Wiltshire County Council and Swindon Borough Council

Joint Waste Site Allocations Site Survey Report

# Prepared for Wiltshire County Council Swindon Borough Council

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## 1.0 Introduction

1.1 This report sets out the results of a series of site surveys carried out in order to establish the potential planning constraints on sites identified for allocation in the Wiltshire and Swindon Waste Site Allocations preferred Options document. The Planning and Compulsory Purchase Act 2004 (the Act) required the Planning Authorities in England and Wales to implement a new system of Planning documents that take the place of Structure Plans and Local Plans. The new Local Development Frameworks (LDFs) are to be produced in accordance with a timetable identified in the Local Development Scheme submitted by the Authority to central government.

1.2 Each LDF comprises several documents, known as Development Plan Documents (DPDs) and each of those documents progresses through several stages of development. This report is concerned with the evidence base to inform the Waste Site Allocations DPD. The definitive guidance on producing DPDs is Planning Policy Statement 12 (PPS12)<sup>1</sup> and the Companion Guide to PPS12<sup>2</sup>. For Site Allocation DPDs PPS12 states that;

"The identification of sites should be founded on a robust and credible assessment of the suitability, availability and accessibility of land for particular uses or mix of uses."

1.3 Section 8.8 of the Companion Guide expands on this theme and details the approach that should be followed in producing this Document. This current project allows the client to take forward their selected sites with confidence that they are not going to be deleted from the final document through a fundamental failure relating to the subjects considered during the project.

1.4 The client has established the need for differing sizes and types of facility/use and has identified a selection of sites that may be suitable for each facility or use. That exercise resulted in a geographical spread of sites throughout Wiltshire County and Swindon Borough. The sites were required to conform with the Draft Regional Spatial Strategy for the South West (public consultation period ends 30 August 2006), and the policies set out in the Wiltshire and Swindon Waste Core Strategy DPD<sup>3</sup> and the Wiltshire and Swindon Waste Development Control Policies DPD<sup>4</sup>. The sites were then appraised by the client using a method that conforms to the requirements of Sustainability Appraisal imposed by the Act. This appraisal applied exclusionary criteria based on anticipated impacts on areas of land subject to statutory and non-statutory designations. Discretionary criteria that might demonstrate a desire to avoid certain development were then applied with separate 'Thresholds of Concern', determined by the client, in order to establish whether further, more detailed, surveys were needed. The output from this exercise is a matrix (included at Appendix A) showing which sites were to be surveyed for different topics.

1.5 Atkins staff were tasked with carrying out surveys relating to a total of 57 sites but each site was unique and did not require surveying in every discipline. The

Planning Policy Statement 12: Local Development Frameworks, Office of the Deputy Prime Minister, 2004

Creating Local Development Frameworks A Companion Guide to PPS12, Office of the Deputy Prime Minister, 2004

Wiltshire and Swindon Waste Core strategy development Plan Document, Preferred Options for Consultation Report, June 2006, Wiltshire Council

Wiltshire and Swindon Waste development Control Policies development Plan document, Preferred Options for Consultation Report, June 2006, Wiltshire County Council



numbers in brackets are the number of sites which were identified as needing the various surveys;

(37)
(27)
(28)
(35)
(4)
(6)
(19 + 2)
(1 + 1)
(39)
(11)

1.6 Screening for Appropriate Assessment under the Habitats Regulations<sup>5</sup> was also required for those Natura 2000 sites (SAC/SPA) that may experience an adverse impact as a result of the potential development proposal.

1.7 Each of the surveys was carried out by professionally qualified staff. The methods employed by each of the subject-matter experts are summarised in Section 3 below. The level of detail of investigation that has been carried out is a reflection of the need to add certainty and robustness to the site allocation process but less than that which would be required to support a Planning Application or Environmental Impact Assessment.

<sup>5</sup> Conservation (Natural Habitats &c) Regulations 1994



## 2.0 Policy Context

2.1 This section identifies the legislative and policy context within which the Waste Site Allocations DPD is placed.

## **European Legislation**

#### Framework Directive on Waste 75/442/EEC, as amended by Directive 91/156/EEC

2.2 The European Framework Directive on Waste, as amended in 1991, describes the key elements of Community waste management strategy, including the waste management hierarchy and the principles of proximity and self-sufficiency which remain as key principles underpinning waste planning policy in the UK. The Directive requires that Member States establish national waste management plans, setting out their policies on the disposal and recovery of waste, and a procedure for licensing those companies involved in waste disposal or recovery.

#### Landfill of Waste Directive 1999/31/EC

2.3 The main aim of the Landfill Directive is to prevent, or reduce as far as possible, the negative effects of the landfill of waste on the environment and human health. It has been introduced to ensure that landfill sites across the European Union face strict regulatory controls on their operation, environmental monitoring and long-term care after closure. The Directive also aims to reduce the emission of methane from landfill sites. Where methane is produced the Directive aims to ensure that it is used productively, by requiring the collection, treatment and use, where possible, of the gas from all landfills receiving biodegradable waste. To help fulfil its objective of reducing methane emissions, the Landfill Directive introduces progressively diminishing limits on the landfill of biodegradable municipal waste.

2.4 The UK, along with other countries with a high dependence on landfill, has been granted a four year derogation to meet the targets imposed by the Directive but those targets can only be met by increased recycling at source and the pre-treatment of wastes to reduce the quantity sent to landfill. This requirement generates the need for recycling and composting facilities.

### Animal By-Products Regulation (EC) 1774/2002

2.5 On 3rd October 2002 the EU adopted Regulation (EC) No 1774/2002 governing animal byproducts, which lays down strict animal and public health rules for the collection, transport, storage, handling, processing and use or disposal of all animal by-products. The Regulation currently applies to the UK, and divides animal by-products into three categories:

(i) Category 1 is the highest risk category and includes material such as Specified Risk Material and the carcases of animals infected, or suspected of being infected, with BSE. The permitted disposal routes are incineration and rendering in a Category 1 rendering plant.

(ii) Category 2 is also high-risk material (e.g. diseased animals, condemned material and animals which are not slaughtered for human consumption). The permitted disposal routes include incineration and rendering in a Category 1 or 2 rendering plant.



(iii) Category 3 is essentially material which is fit for human consumption. The permitted disposal routes are:

incineration; rendering in a Category 1, 2 or 3 rendering plant; use in a pet food plant; use in a technical plant; and treatment in a biogas or composting plant.

2.6 The Regulation would permit the treatment of category 3 material in composting plants and biogas plants. The material would need to be reduced to a size of 12mm and treated at 70°C for at least one hour in a closed vessel on approved premises. The compost or residues could be used as fertiliser on non-pasture land (i.e. land that is not grazed by animals). Manure and digestive tract contents could be used without pre-treatment, but other category 2 material could only be used in a composting or biogas plant if it had first been rendered to the pressure cooking standard. The potential impacts of importing and treating these products, to those sites identified by the Authorities as suitable for composting, will need to be examined closely at the planning application stage.

#### The Water Directive

2.7 The provisions of the Water Framework Directive were brought into law for England and Wales on 2<sup>nd</sup> January 2004<sup>6</sup> and gave rise to a 'daughter' Directive entitled the Groundwater Directive' (GWD). The GWD imposes duties on both Central Government and the Environment Agency and its' purpose is to offer protection to groundwater resources from pollution events. As such it is a material consideration in the formulation of LDFs and has been accommodated by the surveys relating to water quality, water environment and geology.

#### **National Planning Policy and Legislation**

2.8 Central Government provides advice on policy formation to local planning authorities through PPGs and, more recently, Planning Policy Statements. This subsection identifies the guidance which is of relevance to this project.

#### Policy and Guidance

Waste Strategy 2000 Planning Policy Statements Planning Policy Guidance Notes

Legislation

Environmental Protection Act 1990 Environment Act 1995 Finance Act 1996 and the Landfill Tax Regulations Special Waste Regulations 1996 Producer Responsibility Obligations (Packaging Waste) Regulations 1997 (as amended)

<sup>6</sup> Water Environment (Water Framework Directive) (England and Wales) Regulations 2003



Waste Minimisation Act 1998 Animal By-Products Order 1999 and Animal By-Products (Amendment) (England) Order 2001 Landfill (England and Wales) Regulations 2002

2.9 Planning Policy Guidance Notes (PPGs) are being replaced by Planning Policy Statements which set out the Policy framework with which individual policies are to conform. Of particular interest to this process are the following;

PPS1	Delivering sustainable development, ODPM, 2005
PPS7	Sustainable development in Rural Areas
PPS9	Biodiversity and Geological Conservation
PPS10	Planning for Sustainable Waste Management
PPS12	Local development Frameworks

2.10 Several of the PPGs have yet to be replaced and PPG25: Flooding remains relevant to the DPD production process as does Planning Policy Guidance Note 23: Planning and Pollution Control

#### Waste Strategy 2000

2.11 Waste Strategy 2000 describes the Government's vision for better managing waste resources in England and Wales, and sets out the changes needed to deliver more sustainable development. The Strategy sets targets for reducing the amount of household and industrial/commercial waste going to landfill until 2015, as well as for the recovery of municipal waste, the recycling and composting of household waste and the reduction of household waste. The Strategy sets out guidelines about how the Government expects itself, business, the waste management industry, waste planning authorities, waste collection and disposal authorities, the Environment Agency and the community sector to deliver these changes.

#### Planning Policy Statement 1: Delivering Sustainable Development

2.12 PPS1 sets out the overarching planning policies on the delivery of sustainable development through the planning system. These policies complement, but do not replace or override, other national planning policies and should be read in conjunction with other relevant statements of national planning policy. Paragraphs 4 and 5 state that;

4. The Government set out four aims for sustainable development in its 1999 strategy.<sup>7</sup> These are:

- social progress which recognises the needs of everyone;
- effective protection of the environment;
- the prudent use of natural resources; and,

A Better Quality of Life – A Strategy for Sustainable Development for the UK – CM 4345, May 1999. The strategy is currently subject to review.



- the maintenance of high and stable levels of economic growth and employment.

These aims should be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment, and a just society that promotes social inclusion, sustainable communities and personal well being, in ways that protect and enhance the physical environment and optimise resource and energy use.

5. Planning should facilitate and promote sustainable and inclusive patterns of urban and rural development by:

- making suitable land available for development in line with economic, social and environmental objectives to improve people's quality of life;

- contributing to sustainable economic development;

- protecting and enhancing the natural and historic environment, the quality and character of the countryside, and existing communities;

- ensuring high quality development through good and inclusive design, and the efficient use of resources; and,

– ensuring that development supports existing communities and contributes to the creation of safe, sustainable, liveable and mixed communities with good access to jobs and key services for all members of the community.

2.13 The current exercise has been carried out in pursuance of the stated aims in order to support the allocation of sites.

2.14 Paragraphs 19 and 26 of PPS1 give further detail and advice to Local Authorities on the content of their DPDs.

19. Plan policies and planning decisions should be based on:

up-to-date information on the environmental characteristics of the area;

- the potential impacts, positive as well as negative, on the environment of development proposals (whether direct, indirect, cumulative, long-term or short-term)8; and,

- recognition of the limits of the environment to accept further development without irreversible damage.

Planning authorities should seek to enhance the environment as part of development proposals. Significant adverse impacts on the environment should be avoided and alternative options which might reduce or eliminate those impacts pursued. Where adverse impacts are unavoidable, planning authorities and developers should consider possible mitigation measures. Where adequate mitigation measures are not possible, compensatory measures may be appropriate. In line with the UK sustainable development strategy, environmental costs should fall on those who impose them – the "polluter pays" principle.



26. In preparing development plans, planning authorities should:

(v) Take account of the range of effects (both negative and positive) on the environment, as well as the positive effects of development in terms of economic benefits and social well being. Effects should be properly identified and assessed through the sustainability appraisal process, taking account of the current quality of the environment in the area and any existing environmental issues relevant to the plan.

(vi) Ensure that plans and policies are properly based on analysis and evidence. Where the outcome of that analysis and evidence remains uncertain, policy makers should exercise and demonstrate soundly based judgement, taking account of the other principles set out in this paragraph. Where justifiable on the basis of the evidence available, a precautionary approach to proposals for development may be necessary.

2.15 The site survey project has been carried out in support of this advice and the recommended mitigation measures are based on current best practice, within the constraints of the level of detail that has been supplied for the proposed developments.

#### Planning Policy Statement 7: Sustainable development in Rural Areas

2.16 PPS 7 was published in 2004 and expresses Central government objectives and the key principles that should be applied when considering rural land use planning. The sustainable development principles seek to ensure that decisions on development proposals are based on;

- social inclusion, recognising the needs of everyone
- effective protection and enhancement of the environment;
- prudent use of natural resources; and
- maintaining high and stable levels of economic growth and employment.

#### 2.17 Paragraph 4 states that;

Planning authorities should set out in LDDs their policies for allowing some limited development in, or next to, rural settlements that are not designated as local service

centres, in order to meet local business and community needs and to maintain the vitality of these communities.

2.18 In Paragraph 6 it is stated that Local Authorities should;

"(iii) identify suitable buildings and development sites for community services and facilities to meet the needs of the whole community, including disabled users;"

2.19 The Household Waste Recycling Facilities fall directly into this category and the remainder of the sites fall indirectly into the category of sites needed to satisfy the waste treatment and disposal needs of the community at large.



2.20 When Planning Authorities are developing Development Plan Documents they should, according to Paragraph 16;

"(iii) take account of the need to protect natural resources; and

(v) conserve specific features and sites of landscape, wildlife and historic or architectural value, in accordance with statutory designations."

2.21 This guidance is reflected in the range of surveys that have been undertaken in order to give the required level of 'robustness' indicated in PPS12.

2.22 The relatively high occurrence in Swindon Borough and Wiltshire County of nationally designated areas has been a driving factor in the analysis of the site survey information. The protection recommended in PPS7 at this stage of the DPD process is contained in Paragraphs 21 and 22 below;

21. Nationally designated areas comprising National Parks, the Broads, the New Forest Heritage Area and Areas of Outstanding Natural Beauty (AONB), have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty. The conservation of the natural beauty of the landscape and countryside should therefore be given great weight in planning policies and development control decisions in these areas. The conservation of wildlife and the cultural heritage are important considerations in all these areas. They are a specific purpose for National Parks, where they should also be given great weight in planning policies and development control decisions. As well as reflecting these priorities, planning policies in LDDs and where appropriate, RSS, should also support suitably located and designed development necessary to facilitate the economic and social well-being of these designated areas and their communities, including the provision of adequate housing to meet identified local needs.

22. Major developments should not take place in these designated areas, except in exceptional circumstances. This policy includes major development proposals that raise issues of national significance. Because of the serious impact that major developments may have on these areas of natural beauty, and taking account of the recreational opportunities that they provide, applications for all such developments should be subject to the most rigorous examination. Major development proposals should be demonstrated to be in the public interest before being allowed to proceed. Consideration of such applications should therefore include an assessment of:

(i) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;

*(ii) the cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way; and* 

(iii) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

2.23 Local landscape designations are also considered in PPS7 and reliance is placed on robust Landscape Character Assessments (see below) in determining LDD



policies that will, in turn, inform decisions on sustainable development in the rural environment rather than 'rigid' local designations.

#### Planning Policy Statement 9: Biodiversity and Geological Conservation

2.24 PPS9 sets out planning policies on protection of biodiversity and geological conservation through the planning system and requires its' contents to be taken into consideration in the preparation of DPDs.

2.25 Two of the key principles underlying the Government's objectives are;

(i) Development plan policies and planning decisions should be based upon up-to-date information about the environmental characteristics of their areas. These characteristics should include the relevant biodiversity and geological resources of the area. In reviewing environmental characteristics local authorities should assess the potential to sustain and enhance those resources.

(ii) Plan policies and planning decisions should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests. In taking decisions, local planning authorities should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; and to biodiversity and geological interests within the wider environment.

2.26 The site surveys for ecology have taken account of PPS9 and the content of the South West Biodiversity Action Plan (see below). Information sources have included records drawn from the Wiltshire and Swindon Biological Records Centre and records of designated sites from National, County and local levels.

2.27 PPS9 goes on to state at Para 5 that local Development Frameworks should;

(ii) identify any areas or sites for the restoration or creation of new priority habitats which contribute to regional targets, and support this restoration or creation through appropriate policies.

2.28 Where this has been possible, opportunities for enhancement have been identified in the individual ecological reports. Many of the sites show low or negligible ecological residual impacts.

2.29 Paras 6-10 of PPS9 relate to designated Sites of Biodiversity and Geological Conservation Value and with particular reference to the county of Wiltshire, this includes International Sites, Sites of Special Scientific Interest and Ancient Woodlands and Other Important Natural Habitats. In accordance with the need to understand the potential impacts on these designated areas Appropriate Assessments, as defined by the Habitats Directive, have been carried out for the sites which have been given a high degree of protection, designated for their valuable ecological features.

2.30 In summary, PPS9 sets out to find a balance between environmental conservation and development. Where possible, attempts should be made to mitigate against adverse impacts upon the natural environment and each ecological reports states appropriate mitigation measures.



#### Planning Policy Statement 10: Planning and Waste Management

2.31 PPS 10, published in 2005, replaces PPG10 and sets out the Government's policies on planning with respect to waste management. It provides advice about how the land-use planning system should contribute to sustainable waste management through the provision of the required waste management facilities in England and how this provision is regulated under the statutory planning and waste management systems. PPS 10 must be taken into account by local planning authorities as they prepare development plans and may be material to decisions on individual planning applications.

2.32 Paragraph 4 states (partially) that;

Regional planning bodies and all planning authorities should, to the extent appropriate to their responsibilities, adhere to the following principles in preparing planning strategies:

regional planning bodies should prepare regional spatial strategies (RSS) which aim to provide sufficient opportunities to meet the identified needs of their area for waste management for all waste streams. In turn, planning authorities should prepare local development documents that reflect their contribution to delivering the RSS;

2.33 Para 5 of PPS10 advises that Waste Planning Authorities should adhere to the following principle (amongst others) in determining planning applications:

- in considering planning applications for waste management facilities before development plans can be reviewed to reflect this PPS, have regard to the policies in this PPS as material considerations which may supersede the policies in their development plan. Any refusal of planning permission on grounds of prematurity will not be justified unless it accords with the policy in The Planning System: General Principles.

2.34 Para 17 details the requirement for allocation of areas for different types of facilities as follows;

Waste planning authorities should identify in development plan documents sites and areas suitable for new or enhanced waste management facilities for the waste management needs of their areas. Waste planning authorities should in particular:

 allocate sites to support the pattern of waste management facilities set out in the RSS in accordance with the broad locations identified in the RSS; and,

 allocate sites and areas suitable for new or enhanced waste management facilities to support the apportionment set out in the RSS.



2.35 The type of facility that could be placed on a particular site should also be shown in the Plan and in this case the acceptable types are detailed in the Waste Core Strategy Preferred Options Report (see below).

#### Habitats Regulations

2.36 In the UK, the Habitats Directive is implemented through the Conservation (Natural Habitats &c) Regulations 1994 (the "Habitats Regulations"). Appropriate assessment of plans and projects is required by Articles 6(3) and 6(4) of the European Habitats Directive:

"6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public"

"6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest".

2.37 Natura 2000 sites include Special Areas of Conservation (SAC), Special Protection Areas (SPA). The UK Government (in the accompanying circular to Planning Policy Statement 9 (PPS9)) also affords the same protection to sites designated under the Ramsar convention.

2.38 European Commission guidance (Assessment of plans and projects significantly affecting Nature 2000 sites, 2001 - recommends a four stage process of appropriate assessment (AA):

- 1. Screening: identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;
- 2. Appropriate assessment: considers the impact on the integrity of the Natura 2000 sites of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, it assesses the potential mitigation of those impacts;



- 3. Assessment of alternative solutions: examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;
- 4. Assessment where no alternative solutions exist and where adverse impacts remain: assesses compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

#### Consultation

2.39 Regulation 48(3) of the Habitats Regulations requires consultation with 'the appropriate nature conservation body' about whether the plan is likely to affect the integrity of any Natura 2000 site. The appropriate nature conservation body in England is Natural England (previously known as English Nature).

