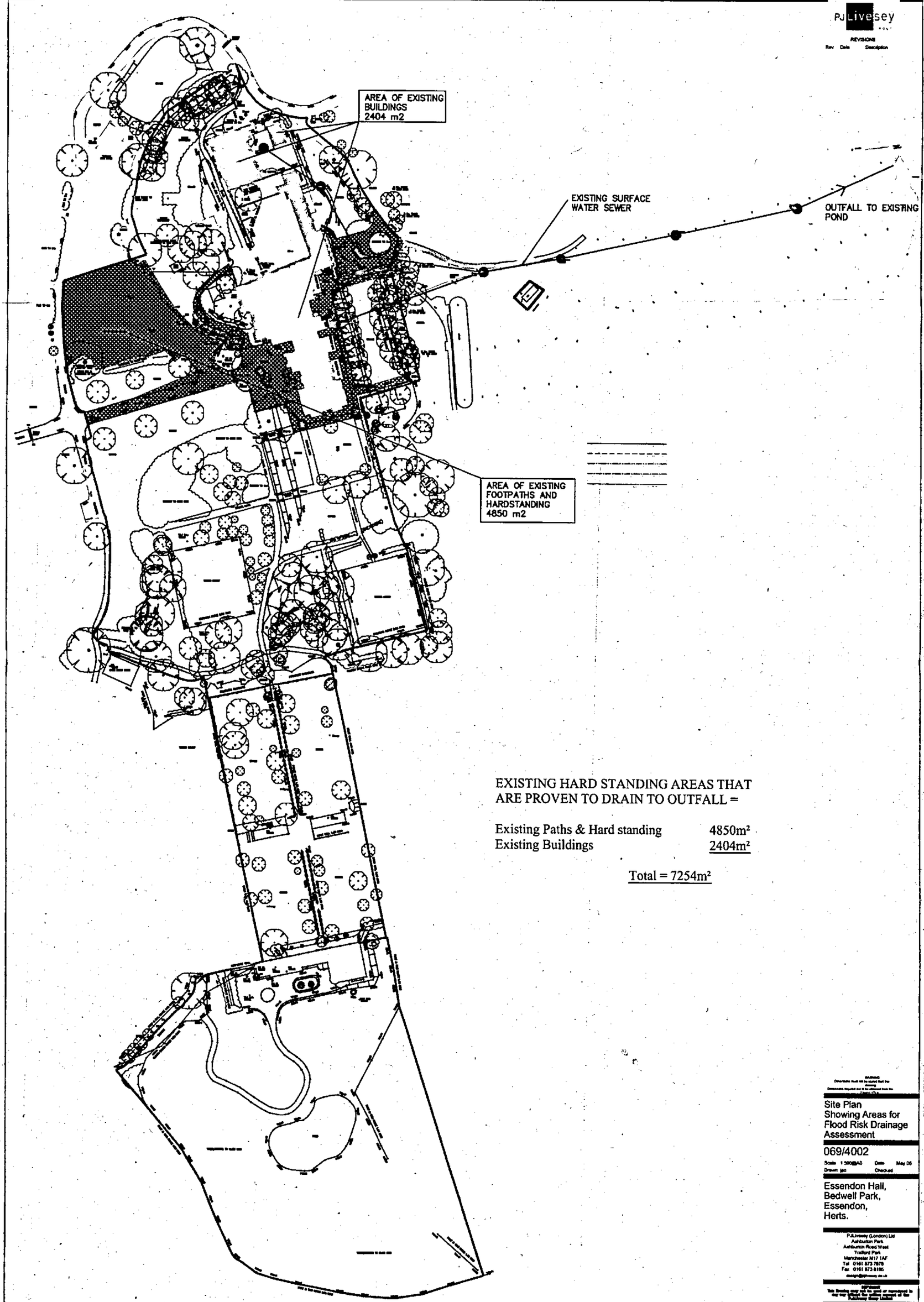
PN	Storm	Return Period	Rank	First X Surcharge	First Y Flood	First Z Overflow	O/F Act	Lvl Ex.
1.000	15 Winter	100	1	30/15 Summer				
1.001	15 Winter	100	1	10/15 Summer	30/15 Summer			9
2.000	15 Winter	100	1	10/15 Summer				
2.001	15 Winter	100	1	30/15 Summer				
2.002	15 Winter	100	1	10/15 Summer	100/15 Summer			1
1.002	15 Summer	100	1	10/15 Summer				
1.003	15 Winter	100	1	10/15 Summer				
1.004	15 Summer	100	1					
3.000	15 Winter	100	1	30/15 Summer				
3.001	15 Winter	100	1	100/15 Summer				
1.005	15 Winter	100	1	100/15 Summer				
1.006	15 Summer	100	1					
1.007	15 Winter	100	1	100/15 Winter				
1.008	15 Winter	100	1	100/15 Summer				

PN	Water Lvl. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	107.539	0.364	0.000	1.27	0	57	SURCH'ED
1.001	106.875	0.090	14.576	0.89	0	54	FLOOD
2.000	108.715	0.565	0.000	1.37	0	11	SURCH'ED
2.001	108.171	0.371	0.000	0.89	0	10	FLD RISK
2.002	107.321	0.601	0.616	1.22	0	9	FLOOD
1.002	106.798	0.598	0.000	1.30	0	61	FLD RISK
1.003	106.813	0.853	0.000	1.57	0	92	FLD RISK
1.004	105.318	-0.082	0.000	0.73	0	92	O K
3.000	107.467	0.491	0.000	1.07	0	48	FLD RISK
3.001	103.934	0.064	0.000	1.01	0	48	SURCH'ED
1.005	100.879	0.039	0.000	1.01	0	138	SURCH'ED
1.006	98.279	-0.061	0.000	0.88	0	138	O K
1.007	93.289	0.024	0.000	0.98	0	138	SURCH'ED
1.008	89.198	0.203	0.000	1.03	0	137	SURCH'ED

PJ Livesey

REVISIONS

Rev Date Description



EXISTING HARD STANDING AREAS THAT ARE PROVEN TO DRAIN TO OUTFALL =

Existing Paths & Hard standing	4850m²
Existing Buildings	2404m²
Total =	7254m²

Site Plan Showing Areas for Flood Risk Drainage Assessment

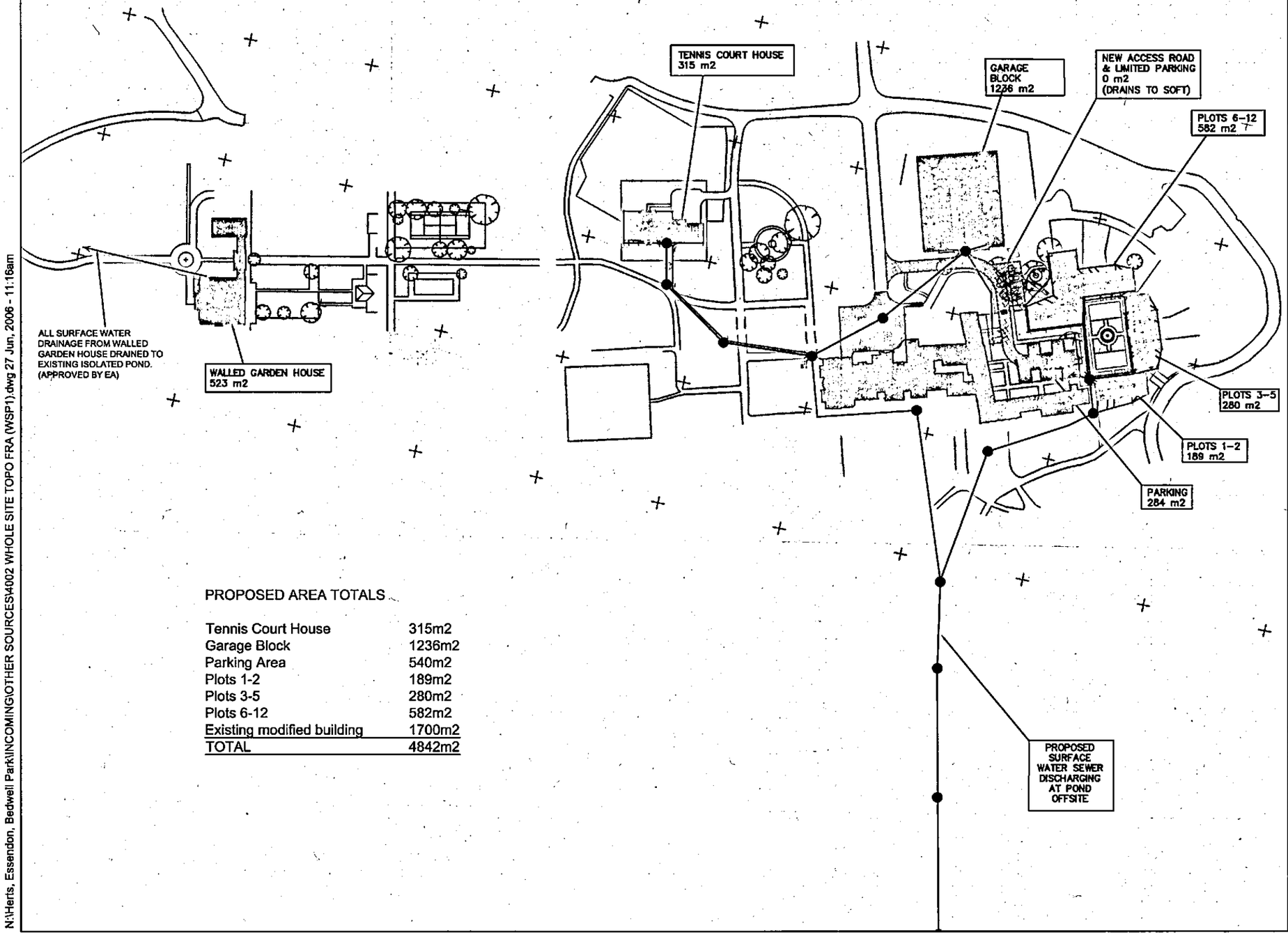
069/4002

Scale 1:500@A0 Date May 06

Drawn jpo Checked

Essendon Hall, Bedwell Park, Essendon, Herts.

P.J.Livesey (London) Ltd
Ashburton Park
Ashburton Road West
Trafford Park
Manchester M17 1AF
Tel 0161 873 7878
Fax 0161 873 8185



PROPOSED AREA TOTALS

Tennis Court House	315m2
Garage Block	1236m2
Parking Area	540m2
Plots 1-2	189m2
Plots 3-5	280m2
Plots 6-12	582m2
Existing modified building	1700m2
TOTAL	4842m2

DO NOT SCALE

REV	DATE	BY	DESCRIPTION	CHK	APD

DRAWING STATUS:

WSP

WSP House, The Chase, John Tate Road
Foxholes Business Park, Hertford SG13 7NN
Tel: +44 (0)1992 526000 Fax: +44 (0)1992 526001
http://www.wspgroup.com

CLIENT: Millgate Homes

ARCHITECT:

PROJECT: Bedwell Park
Essendon

TITLE: Proposed development Layout
Impermeable Areas

SCALE @ A3:	CHECKED:	APPROVED:
	SP	SP
CAD FILE:	DESIGN-DRAWN:	DATE:
Site topo FRA (WSP1)	SW	22/06/06
PROJECT No:	DRAWING No:	REV:
11500653.PT1	0001	a

N:\Herts, Essendon, Bedwell Park\INCOMING\OTHER SOURCES\4002 WHOLE SITE TOPO FRA (WSP1).dwg 27 Jun, 2006 - 11:16am

Highway and Transportation Consultants

GAF/3247/1

May 2006

Clover House
Western Lane
Odiham
Hampshire RG29 1TU
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BEDWELL PARK, ESSENDON
TRAFFIC COMPARISON REPORT

On behalf of

P. J. LIVESEY

CONTENTS

1.0 INTRODUCTION

1.1 This report has been prepared on behalf of P. J. Livesey in respect of redevelopment proposals at Bedwell Park, Cucumber Lane, Essendon, Hatfield and updates the Bellamy Roberts report of June 2003.

1.2 The previous use of the site has been as a golf clubhouse. However, in January 2002 planning consent was granted for a conversion of the existing buildings and some new build to provide a mixed scheme containing leisure facilities, studio apartments, small office suites and conference facilities. Subsequent to that, planning consent was granted in 2004 for the construction of the following .

10 residential units (flats) - main house conversion

8 residential units (houses) – courtyard

7 residential units (cottages).

1.3 This report considers revised residential development proposals for the site and a comparison of the traffic generation pattern between these proposals and the 2002 and 2004 consents.

2.0 CONSENTED USE (2002)

On 23rd January 2002 planning consent was granted for alterations to the Country Club buildings plus an extension to provide:

- 9 studio flats
- 1151m^2 gfa leisure facilities
- 6 small office suites
- conference facilities (120 delegates approx).

3.0 CONSENTED USE (2004)

3.1 In 2004 planning consent was granted for:

- 10 residential units (flats) (main house conversion).
- 8 residential units (houses) (courtyard)
- 7 residential units (cottages).

4.0 PROPOSED USE (2006)

4.1 Current development proposals envisage a replacement to the above consent to provide:

- 17 flats within the main listed building/courtyard
- 14 houses.

5.0 COMPARISON OF TRAFFIC GENERATION

5.1 In June/July 2003 this practice prepared a Traffic Comparison Report on behalf of the then site developers to support their planning application a total of 25 residential units (see para 3.1). Details of the TRICS data used at this time along with part of the supporting text is reproduced below. In order to make an assessment/comparison of the traffic generation from the earlier consented and the proposed uses, the TRICS database (Version 5.2) has been interrogated where relevant. We have used our own data for conference facilities in the absence of information in TRICS.

2002 Consent

5.2 For the residential element of the consented option, all surveyed sites in the "residential flats privately owned" category were looked at. Unfortunately, the majority of the sites did not have the same locational characteristics as the site then currently under consideration but the nature of the dwellings were similar in that the 2002 consented development was for 1-bedroom studio apartments. Therefore, in order to secure a robust assessment the survey with the highest daily trip rate was selected. Details of this are reproduced at **Appendix 1.**

5.3 In respect of the leisure element, all sites in the "sports centre" category of the "Leisure" section were looked at in the TRICS database. From these the top ranked daily trip rate site was discarded as it appeared to provide an abnormal figure. From the remaining sites, the average trip rate was determined for which a printout is contained at **Appendix 2.**

5.4 The 6 small offices comprised a total of approximately 250m^2. The 'Office' category of the 'Employment' section of TRICS was used, from which data for small offices of less than 1000m^2 gross floorspace was selected. A copy of the TRICS printout is attached at **Appendix 3.**

5.5 No data was available in TRICS for freestanding conference facilities. However, we had carried out surveys at a number of such developments from which we could derive trip rates per delegate. These figures are those which have been incorporated into Table 1 below, but it should be noted that these relate to a conference centre for 300 delegates which provided 120 bedrooms. On the basis that some delegates stayed overnight, these trip rates will underestimate the traffic generation from a facility with no

overnight accommodation, as in this case. That makes the comparison even more robust.

5.6 Details of the trip rates are set out below in **Table 1.**

Trip Rates for 2002 Consented Development

Development	AM Peak		PM Peak		Daily	
	Trip Rate	Veh No	Trip Rate	Veh No	Trip Rate	Veh No
Residential (Flats)	0.42	4	0.20	2	3.31	30
Leisure (Sports)	0.88	10	2.0	23	21.69	250
6 Offices (250m^2)	3.15	8	1.91	5	18.89	47
Conference (120 persons)	0.19	23	0.22	26	1.23	148
Total Veh		**45**		**56**		**475**

(Per 100m^2 for leisure and offices, per residential unit for flats and per delegate for conference)

2004 Consented Development

5.7 For the 2004 consented residential development we have used the same trip rate for flats as for the houses and cottages. That is a different assumption from the one adopted for the 2002 consented development and reflects the change in character of the flats. Those included in the 2004 consent were all reasonably large, 3-bedroom flats, and therefore it was considered that they would have trip generation characteristics more akin to a conventional house.

5.8 For the proposed cottages and houses, the "Houses, privately owned" category from TRICS was adopted. From the numerous surveys available only those with low access to public transport were selected to ensure that a

robust trip rate was secured. The TRICS printout is contained at **Appendix 4.**

5.9 Set out below in **Table 2** are the TRICS based trip rates for the 2004 consented development proposals of 10 flats and 15 houses/cottages.

Table 2

Trip Rates for 2004 Consented Development

Development	AM Peak		PM Peak		Daily	
	Trip Rate	Veh No	Trip Rate	Veh No	Trip Rate	Veh No
Residential (10 Flats)	0.92	9	0.80	8	8.46	85
Residential (8 Houses)	0.92	7	0.80	6	8.46	68
Residential (7 Cottages)	0.92	6	0.80	6	8.46	59
Total		**22**		**20**		**212**

(Per residential unit)

6.0 PROPOSED DEVELOPMENT

6.1 Details set out above at para 4.1 indicate that the current proposals for this site are to construct 17 flats within the current listed building and courtyard along with a further new build of 14 houses making a total of 31 residential units.

6.2 In order to maintain a level of conformity and consistency in the traffic generation assessment and analysis it is considered that the trip rates used in the Bellamy Roberts Traffic Comparison Report of June/July 2003 should be utilised.

6.3 As in the case of the analysis at that time the proposed flats have been treated as houses for the purpose of determining a peak hour and daily trip rate. Therefore based on the above criteria, Table 3 below has been produced.

Table 3

Trip Rates for Proposed Residential Development

Development	AM Peak		PM Peak		Daily	
	Trip Rate	Veh No	Trip Rate	Veh No	Trip Rate	Veh No
Residential (17 Flats)	0.92	16	0.80	14	8.46	144
Residential (14 Houses)	0.92	13	0.80	11	8.46	118
Total		**29**		**25**		**262**

(Trip rate per residential unit)

6.4 It should be noted that the above assessment is robust insofar as it treats the flats in the same way as the residential units and follows the format of the earlier report which is understood to have been acceptable.

7.0 COMPARISON

7.1 It can be seen from the contents of Tables 1, 2 and 3 that during the weekday peak hours (08:00-09:00 and 17:00-18:00) that the 2002 consented development was predicted to generate in the order of 45 vehicle movements in the a.m. peak and 56 in the p.m. The 2004 residential consent lowered those predicted movements to 22 and 20 respectively.

7.2 The current development proposals, as can be seen from Table 3 estimate that the peak hour flows will still be substantially below that of the 2002

consent and with only 7 additional movements in the a.m. peak and 5 extra p.m. peak hour movements than for the 2004 consented residential scheme.

7.3 Over a typical weekday it is predicted that the new proposals will still generate substantially less vehicle movement than the 2002 (around 45% lower) albeit the additional dwelling units proposed in comparison with the 2004 consent will naturally engender some increased flows, up to 50 movements (25 in and 25 out) per day.

7.4 However, this anticipated increase in daily flows over the 2004 consent must be seen in context insofar as it related to flows over a 24 hour day and is still substantially below that which would have been generated by the 2002 consented development.

8.0 CONCLUSIONS

8.1 It is clear from the comparison that the current proposals will give rise to traffic flows which are substantially below the figures which would result from implementation of the 2002 planning consent and in terms of peak hour flows only marginally above the 2004 consented development.

APPENDICES

APPENDIX 1

Bellamy Roberts Turnpike House, 16 Church Road Fleet, Hampshire Licence No: 200601

TRIP RATE for Land Use RESIDENTIAL/FLATS PRIVATELY OWNED

Calculation Factor: 1 HHOLDS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	108	0.04	1	108	0.26	1	108	0.30
08:00 - 09:00	1	108	0.01	**1**	**108**	**0.41**	**1**	**108**	**0.42**
09:00 - 10:00	1	108	0.09	1	108	0.16	1	108	0.25
10:00 - 11:00	1	108	0.10	1	108	0.08	1	108	0.19
11:00 - 12:00	1	108	0.11	1	108	0.09	1	108	0.20
12:00 - 13:00	1	108	0.16	1	108	0.16	1	108	0.31
13:00 - 14:00	1	108	0.10	1	108	0.13	1	108	0.23
14:00 - 15:00	1	108	0.07	1	108	0.10	1	108	0.18
15:00 - 16:00	1	108	0.21	1	108	0.11	1	108	0.32
16:00 - 17:00	**1**	**108**	**0.31**	1	108	0.06	1	108	0.38
17:00 - 18:00	1	108	0.17	1	108	0.04	1	108	0.20
18:00 - 19:00	1	108	0.18	1	108	0.16	1	108	0.33
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Daily Trip Rates:			1.56			1.76			3.31

Parameter Summary

Trip Rate Parameter Range Selected:	70 - 108 (units:)
Survey Date Date Range:	01/01/94 - 16/06/98
Number of Weekdays (Monday-Friday):	1
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	NO
Surveys Manually Removed from Selection:	9

APPENDIX 2

Bellamy Roberts Turnpike House, 16 Church Road Fleet, Hampshire Licence No: 200601

TRIP RATE for Land Use LEISURE/SPORTS CENTRES
Calculation Factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	5	5800	0.00	5	5800	0.00	5	5800	0.01
01:00 - 02:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
02:00 - 03:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
03:00 - 04:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
04:00 - 05:00	5	5800	0.00	5	5800	0.00	5	5800	0.00
05:00 - 06:00	5	5800	0.01	5	5800	0.01	5	5800	0.01
06:00 - 07:00	6	5767	0.08	6	5767	0.01	6	5767	0.09
07:00 - 08:00	17	6842	0.33	17	6842	0.14	17	6842	0.47
08:00 - 09:00	17	6842	0.50	17	6842	0.38	17	6842	0.88
09:00 - 10:00	17	6842	0.77	17	6842	0.38	17	6842	1.15
10:00 - 11:00	17	6842	0.67	17	6842	0.53	17	6842	1.20
11:00 - 12:00	18	6559	0.56	18	6559	0.69	18	6559	1.26
12:00 - 13:00	19	6530	0.68	19	6530	0.73	19	6530	1.41
13:00 - 14:00	19	6530	0.62	19	6530	0.69	19	6530	1.30
14:00 - 15:00	19	6530	0.53	19	6530	0.54	19	6530	1.07
15:00 - 16:00	19	6530	0.72	19	6530	0.59	19	6530	1.31
16:00 - 17:00	19	6530	0.86	19	6530	0.77	19	6530	1.63
17:00 - 18:00	19	6530	1.16	19	6530	0.84	19	6530	2.00
18:00 - 19:00	**19**	**6530**	**1.22**	19	6530	0.94	19	6530	2.16
19:00 - 20:00	17	6200	1.14	**17**	**6200**	**1.10**	**17**	**6200**	**2.24**
20:00 - 21:00	17	6200	0.61	17	6200	1.04	17	6200	1.64
21:00 - 22:00	16	6479	0.26	16	6479	0.81	16	6479	1.07
22:00 - 23:00	9	6052	0.08	9	6052	0.52	9	6052	0.59
23:00 - 24:00	5	5800	0.02	5	5800	0.17	5	5800	0.19
Daily Trip Rates:			10.80			10.89			21.69

Parameter Summary

Trip Rate Parameter Range Selected:	1696 - 19750 (units: sqm)
Survey Date Date Range:	01/01/94 - 27/06/02
Number of Weekdays (Monday-Friday):	19
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	NO
Surveys Manually Removed from Selection:	1

APPENDIX 3

Bellamy Roberts Turnpike House, 16 Church Road Fleet, Hampshire Licence No: 200601

TRIP RATE for Land Use EMPLOYMENT/OFFICE

Calculation Factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	593	0.22	3	593	0.11	3	593	0.34
07:30 - 08:00	3	593	0.17	3	593	0.11	3	593	0.28
08:00 - 08:30	3	593	1.35	3	593	0.17	3	593	1.52
08:30 - 09:00	**3**	**593**	**1.46**	3	593	0.17	**3**	**593**	**1.63**
09:00 - 09:30	4	695	0.22	4	695	0.29	4	695	0.50
09:30 - 10:00	4	695	0.25	4	695	0.18	4	695	0.43
10:00 - 10:30	4	695	0.32	4	695	0.36	4	695	0.68
10:30 - 11:00	4	695	0.50	4	695	0.36	4	695	0.86
11:00 - 11:30	4	695	0.29	4	695	0.22	4	695	0.50
11:30 - 12:00	4	695	0.47	4	695	0.36	4	695	0.83
12:00 - 12:30	4	695	0.36	4	695	0.72	4	695	1.08
12:30 - 13:00	4	695	0.36	4	695	0.76	4	695	1.12
13:00 - 13:30	4	695	0.68	4	695	0.47	4	695	1.15
13:30 - 14:00	4	695	0.50	4	695	0.32	4	695	0.83
14:00 - 14:30	4	695	0.54	4	695	0.29	4	695	0.83
14:30 - 15:00	4	695	0.36	4	695	0.29	4	695	0.65
15:00 - 15:30	4	695	0.36	4	695	0.18	4	695	0.54
15:30 - 16:00	4	695	0.43	4	695	0.18	4	695	0.61
16:00 - 16:30	4	695	0.18	4	695	0.29	4	695	0.47
16:30 - 17:00	4	695	0.18	4	695	0.43	4	695	0.61
17:00 - 17:30	3	593	0.06	3	593	0.73	3	593	0.79
17:30 - 18:00	3	593	0.17	**3**	**593**	**0.96**	3	593	1.12
18:00 - 18:30	3	593	0.11	3	593	0.51	3	593	0.62
18:30 - 19:00	3	593	0.06	3	593	0.34	3	593	0.39
19:00 - 19:30	2	686	0.07	2	686	0.22	2	686	0.29
19:30 - 20:00	2	686	0.07	2	686	0.15	2	686	0.22
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Daily Trip Rates:			9.75			9.14			18.89

Parameter Summary

Trip Rate Parameter Range Selected:	408 - 999 (units: sqm)
Survey Date Date Range:	01/01/94 - 24/06/02
Number of Weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	NO
Surveys Manually Removed from Selection:	0

APPENDIX 4

Bellamy Roberts Turnpike House, 16 Church Road Fleet, Hampshire Licence No: 200601

TRIP RATE for Land Use RESIDENTIAL/HOUSES PRIVATELY OWNED

Calculation Factor: 1 HHOLDS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate
00:00 - 01:00	12	85	0.03	12	85	0.02	12	85	0.05
01:00 - 02:00	12	85	0.02	12	85	0.01	12	85	0.03
02:00 - 03:00	12	85	0.00	12	85	0.00	12	85	0.01
03:00 - 04:00	12	85	0.01	12	85	0.00	12	85	0.01
04:00 - 05:00	12	85	0.01	12	85	0.01	12	85	0.02
05:00 - 06:00	12	85	0.01	12	85	0.04	12	85	0.06
06:00 - 07:00	12	85	0.04	12	85	0.12	12	85	0.16
07:00 - 08:00	13	81	0.09	13	81	0.42	13	81	0.52
08:00 - 09:00	13	81	0.18	**13**	**81**	**0.74**	**13**	**81**	**0.92**
09:00 - 10:00	13	81	0.20	13	81	0.24	13	81	0.43
10:00 - 11:00	13	81	0.14	13	81	0.17	13	81	0.32
11:00 - 12:00	13	81	0.19	13	81	0.19	13	81	0.38
12:00 - 13:00	13	81	0.21	13	81	0.20	13	81	0.42
13:00 - 14:00	13	81	0.18	13	81	0.17	13	81	0.34
14:00 - 15:00	13	81	0.17	13	81	0.17	13	81	0.33
15:00 - 16:00	13	81	0.30	13	81	0.26	13	81	0.55
16:00 - 17:00	13	81	0.34	13	81	0.19	13	81	0.53
17:00 - 18:00	**13**	**81**	**0.57**	13	81	0.23	13	81	0.80
18:00 - 19:00	13	81	0.48	**13**	81	0.32	13	81	0.80
19:00 - 20:00	12	85	0.37	12	85	0.27	12	85	0.64
20:00 - 21:00	12	85	0.29	12	85	0.21	12	85	0.50
21:00 - 22:00	12	85	0.18	12	85	0.13	12	85	0.31
22:00 - 23:00	12	85	0.14	12	85	0.07	12	85	0.21
23:00 - 24:00	12	85	0.08	12	85	0.04	12	85	0.13
Daily Trip Rates:			4.24			4.22			8.46

Parameter Summary

Trip Rate Parameter Range Selected:	9 - 4334 (units:)
Survey Date Date Range:	01/01/94 - 18/12/98
Number of Weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Optional Parameters Used in Selection:	YES
Surveys Manually Removed from Selection:	0

Bedwell Park, Essendon

HERTFORDSHIRE

Formerly - Hatfield London Country Club

A Protected Species Report

Client: **P. J. Livesey**

Survey date: **4th February 2006** 06 / 0365.

Job no: **AE0643**

Aurum Ecology,

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Constraints

Aurum Ecology has produced this report with professional diligence and skill for the named client. The ecological interpretation of wildlife species, their identification, behaviour, requirements and other matters are not necessarily part of an exact tested science and may, on occasion, be open to alternative interpretation by other "experts".

Bats in particular, as well as most wildlife, are accustomed to "coming and going" as they please, in tune with the seasons and the weather and in a covert way. This can occasionally result in unpredictable changes of circumstance on a day-to-day basis, though Aurum Ecology always advises clients of possibilities and to bear in mind what is just a natural phenomenon.

This report is confidential to the client under the full terms and conditions of the contract and responsibility for release of the report in part or whole to third parties by the client does not imply any legal responsibility for the contents to any such third parties who may see or be given copies of the report.

In our experience of working, since its inception, with the requirements of the 1981 Wildlife and Countryside Act (as amended by subsequent legislation) and the requirements of PPS9 guidance notes, it is more satisfactory to tackle appropriate surveys for protected species by commissioning experienced consultants, who are prepared to work for and with the client, as well as within the existing and changing legislation, in this complex and poorly understood area of specialist work.

Aurum Ecology

February 2006

A Brown Long-eared bat

1 INTRODUCTION

Mr Simon Kennedy of P. J. Livesey initialised this protected species survey and report from Aurum Ecology on January 16th 2006.

Bedwell Park is situated within an eighteen-hole golf course near Essendon in Hertfordshire within the Welling and Hatfield District Council area, at approximate grid reference TL277077. The main building is a listed, grade II three storey building of 1861 date and is in a good state of external repair with solid brick walls, some roofs tiled and some leaded. It has been a private house, a school and a golf club over the years and is now proposed for conversion into residential units. A stable block, two dwellings & a seminar building are situated adjacent or nearby.

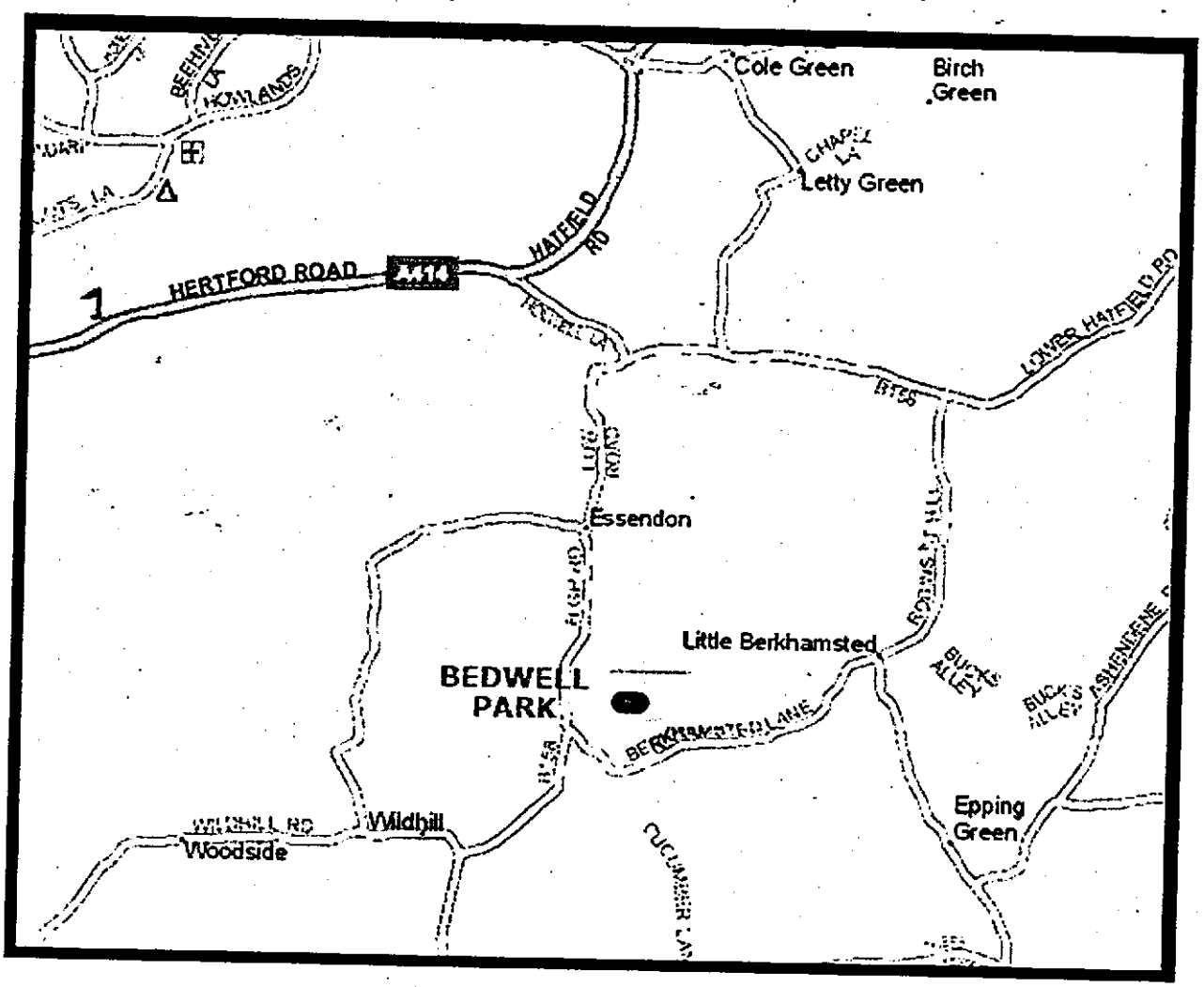
Some 15 man hours were spent surveying the site for indications of protected species on February 4th 2006, while further investigations were made of bodies and individuals who might have knowledge of the site and any previous bat records. This included reference to a report by Mr. S. Laurence of November 2005.

Within the main leaded roof there had been a Brown Long-eared colony present, predominantly at the southern end, though not recently. Any development work will have to be mitigated for in this area and licensed, however, there remains a question as to which chemical has been used to treat the timber in this area and its toxicity to bats.

The listed Ice House at Bedwell Park was not located nor check

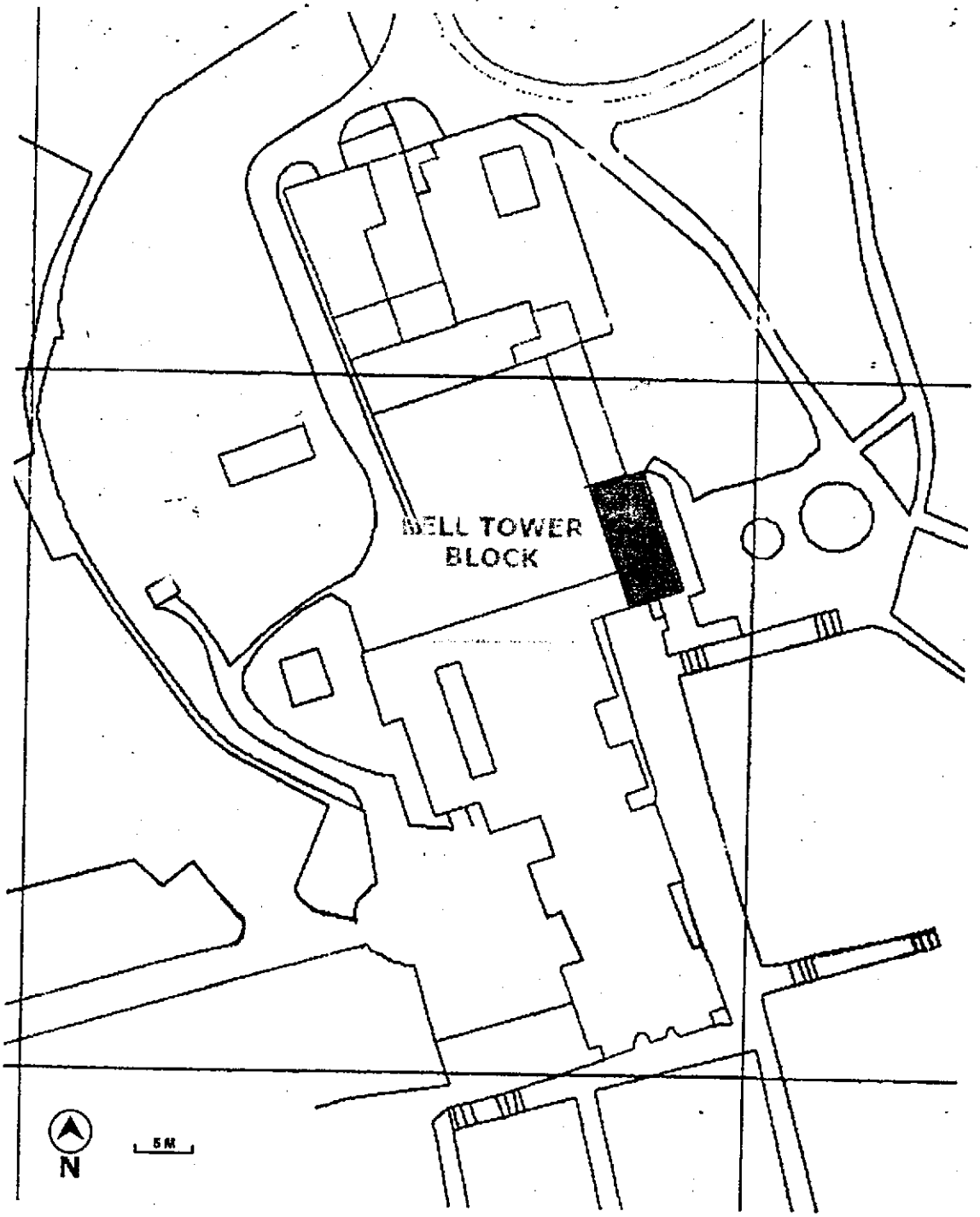
LOCATION MAP:

for guidance only:



SITE PLAN:

for guidance only:



Not to an exact scale

2 APPROACH & METHODS

This fine building is dated 1861 and the good state of external repair rather belies the rather severe attack of dry rot that presents inside.

A protected species survey approach is a fairly standard one, although often modified to suit particular locations or species. Health and Safety considerations are paramount when dealing with sites and buildings that may be in a parlous state of decay and an overall assessment of the site is always our first undertaking, with appropriate approach, equipment and safeguards put in place before any surveying begins.

An examination of the general area from the public roads as well a map-based topographical consideration was undertaken, in order to briefly assess the overall ecological potential of the surrounding area in wildlife terms, and to place the site into a correct local context.

The field check involved a daylight visit on Saturday February 4th 2006, the time taken being in relation to the size and complexity of the site, together with the target species likely to be encountered in any given situation, as judged from available habitats. If inspection of the physical evidence reveals that nocturnal species are suspected to be present, then a follow-up survey after dark is generally undertaken with suitable specialised equipment, however, this was not appropriate in this case as it was during the winter hibernation season, when bats would not be active, and there was data from a previous survey and the local bat group.

A detailed day time examination of all the potential target points that protected species might use was undertaken utilising suitable sampling techniques, equipment, lights, magnifiers and wearing appropriate protective clothing. This included the detailed examination of vertical crevices, horizontal surfaces, floors and cracks in mortar and brickwork, plus all around the buildings for tracks, trails, signs or droppings.

In view of the relatively large size and complexity of the main building, we decided to familiarise ourselves with it before looking at the associated structures on site later in the day. Each floor, together with the small wine cellar were examined for signs of bats, while noting if windows, hatches etc. were open allowing easy bat access, and occasionally noting temperatures and humidity, as these can indicate potential bat usage.

