

ECOLOGICAL APPRAISAL

**15-17 KEW GARDENS, BOGNOR REGIS, WEST
SUSSEX, PO21 5RD**

SU 9176 0008

On behalf of Vivid Design Studio

March 2019 v1

Prepared by:	Emma Pollard BSc (Hons) MCIEEM Freelance Ecologist [REDACTED]
Checked and Verified by:	Dr Rachel Holmes CEnv MCIEEM Director Ashgrove Ecology

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SUMMARY

A visit to the site was made on 11th March 2019 by freelance ecologist Emma Pollard BSc (Hons) MCIEEM.

The site is 0.1 ha and comprises buildings, hardstanding, amenity grass and ornamental planting. It lies c1m from the south coast in the town of Bognor Regis in West Sussex.

Proposals are for three new dwellings on the site.

The habitats on site are widespread and common and considered to be of negligible ecological value with no evidence or potential to support protected species. It is considered that the proposals, with implementation of all the mitigation measures for birds, would not have significant adverse ecological impact.

The southern bike shed had evidence of bird nesting, as such, demolition should be undertaken in the winter outside of the bird nesting season, which is considered to be March-August inclusive. If demolition is required during the bird-nesting season, then a suitably qualified ecologist should carry out a search and any nest found should be left until the chicks have fledged.

The site could be enhanced for its value to wildlife the aim of providing a net biodiversity gain, contributing to the aims of National Planning Policy Framework and local policy, through the inclusion of:

- New bird nesting features such as bird boxes and planting of native shrub species such as hazel, dog-rose, blackthorn, hawthorn, field maple or elder providing new nesting and foraging habitat;
- Provision of bat roosting opportunities such as the inclusion of bat boxes or tubes on new buildings;
- Provision of bee bricks in the new buildings.

INTRODUCTION

1. In March 2019 Emma Pollard, a licensed and experienced freelance ecologist and full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), was commissioned by Vivid Design Studio to undertake an Ecological Assessment of 15-17 Kew Gardens to support a planning application to develop the site with 3 new dwellings (see Appendix 1 for proposals and existing scheme).
2. The site is 0.1 ha and comprises buildings, hardstanding, amenity grass and shrubs. It lies c1m from the south coast in the town of Bognor Regis in West Sussex (central grid ref SU 9176 0008, see Appendix 2).
3. The site was visited by Emma Pollard, with permission of the landowner, on 11th March 2019.
4. The aim of this report is to assess the potential of the habitats present on site to support protected species and the scale of impact resulting from the proposed development. This report details the methodologies and results and any recommendations for action. It does not attempt to provide a comprehensive species list for the site.
5. The common name only of flora and fauna species is given in this report; however, scientific names are given where no common name is available.
6. The information and advice contained in this report relates primarily to factual survey results and general guidance only. All reasonable effort has been made to provide accurate information at the time of the survey. On all legal matters you are advised to take legal advice.
7. The report is confidential to the client and the author accepts no responsibility in respect of any matters outside the scope of the contract with the client. The report remains the property of the author until full payment has been received.

PLANNING POLICY AND LEGISLATION

8. This note is intended only as a brief introduction to the relevant wildlife law and policy in the UK. Reference should always be made to the full text of the legislation or policy if more detailed interpretation is needed.
9. The National Planning Policy Framework (NPPF) 2019 expects that planning decisions are based on full, up-to-date ecological information with minimal impacts on biodiversity and provision of net gains in biodiversity where possible and advises that local planning authorities should aim to conserve and enhance biodiversity by encouraging opportunities to incorporate biodiversity in and around development.
10. Biodiversity 2020: A strategy for England's wildlife and ecosystem services, replaces the UK Biodiversity Action Plan sets national targets for protecting and restoring priority 1,150 species and 65 habitats of principal importance as detailed in Section 41 of 2006 Natural Environment and Rural Communities (NERC) Act.
11. The Wild Mammals (Protection) Act 1996 provides protection of all wild animals from intentional acts of cruelty.