#### Regional Spatial Strategy

2.40 The Wilshire and Swindon Waste Core Strategy Preferred Option for Consultation Report states that;

"In July 2004 the SWRA approved their Regional Waste Strategy, a key document that sets the vision and approach for achieving sustainable waste management throughout the South West Region until 2026, and formally launched the Strategy in October 2004. Prepared in partnership with its member Local Authorities, including Wiltshire and Swindon, the Strategy has also been used to inform the final modifications of the WLP. The Strategy will now be used to monitor the implementation of the WLP and in the preparation of the new WDDs as well as the review of the Wiltshire Municipal Waste Management Strategy and the preparation of the Swindon Municipal Waste Management Strategy.

The Draft RSS sets a number of policies for waste in the South West region. Policy W1 provides that Waste Planning Authorities should make provision in their Waste Development Frameworks for a network of strategic and local waste sites to meet the indicative allowances for their area for the periods 2010, 2013 and 2020. The Draft RSS states that WDFs should include allocated sites or preferred areas for new waste management facilities, sufficient to accommodate the indicative capacity allocations set by the RSS.

The Draft RSS goes on to advise the region's Waste Planning Authorities that the provision of waste facilities should generally avoid protected landscapes such as Areas of Outstanding Natural Beauty and would also be generally inappropriate in Green Belts. Policy W2 of the Draft RSS identifies a hierarchy for the provision of waste facilities with preference being given to waste managed on the site where the waste is produced wherever possible, or where waste cannot be managed at its point of arising it should be managed according to the proximity principle.

The Draft RSS also identifies a number of settlements across the region expected to play a key role in delivering the region's continued growth, These Strategically Significant Town and Cities are therefore expected to play a primary role in delivering infrastructure in the South West and, in the Plan



Area, include Swindon, Salisbury, Trowbridge, and Chippenham. In identifying these settlements policy W2 of the draft RSS states that the location of new waste facilities should be either within, on the edge of, or in close proximity (i.e. 10miles) of the settlement primarily served by the facility. For rural areas and smaller settlements there should be provision for a network of local waste facilities close to centres of population and these should be served by an accessible network of strategic waste facilities."

2.41 The draft RSS is now in its public consultation period and the most relevant policies are Policy RE9 which requires that air quality impacts should be taken into account in Development Plan Documents. Policies W1 and W2 are unchanged. Policy W3 relates to hazardous waste landfill capacity and the need to safeguard existing capacity, make provision for future capacity requirements and hazardous waste transfer, treatment and disposal facilities.

#### Wiltshire Landscape Character Assessment 2005 (LCA)

2.42 The main purpose of the Wiltshire Landscape Character Assessment<sup>8</sup> is to "document the current status of the Wiltshire landscape, furthering the understanding of the landscape resource available in the area and giving an indication of areas in need of enhancement and of conservation. This will enable better-informed decisions to be made on the future management of the landscape and provide an objective basis for developing policies and enhancement and restoration projects."

2.43 Use of the document allows an opinion to be formed on the ability of certain landscape types to accept change through development. The LCA does not categorically state that development of any type should be prevented in any of the classifications identified in the assessment. However, the sensitivity of certain areas is greater than others and each development proposal will eventually require justification at the planning application stage. The completed surveys have had regard to the content of the LCA which defines the following Landscape types;

Type 1: Open Downland	Type 9: Limestone Wold
Type 2: Wooded Downland	Type 10: Limestone Valleys
Type 3: High Chalk Plain	Type 11: Rolling Clay Lowland
Type 4: Low Chalk Plain	Type 12: Open Clay Vale
Type 5: Chalk River Valley	Type 13: Wooded Clay Vale
Type 6: Greensand Terrace	Type 14: Forest-Heathland Mosaic
Type 7: Wooded Greensand Hills	Type 15: Greensand Vale
Type 8: Limestone Ridge	Type 16: Limestone Lowlands

Each of the generic landscape types has a distinct and relatively homogenous character with similar physical and cultural attributes, including geology, landform, land cover, biodiversity and historical evolution.

#### South West Biodiversity Action Plan (SWBAP)

2.44 The SWBAP has been produced by the South West Regional Biodiversity Partnership. The SWBAP represents the assessment of habitats and species of importance, in the regional context, for the South West. PPS9 (see above) requires that Local authorities should 'ensure that policies in local development documents

<sup>8</sup> Wiltshire landscape Character Assessment, Final Report, December 2005, Land Use Consultants



reflect, and are consistent with, national, regional and local biodiversity priorities and objectives.

2.45 The South West Biodiversity Action Plan was developed in 1997. It has since been updated & complemented with the SW Biodiversity Implementation Plan (SWBIP). The SW BIP sets out a framework of policy, priorities and actions to assist in a more joined up approach to biodiversity delivery. It updates those actions included in the SWBAP. The BIP is a contribution to the 'Biodiversity Strategy for England' and seeks to contribute to regional strategies, plans and policies such as the Regional Spatial Strategy and regional agri-environment scheme targeting. As such the SWBAP and SWBIP have been taken into consideration when forming the ecological reports which are based on the extended Phase 1 Habitat surveys.

The generic priorities across the sectors are as follows:

1 Maintain and enhance biodiversity by:

-sensitively managing existing habitats,
-expanding and re-establishing links between fragmented sites and,
- where appropriate, managing at a larger, functional scale (landscape, ecosystem or catchment).

2 Develop integrated sustainable land management practices – that safeguard and enhance the region's biodiversity whilst also bringing benefits to society, the economy and environment.

3 Increase awareness and understanding of the importance of biodiversity to the region's health, quality of life and economic productivity and develop wider support and active engagement.

4 Understand and manage the dynamic processes of change (e.g. climate change) and develop long-term sustainable approaches within the region that focus on the quality, extent and diversity of habitats.



## 3.0 Methodology

3.1 The potential waste development sites, for a variety of different uses were selected by the client using "four main methods of information collection and assessment: site visits; desk top studies; consultation; and assessment"<sup>9</sup>. The site visits were carried out by a qualified Planner and resulted in the identified need for specific surveys to be carried out in accordance with the matrix reproduced at Appendix A. In addition to those specified a further contaminated land survey was undertaken and two surveys for water quality/environment were added relating to sites which had already been noted for ecological Appropriate Assessment (Kingsway Trading estate, Wilton(Salisbury district, S9, inset number 41) and Salisbury Road Business park, Pewsy (Kennet District, K15, inset map 28)).

3.2 Each of the different disciplines provided a method statement that was reviewed by the Project Manager and forwarded to the client for ratification. The purpose of the review and ratification was to ensure that the methods employed fulfilled the requirements of the brief and were of sufficient depth to justify the results that were being demanded from those surveys. Those method statements were subject to consultation within and outside the client Authorities. The agreed method statements were then implemented by the respective personnel within Atkins. Presented below are summaries of the method statements and they are reproduced in full at Appendix B. Lone working was discouraged and Atkins standard control measures were put in place. Where surveys could be coordinated this did occur in order to generate temporal and financial economies.

3.3 As stated in section 1, the level of detail in the surveys would not be sufficient to support a planning application or Environmental Impact Assessment but they were detailed enough to answer the question as to whether the site should not be carried forward to the next stage of the allocation process.

### **Method Statements**

#### Landscape and Visual Impact

3.4 The landscape and visual assessment is split down into four stages due to separating out the consultation element of the study. These are;

Desk study – The main landscape designations relating to the sites were reviewed through the MAGIC website and those sites that were considered to have a key landscape designation were mapped in greater detail. Reference was made to the Countryside Agency's Countryside Character Volume 8 South West database and the Wiltshire Landscape Character Assessment <sup>10</sup>, together with information from District-level assessments.

Consultation – The Countryside Agency and other relevant parties such as the County, Borough and District Landscape Officers were then consulted on the allocation proposals.

Site Visits – Each site was visited by a senior or Principal Landscape Architect in order to provide local data to support the desk-study baseline

Waste Site Appraisals: methodology and matrix, Wiltshire County Council/Swindon Borough Council, undated

Wiltshire Landscape Character Assessment, Final report, December 2005, Land Use Consultants, ISBN 0-86080-508-5



Landscape and Character description, to review potential landscape impacts, to identify key visual receptors and to consider mitigation options.

Reporting – For each site the report contains detail relating to the current baseline condition of the sites, the Landscape character and local features including topography, vegetation and landcover. The report also details the potential landscape impacts and key visual receptors such as local residents, businesses, roads and footpath users. Potential mitigation measures for the site are also described and may include planting, earthworks and site planning.

#### <u>Noise</u>

3.5 The team members visited on a weekday and identified an appropriate location for noise monitoring. Each monitoring exercise took the form of a series of 3 consecutive 5-minute measurements at one position during the working day. The following parameters were measured and recorded:

LAeq, LMax, LMin, LA10, LA90,

3.6 Weather conditions were noted, and no measurement taken during periods of rain, fog, or when windspeeds in the locality exceed 5m/s. All major noise sources were noted for each of the measurement periods.

3.7 All monitoring equipment had been reference calibrated to a UKAS accredited source within the previous 2 years. As a precautionary measure on site calibration was carried out before and after each measurement exercise, and any drift in the calibrated level was recorded. All monitoring equipment will be tripod mounted at a height between 1.2 and 1.5 metres above local ground level in order to obtain the 'free field' reading. The topographical features of the site and surroundings and the location of the nearest noise sensitive receptors (NSR's) were identified as well as any other significant features that may affect noise propagation.

3.8 The team produced a synoptic report detailing the findings of the site visit including copies of all noise monitoring records. Form an opinion of noise mitigation that may be needed to minimise the effect of noise arising from the proposed site development on local NSRs and opinion on the general viability, on noise grounds, of the site operating with the use proposed.

#### Air Quality

3.9 A desk study was undertaken to determine current air quality conditions and issues in the vicinity of each site. With reference to ODPM Mineral Planning Guidance 2 - Annex 1 (Dust), the detailed study area for each site extended to 1km from the anticipated site boundary. Data relevant to air quality conditions in each study area will be compiled in GIS to show:

- Potentially sensitive receptors (human population and designated ecological sites)
- Ambient levels of local air pollutants (using NETCEN background data)
- Levels of traffic on major roads (derived from AADF counts by Government Office Region)
- Existing industrial sources of air pollutants (from local authority and Environment Agency inventories)
- Existing minerals, waste and wastewater treatment sites



- Air Quality Management Areas
- Landuses
- Significant topographic features affecting surface air flow

3.10 Consideration of air quality conditions along potential site traffic route corridors will also be included in the survey.

3.11 An analysis will be undertaken to indicate risk of exposure at identified receptors to fugitive emissions from each surveyed site. The analysis will make use of topographic and representative climate/meteorological data.

3.12 The desk study will be used to inform the recommendation of appropriate best practice mitigation to minimise potential air quality impacts.

#### Traffic/Transport

3.13 The transport method requires every site to be visited without the prior need for desk-top study. The survey staff do not need to enter the site as they are not concerned with traffic movement within the sites. However, they do seek to establish that the site can safely allow vehicles to enter and exit the site

- <u>Site access</u> Look at the possibilities for access and make suggestions about suitable location(s) for access. Where access may be difficult point out potential constraints, such as road width, visibility, etc.
- <u>Off –site highway network</u> Briefly comment on the existing network layout and potential constraints and issues paying particular attention to the routes and junctions in the immediate vicinity of the site. Consider speed limits, widths, and any potential constraints on the network.
- <u>Potential traffic impact</u> Indicate the likely times of greatest impact on the local network and how the local network is likely to deal with additional development related traffic at these times. Indicate likely traffic impact on nearby residential areas, if appropriate.

#### <u>Geology</u>

3.14 The survey evaluated key data including stratigraphy, major structures and borehole information, quarrying site information, RIGS (Regionally Important Geological Sites) and relevant landscape designations.

3.15 The geology surveys were produced through the same process as, and presented in a table and summary format consistent with, the water survey findings. The data sources for these surveys, namely Wiltshire County Council, Envirocheck and the BGS are also consistent with the water surveys. The assessments have been completed using the agreed information and supplemented with published sources. The assessment focused on the area within 1km of each of the sites.

#### Cultural Heritage

3.16 The cultural heritage team undertook the following tasks:



- Review of the existing information on Cultural Heritage assets including the following sources: MAGIC website for information relating to World Heritage Sites, Scheduled Monuments, registered Parks and Gardens and Battlefields; the National Monuments record (NMR) for information on Listed Buildings; and the local Sites and Monuments Record (SMR) for information on undesignated archaeological sites.
- Site visits to inform the understanding of any issues relating to development at the given sites on both known buried archaeological remains or the built heritage (Listed Buildings; upstanding and visible Scheduled Monuments, etc.).
- Preparation of a short report for each site setting out the known or potential constraints to development; summarising with a statement as to whether the constraints identified at this stage could potentially preclude development at the site.

#### Water Quality/Environment

3.17 The water quality and environment surveys evaluated data including hydrology, hydrogeology, abstractions, flood risk, landuse and designations and property.

3.18 The data was collated from a variety of sources and tabulated. Basic details of each site are stated, including name, National Grid Reference (NGR), brief location description and site area, where known. The waste site water environment and quality assessments are presented in table format for simple referencing including:

- Information and results table
- Conceptual Site Model (CSM) matrix

3.19 The CSMs incorporate recommendations including additional works typically employed to address the highlighted development constraints which would be required to progress the site through planning and generic mitigation measures.

3.20 A summary is provided to indicate whether a given site has many and/or significant issues identified which may assist determining its environmental suitability for further consideration of its potential future waste management landuses. The assessment focused on the area within 1km of each of the sites.

3.21 Key data sources include Wiltshire County Council (WCC) with the relevant Districts/Boroughs, Envirocheck Datasheets. The WCC data was largely managed through use of MapInfo Professional 8.0 which is a GIS package. The Envirocheck Datasheets provided the additional information required including Environment Agency data as available.

3.22 The data compiled to support the Water Quality and Water Environment analyses is reproduced at Appendix B.



#### Contaminated Land

3.23 The contaminated land survey is closely allied to the Water and Geological surveys. Initially only one site was considered to require this type of study but a second was added.

3.24 Historical landuse information and their contamination potential was collected from published Ordnance Survey map sheets with reference made to Industry Profiles provided through the IHT Indices website<sup>11</sup>. Current landuse information was collected during site walkover surveys completed during July 2006, and potential future landuse information has been obtained from Wiltshire County Council.

3.25 The contaminated land surveys were structured to look at likely sources and types of contamination, typical pathways of contaminant transport and typical receptors which may be at risk. The assessment was conducted focusing on the area within 1km of each site.

3.26 The principal focus of the contaminated land surveys relate to their historical, current and potential future landuses and any impacts associated with these landuses.

#### Ecology

3.27 The ecological surveys were carried out in three stages.

3.28 The first stage involved the collation of data from previously published reports, survey data, studies and development plans relevant to each site as well as Wiltshire Biological Records Centre which then fed into a desk-based assessment of the sites. Consultation with the County Ecologist took place during this stage.

3.29 The second stage involved the carrying out of 'Extended Phase 1' field surveys broadly following the 'Extended Phase 1' methodology as set out in Guidelines for Baseline Ecological Assessment (Institute of Environmental Assessment 1995). During the extended Phase 1 surveys Phase 1 habitat maps were produced (following standard mapping symbols in the Handbook for Phase 1 Habitat Survey, JNCC, 1993) with target notes to record any notable flora and fauna encountered during the survey.

3.30 The data analysis and reporting element of the process is the final stage. The report for each site consists of a summary report identifying relevant information for each site with an assessment of the nature conservation value for that site, potential impacts of the proposed development, and potential mitigation and enhancement measures. Each ecology summary report is followed by a Phase 1 map, with target notes, and a map showing nature conservation designations and notable species records in the vicinity of the site. The notable species records appear on the maps as points with a grid reference. The species records are accompanied by grid references as, at some points, there are several records which could not all be displayed on the plan. Therefore, a spreadsheet accompanies the maps with a list of notable species records at the appropriate grid reference.

<sup>11</sup> http://uk.ihs.com/



3.31 Atkins standard criteria for nature conservation evaluation and for the assessment of ecological impacts were used to assess each site.

#### Appropriate Assessment

3.31 The full method statement for the Appropriate Assessment screening is reproduced at Appendix C (Appropriate Assessment screening Advisory Notes).



## 4.0 Conclusions and Recommendations

4.1 The aim of the project was to add legitimacy and robustness to the site allocations. This would be achieved by the assessment of the sites by subject-matter experts in the fields of Landscape and Visual Impact, Noise, Air Quality, Traffic/Transport, Geology, Cultural Heritage, Water (Quality/Environment), Contaminated Land, Ecology.

4.2 The level of detail to which the surveys have been carried out satisfy this aim but only allow for two broad conclusions. The first is that the site cannot support the proposed development in terms of that particular subject. The alternative conclusion is that the specific design, layout and methods of operation are not known and, as such, the proposed development <u>may</u> be acceptable with appropriate mitigation. Examples of such mitigation are provided in each survey report but should not be regarded as an exhaustive list until more detailed investigation has been carried out.

4.3 Individual proposals will have to satisfy all other material considerations and policy requirements at the planning application stage. The survey conclusions of the site assessments is summarised in table 4.1 below.

4.4 The majority of sites are shown as acceptable with appropriate mitigation but four of the sites are deemed to be incapable of mitigation for noise reasons. These are;

K1 Broadway, Market Lavington. Small materials recovery facility, waste transfer station or local scale recycling.

NW33 Land off Hartham Quarry, Corsham. Local Recycling

S11 Maidments Skip Hire, Swallowcliffe. Local Scale recycling, materials recovery facility, waste transfer station. Doubts are also expressed about the suitability of the site in visual terms as it lies within an AONB.

SW2 Chapel Farm (extension to landfill), Swindon. Landfill

4.5 In order to assess a given site's suitability for development in noise terms, calculations have been undertaken based on information about the proposed activities, as provided by the client, and representative empirical data based on Atkins' previous experience for the noise levels of these proposed activities. This, combined with a background noise survey, allows indicative conclusions to be drawn about the sites suitability for the uses proposed, in terms of the resulting noise impact. Where several potential uses have been indicated this has resulted in a range of separation distances for different operations. Owing to the lack of detailed design assumptions have had to be made as to the equipment type and location. The worst case scenario would be that the equipment is open to the elements and situated on the boundary of the site.

4.6 Noise calculations have been undertaken for the worst case scenario, whereby background noise level measurements have been taken at the most sensitive receiver in the vicinity of the site (the location which was deemed to be quietest), and initially assuming that any plant on the site is positioned on the boundary of the site where it is in closest proximity to this most sensitive receiver. Distance attenuation has been based on the plan distance between this location and the most sensitive receiver with ground attenuation effects being ignored.



4.7 The above recommendations are, therefore, on the basis of the supplied information and the above assumptions. In the event that the detailed design and enclosure/location of the plant and equipment on a specific site suggest that noise levels are acceptable at noise sensitive locations this will need to be demonstrated at the planning application stage.

4.8 Strong doubts are also expressed about the following sites and will require thorough arguments and mitigation at planning application stage;

NW17 Leafield Industrial Estate, Corsham. Household Recycling Centre, local scale recycling, materials recovery facility. In transport/traffic terms the vehicles will have to pass significant numbers of residential properties and means of dealing with the impact on amenity of those properties.

NW20 Parkgate Farm, Purton. Centralised outdoor composting, in-vessel composting, mechanical and biological treatment, materials recovery facility. The ecological survey has indicated that even with suggested mitigation measures there will still be a minor adverse impact.