The roof voids were then accessed and explored in detail, before moving on to the associated buildings marked on the Site Plan as North Cottage, East Cottage, Stables, and Bell/Clock Tower Block. Further time before darkness fell was spent looking at trees, the walled garden, including the artificial rock feature, potting sheds and the Gyosei Seminar House.

The information recorded was entered as hand-written notes that form the basis of this report, while record quality photographs were taken.

English Nature and the local bat group were contacted subsequently to discover what was already known and recorded about this site.

3 OBSERVATIONS AND RESULTS

Due to the relatively complex nature of this site, our observations are set out on an individual building basis. No live bats were encountered during the survey, so all evidence gathered was based on the droppings deposited by the animals when in residence.

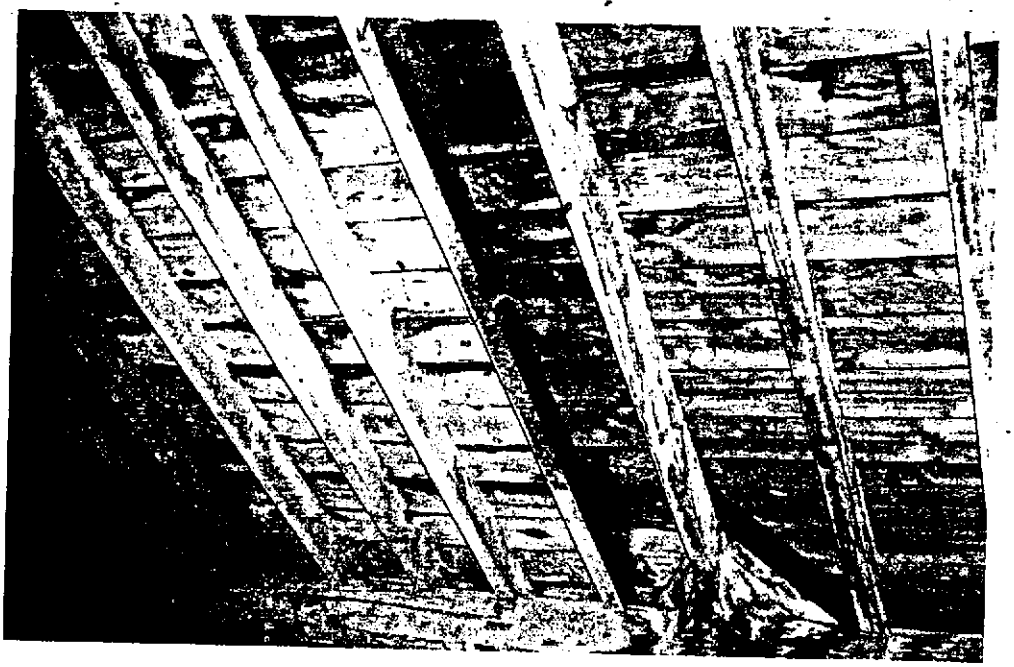
A) MAIN BUILDING: A careful search of the main building on all three floors, carefully avoiding areas of missing joists and removed floorboards (due to the dry rot infestation) and using lights, showed a very tiny number of old bat droppings on a few floors and carpets. This is quite consistent with most rural, semi-abandoned buildings that have access via open windows as the creatures explore for potential new sites. The through-draft from open windows is important for control of humidity which might 'feed' the dry rot problem though, where bats or pigeons may enter, it is good practice to apply a 25 mm mesh over all such openings. The finding of small numbers of bat droppings in no way indicates any established "use" by bats in the habitable rooms and corridors of the house, as defined in law and zoologically as a bat "roost".

The main roof space of the primary building, defined here as the area under lead plus the tiled dormers and far southern east-west orientated pin-tiled roof, had been in use by Brown Long-eared bats. However, this was not recent use, as most droppings were in states of decay beyond that which would be expected between, say, July/August 2005 and February 2006. Although the whole roof void had a scatter of old

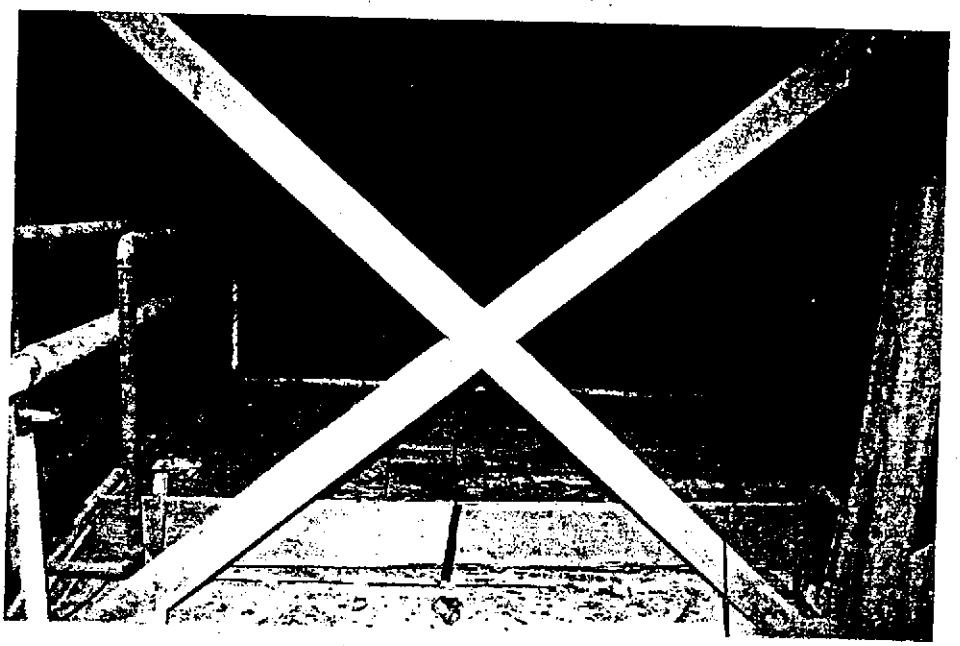
droppings, the primary focus of interest for this colony of Brown Long-eared bats was, predictably, the warmest and most southerly section. This area is hatched in red on the copy aerial photograph below, taken from the east.

The extensive and continuous open main roof is an ideal one for exploitation by Brown Long-eared bats, especially where there are side dormers offering a range of temperatures and niches. However, in one respect this is not an ideal roof as the flat ceiling aspect for most of the length does not offer apical "hot spots", although the leaded exterior roof covering would give conductive solar heating. Our observations mirror those of the November 2005 report from Mr Laurence and also those of the Hertfordshire and Middlesex Bat Group who looked at the site prior to re-roofing work in 1991. The roost had been active in 1991 but the roof was quite clearly unoccupied during 2004/5 judging by the state of the droppings. What was not commented upon was the extensive, and rather haphazard, timber treatment applied to the sarking boards,

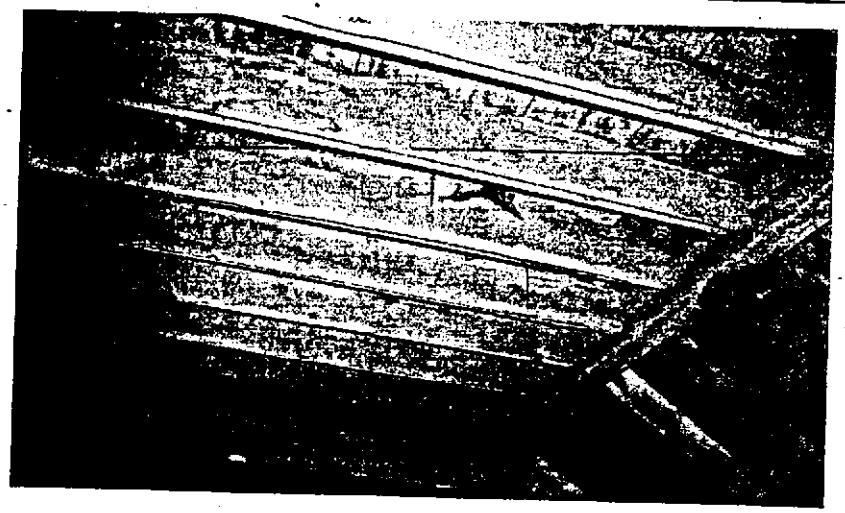
trusses and cross-tie beams in the main roof. This pale blue and crystalline substance was also found to be covering some bat droppings, which may explain their resistance to decay, if the treatment was applied several years ago.



Sarking half sprayed



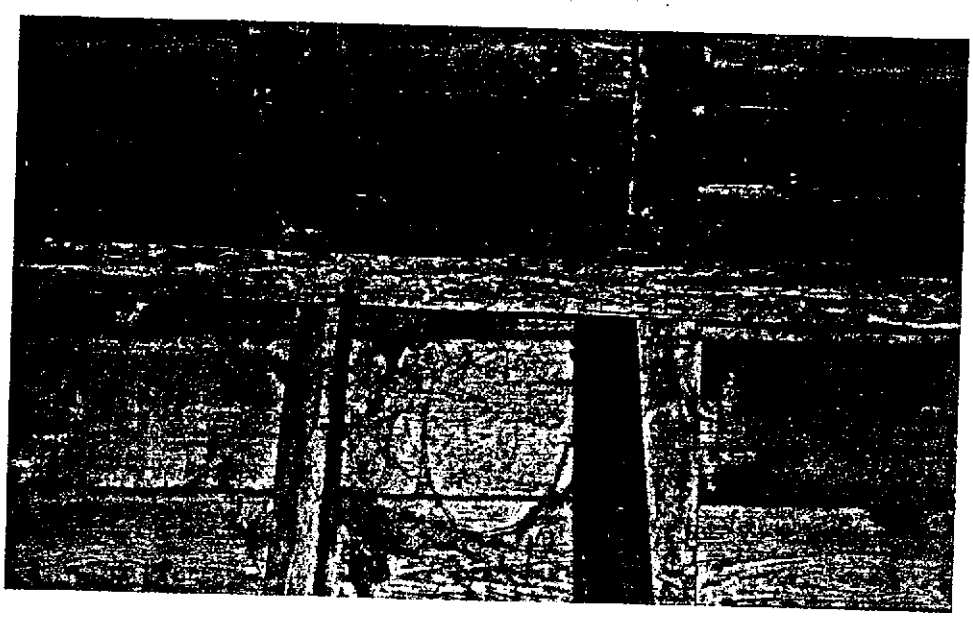
Sprayed cross beams



Flat roof aspect offers no roosting "hot spots"

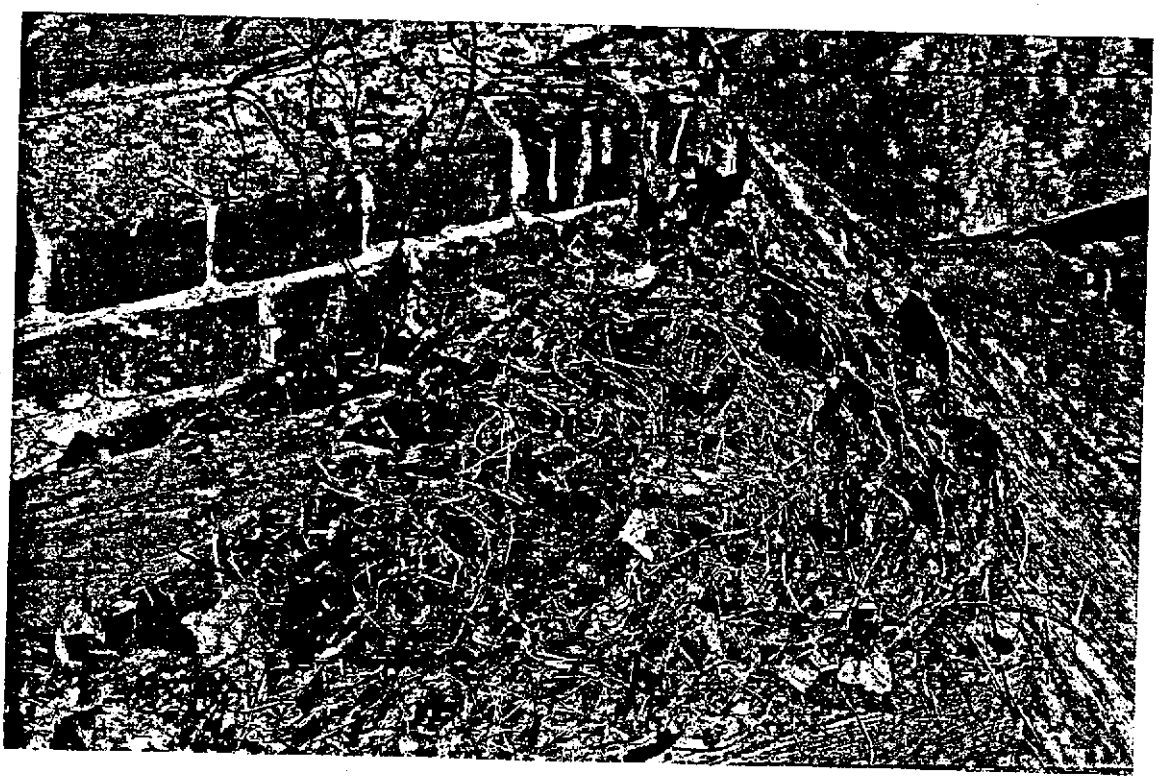
Our key observation here is that this timber treatment should be tested to determine if it may be toxic to bats, or if it is a chemical approved by English Nature for use within known bat roosts.

Further conclusive evidence of lack of recent use by bats was the dust accumulation on timbers and the spiders' webs on the ridge board above where the droppings were at the southern end, demonstrating little or no recent use.



Although there were a few Pipistrelle droppings scattered, we would conclude that these are just occasional visitors and certainly the temperature and humidity recorded would not be conducive to long-term hibernation within this particular roof, nor is the structure obviously suited to a breeding colony. It is noted that Mr Laurence observed two Pipistrelles in wall mortar cracks but, from our knowledge of this species and their habits, such sites are rarely used as anything other than a temporary shelter for single animals.

A grey squirrel was occupying a large nest in the most south-eastern roof corner and scuttled off and out through a hole in the brickwork when approached. There were a few droppings of this animal present but no other bat or animal species were seen or suspected.

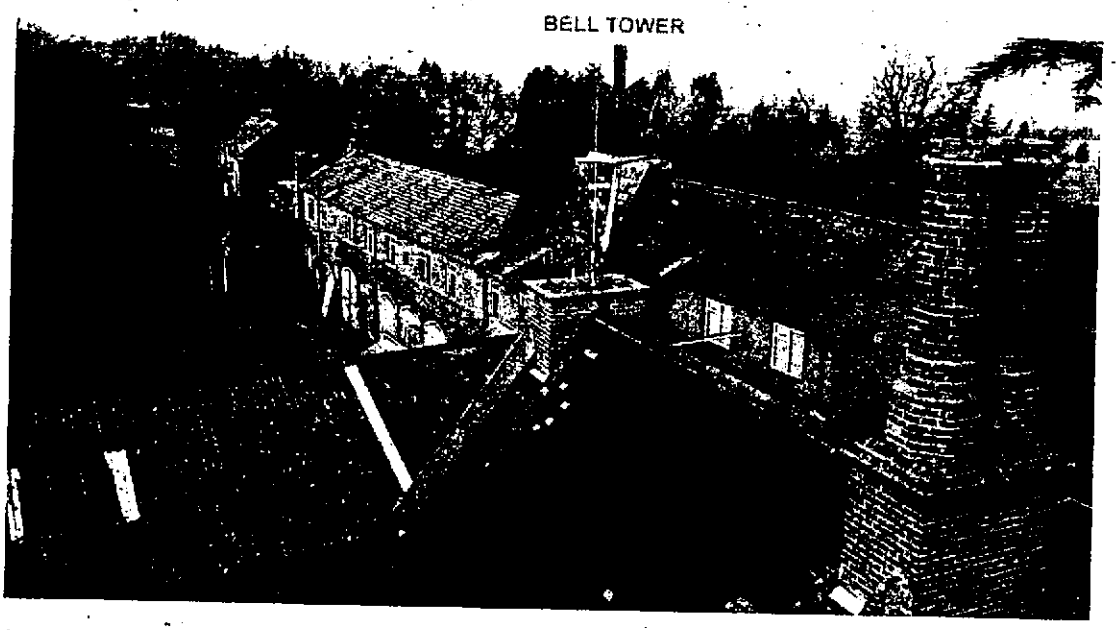


Grey Squirrel Nest

B) Bell/Clock Tower and associated buildings to the north-east:

The Bell Tower had just a few Brown Long-eared droppings but was too open and draughty to be any kind of permanent roost site.

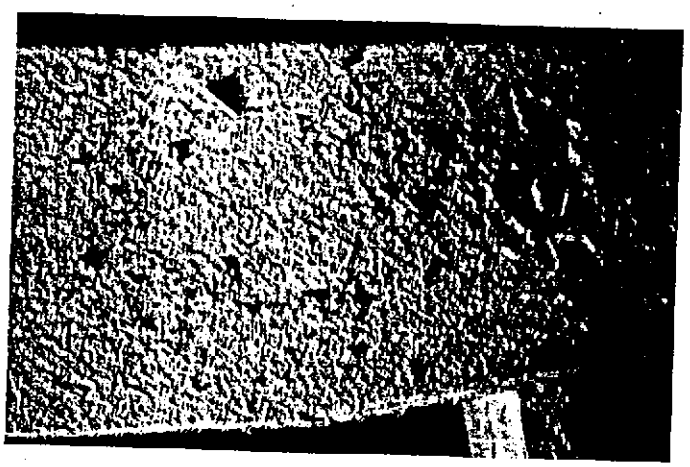
BELL TOWER



The adjoining roof void was covered in pigeon droppings, though the entrance slits to the south appeared to be covered with mesh, so this, again, may not be recent. Pigeons and bats rarely co-habit and there was light entering, so it is safe to assume bats are not using this roof.

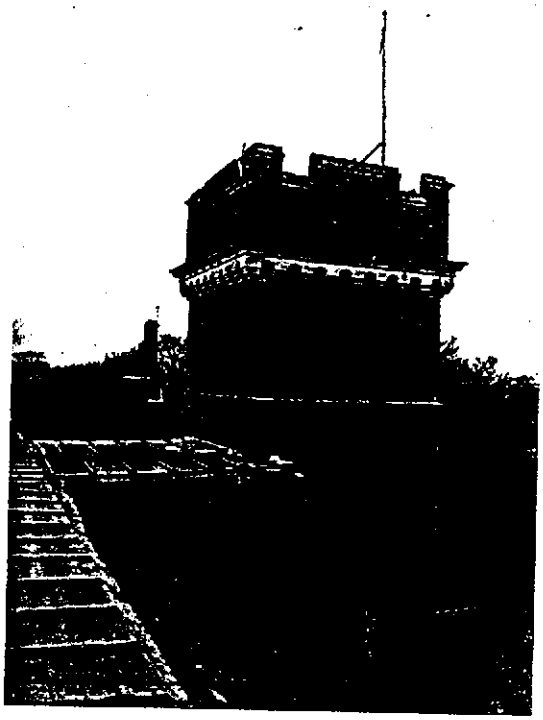
The other roof voids on the north-east were examined. They were slated, so potentially warm, although the ridge alignment was north-south and the Cedar tree may cast some shade from the sun, again reducing solar-gain.

A very small number of Brown Long-eared bat droppings were present beneath the ridge of the more northern roof; however, they were not recent and were covered in thick dust from the demolition work (carried out at an unknown date) adjacent and below.



A dust covered board under the ridge with a few bat droppings

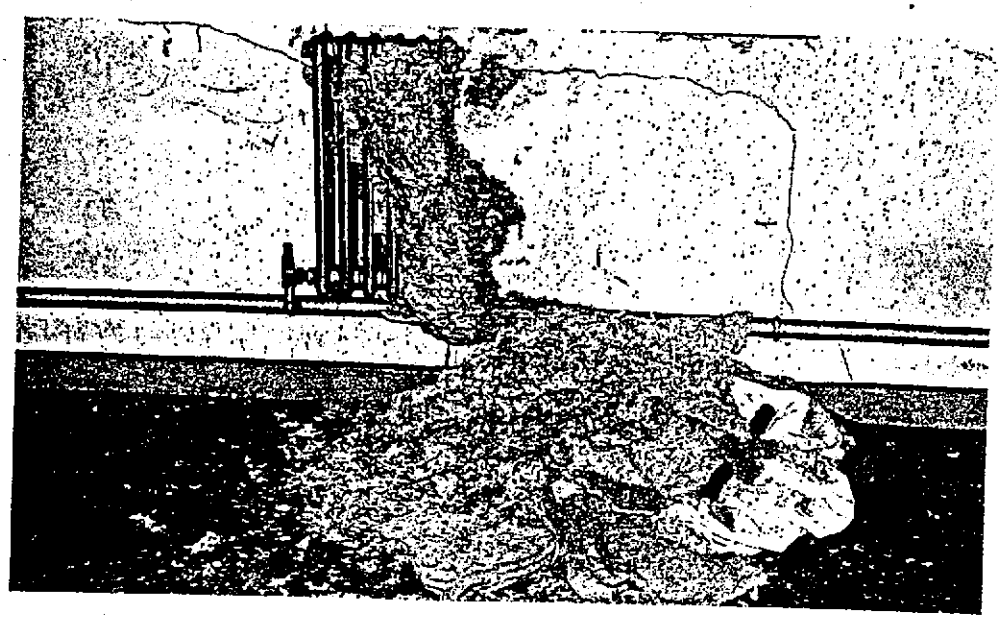
The final area of the main building we considered was the crenulated tower that forms the primary frontispiece to the building. In this view we are looking south-west from the leaded roof top.



The tower contains water tanks and is accessed via stairs, then a vertical ladder. A few droppings of both Pipistrelle and Brown Long-eared were present but there is no suggestion of any roosting here.

The Stables:

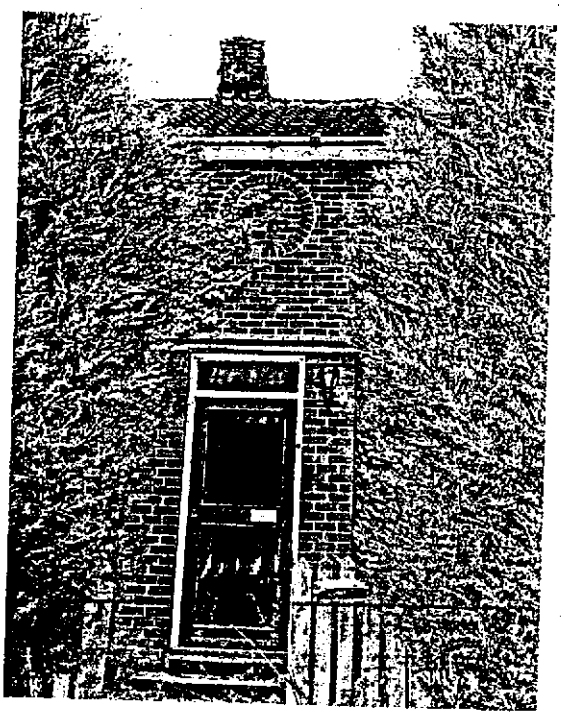
Nothing of significance was found at any level in the stables. The ground floor level is lacking in suitable sites and crevices, and the first floor consists of habitable rooms, although one of the biggest wasp nests we have ever seen was still partly attached to a radiator, but lifeless.



Wasp nest attached to a radiator

East Cottage & North Cottage:

The North Cottage was joined to the stable block and contemporaneous in date with the stables. Mouse droppings were located in several spots and a few "shadow" droppings (decayed), which may have been of mouse or bat, but these were not of any significance.



The East Cottage, illustrated above, dated 1961 above the front door was, due to roof damage, decaying rather quickly. A few "shadow" droppings (decayed) were present on the stairs, which may have been bat but were not of any significance in terms of legal considerations. Mesh had been placed over the gable end ventilation slit.

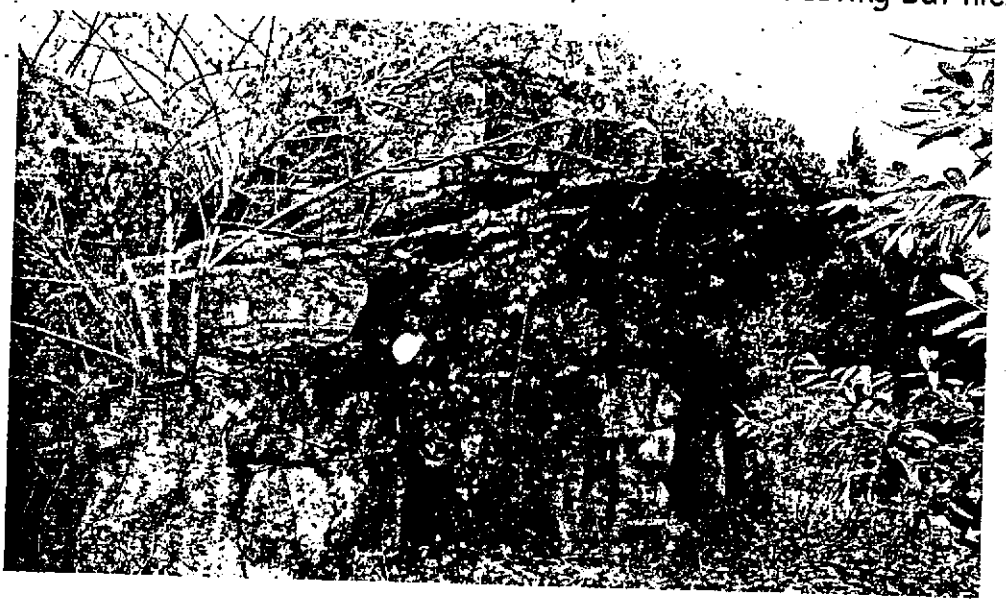
Garden walls and other miscellaneous sheds and buildings on site:

Not considered to be of any significance due to structure, condition, orientation or placement.

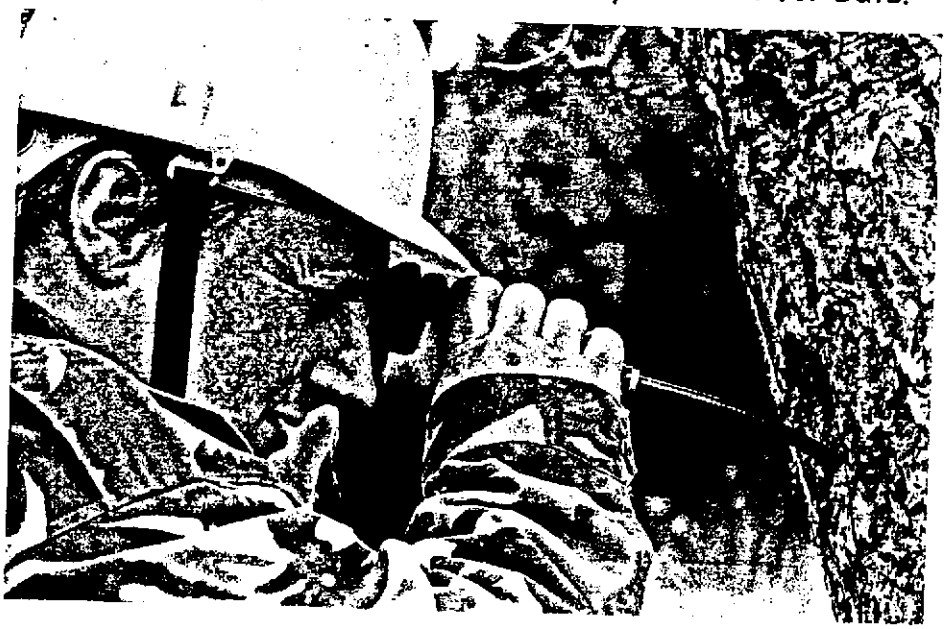
Grounds, Walled garden and "potting sheds":

Just to the north of the tennis court at the south end of the building is a splendid old Sweet Chestnut coppiced tree. This appears to have hollow branches and is an example of the kind of tree, which can be attractive to bats for roosting and hibernation.

The artificial concrete rock that forms most of the northern wall of the garden initially gave rise to the possibility of some interesting bat niches.



However an examination of some likely cracks, as well as some of the hollow apple trees in the garden, some with holes drilled by Green Woodpeckers, failed to confirm the suitability of these for bats.



Here an endoscope is being used to look into a hollow apple tree

The two "potting" sheds differ in that one is more ruinous and the other appears to have been used as stables. One had the remains of swallows' nests and gave the appearance of being damp and stable enough in environmental terms to be used for hibernation by species such as Pipistrelle, however, none were found. The other shed had some south-facing lead capping which can attract single specimens of species such as Pipistrelle during the summer months. Overall, we consider there is little of significance for bats in this area, except as feeding habitat.

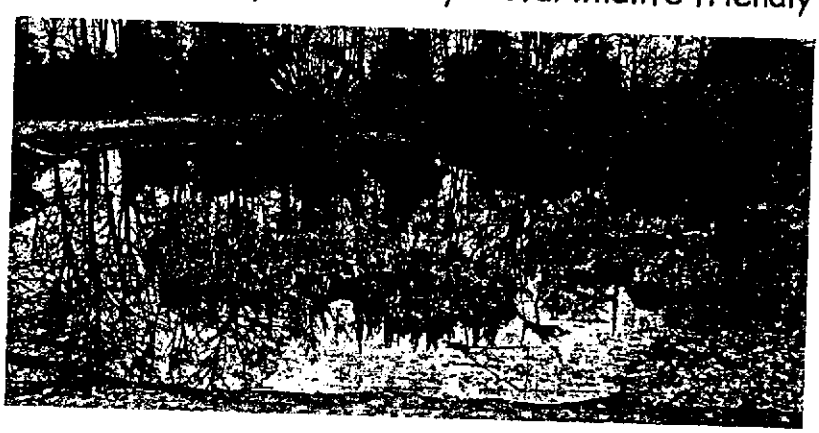
The damper horticultural building

The presumed horticultural building converted to stables

Gyosei Seminar House:

This unusual modern building, which wraps around an existing older cottage, was examined briefly but there were no signs of bats ever having used the building. Moss and ferns growing on an indoor carpet were new features to us!

Old, deep, wells are used by hibernating *Myotis* bat species, however, this was not the case with the one situated in the garden near the seminar house, while the artificial pond is a very useful wildlife friendly feature.



4. DISCUSSION & CONCLUSIONS

The winter period is never a really ideal time to determine bat residence and roosting activity in buildings as they are hibernating. The advantage of winter checks is that there is the possibility of identifying if parts of the buildings or site are in use by bats as hibernation sites, within certain limitations.

Although there is some evidence of small scale exploration of the whole site, through many of the buildings, this does not constitute roosting use as defined in law, while many of these areas would fall within the definition of previously "habitable areas" during former use, so are exempt.

Our evaluation is that the southern part of the main roof void of "Bedwell Park" is the only area of importance to bats, and we estimate that a breeding colony of perhaps less than 30 Brown long-eared may have used this site, plus incidental roosting. However, this use has not been recent in nature, possibly as a result of timber treatment, accidental exclusion during other roof repair work, or some other reason such as occupation of the roof by Grey Squirrels.

We suggest in our mitigation proposals that there are two possible courses of action, both of which would require the issue of appropriate DEFRA licences, which Aurum Ecology would be able to apply for on behalf of the client.

5 MITIGATION

It is our view that the southern end of the main roof is the only critical area for bats. This has had a breeding Brown Long-eared Bat colony, perhaps in the range of < 30 females, plus regular use outside the breeding season. However, none of this activity is recent.

Our suggested mitigation falls into two sequential sections:

1) That the chemicals used for timber treatment should be sampled and identified. If a substance harmful to bats has been applied, we would recommend that the roof should be sealed against any further bat entry. A DEFRA licence would be required. It would also be possible to submit this to a DEFRA "Wildlife Incident Investigation Scheme" for appraisal and approval.
2) If the treatment is determined as non-toxic to bats then we would recommend an application for a licence to cover the proposed re-roofing and building work, perhaps for the coming summer, with a return of the roof void to bat use in subsequent seasons. We imagine that the roof void will require one or more firewalls and consideration should be given to maintaining the most southerly area for bat use, along with appropriate bat access.

We should be pleased to offer further detailed advice and guidance on mitigation with some architectural and design suggestions, when a course of action has been determined.

Acknowledgements

In compiling this report and reaching conclusions, experts and staff from English Nature, DEFRA, The Bat Conservation Trust and various other bat and bird scientists/conservationists/naturalists have been consulted.

Photographs used are primarily copyright of Aurum Ecology, but the use of some wildlife photographs taken by Kevin Simmonds and Tony Tilford are acknowledged.

Other wildlife recorded on site on the day of the survey included:

Birds	Mammals
Magpie	Rabbit
Wren	Grey Squirrel
Nuthatch	Fox
Jackdaw	Mole
Carrion Crow	Field Mouse
Green Woodpecker	
Great Spotted Woodpecker	
Sparrowhawk (with prey)	
Bullfinch (pair) [BAP species]	
Song Thrush [BAP species]	

6 SUMMARY

Bedwell Park is situated some 5 kilometres east of Hatfield in Hertfordshire and surrounded by a golf course. It is bounded within a few kilometres by relatively good semi-natural habitats. To the north is the Lea Valley, to the east is Broxbourne Wood Nature Reserve, and Wormley Wood Nature Reserve while to the south is Great Wood and Well Wood and to the west is Hatfield Hall and Park.

This listed, grade II three storey building of 1861 date has been out of regular use for some time and a redevelopment is now proposed to provide new residential units.

Aurum Ecology undertook a Protected Species survey on February 4th 2006, which also took account of previous work and bat observations made on this site over the previous fifteen-year period.

The findings are that a breeding Brown Long-eared Bat colony has been present in the far southern section of the main roof, though not recently.

This finding means that a DEFRA licence must be obtained before work can begin and suitable mitigation must be agreed with the developers. This mitigation should also take account of the fact that a currently unknown timber treatment product has been applied to some parts of the roof void.

Dependant upon the analysis of the chemical constituents of the timber treatment our final advice will either be;

- If the timber treatment, when tested, proves to be toxic to bats then access to the roof by bats should be prevented *or*

- Ensure that access for bats is maintained when refurbishment work is completed and maintain the existing Brown Long-eared Bat roost in the area it has chosen, for specific environmental reasons.

7 REFERENCES

Appleton, C. (2003) The effect of building work on bats: ten case studies. The National Trust. CD.

Arnold, H.R. (1983) Provisional Atlas of the mammals of the British Isles Bio. Records Centre, Monks Wood Experimental Station, Abbots Ripton, Huntingdon.

Corbet, G.B. & Southern, H.N. (eds) (1977) Handbook of British Mammals, Blackwell Scientific, Oxford.

English Nature (1993) Bats in roofs, a guide for surveyors, English Nature, Peterborugh.

Entwhistle, A.C., Harris, S., Hutson, A.M., Racey, P.A., Walsh, A., Gibson, S.D., Hepburn, I., and Johnston, J. (2001) Habitat Management for Bats - A guide for Land Managers, land owners and their advisors. JNCC, Peterborough. 48 pp.

Mitchell-Jones, A.J. (2004) Bat Mitigation Guidelines, English Nature. 74 pp.

Mitchell-Jones, A.J. & McLeish, A.P. (2004) The bat workers' manual. 3rd edition. Joint Nature Conservation Committee, Peterborugh.

Shawer C.R. (1987) The Barn Owl in the British Isles - its past present an future 114 pp

Stebbings R.E. (1974) Artificial roosts for bats. J. Devon Nat. Conserv. 6, 114-119

Stebbings R.E. (1988) The Conservation of European Bats. Helm, London. 246 pp.

Stebbings R.E. & Walsh, S.T. (1991) Bat Boxes. The Bat Conservation Trust, London.

Tuttle, M.D. & Hensley, D.L. (1993) The Bat House Builder's Handbook. Bat Conservation International.

Appendix 1

Planning mitigation and compensation
Key principles

Adapted from "Planning mitigation and compensation – Key principles" by Dr. Tony Mitchell-Jones, English Nature. January 2004.		
Conservation significance	Roost Status	**Mitigation/compensation requirement** (Depending on impacts)
1	Maternity sites of rarest species	Oppose interference with existing roosts or seek improved roost provisions. Timing restraints. No destruction of former roost site until replacement completed and significant usage demonstrated. Monitor for as long as possible.
2	Sites meeting SSSI guidelines	
3	Significant hibernation sites for rarest species or all species assemblages	Timing constraints. Like-for-like replacement as a minimum. No destruction of former roost site until replacement completed and usage demonstrated. Monitoring for at least 2 years.
4	Maternity sites of rarer species	
* 5	Maternity roosts of common species	Timing restraints. More or less like-for-like replacement. Bats not to be left without a roost and must be given time to find the replacement. Monitoring for 2 years.
6	Hibernation sites for small numbers of common species	
7	Hibernation sites for small numbers of rarer species	
8	Small numbers of rarer species. Not a maternity site.	Provision of new roost facilities where possible. Need not be like-for like, but should be suitable, based on species requirements. Minimal timing restraints or monitoring requirements.
9	Feeding perches of annex II species	
10	Small numbers of common species. Not a maternity site.	Flexibility over provision of bat boxes, access to new buildings etc. No conditions about timing or monitoring. Licence not usually required.
11	Individual bats of common species.	
12	Feeding locations of rarer species	
13	Feeding locations of common species	

* Bedwell Park bat status

Appendix 2

The DEFRA rules on Protected Species and Licensing

defra

THE DEFRA RULES ON PROTECTED SPECIES AND LICENSING

When is a licence needed?

Developers, builders, architects and anyone involved in any work that might impinge upon any European Protected Species are advised to seek the guidance of an ecologist. However, the following advice is offered as a guide.

DEFRA's view is that:

A licence will needed if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that, on balance, the proposed activity is reasonably likely to result in an offence under Regulation 39; or if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably unlikely to result in an offence under regulation 39 then no licence is required.

However, in these circumstances DEFRA would urge that reasonable precautions be taken to minimise the effect on all European Protected Species should they be found during the course of the activity. If they are found then work should cease and an application be made to the DEFRA.

Who applies for the licence?

The application should normally be made by a consultant ecologist. The application will need to be able to demonstrate to the satisfaction of English Nature that the relevant skills and knowledge of the species concerned have been applied.

The application form for bat species is;

WLF 3 – An application for a licence in respect of bat species affected by development (6 pages).

The application should comprise of :

The application form x 3,
Method Statement x 3,
Reasoned Statement x 3 and
supporting documentation which will include planning documents.

Site Visits & Compliance Checks

DEFRA will monitor compliance with licences issued. Therefore, licensees should be aware that they might receive a request for a site visit by one of the Department's

Wildlife Advisers to assess site conditions against the details given in the Method Statement attached to the licence. It is therefore essential that Method Statements be updated to reflect any changes.

It is also possible that the Department may undertake a site visit prior to the issue of a licence to confirm that the details of the site are accurately stated in the application.

The majority of site visits will be arranged several days in advance and will be conducted in the presence of the licensee (or applicant) however there may be occasions when a site visit will be made at short notice.

Correct as at May 2005

ADENDUM

1) E.P.S. licensing – DEFRA has issued an announcement of the transfer of the operational and delivery functions of DEFRA's **E**uropean **P**rotected Species licensing remit to the Rural Development Service National Wildlife Management Team from the 1st July 2005.

2) With the combining of English Nature and certain DEFRA functions from October 2006 the way in which aspects of licensing are being handled is being revised during 2006. This is likely to include all English Nature responsibilities for licensing being passed to DEFRA staff during March 2006.

Appendix 3

Statutory Instrument 1994 No. 2716

Statutory Instrument 1994 No. 2716

The Conservation (Natural Habitats, &c.) Regulations 1994 - *continued*

PART III

PROTECTION OF SPECIES

Protection of animals

European protected species of animals

38. The species of animals listed in Annex IV(a) to the Habitats Directive whose natural range includes any area in Great Britain are listed in Schedule 2 to these Regulations.

References in these Regulations to a "European Protected species" of animal are to any of those species.

Protection of wild animals of European protected species

39.—(1) It is an offence-

(a) deliberately to capture or kill a wild animal of a European protected species;

(b) deliberately to disturb any such animal;

(c) deliberately to take or destroy the eggs of such an animal; or

(d) to damage or destroy a breeding site or resting place of such an animal.

(2) It is an offence to keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of a European protected species, or any part of, or anything derived from, such an animal.