Hedgerows

12. The Hedgerow Regulations 1997 establish a set of criteria for assessing the importance of hedgerows. Where a hedgerow is deemed to be important its' removal is prohibited without consent from the local planning authority.

Sites

13. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are protected under the Conservation of Habitats and Species Regulations 2017 which implements the EC Habitats Directive. These are a network of sites designated for supporting habitats or species of high nature conservation importance in the European context. Any activity that has a detrimental effect on these European sites is made an offence under the Regulations. Where a development is likely to have a significant impact on a European site, the Regulations require a rigorous assessment of the impacts, known as an Appropriate Assessment.
14. Sites of Special Scientific Interest (SSSIs) are protected under the Wildlife and Countryside Act 1981. These are a network of sites identified as being of national nature conservation importance and hence afforded legal protection. Their protection and management is improved through the Countryside and Rights of

Way Act 2000.

15. Local Sites (Sites of Importance for Nature Conservation (SINCs), Local Nature Reserves (LNR's) and Biological Notification Sites (BNSs)/County Wildlife Sites (CWSs) are a network of sites designated for their local nature conservation importance. Although not afforded legal protection they contribute towards local biodiversity.

Reptile and amphibian

16. There are six species of reptile and six species of amphibian native to the UK, all of which are protected under the Wildlife & Countryside Act 1981 (as amended) at three different levels making it illegal to kill or injure any of these species. There are 'defences' provided by the legislation, these are cases where acts that would otherwise be prohibited by the legislation are permitted. Notably these allow things to happen that are reasonable, unpredictable and unavoidable, such as running over a slow-worm on the road.
17. Great-crested newt is afforded extra protection under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 which implements the EC Habitats Directive. It is an offence to intentionally or deliberately kill, injure or disturb a great-crested newt or to destroy; damage or obstruct access to a place used for shelter or protection. Disturbance includes deliberate activity that affects a group's ability to survive, breed or raise their young or affects the species numbers or range in the local area. This applies throughout the year whether they are present or not at the time of survey or work being carried out. Where a development has the potential to impact upon great-crested newt, the results of appropriate survey along with appropriate mitigation measures must be submitted with a planning application. Great crested newts are known to forage up to five hundred metres from their breeding sites and suitable habitats that fall within five hundred metres must be considered even in situations where the breeding site itself will not be affected.

Bat

18. All British species of bat are protected under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 which implements the EC Habitats Directive. It is an offence to intentionally or deliberately kill, injure or disturb a bat or dormouse or to destroy; damage or obstruct access to a place used for shelter or protection. Disturbance includes

deliberate activity that affects a group's ability to survive, breed or raise their young or affects the species numbers or range in the local area. This applies throughout the year whether bats are present or not at the time of survey or work being carried out. Where a development has the potential to impact upon bats, the results of appropriate survey along with appropriate mitigation measures must be submitted with a planning application.

19. Where a development is proposed within the vicinity (usually 4km) of a Special Area of Conservation (SAC) that has been designated for bats, the developer has an obligation to assess the potential impact of the development on the SAC. Should unacceptable detrimental impacts on the SAC that cannot be offset by appropriate mitigation be likely then it is conceivable that planning permission may not be granted.

Bird

20. All species of wild bird in the UK (apart from certain pest species) are protected under the Wildlife and Countryside Act, 1981 (as amended), and all species are protected during the breeding season. They are protected against intentional killing, injuring or taking as well as taking, damaging or destroying nests in use or being built, and taking or destroying eggs. The bird nesting season is generally defined as being between March to August inclusive although nesting outside of the period is not unusual if conditions are favourable. UK's birds are split into three categories of conservation importance with red list species receiving the highest conservation priority.

Dormouse

21. Dormice are protected under the Conservation of Habitats and Species Regulations 2017 which implements the EC Habitats Directive and the Wildlife and Countryside Act, 1981 (as amended). It is an offence to intentionally or deliberately kill, injure or disturb a dormouse or to destroy; damage or obstruct access to a place used for shelter or protection by dormice. Disturbance includes deliberate activity that affects a group's ability to survive, breed or raise their young or affects the species numbers or range in the local area. Activities that can affect dormice and require a licence include handling, disturbance such as noise and light, habitat removal, fragmentation and isolation. This applies throughout the year whether bats or dormice are present or not at the time of survey or work being carried out. Where a development has the potential to impact upon dormice, the

results of appropriate survey along with appropriate mitigation measures must be submitted with a planning application.