S6 Employment Allocation, Mere. Local scale recycling, material recovery facility and waste transfer station. There would be a significant erosion of the rural character of the area. Not deleting this site is predicated upon the existing allocation for employment uses which may not receive consent on similar landscape grounds and this site is weak as a result.

S10 Sarum Centre, Salisbury. Local Scale recycling, materials recovery facility, waste transfer station. The potential for impact on the historic character of the area will require special attention at planning application stage.

S15 Ratfyn, Amesbury. This site has been shown to have significant ecological interest and Appropriate Assessment will be required when or if the planning application process is commenced. Given these considerations this site should be considered as weak but insufficient information is available at the present time to confirm that the site should be rejected.

SW2 Chapel Farm (extension to landfill), Swindon. Landfill. Independently of the recommendation that this site should be deleted for noise reasons it is considered that mitigation of the ecological impact, being the temporary loss of habitats of local value, should feature strongly in any planning application.

WW9 Northacre Trading Estate, Westbury. Energy from Waste, MBT, MRF, IVC, Recycling and Household recycling Centre. The judgement expressed is that the landscape impact is dependent on the urban fringe location and the presence of residential properties. The site is not deleted from consideration but this view is predicated on the assumption that the site would be developed under its' current employment allocation.

WW16 West Ashton Employment allocation, Trowbridge. MRF, WTS, LR. The semi-enclosed rural floodplain character of the site would be significantly affected by the proposed development. The decision not to recommend this site for deletion is based on the assumption that the site will be developed for employment uses.



S3 Brickworth Quarry and Landfill. The fact that this site has been identified as requiring full Appropriate Assessment under the Habitats Regulations must raise doubt about the eventual development of the site but this will be fully tested at the Planning Application stage.

K15 Salisbury Road Business park, Pewsey. The fact that this site has been identified as requiring full Appropriate Assessment under the Habitats Regulations must raise doubt about the eventual development of the site but this will be fully tested at the Planning Application stage.







## Table 4.1Summary of Conclusions by site

Site	Survey Topic	Conclusions	Site Deleted Y/N
K1 Broadway, Market Lavington	Landscape	Due to its semi-enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on residences on Broadway Ledge and the footpath to the south of the site, could be almost entirely mitigated through sensitive site planning and screen planting. Site planning should avoid the loss of the lane with hedge banks that runs through the site.	N
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.	Y
	Air Quality	All air quality risks for the intended use are low without mitigation. Mitigation for dust is recommended. Further assessment should not be necessary.	N
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
	Contaminated Land	The outcome of initial screening to indicate the environmental suitability of Broadway, Market Lavington is that many potentially significant issues were identified and risk mitigation is considered practicable to address most issues although long term environmental management is highly likely to be required. Further assessment requirements should be reviewed.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
K4 Everleigh Waste Management Facility	Landscape	Due to its semi-enclosed setting and existing waste-dominated character, the site could accommodate change. The main visual impacts, on users of the lane and the footpath to the south of the site, could be almost entirely mitigated through sensitive site planning and screen planting. Ideally the footpath should be diverted, as regardless of the proposals, it is already in close proximity to the waste treatment works and is unmanaged. Site planning should avoid the loss of the mature vegetation within the site and along its boundaries.	N
	Cultural Heritage	The risk of potential impact is unknown, but probably low. The three Scheduled Monuments in the vicinity are screened from the Study Area, so there is no potential for impact on their setting.	N
	Water Quality /Environment	Whilst the initial screening to indicate the environmental suitability of Everleigh Waste Management Facility is that several / potentially significant issues have been identified, risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	N
	Ecology	The majority of the site is of negligible nature conservation value (hard standing and operational areas of the site). However the woodland, the species-rich hedgerow and mature Scots pine trees that bound the site to the east are of local nature conservation value. If all of the recommended mitigation is undertaken, the proposed waste facility will have a negligible impact on the ecology of the site, given the size and type of habitat to be lost.	N
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	Ν
K5 Castledown Business Park, Ludgershaw	Landscape	With its current open, semi-rural character, it would be difficult for the site to accommodate works without compromising the rural setting and open chalkland character of the landscape around Ludgershall. However if the site is developed for business use, the residual impact of waste treatment works will be far less. Given the size of the site, with sensitive siting and vegetative screening, the proposals could have a negligible impact on school children, users of the A3026 and employees of the MoD depots to the north and south of the site.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.	Ν
	Ecology	Overall, site is of negligible value; visually pleasing but of limited biodiversity value now that all vegetation has been cleared.	N
K7 Garden Estate, Devizes	Landscape	Due to its partially enclosed setting and existing industrial character, the site could accommodate some change, although this would need to be managed carefully, due to the presence of residential properties to the east and open countryside to the west. The proposals would need to be located away from these visual receptors and planting screens and bunds used around the boundaries to protect the rural setting.	Ν
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
K8 Hopton Industrial Estate,Devizes	Landscape	Due to its existing industrial character, some parts of this site could accommodate change, although care would need to be taken to avoid harming the rural character of the adjacent AONB. The main visual impacts would be on employees and visitors to the Industrial estate, and new facilities would need to be discreetly sited to minimise visual impact. A structure of large trees and hedgerows would help to mitigate visual impact. Consideration will need to be given to the visual impact on local footpaths. To mitigate visual impact on walkers on-site or off-site planting could screen views.	N
	Transport	This site is suitable, in traffic terms, for the proposed uses	Ν
K11 Tinkersfield Farm, Monument Hill, Devizes	Landscape	Due to its enclosed setting and existing waste-dominated character, the site is well placed to accommodate change. Site planning should avoid the loss of mature hedgerows and trees around and within the site, but make use of the existing earth bunds to continue screening views. Care will need to be taken when designing the site entrance to ensure that views into the site from the A342 and Ridgecroft are not opened up.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.	
			N
	Air Quality	All air quality risks for the intended use are low to high without mitigation. Mitigation for dust, bioaerosols and odour is recommended. Detailed assessment should be undertaken.	Ν
	Ecology	The site is assessed as being of negligible value, although further surveys for reptiles and invertebrates will be needed for a proper valuation. Unknown residual impacts at this stage due to the site requiring further surveys. However, if the suggested mitigation is followed, residual impacts should be minimal.	
			Ν
	Contaminated land	The outcome of initial screening to indicate the environmental suitability of Tinkersfield Farm, Monument Hill, Devizes is that many potentially significant issues were identified and risk mitigation is considered practicable to address most issues although long term environmental management is highly likely to be required. Further assessment requirements should be reviewed.	N
K14 Salisbury Road Business Park, Marlborough	Landscape	Due to its semi-enclosed setting and existing commercial character, the site could accommodate change, especially away from the A346. The main visual impacts, on users of this road, and, during the winter, residents to the north, could be almost entirely mitigated through sensitive site planning and screen planting.	Ν
		This site is suitable, in traffic terms, for the proposed uses.	
	Transport		Ν
	Ecology	The majority of site is of negligible nature conservation value (bare earth, hard standing and newly constructed industrial units). However the surface water storage lagoon present within the site and the woodland and disused railway embankment that bound the site are of local nature conservation value. If suggested mitigation is undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
K15 Salisbury Road Business Park, Pewsey	Landscape	Due to its existing commercial character, the site could accommodate change with little change to the visual amenity of the area, although sensitive site planning would have to ensure that existing residential properties on the site would not be adversely affected. It is also likely that additional planting would be needed along the A345 frontage of the site and along the northern boundary to screen views from the river valley.	
			N
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Salisbury Road Business Park, Pewsey is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
	Ecology	The majority of the site is of negligible nature conservation value (areas of hard standing within a business park). However the hedgerows and woodland areas that bound the site are of local nature conservation value (with value for nesting birds) and some of the mature trees surrounding the site have the potential to be used by roosting bats. If all mitigation is undertaken, the residual impacts are likely to be minor given the size and type of habitat to be lost. Providing the Environment Agency PPGs are strictly adhered to and SUDs principles are employed during the operation of the site residual impacts on the River Avon SAC can be avoided. The facility would need to be designed to have no water quality impacts upon the River Avon SAC and construction and operation would require method statements and monitoring programmes to ensure the continued absence of adverse effects on the River Avon SAC.	N
			Ν
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS required	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
NW2 Bumpers Farm Industrial Estate, Chippenham	Noise	Given that the minimum separation distance can achieved within the site boundary and that careful positioning of the development would reduce the separation distance required, indications are that this site would potentially be suitable for the proposed development.	Ν
	Transport	This site is suitable, in traffic terms, for the proposed uses.	N
NW3 Hills Resource recovery Centre, Compton Bassett	Landscape	Due to its enclosed setting and existing industrial character, the site has a high ability to accommodate change. The main visual impacts, on residences to the south and east and the bridleway to the north of the site could be almost entirely mitigated through sensitive site planning and screen planting.	Ν
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
NW6 Eysey Manor Farm, Cricklade	Noise	Given that the minimum separation distance can be achieved within the site boundary, indications are that this site is likely to be suitable for the proposed development with considerate positioning of the development within the site boundary.	N
	Air Quality	Air quality risks for the intended use are low to moderate without mitigation. Mitigation for dust is recommended. Further assessment should not be necessary.	Ν
	Water Quality /Environment	The outcome of initial screening to indicate that the environmental suitability of Eysey Manor, Cricklade is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	
		The site is currently operational as an inert landfill. Risk mitigation is likely to be practical, and must meet the compliance issues which landfill sites may require. This would be significant risk mitigation given the water environment sensitivity in the context of this site.	Ν


Site	Survey Topic	Conclusions	Site Deleted Y/N
	Ecology	Given the scale of habitats within the site and the variety of fauna and flora it supports it has the potential to be important at least at a local level. If mitigation undertaken, the residual impacts on the ecology of the proposed site are likely to be negligible given the size and type of habitat to be lost.	Ν
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	Ν
NW16 Land east of HRC and WTS, Stanton St Quintin	Landscape	Due to its isolated and enclosed setting the site has a high capacity to accommodate change. The main visual impacts, on users travelling along the M4, could potentially be mitigated through screen planting.	Ν
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.	Ν
	Air Quality	Air quality risks for the intended use are moderate to high without mitigation. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bioaeorosols should be required. Detailed assessment is recommended.	N
	Transport	This site is suitable, in traffic terms, for the proposed uses.	N
	Ecology	The majority of the habitats present within the site are of negligible nature conservation value (predominantly arable farmland). The area of semi-natural broadleaved woodland at the western edge of the site is of local importance for nature conservation. If suggested mitigation is undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
NW17 Leafield Industrial Estate, Corsham	Transport	The proposed site would be likely to have an adverse impact on the residential amenity of the area and a potential minor adverse impact on the local highway network. Consideration could be given (in conjunction with the highway authority) to a removal of parking on Potley Lane. In all other traffic/highways aspects the site is suitable for the proposed uses.	Ν
	Ecology	The majority of the habitats present within the site are of negligible nature conservation value (predominantly arable farmland). The area of semi-natural broadleaved woodland at the western edge of the site is of local importance for nature conservation. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	Ν
NW18 Low Lane Extension, Compton Bassett	Landscape	Due to its semi-open setting and existing rural character, the site has a low ability to accommodate change. The main visual impacts, on residences to the north and the bridleway to the south of the site would be difficult to mitigated, even through sensitive site planning and screen planting.	Ν
	Noise	The minimum separation distance can be achieved with the area known as Low Lane Extension but not at the Resource Recovery Centre Area. However, depending on the location of the development within the site, existing buildings and ground topography within the site may offer some screening effects allowing a closer proximity to be achieved. Alternatively, mitigation measures may need to be implemented. Indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary	Ν
	Air Quality	Air quality risks for the intended use are low to moderate without mitigation. Dust and odour mitigation is recommended. Further assessment is recommended for odour.	N
	Transport	This site is suitable, in traffic terms, for the proposed uses.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Geology	The outcome of initial screening to indicate the environmental suitability of Low Lane, Compton Bassett is that several / potentially significant geological issues were identified, with risk mitigation considered to be practicable to address most issues. Further assessment requirements should be reviewed	
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Low Lane, Compton Bassett is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	N
	Ecology	This site is of negligible nature conservation value consisting predominantly of hard standing (including the operational areas of the site) and semi-improved grassland. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	N
NW20 Parkgate Farm, Purton	Landscape	Due to the existing significant landscape and visual detractor of the adjacent landfill, and the relatively visually and physically isolation of the site, sensitive development within the site would minimize the adverse impact on the local and surrounding character and visual receptors. Therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.	<u>N</u>
	Air Quality	Air quality risks for the intended use are low to high without mitigation. Mitigation for dust, odour and bio-aerosols is recommended. Detailed assessment is recommended if residential premises remain within 250m (Parkgate Farm); the assessment should account for the influence of Paven	N
	Transport	Provided access is gained off Mopes Lane via the existing accommodation bridge, this site is suitable, in traffic terms, for the proposed uses.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Ecology	There are no designations on the site and the ecological features within the site boundary are of local nature conservation importance but the habitat in the south-east corner of the site, the disused farm buildings, and the River Key are particularly important features for local wildlife. If all of the mitigation is undertaken the large loss of habitat of local value will still cause an adverse impact of minor significance in the short-term.	Ν
NW21 Parkgrounds Farm, Wootton Bassett	Landscape	The proximity of the M4 and the former landfill to the immediate south of the site have degraded the landscape character of the area, which strongly impacts on the site due to its exposed nature, this gives the site a poor landscape quality. Sensitive site planning and establishment of hedgerows and screen planting will improve the site enclosure allowing the site to accommodate change while minimising adverse landscape and visual impacts of development.	N
	Noise	Minimum separation distances may be achievable within the site boundary depending on the exact use of the site and background noise levels at other nearby sensitive receivers. Indications are that this site would potentially be suitable for the proposed development depending on these factors. It is likely that mitigation measures would be required at this site.	Ν
	Air Quality	Air quality risks for the intended use are low to high without mitigation. Mitigation for dust, odour and bioaerosols is recommended. Detailed assessment is recommended for bioaerosols and odour if the layout of the site is to include composting facilities within 250m of receptors; given the size of the site, there is potential for these activities to be located beyond 250m. The need for further assessment of impacts in-relation to NO <sub>x</sub> and NH <sub>3</sub> and ecology should be considered.	Ν
	Transport	This site is suitable, in traffic terms, for the proposed uses. However the environmental implications on the residential amenity of the village of Brinkworth should be considered.	Ν
	Geology	The outcome of initial screening to indicate that the environmental suitability of Parkgrounds Farm, Wootton Bassett is that few / no significant issues were identified and risk mitigation is considered practicable to address most issues. Further assessment requirements should be reviewed.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Parkgrounds farm is that few / no significant issues were identified and that risk mitigation is considered practicable to address most issues. Further assessment requirements should be reviewed.	Ν
	Ecology	Potential ecological impacts include the loss of large areas semi-improved grassland. Other potential impacts include the possible loss of a large number of hedgerows and semi-mature and mature trees. There may also be the loss of known bat roosts (and trees which may support bat roosts) and the loss of ponds that are known to support great crested newts (and three other waterbodies which may support great crested newts). The overall works are likely to have minor ecological impacts. If the suggested mitigation is undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	Ν
NW22 Porte Marsh Industrial Estate, Calne	Cultural Heritage	Although the development of the existing business park and link road is already likely to have impacted on surviving archaeological deposits, the potential remains for more to be found in the event of further development.	N
NW23 Purton Brickworks Employment Allocation	Landscape	The site is currently a significant landscape detractor, sensitive site planning with low, single or double storey facilities in keeping with the rural style would have a minimal adverse impact. Therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.	N
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
	Ecology	Local: No sites designated for their nature conservation value surround the site. However there are habitats of value to common species including hedgerows and semi- mature and mature trees. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
NW25 Sands Farm Quarry and Landfill, Calne	Landscape	Due to its semi-enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on Old Camp Farm and the residences on Speckley Road, could be partially mitigated through sensitive site planning and screen planting.	N
		The majority of the site is of negligible nature conservation value (factory buildings and hardstanding). However the woodland, the ponds and the Abberd Brook have nature conservation value in a local context.	
		There may be direct loss of a small part of Calne Sand Pits and Pearce's Old Pit (Calne) Wildlife Site. This will not affect the actual water bodies within the designation but will affect terrestrial habitat within the designation. It is unlikely that loss of this area will significantly affect the functioning of the Wildlife Site.	
		There is the potential for the loss of the majority of the woodland within the site, affecting deer and badger habitat (foraging/commuting). There will also be the potential loss of terrestrial habitat used by great crested newts and possible loss of two ponds which could contain great crested newts.	
		There could be water quality impacts on the Abberd Brook which flows adjacent to site.	
		Overall works likely to have adverse impact of minor significance. If the mitigation is undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	
	Ecology		N
Thingley Junction, Chippenham	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.	
			N



Site	Survey Topic	Conclusions	Site Deleted Y/N
		Air quality risks for the intended use are low without mitigation. Some mitigation for dust	
		and odour mitigation is recommended. Further assessment should not be necessary.	
	Air Quality		N
	<b>-</b>	The proposed extension to the site can be accommodated in traffic terms with little impact	
	Transport	on the wider highway network. However, extensive physical changes to the site access	
		will be required. Consideration ought to be given (pernaps in conjunction with the highway	N
		The majority of the cite which is hard standing or have bellest material has paglicible	IN
	Ecology	nature conservation value. However the species rich grassland in association with scrub	
	LCOIOgy	and trees has local value. The hunker requires checking for the presence of roosting hats	
		before the structure can be evaluated. If all mitigation carried out the impacts would be	
		negligible pending the results of the bat survey.	Ν
NW28 Whitehills Industrial Estate, Wootton Bassett	Transport	In terms of traffic impact the site and off-site highways are suitable to accommodate the proposed uses with possible minor improvement to the highway network and consideration of noise/air quality on adjacent properties.	Ν
NW29 Studley Grange Waste Management Facility, Wootton Bassett	Landscape	Due to its semi-enclosed setting and the undulating topography to the south, the site could accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.	N
	Noise	Minimum separation distances may or may not be achievable within the site boundary depending on the exact use of the site. Indications are that for this site to be suitable the proposed development would likely require the implementation of mitigation measures and considerate positioning of the development within the site boundary.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Air Quality	Air quality risks for the intended use are low to high (in-combination with existing landfill) without mitigation. Mitigation for dust and odour is recommended. Detailed assessment should be undertaken to examine cumulative odour impacts.	Ν
	Transport	The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes to the site access. Consideration ought to be given (perhaps in conjunction with the highway authority) to a removal/management regime for vegetation in the verge at the site access.	Z
	Geology	The outcome of initial screening to indicate the environmental suitability of Studley Grange, Wootton Bassett is that several / potentially significant geological issues were identified, with risk mitigation considered to be practicable to address most issues. Further assessment requirements should be reviewed	Ν
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Studley Grange, Wootton Bassett is that few / no significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	N
	Ecology	There are no nature conservation designations on the site and overall the site has local nature conservation value. If all the mitigation recommended is undertaken and development is restricted in the northern part of the site (with management of the habitat) there is the potential for minor beneficial impacts on ecology.	Ν
NW31 Barnground, South Cerney	Landscape	Though a relatively open landscape, the rolling topography of the site with a significant fall away to the south provides for an opportunity to develop the site minimal adverse impact on the local and surround character and visual receptors, therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could potentially be mitigated through sensitive site planning and screen planting.	Ν
	Noise	Given that the minimum separation distance for the lowest measured background noise level can be achieved within the site boundary indications are that this site is likely to be suitable for the proposed development with the implementation of mitigation measures or considerate positioning of the development within the site boundary.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Air Quality	Air quality risks for the intended use are low without mitigation. Some mitigation for dust and odour is however recommended. Detailed assessment should not be necessary.	Ν
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
NW33 Land off Hartham Quarry, Corsham	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation measures in place it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.	Y
	Air Quality	Air quality risks for the intended use are low without mitigation. Some mitigation for dust and odour is however recommended. Detailed assessment should not be necessary.	Ν
	Transport	The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes to the site access. Consideration ought to be given (perhaps in conjunction with the highway authority) to a removal/management regime for vegetation in the verge at the site access.	N
	Ecology	The site is of negligible nature conservation value consisting of areas semi-improved grassland and tall ruderal species. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost. If the treatment of the Japanese knotweed is undertaken this will be a beneficial impact for the habitat surrounding this site.	Ν
S3 Brickworth Quarry and Landfill, Whiteparish	Landscape	Due to its semi-enclosed wooded setting and existing quarried character, the site could accommodate change. The main visual receptor groups, walkers on nearby footpaths and drivers on the A36 are both already well screened, although this could be further enhanced with additional planting.	Ν