(3) Paragraphs (1) and (2) apply to all stages of the life of the animals to which they apply.

(4) A person shall not be guilty of an offence under paragraph (2) if he shows-

(a) that the animal had not been taken or killed, or had been lawfully taken or killed, or

(b) that the animal or other thing in question had been lawfully sold (whether to him or any other person).

For this purpose "lawfully" means without any contravention of these Regulations or Part I of the Wildlife and Countryside Act 1981.

(5) In any proceedings for an offence under this regulation, the animal in question shall be presumed to have been a wild animal unless the contrary is shown.

(6) A person guilty of an offence under this regulation is liable on summary conviction to a fine not exceeding level 5 on the standard scale.

Exceptions from regulation 39

40.—(1) Nothing in regulation 39 shall make unlawful-

(a) anything done in pursuance of a requirement by the agriculture Minister under section 98 of the Agriculture Act 1947 or section 39 of the Agriculture (Scotland) Act 1948 (prevention of damage by pests); or

(b) anything done under, or in pursuance of an order made under, the Animal Health Act 1981.

(2) Nothing is regulation 39(1)(b) or (d) shall make unlawful anything done within a dwelling house.

(3) Notwithstanding anything in regulation 39, a person shall not be guilty of an offence by reason of-

(a) the taking of a wild animal of a European protected species if he shows that the animal had been disabled otherwise than by his unlawful act and was taken solely for the purpose of tending it and releasing it when no longer disabled;

(b) the killing of such an animal if he shows that the animal has been so seriously disabled otherwise than by his unlawful act that there was no reasonable chance of its recovering; or

(c) any act made unlawful by that regulation if he shows that the act was the incidental result of a lawful operation and could not reasonably have been avoided.

(4) A person shall not be entitled to rely on the defence provided by paragraph (2) or (3)(c) as respects anything done in relation to a bat otherwise than in the living area of a dwelling-house unless he had notified the appropriate nature conservation body of the proposed action or operation and allowed them a reasonable time to advise him as to whether it should be carried out and, if so, the method to be used.

(5) Notwithstanding anything in regulation 39 a person-

(a) being the owner or occupier, or any person authorised by the owner or occupier, of the land on which the action authorised is taken, or

(b) authorised by the local authority for the area within which the action authorised is taken,

shall not be guilty of an offence by reason of the killing or disturbing of an animal of a European protected species if he shows that his action was necessary for the purpose of preventing serious damage to livestock, foodstuffs, crops, vegetables, fruit, growing timber or any other form of property or fisheries.

(6) A person may not rely on the defence provided by paragraph (5) as respects action taken at any time if it had become apparent before that time that the action would prove necessary for the purpose mentioned in that paragraph and either-

(a) a licence under regulation 44 authorising that action had not been applied for as soon as reasonably practicable after that fact had become apparent, or

(b) an application for such a licence had been determined.

(7) In paragraph (5) "local authority" means-

(a) in relation to England and Wales, a county, district or London borough council and includes the Common Council of the City of London, and

(b) in Scotland, a regional, islands or district council.

Prohibition of certain methods of taking or killing wild animals

41.—(1) This regulation applies in relation to the taking or killing of a wild animal-

(a) of any of the species listed in Schedule 3 to these Regulations (which shows the species listed in Annex V(a) to the Habitats Directive, and to which Article 15 applies, whose natural range includes any area of Great Britain), or

(b) of a European protected species, where the taking or killing of such animals is permitted in accordance with these Regulations.

(2) It is an offence to use for the purpose of taking or killing any such wild animal-

(a) any of the means listed in paragraph (3) or (4) below, or

(b) any form of taking or killing from the modes of transport listed in paragraph (5) below.

(3) The prohibited means of taking or killing of mammals are-

(a) blind or mutilated animals used as live decoys;

(b) tape recorders;

(c) electrical and electronic devices capable of killing or stunning;

(d) artificial light sources;

(e) mirrors and other dazzling devices;

(f) devices for illuminating targets;

(g) sighting devices for night shooting comprising an electronic image magnifier or image converter;

(h) explosives;

(i) nets which are non-selective according to their principle or their conditions of use;

(j) traps which are non-selective according to their principle or their conditions of use;

(k) crossbows;

(l) poisons and poisoned or anaesthetic bait;

(m) gassing or smoking out;

(n) semi-automatic or automatic weapons with a magazine capable of holding more than two rounds of ammunition.

(4) The prohibited means of taking or killing fish are-

(a) poison;

(b) explosives.

(5) The prohibited modes of transport are-
(a) aircraft;
(b) moving motor vehicles.

(6) A person guilty of an offence under this regulation is liable on summary conviction to a fine not exceeding level 5 on the standard scale.

Protection of plants

European protected species of plants

42. The species of plants listed in Annex IV(b) to the Habitats Directive whose natural range includes any area in Great Britain are listed in Schedule 4 to these Regulations.

References in these Regulations to a "European protected species" of plant are to any of those species.

Protection of wild plants of European protected species

43.—(1) It is an offence deliberately to pick, collect, cut, uproot or destroy a wild plant of a European protected species.

(2) It is an offence to keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild plant of a European protected species, or any part of, or anything derived from, such a plant.

(3) Paragraphs (1) and (2) apply to all stages of the biological cycle of the plants to which they apply.

(4) A person shall not be guilty of an offence under paragraph (1), by reason of any act made unlawful by that paragraph if he shows that the act was an incidental result of a lawful operation and could not reasonably have been avoided.

(5) A person shall not be guilty of an offence under paragraph (2) if he shows that the plant or other thing in question had been lawfully sold (whether to him or any other person).

For this purpose "lawfully" means without any contravention of these Regulations or Part I of the Wildlife and Countryside Act 1981.

(6) In any proceedings for an offence under this regulation, the plant in question shall be presumed to have been a wild plant unless the contrary is shown.

(7) A person guilty of an offence under this section is liable on summary conviction to a fine not exceeding level 4 on the standard scale.

Power to grant licences

Grant of licences for certain purposes

44.—(1) Regulations 39, 41 and 43 do not apply to anything done for any of the following purposes under and in accordance with the terms of a licence granted by the appropriate authority.

(2) The purposes referred to in paragraph (1) are-

(a) scientific or educational purposes;

(b) ringing or marking, or examining any ring or mark on, wild animals;

(c) conserving wild animals or wild plants or introducing them to particular areas;

(d) protecting any zoological or botanical collection;

(e) preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;

(f) preventing the spread of disease; or

(g) preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other form of property or to fisheries.

(3) The appropriate authority shall not grant a licence under this regulation unless they are satisfied-

(a) that there is no satisfactory alternative, and

(b) that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

(4) For the purposes of this regulation "the appropriate authority" means-

(a) in the case of a licence under any of sub-paragraphs (a) to (d) of paragraph (2), the appropriate nature conservation body; and

(b) in the case of a licence under any of sub-paragraphs (e) to (g) of that paragraph, the agriculture Minister.

(5) The agriculture Minister shall from time to time consult with the nature conservation bodies as to the exercise of his functions under this regulation; and he shall not grant a licence of any description unless he has been advised by the appropriate nature conservation body as to the circumstances in which, in their opinion, licences of that description should be granted.

Licences: supplementary provisions

45.—(1) A licence under regulation 44-

(a) may be, to any degree, general or specific;

(b) may be granted either to persons of a class or to a particular person; and

(c) may be subject to compliance with any specified conditions.

(2) For the purposes of a licence under regulation 44 the definition of a class of persons may be framed by reference to any circumstances whatever including, in particular, their being authorised by any other person.

(3) A licence under regulation 44 may be modified or revoked at any time by the appropriate authority; but otherwise shall be valid for the period stated in the licence.

(4) A licence under regulation 44 which authorises any person to kill wild animals shall specify the area within which and the methods by which the wild animals may be killed and shall not be granted for a period of more than two years.

(5) It shall be a defence in proceedings for an offence under section 8(b) of the Protection of Animals Act 1911 or section 7(b) of the Protection of Animals (Scotland) Act 1912[54] (which restrict the placing on land of poison and poisonous substances) to show that-

(a) the act alleged to constitute the offence was done under and in accordance with the terms of a licence under regulation 44, and

(b) any conditions specified in the licence were complied with.

(6) The appropriate authority may charge for a licence under regulation 44 such reasonable sum (if any) as they may determine.

False statements made for obtaining licence

46.—(1) A person commits an offence who, for the purposes of obtaining, whether for himself or another, the grant of a licence under regulation 44-

(a) makes a statement or representation, or furnishes a document or information, which he knows to be false in a material particular, or

(b) recklessly makes a statement or representation, or furnishes a document or information, which is false in a material particular.

(2) A person guilty of an offence under this regulation is liable on summary conviction to a fine not exceeding level 4 on the standard scale.

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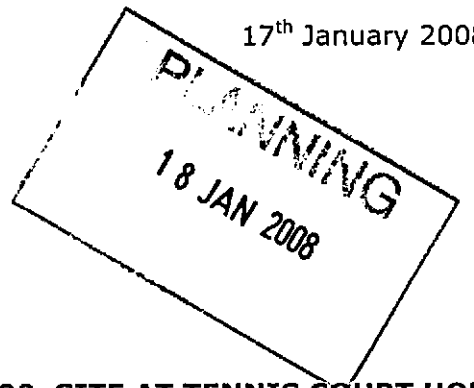
17th January 2008



Ref: BP/TCH/03

Dear Sirs,

RE: TOWN & COUNTRY PLANNING ACT 1990, SITE AT TENNIS COURT HOUSE, ESSENDON HALL, BEDWELL PARK, ESSENDON, HATFIELD, APPLICATION No. S6/2007/592/FP, APPEAL REF: APP/C1950/A/07/2048215

Further to the granting of the above planning permission for a swimming pool and summerhouse at the above site.

Please find attached information to discharge the following conditions: -

Condition 2 (Materials)

Please find attached a sample of the cedar timber shingles for the roof and the European Redwood Cladding, painted Mocha. The windows to the building will be a soft wood timber construction.

Condition 3 (Trees, Hedges and Shrubs)

I would like to confirm that no additional trees, hedges or shrubs will be removed other than those approved under the original planning permission, permission No. S6/2003/941/FP.

I hope that this information is satisfactory but should you wish to discuss this any further then please do not hesitate to contact me on my direct line telephone number 0188 9348022, or via email on davidl@millgatehomes.co.uk

Yours Sincerely

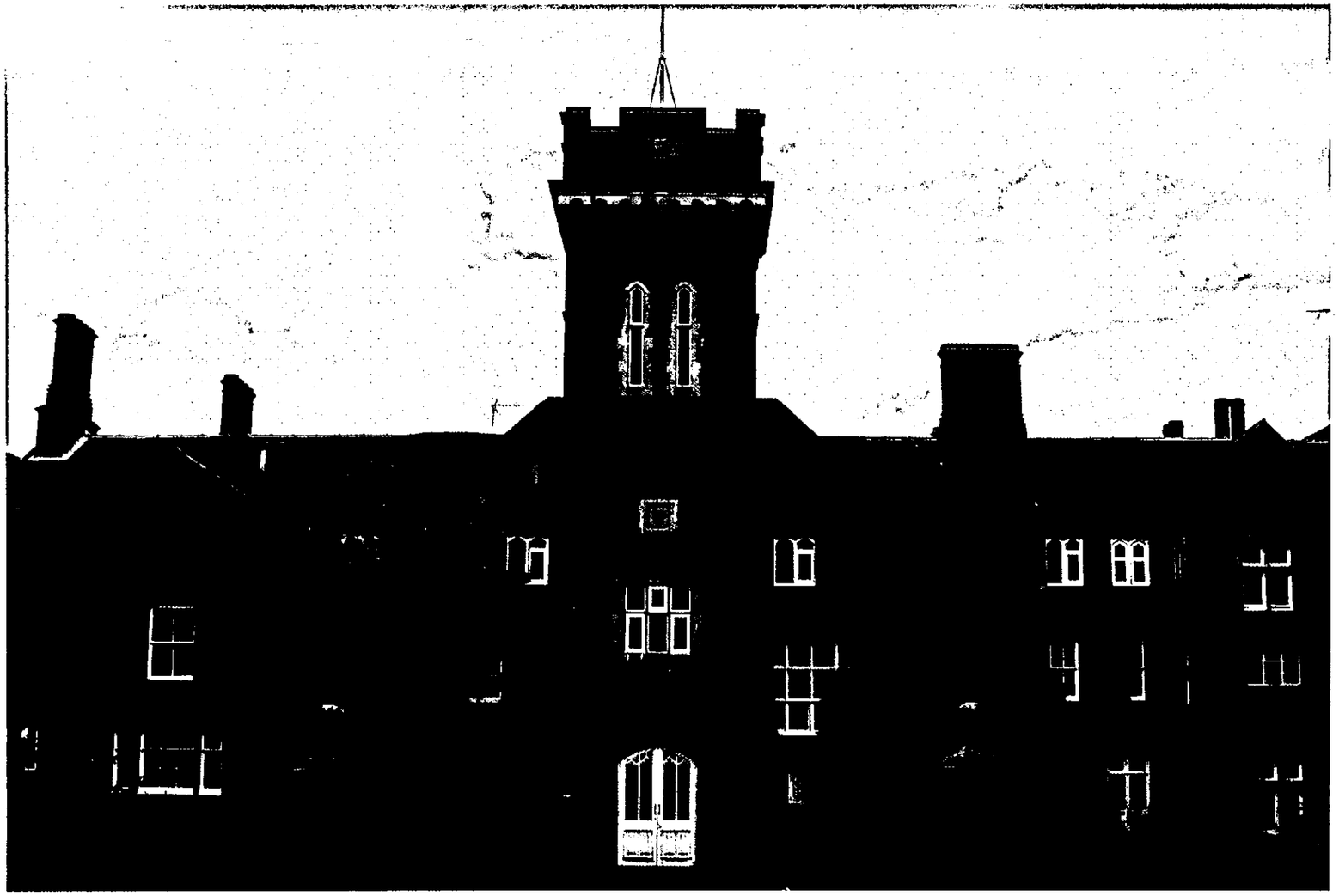
David Lambert
Assistant Architect

THE RESTORATION AND CONVERSION OF ESSENDON HALL, BEDWELL PARK,
ESSENDON, HATFIELD

PLANNING STATEMENT ON BEHALF OF PJ LIVESEY (LONDON) LIMITED AND MILLGATE HOMES.

TO CREATE 17 RESIDENTIAL APARTMENTS AND HOUSES WITH 14 NEW BUILD DWELLINGS PARKING SPACES OR GARAGES AND ANCILLARY WORKS.

March 2006



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CONTENTS

Appendices

1. INTRODUCTION

1.1 Bedwell Park is a former Country Mansion House sited within the boundary of London Hatfield Golf and Country Club. It is our intention to rename the main listed building Essendon Hall, whilst the remaining buildings will remain as Bedwell Park.

1.2 The site of Essenden Hall is located approximately 5 miles to the east of Hatfield and approximately 1km to the south of Essenden Village. The main access is from the B158 High Road / Kentish Lane Cucumber Lane, close to the junction with Cucumber Lane.

1.3 Essenden Hall was used from approximately 1946 until 1972 as a residential boarding school. The 3 storey main building is a Grade II listed former country house dating from around 1860, with substantial later additions. Following its use as a school the Hall was used, until the late 1990's, as a clubhouse for the adjoining golf course.

1.4 The application site is approximately 5.3ha in extent. It contains cottages, former stables and outbuildings and a detached house within a walled garden to the south of the main house. The buildings are set within a large estate comprising lawns, formal gardens, woodland and pond extending to Berkhamsted Lane to the south. The listing descriptions include the former house, ice house and former lodge.

1.5 Essenden Park is almost entirely surrounded by the adjoining Golf Course, so that public views from the rural area towards the hall are obscured. The formal avenue along the existing private driveway provides a clear view towards the frontage of the main building.

2. DESCRIPTION OF PROPOSED DEVELOPMENT

2.1 **This planning statement relates to the joint planning application submitted by Millgate Homes with PJ Livesey (London) Limited for the redevelopment of the site of Essenden Hall, Bedwell Park. It is also submitted in support of the application for listed building consent for the restoration and conversion of the listed buildings to residential use.**

2.2 The applications are supported by this Planning Statement; a Design and Conservation Statement and Schedule of Works; and a Bat Survey. Details of the proposed development are shown on the submitted drawings as follows:

Drawings List – PJ Livesey Drawings

069-0001 - Existing Site Plan

069-0010 - Existing Ground Floor Plan
069-0011 - Existing First Floor Plan
069-0012 - Existing Second Floor Plan
069-0014 - Existing Roof Plan

069-0310 - Existing Elevations 1
069-0311 - Existing Elevations 2
069-0312 - Existing Elevations 3

069-1000 – Location Plan
069-1001 – Proposed Site Plan
069-1002 – Proposed Demolition Plan

069-1010 - Proposed Ground Floor Plan
069-1011 - Proposed First Floor Plan
069-1012 - Proposed Second Floor Plan
069-1013 - Proposed Roof Floor Plan
069-1014 - Proposed Roof Plan

069-1310 - Proposed Elevations 1
069-1311 - Proposed Elevations 2
069-1312 - Proposed Elevations 3

Drawings List – Millgate Homes Drawings

4493/11 – Overall Site Plan
4493/1105 – Site Survey

4493/01 – Courtyard Site Plan
4493/02 – Courtyard Ground Plan
4493/03 – Courtyard First Plan rev A
4493/04 – Courtyard Elevations 1
4493/05 – Courtyard Elevations 2
4493/06 – Courtyard Elevations 3
4493/07 – Courtyard Elevations 4
4493/09 – External Garage Courtyard Elevations
4493/10 – Internal Garage Courtyard Elevations

06/ESS/SP01 – Detached House Site Plan rev A
06/ESS/P1 – Tennis Court House Plans & Elevations
06/ESS/P2 – Walled Garden House Floor Plans
06/ESS/P3 – Walled Garden House Elevations
06/ESS/P4 – Walled Garden House Out Buildings Plans & Elevations

2.3 Retention and conversion of the listed buildings

The majority of the listed buildings have been vacant for over 20 years. Although parts of the main buildings have been used as a golf clubhouse, general lack of use, together with extensive vandalism and theft, have made them increasingly vulnerable to damage.

The current proposals comprise the retention and conversion to residential units of the existing former mansion house. The main building will be retained intact, although several later additions such as the flat roof over the internal courtyard and other unsightly structures will be demolished, as described in the Conservation Statement. All the proposed demolitions have been previously granted listed building consent.

3. PLANNING HISTORY

3.1 The main buildings were used as a residential school from approximately 1946, pre-dating current planning law. In August 1973 planning permission was granted for the conversion of the buildings to a hotel and golf course but this permission was only part implemented.

3.2 Planning permission was subsequently granted in 2002 for new health and leisure facilities, swimming pool and conversion of the main building to apartments, serviced offices and a conference suite. Proposals for new residential development in the grounds were refused.

3.3 Applications for planning permission and listed buildings consent were granted permission in October 2004, Ref: S6/2003/941/FP and S6/2003/942/LB). In respect of the listed buildings and curtilage buildings, the description of development was '*conversion, refurbishment and change of use of former golf clubhouse to ten apartments; conversion of existing courtyard buildings to four dwellings, refurbishment of existing east cottage'*.

3.4 The previous Officers Report to Planning Committee advised that there were strong planning reasons to allow the development, including the following. All these reasons still apply to the current applications.

- The case made by the applicants for enabling development constitutes very special circumstances that justifies a departure from Green Belt policy;
- The development does not have an unacceptable harmful visual impact on the Green Belt, setting of the listed building, landscape, rural character or residential amenity;
- The development has a limited visual impact on the openness of the Green Belt, landscape and rural character of the site;
- The development is acceptable in terms of scale and design and respects the setting of the listed building, does not result in unacceptable overlooking or loss of privacy and does not dominate neighbouring uses.

3.5 Conditions relating to the listed buildings, attached to the planning permission and listed building consent, included details of materials, landscape scheme and means of enclosure, tree protection works, schedule of works for the listed buildings, external lighting, approval of a programme of archaeological works, bat survey, details of ground levels, curtilage areas for proposed dwellings, drainage and bin stores.

3.6 The developers were required to complete a Section 106 agreement relating to the timing of restoration works, the establishment of a Management Company to manage the site, together with a Management Plan for the external areas of the site.

4. PLANNING POLICY BACKGROUND

4.1 The relevant planning policies contained in the adopted Hertfordshire Structure Plan and Welwyn Hatfield District Plan are listed in the previous Officers Report to Planning Committee. The site is located within the Green Belt and not within a settlement; it is also located within a designated Landscape Conservation Area and an Area of Archaeological Significance. The pond at Berkhamsted Lane Plantation is protected as a County Wildlife Site.

4.2 The relevant planning policies in the Welwyn Hatfield District Plan Review Alterations No 1 1998 include Policies BEV15, BEV16 and BEV17 which relate to listed buildings and conservation areas. Policy BE3 reflects the guidance in PPG15 Planning and the Historic Environment and provides criteria to be met by all proposals for extensions or internal alterations to listed buildings.

4.3 Trees within the site are protected by TPO Nos 2 and 3 (Broxbourne Woods 1955) as woodland and smaller groups. There are approximately 36 mature trees within the application site, the majority of which will be retained within the proposed development site.

4.4 The original gardens associated with the mansion are largely intact. They are said to be of historical interest, particularly because of a substantial rockery constructed of artificial Pulhamite stone in the 1860's. However, they are not of sufficient value to be included in the English Heritage Register of Historic Gardens and Parks.

5. ASSESSMENT OF ARCHITECTURAL HISTORY

5.1 The DCMS listing description describes the listed buildings as a '*rambling country house of several periods, mainly c1860; late C17 section to right of centre; 3 windows left of centre early C18; exterior recased and building extended both ends in 1861 by Hambry family*'. Various external and internal details are described. The '*interior has C1730 staircase rising to attic on left centre*'.

5.2 In the grounds there is an Ice House near the road and pond to the south of the main house and a house, formerly the Lodge to Bedwell Park House, both of which are also included in the listing description. The courtyard buildings and other buildings and structures in the grounds of the main house are also protected as curtilage buildings.

5.3 The current application for listed building consent is supported by an Architects' Design and Conservation Statement. This explains the process by which the proposed conversion works have been designed and provides justification for the proposed alterations and limited demolition works. Buildings and structures will be archaeologically recorded and the findings agreed with the local authority before any demolition takes place.

6. PROPOSALS FOR THE CONVERSION OF THE LISTED BUILDINGS, NEW BUILD DWELLINGS AND GARDENS

Creation of residential units

6.1 The scheme proposals for the listed buildings comprise the conversion of the existing house and adjoining courtyard buildings to a mixture of 2 bed and 3 bed apartments and 3 bed and 4 bed houses. In total 11 apartments will be created within the main house, together with 6 mews houses within the existing courtyard buildings incorporating the former East Cottage. A Conservation Statement is submitted in support of the proposals to restore and convert the listed buildings.

6.2 To the north of the main house a group of new buildings is proposed, to complete the arrangement of outbuildings adjoining the main house, enclosing a new 'courtyard'. A total of 12 new build dwellings, comprising eight 2, 3 and 4 bed houses and four 2 bed apartments, are proposed adjoining the existing outbuildings and replacing the more modern 'North Cottage'. The existing Walled Garden Cottage will be sympathetically restored and enlarged to provide a single detached house and garage. A second detached house is proposed on the former tennis court area.

Access and Parking

6.3 The existing access driveway into the site from Cucumber Lane will be re-used, with minor alterations as necessary to improve highway safety. Bearing in mind that the existing Golf Club continues to operate from the same access, the applicants consider that the driveway is suitable for the proposed development for residential use.

6.4 Parking will be provided within a new garage block at the side of the main building. The provision of garages sunk down into the natural ground forms on the site and the use of courtyard areas away from the main building will ensure that vehicles do not dominate the largely pedestrian environment within the site. The walls of the car park enclosure will appear to be as those of a walled garden with dense planting to further screen the garage area. The hard paved areas of the existing courtyard will also be used for car parking and visitor spaces will be provided in the walled entrance courtyard.

6.5 In total 74 car parking spaces will be provided for the whole development. There will be 28 garages in total; 17 for the dwellings within the listed buildings and 11 for the new build houses. In addition, 18 car spaces will be provided within the garage courtyard; 10 spaces will be available within the stable (lower) courtyard; 6 spaces will be provided close to the entrance to the stable area; 12 visitor spaces will be available in front of the main hall.

Protected Species

6.6 Bats are known to have been present in the main building in the past. PJ Livesey commissioned a new survey of the buildings and gardens to ascertain whether bats continue to roost on the site. Specialist bat experts, Aurum Ecology, carried out thorough surveys in February 2006. Their report is submitted in support of the planning application.

6.7 Detailed surveys were carried out within the existing buildings and garden areas, to identify and examine all the potential places that bats might use. No live bats were found. The ecologists found that the southern part of the main roof had been used by Brown Long-eared bats up to 1991. However, previous repairs to damaged roof coverings are believed to have prevented the entry of bats and chemical timber treatments may have also deterred their presence. A few Pipistrelle droppings were also found but the roof is not considered to be suitable for long term hibernation or to sustain a breeding colony.

6.8 The ecologists advised that the chemical constituents of the timber treatment product should be analysed to ascertain whether it is toxic to bats. If it is, then access to the roof by bats should be prevented. If not, then access for bats to the southern section of the main roof should be maintained when refurbishment work is completed.

Conversion of the Main House

6.9 The previous approved scheme proposed 10 apartments in the main house and 4 houses within the existing courtyard buildings, with the separate East Cottage adjoining. The current revised proposals include 11 apartments in the main house and 6 dwellings in the courtyard area incorporating the existing East Cottage. Detailed descriptions of the conservation proposals are submitted separately.

6.10 The number of units has increased as a result of various amendments. For example, the roof areas of the mansion, previously left as voids, are proposed to be incorporated into the dwelling units. This will ensure that all parts of the building are properly maintained in the long term.

6.11 The roof voids of all the existing buildings have been surveyed by a specialist to investigate their potential for bat roosts and a full Bat Survey is submitted with the applications. Although some parts of the main building were clearly used by bats in the past, there are no signs of recent use.

6.12 Fewer internal areas will be sub-divided and the internal arrangement has been altered to keep the majority of the existing rooms intact. Full details of proposed alterations and the retention of internal features are included in the submitted Schedule of Works and Conservation report. The existing chimneys and tower will be restored; a missing chimney on the feature gable will be reinstated. The decorative facades of the main building will be enhanced by the retention of existing windows or by their replacement, where necessary, as existing. No new doorways will be inserted into the main house.

Lower Courtyard Buildings

6.13 The courtyard buildings are to be retained intact and converted to small 'mews houses' within the existing footprint. The adjoining garage will also be converted to a dwelling unit. The proposals for vehicle circulation include an area of car parking within the existing courtyard. The landscape proposals will ensure that hard paved areas and planting will also be introduced into the courtyard, to maintain its character as a 'stable yard' and to provide communal amenity areas for incoming occupiers.

6.14 New doors will be inserted into former openings that have been blocked up in the courtyard buildings. The current proposals include small elements of demolition of substandard building materials and roof coverings, including later additions such as the flat roof over the internal courtyard of the main building. These will enhance the appearance of the listed buildings and have been agreed by the local authority under the previous approvals.

Upper Courtyard Buildings

6.15 The current proposals for the upper courtyard comprise 12 individually sized cottages and apartments, where the approved scheme proposed seven houses forming two long narrow courtyards and one large, detached, six-bedroom house. In our view the increase in dwelling numbers is more than compensated for by the reduction in height and bulk of buildings, particularly in relation to the incongruous 'Upper Courtyard House' previously approved.

6.16 The approved detached house will be omitted from this part of the site, to enable the courtyards to become more open and wider with attractive outdoor spaces, reflecting the atmosphere of their rural setting. The more open and spacious courtyard arrangement also helps to overcome issues of privacy and overlooking and creates better opportunities to provide a good landscape design to these areas.

6.16 The original Walled Garden Cottage, to the south of the Hall, has been unsympathetically extended in the past on the east, south and west sides. These additions will be removed and the original 2 storey cottage will be incorporated into a new detached dwelling and garage.

6.15 A Design and Conservation Statement is submitted separately in support of the conversion works and new build proposals.

Garden Restoration and landscape treatments

6.16 The applicants have carried out a survey of the landscape elements to the grounds of Essendon Hall for those areas immediately around the listed buildings and reviewed the landscape strategy previously approved. The current proposals for the restoration of the landscape are broadly based on those within the approved scheme, as set out in detail within the Enplan Landscape Design and History Proposals document prepared in June 2003.

6.17 The proposals include the restoration of the historic features and structures within the gardens and the introduction of new planting to be historically appropriate in order to significantly enhance the appearance of the gardens and to restore their former Victorian character. Landscape management work and works to existing trees will also be undertaken in line with previous approvals. Existing trees will be retained and protected during construction

6.19 Existing hard surfaced areas adjoining the main building will be restored to garden and used as private terraces for the benefit of future occupiers. Lawned and planted areas will be generally available as communal amenity spaces for all residents, with small areas excluded to allow the majority of dwellings to benefit from private garden areas.

6.20 The apartments in the upper floors of the main house will be provided with roof terraces. All private garden areas and terraces will be located so as to safeguard the privacy of adjoining occupiers. The existing internal courtyard area, which is enclosed by the existing buildings and roofed over in the past, will be opened out and restored for communal enjoyment. As this space will be overlooked by several apartments, it will not be divided into private gardens.

6.21 Within the courtyards, the landscape treatments will be essentially 'hard' paved areas with planted containers, colours and textures of paving materials used to delineate pedestrian areas, vehicular circulation routes and parking areas.

6.22 The current proposals for the restoration and design of the garden areas around the main house closely follow the previously approved scheme. Of particular interest is the 1860's landscape including a small hermitage and large rockery made of artificial stone (Pulhamite). As the site is located within a designated Landscape Conservation Area, a detailed garden restoration scheme will be designed.

6.23 Broadly the proposals for the restoration of the gardens to the area surrounding the building will reflect the layout in Victorian times. Our proposals aim to restore features that have declined through their physical deterioration and remove certain elements that were created at a later date. Generally later features were added as part of the operation of the building and its surroundings as a club house for the adjacent golf club. These features have detracted from the character of the setting to the building and should be removed.

6.24 Management works and tree works will be undertaken to the existing trees and mature vegetation on site which have been neglected or damaged by recent uses. Where necessary over-mature trees and shrubs will be replaced, this will be covered within a more detailed strategy document.

6.25 The Proposals for the Landscape Works are covered area by area as follows:

1.0 West Court – This area retains the basic form of 1860. The existing gate piers and balustrades require some restoration. Some additional balustrade replicating the existing will be added to frame the North side of the courtyard.

1.1 The recent low brickwork and over-mature planting, in particular the island bed in the centre of the courtyard which obscures the frontage of the house, will be removed. Some new planting sympathetic with the Victorian period will be added to soften the front aspect of the building and provide some screening to the private apartments.

1.2 The existing evergreen Magnolia will be retained within a broader planting bed, which will be beneficial to its health.

1.3 Whilst the original surfacing to the frontage may have been light coloured loose gravel chippings, it is considered more practical to stabilise this medium with either resin or tar emulsion to ensure that it withstands vehicle wear and tear.

1.4 Neglected and over-mature tree and shrub planting will be restored or replaced as necessary. Some shrub areas adjacent to the Hall have reached a state where they need to be replaced with historically appropriate planting as they are unmanageable and are overshadowing the buildings. The replacement planting proposals for these areas will be covered fully within the detailed designs.

2.0 South Front – The concrete paving which surround the South and East aspects of the house should be removed and replaced with a light coloured loose gravel similar to that remaining on paths within the garden. Where appropriate some areas of a more robust surface such as Yorkstone slabs may be introduced adjacent to doorways.

2.1 The existing footpaths should be reinstated using loose gravel to match that which remains. Edges will be reinstated where necessary and any invasive weed growth eradicated.

2.2 All stone stairways and flanking walls will be repaired.

2.3 The rectangular rose bed and incidental small trees and specimen shrubs will be removed from the lawn immediately in front of the South frontage and replaced with an oval bed to reflect the original design.

2.4 The terraces on the Western side of this garden area will be retained and a new specimen Cedar added at the Southern end to match the layout of the Eastern terraces.

In the long term the existing Cedars within the gardens will become over-mature and a planned strategy for their future replacement will be undertaken.

3.0 Eastern Terrace – As above the paving slabs will be removed and replaced with loose gravel and existing paths and stairways reinstated.

3.1 Inappropriate ornamental planting of fruit trees and yew hedging will be removed from the Eastern terraces, reinstating the original open aspect across the parkland.

3.3 To the Northern end of the Eastern frontage those areas utilised for buggy parking will be removed. This will involve the removal of raised brick planters around the Cedar of Lebanon and grubbing up of hard surfacing. The return of the hard paved areas to grassland will have a beneficial effect on the somewhat over-mature Cedar of Lebanon in this area.

3.4 The introduction of new historically appropriate soft landscaping will be complement those areas where the existing peripheral buildings are being adapted for residential use. Over mature and inappropriate hedges and shrub planting will be removed or replaced with a more sensitive palate of plants.

3.5 Northern Courtyard – The conversion of the buildings surrounding the courtyard at the Northern end of the building into residential use will require new hard and soft landscape works to allow the creation of new parking areas. By the careful use of paving and planting the stable yard character of the area will be retained.

7. OWNERSHIP OF SITE, AMENDED DRAFT SECTION 106 AGREEMENT

7.1 The application site is owned by PJ. Livesey (London) Limited and Millgate Developments Limited. PJ. Livesey (London) Limited own the main listed building and associated landscaped areas. Millgate Developments Limited own the residual area of the site to the boundary with London Hatfield Golf and Country Club and all other buildings.

7.2 It is the opinion of the applicants that the current approvals are not the most sympathetic or sensitive redevelopment of the listed buildings and associated land. We wish to submit a new application which is both a variation to the earlier approval, with reference to the new build elements of the scheme, and a less intrusive conversion of the mansion house, with reference to the conversion element.

7.3 The Section 106 Agreement associated to the current approvals do not make provision for development of the site by two owners. It has been established with officers of Welwyn Hatfield District Council that this element of the agreement was included to protect the unity of the site, and specifically the listed mansion house, and enable the landscape to be refurbished in a consistent manner. Included with this application is a draft Section 106 Agreement that seeks to provide a similarly robust control of the site and its development with dual ownership, as that provided by the earlier agreement.

8. ARCHITECTS DESIGN AND CONSERVATION STATEMENT
(Incorporating Schedule of Works)

8.1 INTRODUCTION

8.1.1 As PPG 1 (General Policy and Principles) and PPG 15 (Planning and the Historic Environment) make clear, planning is an important instrument for protecting and enhancing the environment in town and country, and preserving the built and natural heritage. However, in paragraph 1.3 of PPG 15, there is a general presumption that 'the historic environment of England is all pervasive and it cannot in practice be preserved unchanged'. Its protection has to be reconciled with the need for economic growth.

8.1.2 The guidance explains that the starting point for the exercise of listed building control is the statutory requirement on local planning authorities to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. The former School / Club house has attracted this statutory protection as Grade II Listed Buildings.

8.1.3 The listing description is highlighted below.

Hatfield London Golf and Country Club TL 20 NE (9/50 22.08.72)
Listed NGR TL 2767407651

Rambling country house of several periods, mainly c1860. Late C17 section to the right of centre. 3 windows left of centre, early c18. Exterior recased and building extended both ends in 1861 by Hambry family. Red brick with dark red brick diaper work. Windows with flush stone windows and sills, those of right wing with Tudor hood moulds. Machine tile roof. 2-3 storeys. Sash and casement windows, most glazing bars removed. Entrance elevation dominated by 4-storey tower porch with crenellated parapet and corbelled stone eaves. Arched doorway with traceried half-glazed doors. Many gables and gabled projections to elevations. Tudor style polygonal chimney stacks. North end of range has C17 former barn, tie beams exposed, now brick faced with slate roof.
Brick chapel adjoins with lancet style ground and modern upper floor. South end of house has central 1st floor balcony with 2 cusped lights and moulded, carved stone soffit. Interior has c1730 staircase rising to attic on the left centre with alternate plain and barley twist balusters. An early-mid C17 staircase, possibly brought from elsewhere was moved c1980 from entrance hall and is now in pieces in the C17 wing. Front courtyard enclosed by 1861 wall, red brick pierced with square stone quatrefoil panels.

8.1.4 PPG 15 (para 2.11& 3.4) states that local authorities should,
"expect developers to assess the likely impact of their proposals on the special interest of the site or structure in question, and to provide such written information or drawings as may be required to understand the significance of the building and its setting, to justify their proposals".

<u>The Aims of the Scheme:</u>

8.1.5 The proposed scheme has been designed to satisfy the objectives of PPG1 and PPG15 by protecting and enhancing the historic value of the site. The proposals respect the structural limitations of the existing buildings and adopt an imaginative re-use of unorthodox spaces as detailed within PPG 15 para 3.15. The majority of the buildings on site will be retained and restored to a high standard. The design proposal will achieve a sympathetic conversion to meet the needs of residential occupiers without destroying the overall character of the building and its setting.

8.1.6 This architectural conservation statement / schedule of works includes a detailed appraisal of the potential impact of the proposed development on the listed buildings and their setting.

8.2 THE CONSULTATION and ANALYSIS PROCESS

8.2.1 Following site investigations of the former golf clubhouse / school, the architects and other P.J.Livesey and Millgate staff consulted with the Planning Officer and Conservation Officer for Welwyn Hatfield Council, English Heritage, The Hertfordshire Garden Trust and the Victorian Society in order to discuss all aspects of the site and the buildings. Following these consultations and extensive analysis, the designers formulated the proposals that have become the subject of the current planning application.

8.2.2 The advice of specialists in various fields, including landscape architects, bat and other ecological experts, archaeologists and highway safety consultants, have all contributed to the formulation and refining of the application proposals for the site.

8.2.3 During our research into the site we visited the County Records Office in Hertford Library. Various publications, such as Nicholas Pevsner's 'Historic Buildings of the South East', include brief histories of the site and buildings. We found only large scale OS maps showing the whole site; we could find no historic floor plans of the house itself within the archives.

Kate Harwood, conservation team leader for the Hertfordshire Garden Trust kindly forwarded the following sketch and plan from their archives:

Figure 1- a plan of the estate in 1765. (see appendix A)

Figure 2 - a perspective hand drawn sketch of the manor house from the late 17th Century. (see appendix A)

From our limited discoveries of documentary evidence and the physical evidence on site we have created a chronological plan, included as Figure 3. . (see appendix A)
This shows the existing house plan with various shaded areas identifying the approximate dates of the various elements. We also include a brief written summary of the history of the park and buildings as follows.

8.3 A BRIEF HISTORY OF THE PARK AND BUILDINGS

8.3.1 The first reference to Bedwell Park in the records dates back to 1388 when John Norbury was licensed to enclose 800 acres to make a park. It was primarily used as a nursery deer park to supply the King's deer park at Waltham. There is no evidence in records that any buildings of note were constructed during this period.

The stewardship of the manor: keepership of Bedwell Park: the hunt of the deer and the Kings mansion at Bedwell were granted to Sir Anthony Denny by King Henry the VIII. Queen Elizabeth I transferred the title absolute to the Denny Family some twenty years later. The Denny family sold it in turn to the Potters in 1601 and it was again sold on to the Atkin family in 1627.

The Atkins family held title to the House and manor between 1627 and 1701. The sketch highlighted in figure 2 was most likely commissioned by the Atkins family. This illustration also indicates the area of the building which is referred to in the listing description as the late 17th century core. Although there is no way of knowing whether this sketch was of a design proposal or of the actual house and grounds at this time, when comparing the sketch to present day photographs of the eastern façade, similarities can be clearly identified. For example, the three gables, windows and the kitchen / courtyard buildings show obvious similarities apparent in both cases. This sketch also demonstrates that the main entrance to the house at this time was to the east and that extensive walled courtyards and ornamental lakes surrounded the house.

The Wynne family bought the estate in 1701 and held it until 1780. The estate plan illustrated in Figure 1 was probably commissioned by the Wynne family and was used in the sale of the estate to Samuel Whitbread of the famous brewery family, in 1780. The house, walled gardens and ornamental lakes are also clearly visible in this plan. At the time of the sale, the house and grounds were apparently in a bad state caused by many years of neglect and Samuel Whitbread made extensive restorations. However, there is no way of knowing precisely what restorations or alterations were carried out during this time. The Whitbread family sold the estate in 1807 to Sir Culling Smith.

