

EIA Screening Request

**For Site at Hertswood School
Thrift Farm Lane
Borehamwood
WD6 1TS**

**Prepared by PPML Consulting Ltd for Bellway Homes (North London)
Ltd**

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EIA Screening Review

This document is provided to assist the planning authority in making their screening opinion as to whether the project proposed requires EIA. It does not however absolve the planning authority of their duty to undertake their own screening assessment. An assessment format that the planning authority may find useful is provided by the planning portal¹.

This document is set out in a systematic manner to aid the screening process and provide the information required by the EIA regulations:

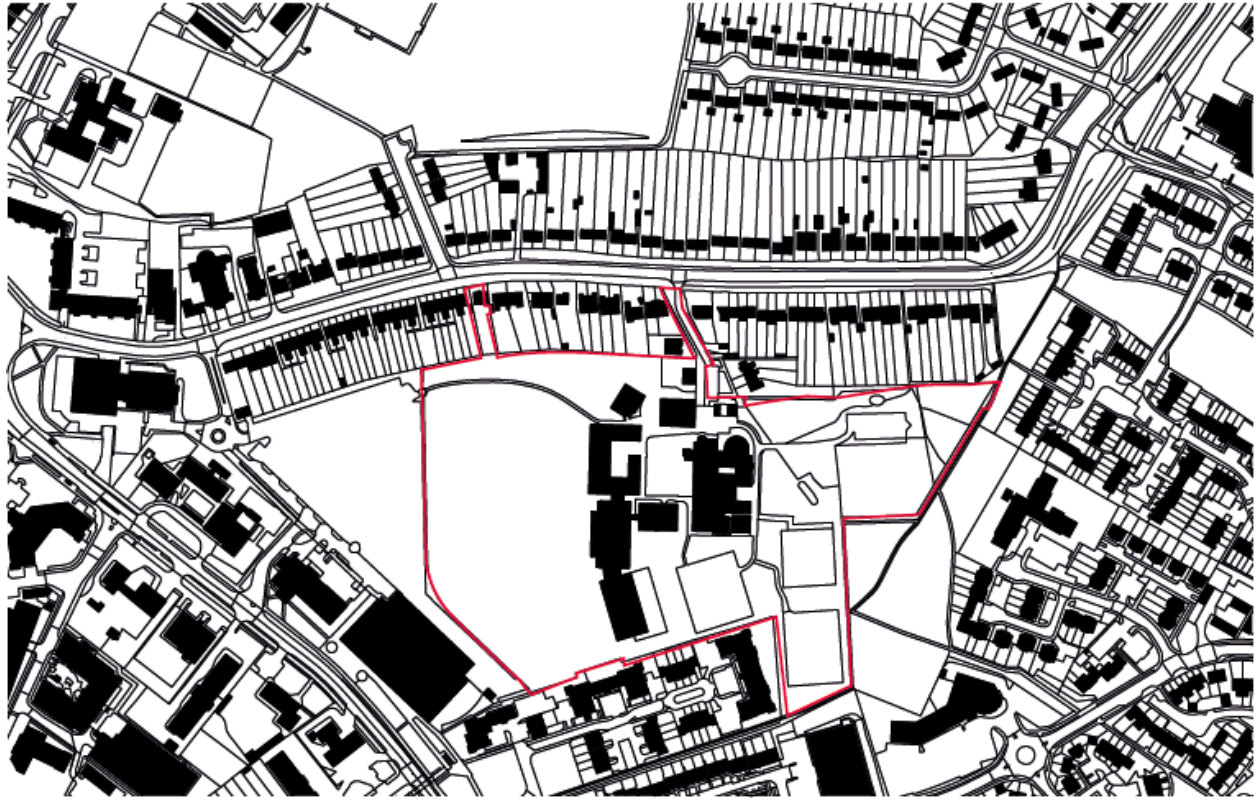
- Section A provides a description of the nature and purpose of the development and a plan sufficient to identify the project site.
- Section B describes the EIA framework within which screening should be undertaken.
- Section C considers the potential for significant effects on the environment.
- Section D concludes the review.