Sito	Survey Topic	Conclusions	Site Deleted
	Noise	Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Depending on the location of the development within the site, existing works and intervening ground topography may offer some screening effects allowing a closer proximity to be achieved.	
		All air quality right for the intended use are law. Dust mitigation is recommended. Detailed	N
	Air Quality	All air quality risks for the intended use are low. Dust mitigation is recommended. Detailed assessment should not be necessary.	Ν
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
	Water Quality/ Environment	Outcome of initial screening to indicate the environmental suitability of Brickworth Quarry and Landfill, Whiteparish is that few / no significant issues were identified but that, for those that were identified, risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	
			Ν
	Ecology	The habitats present within the site are of negligible nature conservation value (areas of arable farm land, bare earth, quarry and semi-improved grassland). However the woodland and hedgerows that bound the site are important for nature conservation at a local level. If mitigation undertaken, the residual impacts are likely to negligible given the size and two of behitted to be least.	N
	Annenziata	type of habitat to be lost.	IN
	Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS required	Ν
S4 CB Skip Hire, St Thomas Farm, Laverstock	Landscape	Due to its semi-enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on residences on Broadway Ledge and the footpath to the south of the site, could be almost entirely mitigated through sensitive site planning and screen planting. Site planning should avoid the loss of the lane with hedgebanks that runs through the site.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Air Quality	All air quality risks for the intended use are low to high without mitigation. Dust, bioaerosol (with composting) and odour mitigation is recommended. Detailed assessment should be undertaken if the site is intended for composting.	Ν
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of CB Skip Hire, St Thomas' Farm is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
	Ecology	The CB Skip hire site and the semi-improved grassland field that form the majority of the site are of negligible nature conservation value. However this site is surrounded by habitats that are of local nature conservation value (i.e. hedgerows and dense scrub on railway embankment of value for nesting birds). If all mitigation is implemented the residual impacts are likely to be negligible given the size and type of habitat to be lost.	N
S6 Employment Allocation, Mere	Landscape	Compared to the majority of other sites, this is greenfield in character and to develop it for waste purposes would see a significant erosion of its rural character. Given that the site is allocated for employment use, however, it is likely that this character will change in any event. If the site was developed for business, and with careful siting of the proposed facilities away from the B3092 and adjacent industrial estate, and with the planting of additional screening vegetation, the residual adverse impact of the proposals would be slight - negligible.	N
	Noise	Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Implementation of mitigation measures would serve to attenuate the noise levels from the site and possibly allow a closer proximity to be achieved.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
		The arable field that forms the site is of negligible nature conservation value. However the hedgerows and woodland areas that form the boundaries of the site are of local nature conservation value.	
	Ecology	If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	Ν
50			IN
Kingsway Trading Estate, Wilton	Landscape	Due to its enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on the employees of the trading estate and the railway could be almost entirely mitigated through sensitive site planning and screen planting.	Ν
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.	N
		All air quality risks for the intended use are low to high without mitigation. Dust and adour	IN
	Air Quality	mitigation is recommended. A local air quality assessment should be undertaken for road traffic. Further assessment should be undertaken for dust and odour.	
			Ν
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Kingsway Trading Estate, Wilton is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
	Ecology	The site is assessed as being of negligible nature conservation value. Bats are a target species in the local BAP and if any buildings were supporting roosting bats this would give them some local value. If all of the mitigation recommended above is carried out there should be no residual impacts. However, detailed design of the facility and method statements and monitoring programmes would be required for construction and operation to ensure the continued absence of adverse effects on the River Avon SAC.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	Ν
S10 Sarum Centre, Salisbury	Landscape	These sites are both relatively large, and it is difficult to summarise potential impacts without further information on specific proposals. It is important that both have a relatively strong historic character, albeit dating to the 19 <sup>th</sup> century and this should be protected. Both sites are also well used, with a large number of visual receptors, both on-site and within the surrounding countryside, which is very open in character. Whilst they are brown-field sites, neither currently has a strong heavy-industry or waste-dominated character.	
			N
	Cultural Heritage	Although a number of pre-modern archaeological sites are known in the immediate vicinity of the Study Area, it is likely that the original construction and subsequent development of the airfield may have already impacted on buried archaeological remains. Potential for some survival remains, however. There is the potential for development to impact on the historic character of the area.	N
	Ecology	The majority of the site is of negligible nature conservation value (areas of hard standing and amenity grassland). However the woodland area and the semi-mature and mature trees present within the site are of local nature conservation value. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat likely to be lost.	N
S11 Maidments Skip Hire, Swallowcliffe	Landscape	This site is located in a relatively sensitive position, within an AONB and adjacent to elevated open farmland and a relatively busy A road. The presence of the garage building which is of some historical interest also adds to the character of the site. However, given that the site is already utilised for waste management purposes and that there are no high sensitivity visual receptors within the immediate vicinity of the site, the residual visual and landscape impacts could be negligible, so long as vegetation screens are provided and the site is carefully planned.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is highly unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation measures in place it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.	Y
	Transport	The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes to the site access.	Ν
S12 Harnham Business Park, Salisbury	Landscape	Due to its semi-enclosed setting at the foot of a low scarp and with some mature trees on its northern boundary, and its existing industrial character, the site could accommodate some change. However, due to its semi-rural location and the relatively high number of sensitive visual receptor groups in close proximity to the site, particular care will need to be taken when siting and screening any facility here, to mitigate visual impact.	Ν
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Harnham Business Park is that several / potentially significant issues identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
	Ecology	Due to the man-made nature and lack of habitat to support notable species the the site is considered to be of negligible value for biodiversity. If all of the mitigation recommended above is carried out there should be no residual impacts.	N
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	Ν
S15 Ratfyn, Amesbury	Landscape	Due to its semi-enclosed setting, poor landscape condition and lack of sensitive visual receptors in close proximity, this site could accept some change, however a substantial visual buffer of woodland planting would be required to integrate the facility with the surrounding rural landscape and screen it from the adjacent footpath and more distant views from the north.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.	Ν
	Air Quality	All air quality risks for the intended use are low to high without mitigation. Local air quality (gas engines), dust, bioaerosol and odour mitigation is recommended. Detailed assessment should be undertaken.	Ν
	Transport	The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network however physical changes to the site access or the creation of a new site access may be required.	N
	Cultural Heritage	This is an area of high archaeological interest on the boundaries of the Stonehenge World Heritage Site. The site has been compromised with the development of a chemical works and electricity substation. Potentially little direct impact on cultural heritage, although it will be visible from Woodhenge, compromising the setting of the Stonehenge World Heritage Site.	N
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Ratfyn, Amesbury is that several / potentially significant issues identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
		The fields within the waste allocation boundary are of local value as skylarks and hares are using them.	
	Ecology	There will be a loss of suitable nesting habitat for skylarks and hares if the rough improved grassland and ex-arable fields are developed causing minor ecological impacts which would be difficult to mitigate.	
		If all of the recommended mitigation is carried out there may still be some residual impacts on the River Avon SAC (depending on the results of further assessments required). Detailed design of the facility and method statements and monitoring programmes would be required for construction and operation to ensure the continued absence of adverse effects on the River Avon SAC or to ensure that adverse impacts were within acceptable levels (in discussion with English Nature).	Ν
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS required	Ν
S16 Salisbury Road Industrial Estate, Downton	Landscape	Due to its semi-enclosed setting and existing industrial character, the site could accommodate some change, however sensitive planning would be required to minimise adverse impacts on surrounding residential properties and existing users of the industrial estate. The rural floodplain character of the landscape to the east should be reflected in planting around new facilities to integrate them with their surroundings.	Ν
	Transport	The proposed site can be accommodated in traffic terms with little traffic impact on the wider highway network and no physical changes to the site access. There is a potential for adverse impacts on the residential amenity of the local villages and therefore any potential impacts should be addressed and if necessary mitigated against.	N
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Downton Waste Management Facility is that several / potentially significant issues identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	
			N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Ecology	The site is assessed as being of negligible value. <b>Potential Ecological Impacts:</b> None envisaged as entire site, bar one small plot, are all developed.	
		No residual impacts envisaged.	N
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	N
S17 Solstice Business Park, Amesbury	Landscape	This is an extremely open site, forming part of a wider landscape praised for its sense of remoteness and strong rural character. Although not directly overlooked by residential properties, it is highly visible to users of the busy A303. Whilst woodland planting could help to mitigate the impacts of the proposals on landscape character and visual amenity, this would still erode the open, exposed character of the area. In assessing the effects of the proposals however, it is important to recognise that the land is allocated for employment use and will be developed in any event, thus reducing the overall effects. Such uses may be less industrial in character than a waste site however and careful consideration should be given to how such a facility could be suitably accommodated on this site.	Ν
	Cultural Heritage	As the site has already been developed, evaluation has already been undertaken, so the potential for impact is reduced but not eliminated.	N
	Ecology	The value of this site in terms of habitat which remains and species which may be present is negligible. Because the majority of this site has already been cleared, there will be few if any residual impacts from the development itself if the above advice is adhered to.	N
S19 Thorney Down WTS, Winterslow	Landscape	Given that this site is well-concealed and already predominantly given over to use as a waste transfer station, there would be negligible landscape and visual impacts.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Thorney Down, Winterslow is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	
			Ν
	Ecology	The majority of the site is of negligible nature conservation value (areas of hard standing within an operational waste management facility). However the pyramidal orchids noted at the site are of local nature conservation value. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of babitat to be lost	Ν
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	N
S21 Churchfields Industrial Estate, Salisbury	Landscape	Due to its semi-enclosed wooded setting and existing quarried character, the site could accommodate change. The main visual receptor groups, walkers on nearby footpaths and drivers on the A36 are both already well screened, although this could be further enhanced with additional planting.	Ν
	Noise	Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Implementation of mitigation measures would serve to attenuate the noise levels from the site a possibly allow a closer proximity to be achieved.	Ν
	Transport	More detailed assessment would need to be undertaken in order to determine whether the proposed extension to the site can be accommodated in traffic terms within the wider highway network. Consideration ought to be given to the upgrade/modification of the local junctions given the existing access problems even without the additional traffic to the proposed site.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Churchfields is that many / serious issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
	Ecology	The entire site is built up and all units currently occupied, potential for wildlife is low apart from roosting possibilities in some of the buildings. Overall value is negligible.	N
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	Ν
SW1 Brindley Close/Derby Close, Swindon	Noise	Given that the minimum separation distance for the average background noise level is less than the distance between the site and the most sensitive receiver indications are that this site is likely to be suitable for the proposed development.	Ν
	Air Quality	All air quality risks for the intended use are low to moderate (in-combination) without mitigation. Dust and odour mitigation is recommended. Further assessment should be undertaken for odour.	Ν
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Brindley Close, Swindon is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
	Ecology	The majority of land within the site boundary contains industrial buildings and hard standing and is of negligible nature conservation value. The area of undeveloped land in the north-west is of local nature conservation value, particularly as it links to the riparian habitat and the 'cut-off' section of river which now forms a standing water body. If the recommended mitigation measures above implemented development should have negligible impacts.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
SW2 Chapel Farm Swindon, Area A	Landscape	Though a relatively open landscape, the rolling topography of the site with a significant fall away to the south provides for an opportunity to develop the site minimal adverse impact on the local and surround character and visual receptors, therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.	N
	Noise	Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation measures in place it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.	N
	Air Quality	All air quality risks for the intended use are low to high without mitigation. Mitigation for PM <sub>10</sub> , dust and odour is recommended. Detailed assessment should be undertaken for odour. Further assessment should be undertaken for PM <sub>10</sub> and dust.	N
	Geology	The outcome of initial screening to indicate that the environmental suitability of Chapel Farm, Swindon is that few / no significant issues were identified and risk mitigation is considered practicable to address most issues. Further assessment requirements should be reviewed.	Ν
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Chapel Farm, Swindon is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	N
	Ecology	The site contains no designations but supports habitat of potential use to common species particularly along the hedgerows and within the pond. Therefore the site is considered to have local nature conservation value. Even with mitigation the majority of habitat within the site boundary is likely to be lost to development (at least in the short term until restoration) and therefore the adverse impact would remain of minor significance (pending results of an amphibian survey on the pond).	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
SW3 Chapel Farm, Swindon, Area B	Landscape	Though a relatively open landscape, the rolling topography of the site with a significant fall away to the south provides for an opportunity to develop the site minimal adverse impact on the local and surround character and visual receptors, therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.	N
	Air Quality	All air quality risks for the intended use are low to high without mitigation. Dust, bioaerosol and odour mitigation is recommended. Detailed assessment is recommended for bioaerosols and odour with account for local topography. Further assessment should be undertaken for $PM_{10}$ and dust.	N
	Ecology	The majority of the site is of negligible nature conservation value (areas of improved grassland). However the two areas of woodland that are present adjacent to the south-eastern and south-western edges of the site are of local nature conservation value. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	Ν
SW4 Land within Dorcan Industrial Estate, Swindon	Noise	Depending on the proposed activities for the site, minimum separation distance may be achieved within the site boundary. Implementation of mitigation measures combined with careful positioning of the development within the site boundary would reduce the separation distance required and indications are that this site would potentially be suitable for the proposed development.	Ν
	Air Quality	All air quality risks for the intended use are low without mitigation. Dust and odour mitigation is recommended. If the site does accommodate small-scale energy from waste, MBT, anaerobic / aerobic digestion and in vessel composting, screening assessment is recommended. Detailed assessment should not be necessary.	N
	Transport	This site is suitable, in traffic terms, for the proposed uses.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
SW7 Land at			
Kendrick			
Industrial Estate	Air Quality	All air quality risks for the intended use are low to moderate (in-combination). Mechanical Biological Treatment (MBT) increases the risk of biogerosols and odour: further	
Swindon	An Quanty	assessment is recommended. As a minimum, basic dust and odour mitigation is	
		recommended. Detailed assessment should not be necessary.	N
	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Kendrick Industrial Estate, Swindon is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further	
		assessment requirements should be reviewed.	Ν
		The habitats present within the site are of negligible nature conservation value (areas of	
	E e e le en e	hard standing, bare earth, scrub and quarry).	
	Ecology	type of habitat to be lost.	Ν
SW8			
Mannington			
Swindon	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Mannington Depot site, Swindon is that several / potentially significant issues were identified but that	
		risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
SW10			
Land within			
South Marston			
Fstate			
Swindon	Transport	This site is suitable, in traffic terms, for the proposed uses.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
		The River Cole has county value as a wildlife Site although the habitats within the remainder of the site are of local nature conservation value.	
	Ecology	Rivers and Streams, neutral grassland and scrub habitat are all listed as priority habitats in the Swindon BAP. In additions rivers and hedgerows are also priority habitats in the Wiltshire BAP. If all the mitigation measures are implemented the development of the site should have negligible impacts.	Ν
SW13 Transfer Bridges Industrial Estate, Swindon	Transport	This site is suitable, in traffic terms, for the proposed uses	N
WW1			
Bowernill Industrial Estate, Melksham	Noise	Given that the minimum separation distance can achieved within the site boundary and careful positioning of the development would reduce the separation distance required, indications are that this site would potentially be suitable for the proposed development.	N
	Air Quality	Air quality risks for the intended use are low to moderate without mitigation. Mitigation for dust and odour is recommended. Detailed assessment should not be necessary.	Ν
	Transport	In purely traffic terms the site is considered suitable for the proposed uses.	N
WW2 Brook Lane Trading Estate, Westbury	Transport	The existing access to the site is of considerable length and could easily accommodate the traffic arriving at site with no issues of blocking back to the highway network. As such the proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network. However physical changes to the site access will be required, a process already seems to be taking place with the construction of the new access from the Northacre Business Park.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Brook Lane Trading Estate, Westbury is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	N
		The site itself has negligible nature conservation value but is directly adjacent to the tributary of the River Biss which supports a population of water voles that could be important in a county context.	
		<b>Potential Ecological Impacts:</b> There will be no impacts on designated features of nature conservation value.	
	Ecology	The main potential impact is on a decrease in water quality within the Biss Brook and loss of bank side habitat which may have an adverse impact of moderate significance on the water vole population using the brook. Bird nesting habitat will be lost with the demolition of buildings and there is the potential for impacts on bat roosts.	
		No other potential significant impacts are identified. If all of the mitigation measures are implemented the development should have negligible impact on nature conservation.	Ν
WW3 Canal Road Industrial Estate, Trowbridge	Noise	Given that the minimum separation distance can achieved within the site boundary and careful positioning of the development would reduce the separation distance required, indications are that this site would potentially be suitable for the proposed development.	Ν
	Air Quality	All air quality risks for the intended use are low to moderate without mitigation. Mitigation for dust and odour is recommended. Detailed assessment should not be necessary.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Transport	Whilst the proposed site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes to the site access, consideration ought to be given to the impacts on the residential amenity of the areas through which the HGVs will pass.	
			Ν
WW4 Chitterne Waste Management		This is a greenfield site in an open, rural location that is designated as a Special Landscape Area. Its use for waste treatment would therefore contribute to the erosion of the countryside. With strategically placed, substantial woodland buffers, the visual impact of the proposals could be reduced however. Due to its remote location, few visual receptors would be significantly affected, although until vegetative screens establish, users of the B390 would have glimpses of the site.	
Facility	Landscape		Ν
	Noise	Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Depending on the location of the development within the site, existing buildings/works and intervening ground topography may offer some screening effects allowing a closer proximity to be achieved.	Ν
	Air Quality	Air quality risks for the intended use are low. Dust and odour mitigation is recommended. Detailed assessment should not be necessary.	N
	Transport	The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and minimal physical changes to the site access. Consideration ought to be given (perhaps in conjunction with the highway authority) to a removal/management regime for vegetation in the verge at the site access. The impact on the village of Chitterne should be carefully managed and controlled through condition, legal agreement, or possible 7.5T environmental weight restriction.	Ν
		The outcome of initial screening to indicate the environmental suitability of Chitterne	
	Water Quality/ Environment	Waste Management Facility is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed	
			Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
		Based on current knowledge, the field itself is of negligible value but the mature trees could be of local value due to their maturity and size. Edge habitat cannot be assessed due to lack of surveying. Hedgerows, woodlands and arable farmland are local BAP	
	Ecology	habitats. There should be few if any residual impacts if the suggested actions are implemented.	Ν
	Appropriate Assessment	It is the conclusion of the assessment survey that an Appropriate Assessment IS NOT required	N
WW6 Hampton Business Park (Part of)		Due to the disconnection of the site from the wider rural landscape character and existing adjacent land uses the site has a high capacity to accommodate change. There are no landscape or visual receptors in the vicinity with a high sensitivity to change within the site. The main visual impacts could be almost entirely mitigated through sensitive facility design.	
Melksham	Landscape	and screen planting.	Ν
	Transport	The proposed site can be accommodated in traffic terms with little impact on the wider highway network.	N
	Ecology	The habitats present within the site are of negligible nature conservation value with only semi-improved grassland and species poor hedgerows). However if following further survey work great crested newts are found to be using the habitats within this site for foraging, commuting and/or resting the nature conservation value of the site will increase to local importance. If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	N
		Given the large scale of the site, much of it is relatively well concealed during the summer	N
WW7 LaFarge Cement works	Landscape	months at least, by the strong hedgerow boundaries within its immediate vicinity. The site would be most visible to recreational visitors to Westbury Hill to the south. Given its existing weak rural character, any changes to the site would have little impact, either in landscape or visual terms. Indeed, with additional native woodland buffer planting, there may be the opportunity to enhance parts of the site in visual or landscape terms.	
			Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
	Air Quality	Air quality risks for the intended use are moderate to high. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bio-aerosols are recommended. Detailed assessment should be undertaken.	N
WW9 Northacre Trading Estate, Westbury	Landscape	Given the size and diverse character of this site, it is not possible to make firm conclusions on the significance of the landscape and visual impact, however given that the site is allocated for Employment use and will ultimately be developed, the residual impact is likely to be slight. Given the urban fringe location of the site and proximity of some residential properties and footpaths however, it is essential that sensitive site planning and visual mitigation measures are incorporated.	Ν
	Noise	Minimum separation distances may be achievable within the site boundary depending on the exact use of the site and background noise levels at other nearby sensitive receivers. Indications are that this site would potentially be suitable for the proposed development depending on these factors. It is likely that mitigation measures would be required at this site.	Ν
	Air Quality	Air quality risks for the intended use are moderate to high. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bioaerosols recommended. Detailed assessment should be undertaken.	N
	Ecology	The developed parts of the site are generally of negligible nature conservation value. However, the undeveloped parts of the site support species such as badger, common birds and have the potential to support amphibians and reptiles and therefore have local value. The likely residual impact following mitigation is the loss of badger territory.	Ν
WW15 Warminster Business Park	Noise	Given that the minimum separation distance can be achieved within the site boundary and the current use of the site, indications are that this site would potentially be suitable for the proposed development.	Ν
	Air Quality	Air quality risks for the intended use are low to moderate without mitigation. Dust and odour mitigation is recommended. Detailed assessment should not be necessary.	N