Although the surnames of the descendants of Sir Culling Smith changed from Smith to Eardley to Fremantle, the house and estate remained essentially in the same family from 1807 to 1945. The most extensive changes to the house were made during this period.

Sir C.E. Eardley commissioned William Gilbee Habershon (architect) in the 1850's to design and direct a major refurbishment and enlargement of the property. This involved a large extension to the south containing the Ballroom and two principal bedrooms above. In addition he designed and built a castellated tower on the West façade and a chapel to the East. The whole of the main house was over-clad with a new skin of brickwork during this period giving the apparent unified brickwork appearance of today. The South extension bears the date of this work in the form of an engraved stone plaque dated 1861.

The house was sold to the Royal Patriotic Fund School in 1945. The school housed up to 100 orphaned children of military personnel under a Hertfordshire County Council Education Committee direction. Many internal alterations were made during this period (1945 to 1972) to convert the house into a school. Many of the large rooms were converted into classrooms, and many additional washing facilities were also added.

One of the most notable changes was the removal of the three feature fire places in the Ballroom during its conversion into a sports hall. Figure 7 is a photograph which shows the ballroom / sports hall during this period with the incongruous pairing of school climbing frames and Victorian feature ceiling. The only major external alteration to the building during this period was to create a new first floor extension over the whole of the north eastern stable and chapel area.

The Hall was sold and converted for use as a Golf and Country Club and hotel between 1972 and 1998. During this period most of the upper floors remained largely unused. Two main rooms on the first floor are used for little more than housing extraction ductwork for accommodation on the ground floor below. The main stair was removed and new public toilets, a new bar and kitchen facilities were installed on the ground floor to the south of the main entrance. The ballroom was converted back into a function room. Externally a new single storey extension was added to the West façade to act as part of the male changing facilities and as a new boiler house.

The Golf and Country Club developed new facilities half a mile away from the main house in the late 1990's. They then sold the house and walled garden with 9.5 acres of the surrounding land to Sabre Developments in the early 2000's. Sabre Developments were granted planning permission for the conversion of the main house and stable facilities into 15 dwellings with 10 new build houses and the 1 refurbishment / new build house attached to the listed walled garden cottage.

The Walled Garden and Cottage

8.3.2 The walled garden to the south east of the main hall is shown on the 1765 estate plan of the site in figure 1. It is therefore clearly older than most of the hall and has probably been functioning as a formal garden for nearly three hundred years. It is not mentioned in the listing description and is not of sufficient value to be included in the English Heritage Register of Historic Gardens and Parks. It is within the curtilage of a listed building and the whole site is located within a designated Landscape Conservation Area.

The walls are over three metres high constructed from imperial bricks in a Flemish bond, topped predominantly with a stone coping. One and half wide and a full brick deep piers project at approximately 4.5 metre centres to give stability to the wall.

There are no buildings shown in this area on the 1765 estate plan. The central cottage integrated into the south wall was probably added in the 1860's at the same time as the major works on the house. The whole of the south wall of the walled garden was in turn integrated into a predominantly flat roofed entertainment suite for golf club use in the 1970's. The central cottage is to be retained and incorporated into a new house largely on the footprint of the entertainment suite. Please see section 8.7 below for a description of the new proposed development.

8.4 THE INITIAL DESIGN BRIEF

8.4.1 The design brief that guided the current proposals incorporated the initial views of the Victorian Society, Police Crime Prevention Liaison Officer and local Planners including the Conservation Officer.

Site Layout and enclosure:

8.4.2 The P.J. Livesey site forms only 1.75 acres (0.7 hectares) of the total 9.4 acre (3.8 Hectare) application site. This area contains the main listed building.

8.4.3 The architects' brief defines the importance of the existing landscaped spaces and the enclosure of these spaces within our site and the application site as a whole. The form of the development should follow the original plan form with any new buildings complementing existing buildings, to ensuring that the relationship of buildings to their formal setting is maintained. Features that intrude or detract from the character of the site, for example more recent extensions and new buildings, should be removed.

8.4.4 The brief also requires the architects to take account of the need for privacy and security for the incoming occupiers, and future management of the communal spaces. The pedestrian access through the main gates will be in permanent use and will not be locked. The developers will not allow vehicular access through these gates other than for deliveries and maintenance. The fact that there are imposing gates will exude the feeling of private space beyond and give notional security for residents overlooking the West courtyard.

8.4.5 P.J.Livesey proposes that the future management of the site will be by means of a management company set up to maintain the heritage assets on the site.

Parking:

8.4.6 We have been advised by the planners that the following parking standards will be applicable for our proposed residential development on the site

- *1.25 spaces for 1 bed;*
  1.5 spaces for 2 bed;
  2.25 spaces for 3 bed;
  3 spaces for 4+ beds;
  Casual visitor parking 0.25 spaces per dwelling;

During our initial meetings with the Planners and the Conservation Officer it was agreed that the impact of parked vehicles on the site and the setting of the listed buildings should be minimised. The former clubhouse was served by a single large car parking area to the North West of the main house with a capacity over 80 spaces. This elevated parking area is in full view when approaching the building on the main drive from the West. We feel it is inappropriate to maintain this large area of tarmac in such close proximity to the listed building.

8.4.7 The previously approved scheme retained part of this parking area and included a proposal to construct new parking for the residential development in the form of a garage courtyard area directly on top of the car park. We feel this development would have seriously detracted from the setting of the listed building.

8.4.8 Although we also propose to construct a new garage courtyard area in the same location it is designed to mitigate its impact, using the lie of the land to conceal its function. By partially sinking the courtyard into the hill, the surrounding wall height can be reduced. The car parking courtyard and garages thereby appear, to the external viewer, as little more than a walled courtyard. There is ample historic precedent for walled courtyards such as this, as illustrated in fig 1. We also propose to extensively landscaping the immediate surrounding area to further screen this new development.

8.4.9 One garage will be provided for each of the houses / apartments in the listed building (17) with 11 garages for the new build houses / apartments in the courtyard area. A total of 28 garages is proposed. With 46 surface car parking spaces these will contribute to the total of 74 car spaces.

8.4.10 The surface car parking will be divided into four main areas.

(i) 18 car parking spaces in the garage courtyard;
(ii) 10 spaces within the stable courtyard;
(iii) 6 spaces close to the stable courtyard entrance;
(iv) 12 visitor spaces in front of the main house.

Building design:

8.4.11 The brief reflects the company policy of the applicants, who have successfully converted listed buildings over the last 20 years. This policy is to identify the intrinsic qualities of the listed buildings and conserve as many elements of the structural fabric as possible whilst maximising the area of viable accommodation to be re-used. The apartments created within these conversions are often unique and full of character. This approach is wholly consistent with government policy in PPG 3 to maximise the re-use of previously developed land and buildings.

8.4.12 Our scheme was required to convert all elements of the listed buildings into apartments or town houses, and to provide new apartments and town houses in order to make the restoration scheme viable.

8.4.13 In terms of the conversion of the main listed buildings, the most prominent buildings on the site, the design brief was simple 'to conserve as much of the building fabric as possible'.

8.5 ENHANCING THE LISTED BUILDING SETTING

8.5.1 The listed building consists of a conglomeration of elements dating from C17th through to the 1980's. All elements have listed status including those listed as ancillary buildings attached to the listed structure. However, there are elements of the buildings which are more historically and architecturally significant than others. The listing description above highlights the areas of particular architectural and historical interest.

Clearly certain structures do not warrant the listed status and in reality detract from the setting of the listed structures. The removal of those inferior structures will also enable the listed structures to be converted and re-used more efficiently. This section identifies the structures proposed to be demolished and explains the reasoning for each. Each proposed demolition is numbered on the demolition and tree removal drawing number 063-1002.

8.5.2 **Building 1- The male changing rooms and new boiler house extension**
Building 1 is a 1980's extension designed to house the male changing rooms and the boiler house for the golf and country club. It is located on the western façade and links the garage building with the main house immediately in front of the former kitchen wing. A small courtyard was formed between the two.

The brickwork colour and pointing are quite close matches to the main house but this is where the similarity ends. This extension is little more than a plain utilitarian design with few architectural features of note. The modern metal windows and flat parapet roof are totally out of character with the steep pitched roof vernacular aesthetic of the main house. The scale is also inappropriate for this prominent location to the immediate north of the main entrance.

PJL propose to demolish this building with the exception of 1500mm of the external wall. This will be capped with coping stones to match existing typical designs on site. This wall will serve to create a secure courtyard area for House 7 and apartment 004. The elevations to the main house and garage will be made good.

The main benefit of this proposed demolition will be to restore the external view of the original kitchen wing. The virtually unfettered views from the accommodation on the ground floor within this wing along the main front drive will be restored.

8.5.3 **Building 2- The courtyard enclosure**
The kitchen wing can be seen in the sketch of the hall drawn in 1765. At this time the front of the building faced towards the east. During the major extensions of the 1850's a further wing was constructed to the east of this wing and a small courtyard was created between these wings. This courtyard was covered by a flat roof which enclosed the entire area between the two wings and also between the main house and the stables.

PJL propose to partially remove this roof and restore the small internal courtyard area of the 1850's. This will reintroduce natural light into the ground floor accommodation of the listed structures around it.

8.5.4 **Building 3- The bathroom extension**
We propose to partially demolish this mono-pitched bathroom extension and convert the remaining structures into a porch for the New House 1. The existing back-of-house utilitarian facades of this extension may be appropriate to the existing 'small garden' setting. However this area of the site is, in effect, being elevated to the main entrance area adjoining a formal courtyard space and needs to be restored with care. The bathroom extension displays no architectural details of merit that we feel should be retained.

8.5.5 **Building 4- Green Keepers House**
The green keeper's house located to the north of the stable block is a 1970's three bedroom house typical of any housing estate of the period. It was earmarked for demolition under the previous approval by sabre developments. It is in poor condition and inappropriate in style for its location we therefore also propose to demolish this structure.

8.5.6 **Building 5- Potting sheds and golf cart storage shed**
To the west of the green keepers house and the north of the former stable yard there are a series of small predominantly brick buildings with slate roofs linked to a car port type structure with a corrugated metal roof. All these structures were earmarked for demolition under the previous approval. Although these brick buildings are of some age they are in particular poor condition and exhibit no architectural detail of merit. We therefore also propose to demolish these buildings.

8.6 CONVERSION OF THE GRADE II LISTED BUILDINGS

Factors affecting the design and subdivision of each building on the site.

8.6.1 Market Conditions:

Following extensive market research by the PJ Livesey Estates and Marketing departments, the ideal size and mix of apartments was established.

8.6.2 Surface Parking;

Due to the cramped nature of the site and the wish to retain all the listed buildings, the architects decided early on in the design process to limit the amount of surface parking. Most of the residential accommodation created at this level would be blighted because of the proximity of vehicular traffic movement passing their windows.

8.6.3 Technical & Constructional Alterations

Roof Construction:

It is P J. Livesey company policy to strip all roofs on each and every listed building to ensure the roof is both watertight and insulated to modern standards. This process begins with the stripping of all roofs and storing the roof coverings for reuse. The tiled or slate roofs on all the listed buildings on the site are in need of repair. Our proposal does not change the height or profile of any of the roofs beyond the nominal thickness of any proposed insulation.

During this process the condition of each rafter and roofing board will be checked and treated as required. Insulation and felt will be installed before the existing tiles or slates are replaced on a double battened system. All ridge tiles will be removed and re-fixed during this process. All lead work will similarly be assessed and replaced if necessary. This upgrading process is required to bring the building up to modern building regulation standards and to achieve NHBC cover.

The roof coverings on the main house and stable wing are currently a patchwork of different types, sizes and styles. These range from clay tiles predominantly on the main house and garage, slates on the stable block with areas of a sheet covering which appears to be asbestos roofing. The flat roofs on various areas of the building are also covered by a combination of different materials from lead to modern felt.

The lead work on the main building appears to have been renewed relatively recently, possibly during its conversion into a golf clubhouse. It is a good quality gauge of lead which has been vandalised in places by thieves in their attempt to steal it. We propose to leave most of the lead in place, repairing it where necessary, and to install roof lights to provide natural daylight into apartments and communal spaces within the roofs.

During the stripping of the roof there will be inevitable breakages and therefore there will be a shortfall of existing slates to re-roof all of the buildings. We will aim to re-roof all outward facing roof pitches with the existing tiles and slates and use any replacements (to match existing) on the hidden valleys. We will provide sample replacements for approval by the planning authority prior to any construction.

Windows: Main house

A window schedule will be submitted to the Council for approval. This will assess the condition and suitability of each existing window and identify any actions to be taken. The schedule will also include the specification for any new and/or replacement windows.

The Listing description above indicates three distinct periods of extension and alteration to the original 17th century main house; one being during the 1860's by the Hambury family; the next being the conversion into a school in the 1940's; and finally in the 1980's during its conversion into the golf clubhouse. Clearly these are the periods of major change but there is no way of knowing if there were changes at other times.

The windows are probably the best indication of this history of change. The windows are an eclectic mixture with often evidently different ages, sizes and style sitting next to each other in an apparently quite arbitrary way.

The ornamental lattice sash windows which are shown on figure (3) (the C17th sketch) are the oldest remaining windows. There are however latticed casement windows to the ground floor extension which are not shown on this sketch. This would indicate there was an extension to the house between the 1765 and the 1861 Harbury Family amendments. Both these windows types appear to be largely in good order and will be refurbished as necessary.

Sections of the former C17th century windows have been replaced with simplified sections without tracery. In some cases whole windows have been replaced with typical Georgian style sash windows. We feel these changes provide an interesting indication of the history and overall development of house. Therefore we do not propose the wholesale replacement of these later windows to match the original C17th windows; we propose to deal with each window on its own merit.

The most significant alterations to Essendon Hall were made by the Harbury Family in the 1860's, essentially forming the listed building we know today. During this period the whole of the South elevation was formed and significant areas of the infill between the stable block and main house were also constructed. The whole of the C17th Hall appears to have been re-skinned during this period with brick work to match the new extensions, thus giving an overall harmony to the masonry.

The original windows appear to have been retained within a new masonry surround. This new surround was common to all windows despite the style of the original window, consisting of a stone cill and low gothic arched lintel with cant brick jambs and a solder course of brickwork above the lintel.

The windows in Southern extension are all of a low gothic arched style. With simple casement windows set within entirely stone surrounds, with stone mullions and transoms. All these windows are of a style and quality which befits the status of the rooms they serve, the principal rooms of the 1860's Hall. These windows also appear to be largely in good order and will be refurbished as necessary.

The kitchen wing windows in the ground floor have all been replaced with Georgian style single or double sash windows. The first floor however has a combination of C17th tracery windows and the Georgian windows. A section of the kitchen wing is indicated on the late C17th sketch (Figure 3) and these windows would fall within this area and therefore they appear to be original. These windows do not appear to have been maintained to the same standard as those in the main house and therefore may require more fundamental refurbishment.

The office wing is served by smaller scale casement windows both plain and tracery windows befitting the status of the room they served. These windows appear to be well maintained and will be refurbished as necessary.

Windows: stable buildings

The northern wing of the stable area has an eclectic mixture of windows, as with the main hall, ranging from the twentieth century timber windows to most of the first floor, to the gothic leaded lights in the chapel.

The C17th section of these stable buildings has few windows on the ground floor with mostly doors onto the courtyard and a solid wall to the rear. There is evidence of windows and doors which have been infilled. The only windows in this area are those in the section abutting the cottage and appear to be of the same style as the cottage suggesting they were built at the same time.

The chapel windows are gothic arched head fixed leaded lights. Building regulations require any habitable room to have a window with an opening light equivalent to 1/20th of the floor area of that room. The windows in the chapel have no opening lights and will therefore fail the building regulations under part L for ventilation. Due to the design of these windows and the fact they fail building regulations under part L, we propose to mechanically ventilate the bedrooms proposed to be created within this area.

Normally we do not regard it as good conservation practice to propose the wholesale removal of a complete section of windows. However the windows in the first floor extension over most of this northern wing are of such poor quality and of such an inappropriate modern style for the age of the building, we feel that there is no alternative. The windows also do not follow the lines of the more historic fabric at ground floor. We therefore propose to remove all of these windows and introduce new casement windows which line through with elements below. Each of these windows will have stone cills and heads to match those of the main house.

The windows of the eastern end of the western stable block building are mostly tall and narrow modern casement windows with arched head windows set in a dormer style construction above, which served the double volume space internally. An extra floor has been constructed in the eastern end and the windows of the same width have been adjusted in height to serve the two separate storeys. The garage wing has only one window of the same style as the cottage windows. All these windows are to be retained and refurbished. Opaque glass will be introduced into the central sections of the tall windows to hide the presence of a new first floor.

Doors:

A door schedule will be submitted to the Council for approval, assessing the condition and suitability of each existing door and any actions to be taken. The schedule will also include the specification for the new apartment doors.

External Doors:

All external doors to the main house are to be assessed for their state of repair and refurbished or replaced 'like for like' depending on their condition. The main entrance doors to the tower, mentioned in the listing description above and the former tradesman entrance door adjacent to the old kitchen are examples of the quality doors that fit into this category.

There are however notable exceptions to these doors where they are clearly inferior quality or have an inappropriate style for their location. For example the doors to the sides of the bay windows on the South façade, which are fairly modern utilitarian doors, are considered to be inappropriate for their location. Similarly, the French doors to the new clubhouse kitchen facilities have been modified inappropriately. In both cases we propose to submit detailed designs for approval prior to construction or fitting of new doors.

Internal Doors;

The internal doors, as with the external doors, are an eclectic mixture of styles and quality. Varying from the fine low gothic arch doors to the principal rooms on the ground, first and second floors, to the modern flush doors used in the fit-out for the service areas of the golf and country club. We propose to retain and refurbish where necessary all the arched head doors and architraves in their current positions.

Doors which are not required within the new layout will be fixed shut. If a door is fixed shut and forms part of a compartment wall, the door will be replicated on the other side and insulation will be placed between these to achieve the fire and sound separation standards required within Part B and E of the building regulations.

A suitable quality apartment entrance door and internal access door sample will be submitted for approval by the Council.

External Masonry
As highlighted above, most of the masonry on main hall buildings dates from the refurbishment by the Hanbury Family in the 1860's. The extensions of this period and the re-skinning of the C17th may have been intended to provide an overall unity to the appearance of the masonry.

This section deals with the current condition of, and our proposed maintenance for, all masonry elements on the building. All comments and proposals have been made from observations from the ground. A detailed schedule of remedial works can only be made following the scaffolding of all facades and a detailed assessment of all elements.

Cleaning:
We propose to clean all the masonry on the building with a low powered water jet wash. This will assist with the assessment of the condition of each element of masonry.

Stone work:
The stonework used on the building is mostly limestone and is generally in good condition. The age of the various elements varies; some elements are eroded or have suffered from frost damage more than others.

English Heritage's advice is that the wholesale replacement of all weathered items of stone is not good conservation practice. However, we feel that only damaged stonework that no longer fulfils its purpose should be replaced.

Brickwork and Pointing:
As highlighted above most of the brickwork on the house dates from the 1860's. The Stable block brickwork shows the variation of age we would expect from this age of building, with several courses of Elizabethan brickwork still present at lower levels.

The facing brickwork on the house itself is in a relatively good condition. However, it has unfortunately been re-pointed relatively recently (probably in the 1980's) with a raised weathered bed of sand and cement mortar. We are of the view that this is a totally inappropriate type and style of mortar but reluctantly feel its wholesale removal would damage too many bricks. We therefore reluctantly propose retain this mortar style and patch repair where necessary to match the existing.

The stable block is built from older bricks and possibly poorer quality bricks, as befits the lower status of the outbuildings. Badly weathered and frost damaged blown bricks will be replaced where necessary. There is evidence that patch pointing has taken place over these building over time and there is variation in the colour, joint type and age of the mortar. However, our view is that the wholesale re-pointing of the building would unacceptably affect the character of the building and we therefore propose to patch point only where necessary.

Floor and Ceiling Construction:
The existing floor construction within the building is the traditional timber floor joist and T & G boarding throughout. Large areas of the ground floor timber boarding have been replaced with modern composite floor boards. Modern plaster board has been used to replace many plaster and lath ceilings especially in rooms used by the golf club. The Ballroom ceiling is the notable exception to this replacement; it is the only remaining ceiling with original Victorian moulding or coving.

All the existing floors do not currently conform to the required fire or acoustic separation standards recommended in part B or E of the building regulations for residential use between apartments. Part E requires the floor to comply for both impact and transmission noise.

We propose to overlay each compartment floor with a build up of 50mm of materials on the surface of each floor and two layers of fireboard and a additional suspended ceiling beneath. This ceiling formation will not be required under the ballroom ceiling because the existing is over 30mm thick. All cracks in this ceiling must however be filled and repaired to ensure the acoustic separation.

The following specification provides the required floating floor elements for impact noise and the density requirements for transmission noise:

- carpet with underlay on 18mm T & G boards;
- on two layers of 13mm plaster board;
- on 5mm of flexible mat;
- laid over the existing floor boards.

All existing ceiling features in apartments will remain but will be hidden behind the new suspended ceiling. In most of the existing offices suspended proprietary modular ceilings have been fitted to hide the mechanical services associated with modern dining and bar usage. We will be removing all modern modular ceilings from both the former office spaces and the circulation areas.

Internal Wall Construction:
The design for the subdivision of the listed building is such that we have, wherever possible, limited the removal of existing walls. By incorporating them into the detailed proposals the scheme limits the loss of historic fabric.

Modern stud and block walls for toilets etc will be removed. Where existing walls do not conform to the standard required within Part B & E of the Building Regulations these will be enhanced with linings to achieve these standards. All new walls and linings will be constructed from metal stud partitioning with one or two layers of plasterboard

depending on location. Sound insulation will be sandwiched between this wall construction when required.

Stairs
Existing Stairs:

Stair 1
Stair One is described in the listing description as follows: *"An early-mid C17 staircase, possibly brought from elsewhere was moved c1980 from entrance hall and is now in pieces in the C17 wing".*

We believe that this staircase was dismantled during the fit-out for the golf club in the 1980's and the pieces are no longer in the building. It is clear that it once stood in the entrance lobby just to the right of the main entrance. The first floor landing is obviously still in place and the location of the upper wall string is also clear.

At the time of writing, no member of P J Livesey staff has inspected this stair for condition. We propose inspect the condition of each section and to reinstate the stair in its former position, making good where necessary. This will allow natural light to flood into the entrance hall from the large feature stair window as originally designed.

Stair 2
The building has three functioning stairs at present. By far the most ornate is the feature stair centrally positioned in the southern extension area rising from the first to the second floor only.

This stair is an anomaly in that it does not rise off any main entrance and is not easily linked to the ground floor. Therefore it performs poorly both as a circulatory or a fire escape stair. Due to these inadequacies we propose to retain and refurbish it within a single apartment.

Stair 3
Stair three is currently the only stair to serve both of the upper floors and discharge to outside. It discharges at ground floor level from a door on the eastern façade. Although it at first appears to be an ideal fire escape stair, it could not serve as the only fire escape stair because fire escape distances from the southern end of the building would be too excessive. If used as a common stair it would need to be used in conjunction with a second stair in the southern end of the building.

We therefore propose to use Stair 3 as a circulatory stair within apartment 203. The listing description refers to this stair as a 1730's stair. The stair and wainscoting on the upper level have been replaced recently (date unknown), with the spindles and newel posts reused. This area is now suffering from wet rot and needs replacing again which suggests a recurring problem with the roof above this point. We propose to use this opportunity to realign the upper flight of the stair to aid the apartment layout, reusing the newel posts and spindles where possible.

Stair 4;

Stair four is a tight winding stair connecting the ground and first floors within the kitchen wing. It was probably used as a servants' stair to link the kitchens with the living accommodation above.

We propose to remove Stair 4 for the following reasons;
(i) It is in a poor state of repair.
(ii) It is inadequate in size and design for furniture circulation within the house it would serve.
(iii) It is not a good or unique example of this type of stair.

Existing Stable Block stairs.

There are currently five sets of stairs in the stable block area. Four of which are timber and one concrete. One serves the cottage three serve the 1940's first floor extension, and the last serves the hay loft in room 130. Wepropose to remove all of these stairs none of which exhibit any detail of historical or architectural interest.

New Stairs

We are proposing twelve new stairs for the property each of which will be within an individual unit to serve that unit only. Seven of these stairs will be in the stable block / chapel / kitchen wing houses. These stairs will only penetrate through new floors constructed around them or floors of the 1940,s extensions. No historic floors are penetrated therefore there is no loss of historic fabric.
Four new stairs serving the four duplex apartments which bridge between the second floor and the roof space above in the main house and the fire escape stair for all penetrate the historic ceiling construction. The stairs however are positioned such that no roof trusses will be affected by there penetration and the disruption to the ceiling joists is kept to a minimum. Most of the plaster and lath ceilings have been removed on the second floor and have been replaced by relatively modern plasterboards.

8.7 INDIVIDUAL ANALYSIS OF THE PROPOSED DESIGN FOR EACH ELEMENT OF THE RETAINED STRUCTURE

General factors which have affected the subdivision of the whole into individual units are as follows;

1. The structure and detail of the individual elements of the building.
2. Proximity of other elements of the building and new building.
3. Exploitation of principal views.
4. Access and parking.
5. Privacy and security

This section deals with the internal and external design amendments proposed to the listed structures to convert it from clubhouse building into apartments.

This section is itself divided into two sections. Section 8.7.1 deals with the general principles for areas. Section 8.7.2 is a schedule of prescriptive and not a descriptive schedule of works for each room in the building.

8.7.1 General Principles

(i) The Use of Basement Areas

PJL believe it is good conservation practice to fully utilise all areas of the listed structure, as this ensures the future maintenance of such areas. With no natural light at present and no prospect of introducing light wells, this space can only be used for incoming service spaces (gas, electricity and water). The floor to ceiling height is at present only 1.75 metres in all areas. This depth will be increased where necessary by lowering the floor to allow safe working conditions for maintenance. We also propose to install a new damp proof membrane and partial tanking to ensure the area is watertight.

(ii) The Corridor Spaces.

Many of the doors on the first and second floor corridors, which now serve individual rooms, were probably changed when the house was converted from a private residence to a school in the 1940s. All remaining architectural details such as the architraves and skirting boards appear to be from this period. Most of the original architectural detail was probably removed during the 1940's refurbishment.

Despite the fact that much of the existing architectural detailing appears not to be original, PJL propose to retain it where possible. We also propose to use the existing door openings where possible, upgrading where necessary all doors to conform to Part B and E of the Building Regulations.

(iii) Bed / library / study shelves

We are proposing to develop a design which would introduce bed / study shelves into two of the ground floor apartments (see schedule below for rooms 001 and 002) and one second floor apartment (See schedule below). As a design benefit the roof trusses will then be visible from within the apartments.

We also propose the use of roof lights, largely on the valley side of the roof, to aid the natural lighting onto these bed shelves. Only the new supporting beams would reach the external walls and the shelf would be kept back from the window to make it largely invisible externally.

(iv) The roof space

As with section (i) above, it is the company's policy to fully utilise all areas of the listed structure. We therefore propose to use the roof space for living accommodation within the building. Over the last 24 years we have successfully utilised roof space in most of our redevelopment and refurbishment projects on all grades of listed buildings; Grade II and II* and even Grade I listed buildings.

At Bedwell, little of the roof space between the trusses is currently used for habitable accommodation. This large volume of space is little more than an enormous service duct running the full length of the building. If it had been decided not to use the roof space, the division of the second floor into apartments would necessitate either;

(1) Fire protecting each and every ceiling and or
(2) The construction of fire stops at regular intervals.

We propose to utilise most of this roof space to provide secondary bedroom and ancillary accommodation for the apartments immediately below. The second floor will house the principle accommodation living rooms, kitchens, family rooms, master bedroom suites etc.

In providing this accommodation no roof truss will be moved or removed. It will however be necessary to remove of some of the bracing elements of the trusses to allow the circulation between rooms and the fire escape to the proposed new common stair. Through careful design, truss element removal will be limited to the absolute minimum to allow for this access. Each truss thus altered will be checked by structural engineers and measures will be taken to ensure the structural integrity of the roof.

The majority of the purlins will also be retained in-situ. We will however move certain sections of purlins to allow for the construction of dormer windows or conservation roof lights to light and ventilate the roof space.

Where the roof space is being re-used we will adopt a warm roof construction system using a proprietary sheeting insulation. In all other cases the scheme will introduce traditional insulation at ceiling level. A proprietary breathable membrane will be introduced in place of sarking felt, thereby reducing the need for intrusive ventilation tiles or vents.

8.7.2 Schedule of Additional Works

This section is not a schedule of works itemising in detail all elements of the proposed works. Section 8.6 above itemises our detailed intentions for each element of construction, a detailed schedule of works can only be produced following a detailed assessment of each element of construction. This can only be achieved when individual consultants and tradesmen have carried out detailed surveys.
This section identifies on a room by room basis the current or historic use of the room, the proposed use of the room, any historic or architectural features, the current condition of the room and those features and any additional works that are not covered by section 8.6 above. See figures 4-6 for the location of each room.

ROOM 001
Current use and former use: The former gym / ball room
Proposed use: Two lounge / dining rooms
Elements of Historical or Architectural Interest:

This room was built as part of the total refurbishment of the Hall in the 1860's. It was designed as a large Entertainment / Ball Room with a high elaborate ceiling befitting its formal status. The two large bay windows have glazed side doors accessing onto the landscaped lawns and terraces to the south and are the only natural light to this grand room. There are no traces of the large formal fire places that once stood between these two bay windows and at each end of the room. These were probably removed when the Hall was converted into a girls school in the 1940's and this room was used as a gym.
In fact there are few Victorian details remaining within the room these are itemised below.

(1) The ceiling.
(2) The two gothic doors.
(3) The bay windows
(4) The perimeter heating floor grills.
(5) The skirting boards

All these features are to be refurbished and retained.

Condition of room, details and proposed works:

This room was in use until its closure as the clubhouse in the late 1990's. It is in fair condition. We propose to remove all the modern wainscoting and wall lighting (fitted in the 1970's) which is totally inappropriate in design and scale for this room.

Following our research into the viability of apartments within the hall with local estate agents, it was clear that no apartment would be viable with this size of entertainment room within it. We therefore propose to subdivide it into two equal sized living rooms. There is a natural break in the ceiling features along this proposed central line. This is also the point at which the ceiling is bowing badly and additional support will prevent further damage or potential collapse.
Despite this room being split into two we feel each remaining room will still be of an impressive scale, over 80 square metres in area. We therefore propose to introduce a study / library shelf into each room. This from our experience on similar listed buildings allows more intimate spaces to be formed within these rooms without effecting the overall volume or scale of the room. The inclusion of a study shelf will not affect any architectural detail within the room and therefore is totally reversible in conservation terms.

ROOM 002 – 002a – 002b
Current use and former use: Kitchen area
Proposed use: Master bedroom and kitchen for apartment 001
Elements of Historical or Architectural Interest:

This group of rooms including the male toilets kitchen and rear bar area within the golf club would formerly have been a single reception room within the 1860's house.
There is no evidence of the feature fire place which once would have stood between the two french doors facing west on the front façade. The low gothic doors to the Ball room and adjacent reception room still remain but require refurbishment. The feature door from this room to the foyer was also probably removed during the conversion to the clubhouse.

(1) Two low gothic doors.

Both doors are to be refurbished and retained.

Condition of room, details and proposed works:

We propose to remove all traces of the kitchen, kitchen stores, bar stores and toilets including the fully tiled walls and convert this area into a master bedroom and a kitchen / family room. The external french doors will be restored to fully glazed timber doors. We also propose to restore a low gothic arched door to match the existing doors as the main door into the apartment.

ROOM 003 & 004
Current use and former use: The bar and club rooms
Proposed use: Master bedroom, bedroom 2 and kitchen for apartment 002
Elements of Historical or Architectural Interest:

This area within the club house was formed into one large open dining / bar area. It is clear there has been extensive remodelling in this area over the last 40 years. The décor including coving, window seats hiding the heating, skirtings, etc, is all late 20th

century. The room has been enlarged by a flat roofed extension between the two gables on the east façade. A feature fireplace and the ground floor section of chimney breast were removed during this remodelling, rendering the remaining feature chimney stack above as a redundant feature. This area was once a series of individual lounge / reception rooms. Only window shutters and the doors to the club room, ballroom and kitchen remain of the original features.

(1) Three low gothic doors.
(2) Window shutters.

All these historic doors and window shutters are to be refurbished and retained.

Condition of room, details and proposed works:

We propose to relocate the door currently serving the club room and reuse it as a main entrance door to apartment 002. All modern decoration and bar fittings are to be removed. The low wide arches between the areas of this large existing room are to be expressed within the corridor spaces of apartment 002.

ROOM 005 & 005a
Current use and former use: The entrance hall
Proposed use: The entrance hall and concierge desk
Elements of Historical or Architectural Interest:

The Entrance Hall to the clubhouse links directly into the bar, this clearly would not have been the case when in use as a school or large private house. During the refurbishment of the school into a clubhouse the main stair was removed to allow the construction of public toilets immediately off this entrance area. There is consequently currently only one small rear stair serving the first floor, which was largely unused during this period. These doors are to be refurbished and retained.

Condition of room, details and proposed works:

We propose to retain and enlarge the existing foyer area by reinstating the original stair thus restoring the entrance foyer to that of the 1860's house. The listing description above states the original stair was probably a 17th century stair from elsewhere and installed during the extension / refurbishment of the house of the 1860's. This stair is currently stored off site and following the demolition of the ladies toilet will be restored to its original position. The stringer positions off the original landing above are clearly visible making the precise relocation possible. The restoration of the stair will allow the light from the original feature stair window to flood into the reception area once more.
A largely glazed screen will be introduced between the foyer and apartments 001 and 002 to enable this main stair to be used as part of the main fire escape route from the upper three floors. A concierge desk will be introduced into this area but this will be the only intrusion into this newly enlarged space.

ROOM 006
Current use and former use: The tower entrance lobby
Proposed use: The tower entrance lobby
Elements of Historical or Architectural Interest:

The tower entrance lobby doors are described in the listing above as 'Arched doorways with traceried half-glazed doors'. Other details to note are the two arched head windows in each side elevation, the tiled floor and the sectional T & G boarded ceiling.

Condition of room, details and proposed works:
The lobby appears in good condition; each of the above elements will be assessed and refurbished as necessary.

ROOM 007
Current use or historic use: The golf club reception
Proposed use: Residential accommodation for apartments 03 and 04
Elements of Historical or Architectural Interest:

Formerly two rooms linked to form one large club house reception directly of the entrance hall. As with room 104 this room has been extended beyond the original 17TH century gable line above. The windows have shutters and the external door has a low gothic arch which suggests it was extended at the same time as the 1860 extensions.

Condition of room, details and proposed works:

We propose to divide the space into two rooms one facing east the other west, with a corridor between. The structural beams above suggest this was the probably the 1860's layout for this area. The doors and windows will be assessed and refurbished as necessary.

ROOM 008 - 013
Current use or historic use: Changing rooms and former kitchen wing.
Proposed use: Ground Floor of Apt 04 and House 7.
Elements of Historical or Architectural Interest:

There are few internal architectural details of merit within these rooms. Rooms 008 – 011 are fitted out with showers and lockers. The floor above room 013 has been removed apparently due to dry rot and all of the plaster has been removed. The large masonry chimney breast shows signs it once housed a full kitchen range. The grandeur of the large external door into room 012 suggests that this was once the main tradesman's entrance door. The windows are all Georgian style sash windows.

Condition of room, details and proposed works:

The tradesman's door and Georgian style windows are to be refurbished and retained. We will also restore the floor in room 013 at the former level.

ROOMS 015 - 018
Current use or historic use: Reception and Accounts offices
Proposed use: Accommodation for Apt 04.
Elements of Historical or Architectural Interest:

The exact date at which this wing of the house was built is unclear. The 1765 map (figure 2) does not show it but the 1890's OS map does. Clearly it was built between these dates. We estimate it was commissioned by Samuel Whitbread during his refurbishment in the late 18th century because it has similar windows to that of the 17th century house. The original function of each of these rooms is unclear but during the golf club use they were used as the reception and accounts offices. The fitted book cases in room 017 have the same traceried glazed doors but are in poor condition.

Condition of room, details and proposed works:

The traceried windows are to be refurbished and retained.

ROOMS 019 - 020 - 021- 022
Current use or historic use: Office / Storage rooms.
Proposed use: Residential accommodation for apt 04
Elements of Historical or Architectural Interest:

The exact date at which this wing of the house was built is also unclear. The 1765 map (figure2) again does not show it but the 1890's OS map does.
We estimate this extension was built at approximately the same time as the complete south extension in the 1860s. The original function of each of these rooms is unclear but during the golf club use they were use as secondary offices and storage rooms. All of these rooms have been completely stripped including the plaster and timber floor boards and joists. There are no internal architectural details of merit to be retained other than a water pump. This suggests there may be a well below this area.

Condition of room, details and proposed works:

We propose to replace the timber floors where necessary and investigate the possibility where and if the well exists.

ROOMS 023 - 026
Current use or historic use: Storage rooms.
Proposed use: Courtyard and reformed residential accommodation.

Elements of Historical or Architectural Interest:

All of these rooms have been completely stripped including the plaster and timber floor boards and joists. There are no internal architectural details of merit to be retained.

Condition of room, details and proposed works:

We propose to remove the flat roof from rooms 024 and 026 and part of 025 and restore an external courtyard between the two wings.

ROOMS 027 - 029
Current use or historic use: Garage, oil storage tank rooms.
Proposed use: House 6
Elements of Historical or Architectural Interest:

No elements of interest.

Condition of room, details and proposed works:

We propose to construct a first floor within this large volume space whilst maintaining the roof height as existing. A dormer window to match the existing dormers in the courtyard and a pair of conservation rooflights will be inserted to light the first floor bedrooms.

ROOMS 030 - 032 & 130
Current use or historic use: Former Barn converted into School Hall.
Proposed use: House 4 & 5
Elements of Historical or Architectural Interest:

There are a series of six beams with propped supports to support the purlins over this area. The volume is currently spit into two. The western end has a first floor which is unfortunately too high leaving insufficient head height beneath the existing beams.

Condition of room, details and proposed works:

We propose to construct a new first floor over the whole area whilst maintaining the roof height as existing. The living area will be on the first floor. By placing the largest volume rooms at this level the beams will be fully visible and expressed within this space.

ROOMS 033 - 035
Current use or historic use: Former Chapel
Proposed use: House 3
Elements of Historical or Architectural Interest:

All the windows within the former chapel have arched heads and fixed leaded lights. Room 34 has wainscotting up to approximately one metre high, there is also a porch providing external access for this room. The south gable wall is dominated by a large French door with roller shutter door attached.

Condition of room, details and proposed works:

We propose to restore the windows, and fit a more appropriate style door minus the roller shutter.

ROOMS 036- 041
Current use or historic use: Garage, former stable buildings.
Proposed use: House 1 & 2.
Elements of Historical or Architectural Interest:

Low Gothic arched doors and windows dominate the whole western façade. There are currently no windows or doors in the eastern façade although there is evidence they were once present.

Condition of room, details and proposed works:

We propose to fit glazed screens into each of the former stable doors and form new openings for new doors into the eastern façade.

ROOMS 042 - 044
Current use or historic use: Cottage.
Proposed use: Part of House 1
Elements of Historical or Architectural Interest:

There are no details of particular interest or merit.

Condition of room, details and proposed works:

We propose to remove the corner stair and part of the western extension.

ROOM 101
Current use or historic use: storage.
Proposed use: Residential accommodation for apartment 001
Elements of Historical or Architectural Interest:

This room was once two rooms but the majority of the dividing wall is missing. The western room floor has been removed. The eastern room has a feature ceiling which belies it current use. This combined with the top of an arch in the southern wall suggest that this room was once linked with the ballroom in some way.

Condition of room, details and proposed works:

We propose to open up the arch and use it as the access link between the accommodation of apartment 001 on the ground floor and bed deck level and the accommodation on the first floor. The missing floor will also be replaced.