Section A: Nature and Purpose of the Development

The proposal entails the demolition of all the existing school buildings and construction of circa 325 new dwellings (use Class C3). A new entrance off Shenley Road is proposed with houses framing the entrance and views into the development. Buildings provide frontage aligning roads and open spaces and act as visual markers. Views from the central domestic scale buildings lead to taller elements which frame the site boundary and relate to the adjacent development. The current use of the site, comprises a mix of single and two storey school buildings which are clustered together on the site in a central location around the vehicular and pedestrian access of Thrift Farm Lane. The remainder of the site comprises playing fields, sports pitches and a small parking area. The surrounding area comprises a mix of residential, office and leisure uses and the new residential developments of the former Oakland's College and Studio Plaza site. Buildings in the area are predominantly single and two storeys in height. However, the new residential developments along with existing Council Offices have introduced higher 3, 4 and 5 storey buildings to the area.

The whole site is designated Urban Open Land.

Section A: Plan Sufficient to Identify the Land



HERTSWOOD SCHOOL BOREHAMWOOD

Section B: The EIA Framework

Section B.1: Legislation and Background

Environmental Impact Assessment (EIA) is a statutory process governed by UK and European law. The European Union set out the legal framework for EIA in June 1985 in Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment². This has subsequently amended in 1997³, 2003⁴ and 2009⁵.

The EIA Directive is currently undergoing a further review⁶. Public consultation was undertaken in 2010. The results suggest a preference by the majority of parties for only minimal changes to the legal framework but more guidance. In any event the EU's tentative timetable suggests that any changes are unlikely to come into force until 2016.

The UK has incorporated the Directive into its existing legal framework resulting in a multitude of regulations specific to certain acts of Parliament. Most projects however require planning permission in accordance with the Town and Country Planning Act 1990 and it is the regulations relating to this that are most commonly applied. These regulations have been subject to review and amendment since they first came into force in July 1988. The most recent version is the Town and Country Planning (Environmental Impact Assessment) Regulations 2011⁷, which consolidates the 1999 regulations, its four subsequent amendments and various elements of case law.

Note that these regulations only relate to development in England, other devolved parts of the UK have their own regulations.

Section B.2: Government Guidance

In addition to the EIA Regulations and Directive, there is a body of Government guidance that further informs the EIA process, including:

- DETR. (March 1999). Circular 02/99: Environmental Impact Assessment⁸;
- DETR. (November 2000). Environmental Impact Assessment: A Guide to Procedures⁹; and
- Various notes from the ODPM and DCLG in relation to case law (see below).

A consequence of legal challenges is that the Circular and Guide to Procedures are substantially out of date. Revised versions were published in 2006^{10&11} but subsequent legal challenges have resulted in these too being out of date. However, these consultation documents are useful in that they highlight some of the shortcomings of the earlier documents in relation to screening. In particular the consultation documents suggest that the main types of case where EIA might be required and the indicative thresholds set out in the Circular should be deleted as they were found to be misleading. As such the original documents are not considered in detail in this screening review.

Case law is an important factor in EIA, particularly screening. Failure to adequately screen a project is likely to be considered contrary to the objectives of the EIA Directive by the Courts. Since the Directive has a direct effect, the UK Courts have little option other than to quash the planning permission^{12&13}. However, the Courts are generally unwilling to become involved in screening unless the planning authority can be shown to have acted unreasonably^{14,15&16}.