Site	Survey Topic	Conclusions	Site Deleted Y/N
		This site is suitable, in traffic terms, for the proposed uses.	
	Transport		N
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of Warminster Business Park is that many / serious issues were identified and further assessment requirements should be reviewed. Risk mitigation should be practicable to address some or most issues	Ν
	Ecology	The majority of the habitats present within the site are of negligible nature conservation value (areas of hard standing, bare earth, scrub, tall ruderal and semi-improved grassland). If mitigation is undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.	N
		The site is surroutly a groupfield site forming part of the patting of Troubridge Whilet it is	IN
WW16 West Ashton Employment Allocation, Trowbridge	Landscape	relatively well screened by hedgerows and intervening off-site woodland vegetation in the summer months, it is likely to be visible to a wider audience in the winter. The site contributes to the semi-enclosed, rural floodplain character of the area and this would be significantly affected if the site were to be developed. It is important to consider that the site is already allocated for Employment use however, in the West Wiltshire District Local Plan, and could therefore be developed in any event. If this was to occur, the residual landscape and visual effects would be minimal, either resulting in no change or slight adverse effects.	
			Ν
	Water Quality /Environment	The outcome of initial screening to indicate the environmental suitability of West Ashton Employment Allocation is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	
			Ν
	Ecology	The site itself has negligible nature conservation value but is directly adjacent to the tributary of the River Biss which supports a population of water voles that could be important in a county context. If all of the mitigation measures are implemented the development should have negligible impact on nature conservation.	
			IN IN



Site	Survey Topic	Conclusions	Site Deleted Y/N
WW17 West Wilts Trading Estate,	Noise	Given that the minimum separation distance can be achieved within the site boundary and the current use of the site, indications are that this site would potentially be suitable for the proposed development.	
Westbury			Ν
	Air Quality	Air quality risks for the intended use are moderate to high without mitigation. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bio-aerosols are recommended. Detailed assessment should be undertaken.	
	y		Ν
	Transport	This site is suitable, in traffic terms, for the proposed uses subject to small scale mitigation measures.	
			N
	Cultural Heritage	The area is clearly of some medieval interest, notably the moated site within the deer park associated with the earlier Brooke Hall. However, the development of the business park is likely to have negatively impacted on other archaeological features. Potential impact on the setting and context of the Scheduled Monument (although already heavily compromised).	
			N
	Water Quality/ Environment	The outcome of initial screening to indicate the environmental suitability of Kendrick Industrial Estate, Swindon is that several / potentially significant issues were identified but that risk mitigation is considered practicable to address most issues and further assessment requirements should be reviewed.	Ν
		The majority of the site is of negligible nature conservation value (areas of hard standing	IN
	Ecology	within a business park). However the pond present within the site and the hedgerows and woodland areas that bound the site are of local nature conservation value (with value for nesting birds). A number of the mature trees surrounding the site have the potential to be used by roosting bats.	
		type of habitat to be lost.	Ν



Site	Survey Topic	Conclusions	Site Deleted Y/N
WW18 Westbury Waste Management Facility	Landscape	Given the large scale of the site, much of it is relatively well concealed during the summer months at least, by the strong hedgerow boundaries within its immediate vicinity. The site would be most visible to recreational visitors to Westbury Hill to the south. Given its existing weak rural character, any changes to the site would have little impact, either in landscape or visual terms. Indeed, with additional native woodland buffer planting, there may be the opportunity to enhance parts of the site in visual or landscape terms.	Ν
	Air Quality	All air quality risks for the intended use are low to high (in-combination). Mitigation for dust, bioaerosols and odour is recommended. Detailed assessment should be undertaken to examine cumulative impacts.	Ν

Joint Waste Site Allocations Site Survey Report



## Appendix A – Site survey matrix





	Joint Waste Site Allocations Site	Survey Report											
Site	Site Name	Survey Type Needed											
Ref		Landscape	Noise	Air Quality	Traffic / Transport	Geology	Cultural Heritage	Water (Quality / Environ ment)	Contami nated Land	Ecology	Ecology – Appropriate Assessment		
Kennet	District				<u>-</u>					•			
K1	Broadway	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$				
K4	Everleigh	$\checkmark$					V	$\checkmark$		$\checkmark$	☑ (SPA)		
K5	Ludgershall	$\checkmark$	$\checkmark$							$\checkmark$			
K7	Garden Ind Est	$\checkmark$			$\checkmark$								
K8	Hopton Ind Est	$\checkmark$			$\checkmark$								
K11	Monument Hill	$\checkmark$	$\checkmark$	V						V			
K14	Marlborough	$\checkmark$			$\checkmark$					$\checkmark$			
K15	Pewsey	V			$\checkmark$					$\checkmark$	☑ (SAC)		
North W	iltshire District												
NW2	Chippenham		$\checkmark$		V								
NW3	Compton Bassett	V			V								
NW6	Eysey Manor		$\checkmark$	V				$\checkmark$		$\checkmark$	☑ (SAC)		
NW16	Stanton St Quintin	$\checkmark$	$\checkmark$	V	V					$\checkmark$			
NW17	Leafield Ind Est				V					$\checkmark$			
NW18	Low Lane	$\checkmark$	$\checkmark$	V	V	V		$\checkmark$		$\checkmark$			
NW20	Parkgate Fm	$\checkmark$		V	V					$\checkmark$			
NW21	Parkgrounds Farm	V	V	V	V	V		V		$\checkmark$			
NW22	Porte Marsh Ind Est						V						
NW23	Purton				$\overline{\checkmark}$					$\checkmark$			
NW25	Sands Farm	V								$\checkmark$			
NW27	Thingley		$\checkmark$	V	$\checkmark$					$\checkmark$			

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VW28	Whitehills Ind Est				V						
VW29	Studley Grange	$\checkmark$	V	V	$\checkmark$	$\overline{\mathbf{A}}$		$\checkmark$	$\checkmark$		
NW31	BarnGround	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$						
VW33	Hartham Quarry		$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$		
Salisbur	y District										_
S3	Brickworth	$\mathbf{V}$	$\mathbf{N}$	$\mathbf{N}$	$\mathbf{\nabla}$				$\mathbf{N}$	☑ (SAC)	
54	CB Skip Hire	$\mathbf{N}$		$\mathbf{N}$				$\checkmark$	$\checkmark$		
S6	Mere	$\checkmark$	$\mathbf{N}$						$\checkmark$		
59	Wilton	$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$	☑ (SAC)	
S10	Sarum centre	V					V		$\checkmark$		
S11	Swallowcliffe	$\checkmark$	$\overline{\mathbf{A}}$		V						
S12	Harnham	$\checkmark$						V	$\mathbf{\overline{A}}$	☑ (SAC)	
S15	Ratfyn	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	☑ (SAC)	
S16	Downton	$\checkmark$			$\checkmark$			$\checkmark$	$\checkmark$	☑ (SAC)	
S17	Solstice, Amesbury	$\checkmark$					$\checkmark$		$\checkmark$		
S19	Thorney Down	$\checkmark$							$\checkmark$	☑ (SPA)	
S21	Churchfields	$\checkmark$	$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	☑ (SAC)	
Swindon	Borough										_
SW1	Brindley Close		$\mathbf{N}$	$\mathbf{N}$				$\mathbf{N}$	$\mathbf{N}$		
SW2	Chapel Farm (landfill)	$\mathbf{V}$	V			V		V	Ŋ		
SW3	Chapel Farm (Composting)								Ŋ		
SW4	Dorcan Area A		$\checkmark$	$\checkmark$	V						
SW6	Groundwell										
SW7	Kendrick			V	V			$\mathbf{\overline{A}}$	V		
SW8	Mannington							$\mathbf{\overline{\mathbf{A}}}$			
SW10	South Marston				$\overline{\mathbf{A}}$				$\checkmark$		

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SW13	Transfer Bridges				$\checkmark$								
SW14	Waterside												
West Wi	Nest Wiltshire District												
WW1	Bowerhill		$\checkmark$	$\checkmark$	$\checkmark$								
WW2	Brook Lane				$\checkmark$			$\checkmark$		$\checkmark$			
WW3	Canal Road		$\checkmark$	$\checkmark$	$\checkmark$								
WW4	Chitterne	V	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		V	☑ (SPA)		
WW6	Hampton	$\checkmark$			V					V			
WW7	LaFarge	$\checkmark$		$\checkmark$									
WW9	Northacre	$\checkmark$	V	$\checkmark$						V			
WW15	Warminster		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		V			
WW16	West Ashton	$\checkmark$						$\checkmark$		$\checkmark$			
WW17	West Wilts Trading Est		V	V	V		V			☑?			
WW18	Westbury Waste Management Facility	V		V									



Joint Waste Site Allocations Site Survey Report


Appendix B – Water Quality/Water Environment/Geology Base Data

#### Site: K4 Everleigh Waste Management Factility

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is 660m south - undefined	Envirocheck	Potential receptor
		The River Bourne is 4.7km to the east of the site.	Map info	No potential receptors within 1km marked
	Current Discharge Consents	None are recorded within 1km of the site	Envirocheck	No potential sources identified
	Historical Discharge Consents	None are recorded within 1km of the site	Envirocheck	No potential sources identified
	Pollution Incidents	None are recorded within 1km of the site	Envirocheck	No potential sources identified
	Surface Water Quality	No river quality, biology, chemistry data available within 1km of the site.	Envirocheck	No data available
				More remote Environment Agency sampling locations of surface water quality must be searched.
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Aquifer and groundwater are potential pathway and receptor
		The site is within zone II of an SPZ, with SPZ zone I 250m west of the site, ref sw200 – Upavon borehole	Envirocheck	SPZ is a potential receptor
	Likely direction of groundwater movement	Likely to be south to southwest direction with topography	Map info	
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable	Map info	Major aquifer / groundwater is a potential pathway and receptor
		Soil classified as vulnerability = 1 i.e. high leaching potential		
Abstractions	Surface Water Abstractions	None are recorded within 1km of the site	Envirocheck	No potential receptors identified
	Public Water Abstractions	None are recorded within 1km of the site	Envirocheck	No potential receptors identified



Joint Waste Site Alloca	ations Site Survey Report			
Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
	Private Water Abstractions	There are no groundwater abstractions within 1km of the site	Envirocheck	There are no groundwater abstractions within 1km of the site to consider as potential receptors
		There are 9 abstractions between 1 and 2km from the site		
Flood risk	Details	The site is not directly affected by any flooding zones	Map info	Unlikely to impact site directly
Land	Designations/ Sensitive landuses	North Wessex Downs AONB is immediately next to the site to the north There are three Scheduled Ancient Monuments within 1km of the site There is an area of Ancient and Replanted Woodland 130m northeast of the site. This site is also Everleigh Ashes Wildlife site.	Map info and Envirocheck	There are several potential receptors within 1km including the AONB, 3 SAMs, an Ancient and replanted wood and a wildlife site
	Landuses	Existing / restored landfill immediately adjacent to the site	WCC map	Landfill is a potential source of current contamination
Property	Conservation	No conservation areas within 1km	Map info	No potential receptors identified

### Site: K15 Salisbury Road Business Park, Pewsey

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is the River Avon, 10m to the north of the site, which drains locally to the southwest	Map info	R Avon is a potential receptor
		R Avon is 10m to northwest	Envirocheck	



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Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Current Discharge Consents	<ul> <li>Wessex Water         <ul> <li>Have 4 current discharge consents:</li> <li>Sewerage storm overflow, permitted Sept 1990 on site</li> <li>Sewage final effluent discharge, permitted Dec 2005 40m north of site</li> <li>Storm overflow permitted Dec 2005, 60m northwest of site</li> <li>Sewage discharges into R Avon, issued Dec 2000, 4660m northeast of site</li> </ul> </li> <li>Rosalind &amp; J Gray         <ul> <li>Final treated sewage effluent to soakaway discharge from Oct 1999</li> <li>130m northwest</li> </ul> </li> <li>Kuwait Petroleum Gb Ltd (formerly Pewsey Service Station and Pace Petroleum Ltd)         <ul> <li>Trade discharge – site drainage from Apr 1997</li> <li>600m northeast</li> <li>Discharge to R Avon</li> </ul> </li> <li>RJ Leighfield and Sons Ltd         <ul> <li>Retail distribution trade discharge into R Avon</li> <li>Permitted May 1996</li> <li>the northeast of site</li> </ul> </li> </ul>	Envirocheck	7 potential sources of off site contamination
	Historical Discharge Consents	<ul> <li>Wessex Water         <ul> <li>Have 8 historical discharge consents</li> <li>4 for final treated effluent, 4 are 40m north of site</li> <li>4 for storm overflow, 3 of which were 55m northwest of site, 1 is 200m northeast of site</li> <li>All revoked between 1993 and 2005</li> </ul> </li> <li>J Black         <ul> <li>Scrap metal dealer – site drainage to soakaway</li> <li>Permitted between 1997 to 1999, now revoked</li> <li>Site 880m north of site</li> </ul> </li> <li>Crs pioneer         <ul> <li>Discharge of surface water to unspecified receptor</li> <li>Permitted from 1991 to 1999</li> <li>tkm northeast of site</li> </ul> </li> </ul>	Envirocheck	10 historical potential sources of off site contamination



Joint Waste Site Allo	Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome	
	Pollution Incidents	<ul> <li>Two minor pollution incidents have been recorded:</li> <li>Organic chemical spill on a farm 530m northwest of the site in June 1999</li> <li>Oil spill in Aug 1996 930m northeast of the site</li> </ul>	Envirocheck	2 potential historical sources of off site contamination	
	Surface Water Quality	<ul> <li>In 2000 the R Avon was recorded as being of River Quality 'A' at two locations (on site, and 760m northeast), and River Quality 'B' on site and 450m west of the site</li> <li>Deane Water was recorded in 2000 as being of River Quality 'A' 760m northeast</li> <li>River Quality Biology was recorded at 2 points on the R Avon, 120m northwest and 430m west of the site. The results for both are identical: GQA Grade 'C', fairly good in 1990, Grade 'B', good between 1995 and 2002 and Grade 'A' very good in 2003-4.</li> <li>River Quality Biology was also sampled for Deane Water, 800m northeast of the site. The results were the same as the R Avon results until 2002. The 2003-4 Biology results are Graded 'C'</li> <li>River Quality Chemistry has varied between Grades 'B' and 'C' between 1990 and 2004. The B grades are compliant with the quality targets, with C grades being significant failures according to the EA. Samples were recorded 250m west of the site.</li> <li>River Quality Chemistry has varied between Grades 'A' and 'B' between 1990 and 2004, with 8 of the 13 years being graded A. The A grades are compliant with the quality targets, with B grades being marginally compliant according to the EA. Samples were recorded 570m northeast of the site.</li> </ul>	Envirocheck	R Avon is a potential receptor R Deane is a potential receptor??	
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Groundwater / major aquifer are a potential pathway and receptor	
	Likely direction of groundwater movement	Likely to be south to northwest direction with topography across the site	Map info		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil classified as vulnerability = 1 i.e. high leaching	Map info	Major aquifer / groundwater is a potential receptor
Abstractions	Surface Water Abstractions	potential         Malmesbury Potatoes Ltd         Surface abstraction for spray irrigation permit from river/row of well points         Unspecified volumes         Permitted Sept 1988         560m northeast of site         Second surface abstraction point         Same use, unspecified volume         Permitted Mar 1996         870m west         2 additional abstractions over 1km away to the northwest as previous, permitted Sept 1988         Pewsey Partnership Holdings         Surface abstraction for spray irrigation permit from river/row of well points         Unspecified volumes         Permitted July 2001         570m northeast of site         2 additional abstractions more than 1km to the northwest of unspecified volume permitted from July 2001         Dhillon's         Surface abstraction from single point for agriculture Unspecified volume         Permitted Apr 2004         870m west         H Thompson         River abstraction         Permitting dates unspecified for 45m3/d or 455m3/y	Envirocheck	5 potential surface water abstractions are potential receptors within 1km
	Public Groundwater	1km northeast of site There are no public supply abstraction records	Envirocheck	No public supply abstractions identified as
	Abstractions			potential receptors



Joint Waste Site Alloca	Joint Waste Site Allocations Site Survey Report						
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome			
	Private Groundwater Abstractions	J Strong 2 General farming/domestic abstractions, borehole 1 and borehole A Unspecified volume for BH1, BHA is for up to 24 m3/d Permitted July 1976 and Feb 1967 respectively On site and 150m west of site respectively	Envirocheck	<ul> <li>3 licensed abstractions which are potential receptors within 1km (of which one abstraction is on site, although precise location is uncertain)</li> <li>11 abstractions are between 1 and 2 km from the site</li> </ul>			
		<b>O Gates</b> General farming/domestic abstraction for a dairy Unspecified volume Permitted in Aug 1978 560m northwest of site					

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Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		There are 11 abstractions between 1 and 2km away from the site including		
		4 permits for <b>Whatey and Co</b> relating to Pewsey BH1 1.1km northeast of site Volumes unspecified		
		<b>M Wilson</b> General farming/domestic abstraction Permitted May 1969 1.1km to east		
		<b>E Waight &amp; Sons</b> General farming/domestic abstraction Permitted Aug 1966 1.4km to southwest		
		<b>N Way</b> General farming/domestic abstraction Permitted May 1966 1.5km to northeast		
		Whitehare Farms General farming/domestic abstraction Permitted May 1966 1.7km to southeast		
		<b>P &amp; C Bowerman</b> Permit for groundwater abstraction for farming/domestic use Unspecified volume Permitted Feb 2005		
		N De Brito E Cuhna 2 permits relating to BH1 for farming/domestic use Unspecified volume Permitted Oct 1987 and June 2005		



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Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Flood risk	Details	All of the local watercourses in the vicinity are at risk of Zones 2 and 3 Flooding as designated by the Environment Agency	Map info	Flood risks might impact part of the site
		The northern part of the site is directly affected by the flood risk zone 2 as part of the River Avon flood zone, with zone 3 areas immediately adjacent to the site boundary		
Land	Designations/Sensitive landuses	North Wessex Downs AONB is on site The R Avon is as SSSI and SAC 40m northwest of site The R Avon is an SAC and SSSI 700m west of site	Envirocheck	There are several potentially sensitive land use receptors including the North Wessex Downs and R Avon
		The site and surroundings are all within the North Wessex Downs AONB There is a SSSI 70m to the north, on the northern (opposite bank) of the river. There is also a designated SSSI stretch approximately 800m downstream. Both form part of the River Avon SSSI and are SAC and SPA designated.	Map info	
		The adjacent stretch of the River Avon is a designated Wildlife site (Avon River Headwaters)		
Property	Details	Pewsey Conservation area 570m to the northeast of the site	Map info	Pewsey conservation area is a potential receptor