ROOMS 103 & 204
Current use or historic use: Common Stair and Hall
Proposed use: Private stair and hall
Elements of Historical or Architectural Interest:

Room 102 and 204 contain the stair which currently serves the whole of the southern end of the building between the first and second floor. There are six low gothic arched doors on the first floor landing and second floor. The doors in room are far less ornate.

Condition of room, details and proposed works:

Unlike within the previous approval we propose to retain and restore the stair and principle doors within one apartment thereby maintaining the volume and symmetry of the existing space. Any subdivision of this space would destroy the overall design.

ROOMS 102 & 104
Current use or historic use: Bathrooms and toilet facilities.
Proposed use: Residential accommodation for apartment 102
Elements of Historical or Architectural Interest:

These rooms are laid out as bathrooms for school use and have not been used since the school closed in 1972. There are no architectural details of merit other than the corner window in room 102 and the traceried windows in 104.

Condition of room, details and proposed works:

We propose to remove all the sanitary fittings. We also propose to enlarge room 104 by realigning the corridor wall.

ROOMS 105, 106, 110, 111, 112 & 113
Current use or historic use: Former bedrooms.
Proposed use: Residential accommodation
Elements of Historical or Architectural Interest:

These rooms have not been in use for over the last 35 years. Both bedrooms 111 and 105 have been used purely to house ventilation ducts for the rooms below. Plaster has been removed from some of the walls exposing the timber structural walls of the original 17th century house with wattle and daub still present in some cases.

Condition of room, details and proposed works:

We propose to retain most walls and rooms in their current form to limit the disruption to the historic fabric, encasing walls where necessary to form compartment walls.

ROOMS 107
Current use or historic use: Former stair volume and landing.
Proposed use: Stair volume and landing.
Elements of Historical or Architectural Interest:

The landing is the only element of the 17th century stair still in place. The feature stair was removed during the fitout of the golf club and stored elsewhere. The ceiling joist of the toilets installed below are clearly visible from the first floor. The feature stair window in the west façade has sections of stained glass.

Condition of room, details and proposed works:

We propose to retrieve the original stair and reinstate it if possible. If elements are beyond repair they will be replaced like for like.

ROOMS 108
Current use or historic use: Former stair volume.
Proposed use: Stair volume.
Elements of Historical or Architectural Interest:

See section 8.6.3 above for our assessment of these stairs.

Condition of room, details and proposed works:

See section 8.6.3 above for our detailed proposals.

ROOMS 115, 116, 117, 118 & 119
Current use or historic use: Sanitary and kitchen facilities.
Proposed use: Residential accommodation.
Elements of Historical or Architectural Interest:

There are no elements of historical or architectural interest. These rooms contained sanitary fittings for the school.

Condition of room, details and proposed works:

We propose to refurbish these rooms to fulfil their new purpose. Removing all modern partitioning associated with this type of room.

ROOMS 120, 121, 122, 123, 124 & 125
Current use or historic use: Guest and staff bedrooms.
Proposed use: Residential accommodation.
Elements of Historical or Architectural Interest:

There are no elements of historical or architectural interest other than the traceried windows in rooms 119,121 and 122.

Condition of room, details and proposed works:

We propose to refurbish these rooms to fulfil their new purpose. Removing all modern partitioning associated with this type of room. The floor in room 125 has been removed and will be replaced at the same level.

ROOMS 126, 127, 128 & 129
Current use or historic use: Former bedrooms
Proposed use: Residential accommodation.
Elements of Historical or Architectural Interest:

There are no elements of historical or architectural interest.

Condition of room, details and proposed works:

We propose to refurbish these rooms to fulfil their new purpose.

ROOMS 131-139
Current use or historic use: Cottage.
Proposed use: First floor of Houses 1, 2 & 3.
Elements of Historical or Architectural Interest:

There are no details of particular interest or merit.

Condition of room, details and proposed works.

All these rooms were built as a first floor extension during the 1940's/50s for use as classrooms and an apartment for school use. We propose to remove all the existing stud partitioning and doors and form new partitions as necessary.

ROOMS 141 - 143
Current use or historic use: Cottage.
Proposed use: Part of House 1
Elements of Historical or Architectural Interest:

There are no details of particular interest or merit.

Condition of room, details and proposed works:

We propose to remove the corner stair.

ROOMS 201, 202, 203, 205 & 206
Current use or historic use: Principle bedrooms and ancillary accommodation
Proposed use: Kitchens, Living and dining rooms.
Elements of Historical or Architectural Interest:

This set of rooms were designed and built in the 1860's as the master suite of bedrooms for the enlarged hall. Rooms 201 and 202 being the principle bedrooms and the other rooms being ancillary rooms to serve the bedrooms. These rooms would have certainly have had the high Victorian Ceilings that is evident in the ballroom below. There is no trace of any detail today. Above half of the skirtings have been removed and the low gothic arched doors and architraves between rooms 201 and 202 are also missing. Large sections of plaster and floor boards have been removed. These rooms exhibit very little of the detail decoration you would expect from bedrooms of this period.

Condition of room, details and proposed works:

We propose to restore historic features where possible. In upgrading the floor to a compartment floor it will be necessary to raise the floor by approximately 80mm. We will therefore raise the skirtings and shorten architraves accordingly.

ROOMS 207 – 223 & 301
Current use or historic use: Bedrooms and circulation spaces
Proposed use: Residential accommodation.
Elements of Historical or Architectural Interest:

There are no details of particular interest or merit.

Condition of room, details and proposed works:

We propose to refurbish these rooms to fulfil their new purpose. The stairs that currently serve the tower will be removed and replaced by a new flight of stairs to act as a fire escape form the second floor to the first.

8.8 THE NEW BUILD APARTMENT AND HOUSE DESIGNS

8.8.1 The New Build Courtyard Buildings

Millgate Homes have assessed the approved designs, prepared by Sabre Developments Limited, and prepared amended designs addressing a number of what we considered to be shortcomings in the original designs. We visited the site and took extensive context photographs before studying all the relevant approved drawings and considering the existing character and setting of the listed buildings.

Of paramount importance is the retention of the existing fine parkland setting, and it will be seen that these proposals have neutral impact on this with no changes to the retention of all the established landscaping and existing features.

8.8.2 Design Analysis: Courtyard

The current submitted scheme has been influenced by many factors including the proximity of the courtyard to the Grade II Listed Building, the contours of the site and the rural setting. The design has also been guided by the approved scheme and early discussions with the Planning Authority.

The approved Courtyard Scheme consists of seven houses forming two long narrow courtyards enclosed on the southern and south eastern sides by the existing refurbished buildings. On the western side of the courtyard scheme is one large, detached, six-bedroom house.

The courtyard is presently divided by an existing wall between the upper and lower courtyards and accessed through yet another small courtyard formed by garages and walls only. The lower courtyard partly formed by the refurbished existing houses is only 19 metres wide and the upper courtyard behind the existing wall, further narrows down to 16 metres.

Our proposals will remove the previously approved large house from this side of the site, to enable the courtyards to become more open and wider with attractive outdoor spaces, reflecting the atmosphere of their rural setting. The more open and spacious courtyard arrangement also helps to overcome issues of privacy and overlooking and creates better opportunities to provide a good landscape design to these areas.

The approved scheme did not have the benefit of an accurate Topographical Survey, and therefore did present problems of levels both within the design and also the way the proposal related to the existing buildings. The new houses within the approved courtyard would have been significantly higher than the existing stable units, being over-dominant in height, scale and massing as a result. In addition the approved detached house would be on the highest part of this site and, being 2½ storeys in height, would have detracted from the setting of the main Listed House because of its dominance.

The current proposal addresses these problems by designing 1½ storey and 2 storey courtyard cottages of a similar height and scale to the existing buildings to be refurbished. These new dwellings will sit better within the contours of the land as they are designed to be cut into the slope of the ground in areas where the ridge heights need to be in keeping with the heights of the existing stable block. This helps to maintain a constant level for each dwelling which minimises the need for a stepped or ramped pedestrian approach to each dwelling.

The redesigned lower and upper courtyards are now accessed directly, rather than through rows of garages. They now have clearly defined and different identities, thus removing the need for a separating high "barrier" brick wall.

8.8.3 Access and Parking: Courtyard

The previously approved courtyard scheme was entered through two rows of garages which we felt ruined the formal approach to the courtyard setting. The current proposals provide a more open and softer setting when entering this development by the inclusion of a small landscaped courtyard fronting plots 8-12. This provides a visual focus when first approaching the Courtyard, and again when entering into a more formal landscaped courtyard which will have a focal point towards plot 4. This we feel provides a much more appropriate setting to the main house. It is more suited to the way an approach to the main house would have historically been designed on this type of large country estate.

The redesigned access road to the courtyards will now branch off north about 30 metres away from the main entrance of the listed house thus reducing traffic flow close to the Listed Building. The current scheme proposals enclose all new garages within a walled enclosure, in the same location as the approved scheme. The garages will be located away from the immediate proximity of the residential buildings, yet will be overlooked by both existing and new dwellings to reduce opportunities for crime.

The ten garages originally located at the entrance of the courtyard have now been relocated within the walled enclosure, which is cut into the slope of the ground by 1500mm to 1800mm. This proposal is intended to reduce the impact of this development, which will be enclosed by a wall and heavily screened by new planting on the outside. The garages within the walled courtyard, comprising one per dwelling, will be enclosed with a shallow lean to roof not visible from the outside, nor visible from within the courtyard due to a parapet wall running along the front. We believe this area sits well within the grounds and is consistent with other typical historic walled gardens of some 150 years ago. We also believe that this design will no longer intrude into the view of the important main Listed House when approached along the access road.

We are proposing to provide a small number of parking spaces within the new courtyard, located in more convenient locations nearer to some of the residential entrances. These are kept to small groupings punctuated by tree planting to maintain the character of a formal landscaped courtyard and would be used mainly for visitors and deliveries.

8.8.4 High Quality Design: Courtyard

Although the overall number of dwellings has been increased by four, the redesigned courtyard proposals now comprise 16,258 square feet of residential accommodation divided into 12 individually sized cottages and apartments, slightly less than the original approved proposals for 16,368 square feet. We believe the increase in dwellings is more than compensated for by the reduction in height and bulk of buildings compared to the approved development, particularly in relation to the incongruous 'Upper Courtyard House'.

The Millgate designs for the new build dwellings aim to achieve the highest standards possible, incorporating modern and sustainable constructional methods, whilst also reflecting local styles, forms and materials sympathetic to the area. Energy conservation will be achieved by a number of means such as the design of the buildings (for instance configuration of windows), high standards of insulation, sustainable methods of heating and ventilation, and efficient use of controls.

Eaves lines are kept low in order to reduce building heights, with all new buildings achieving ridge heights lower than or comparable to the approved scheme, in order to compliment rather than compete with the restored splendour of the former Mansion. The sporadic interruption of eaves by gables, dormer windows or chimneys, as well as for practical reasons, enhances the visual quality of the elevations.

The arched brick window heads and brick banding details, although different to the detailing of the existing buildings, will compliment the existing as well as give cohesiveness to the new development. The colour and the quality of bricks for the walls and slates for the roofs will blend with the existing and further enhance the overall harmony of these proposals.

8.8.5 <u>The New Build Detached Dwellings.</u>

It is considered that the principle of building two large detached houses in the grounds of the listed building has been established by the previous planning approval. The siting, size and form of the dwellings is considered to be fixed, although early consultations between Millgate Homes and the Planning Authority have established a degree of flexibility over the design appearance. Provisional amendments to the accesses together with treatment of the Tennis Court House have been agreed in principle.

It is considered that the previously approved house designs would be too austere in external appearance and to some extent poorly elevated. Consideration of the internal layouts (which would have been provided only for illustrative purposes by the previous applicants) reveals a number of shortcomings and problems which we have addressed by completely re-assessing and redrawing the designs.

In both cases the footprint of the buildings and the floor plate of each level has been regarded as being fixed, apart from a couple of very minor adjustments identified below. There has been no increase in floor area or volume associated with these current plans.

The Gothic design of the approved Tennis Court House is considered to be architecturally unsuccessful. It is now proposed to amend the scheme to a more classical design similar to the proposed Walled Garden House. In each case we believe it is important that the overall form and use of materials should be compatible with the existing Listed Building. We therefore propose to use red stock bricks, stone detailing and dark plain clay tiles to both houses, so that the new materials will be sympathetic to and reflect the character of the main house.

8.8.6 Tennis Court House

The previous elevations as approved were unbalanced and austere, with the small windows making the house feel very dark inside. It also our view that having the garage in line with the house made this element too prominent when viewed from the front. Consequently, apart from handing the design, our main proposed change is to introduce a slight stagger here with consequent redesign of the linking element to make more efficient use of the space and provide a usable breakfast area. This is achieved without raising the overall height or bulk of the linking roof.

Similarly, one of the three garages has been sacrificed to provide for a small office and utility room, and the consequent amendment to the elevations has been managed by introducing a slightly lower roofline at this point as indicated on the west front elevation.

The landing of the current house also provides better views towards the Golf Course. The main rooms now look out on the existing "pulhamite" rockery, which should ensure better responsibility for maintenance of this important feature. This also enables the main body of the house to be positioned within the largest part of the gardens with better access and amenity use.

The fenestration of the proposed house has been improved and is now symmetrical. It is designed to be balanced and well proportioned and appropriate for a period-designed house of this quality. The front gable with a recessed roof terrace has been incorporated to replicate the architecture feature on the rear of the main Listed House.

A semi-circular bay has been added to the dining room at the rear and a balancing chimney on the garage gable. Apart from this, all the proposed changes are cosmetic.

The previously approved access is extremely tortuous, and runs very close to the trunks of important retained trees. Additionally, it runs past a dilapidated corrugated iron greenkeeper's shed over which the developer has no control. That is considered to be highly undesirable. We therefore propose to create a shorter route along an existing track to the opposite side of the house, which enables the reduction of hard landscaping to the front of the house. This proposal has been discussed with Planning officers during pre-submission discussions and it was agreed that the revised position improves the overall amenity value of this plot, and its setting.

8.8.7 Walled Garden House

The footprint, form and external layout of the house remains as approved. There would need to be some adjustment of the floor heights and ceiling heights of the existing house to comply with current building regulation standards and special requirements resulting in a slight raising of the eaves level, but the overall shape and form of the roof remains the same with a minimal increase in ridge height of 200mm.

The approved design is classical in style but the proportions are poor and there is a lack of period features that provide for a house of this character. There is no justification for the ground floor rustication, which is now omitted, and the design of the front gable with its flanking balustrading was felt to be overcomplicated and would lead to detailing problems.

The internal layout has been completely redesigned. However, there is no increase in floor area apart from the addition of a large bay window to relieve the east gable elevation, which was very plain although prominent in the approved design.

The approved design did not show the existing fenestration to the Walled Garden Cottage correctly. Our view was that it is important to reinstate both the front and back door elements as working features. In the accompanying site plan we have shown how we would accentuate the importance and setting of this attractive building. The window positions will be retained as existing.

The chimney stacks have been externalised, which we believe is more appropriate for a house of this style, and we have added twin balancing chimneys to each gable. The garage block element is now designed with a more symmetrical and pleasing form.

Apart from these changes, the adjustments to the external appearance can be regarded as cosmetic in nature. In terms of access, a new alignment is proposed to better exploit the existing pond feature and to accentuate the importance of the Gardener's Cottage.

8.8.8 The Walled Garden and Ancillary Buildings

The current proposals retain the walled garden as approved, together with its internal form and layout.

It is recognised that it is important to retain the two ancillary buildings within the walled garden, even though they are of extremely utilitarian appearance. The approved design sought to add a conservatory to the south face of the right hand building and was labelled as a pool hall. It is felt that this feature would be extremely expensive to construct, would suffer overwhelmingly from solar gain and be environmentally very poor from a sustainability point of view. It would not have the widespread appeal which would be appropriate for a speculative venture and we have therefore proposed a modification of the design of this building to provide for a roof sheltered internal pool with internal supporting amenities.

To the second building we propose to add a more modest glasshouse of that type that could have been found on this location, although it is acknowledged that the absence of whitewash on the brickwork suggests that a glasshouse was never fitted here.

It is also felt desirable to reposition the tennis court and external pool beyond these buildings to allow for a more horticultural theme for the walled garden section closest to the proposed new dwelling. We have proposed modifications in the openings in the garden wall contiguous with the new house, and would be happy to discuss details of these which we believe could be controlled by condition.

We wish to point out that the proposed number of openings has been reduced from those that currently exist, which would enable the reinstatement of this original wall and be more in keeping with those existing walls on the three opposite sides as they originally were. Similarly, we would be willing to discuss details of the walled garden ancillary buildings and would consider adjustments if these were thought to be desirable.

8.9 DRAINAGE & SERVICES

8.9.1 The existing sanitary facilities of the main house are spread throughout the building on each floor. On the ground floor there are modern public male and female facilities installed for the golf club and accessed off the entrance foyer. There are also a number of washing and toilet facilities in the male and female changing rooms.

8.9.2 As described above, the first and second floors were not brought into use for the golf club. These sanitary fittings date back to conversion to school use in 1947. Clearly none of these facilities will be of use in any converted residential building.

8.9.3 There are external soil and vent pipes visible on the outside of the building. We will where possible reuse these for the new facilities. Any new facilities in the main building will be either hidden discretely in external corners or will travel down entirely within the building.

8.9.4 We propose to group all new apartment sanitary facilities (the kitchens and bathrooms) into single SVP's where possible. New internal SVP pipes will be boxed-in and will discharge into a common sealed sewer in the lower corridors where possible.

8.9.5 Any bathrooms and kitchens for each apartments will be mechanically ventilated by a single AirVac unit. These units will be vented through the roof for the first and second floor apartments and through the walls. The detail of the wall grilles will be submitted for approval prior to installation.

8.10 REFUSE DISPOSAL AND BIN STORAGE

8.10.1 The bin storage and refuge philosophy for all the buildings is based around the individual tenants initially sorting their own rubbish into joint / shared recycling bins in bin storage rooms.

8.10.2 As required in the building regulations a bin store will be within 30 metres of the front door of each house or apartment.

8.10.3 Each individual bin store within the main building and the stable block will in turn be emptied by a janitor into the larger bin store adjacent to the garage area.

8.10.4 These stores will be emptied by a janitor as required by the management company and to suit the collection dates of the Council's refuse department.

8.11 BICYCLE STORAGE

8.11.1 To aid the sustainability of our design proposals we propose to provide one bike storage space for all apartments and houses on the site to the rear of each garage unit

8.12 CONSTRUCTION IMPACTS

8.12.1 At this stage it is assumed that the project will take approximately 12 months to complete. The impacts of traffic generated by the construction phase are assumed to be significantly less than those created by the previous use as a golf clubhouse.

8.12.2 The demolition of buildings and structures will allow additional working space on this site, without damage to the listed structures to be retained. The works of refurbishment will take place before any new build development is commenced. The provision of protective fencing where necessary to secure the listed buildings and existing trees to be retained will ensure that construction activities are confined to the existing developed areas of the site.

8.12.3 It is expected that a detailed method statement will be agreed with the local authority before development commences, in order to minimise the risks of damage to the listed buildings and landscape features.

8.13 ARCHITECTS CONCLUSIONS

8.13.1 The proposals illustrate a development that has been carefully considered and designed to integrate with and enhance the setting of the listed buildings and the surrounding landscape, providing an attractive residential project in a desirable location.

8.13.2 The choice of materials and quality of the new design is sensitive to the character of the locality and will produce a high quality living environment.

8.13.3 In our view the submitted proposals represent a significant improvement over the approved scheme that will blend well with the existing Grade II listed former Mansion and will secure the long term future of the attractive heritage assets.

9. SUMMARY AND CONCLUSIONS

9.1 This Planning Statement is submitted in support of the proposals submitted by Millgate Homes and P J Livesey (London) Limited for the restoration and conversion of the listed buildings and courtyard buildings at Essendon Hall to a total of 17 apartments and houses and the construction of 14 new build dwelling units.

9.2 There is an urgent need to restore and re-use the vacant listed buildings at Essenden Hall and to secure the future of the heritage assets. The Planning Statement outlines the previous planning history of the site. Applications for planning permission and listed buildings consent were granted in October 2004 but have not been implemented.

9.3 In the section of the site that contains the listed buildings and adjoining courtyard buildings, the revised proposals include the conversion of the main house to 10 apartments and the conversion of the courtyard buildings incorporating the existing East Cottage, to 7 'mews houses'. The proposals include 8 new build houses and 4 apartments adjoining the main house, the alteration of a single detached house within the walled garden and the erection of a single detached house on the former tennis court.

9.4 The relevant planning policies in the Welwyn Hatfield District Plan Review Alterations No 1 1998 include Policies BEV15, BEV16 and BEV17 which relate to listed buildings and conservation areas. Existing trees on the site are protected within the TPO Nos 2 and 3 (Broxbourne Woods 1955). All healthy mature trees will be retained and protected during construction.

9.5 The submitted Schedule of Works and Conservation Statement deals with the potential of the existing buildings for retention and conversion. It also provides justification for the conversion and demolition of limited parts of the buildings, as required by PPG15.

9.6 The submitted Design Statement explains the approach to the new build developments in their historic context. The statement also provides justification for the alteration of the Walled Garden Cottage.

9.7 The proposals are submitted for planning approval and listed building consent by the joint developers, Millgate Homes and PJ Livesey (London) Limited. The submitted scheme has been carefully designed to maximise the potential for re-use of the site and existing buildings in order to secure the long term future of the listed buildings and grounds.

APPENDIX A:-

Figures 1-7

Fig.1

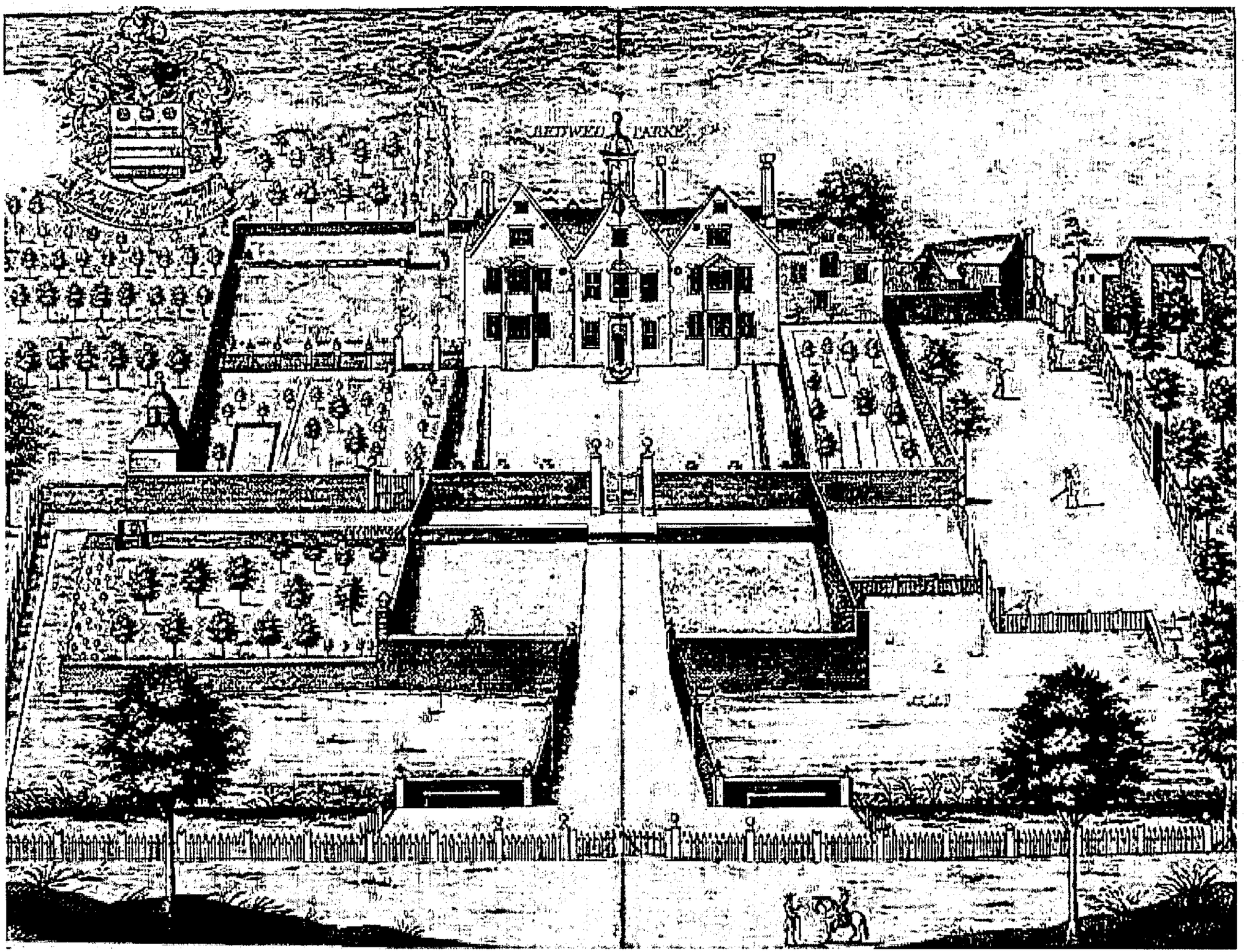
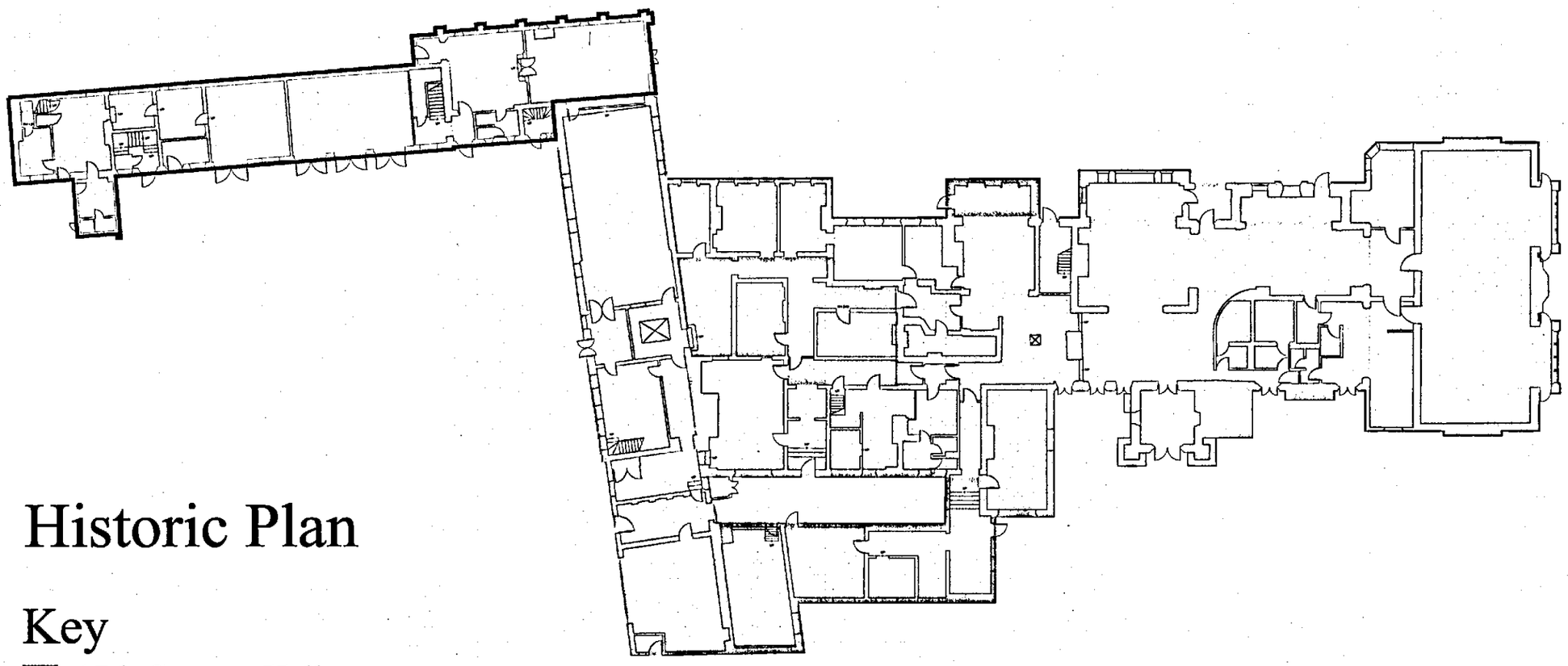


Fig. 2

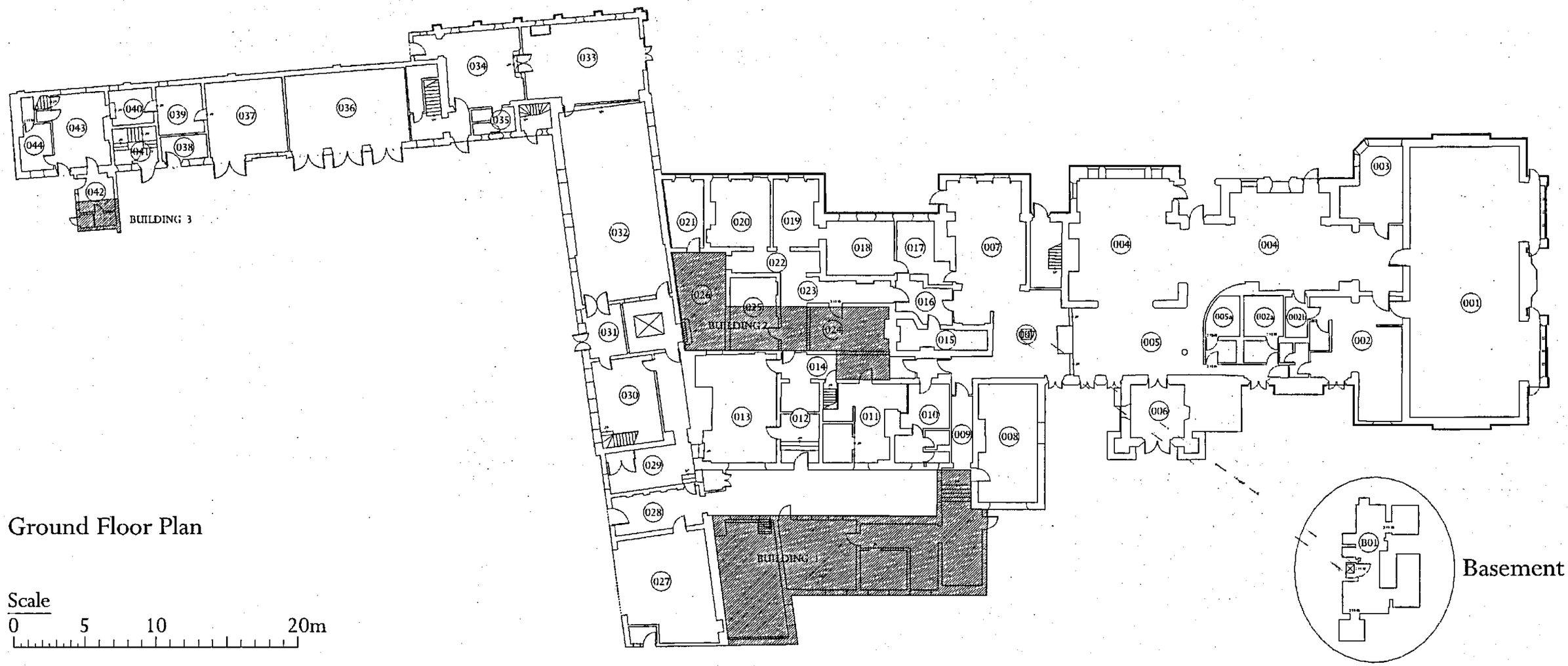


Historic Plan

Key

- 17th Century Hall
- 1861 Extension (Eardley Family)
- 1980 Extension (Golf Club)
- Extension between 17th Century - 1861
- Extension between 1861 - 1980
- First floor extension for school use (1947)

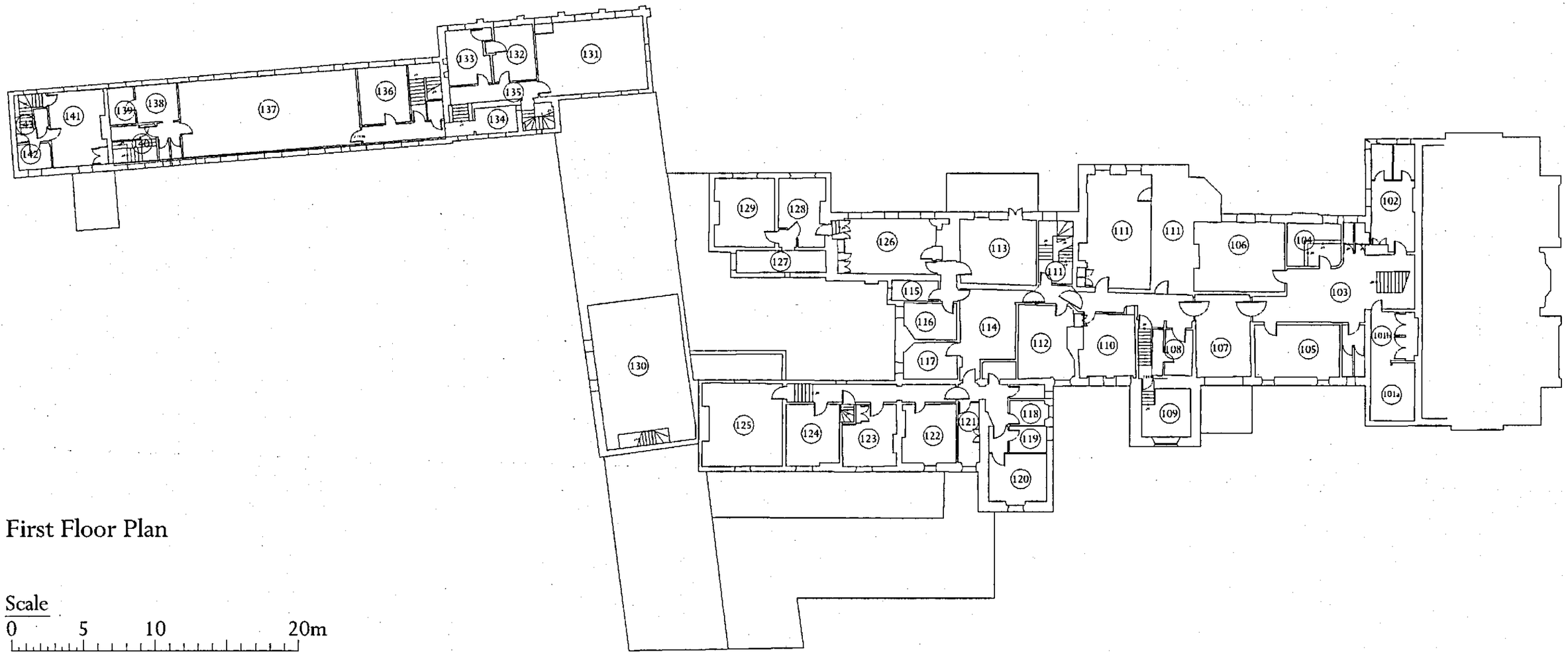
Fig. 3



Ground Floor Plan

Scale
0 5 10 20m

Fig. 4

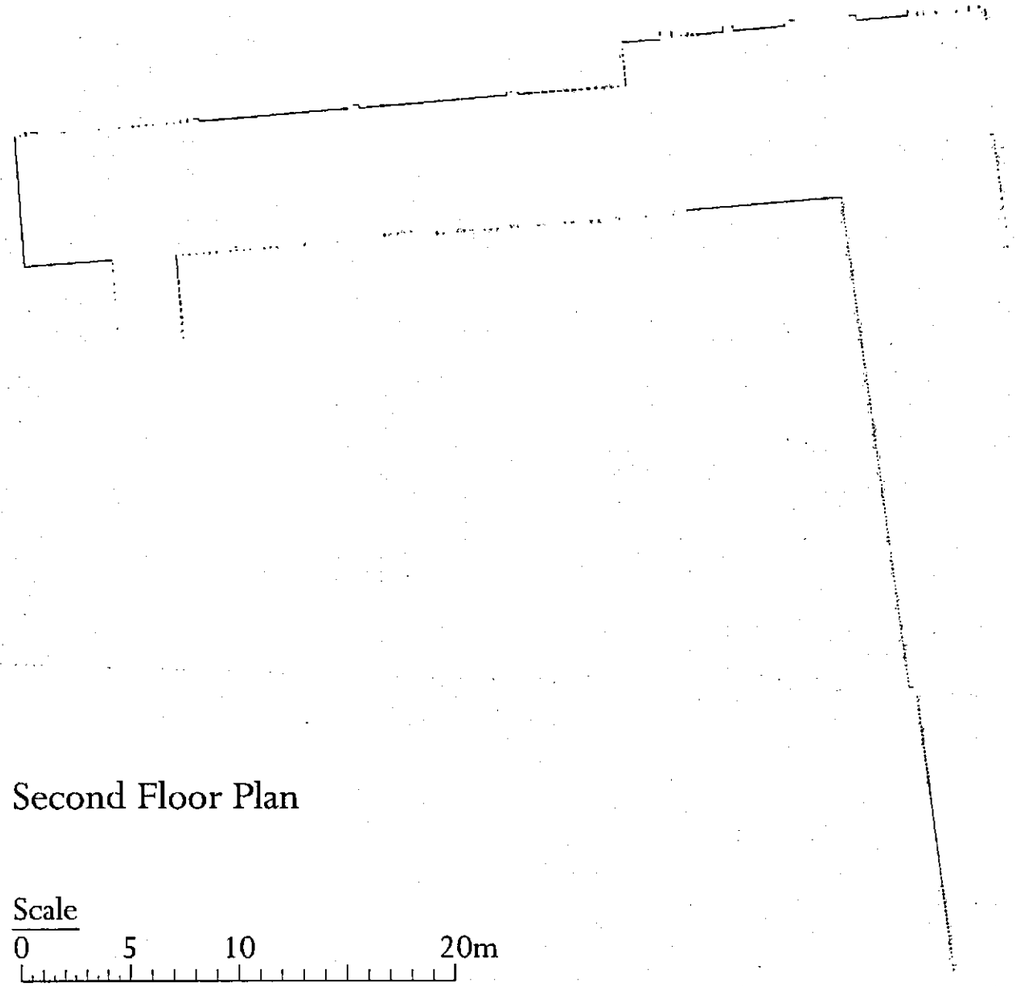


First Floor Plan

Scale

0 5 10 20m

Fig. 5



Second Floor Plan

Scale
0 5 10 20m

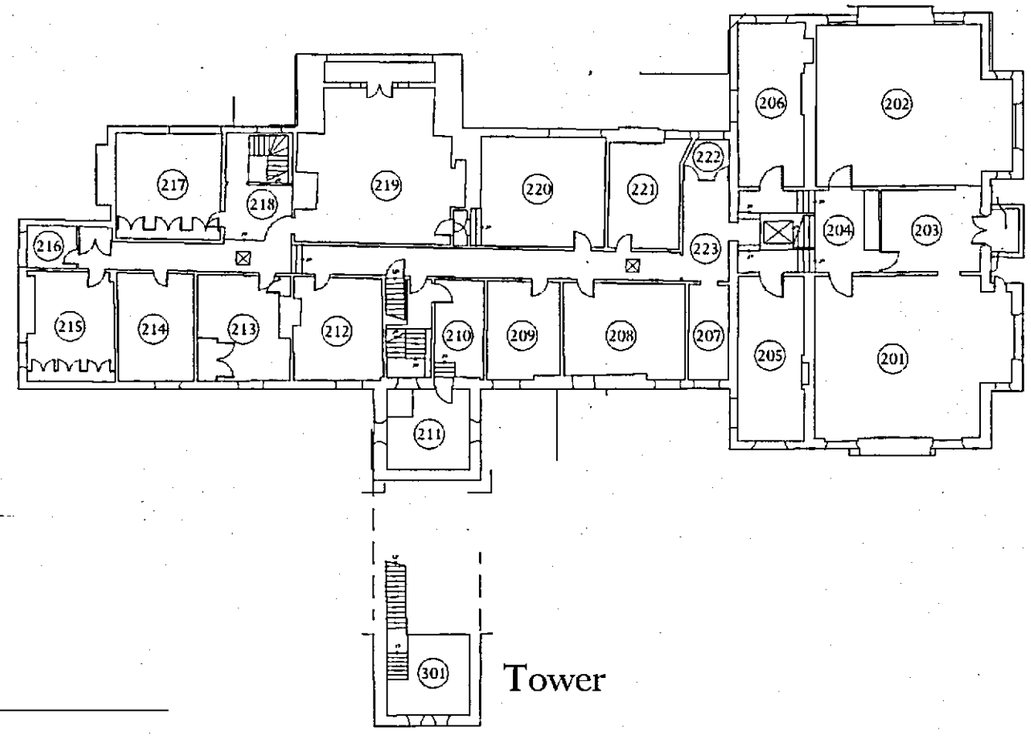


Fig. 6

Fig.7

APPENDIX B:-

DRAFT SECTION 106 AGREEMENT

(Appendix B, under separate cover)

APPENDIX C:-

A PROTECTED SPECIES REPORT

(Appendix C, under separate cover)

APPENDIX D:-

PJ LIVESEY PROPOSED DRAWINGS, A3 FORMAT

069-1000 - Location Plan
069-1001 - Proposed Site Plan
069-1002.-.Demolition Plan

069-1010 - Proposed Ground Floor Plan
069-1011 - Proposed First Floor Plan
069-1012 - Proposed Second Floor Plan
069-1013 - Proposed Roof Floor Plan
069-1014 - Proposed Roof Plan

069-1310 - Proposed Elevations 1
069-1311 - Proposed Elevations 2
069-1312 - Proposed Elevations 3

PJ Livesey

REVISIONS

Rev	Date	Description

N

SUNRISE
early morning
mid morning
late morning
early afternoon
late afternoon
Summer SUNSET
Summer evening
Winter SUNSET

Refer to Millgate plans for treatment of courtyard planting

Refer to Millgate proposals for woodland restoration

Refer to Millgate plans for treatment of courtyard planting

Stone paved private terrace

Repair all stone steps & flank walls.