In many instances issues arisen in case law have been resolved through the 2011 Regulations. However, there are still a number of situations to be mindful of:

- The screening opinion must be robust and based on sufficient information¹⁷. However, a balance must be struck on the amount of information necessary¹⁸.
- Screening must be undertaken for all applications including retrospective applications¹⁹, applications for demolition²⁰ and reserved matters applications²¹.
- Whilst a planning application must be considered on its own merits, consideration should be given as to whether it can be developed in isolation or is inevitably part of a larger project^{22,23&24}. An example would be considering a planning application for a power station without considering its associated power lines.
- When interpreting the types of projects set out in Schedules 1 and 2 of the Regulations, it should be remembered that they are intended to have a wide scope and broad purpose^{25&26}. As such it is likely that even the most obscure development could be covered. There has been considerable confusion regarding such that the EU has recently produced further guidance on their interpretation²⁷.
- In certain circumstances it is appropriate to assume that planning conditions would be employed to mitigate significant effects and therefore not require EIA. Case law to date suggests the following tests^{28&29}:
 - The mitigation proposed so as not to cause a significant effect must have a high confidence of achieving the stated objective; and
 - must not be controversial in any way; and
 - must not itself lead to further potentially significant environmental effects.
- Where it is an extension or modification to a project that is being considered, it is the project as extended or modified that should be screened rather than the extension or modification in isolation^{30&31}.

Section C: Possible Effects on the Environment

Section C.1: Applicable Thresholds

Does the Project fall within Schedule 1 (Y/N)?	No
If yes, what is the applicable description?	N/A
If yes, the Project automatically requires EIA	
If no, does the Project fall within Schedule 2 (Y/N)?	Yes
If yes, what is the applicable description?	10(b) urban development project
Is the Project located in a defined 'Sensitive Area' (Y/N)?	No
If yes, proceed to Section C.2	
If no, what is the corresponding applicable threshold in Schedule 2?	0.5ha
Does the Project exceed the applicable threshold (Y/N)?	Yes
If yes, proceed to Section C.2	
If no, and the project is not located within a defined 'Sensitive Area', the Local Authority cannot form a Screening Opinion. However, if they are concerned that the Project may have potentially significant effects on the environment they should request a Screening Direction from the Secretary of State ³² .	

Section C.2: Assessment of Possible Effects

The following assessment has been undertaken with full consideration of Schedule 3 of the Regulations.

Topic	Analysis
The Site	<p>THE SITE</p> <p>The site is located approximately 0.9 m to the north west of Elstree and Borehamwood Rail Station which has a regular service to London (approximately 10-15 minutes). There are bus stops along Shenley Road to the north west of the site with buses to Elstree and Borehamwood town centre. Shenley road runs north east of the town centre. The M1 runs to the south west of the site provided direct links to north and south. The M25 runs to the north of the site providing links direct to London.</p> <p>The site currently consists of single and two storey school buildings which make up Hertswood School and comprises of 5.7 hectares in total. The buildings are centrally located on the site with direct pedestrian and vehicular access from Thrift Farm Lane with large playing fields and sports pitches towards the edge of the site. There are a number of steep slopes running from south west to north east, a number of banks are located centrally on the site and towards the north west. The site is currently in use with access to the school from Thrift Farm Lane.</p> <p>The levels of the site fall by 11m from south west to north east with interim level changes running from north west to east. There are a number of banks located centrally on the site stepping from the existing school buildings to the sports courts to the north east section of the site.</p>

TRANSPORT

Access

The existing school site has a single point of access from Shenley Road via Thrift Farm Lane. Thrift Farm Lane is a two-way flow carriageway with a single footway to the southern side and is linked to Shenley Road via a simple priority junction.

The proposal is to provide a new main site access approximately 130m to the south of Thrift Farm Lane using the land occupied by 300 Shenley Road and the garage of 304 Shenley Road. Thrift Farm Lane will become the sites’ secondary access serving a limited number of the proposed 300 residential units and will also provide emergency access to the whole of the proposed development. The new main site access will be a simple priority junction with a 6.0m carriageway, a 2.0m footway on northern side of the carriageway and a 3.0m shared cycle/footway on the southern side of the carriageway, which will link into the segregated cycle/footway adjacent to the southbound carriageway of Shenley Road.