#### Site: NW6 Eysey Manor Farm, Cricklade

Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	



Joint Waste Site A	llocations Site Survey Report	Cumment of queilable information	Dete	Commonte / Outcome
Aspect	Type of Information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Ampney Brook flows across the site, and there are two other artificial tributaries of Ampney Brook. Together these three flow across the southwestern part of the site into the River Thames. The River Thames flows eastwards along the southern most part of the site boundary.	MapInfo	Many potential surface water receptors. Water management likely to be a significant issue.
		Four large parts of the site are now shown as being covered by 'new lakes and pits'		
		Ampney Brook has a flow of less than 1.25 cumecs R Thames is estimated as having a flow of less than 2.5 cumecs and less than 5 cumecs	Envirocheck	
	Current Discharge Consents	W Clark Domestic property Eysey manor Farm to discharge treated sewage discharge into an unnamed ditch 370m east of site issued Feb 2001	Envirocheck	2 potential existing sources of off site contamination
		Thames Water Utilities Ltd discharge treated sewage discharge 685m southwest of site Discharge to R Thames		
	Historical Discharge Consents	There are 5 historical discharges within 1km of the site:		5 potential historical sources of contamination
		Thames Water Utilities Ltd Sewage license revoked in Nov 2004, 685m southwest of site Temporary license for Nov 2004 600m southwest of site Sewage license to discharge 890m southwest of site		
		<b>Tarmac Ltd</b> 2 trade discharge licenses to Ampney Brook 825m northwest of site revoked in Apr 2005		



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Pollution Incidents	<ul> <li>There has been one major pollution incident: Agricultural/slurry major water pollution incident during Dec 2003 approx. 1km from site to the south</li> <li>There have been 6 minor pollution incidents: <ul> <li>Rook Tree Farm in Aug 1998, 530m south, no pollutant identified</li> <li>Oil spill in Cricklade in Jan 1999, 760m south</li> <li>Cricklade STW in Nov 1993 and again in Mar 1994 830m southwest of site</li> <li>Oil spill in Latton in Sept 1994 930m west</li> <li>General agricultural pollution incident in Cricklade, date unknown, 960m southwest of site</li> </ul> </li> </ul>	Envirocheck	No current potential sources identified



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Surface Water Quality	River Quality Biology downstream (of the R Thames) was GQA Grade 'B' in 1995 and Grade 'A' from 2000-04 i.e. good and very good. Sampled 650m south of site. Upstream River Quality Chemistry sampling is 850m northwest of site In 1993 was GQA Grade 'C', in 1994 was Grade 'A'. From 1995 to 2002 was Grade 'B' and was Grade 'A' in 2003-4. Prior to 1996 these grades are marginally compliant, but significantly fail during 1999-2001. The last three years have been compliant. Downstream River Quality Chemistry sampling is 530m southeast of site In 1990 was GQA Grade 'C', in 1994-6 was Grade 'B'. From 1997 to 1999 was Grade 'C', Grade 'B' from 2000-1and was Grade 'A' from 2002-4. This represents complete compliance except during 1998. Further downstream River Quality Chemistry sampling is 930m southwest of site In 1993 was GQA Grade 'B', from 1994 to 1996, 2001-2 and 2004 was Grade 'C' and was Grade 'A' in 2003. These are generally compliant, other than the years graded C		Many potential surface water receptors The biological quality of the surface water downstream is very good. The chemical quality of the river is variable, but is generally poorer downstream of the site than the upstream sampling point. All monitoring points have been generally compliant. The river and its associated ecosystem is generally of good status and is a potential receptor
Hydrogeology	Hydrogeological units	The site and surrounding area is directly underlain by a minor aquifer	Map info	Minor aquifer / groundwater is a potential pathway and receptor
		The site is within a zone 3 SPZ	Envirocheck	SPZ and groundwater are potential receptors
	Likely direction of groundwater movement	Likely to be south to southwest direction with topography	Map info	
	Groundwater vulnerability	Minor aquifer (slightly permeable) – formations are regarded as potentially vulnerable	Map info	Major aquifer / groundwater is a potential receptor
		Soil classified as vulnerability = 1 i.e. high leaching potential		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Abstractions	Surface Water Abstractions	There are no surface abstractions within 1km of the site. There are 3 abstraction permits, relating to a location 1.8km northwest of the site at Court Farm	Envirocheck	No potential receptors identified
	Public Water Abstractions	There are no public abstractions within 1km of the site	Envirocheck	No potential receptors identified
	Private Water Abstractions	There are no groundwater abstractions within 1km of the site.	Envirocheck	No potential receptors identified within 1km
		There are 5 abstraction permits, 3 and 2 each at Manor Farm 1.4 and 1.6km north of the site respectively		
Flood risk	Details	The whole site and surrounding are, including the adjacent watercourses e.g. River Thames, Ampney Brook are part of the Wiltshire flood zones 2 and zone 3 as designated by the Environment Agency. The northern 70% of the site, and adjacent areas to the east, north (along the Ampney Brook) and to the west are all directly part of the Swindon flood zones 2 and 3. The River Thames is affected by flood risk zoning upstream of the site, but not downstream or adjacent to the site.	Map Info	Very likely to impact site directly – Flood risks are significant.
Land	Designations/ Sensitive landuses	None within 1km of the site There are Wildlife sites both upstream (River Thames (Ashton Keynes to Cricklade) and downstream of the site (River Ray) There are three Scheduled Ancient Monuments within 1km of the site, to the west in Cricklade, close to Latton and to the northeast of the site North Meadow NNR / SSSI / SAC is approximately 400m west of the site	Envirocheck Map Info WCC	No potential receptors identified Potential receptors include Wildlife sites and 3 SAMs and the North Meadow NNR/SSSI/SAC
	Landuaca	400m west of the site	WCC mon	Potential source of water contamination
Property	Conservation	Cricklade is a conservation area, southwest of the	Man info	Cricklade and adjacent dwellings are
roperty		site		potential receptors
	Details	Eysey Manor and Various Farmhouses	Map info	



#### Site: N18 Low Lane Extension, Compton Bassett

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is the Abberd Brook which is less than 10m from the northwest corner of the site	Map info	Abberd Brook is a potential receptor (Presence of water features requires confirmation)
		Nearest unspecified surface water feature to the site is 96m west of the site.	Envirocheck	
		Abberd Brook is 912m west of the site with a flow of less that 0.31cumecs, estimated in 2000.		
	Current Discharge Consents	<ul> <li>Hills Minerals and Waste Ltd Has 2 current discharge consents: <ul> <li>1 permitted 30th July 2003 for quarry drainage (contaminated. surface water) into Honeyball watercourse 684m south of the site.</li> <li>1 permitted 30th July 2003 for trade discharge from mineral workings into Honeyball watercourse 891m south west of the site. </li> <li>Mr J Heginbotham Permitted 31st July 1996, trade discharge – agricultural and surface water 867m west of the site </li> </ul></li></ul>	Envirocheck	3 potential sources of contamination identified within 1km
	Historical Discharge Consents	into a tributary of the River Marden. Wiltshire CC 1 previous discharge consent – revoked 26th February 1997. WTW trade discharge of process effluent. 534m south of the site. Hills Aggregates Hold 7 expired/revoked consents between 685m and 008m acuth worst of the site.	Envirocheck	8 historical sources identified within 1km of the site
	Pollution Incidents	No pollution events	Envirocheck	No identified potential sources of contamination



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Surface Water Quality	In 1995 the Abberd Brooks River Quality Biology was graded 'E' poor. Between 2000 and 2004 it was graded 'D' fair. River Quality Biology at Montgomery Canal sampling point was graded 'B' good between 1990 and 1995. Between 2000 and 2004 it was graded 'C' fairly good. River Quality Chemistry at Honeyball w/c sampling point was graded annually either 'C' fairly good or 'D' fair between 1994 and 2004.	Envirocheck	The Abberd Brook is a potential receptor The Montgomery Canal and River Marden are also potential receptors
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Groundwater / Major aquifer are both potential pathways and receptors
		No SPZ within 1km of the site.	Envirocheck	No potential receptors identified
	Likely direction of groundwater movement	Likely to be south to northeast direction with topography across the site	Map info	
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil classified as vulnerability = 1	Envirocheck	Major aquifer / groundwater are potential receptors
Abstractions	Surface Water Abstractions	No surface abstractions are recorded within 1km of the site.	Envirocheck	No potential receptors identified
	Public Water Abstractions	No public supply abstractions are within 1km of the site.	Envirocheck	No potential receptors identified
	Private Water Abstractions	<ul> <li>Henley Bros.</li> <li>Hold 5 private water abstraction licences between 790m and 933m southwest – west of the site.</li> <li>18 abstraction licenses exist over 1km from the site.</li> </ul>	Envirocheck	5 groundwater abstractions are potential receptors.
Flood risk	Details	The Abberd Brook Flood Zones 2 and 3 directly affect the most northern part of the site, as designated by the Environment Agency The site is only partially directly affected by the area indicated	Map info	Flooding risk directly impacts part of the site, and indirectly might impact much more of the site
Land	Designations/Sensitive landuses	North Wessex Downs AONB is 200m east of the site	Envirocheck	1 potential receptor identified from Envirocheck, 2 more identified from Map



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Scheduled Ancient Monument 400m northwest of the site	Map info	info
		1km east of the site.		
Property	Details	Compton Bassett is a conservation area 0.5km east of the site	Map info	Compton Bassett is a potential receptor
		Site lies close to existing landfill	WCC, Envirocheck	Potential source of historical and current contamination



#### Site: NW21 Parkgrounds Farm, Wootton Bassett

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is Thunder Brook and another unnamed tributary of Brickworth Brook, both are approximately 150m from the southern and western boundaries respectively Thunder Brook is separated from the site by the M4	Map info	The two brooks are both potential receptors. Brinkworth Brook may also be a potential receptor
		Nearest unspecified surface water feature to the site is 111m north east. Brinkworth Brook is 807m southwest of the site. Sampled at two points - flow less that 0.31 cumecs (estimated in 2000).	Envirocheck	
	Current Discharge Consents	There are no current discharge consents within 1km of the site.	Envirocheck	No potential source of contamination identified
	Historical Discharge Consents	There are no historical discharge consents within 1km of the site.	Envirocheck	
	Pollution Incidents	No recorded incidents within 1km of the site	Envirocheck	
	Surface Water Quality	In 2000 the Brinkworth Brook's River Quality was graded at two locations as 'B' and 'C' respectively. Samples were taken at 807m southwest of the site.	Envirocheck	Brinkworth Brook is a potential receptor
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Groundwater / Major aquifer are both potential pathways and receptors
		Major aquifer No SPZ within 1km of the site.	Envirocheck	Major aquifer is a potential pathway and receptor No SPZs identified as potential receptors
	Likely direction of groundwater movement	Likely to be south to southwest direction with topography across the site	Map info	
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable	Map info	Major aquifer / groundwater is a potential receptor
		Soil classified as vulnerability = 1		
Abstractions	Surface Water Abstractions	One surface water abstraction licence exists at 1.4km from the site.	Envirocheck	No potential receptors identified within 1km of the site



Joint Waste Site Alloca	Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome	
	Public Water Abstractions	No public supply abstractions are within 1km of the site	Envirocheck	No potential receptors identified within 1km of the site	
	Private Water Abstractions	No private water abstractions are within 1km of the site.	Envirocheck	No potential receptors identified within 1km of the site	
Flood risk	Details	Brinkworth Brook and Thunder Brook in the vicinity of the site has associated Flood Risk Zones 2 and 3 as designated by the Environment Agency. These are south of the M4 and are not therefore likely to impact directly on the site The site is not directly affected by the area indicated to be at risk of flooding	Map info, WCC	Flood risk is unlikely to impact site directly	
Land	Designations/Sensitive landuses	There are 6 areas of ancient woodland to the north, northeast and northwest of the site, all approximately 1km away There is 1 unnamed SAM 340m south of the site, south of the M4	Map info	There are effectively 6 potential receptors, as the SAM is separated from the site by the M4	
Property	Details	There are no conservation areas recorded within 1km of the site	Map info	No potential receptors identified	



#### Site: NW29 Studley Grange Waste Management Facility, Wootton Bassett

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is an unnamed stream forming the southern boundary of the site the former Wiltshire and Berkshire Canal (disused) lies 20m from the site boundary on the southern edge	Map info	The unnamed stream and former Wiltshire and Berkshire Canal is a potential receptor
		Nearest unspecified water feature is 101m north of the site.	Envirocheck	
	Current Discharge Consents	<b>Biffa Waste Services</b> Discharge from a waste site – industrial landfill tip, 122m east of the site. Permitted May 2001	Envirocheck	4 potential sources identified within 1km
		Mr A H Miller Sewerage discharges – final/treated effluent – not water company, onto land/into watercourse, 723m east of the site. Permitted June 2001		
		Jardinerie Ltd Sewerage discharge – final/treated effluent – not WTW into fresh stream/river, 792m east of the site. Permitted July 1997.		
		Mr Charles & Mrs Jane Fry Domestic sewerage discharges – final/treated effluent to land/soakaway, 857m south of the site. Permitted January 2005		
	Historical Discharge Consents	<b>Mr F M Allen Armitage</b> Trade discharge – agricultural and surface water, 909m south of the site. Revoked.	Envirocheck	1 historical sources identified within 1km of the site
	Pollution Incidents	No pollution incidents relevant to the water environment recorded	Envirocheck	No potential sources of contamination identified
	Surface Water Quality	No information specified within 1km of the site.	Envirocheck	]
Hydrogeology	Hydrogeological units	No hydrogeology data available at this location	Map info	

## **ATKINS**

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Non aquifer (negligibly permeable)	Envirocheck	Non aquifer may be a potential pathway/receptor
		No SPZ located within 1km of the site.	Envirocheck	No potential receptors identified
	Likely direction of groundwater movement	Likely to be south to southeast direction with topography across the site	Map info	
	Groundwater vulnerability	Non aquifer (negligibly permeable) – formations are regarded as possibly vulnerable	Map info	Non aquifer / any contained groundwater is a potential receptor
-		Soil vulnerability unclassified		
Abstractions	Surface Water Abstractions	No surface abstractions are recorded	Envirocheck	No potential receptors identified
	Public Water Abstractions	No public supply abstractions are within 1km of the site	Envirocheck	No potential receptors identified
	Private Water Abstractions	P & M Whiteley General farming/domestic abstraction 495m north of the site Permitted February 1971 Three abstraction licenses exist more than 1km	Envirocheck	1 licensed abstraction is a potential receptor
		from the site		
Flood risk	Details	Part of the site is designated as Flood Risk Zone 2 Flooding Risk Zones 3 affect the length of channel running along the side of the site Flood Risk Zones are designated by the Environment Agency	Map info	Flooding Risk zones cover a small part of the site directly, and border the southern boundary of the site
		A small part of the southern side of the site is directly affected by Flood Risk Zone 3 associated with the former Wiltshire and Berkshire Canal		
		Fluvial flood plain located 221m south of the site	Envirocheck	
Land	Designations/Sensitive landuses	The site has 2 wildlife sites approximately 150m and 550m to the southwest	Map info WCC data	3 potential receptors identified within 1km of the site
		There is 1 unnamed SAM 900m to the southwest		
		Site currently used as a non-hazardous waste landfill (industrial and commercial wastes)		Potential for contamination from on site sources
Property	Details	There are no conservation areas within 1km of the site	Map info	No potential receptors have been identified

### Joint Waste Site Allocations Site Survey Report **Allocations Site Survey Report** Site: S3 Brickworth Quarry and Landfill, Whiteparish

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is a tributary of the River Blackwater, 500m to the north of the site and 500m south.	Map info	The River Blackwater and tributaries are a potential receptors
		Nearest water feature (unspecified) is 610m to the south of the site	Envirocheck	
	Current Discharge Consents	No current discharges recorded	Envirocheck	No current potential sources of contamination
	Historical Discharge Consents	E Pike Undefined discharge into stream Permit revoked in Mar 1996 820m southeast of site R Lloyd Discharge consent for domestic property sewage Revoked date unknown Discharge to land 940m northeast of site	Envirocheck	2 historical sources of potential contamination identified within 1km of the site
	Pollution Incidents	<ul> <li>Agricultural organic farm waste spill during June 1992</li> <li>705m south of site</li> <li>Minor incident</li> </ul>	Envirocheck	2 historical potential sources of contamination identified
		<ul> <li>Oils / diesel spill during Apr 1997</li> <li>825m south of site</li> <li>Minor incident</li> </ul>		
	Surface Water Quality	No surface water quality data, biological or chemical data is available	Envirocheck	Surface water quality data should be obtained from the Environment Agency
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a minor aquifer	Map info	Groundwater / Minor aquifer are both potential pathways and receptors
		The site is not within an SPZ There are no SPZ within 1km of the site	Envirocheck	There are no receptors within 1km
	Likely direction of groundwater movement	Likely to be in a south to southwest direction with topography across the site	Map info	



Joint Waste Site Allo	cations Site Survey Report		1	
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Groundwater vulnerability	Minor aquifer (variably permeable) – formations are regarded as potentially vulnerable, and non aquifer	Map info	Minor aquifer / groundwater is a potential receptor
Abstractions	Surface Water Abstractions	No surface abstractions are recorded within 1km	Envirocheck	No potential receptors identified
	Public Water Abstractions	No groundwater abstractions recorded within 1km of site	Envirocheck	No potential receptors identified
	Private Water Abstractions		Envirocheck	
Flood risk	Details	The site is not directly affected by the area indicated	Map info	Flooding is unlikely to directly impact the site
		The streams at some distance may be affected by Zones 2 and 3 Flood Risk areas		
Land	Designations/Sensitive landuses	There is the New Forest National Park 800m south of site	Envirocheck	2 potential receptors identified
		There is a Forest Park 990m south of site		
		Part of the New Forest SSSI designated area is 800m southwest from the site	Map info	
Property	Details	Whiteparish village is an adjacent conservation areas within 1km of the site	Map info	Whiteparish village is a potential receptor



#### Site: S4 CB Skip Hire, St Thomas Farm, Laverstock

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is River Bourne, 100m to the south and east of the site.	Map info	R Bourne is a potential receptor
		Nearest unspecified surface water feature is 91m south of the site.	Envirocheck	
		The River Bourne is 130m south of the site, assessed in 2000 as having a flow of less than 1.25 cumecs.		
	Current Discharge Consents	Mr D J Legg Sewage discharge – final/treated effluent – not water treatment works, to land/soak away, 70m south west of the site, Effective June 1997.	Envirocheck	3 existing discharge consents are potential sources of contamination identified within 1km
		Mr & Mrs M Kibble White Domestic sewerage discharges – final/treated effluent, to land/soakaway, 736m north of the site. Permitted December 1999.		
		Wessex Water Services Ltd Public Sewage – storm sewage overflow to freshwater stream/river, 821m north of the site. Receiving water: River Bourne. Permitted March 2004		



Joint Waste Site Allocations Site Survey Report					
Aspect	Type of information	Summary of available information	Data	Comments / Outcome	
			Sources		
	Historical Discharge Consents	There are 5 revoked/lapsed licenses within 1km of the site:	Envirocheck	5 historical potential sources of contamination identified within 1km site	
		• Crest Homes (Wessex) Ltd (2 previous consents) for discharging surface water into the R Bourne revoked Aug 1996.			
		• Wessex Water Services Ltd (1 previous consent) for an old air field sewage pumping station revoked Mar 2004. Approximately 900m north of site			
		<ul> <li>Cork Gully (2 previous consents) for final sewage effluent revoked Jan 1996. Approximately 1km north of the site</li> </ul>			
	Pollution Incidents	No recorded incidents within 1km of the site	Envirocheck	No potential sources of contamination identified	
	Surface Water Quality	In 2000 the R Bourne's River Quality was recorded as being grade 'A' at a sample point 130m south of the site.	Envirocheck	The R Bourne is a potential receptor	
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Groundwater / Major aquifer are both potential pathways and receptors	
		The site is situated on a major aquifer (highly permeable).	Envirocheck		
		The site is reported to be located within a Zone I SPZ	Envirocheck	SPZ is a potential receptor	
	Likely direction of groundwater movement	Likely to be south to southeast direction with topography across the site	Map info	Receptors to south and southeast of site could be the most impacted	
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable	Map info	Major aquifer / groundwater is a potential receptor	
Licensed Abstractions	Surface Water Abstractions	Mr and Mrs E Rippier Amenity abstraction at a single point from lake / pond 817m porth of the site. Permitted March 1991	Envirocheck	1 potential receptor identified at distance from the site	



Aspect	Type of information	Summary of available information	Data	Comments / Outcome
Aspeet			Sources	
		One surface water abstraction licence exists over 1km away from the site.		
	Public Groundwater Abstractions	No public supply abstractions are within 1km of the site	Envirocheck	The site is reported to be within an SPZ Zone 1 but with no current abstractions identified on or within 1km of site
		2 Wessex Water abstractions are greater than 1km away		Check status of abstractions and SPZ
	Private Groundwater Abstractions	Mr R T Cook General farming/domestic abstraction for unspecified volume from a single point, 236m east of the site. Permitted July 1966	Envirocheck	2 potential receptors identified
		Mr N P L Oates General farming and domestic abstraction from a single point, 464m south east of the site. Permitted May 2000.		
		Six water abstraction licences exist over 1km away from the site.		
Flood risk	Details	The River Bourne stretch in the vicinity is at risk of Zones 2 and 3 Flooding as designated by the Environment Agency	Map info	The site is not directly affected by flood risk zones, however it is immediately adjacent to a flooding risk zone 3 and therefore there are possible flood issues
		The site is not directly affected by the flood risk areas indicated		
Land	Designations/Sensitive landuses	The R Bourne is part of the River Avon System 91m to the south east of the site is designated a SSSI and SAC.	Envirocheck	4 potential receptors identified
		Cockey Down is situated 540m to the south east of the site and is designated a SSSI.		