Badger

22. Badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended) and Schedule 6 of the Wildlife and Countryside Act 1981 (as amended), which makes it illegal to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or attempt to;
- interfere with a badger sett;
- disturb a badger when it is occupying a sett;
- obstruct access or any entrance to a badger sett.

23. The term ‘badger sett’ is normally understood to mean the system of tunnels and chambers, in which badgers live, and their entrances and immediate surrounds. The 1992 Act specifically defines a sett as “any structure or place which displays signs indicating current use by a badger”. Interference with a sett includes blocking tunnels or damaging the sett in any way. Guidance to what may be classed as disturbance to a badger (when occupying a sett) can be found at: http://www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf

METHODOLOGIES

Desktop Study

24. The Defra Multi-Agency Geographical Information for the Countryside website was consulted for information on statutory site designations in the area.
25. Sussex Biodiversity Record Centre (SBRC) were consulted for records of protected, designated and invasive species records within 1km of the site.
26. The 'Google Earth' website was accessed for aerial images of the site and used as a visual aid to help put the site into context with its surroundings and to identify any potential features of interest in the surrounding land such as ponds within 500m.

Field Study

Habitats

27. A walkover survey of the site and immediate surrounds was undertaken on 11th March 2019 by Emma Pollard *MCIEEM* to identify any habitats likely to be of conservation value using the standard Phase 1 habitat survey methodology (JNCC 2010). The aim of a walkover survey is to provide a record of habitats that are likely to be ecologically important and the presence, or potential presence, of protected or notable species. Features and habitats capable of supporting such species were noted. Features and habitats with potential botanical or protected species interest which may require more detailed survey at specific times of year were also identified.

Species

Great Crested Newt

28. The site and where possible surrounding areas were surveyed for ponds and terrestrial habitats suitable for amphibians such as great crested newt which are known to forage at least 500m from their breeding site. Ponds within a five hundred metre radius were therefore identified where possible during this survey aided by the 'Google Earth' and 'Where's the Path' websites accessed for OS and aerial views of the site. Habitats within and immediately adjacent to the site were assessed in terms of their suitability as foraging habitat. Tall grass and woodland

are suitable foraging habitat for great crested newt and during the winter they hibernate amongst tree roosts, rubble piles, log piles or fallen trees.

Reptile

29. The site was surveyed for habitats which could potentially support reptiles such as vegetation piles, rough grass, banks with sunny aspects, and log piles.

Bat

30. A thorough external and internal examination was undertaken of all buildings to search for signs of bat use. This included a systematic search using a torch and endoscope of walls, roof slopes, all window and door surfaces and ledges, the floor, roof rafters and internal gable walls. Signs of bat used searched for include droppings, foraging signs (such as moth wings), rub marks indicating prolonged use, and bats themselves. Samples of any droppings were taken to permit DNA analysis. The internal conditions such as the structure, temperature, humidity and light levels were noted. Any building was also assessed for suitability to support bat roosts, such as the structure and any presence of features or any potential bat access points which were inspected with a torch and endoscope where possible and noted.
31. Mature trees were assessed for their potential to support roosting bats by searching for features such as old woodpecker holes, splits, cavities, rot holes, flaking bark and ivy covering using binoculars, torch and endoscope where possible.

32. The buildings and trees were assessed using the following scale:

Confirmed roost	Evidence of bat use found
High Suitability	One or more potential roost sites suitable for use by larger numbers of bats on a regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat
Moderate Suitability	One or more potential roost sites that could support bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status
Low Suitability	One or more potential roost sites that could be used by individual bats opportunistically however these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or surrounding suitable habitat to be used on a regular basis or by a larger number of bats

Negligible Suitability	Negligible habitat features likely to be used by roosting bats
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Bird

33. The site was inspected for signs of nesting birds and habitat with potential to support nesting bird.

Dormouse

34. The habitat on site was assessed for the potential to support dormouse which are found in woodland, scrub and hedgerows with good connectivity and suitable food plants such as hazel.