Shenley Road is a 30mph speed limit road. However, speed data received from Hertfordshire County Council shows that the 85th percentile speed is on average 37.5mph. Therefore, the visibility splays for the junction of 2.4mx43m which are normally required for a 30mph speed limit road, as set out in the Department for Transport’s Manual for Streets, have been increased to 2.4mx90m as set out in the Department for Transport’s Design Manual for Roads and Bridges. This increased level of visibility is achieved to both the north and the south of the proposed access.

Development Trip Generation

The trip generation of the proposed development has been calculated using TRICS and is based on 300 residential units. The table below shows the total number of vehicle movements generated by the proposed development during the AM and PM peak travel times.

	Arrive	Depart	Total
08:00-09:00	46	115	161
17:00-18:00	118	76	194

Proposed Site Access Junction Capacity Assessment

A junction capacity assessment of the proposed site access has been undertaken using

PICADY 5, vehicle trips predicted to be generated by the site (shown in the table above) and traffic flow data for Shenley Road obtained from Hertfordshire County Council.

The Shenley Road traffic flows used for the assessment were based on the day with the busiest AM and PM peak hour traffic flows recorded within the seven days' worth of data. The busiest peak hours recorded in the flow data were 08:00 – 09:00 and 17:00 – 18:00, which also coincides with what is generally regarded as the normal AM and PM peak hour travel times on the transport network, thus providing a robust analysis of the site access junction. The table below shows the total number of vehicle movements on Shenley Road during the AM and PM peak travel times.

	AM	PM	Total
Southbound	470	256	726
Northbound	296	414	710

The highest Ratio of Flow Capacity (RFC) recorded by the assessment for AM peak hour is 35%, which occurred on the site access between 08:15 – 08:45. A junction is generally regarded as reaching its flow capacity when the RFC reaches 85%. Therefore, the proposed site access has 50% capacity available for any increases in traffic. Maximum queue lengths observed for the AM peak hour occurred on the site access between 08:15 – 08:45, with one vehicle queuing.

The highest RFC recorded for PM peak hour is 25%, which occurred on the site access between 17:15 – 17:45. Therefore, the proposed site access has 60% capacity available for any increases in traffic. Maximum queue lengths observed for the AM peak occurred on the site access between 17:15 – 17:45, with one vehicle queuing.

The results of the junction capacity assessment have demonstrated that a simple priority junction is more than adequate for the proposed 300 unit site, with a large amount of RFC reserve for any increases in traffic flows. The results also demonstrate that there is little or no queuing on either the site the access road or Shenley Road, which shows that Shenley Road itself will have little or no impact as a result of the proposed 300 unit site and that the location of the proposed site access will not interfere with the operation of the Meadow Road junction.

The assessment also demonstrates that one site access designed to the specifications of the proposed new main site access has sufficient capacity cope with the level of traffic generated by 300 residential units. However, as previous stated, Thrift Farm Lane will become the sites' secondary access serving a limited number of the proposed residential units and also providing emergency access to the whole proposed development.

Site Accessibility

The proposed development is linked to the start of the town centre for cyclists via a segregated cycle/footway adjacent to the southbound carriageway of Shenley Road near the site, which then converts into an on carriageway cycle way on Shenley Road after its roundabout junction with the A5135 Elstree Way. Borehamwood town centre is approximately 1Km from the proposed development site. Therefore, at an average walking speed of 80m per minute (3mph) or an average cycling speed of 10Km/h (6mph) the town centre can be reached in just less than 13 minutes and six minutes respectively.

The nearest bus stops to the proposed development are on Elstree Way 350m from the proposed main site access. The nearest rail station to the proposed development is Elstree & Borehamwood station which is 1.35Km to the south west. Therefore, at an average walking speed of 80m per minute (3mph) or an average cycling speed of 10Km/h (6mph), the rail station can be reached in just less than 17 minutes and eight minutes respectively.

PRELIMINARY RISK ASSESSMENT

RSK Environment Limited (RSK) was commissioned by Bellway Homes to carry out a geo-environmental assessment of the Hertswood Academy. The objective of the work was to evaluate the condition of the site in order to provide information on the geo-environmental liabilities with residential development and also to provide information on foundation design and associated works.