Fire Escape Route

Remove inappropriate planting from terrace, cherry trees and yew hedging to open up views of landscape and reinstate formality of terrace

Plant woodland scheme as part of reinstatement of existing woodland

Restore flank walls to entrance. Surface with tar bound gravel. Replace inappropriate planting.

Remove yew hedge as part of landscape restoration

Repair and reinstate all stone paths, remove concrete slabs and tarmac house, replace with gravel.

Refer to Millgate proposals for garden restoration

Reinstate formal oval shrub bed

Repair all stone steps & flank walls.

Retain yew hedge

Plant specimen stand Blue Cedar reflecting existing mature specimen at opposite end, as focal point to end of terrace

Refer to Millgate proposals for garden restoration

KEY

- Existing Trees Retained
- Proposed Freestanding Trees
- Proposed Woodland Planting
- Proposed Ornamental Shrub Planting
- Proposed Specimen Plants
- Proposed New Hedge Planting
- Asphalt Roadway
- Proposed Tar/Resin Bound Gravel Surface
- Proposed Loose Gravel Chippings To Match Existing
- Proposed Yorkstone Terrace
- Proposed Yorkstone Paving
- Proposed Sett Paving To Courtyard Parking Area
- Lawn Areas
- Area Of Application

MILLGATE HOMES

RYCROFT ASSOCIATES

LANDSCAPE ARCHITECTS

49 Palatine Road Didsbury Manchester M20 3JD
Telephone 0161 4454772 Facsimile 0161 4454644
E-mail Address : mail@rycroftassociates.co.uk

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Site Plan
As Proposed

069/1001

Scale N.T.S Date Mar 08
Drawn R.D/A.Mc/S.R Checked

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REVISIONS

Rev	Date	Description

N

SUNRISE
early morning
mid morning
late morning
early afternoon
late afternoon
Summer SUNSET
Summer evening / Winter SUNSET

REFER TO MILLGATE DRAWINGS FOR PROPOSED DEMOLITION WORKS

REFER TO MILLGATE DRAWINGS FOR PROPOSED DEMOLITION WORKS

REFER TO MILLGATE DRAWINGS FOR PROPOSED DEMOLITION WORKS

FALLING DOWN

KEY

AREA OF APPLICATION

DEMOLITION WORK PROPOSED BY PJL

TREES TO BE REMOVED

WARNING
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Demolition Plan As Proposed

069/1002

Scale N.T.S. Date Mar 06
Drawn A.Mc Checked

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MILLGATE HOMES

069-002_Demolition Plan.dwg

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REVISIONS

Rev	Date	Description

HOUSE 004 LIVING / DINING

HOUSE 003 LIVING

HOUSE 002 LIVING

HOUSE 001 LIVING / DINING

LANDSCAPED COURTYARD

HOUSE 005 LIVING / DINING

HOUSE 006 LIVING / DINING

HOUSE 007 LIVING/DINING

APT 04 LIVING/DINING

APT 03 LIVING/DINING

HALL

ENTRANCE LOBBY

APT 01 LIVING/DINING

APT 02 LIVING/DINING

GROUND FLOOR PLAN

KEY

EXISTING WALLS

PROPOSED WALLS

MILLGATE HOMES

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Proposed Ground Floor Plan

069/1010

Scale 1:100 @A0 Date Mar 06

Drawn rd Checked rd

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069-1010_Proposed Gr Plan.dwg

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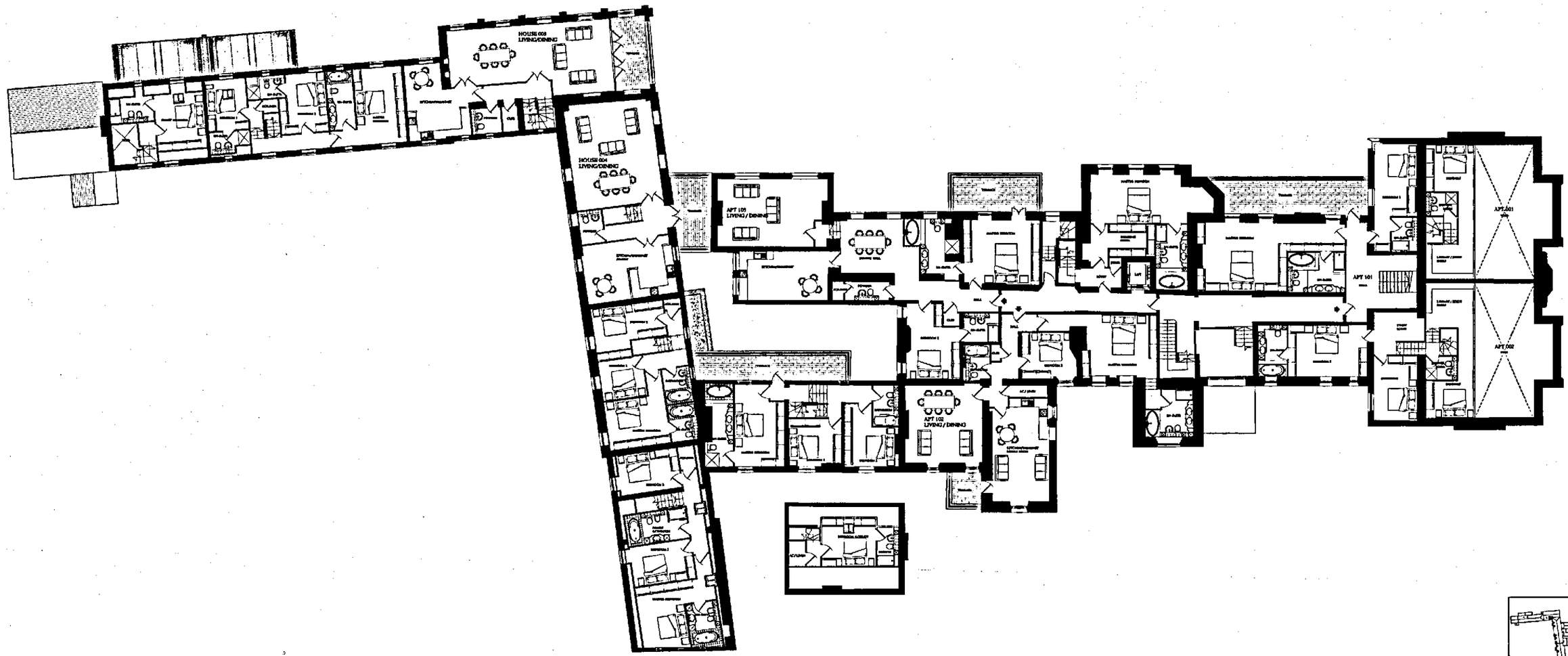
REVISIONS

Rev	Date	Description

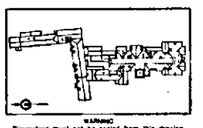


FIRST FLOOR PLAN

KEY

EXISTING WALLS

PROPOSED WALLS



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Proposed First Floor Plan

069/1011

Scale N.T.S. Date Mar 05

Drawn rd Checked rd

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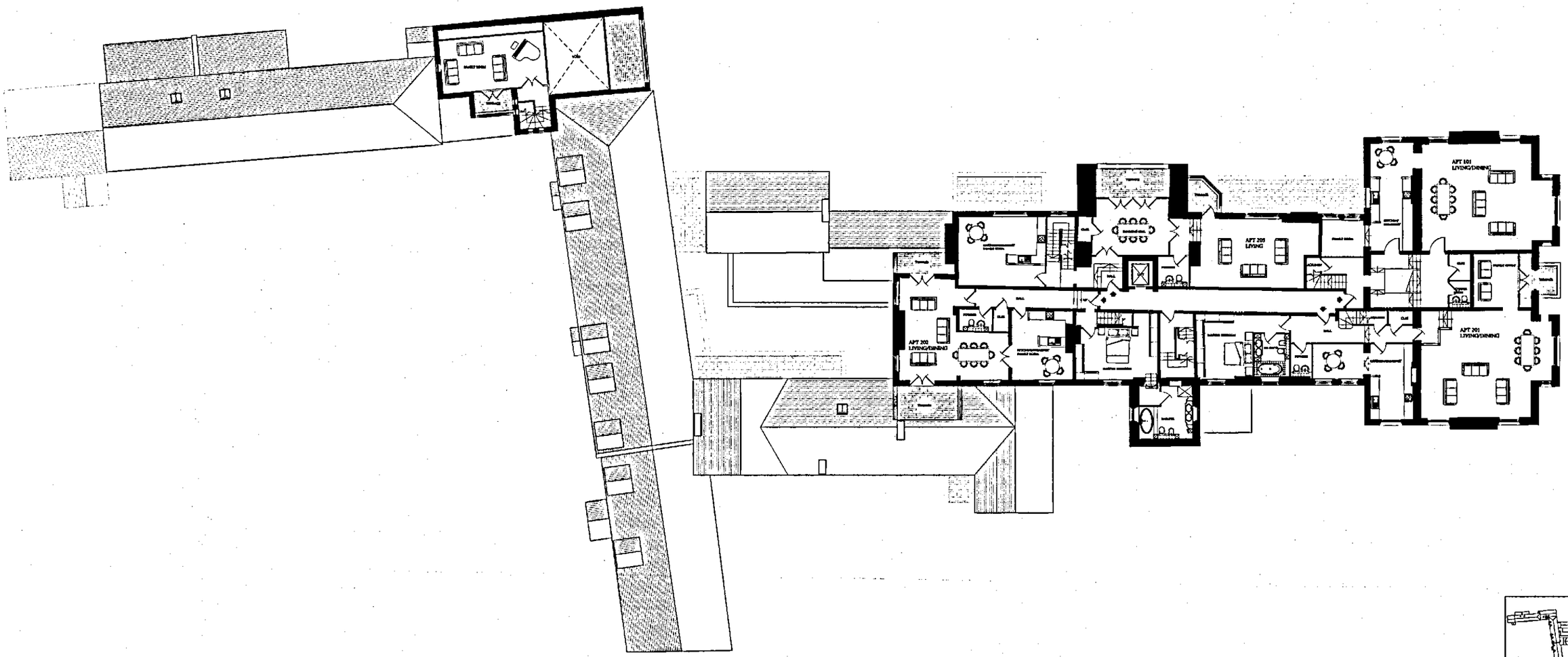
069 1011_Proposed FF Plan.dwg

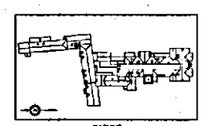


SECOND FLOOR PLAN

KEY

EXISTING WALLS

PROPOSED WALLS



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Proposed Second Floor Plan

069/1012

Scale N.T.S. Date Mar 06
Drawn rd Checked rd

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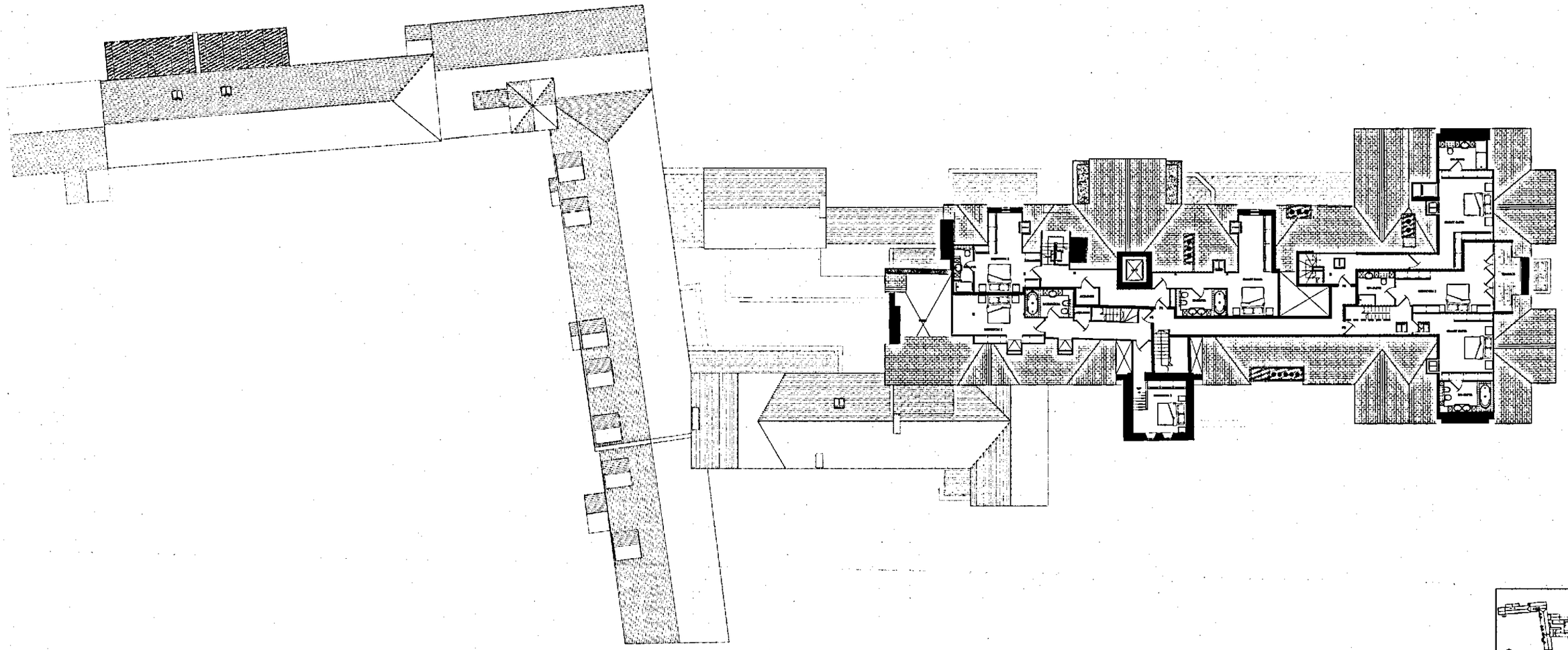
REVISIONS

Rev	Date	Description



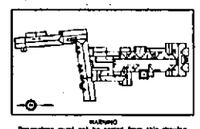
ROOF VOID FLOOR PLAN

KEY

EXISTING WALLS

PROPOSED WALLS

MILLGATE HOMES



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Proposed Roof Void Floor Plan

069/1013

Scale N.T.S Date Feb 06

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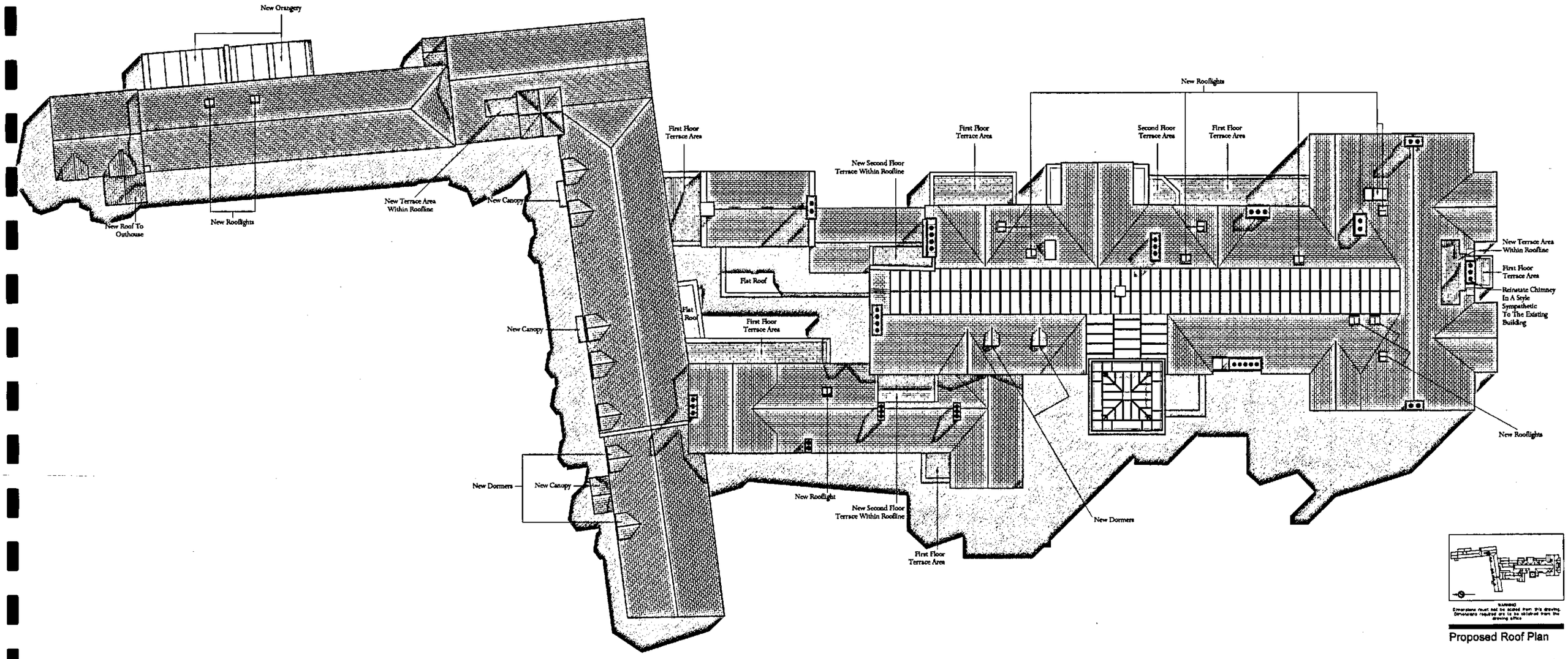
Rev	Date	Description



ROOF PLAN

WARNING
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Proposed Roof Plan

069/1014

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Drawn rd Checked rd

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MILLGATE HOMES

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GENERAL NOTES:

All building facades sympathetically cleaned by approved method.

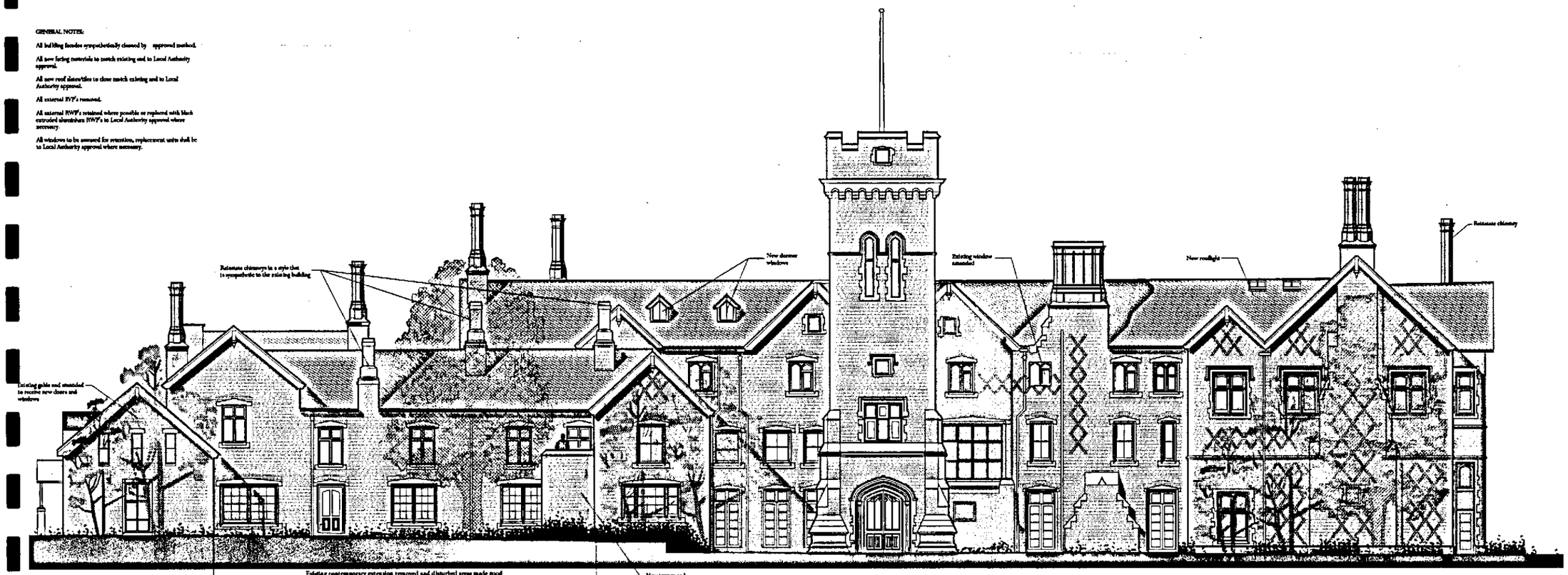
All new facing materials to match existing and to Local Authority approval.

All new roof slate/tiles to close match existing and to Local Authority approval.

All external RWP's removed.

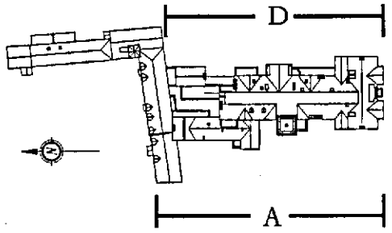
All external RWP's retained where possible or replaced with black extruded aluminium RWP's to Local Authority approval where necessary.

All windows to be assessed for retention, replacement units shall be to Local Authority approval where necessary.



WEST ELEVATION A

EAST ELEVATION D



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REVISIONS

Rev	Date	Description

WARNING
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Proposed elevations

Sheet 1
As Proposed

069/1310

Scale 1:200 @A3 Date Mar 06
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MILLGATE HOMES

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GENERAL NOTES:

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All new roof slates/tiles to close match existing and to Local Authority approval.

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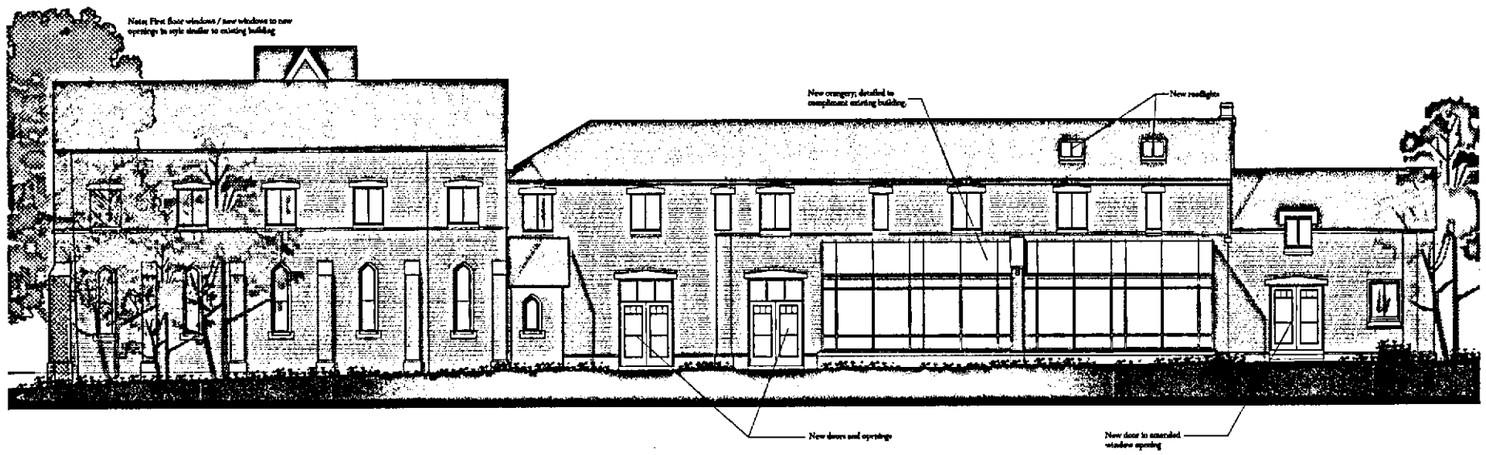
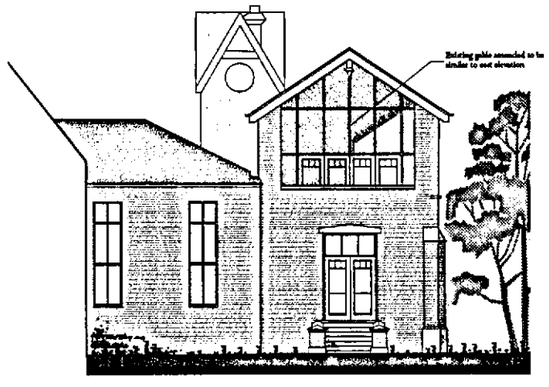
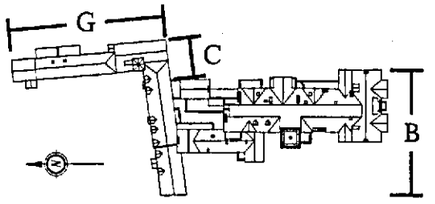


EAST ELEVATION G

SOUTH ELEVATION B



SOUTH ELEVATION C



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REVISIONS

Rev	Date	Description

WARNING
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Proposed elevations

Sheet 2
As Proposed

069/1311

Scale 1:100 @A1 Date Mar 06
Drawn sdm; jw Checked mg

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MILLGATE HOMES

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GENERAL NOTES:

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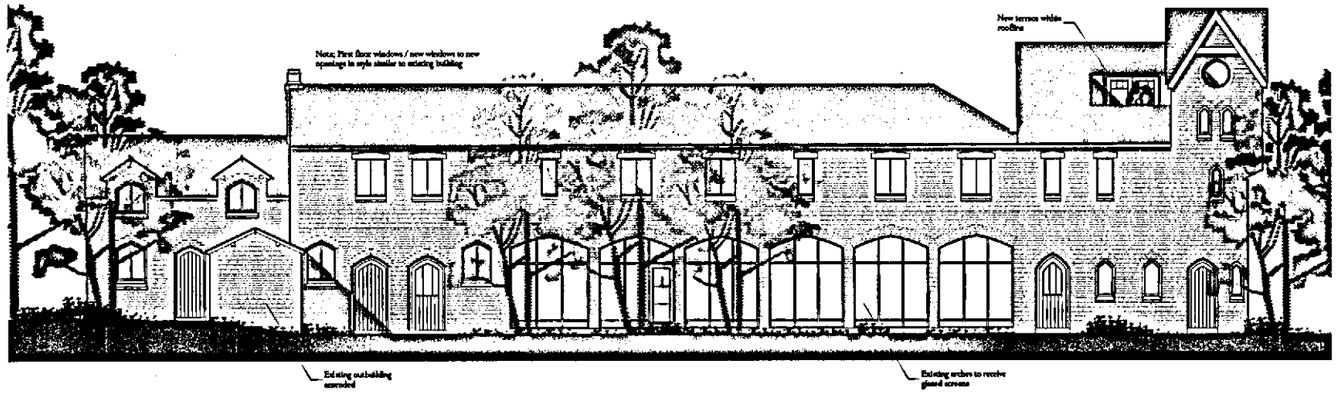
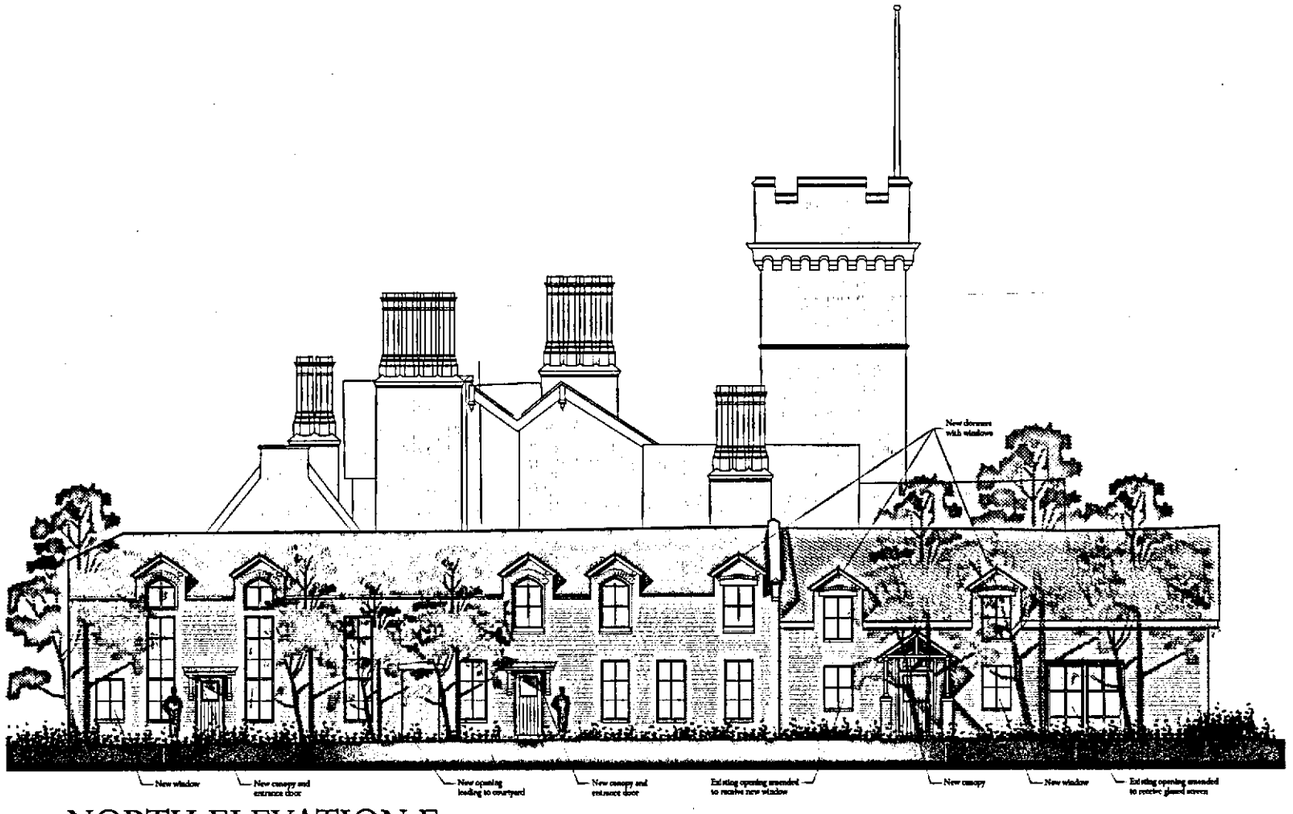
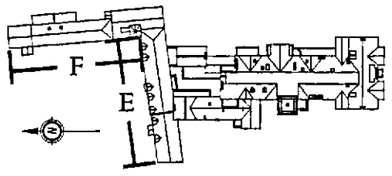


WEST ELEVATION F



NORTH ELEVATION E



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REVISIONS

Rev	Date	Description

WARNING
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Proposed elevations

Sheet 3
As Proposed

069/1312

Scale 1:200 @A3 Date Mar 06
Drawn sdm; jw Checked mg

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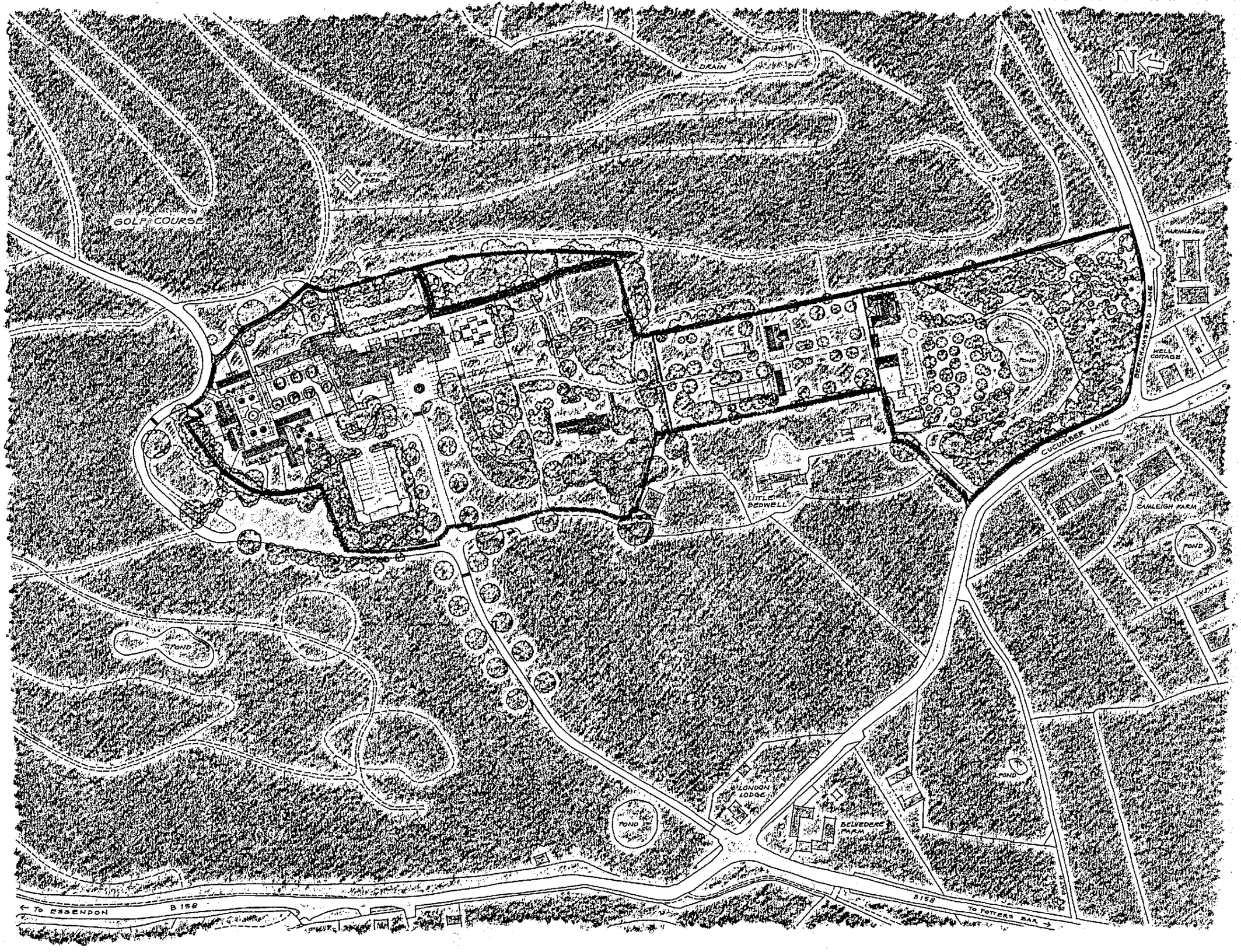
APPENDIX E:-

MILLGATE HOMES PROPOSED DRAWINGS, A3 FORMAT

4493/11 – Overall Site Plan
4493/1105 – Site Survey

4493/01 – Courtyard Site Plan
4493/02 – Courtyard Ground Plan
4493/03 – Courtyard First Plan rev A
4493/04 – Courtyard Elevations 1
4493/05 – Courtyard Elevations 2
4493/06 – Courtyard Elevations 3
4493/07 – Courtyard Elevations 4
4493/09 – External Garage Courtyard Elevations
4493/10 – Internal Garage Courtyard Elevations

06/ESS/SP01 – Detached House Site Plan rev A
06/ESS/P1 – Tennis Court House Plans & Elevations
06/ESS/P2 – Walled Garden House Floor Plans
06/ESS/P3 – Walled Garden House Elevations
06/ESS/P4 – Walled Garden House, Out Buildings, Plans & Elevations



PRINTS AND REVISIONS

10 PLANNING ISSUE	15.3.06

NOTES

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BEDWELL PARK
ESSENDON
HERTS

FOR MILLGATE HOMES

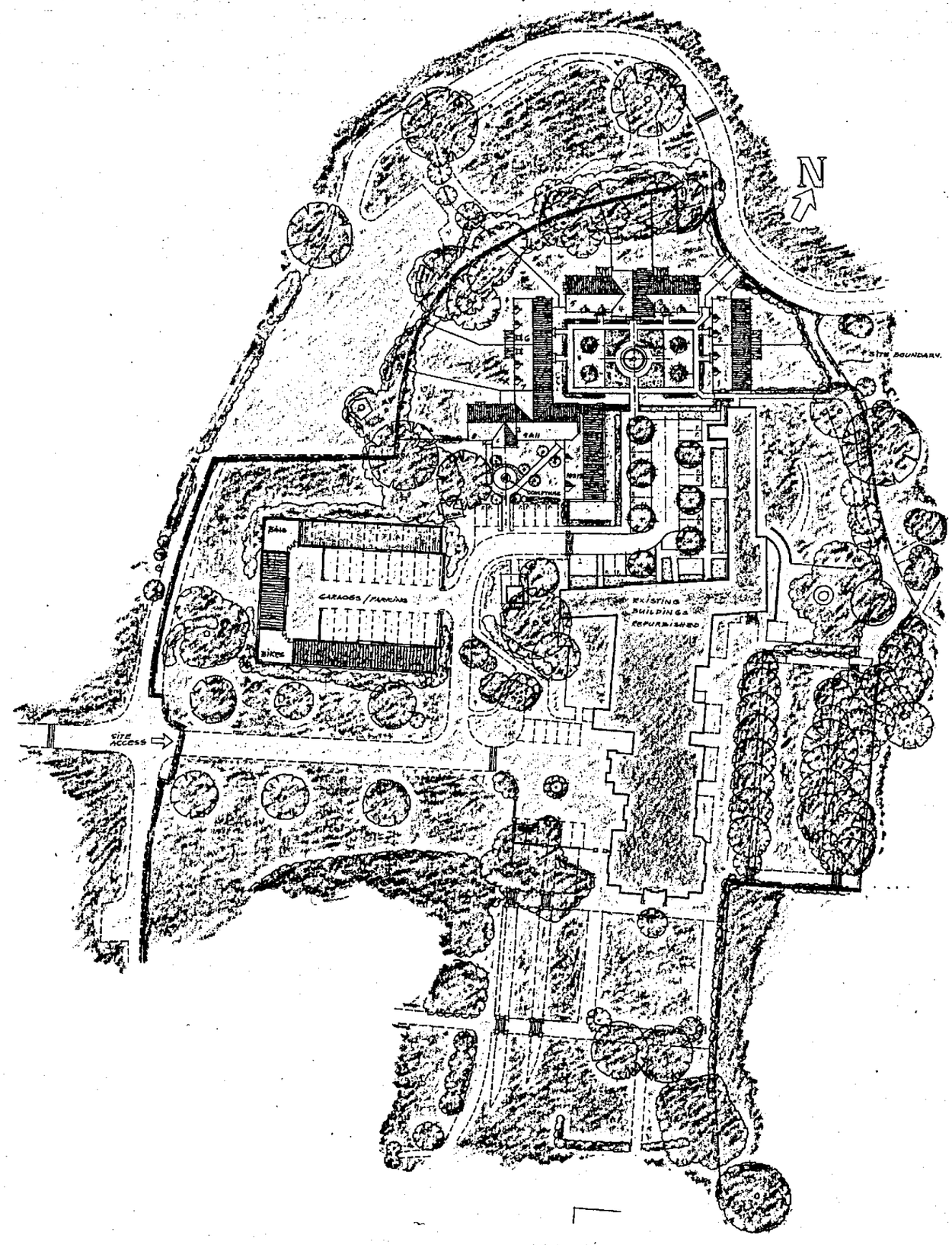
SITE PLAN

PROPOSED

SCALE 1:1000 (AT A1 SIZE)

DATE MARCH 2006 DRAWN Hugo

JOB No. 4493 DWG No. 11



PRINTS AND REVISIONS

1.	CLIENT - BERLIN	30.1.06
1	CLIENT	17.1.06
2.	CLIENT	18.1.06
6	CLIENT (LANDSCAPING)	24.1.06
7.	PLANNING ANTICIPATED	9.2.06

NOTES

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BEDWELL PARK
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FOR MILLGATE HOMES

PROPOSED SITE LAYOUT

SCALE 1:500 (AT A1 SIZE)
DATE JAN. 2006 DRAWN Hugo
JOB No. 4493 DWG No. 01

PRINTS AND REVISIONS

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BEDWELL PARK
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FOR MILLGATE HOMES

SITE SURVEY

SCALE(A1) 1:500	CAD REF	4493	
DATE Dec 2005	DRAWN	HM	
JOB No. 4493	DWG No.	1105	

PRINTS AND REVISIONS

1	CLIENT - PREMIM	161.06
1	CLIENT	17.1.06
2	CLIENT	18.1.06
6	CLIENT	24.1.06
2	ENERGY ASSESSMENT	9.2.06

NOTES

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KEY:

EXISTING TREES RETAINED.