Badger

35. The standard 'walk-over' survey technique was used to inspect the site and surrounding area, to locate any setts and other field signs of badgers, such as latrines, paths, hair and tracks.

Invasive species

36. The site was searched for evidence of invasive plant species such as Japanese knotweed, Himalayan balsam and giant hogweed.

Limitations

37. An assessment of the presence of protected species is based on visual evidence at the time of the survey; apparent suitability of habitats present within the survey area; and experience of the surveyor. The assessment also considers the surrounding land and level of connectivity. It does not take into account possible seasonal differences, or of any species that may take up residence at a later date. Bats roost in a wide variety of sites within buildings, with many species roosting in cracks and crevices, under tiles and within timber beam joints where they are difficult to see. The absence of evidence cannot, therefore, be treated as conclusive evidence that bats are not using a building.

BASELINE ECOLOGICAL CONDITIONS

Desktop Study - Sites

38. The DEFRA Multi-Agency Geographical Information for the Countryside website informed of no designated sites or granted EPSM Licences within 500 of the site.
39. Sussex Biodiversity Record Centre informed of the following key protected and notable species records within 1km of the site: common toad, palmate newt, smooth newt, common frog, hedgehog, slow worm, grass snake, adder, common lizard, western barbastelle bat, common pipistrelle bat, soprano pipistrelle bat, brown long-eared bat, and grey long-eared bat.

Field study

40. The site was visited on 11th March 2019, it was mild at 10°C with broken clouds and a slight breeze. The site is 0.1ha and comprises buildings, hardstanding, amenity grass and ornamental planning. The survey results are described below and annotated in Appendix 3.

Habitats

Buildings

41. There are three buildings on site. The main dwelling takes up most of the site and is labelled 1 in Appendix 3. It is a large detached former care home. It is a bungalow with loft conversion including Velux roof windows and dormer windows on the east and west aspects. The dormer windows have pitched roofs of overlapping corrugated concrete tiles, hanging flat concrete tiles to the sides and wooden cladding to the front with wooden soffit units and barge boards, all noted flush and intact. Small gaps were noted under the end mortar of the bottom roof tiles of each front dormer, inspected with a torch and endoscope to be c5cm depth. There are two porched to the west of the same design. The main roof is pitched with overlapping concrete tiles, the bottom row of tiles has wooden stoppers inserted c5cm depth. The gable ends have wooden cladding which is overlapping, painted and flush with no gaps noted. There are wooden soffit units which are painted and flush to the walls with no gaps noted. The windows and doors are all uPVC. There is a small central attic over the entire building c1m in height lined with foam boards and breathable membrane behind and some floor level

insulation. The space is cluttered with water tanks and evidence of wasps noted. There are small side attics around the upper floor dormers also with foam board insulation in front of breathable membrane with no floor insulation and pipes.

42. There are two small bike sheds labelled buildings 2 in Appendix 3. They have brick non-cavity walls, pitched roofs of overlapping corrugated concrete tiles, wooden barge boards and gable end cladding and open fronts with wooden panelled gates. There is no void and open access over the front gates and between the panels on the gates. The building at the south of the site had evidence of bird nesting with two old nests noted inside atop the end walls.

Hard-standing

43. Around the buildings is hardstanding with brick driveways, concrete path and patios and areas of gravel. There is a raised bed of timber sleepers, two brick barbeques and seating on the rear patio at the west.

Amenity grass

44. There is short mown grass to the east and west of the site with perennial rye and annual meadow grass, red fescue and some periwinkle, ivy, buttercup, bramble, violets, ribwort plantain, dandelion, cleaver, dock, herb Robert, daisy and red dead nettle. There are also some tree stumps.