A preliminary risk assessment (PRA) included a review of existing reports, geological, hydrogeological and hydrological information, a commercially available environmental database, and historical plans; correspondence with regulatory authorities; and a site walkover – this information was used to develop an initial conceptual site model to consider any potentially complete pollutant linkages;

- Man made and natural cavities search;
- Review of published geological data to assess ground stability;
- An intrusive investigation with laboratory analysis plus subsequent groundwater and gas monitoring;
- Development of a refined conceptual site model followed by generic quantitative risk assessment (GQRA) to assess complete pollutant linkages that may require the implementation of mitigation measures to facilitate redevelopment;
- Identification of outline mitigation measures for complete pollutant linkages or recommendations for further work;

Interpretation of ground conditions and geotechnical data to provide recommendations with respect to foundations and infrastructure design;

- Factual and interpretative report with recommendations for further works (i.e. undertake a remedial options appraisal to identify appropriate mitigation measures/produce a remedial implementation and verification plan) and/or remediation as necessary; and
- An assessment of the potential waste classification implications of soil arisings.

Preliminary Flood Risk Assessment

The indicative floodplain map for the area, published by the EA, shows that the site does not lie within a designated flood risk zone.

Environmental

Statistical analyses was conducted on eleven selected samples from the intrusive investigation. The results of the metals and PAH compounds all indicate that the critical concentration is below the action limit in all cases. The results of all the remaining determinants including TPH and BTEX were generally all below the detection limit and have therefore been omitted from the statistical analysis.

The visual inspection at the laboratory identified no materials suspected of potentially containing asbestos and the scheduled laboratory screening for asbestos found no detectable asbestos fibres within the samples of made ground. The results of the contamination testing have been compared with the GAC for phytotoxic effects. The results indicate that a relevant pollutant linkage is unlikely to exist associated with

Preliminary Risk Assessment

phytotoxic effects. For the use of potable water supply pipes, the results of the investigation have been compared with the GAC which are reproduced from *UKWIR Report 10/WM/03/21*.

Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites (UKWIR, 2010). The results indicate that a relevant linkage is unlikely to exist associated with organic contaminants and therefore pollutant polyethylene (PE) and polyvinyl chloride (PVC) water supply pipes are expected to be suitable for use on the development.

Geotechnical

The presence of competent natural soils at a shallow depth indicate that traditional spread footings will be suitable for low-rise residential developments. In areas where trees are to be removed or close to trees that are to remain, deeper foundations may be required due to potential tree desiccation. In such areas, consideration to pile may prove to be a more viable option.

Recommendations

Due to the potentially desiccated soils it is recommended that foundations be constructed at a minimum depth of 1.00m in line with NHBC guidance. Foundations may be required to be constructed deeper depending upon the presence of trees.

The findings of the ground investigation indicate that foundations should be designed for shrinkable soils of high shrinkage, foundations should be designed taking into account all the normal precautions, including minimum founding depths, to minimise the risk of future foundation movements in accordance with NHBC standards or similar. Spread foundations with a width of up to 1.0m and constructed on the London Clay at a minimum depth of 1.0m may be designed using a net allowable bearing pressure of 100 kN/m². The allowable bearing capacity includes an overall safety factor of 3 against bearing capacity failure and with total settlements associated with the bearing pressure estimated to be less than 25mm.

PRELIMINARY RISK ASSESSMENT CONT'D

Ground Conditions

At least seven comprehensive ground investigations reports have taken place by various owners of the property since 1995 to 2012. Bellway reviewed all documentation available and have made recommendations for the suitability of the site for a traditional housing scheme. Ground conditions comprise made ground over clayey sands.

ECOLOGY

ACD Ecology was commissioned by Bellway Homes to carry out an ecological assessment of a parcel of land at Hertswood School, Thrift Farm Lane, Borehamwood,

In August 2013 an extended Phase 1 habitat survey was undertaken, along with an internal and external inspection of buildings to assess bat roosting potential. The site consists of a secondary school and associated grounds, enclosed on all sides by urban mosaic. The site is assessed as providing negligible opportunities for protected species, and is considered not to be restricted by any ecological constraints.