Joint Waste Site /	Allocations Site Survey Report		1 _	
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		The R Avon is a SAC / SPA / SSSI to the east of the site	Map info	
		Cockney Down SSSI is 760m east of the site		
		There are 3 Wildlife sites within 1km of the site, Bishopdown m to the southwest, Laverstock Down and Cockney Down		
		Current landuses on site are railway embankment and potential industrial environment	Map info	Potential source of historical and current contamination on site
	Landuses	On site landuses include skip hire yard and undeveloped grassland Current activities may include waste handling Likely historical area of similar activities on site	WCC maps	Potential current and historical contamination sources on site and off site
		Landuses adjacent to the site include a railway embankment. To the west of the site are residential areas, separated from the site by the railway embankment and road. Both transport types are potential contamination sources.		
Property	Details	No conservation areas within 1km of site	Map info	No potential receptors identified



#### Site: S9 Kingsway Trading Estate, Wilton

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is the River Wylye, 10m to the west of the site separated by a highway. The River Wylye has its confluence with the River Nadder 1.2km to the south.	Map info	R Wylye and adjacent water feature are both potential receptors off site
		Nearest, unspecified water feature is 100m west of site The Rivers Wylye and Nadder both have a flow of less than 5 cumecs	Envirocheck	
	Current Discharge Consents	Wiltshire CC 2 Private sewage discharges to land soakaway Permitted Oct 2002 400m east	Envirocheck	2 potential sources of off site contamination identified
	Historical Discharge Consents	Wilton Royal Carpet Factory Ltd Carpet and floorings discharge consent for process effluent revoked Held Mar 1969 to Oct 1994 430m south of site	Envirocheck	Historical source of off site contamination identified
	Pollution Incidents	None recorded	Envirocheck	No historical sources of off site contamination identified



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Surface Water Quality	In 2000 the R Wylye was recorded as being of River Quality 'A' at 3 locations, 100m southwest of site, 560m west of site and 870m northwest of site At the same time the R Nadder was recorded as River Quality 'B' at 900m southwest River Quality Biology on the R Wylye has been consistently GQA Grade 'A' between 1990 and 2004. No data for River Quality Chemistry sampling available within 1km on the R Wylye	Envirocheck	The R Wylye is a potential receptor off site
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Major aquifer / groundwater is potential pathway and receptor
		Site not within SPZ Zone Zone I SPZ at Ditchampton Well is 800m west of site, with Zones II and III both 650m west of site	Envirocheck	Off site SPZ is a potential receptor
	Likely direction of groundwater movement Groundwater vulnerability	Likely to be southwest direction with topography across the site Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil vulnerability is unclassified	Map info	Major aquifer / groundwater is a potential receptor
Licensed Abstractions	Surface Water Abstractions	<ul> <li>Wilton Royal Carpet Factory Ltd <ul> <li>Has had 2 surface water abstraction permits on the R Wylye</li> <li>Permitted Dec 1983 and June 2000</li> <li>525m south</li> </ul> </li> <li>There are also 3 abstractions more than 1km: <ul> <li>North Hill Farms Ltd for spray irrigation 1.2km south of site</li> <li>Barford Settled Estate for spray irrigation1.9km south of site</li> <li>E Perrott for spray irrigation1.9km south of site</li> </ul> </li> <li>No specified volumes</li> </ul>	Envirocheck	2 potential surface water abstraction receptors have been identified within 1 km of the site



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Public Groundwater Abstractions	Wessex Water Services Ltd For public potable supply, unspecified volume Permitted Nov 1989 870m west of site	Envirocheck	Abstraction is a potential receptor
	Private Groundwater Abstractions	<b>E Naish Ltd</b> 2 permitted industrial processing abstractions of:	Envirocheck	2 licensed abstractions identified as a potential receptor.
		<ul> <li>117m3/d from a borehole (34,096 m3/y) 620m southwest of site</li> <li>136m3/d from a borehole (34,096 m3/y) 690m southwest of site</li> <li>There are 12 abstractions more than 1km from the site:</li> <li>Wilton Estate General use abstraction, unspecified volume Permitted Mar 1980</li> <li>1.2km south of site</li> <li>Imerys Minerals Ltd</li> <li>Has 6 abstractions, 3 each for Well Points A and B</li> <li>Variety of purposes including washing, process, drinking, cooking, sanitary etc</li> <li>No volumes specified</li> <li>Permitted Apr 2004</li> <li>Point A is 1.3km east and Point B is1.6km southeast</li> <li>2 abstractions for the chalk pit at Quidhampton Borehole for mineral washing Unspecified volume</li> <li>Permitted July 1990</li> <li>1.6km southeast of site</li> <li>Bemerton Heath Harlequins Sports &amp; Social Club</li> <li>Groundwater abstractions at football club for irrigation</li> <li>3 permits issued in 2003 and 2004</li> <li>Unspecified volumes</li> <li>1 8km east of site</li> </ul>		12 abstractions are more than 1km from the site



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
Flood risk	Details	All of the local watercourses in the vicinity are at risk of Zones 2 and 3 Flooding as designated by the Environment Agency, representing almost all of the flood plain of the Rivers Wylye and Nadder The site is not directly affected by the area indicated, but the site lies immediately adjacent to the flood zones. The site is to the east of the flood zones.	Map info	The flood zones indicate that the site is not designated to be directly impacted during flood events, although the site is immediately adjacent to potentially affected areas, therefore there is some risk of on- site flooding
Land	Designations/Sensitive	R Avon is a SSSI and cSAC 105m west of site	Envirocheck	R Avon is a potential receptor
	landuses	The Rivers Wylye and Nadder are both part of the River Avon SPA, SAC and SSSI A small section of the River Wylye in the immediate vicinity of the site is also a wildlife site	Map info	R Wylye, Nadder and Avon are all receptors and there is also a local wildlife site
	Landuses	Current commercial usages, site adjacent to railway land	WCC	Potential for some on-site and off site current and historical sources e.g. contamination
Property	Details	No conservation areas within 1km	Envirocheck	No potential receptors identified

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is the River Nadder, 400m to the north, just upstream of the confluence with the River Avon. There is a tributary of the Nadder 550m northwest of the site.	Map info	R Nadder is a potential receptor
		Nearest feature 165m to the north, feature not defined	Envirocheck	Surface water feature is a potential receptor
		The R Nadder specified flow of less than 5 cumecs recorded in 2000 460m northeast of the site		
	Current Discharge Consents	J Mayfield         Has four discharge consents:         Plot 4         Sewage soakaway final effluent discharge         Permitted in July 1991         800m southeast         Plot 3         Sewage soakaway final effluent discharge         Permitted in July 1993         810m southeast         Plot 2         Sewage soakaway final effluent discharge         Permitted in July 1993         810m southeast         Plot 1         Sewage soakaway final effluent discharge         Permitted in July 1993         810m southeast         Plot 1         Sewage soakaway final effluent discharge         Permitted in July 1993         810m southeast         RMC (southwest) Ltd         Trade discharge permit since 1967         970m northeast         Discharge to unspecified watercourse	Envirocheck	Each plot soakaway and the RMC discharge are all potential sources of off site contamination



Joint Waste Site Alloca	Joint Waste Site Allocations Site Survey Report					
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome		
	Historical Discharge Consents	Wessex Water Temporary sewage discharge consent granted in Oct 1989 860m east of site	Envirocheck	Discharge no longer a potential source		
	Pollution Incidents	None recorded within 1km	Envirocheck	No potential historical sources identified		
	Surface Water Quality	The R Nadder has an overall River Quality GQA of B, recorded in 2000 460m northeast of the site No River Quality Biology or Chemistry sampling data available within 1km of the site	Envirocheck	The R Nadder is a potential receptor		
Hydrogeology	Hydrogeological units	Site and surroundings directly underlain by a major aquifer	Map info	Groundwater / major aquifer is a potential pathway and receptor		
	Likely direction of groundwater movement	Likely to be moving in the direction of the Nadder and its tributary i.e. northwards	Map info	There are no SPZs which are potential		
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable There are no SPZs within 1km of the site Soil vulnerability unclassified – no data available	Map info	receptors		
Licensed Abstractions	Surface Water Abstractions	No surface abstractions recorded	Envirocheck	No surface water abstractions identified as potential receptors		
	Public Groundwater Abstractions	Wessex Water Services Ltd Has 2 groundwater abstraction licenses, but both are more than 1.8km northeast of site	Envirocheck	No public supply groundwater abstractions within 1km of site		
	Private Groundwater Abstractions	<ul> <li>AEPP Special Products <ul> <li>Holds 7 groundwater abstraction licenses:</li> <li>Two from the chalk for metal goods cooling of 52m3/d (17,000 m3/y)</li> <li>One from the chalk for metal goods cooling of 8m3/d (2,000 m3/y)</li> <li>Two from the chalk for metal goods cooling of 75m3/d (20,000 m3/y)</li> <li>Two from the chalk for metal goods cooling of 108m3/d (31,000 m3/y)</li> </ul> </li> <li>No specified dates of permits <ul> <li>All between 60 and 70m southwest of site</li> </ul> </li> </ul>	Envirocheck	<ul><li>17 licensed abstractions which are potential receptors within 1km, with varying uses. One additional abstraction license has expired within 1km.</li><li>A further 14 abstractions are between 1 and 2km from the site.</li></ul>		



	Joint Waste	Site Allocations	Site Surve	v Report
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Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
		A E Piston Products Ltd		
		Holds a groundwater license for industrial cooling		
		water of 327m3/d (113,653 m3/y)		
		Date of permit unknown		
		70m southwest of site		
		Gibbs Mew Plc		
		Holds a groundwater license for industrial		
		processing (food and drink) of 200m3/d (53,000		
		m3/y)		
		Data of parmit upknown		
		180m west of site		
		Remarten Forma		
		Bemerton Farms Helde 4 groundwater licenses for general		
		farming/domestic processing use (all Well Point B)		
		Volumes not supplied		
		Date of permits unknown		
		220m north of site		
		Bemerton Farms also has 4 additional groundwater		
		permits for same use, volumes unspecified		
		2 from July 1994 and 2 from Nov 2000		
		1.4km west of site		
		Flowplant Group Ltd		
		Holds 2 groundwater licenses for general		
		machinery/electronics use		
		Volumes not supplied		
		From Aug 1998 and Apr 2002		
		650m and 500m northeast of site respectively		
		J Miles		
		Holds a general tarming/domestic licence for		
		groundwater		
		From June 1066		
		700m south of site		



Joint Waste Site Alloca	ations Site Survey Report			
Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
		Dowty Power Conversion Ltd		
		Expired consent, ended Aug 1993		
		General industrial processing abstraction		
		Yearly rate of 236 m3/y		
		760m northeast		
		J Jeffery (auctioneers) Ltd		
		Abstraction for other industrial/commercial		
		purposes		
		Unspecified volume		
		Permit from Mar 1999		
		850m west of site		



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Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		There are 8 groundwater abstractions more than 1km from the site:		
		Mr and Mrs Mirfin     2 permits for a groundwater borehole for     general agriculture – spray irrigation     Unspecified volume     Originally permitted in 1967, updated in Nov     2000, 1.1km west of site		
		• Salisbury and South Wiltshire Golf Club Supply for direct irrigation spray Permitted May 1997 Unspecified volume 1.3km west of site		
		<ul> <li>R &amp; R Jowett         <ul> <li>2 permits relating to borehole no 1 to supply for direct irrigation spray</li> <li>Permitted Oct 1975</li> <li>Unspecified volume</li> <li>1.3km southwest of site</li> </ul> </li> </ul>		
		• Subandra Consulting Ltd Supply for pump and treat pollution remediation Permitted Aug 2004 Unspecified volume 1.6km northeast of site		
		Avonmore Dairies Ltd     Supply for general use     Permitted Jan 1995     Unspecified volume     1.9km north of site		



Joint Waste Site Allo	nt Waste Site Allocations Site Survey Report					
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome		
		Trustees of J Whittle     Supply for general farming/domestic     Permitted Jan 1995     Unspecified volume, 1.9km southeast of site     1.9km north of site				
Flood risk	Details	All of the local watercourses in the vicinity are at risk of Zones 2 and 3 Flooding as designated by the Environment Agency The site is not directly affected, but the risk of flooding extends to within 70m northeast of the site boundary	Map info	Flooding unlikely to impact site directly		
Land	Designations/Sensitive landuses	<ul> <li>The Avon Valley is a designated Environmentally Sensitive Area 850m to the northeast of the site</li> <li>West Harnham Chalk Pit is an SSSI to 70m southwest of site</li> <li>R Avon is an SAC 400m northeast of site</li> <li>West Harnham Chalk Pit SSSI is 70m southeast of the site</li> <li>Close to the River Avon SAC which includes the morphology of the River Nadder. This is also an SPA and a SSSI.</li> <li>There are several Wildlife sites within 1km: <ul> <li>Fitzgerald Farm Meadows</li> <li>Bemerton Meadows West all to north of site</li> <li>Harnham Water Meadows east of site</li> </ul> </li> </ul>	Envirocheck Map info	Potential receptors include West Harnham Chalk Pit, the R Avon and the Avon Valley Other potential receptors exist more than 1km from the site		
	Landuses	On site there are numerous commercial and industrial landuses. Likely historical area of similar activities	WCC maps	Potential current and historical contamination sources on site		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Property	Details	<ul> <li>There are several conservation areas within 1km of the site:</li> <li>Western half of Salisbury (ref salnwca) which is immediately east of the site boundary</li> <li>(ref salsubca)</li> <li>Stratford Sub Castle (ref strtca)</li> </ul>		3 conservation areas are potential receptors


#### Joint Waste Site Allocations Site Survey Report Site: S15 Ratfyn, Amesbury

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is River Avon, 150m to the southwest of the site.	Map info	R Avon is a potential receptor
		River Avon and Nine Mile River (400m north of site and 460m north of site) . Nine Mile River is less than 0.31 cumecs, and the R Avon is less than 2.5 cumecs, estimated in 2000	Envirocheck	
	Current Discharge Consents	<ul> <li>cumecs, estimated in 2000</li> <li>Wessex Water         <ul> <li>Has 2 current discharge consents:</li> <li>1 permitted July 2003 for storm overflow of Ratfyn STW 225m west of the site</li> <li>Final treated discharge into R Avon permitted in July 2003 300m west of the site</li> </ul> </li> <li>M Reed         <ul> <li>Domestic property soakaway</li> <li>Permitted Jan 1997</li> <li>850m northeast</li> <li>Discharge to tributary of Semington Brook</li> </ul> </li> <li>City Petroleum         <ul> <li>Surface water discharge to unnamed ditch</li> <li>Permitted Aug 1990</li> <li>900m southwest</li> </ul> </li> </ul>	Envirocheck	7 potential sources of off site contamination identified within 1km
		<b>C Maclean</b> Domestic treated sewage discharge to soakaway Permitted Sept 1996 900m northeast		
		<b>G Jones</b> Domestic treated sewage discharge to soakaway Permitted Aug 1996 930m northeast		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		M & P Rees Domestic treated sewage discharge to soakaway Permitted Aug 1996 930m northeast		
	Historical Discharge Consents	Wessex Water Had 6 previous discharge consents: 5 have been revoked 1 was temporary in Oct 1989 Storm overflow to watercourse and treated sewage effluent (relicensed in 2001) Semington Brook receives discharge 300m southwest	Envirocheck	6 historical off site contamination sources identified within 1km of the site
	Pollution Incidents	No recorded incidents within 1km of the site	Envirocheck	No potential contamination sources identified
	Surface Water Quality	In 2000 the R Avon's River Quality was recorded as being grade 'A' at three locations including one on Nine Mile River (400m north of site and 460m north of site)	Envirocheck	The R Avon and Nine Mile River are potential receptors
		River Quality Biology of the R Avon was consistently GQA Grade 'A', very good, between 1990 and 2004. Samples were taken 400m northeast of the site.		
		River Quality Chemistry of the R Avon was consistently GQA Grade 'A', very good, between 1994 and 2004 which complies with the quality targets set. Samples were taken 970m northeast of the site.		
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Groundwater / Major aquifer are both potential pathways and receptors
		Site is not within a SPZ	Envirocheck	SPZ is a potential off site receptor
	Likely direction of groundwater movement	Likely to be radiate in a west to south-western direction with topography across the site	Map info	



Joint Waste Site Alloc	ations Site Survey Report		_	
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil classified as vulnerability = 1 i.e. high leaching potential	Map info	Major aquifer / groundwater is a potential receptor
Licensed Abstractions	Surface Water Abstractions	No surface abstractions are recorded within 1km of the site	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions	No public supply groundwater abstractions are within 1km of the site Wessex Water Services Ltd Have 3 permits relating to a public supply well 1.1km northwest of the site Unspecified volumes Permitted in Sept 1989	Envirocheck	No potential receptors identified There is one public supply borehole 1.1km away
	Private Groundwater Abstractions	P Rowland         General farming/domestic abstraction for         unspecified volume         Permitted May 1966         560m south of site         Dairy Crest Ltd         has a license to abstract for general use, volume         unspecified         Permitted May 2000         880m south of site	Envirocheck	2 licensed abstractions which are potential receptors.
Flood risk	Details	The River Avon stretch in the vicinity are at risk of Zones 2 and 3 Flooding as designated by the Environment Agency The site is not directly affected by the area indicated	Map info	Unlikely to impact site directly
Land	Designations/Sensitive landuses	Avon Valley is 170m northwest of site R Avon is a SSSI and cSAC 320m southwest of site	Envirocheck	3 potential receptors identified from Envirocheck, and a large number of receptors identified from Map info