Ornamental planting

45. There are scattered planted shrubs around the site including mahonia, daffodils, small conifers.

Boundaries

46. The site is bounded to the west by wooden fencing c1m height with a line of sycamore trees behind, a post and wire fence and fire training unit beyond. To the north and south is closed board fencing c2m height with housing beyond. To the east the boundary is open with a pavement, road and housing beyond.

Species

Great Crested Newt

47. No waterbodies or terrestrial habitat suitable for GCN was identified on site and no suitable waterbodies were identified within 500m of the site through a review

of OS mapping and aerial images. No records of GCN were provided by SBRC within 1km of the site. *No further action required.*

Reptile

48. The site comprises mostly hardstanding, buildings and amenity grass and does not provide habitat suitable for reptile use. *No further action required.*

Bat

49. All buildings on site were assessed as offering negligible potential to support roosting bats with a lack of suitable features identified. Any potential access gaps or crevice bat roosting features on the main building 1 roof that were identified, were inspected with a torch and endoscope and ladder where appropriate and found to offer gaps no deeper than 5cm. No evidence of void dwelling species was identified. *No further action required.*

Bird

50. The buildings offer potential for common bird species in the area to use for nesting and foraging, evidence of two nests was noted in the southern bike shed building 2. *Mitigation recommended.*

Dormouse

51. The site offers no habitat suitable to support dormouse. *No further action required.*

Badger

52. No evidence of badger sett holes was observed on site or in the immediate surrounds. *No further action required.*

Invasive Species

53. No invasive species were noted on site. *No further action required.*

MITIGATION AND ENHANCEMENT

54. The small site is of low ecological value with no evidence of protected species noted. No further surveys are required.
55. The habitats on site are widespread and common and it is considered that the proposals, with implementation of the mitigation measures for birds, would not have an adverse ecological impact; and with inclusion of some enhancements could provide a biodiversity net gain.

Mitigation for Birds

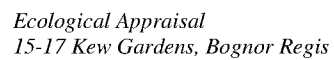
56. The southern bike shed building 2 had evidence of bird nesting, as such, demolition of the buildings, should be undertaken in the winter outside of the bird nesting season, which is considered to be March-August inclusive. If demolition is required during the bird-nesting season, then a suitably qualified ecologist should carry out a search and any nest found should be left until the chicks have fledged.

Site enhancements

57. The site could be enhanced for its value to wildlife the aim of providing a net biodiversity gain, contributing to the aims of National Planning Policy Framework and local policy, through the inclusion of:
- New bird nesting features such as bird boxes and planting of native shrub species such as hazel, dog-rose, blackthorn, hawthorn, field maple or elder providing new nesting and foraging habitat;
 - Provision of bat roosting opportunities such as the inclusion of bat boxes or tubes on new buildings;
 - Provision of bee bricks in the new buildings.

REFERENCES/BIBLIOGRAPHY

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- Bright, P., Morris, P and Mitchell-Jones, T.**(2006) *The dormice conservation handbook*, 2nd Edition. English Nature
- CIEEM** (2017) *Guidelines for Preliminary Ecological Appraisal* 2nd Edition, Chartered Institute of Ecology and Environmental Management, Winchester
- Colins** (2016). Bat Surveys – Good Practice Guidelines. Bat Conservation Trust, London.
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- Department for Communities and Local Government (2019)** *'National Planning Policy Framework*.
- Froglife** (1999). *Reptile surveys. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation.* (Advice Sheet 10).
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- Natural England** (2011) *Badgers and development: a guide to best practice and licensing*. Peterborough
- Sussex Biodiversity Data Search** (2019), *Data request* SBRC
- Where's the Path Website** at <https://wtp2.appspot.com/wheresthepath.htm> Accessed on 729th March 2019