To mitigate for any impacts and enhance the site, the following recommendations have been made;

- Protection of ancient woodland and areas of mature trees within the site;
- Provision of new habitats with ecological value; and
- Provision of bat and bird boxes.

Ecology/Trees

Implementing these recommendations will ensure that there are no significant impacts on habitats or species, and that the proposals will be in conformity with planning policy.

On 3rd October 2013 ACD Ecology carried out a field assessment of a pond located along the north-western boundary of the site at Hertswood School, Borehamwood (OS Grid Reference TQ 20098 97372). The pond was assessed using the Great Crested Newt Habitat Suitability Index (HSI) which combines field and desk based survey to provide a score of a ponds potential suitability to support great crested newts. The assessment is based upon a number of factors, including geographical location, pond area, pond permanence, water quality, amount of shade, presence of waterfowl, presence of fish, the number of ponds within 1km of the survey pond, quality of terrestrial habitat and percentage of macrophyte cover. The pond was assessed using the Great Crested Newt Habitat Suitability Index (HSI) which combines field and desk based survey to provide a score of a ponds potential suitability to support great crested newts. The assessment is based upon a number of factors, including geographical location, pond area, pond permanence, water quality, amount of shade, presence of waterfowl, presence of fish, the number of ponds within 1km of the survey pond, quality of terrestrial habitat and

percentage of macrophyte cover.

Ponds with an HSI score of less than 0.50 are categorised as having poor suitability for great crested newts. The surveyed pond has an HSI score of 0.39. Therefore the pond is assessed as having poor suitability for great crested newts.

Given the results of the HSI and general condition of the pond, great crested newts are unlikely to be present and further survey work is not proposed.

TREES

A tree survey has been undertaken to identify trees of importance on the site to ensure the proposed development protects those trees. An arboricultural impact assessment will accompany the planning application, which will include protection measures during construction. With the incorporation of the mitigation measures identified above, there is not likely to be any significant adverse impact.

Section D: Conclusions

The site is previously developed in part. The proposed development would not have a significant urbanising effects as the site is within an urban area and is adjacent urban development to all sides.

The physical scale of the development will not result in a significant increase in considerations such as traffic, and is well below a capacity of 1,000 dwellings whereupon development would have a significant urbanising effect. The characteristics of the land and the proposed development are not likely to lead to significant environmental impacts. Accordingly, an Environmental Impact Assessment (EIA) is not required.

Notes for Planning Authorities

These notes on procedure are set out to assist planning authorities in adopting their screening opinion:

- The planning officer signing the screening opinion should have the appropriate delegated powers³³.
- The 2011 Regulations now specify that full reasons should accompany a screening opinion whether the project requires EIA or not.
- It is recommended that a screening opinion includes reference to Regulation 4(8) that any person has the right to seek a screening direction from the Secretary of State should they disagree with the screening opinion³⁴.
- The screening opinion must be placed on the public register³⁵.
- Where new information becomes available that would suggest an EIA should be undertaken, the planning authority are under an obligation to review their screening opinion³⁶. Note also that EIA can be required at any time in the consenting process^{37&38}.