NEW TREES PLANTED.

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BEDWELL PARK
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HERTS.

FOR MILLGATE HOMES

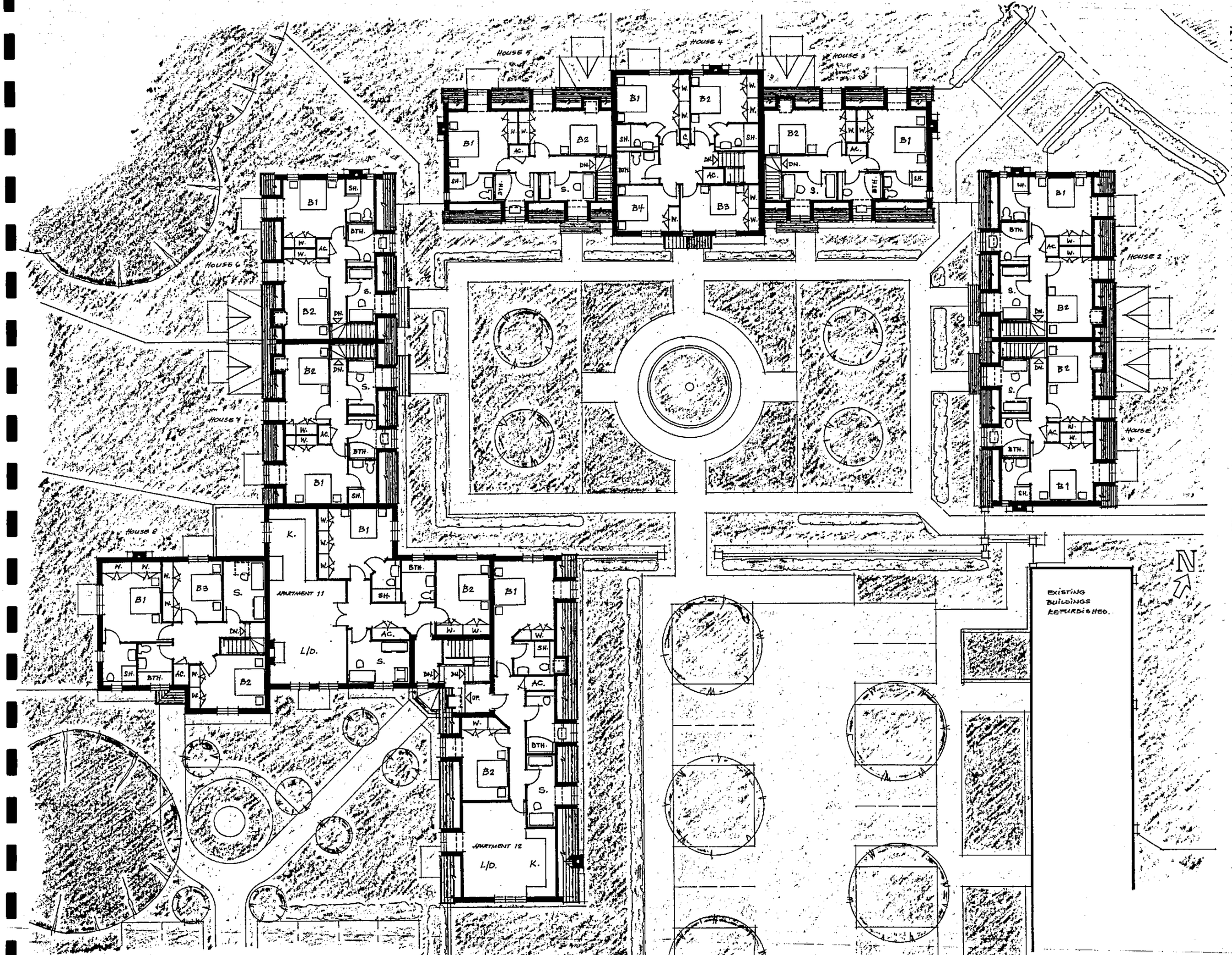
PROPOSED GROUND FLOOR

SCALE 1:100 (AT A1 SIZE)

DATE JAN. 2006 DRAWN HNGO

JOB No. 4493 DWG No. 02

HOUSE 6
HOUSE 5
HOUSE 4
HOUSE 3
HOUSE 2
HOUSE 1
HOUSE 8
HOUSE 7
APARTMENT 9
APARTMENT 10
EXISTING TREES
EXISTING TREE RETAINED
SCULPTURE
FOUNTAIN
PARKING
EXISTING BUILDINGS REFURBISHED.



PRINTS AND REVISIONS

1 CLIENT - PRELIM. 22.06

NOTES

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BEDWELL PARK
ESSENDON
HERTS.

FOR MILLGATE HOMES

PROPOSED FIRST FLOOR

SCALE 1:100 (AT A1 SIZE)

DATE FEB. 2006 DRAWN Hngo

JOB No. 4493 DWG No. 03 A

SOUTH ELEVATION

SECTION
EXISTING BUILDING

KEY PLAN

SECTION - HOUSE 7

COURTYARD ELEVATION - SOUTH

SECTION - HOUSE 1

KEY PLAN

PRINTS AND REVISIONS

1	CLIENT	17.1.06
2	CLIENT	18.1.06
6	CLIENT (COMMENTS)	24.1.06

NOTES

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BEDWELL PARK
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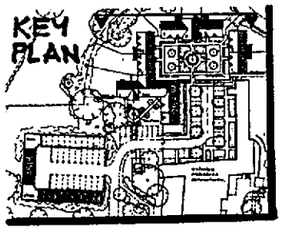
HERTS.

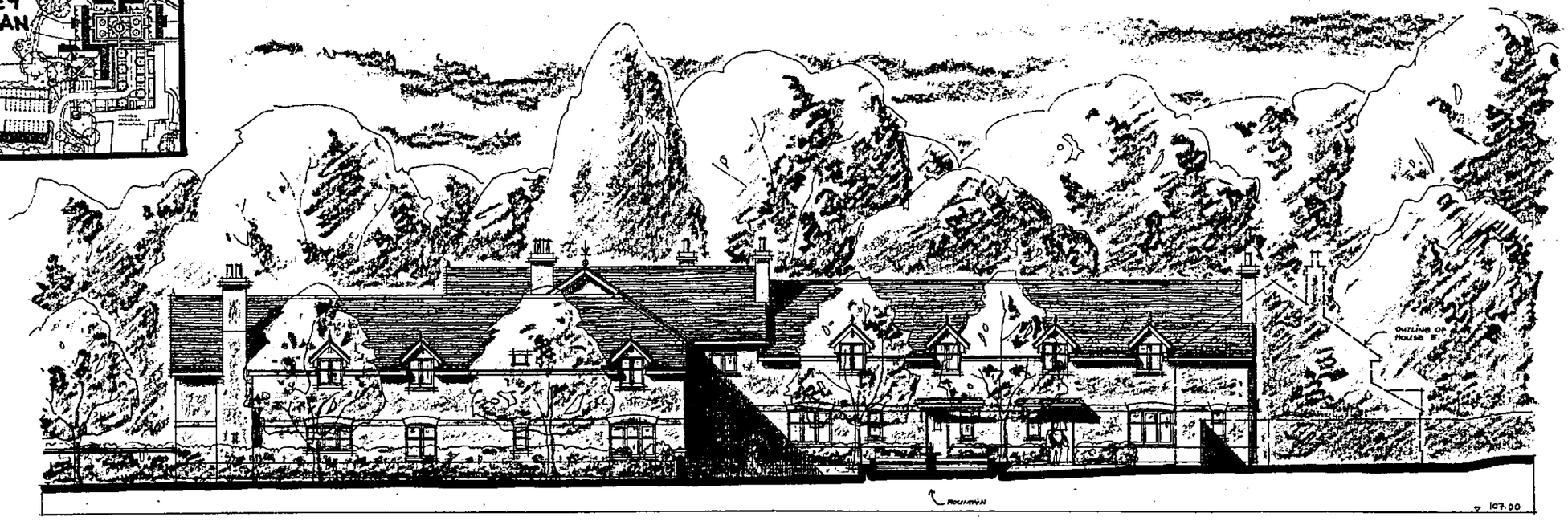
FOR MILLGATE HOMES

PROPOSED ELEVATIONS

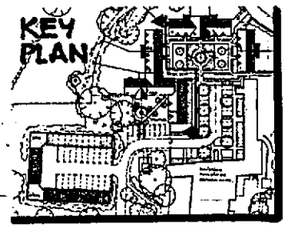
SCALE 1:100 (AT A1 SIZE)
DATE JAN. 2006 DRAWN Hngo
JOB No. 4493 DWG No. 04

NORTH ELEVATION





COURTYARD ELEVATION - EAST



PRINTS AND REVISIONS

1	CLIENT	17.1.06
2	CLIENT	18.1.06
6	CLIENT (LOBBY HUTS)	24.1.06

NOTES

ALL DIMENSIONS MUST BE CHECKED ON SITE AND NOT SCALED FROM DRAWING. ERRORS AND OMISSIONS TO BE REPORTED TO THE ARCHITECTS

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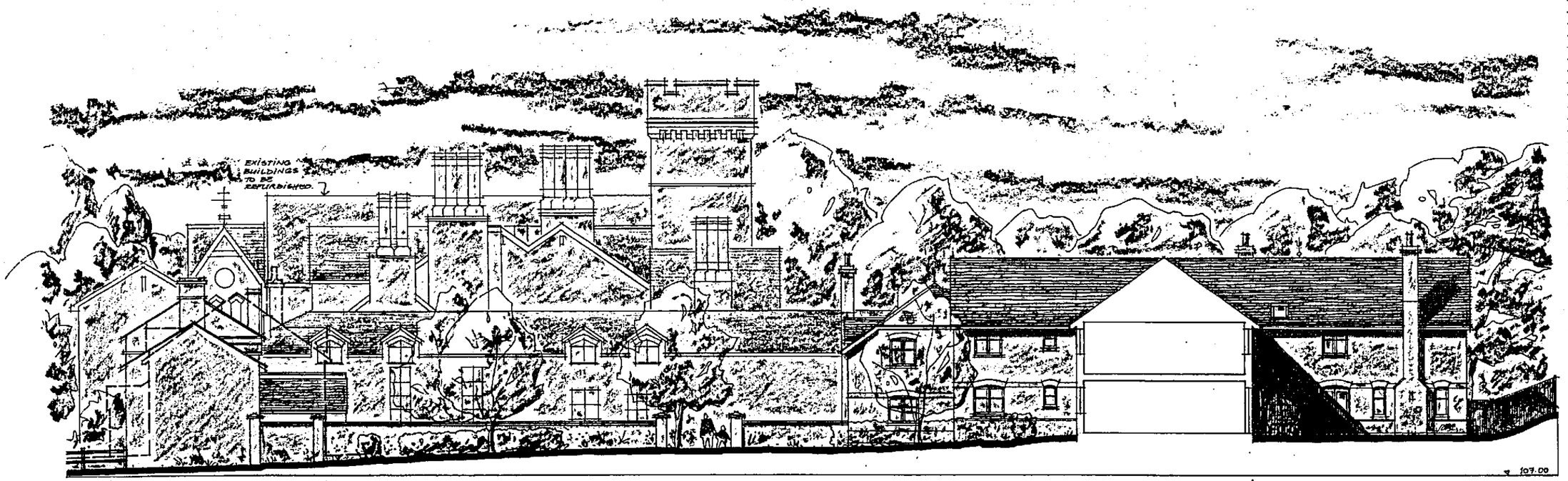
BEDWELL PARK
ESSENDON
HERTS.

FOR MILLGATE HOMES

PROPOSED ELEVATIONS

SCALE 1:100 (AT A1 SIZE)
DATE JAN. 2006 DRAWN HHgo
JOB No. 4493 DWG No. 05

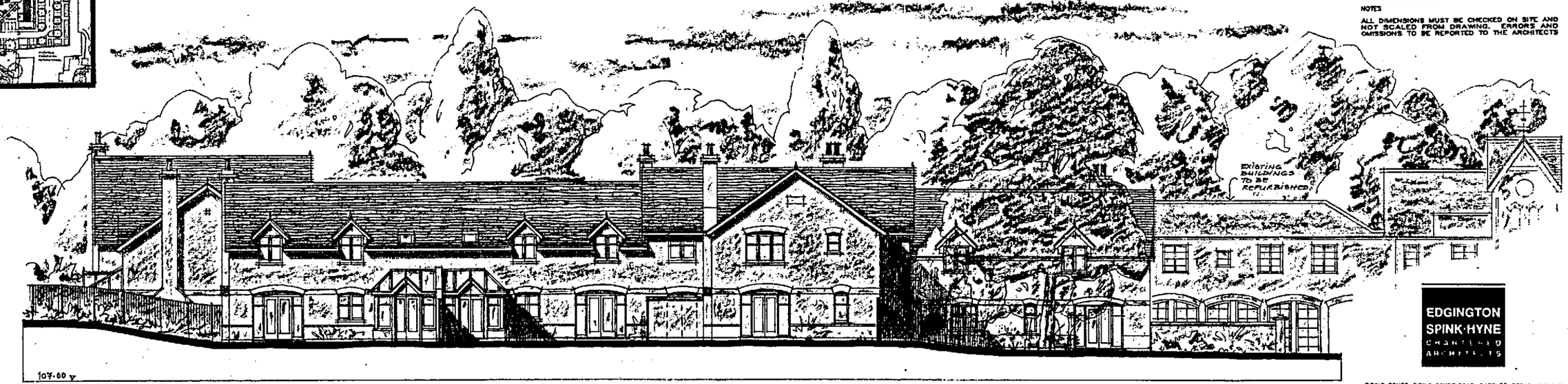


OUTLINE OF HOUSE 1

SECTION - FLATS 9 & 11

COURTYARD ELEVATION - NORTH

KEY PLAN



WEST ELEVATION

KEY PLAN

PRINTS AND REVISIONS

NOTES

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BEDWELL PARK
ESSENDON
HERTS

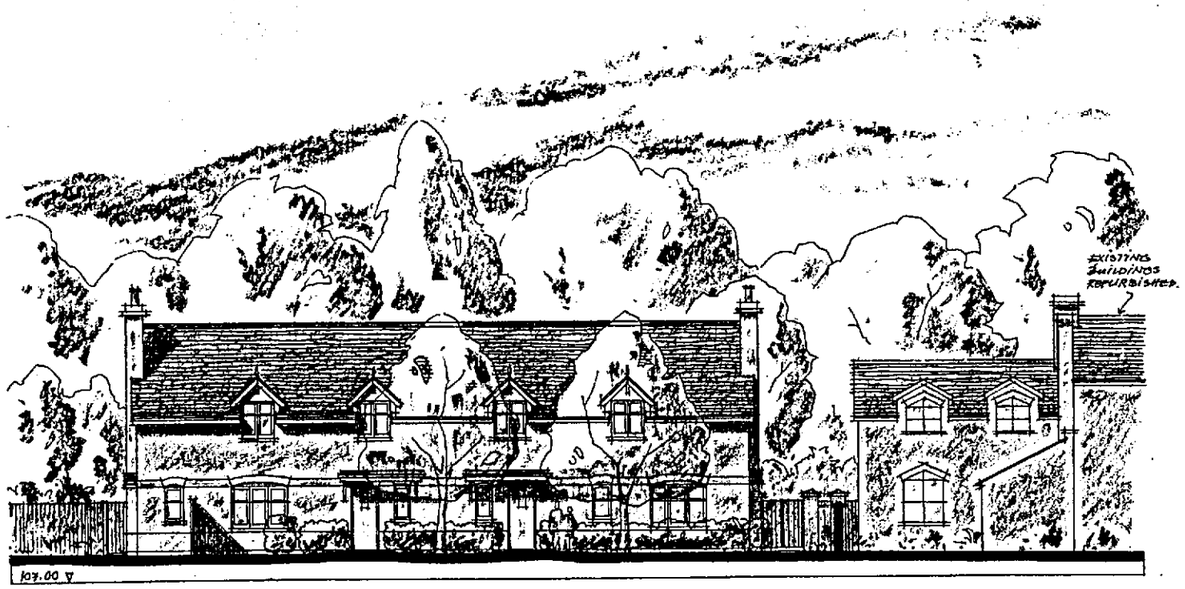
FOR MILLGATE HOMES

PROPOSED ELEVATIONS

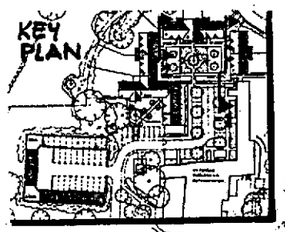
SCALE 1:100 (AT A1 SIZE)

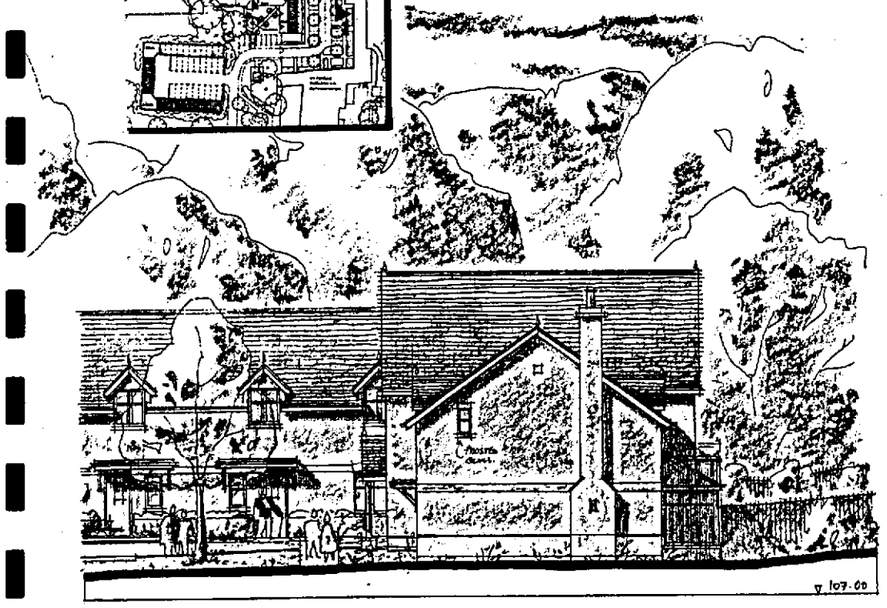
DATE FEB. 2006 DRAWN Hugo

JOB No. 4493 DWG No. 06

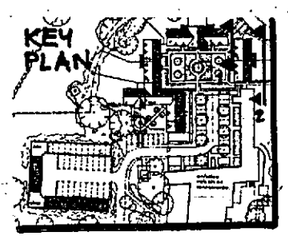


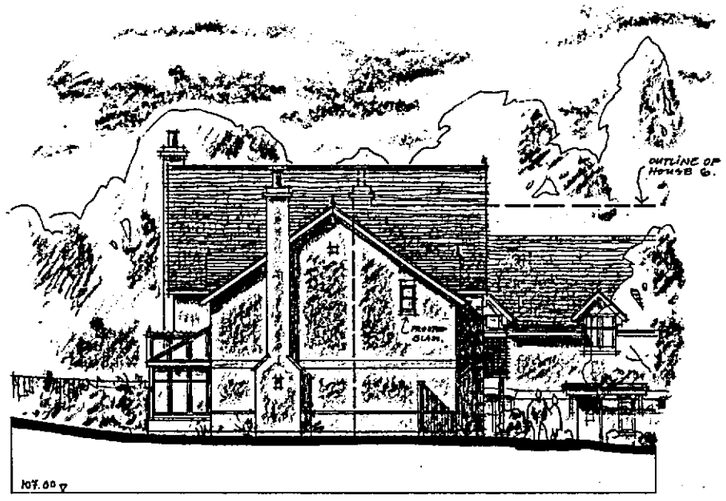
COURTYARD ELEVATION - WEST 1



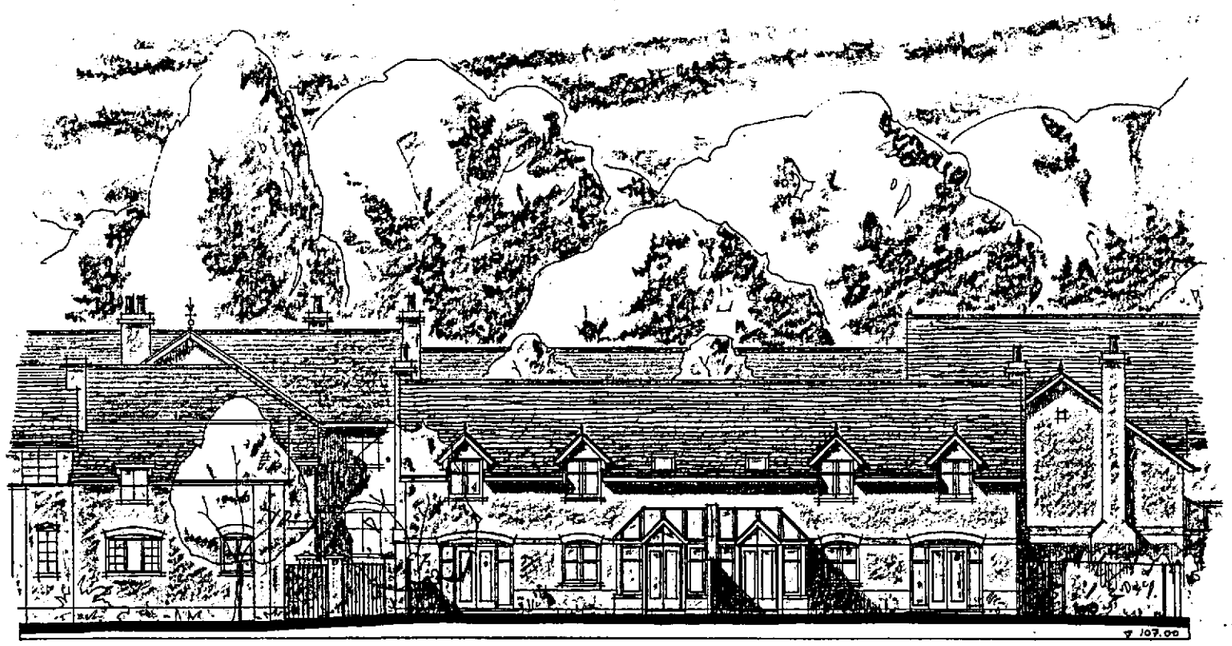


EAST ELEVATION 1





WEST ELEVATION 2



EAST ELEVATION 2

PRINTS AND REVISIONS

NOTES

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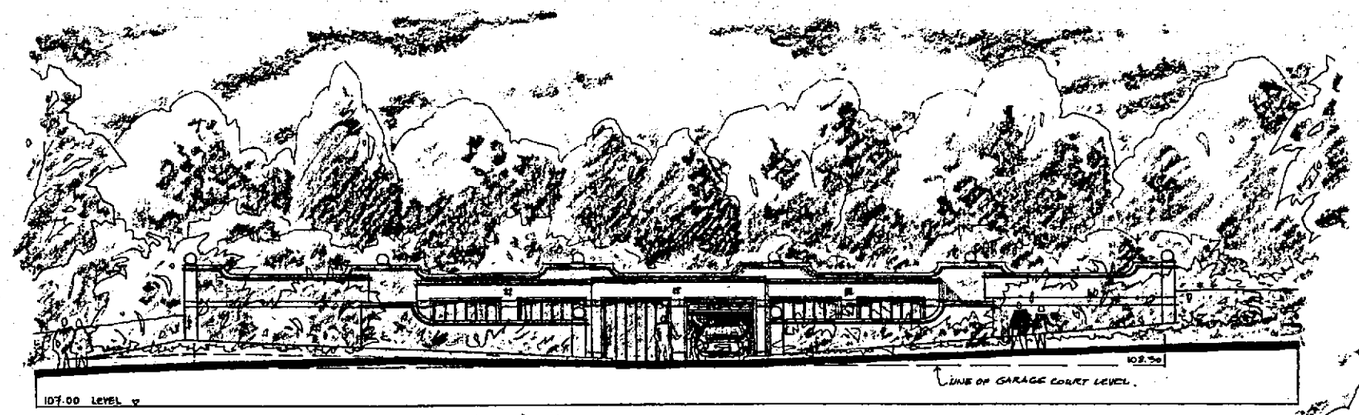
BEDWELL PARK
ESSENDON
HERTS.

FOR MILLGATE HOMES

PROPOSED ELEVATIONS

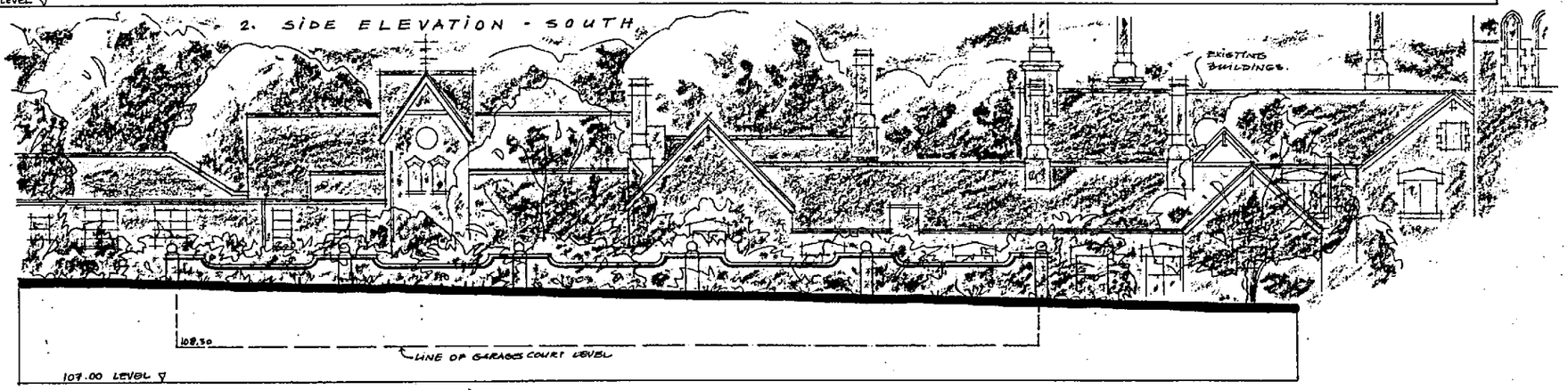
SCALE 1:100 (AT A1 SIZE)

DATE FEB. 2006 DRAWN Hugo

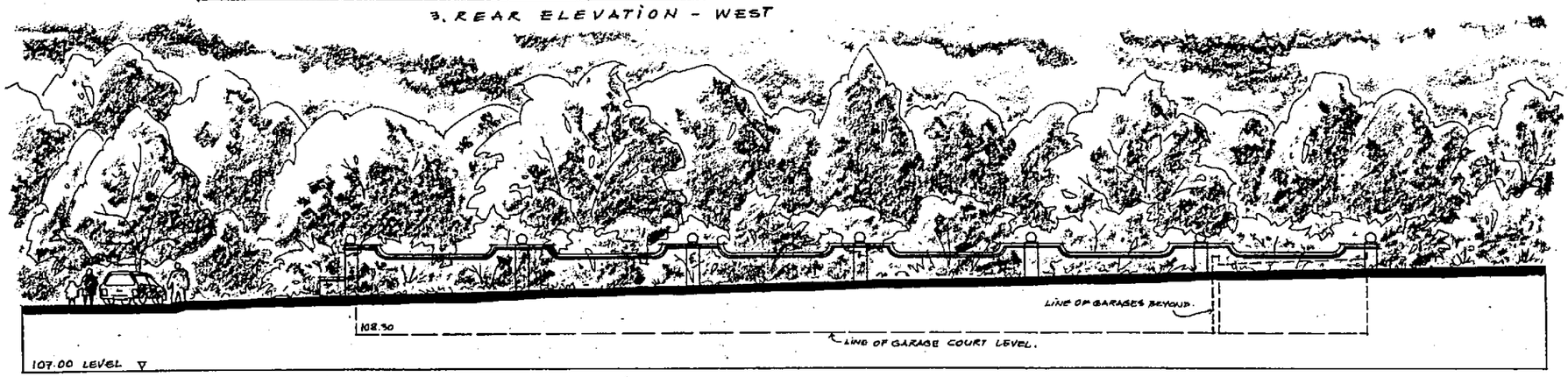


1. FRONT ELEVATION - EAST

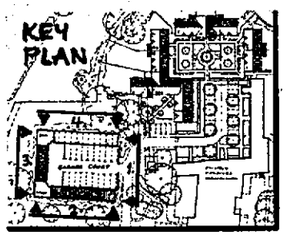
2. SIDE ELEVATION - SOUTH



3. REAR ELEVATION - WEST



4. SIDE ELEVATION - NORTH



PRINTS AND REVISIONS

NOTES

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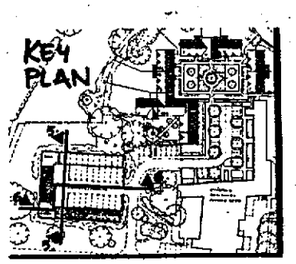
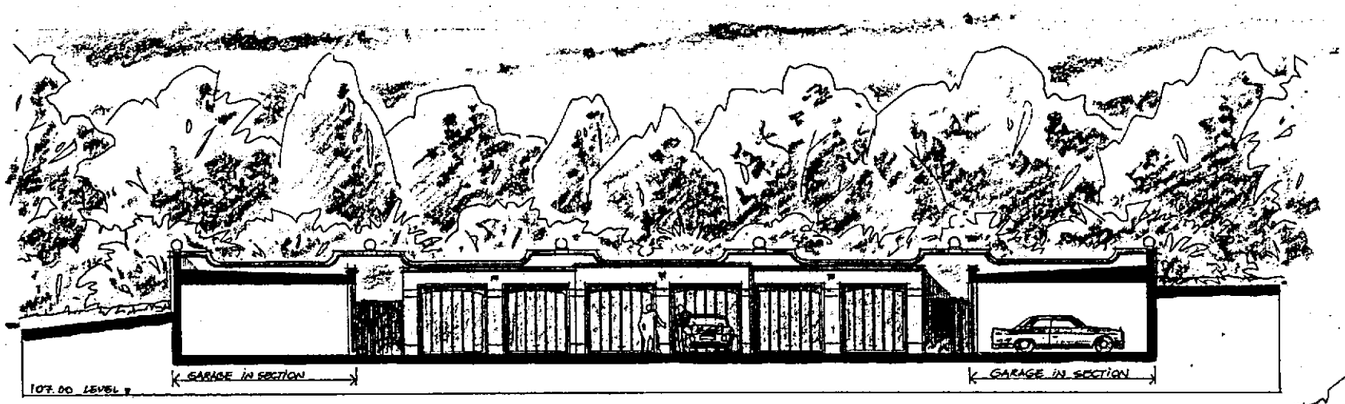
BEDWELL PARK
ESSENDON
HERTS.

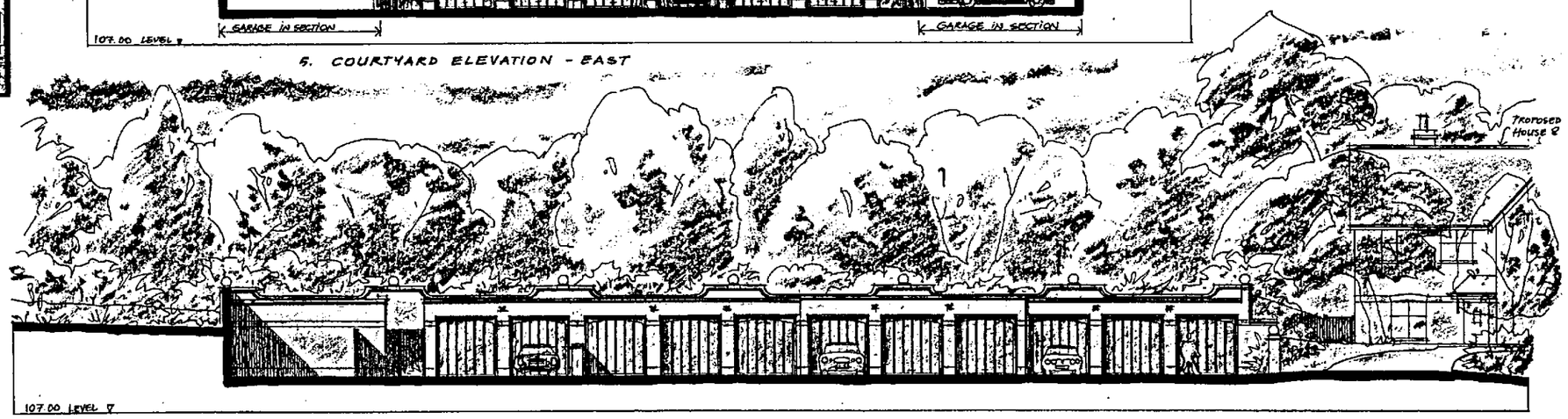
PROPOSED ELEVATIONS
GARAGES COURTYARD

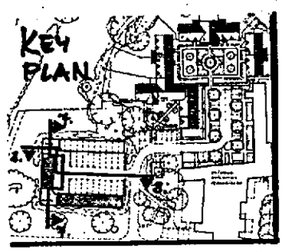
SCALE 1:100
DATE FEB. 2006 DRAWN Hugo
JOB No. 4493 DWG No. 09



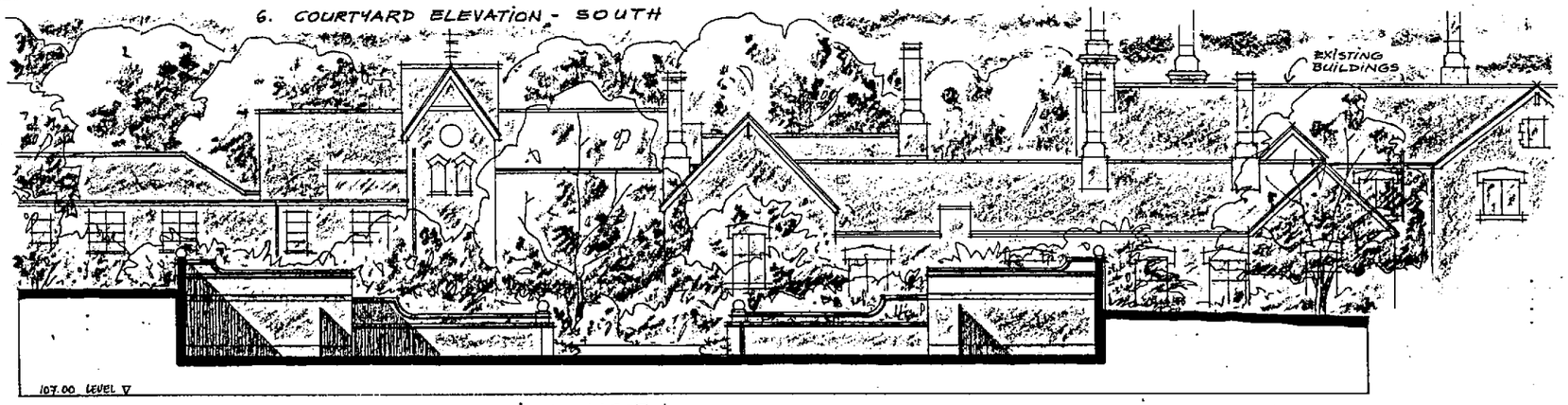


5. COURTYARD ELEVATION - EAST

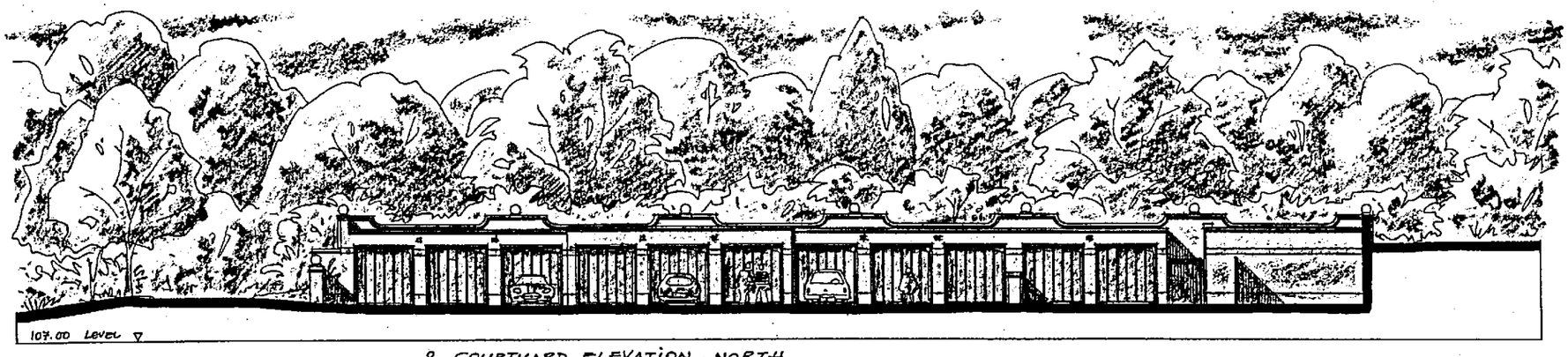




6. COURTYARD ELEVATION - SOUTH



7. COURTYARD ELEVATION - WEST



8. COURTYARD ELEVATION - NORTH

PRINTS AND REVISIONS

NOTES

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BEDWELL PARK
ESSENDON
HERTS.

PROPOSED ELEVATIONS
GARAGES COURTYARD

SCALE 1:100
DATE FEB. 2006 DRAWN HUGO
JOB No. 4493 DWG No. 10

GOLF COURSE

Tennis courts to be retained

Walled garden buildings

Proposed Walled Garden House

Walled Garden

Proposed open air swimming pool

Proposed tennis court

Parking court

Existing pond to be retained

Existing woodland

BERKHAMSTED LANE

Pullamite Wall

Dashed outline of existing hard surfaced tennis courts to be removed

Formal garden to be retained

Proposed amended drive position

Proposed Tennis Court house

CUCUMBER LANE

GOLF COURSE

N

Notes / Revisions
Scale off drawings for planning purposes only

Revision A Amended to clients comments

This plan replicates extant proposal (Proposed site plan, Walled Garden and Main House: 1002 / 005 D Produced by Sabre Developments Limited 15/05/03) except with respect to details of the Tennis Court House and Walled Garden House and garden.