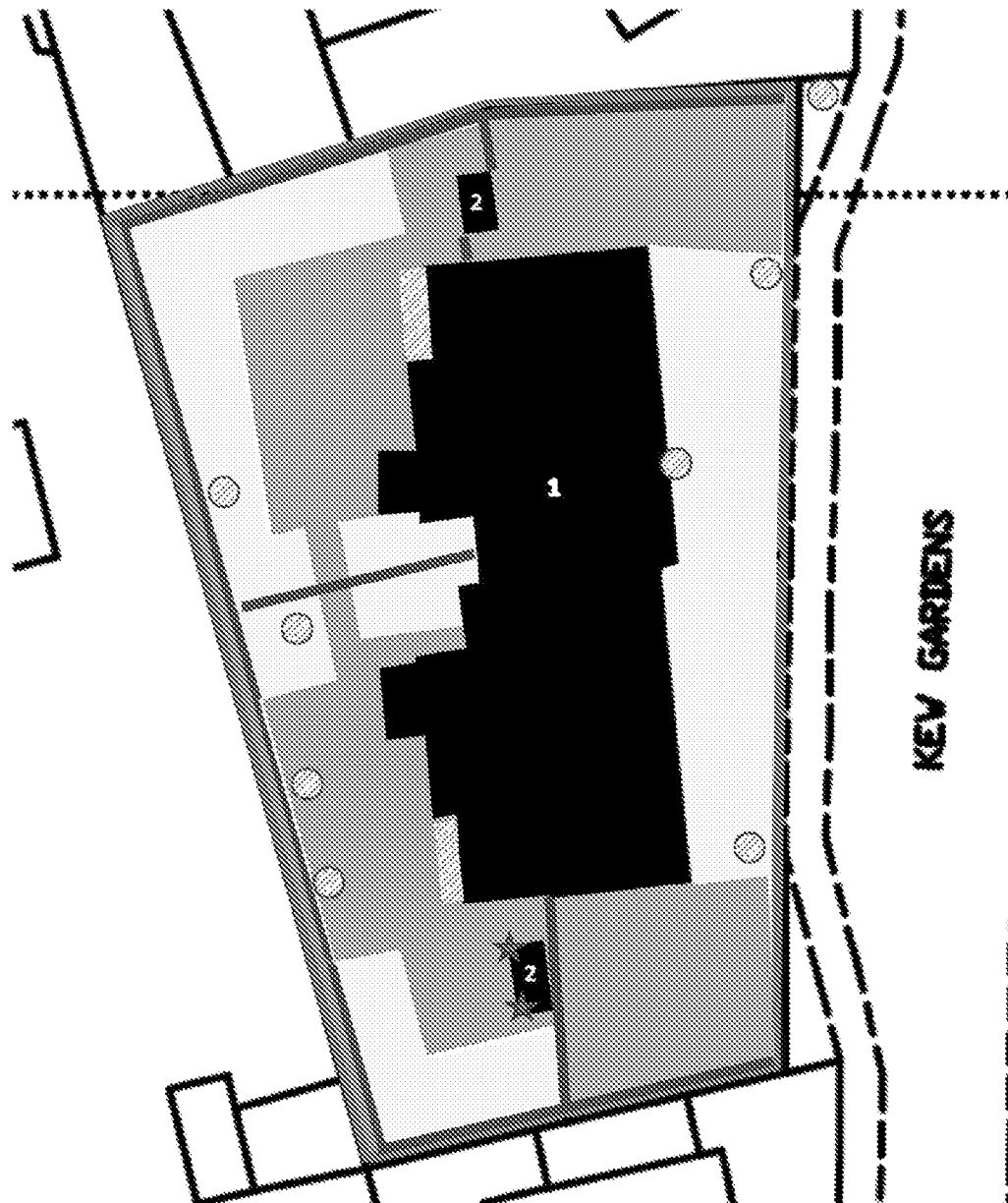


APPENDIX 2: SITE LOCATION



IMAGES TAKEN FROM GOOGLE EARTH 23/03/19

APPENDIX 3 – SURVEY DETAIL AND SITE PHOTOGRAPHS (ALL TAKEN 11TH MARCH 2019)