References

- ¹<http://www.planningportal.gov.uk/planning/appeals/online/tutorialshelp/onlineappealservicepahelp/onlineappealservicehelpforlpas>
- ²<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31985L0337:EN:NOT>
- ³<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997L0011:EN:NOT>
- ⁴<http://eur-lex.europa.eu/Notice.do?val=285362:cs&lang=en&list=466655:cs,459375:cs,285362:cs,283615:cs,283556:cs.&pos=3&page=1&nbl=5&pgs=10&hwords=&checktexte=checkbox&visu=#texte>
- ⁵<http://eur-lex.europa.eu/Notice.do?val=496647:cs&lang=en&list=496647:cs.&pos=1&page=1&nbl=1&pgs=10&hwords=&checktexte=checkbox&visu=#texte>
- ⁶<http://ec.europa.eu/environment/eia/conference.htm>
- ⁷<http://www.legislation.gov.uk/ukxi/2011/1824/contents/made>
- ⁸<http://www.communities.gov.uk/publications/planningandbuilding/circularenvironmentalimpact>
- ⁹<http://www.communities.gov.uk/publications/planningandbuilding/environmentalimpactassessment>
- ¹⁰<http://www.communities.gov.uk/archived/publications/planningandbuilding/amendedcircular>
- ¹¹<http://www.communities.gov.uk/archived/publications/planningandbuilding/environmentalimpactassessment>
- ¹²<http://www.bailii.org/uk/cases/UKHL/2000/36.html>
- ¹³<http://www.bailii.org/ew/cases/EWHC/Admin/2010/71.html>
- ¹⁴<http://www.bailii.org/ew/cases/EWHC/Admin/2001/711.html>
- ¹⁵<http://www.bailii.org/ew/cases/EWCA/Civ/2003/1408.html>
- ¹⁶<http://www.bailii.org/ew/cases/EWHC/Admin/2009/3320.html>
- ¹⁷<http://www.bailii.org/ew/cases/EWHC/Admin/2010/373.html>
- ¹⁸<http://www.bailii.org/ew/cases/EWHC/Admin/2003/7.html>
- ¹⁹<http://www.bailii.org/ew/cases/EWHC/Admin/2009/745.html>
- ²⁰<http://www.bailii.org/ew/cases/EWHC/Admin/2010/979.html> and <http://www.communities.gov.uk/documents/planningandbuilding/pdf/1878017.pdf>
- ²¹<http://www.bailii.org/uk/cases/UKHL/2006/52.html> and <http://www.communities.gov.uk/archived/publications/planningandbuilding/applicationsoutline>
- ²²<http://www.bailii.org/ew/cases/EWHC/Admin/2002/1920.html>
- ²³<http://www.bailii.org/ew/cases/EWHC/Admin/2007/1526.html>
- ²⁴<http://www.bailii.org/ew/cases/EWHC/Admin/2010/416.html>
- ²⁵<http://www.bailii.org/ew/cases/EWCA/Civ/2003/140.html>
- ²⁶<http://www.bailii.org/ew/cases/EWHC/Admin/2009/3428.html>
- ²⁷http://ec.europa.eu/environment/eia/pdf/interpretation_eia.pdf
- ²⁸<http://www.bailii.org/ew/cases/EWHC/Admin/2003/8.html>
- ²⁹<http://www.bailii.org/ew/cases/EWHC/Admin/2005/191.html>
- ³⁰<http://www.bailii.org/ew/cases/EWHC/Admin/2007/1623.html>
- ³¹<http://www.bailii.org/ew/cases/EWHC/Admin/2009/595.html>
- ³²<http://www.bailii.org/ew/cases/EWCA/Civ/2001/1012.html>
- ³³<http://www.bailii.org/ew/cases/EWHC/Admin/1999/298.html>
- ³⁴<http://curia.europa.eu/jurisp/cgi-bin/form.pl?lang=en&Submit=Rechercher&alldocs=alldocs&docj=docj&docop=docop&docor=docor&docjo=docjo&numaff=C->

[75/08&datefs=&datefe=&nomusuel=&domaine=&mots=&resmax=100](#) and

<http://www.communities.gov.uk/documents/planningandbuilding/pdf/letterenvironmentaljudgment.pdf>

³⁵ <http://www.bailii.org/ew/cases/EWHC/Admin/2002/2009.html>

³⁶ <http://www.bailii.org/ew/cases/EWHC/Admin/2000/278.html>

³⁷ <http://www.bailii.org/ew/cases/EWHC/Admin/2001/1001.html>

³⁸ <http://www.bailii.org/uk/cases/UKHL/2006/52.html> and

<http://www.communities.gov.uk/archived/publications/planningandbuilding/applicationsoutline>