David Parker Architects Ltd

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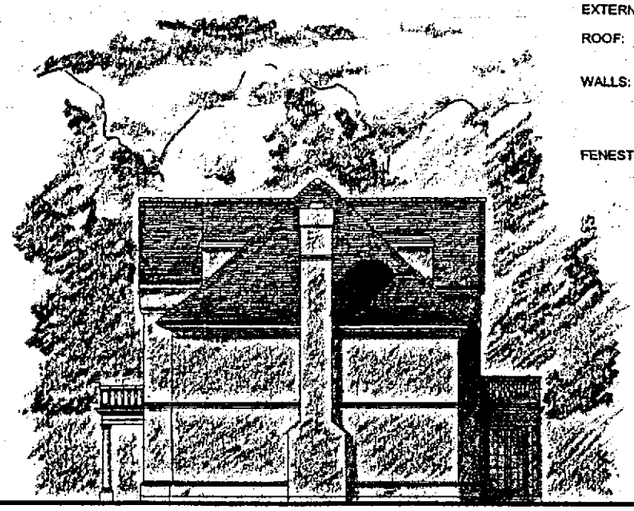
Client	MILLGATE HOMES
Project	BEDWELL PARK
Location	ESSENDON

Drawing title: PROPOSED SITE PLAN		Drawing: 0 6 ESS SP01		Revised: A
Status: PLANNING	Drawn by: JKC	Scale: 1:500	Date: 06.03.06	Date revised: 10.03.06



EXTERNAL MATERIALS

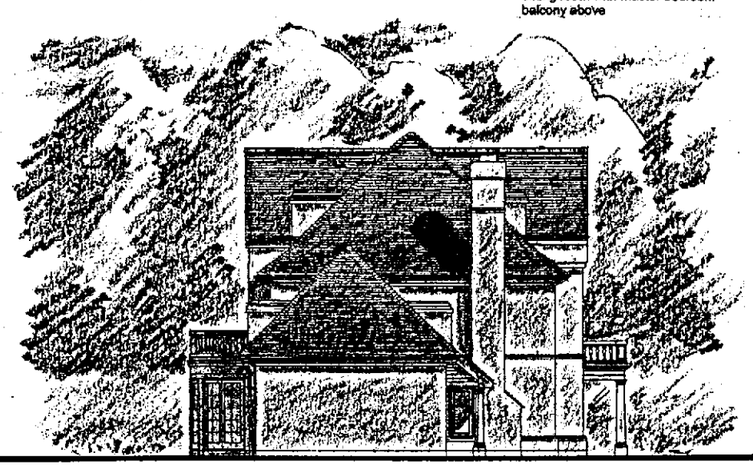
ROOF: To be plain clay tiles at 45° pitch roof, base of roof flared to 40° with matching fittings

WALLS: To be selected high quality stock facing brick in gauged stretcher bond courses. Stone dressings – selected reconstituted stone window surrounds, plinths, string courses, and parapets.

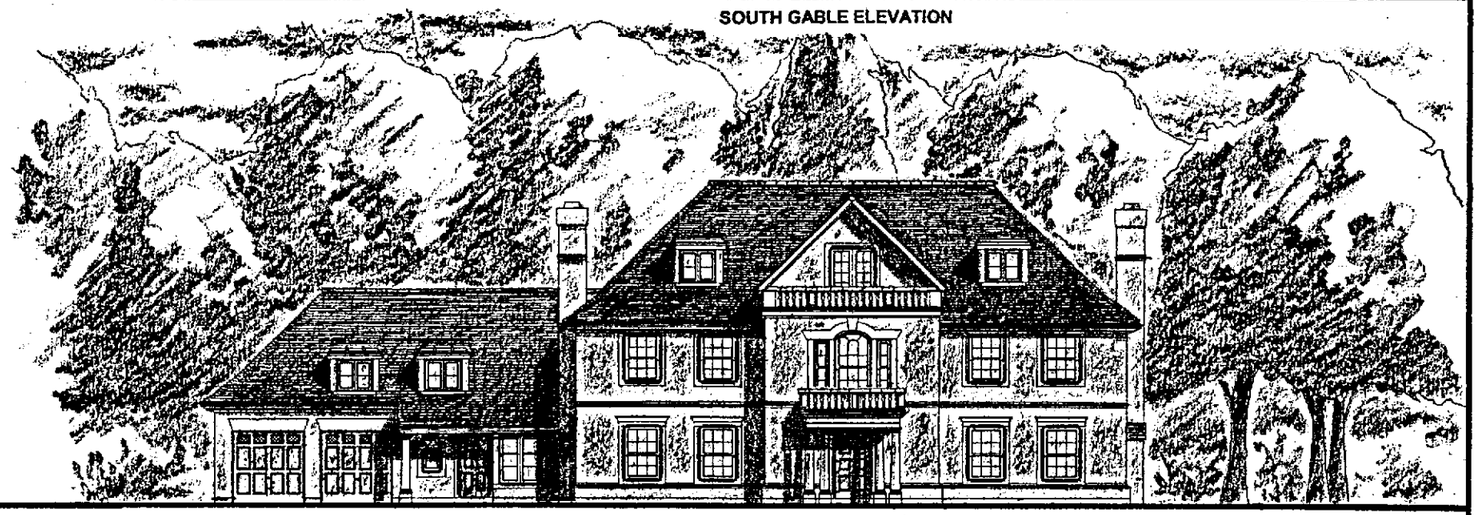
FENESTRATION: To be classic Georgian double-hung white sash windows with matching French doors and full height lights as indicated. Dormer windows – to be matching casements in flat lop lead dormers with lead cheeks.

EAST REAR ELEVATION

Straight segmental glass panels to balustrading to curved bay to dining room with master bedroom balcony above

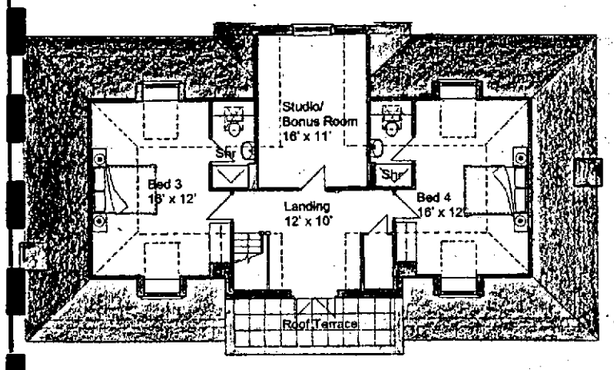


SOUTH GABLE ELEVATION

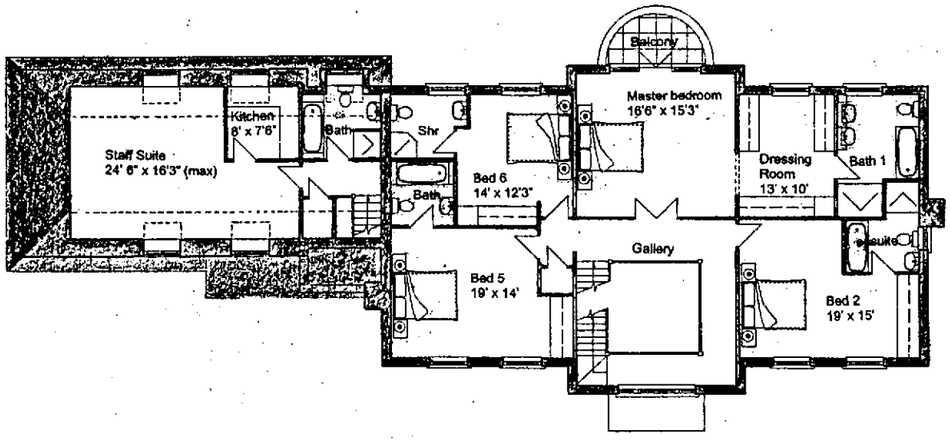


NORTH GABLE ELEVATION

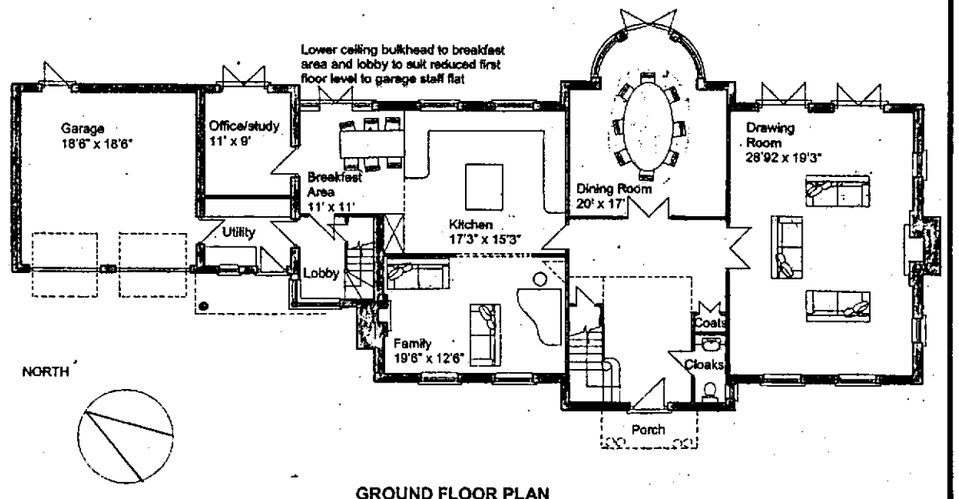
WEST FRONT ELEVATION



SECOND FLOOR PLAN



FIRST FLOOR PLAN



GROUND FLOOR PLAN

David Parker Architects Ltd

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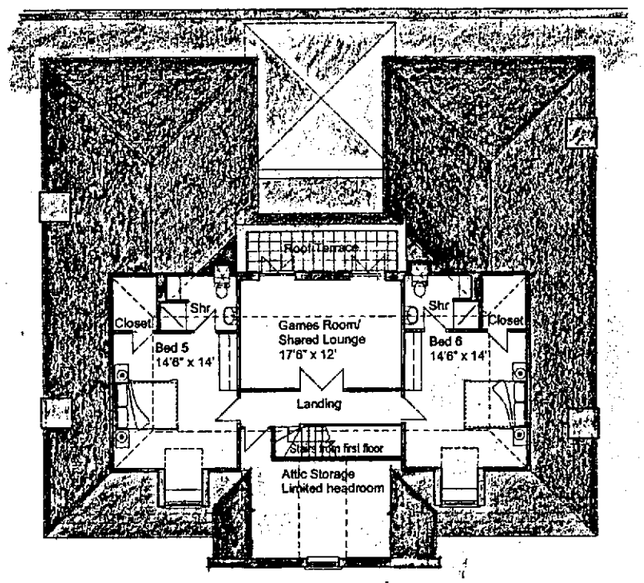
Notes / Revisions
Scale off drawings for planning purposes only

Revision A Amended to clients comments

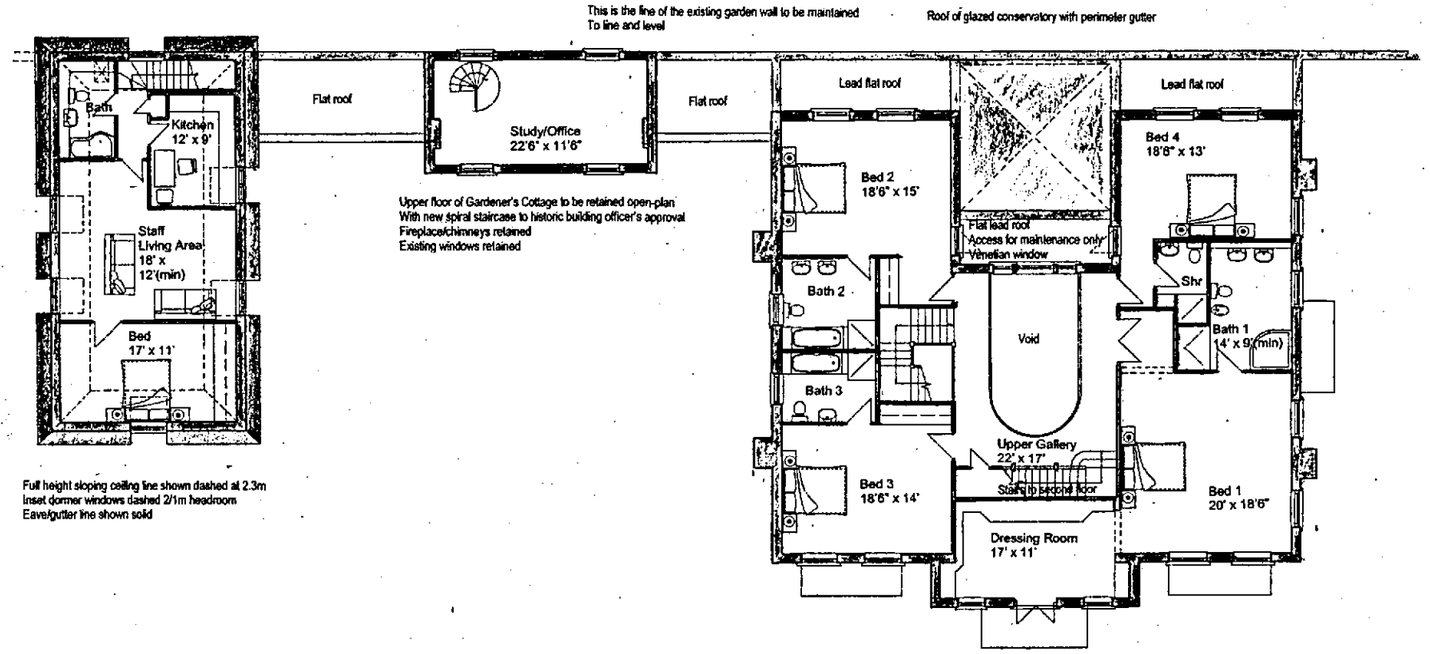
Client	MILLGATE HOMES
Project	BEDWELL PARK
Location	ESSENDON

Drawing title: TENNIS COURT HOUSE PLANS & ELEVATIONS		Drawing: 06 E SS P1		Revised: A
Status: PLANNING	Drawn by: DWP/JKC	Scale: 1:100	Date: 20.02.06	Date revised: 10.03.06

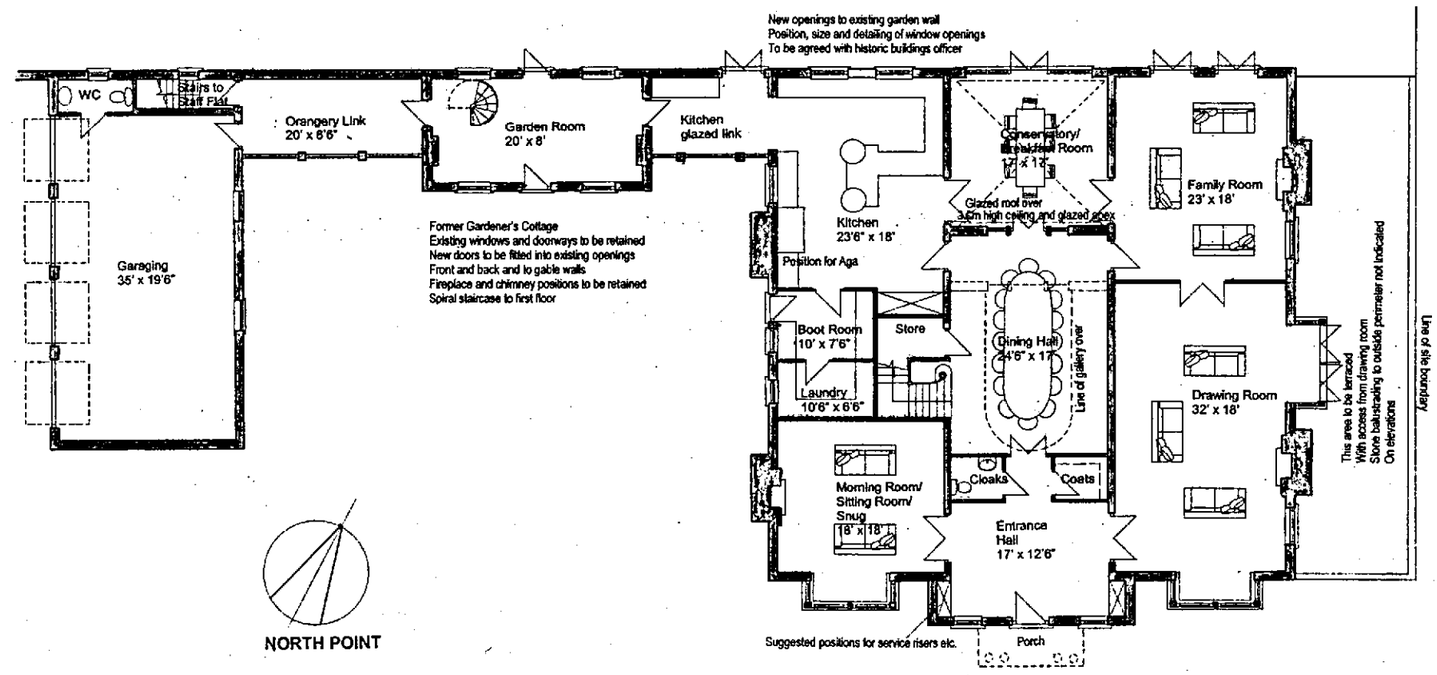


SECOND FLOOR PLAN

Full height sloping ceiling limit shown with dashed lines 2.4m
In attic gable 2.0m
Inside and Outside face of external walls shown dashed
Roof/gutter line shown in scale position with position of
Chimney stacks



FIRST FLOOR PLAN



GROUND FLOOR PLAN

PLANNING NOTES

Read in conjunction with elevations 06 ESS P3
These drawings based on approved planning
Design prepared by Saber Developments Ltd
Drawing no's 1002/804a, 805a, 806a, 607a and 608
Positions of all external walls are the same as Approved
Chimney breasts and bay to drawing room are additional
Internal layouts, are completely revised
Fenestration has been extensively revised and adapted
To suit classical style preferred

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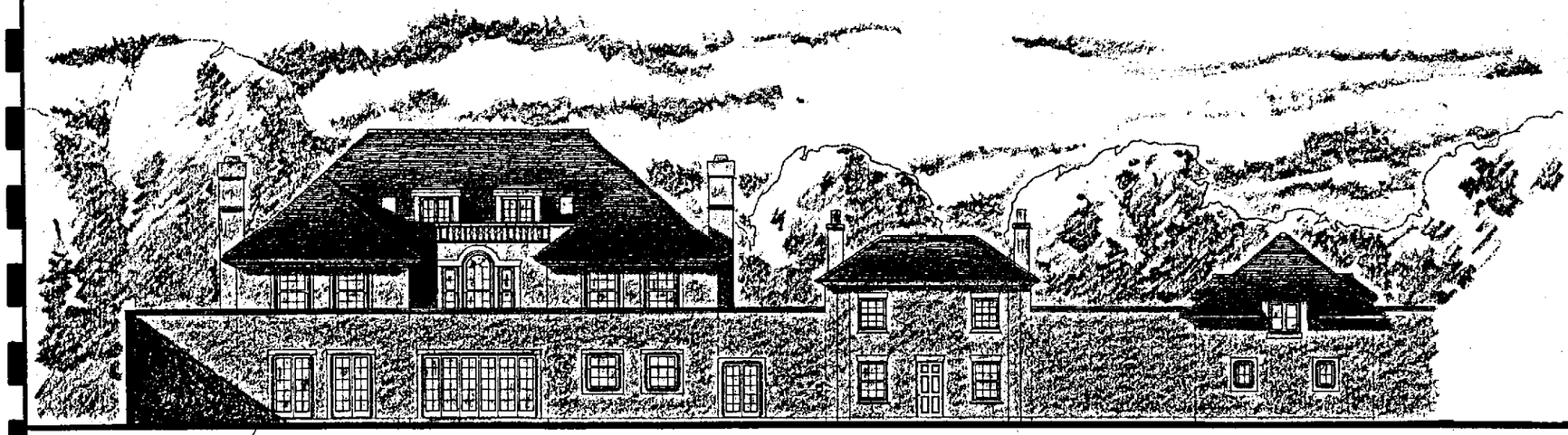
Notes / Revisions
Scale off drawings for planning purposes only

Client	MILLGATE HOMES
Project	BEDWELL PARK
Location	ESSENDON

Drawing title: WALLED GARDEN HOUSE DETAILED PLANS		Drawing: 06 E SS P2		Revised
Status: PLANNING	Drawn by: DWP/JKC	Scale: 1:100	Date: 20.02.06	Date revised



NORTH GARDEN WALL ELEVATION

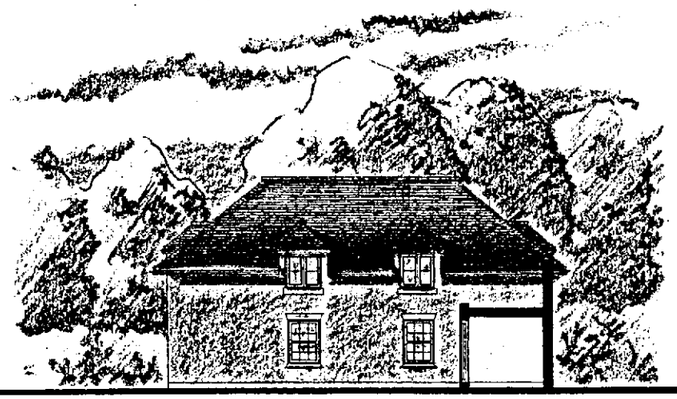
Existing garden wall to be retained with size, positioning and detail of new window openings to be agreed with historic building officer.

Garden Cottage to be retained as existing with garden doorway retained and door reinstated.

Position of new garage walls dashed behind.

WEST GARAGE ELEVATION

Timber arch topped new garage doors with brick gauged arches similar to existing stable block.
Details to be agreed with historic buildings officer.



EAST GARAGE ELEVATION

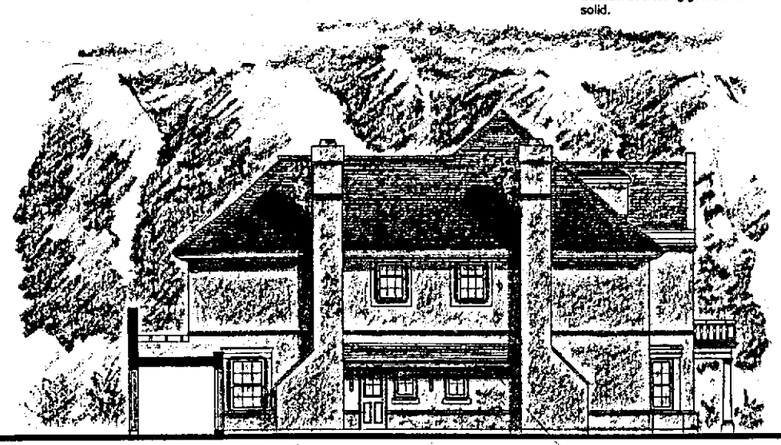
Section of glazed orangery link shown abutting back of new garage building. Section of existing garden wall shown solid.

PLANNING NOTES

Read in conjunction with 06 ESS P2
Overall scale and form of elevations as Saber Development Approved drawings
Marginal amendments to eave and ridge heights to suit Construction sections
Positions of external walls identical to planning approval
Extensive revisions to fenestrations to suit classical style Preferred

EAST GABLE ELEVATION

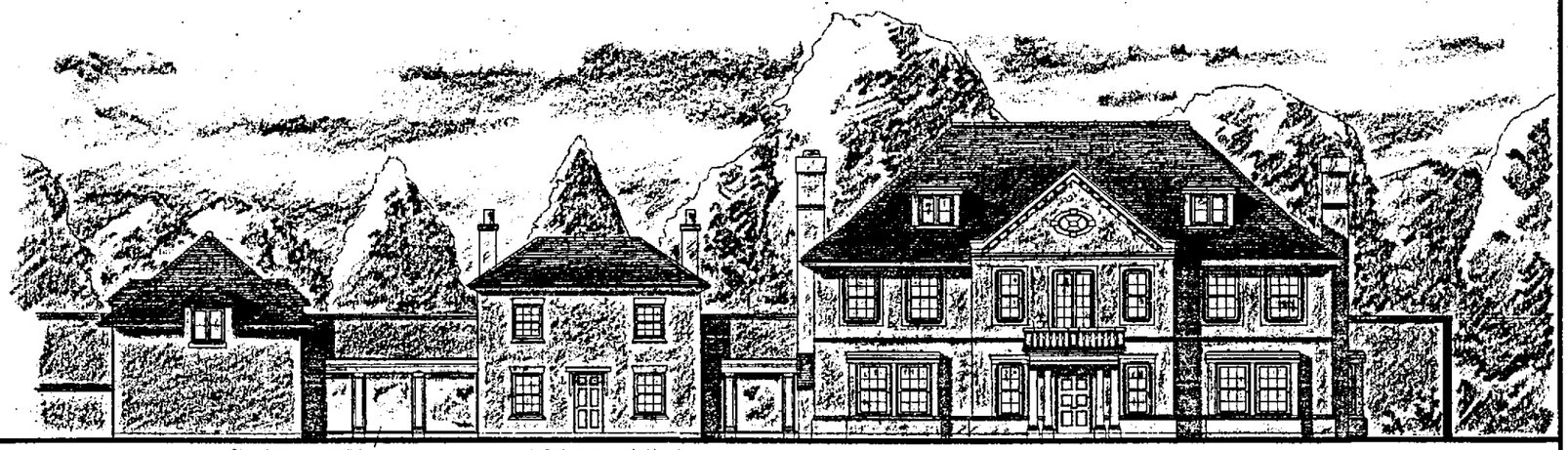
ROOF:	To be plain clay tiles at 42½° pitch roof. Base of roof flared to 37½° Use matching fittings
WALLS:	To be selected high quality stock facing brick in gauged stretcher bond courses. Stone dressings – selected reconstituted stone window surrounds, plinths, string courses and parapets.
FENESTRATION:	To be classic Georgian double-hung white sash windows with matching French doors and full height lights as indicated. Dormer windows – to be matching casements in flat top lead dormers with lead cheeks. Stone quoins and string courses indicated to main house front elevations only to match.



WEST GABLE ELEVATION

Adjoining conservatory glazed link section to kitchen

Lean-to porch veranda roof between chimney breasts To give weather shelter to back door position.



SOUTH FRONT ELEVATION

Glazed conservatory link with flat roof and plain glazing.

Gardener's Cottage retained with existing windows, reinstated doorway and new door.

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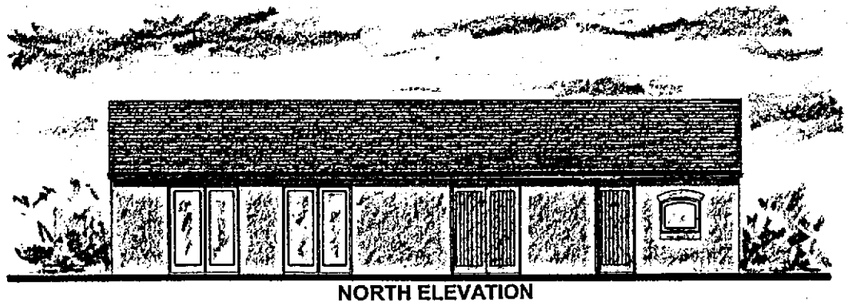
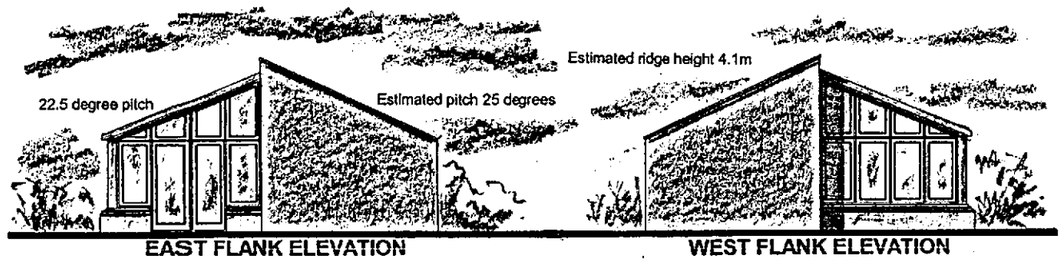
Notes / Revisions
Scale off drawings for planning purposes only

Client	MILLGATE HOMES
Project	BEDWELL PARK
Location	ESSENDON

Drawing title: WALLED GARDEN HOUSE DETAILED ELEVATIONS		Drawing: 06 E SS P3		Revised
Status: PLANNING	Drawn by: DWP/JKC	Scale: 1:100	Date: 20.02.06	Date revised

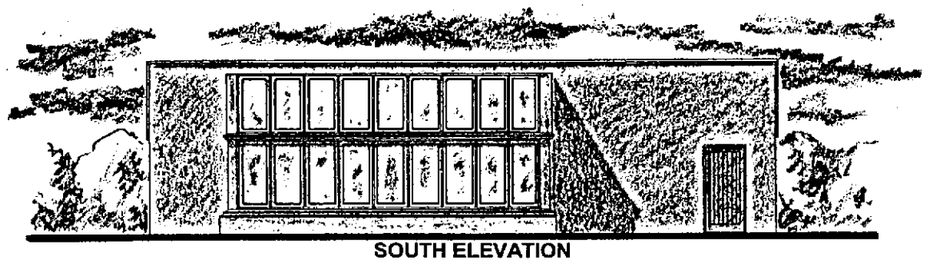


NORTH ELEVATION

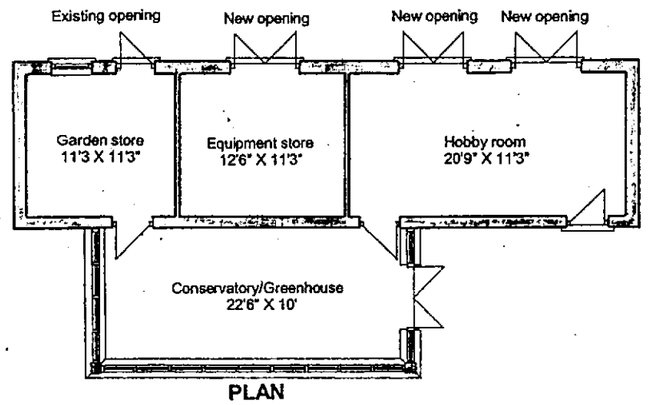


EAST FLANK ELEVATION

WEST FLANK ELEVATION

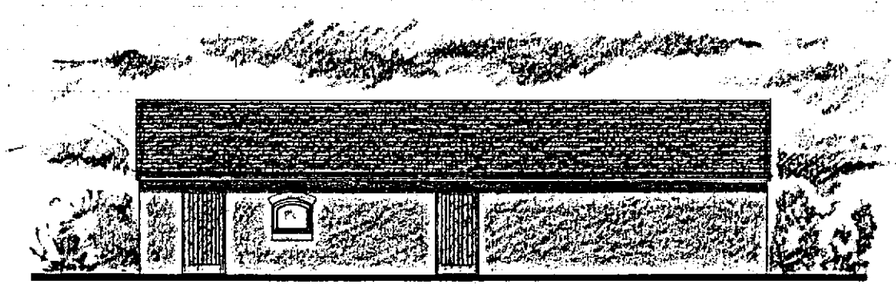


SOUTH ELEVATION

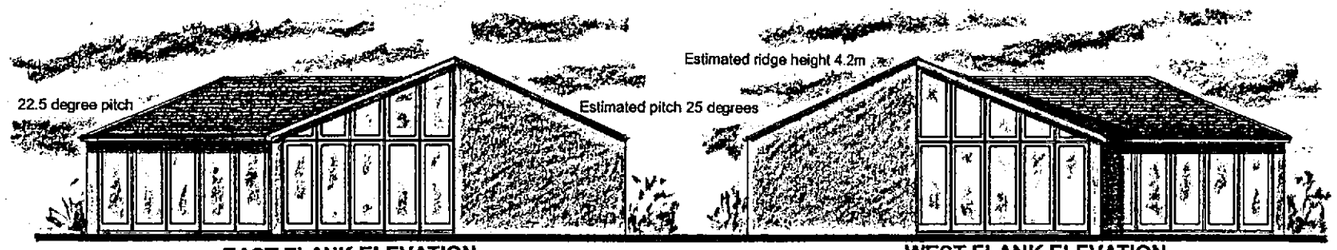


PLAN

WESTERN WALLED GARDEN BUILDING

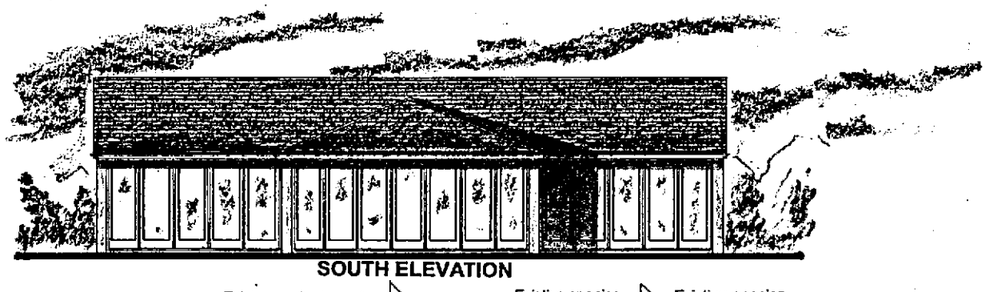


NORTH ELEVATION

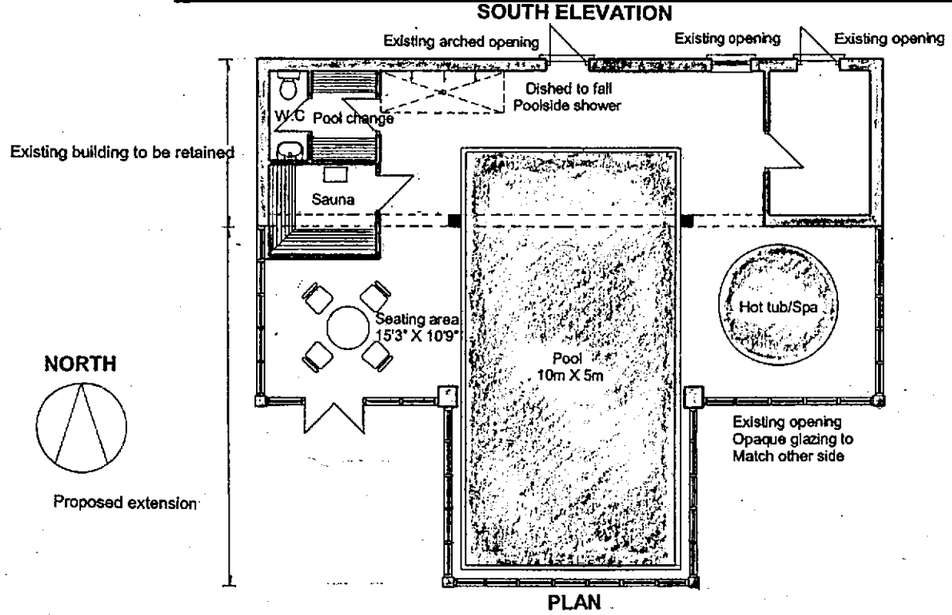


EAST FLANK ELEVATION

WEST FLANK ELEVATION



SOUTH ELEVATION



PLAN

EASTERN WALLED GARDEN BUILDING

MATERIAL NOTES

Roofs: Existing slate retained
New roofs with second hand slate to match existing

Walls: Existing brickwork to be retained and re-pointed

Fenestration: Grey timber, simply designed fixed light or opening sashes as indicated
Framed boarded doors in grey to match

David Parker Architects Ltd

The Old Brewery Tap 3 Shirburn Street Watlington Oxon OX49 5BU telephone 01491 613096 facsimile 01491 614017 mail@dparchitects.co.uk

Notes / Revisions
Scale off drawings for planning purposes only

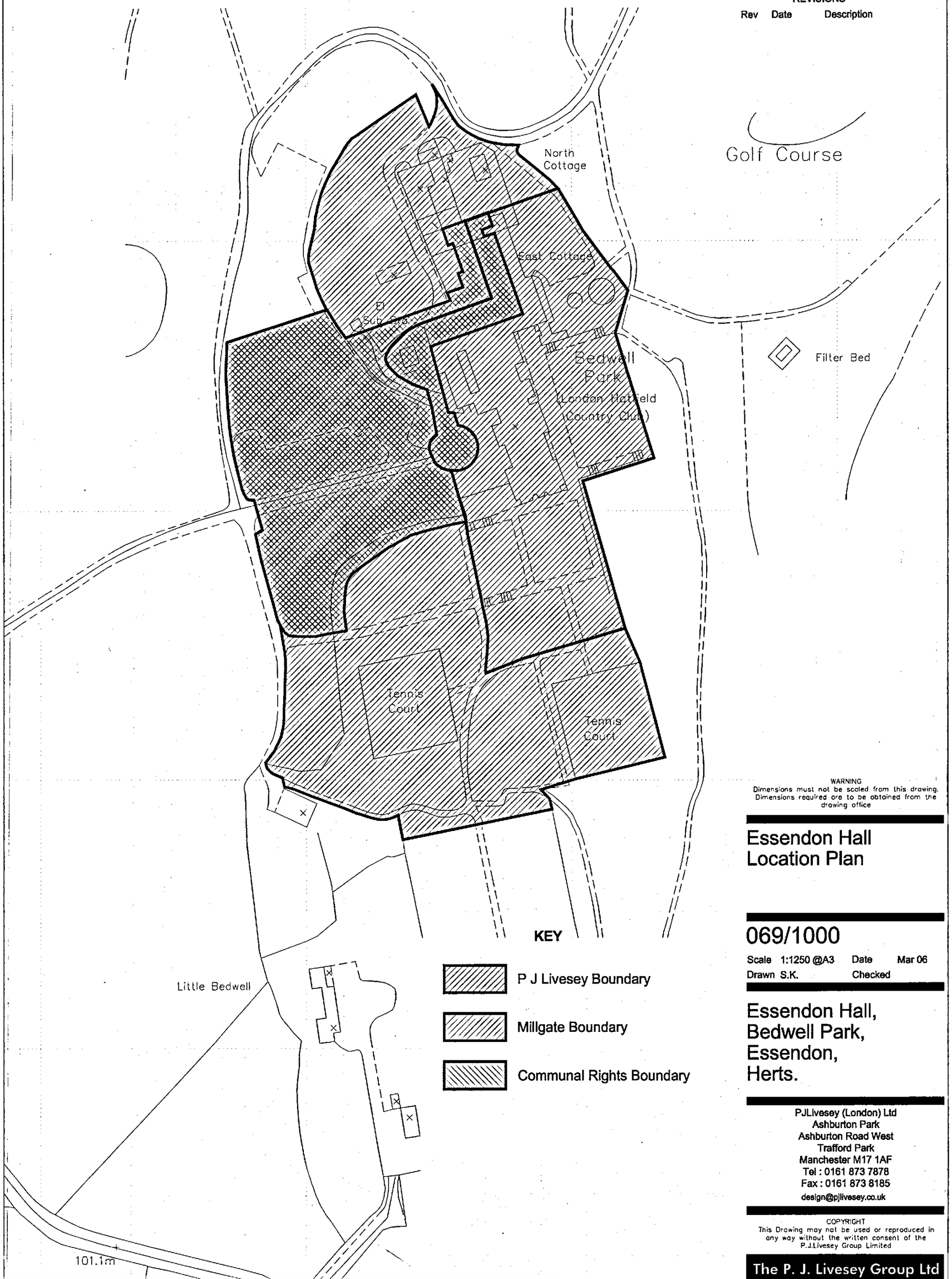
Client	MILLGATE HOMES
Project	BEDWELL PARK
Location	ESSENDON

Drawing title: WALLED GARDEN BUILDINGS			Drawing: 06 ESS P4		Revised
Status: PLANNING	Drawn by: DWP/JKC	Scale: 1:100	Date: 21.02.06		Date revised

PJ Livesey GROUP

REVISIONS

Rev	Date	Description



WARNING
Dimensions must not be scaled from this drawing. Dimensions required are to be obtained from the drawing office

Essendon Hall Location Plan

069/1000

Scale 1:1250 @A3 Date Mar 06

Drawn S.K. Checked

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