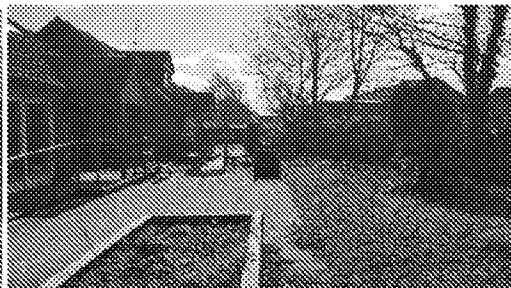
KEY

	SITE BOUNDARY		AMENITY GRASS
	BUILDINGS 1-2		HARDSTANDING
	FENCE		ORNAMENTAL PLANTING
	HEDGE WITH SYCAMORE TREES		BIRD NEST

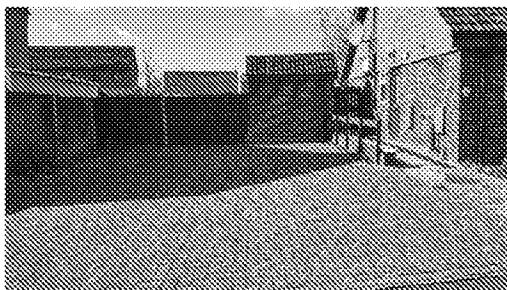
Eastern aspect of site looking south



Western aspect of site looking south



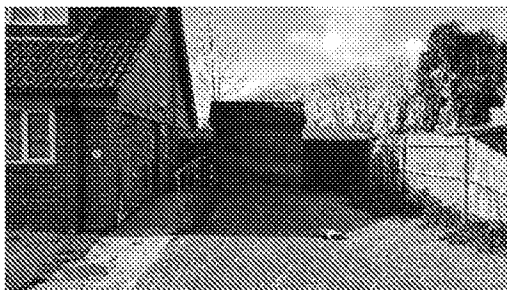
Southern aspect of site looking west



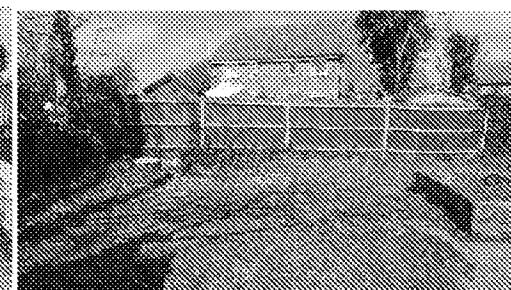
South-west corner



Northern aspect of site looking west



North-west corner



Building 1:

Northern gable end



North-east corner of building



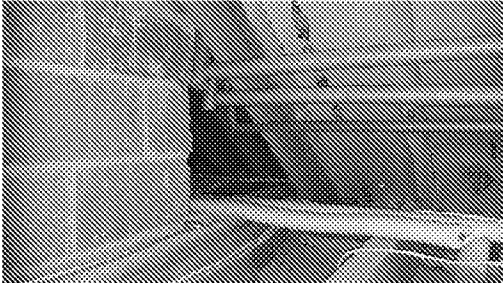
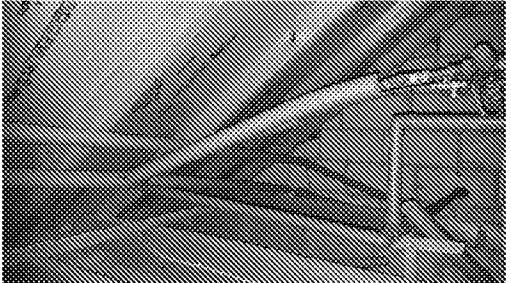
Western elevation



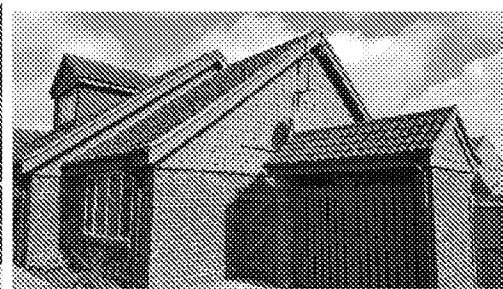
South-west corner



Attic:



Buildings 2:



Bird nests