Joint Waste Site Alloc	Joint Waste Site Allocations Site Survey Report					
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome		
		The River Avon is designated as an SAC, SPA and SSSI There are a large number of Scheduled Ancient Monuments within 1km of the site, with the nearest being approximately 200m east of the site There is a Wildlife site 150m southwest of the site, Countess Farm Swamp, and Woodhenge Verge is 800m to the west	Map info	Countess Swamp sensitive to water environment impacts including hydrological impact of new developments i.e. any change in volume of runoff and pollution		
	Landuses	Existing sewage treatment works adjacent to the site	WCC map	Potential scene of early historical and current contamination. Effect of a new facility during construction and operation including ability to handle potentially contaminated runoff		
Property	Details	Bulford and Amesbury are both conservation areas	Map info	2 potential receptors		

## Joint Waste Site Allocations Site Survey Report Site: S16 Salisbury Road Industrial Estate, Downton

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is River Avon, 200m to the east.	Map info	R Avon and its tributary are potential receptors
		There is an unnamed tributary of the Avon immediately west of the site (with its origin 450m from the site boundary)	Envirocheck	=
	Current Discharge Consents	<b>Trafalgar Fisheries</b> Fish farm Barford Carrier receives discharge Permitted May 1988 600m east of site	Envirocheck	1 potential off site source of contamination
	Historical Discharge Consents	Chemical pipe and vessel co Process effluent 1990 to 1995 Barford Carrier, River Avon 500m southeast of site		Potential historical off site sources of contamination
		Downton Tanning and fellmongery Process effluent 1988 to 1999 Barford Carrier 715m southeast of site		
		Wessex Water Services Ltd Sewage discharges Temporary consent in 1989 River Avon 780m southeast of site		
	Pollution Incidents	2 pollution incidents: Rubble/litter or solids – minor incident reported Aug		2 potential off site current contamination sources identified
		1996 900m north of site One major incident, pollutant not identified – reported May 2001 500m southwest of site		
		One major incident, pollutant not identified – reported May 2001 500m southwest of site		



Joint Waste Site Allocations Site Survey Report					
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome	
	Surface Water Quality	In 2000 the R Avon was recorded as being of River Quality 'A' at one location 520m east, and 'B' at two locations 520m east and 845m southeast River Quality Biology upstream at Woodbridge Bridge was consistently GQA Grade 'A' between 1990 and 2004 at recorded locations 520m east and 845m southeast. River Quality Chemistry sampling close to Littleton Panell in 1990 was GQA Grade 'B', i.e. 'good' from 1994 to 1998 was Grade 'C' ('fairly good') and from 1999 to 2002 was Grade 'B' again. In 2003 the Grade was 'A' ('very good'), and was Grade 'B' in 2004. Sampling was 880m south of the site. Only 2003, graded A was compliant with the local river quality objective, the B grades represent marginal compliance and 'significant failures' were recorded for each other year graded C.	Envirocheck	The R Avon is a potential receptor The overall quality of the Avon has consistently been of grade B or C i.e. 'good' or 'fairly good'. This is means that the Avon is "marginally compliant" or "significantly failing" its objectives respectively	
Hydrogeology	Hydrogeological units	Site and surroundings directly underlain by major aquifer	Map info	Major aquifer and groundwater are potential pathways/receptors	
		No SPZs on site Hale boreholes is a Zone II SPZ 515m southwest of site	Envirocheck	Off site SPZ (zone 2) is a potential receptor	
	Likely direction of groundwater movement	Likely to be moving towards the east	Map info		
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil classified as vulnerability = 1 i.e. high leaching potential	Map info	Major aquifer / groundwater is a potential receptor	
Licensed	Surface Water	Longford Farms Ltd	Envirocheck	Longford Farm/crops and Downton	
Abstractions	Abstractions	Has a surface abstraction permit from Oct 1972 for spray irrigation – from a catchpit 300m northeast of site <b>Downton Tanning Co</b> Has a surface river abstraction permit Volume and dates unspecified 640m east of site	Envirocheck	Tanning Co are potential receptors	



Joint	Waste	Site	Allocations	Site	Survey	Report	

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Public Groundwater Abstractions	None recorded within 1km of the site	Envirocheck	No receptors identified
	Private Groundwater Abstractions	Longford Farms Ltd Has a borehole 180m northeast of site Permitted March 1967 Unknown volume for farming/domestic use	Envirocheck	7 licensed groundwater abstractions (some within multiple licensed properties) which are potential receptors.
		M Hayter and E Parker Has a borehole license for removing 45 m3/d (1137 m3/y) for spray irrigation Expired Dec 1993 240m west of site		
		<b>CPV Ltd Chem pipe and vessel co ltd</b> has a licensed borehole for farming/domestic for 230m3/d or 50000m3/y 540m east of site		
		J & R Mactaggart-Dickson 2 boreholes on Middle Wick Farm point 1 for farming/domestic unknown volume from May 1985		
		<b>point 2</b> for farming/domestic, spray irrigation unknown volume from May 1985 750m west of site		
		<b>Downton Tanning Co</b> Borehole permitted for industrial processing water Daily permitted volume is 662 m3/d (181,000 m3/y) located 740m east of site		
		<b>Trustees of Viscount Folkestone</b> 2 boreholes on Fish Farm/Cress Pond Throughflow <b>Borehole 1</b> permitted June 1986 915m northeast of site <b>Borehole 2</b> permitted June 1986 755m northeast of site		
		There are 14 other abstraction licences between 1 and 2km from the site, to the south, southwest, north and northeast		



Joint Waste Site A	Ilocations Site Survey Report		li	
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Flood risk	Details	All of the local watercourses in the vicinity are at risk of Zones 2 and 3 Flooding as designated by the Environment Agency, other than the upper 500m of the closest tributary of the River Avon. The site may be directly affected by flooding along the eastern boundary	Map info	Flooding may impact site directly
Land	Designations/ Sensitive landuses	The River Avon System has a stretch classified as SPA, SAC and SSSI including the adjacent stretch. This is an Environmentally Sensitive Area, from 150m east of the site. Cranbourne Chase and West Wiltshire AONB is 750m west of the site. There are two Scheduled Ancient Monuments within 1km, one 700m to the east, and one 935m to the west There is a Wildlife site 400m southeast of the site, a 1.7km stretch of the Avon River South and a further site 1.1km to the west, Wick Down	Map info and Envirocheck	There are several sensitive landuses receptors including the River Avon, Cranbourne Chase, 2 SAMs within 1km of the site.
	Landuses	Site currently occupied by commercial landuse including waste operations	WCC	Potential source of historical and current contamination on-site
Property	Details	Downton is a conservation area, sharing the southeast site boundary and extending away from the site There is a guarry 1km to the southeast of the site	Map info	Buildings, people and property in conservation areas may be receptors

## Joint Waste Site Allocations Site Survey Report Site: S19 Thorny Down WTS, Winterslow

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is an unnamed stream, 540m to the south of the site.	Map info	The stream is a potential off site receptor
	Current Discharge Consents	R Robinson         Has discharge consent for sewage effluent into a soakaway         750m to southwest         Permitted Oct 2005         B Docking	Envirocheck	7current potential sources of contamination identified within 1km
		Has 2 Domestic soakaways Final treated sewage effluent Permitted May 2005 750m and 775m south		
		<b>P Allen</b> Domestic sewage discharge to soakaway Issued Mar 2006 870m south of site		
		Hoare Domestic sewage discharge to soakaway Issued Apr 1978 890m southwest of site		
		Higgins and Lewis Sewage discharge to soakaway Issued Sept 2005 900m south of site		
		Interserve Ltd MOD facility Private sewage discharge to soakaway 940m to northwest of site		
	Historical Discharge Consents	J Kavanagh Domestic sewage consent Revoked Mar 1997 870m southwest of site	Envirocheck	4 historical sources of potential contamination identified within 1km of the site



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		J Jeffery & Son Discharge consent for sewage Revoked Mar 1997 900m southwest of site		
		Davison Developments Discharge consent for surface water lapsed Oct 1996 880m northeast of site		
		Mr Harvey Domestic property discharge consent for sewerage Date unavailable 950m northeast of site		
	Pollution Incidents	None reported	Envirocheck	No historical potential sources of contamination identified
	Surface Water Quality	There is no surface water quality data available for description of this	Envirocheck	The adjacent watercourse is a potential receptor
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Groundwater / Major aquifer are both potential pathways and receptors
		Site not within an SPZ There are no SPZ Zones I within 1km of the site, although SPZs II and III 355m southeast	Envirocheck	There are no SPZ receptors within 1km
	Likely direction of groundwater movement	Likely to be in an east to southeasterly direction with topography across the site	Map info	
	Groundwater vulnerability	Major aquifer (variably permeable) – formations are regarded as potentially vulnerable, and non aquifer	Map info	Major aquifer / groundwater is a potential receptor
		Soil vulnerability is high		
Licensed Abstractions	Surface Water Abstractions	None recorded within 1km	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions	None recorded within 1km of site	Envirocheck	No potential receptors identified
	Private Groundwater Abstractions	Brennan Farms Ltd Has a groundwater abstraction of unknown volumes End use not specified Permitted Nov 1998 140m southeast of site	Envirocheck	1 potential receptor within 1km



Joint Waste Site Alloca	Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome	
Flood risk	Details	The Flood Risk Zones 2 and 3 as designated by the Environment Agency are approximately 540m southwest of the site	Map info	Flooding is unlikely to impact the site directly	
		The site is not directly affected by the area indicated			
Land	Designations/Sensitive landuses	There is one designation within a 1km radius, Porton Down SSSI and SAC and Salisbury Plain 320m east is a SPA	Envirocheck	3 potential receptors have been identified	
		Thorny Down Road Verge Nature Reserve is	Porton Down		
		Immediately adjacent, to the north of the site.	SSSI IS		
		to the southwest	200m to the		
			site		
			Map info		
		Site is currently part of a waste transfer station and lies immediately adjacent a former landfill site	WCC, Envirocheck	Potential source of historical and current contamination off site, but nearby	
Property	Details	No adjacent conservation areas within 1km of the site	Map info	No potential receptors identified	

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is the River Nadder, just upstream of the confluence with the River Avon. The site is within a river meander of the Nadder, which flows to the west	Map info	River Nadder is a potential receptor
		cumecs	Envirocheck	
	Current Discharge Consents	RMC South West Ltd Trade discharge – process effluent since Feb 1967 into R Nadder 250m west	Envirocheck	2 potential sources of off site contamination
		Asm Properties Ltd Single Domestic property – boathouse – Boathouse Meadow Lower Road into R Nadder 450m northwest		
	Historical Discharge Consents	al Discharge its Wessex Water services Sewage storm overflow at pumping station 1963 to 1991 430m northwest Discharge receiving environment unknown Also granted a temporary license in 1989 to discharge sewage into the Nadder 800m southeast of site R Johnson Single Domestic property – boathouse – Boathouse Meadow Lower Road into R Nadder 1985 to 1996	Envirocheck	3 potential historical sources of off site contamination
		460m northwest Esso Petroleum Co Ltd Retailing filling station – trade discharge to land soakaway 3 licenses expired May 2000 – May 2001 2 licenses revoked Sept 2001 – June 2003 All c. 840m northwest of site		



Joint Waste Site Allocations Site Survey Report

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Pollution Incidents	Sheep carcass reported Aug 1996 950m east Minor water risk incident Food industry chemicals – paints/dyes spill reported Oct 1996 960m east Significant category 2 water incident Construction – suspended solids event reported Aug 1996 960m east Minor water risk incident Crude sewage spill – substantiated pollution incident Oct 2005 970m east Significant category 2 water incident	Envirocheck	4 off site contamination sources identified in the immediate vicinity of the site
	Surface Water Quality	In 2000, the R Nadder was recorded as being of River Quality 'B' 260m west of site (upstream)	Envirocheck	The overall quality of R Nadder B is good. R Nadder is a potential receptor
Hydrogeology	Hydrogeological units	Site and surrounding s directly underlain by a major aquifer No drift	Map info	Major aquifer is a potential pathway / receptor No attenuation of contamination by drift cover
		No SPZs identified on site Nearest source protection zones - zone I: 320m north of site 950m north of site, ref SW071	Envirocheck	2 off site SPZs identified are potential receptors
	Likely direction of groundwater movement	Likely to be moving in a radial pattern outwards from the centre of the site in the direction of the three site boundaries interfacing with the river meander.	Map info	Aquifer is a potential pathway / receptor R Nadder is a potential receptor
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil vulnerability unclassified – no data available	Map info	On site groundwater is a potential receptor
Abstractions	Surface Water Abstractions	No abstractions recorded	Envirocheck	No potential receptors



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Public Water Abstractions	Wessex Water Services Ltd 2 groundwater boreholes for public supply No 1 permitted Nov 1989 Potable water supply direct 950m north of site No 2 permitted Nov 1989	Envirocheck	Both boreholes are potential receptors although at a distance from the site
	Private Water Abstractions	1000m northeast of siteExpired abstractionDowty Power Conversion LtdOn Telford Road has a private (industry)abstraction of 236m3/y from a chalk borehole100m southeast of siteFlowplant Group Ltdlicense to abstract from borehole no 1 formachinery and electronics: general useIssued Aug 1998, reissued Apr 2002175m southwest of site initially. Second permit waslocated 300m southwest of site	Envirocheck	There are three licensed abstractions which are potential receptors close to the site: Flowplant Group Ltd, Bemerton Farms and Subandra Consulting Ltd.
		Bemerton Farms Licensed groundwater abstraction, well point B, for farming/domestic use for an unknown volume. There have been four different permits from July 1994 and Nov 2000 600m southwest of site Subandra Consulting Ltd Pump and treat pollution remediation abstraction, unknown volume of groundwater Permitted Aug 2004 820m northeast of site	-	



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		There are many abstraction points greater than 1km from the site:		
		<b>AEPP Special Products</b> have held 7 different permits c. 1km southwest of the site, abstracting up to 20,000m3/y for process cooling water for metal goods		
		<b>AE Piston Products Ltd</b> has a borehole 1km southwest of site		
		<b>Gibbs Mew Plc</b> has a food/drink processing abstraction of 53,000m3/y approx 1.1km southwest of site		
		Plus a further 11 boreholes more than 1.5km from site		
Flood risk	Details	All of the local watercourses in the vicinity are at risk of Zones 2 and 3 Flooding as designated by the Environment Agency	Map info	Flooding may impact site directly, particularly on western side
		The site is only marginally affected directly, along its western site boundary, but the River Nadder and its tributaries are all at risk of flooding.		



Aspect	Type of information	Summary of available information	Data	Comments / Outcome
Land	Designations / Sensitive landuses	Part of the River Avon SAC, which follows the morphology of the River Avon, and bounds the site on the west, south and east sides. This is also an SPA and a SSSI.	Map info	Several potential receptors have been identified within 1 km of the site, including the R Avon and 6 ancient woodland areas
		<ul> <li>There are several Ancient Woodlands within 1km:</li> <li>Fitzgerald Farm Meadows</li> <li>Bemerton Mainland Meadows</li> <li>Bemerton Meadows West</li> <li>Island Meadow</li> <li>Bull Plot Meadow all to west of site</li> </ul>		
		• Harnham Water Meadows southeast of site There are other Ancient Woodlands greater than 1km away.		
		Cranbourne Chase and West Wiltshire AONB is 2.8km southwest of site There are several Scheduled Ancient Monuments		
		1.3km from the site - RIGS site – Quidhampton Quarry 1.7km east northeast of the site Avon Valley is an Environmentally Sensitive Area,	Envirocheck	
		SSSI and cSAC 275m west of site		
	Landuses	On site there are numerous commercial and industrial landuses. Likely historical area of similar activities	WCC maps	Potential on-site current and historical contamination sources



Joint Waste Site Alloca	pint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome	
Property	Details	<ul> <li>There are several conservation areas within 1km of the site:</li> <li>Western half of Salisbury (ref salnwca) which is immediately east of the site boundary</li> <li>(ref salsubca)</li> <li>Stratford Sub Castle (ref strtca)</li> </ul> There are two conservation areas more than 1km away, west of the site – Wilton and Netherhampton	Map info	Three potential receptors have been identified	

## Joint Waste Site Allocations Site Survey Report Site: SW1 Brindley Close/Derby Close, Swindon

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is River Ray is adjacent to the site boundary on the western side	Map info	River Ray is a potential receptor
		Nearest water feature, unspecified (probably the River Ray) is on the site boundary to the northwest	Envirocheck	
		The flow of the R Ray is estimated to be less than 1.25 cumecs		Comments / Outcome         River Ray is a potential receptor         7 potential sources of off site water contamination identified within 1km         10 historical sources of off site water contamination identified within 1km of the site
	Current Discharge Consents	Metal recycling sites (mixed) Has discharge consent for trade effluent into a tributary of R Ray On site Permitted June 2003	Envirocheck	7 potential sources of off site water contamination identified within 1km
		Thames Water Has 6 discharge consents: Final treated sewage effluent Permitted Mar 2005 400m west Discharge to R Ray		
	Historical Discharge Consents	Thames Water Had 6 previous sewage discharge consents: 5 have been revoked 1 was a temporary permit 410 to 730m west of site	Envirocheck	10 historical sources of off site water contamination identified within 1km of the site
		Davison Developments Discharge consent for surface water lapsed Oct 1996 780m northeast of site		
		Swindon Borough waste disposal works Sewage disposal Revoked Nov 1986 730m east of site		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Mr HarveyDomestic property discharge consent for sewerageDate unavailable950m northeast of siteKennet Social HousingDischarge consent for surface waterRevoked Mar 1992645m south of site		
	Pollution Incidents	There are 29 reported incidents, most included incidents had minor impact. None are associated with the site.	Envirocheck	Historical potential sources of contamination identified off site.
	Surface Water Quality	<ul> <li>In 2000 the water quality was measured at 4 locations, 2 on Lydiard Brook and 2 on the R Ray. Lydiard Brook was 'A' grade in 2000, and quality C at the second monitoring point. Both are approximately 870m west. The River Ray has a quality rating 'B' upstream of Swindon STW and 560m from site, with the downstream quality being graded 'C'.</li> <li>River Quality Biology of Lydiard Brook was generally GQA Grade 'B', good, between 2000 and 2004. Samples were taken 830m northeast of the site.</li> <li>River Quality Biology of the R Ray was consistently GQA Grade 'C', very good, between 2000 and 2004. During 1995 this channel length was graded 'E' - poor. Samples were taken 400m northeast of the site.</li> <li>River Quality Chemistry of the R Avon was</li> </ul>	Envirocheck	The R Ray and Lydiard Brook are potential receptors
		generally GQA Grade 'C', fairly good, between 1997 and 2004. Samples were taken 970m northwest of the site.		
Hydrogeolog	y Hydrogeological units	Site and surroundings are directly underlain by a minor aquifer	Map info	Groundwater / Minor aquifer are both potential pathways and receptors
		There are no SPZ within 1km of the site	Envirocheck	No identified receptors within 1km



Joint Waste Site Alloc	ations Site Survey Report			
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Likely direction of groundwater movement	Likely to be in a northwest direction following topography and direction of nearest surface water course	Map info	
	Groundwater vulnerability	Minor aquifer (variably permeable) – formations are regarded as potentially vulnerable, and non aquifer Soil vulnerability is unclassified – mo data available	Map info	Minor aquifer / groundwater is a potential receptor
Licensed Abstractions	Surface Water Abstractions	No surface abstractions are recorded	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions Private Groundwater Abstractions	There are no groundwater abstractions recorded within 1km of the site	Envirocheck	No potential receptors identified
Flood risk	Details	The western part of the site is within Flood Zones 2 and 3 as designated by the Environment Agency The site is directly affected by the area indicated	Map info	Flooding may impact site directly and should be further assessed
Land	Designations/Sensitive landuses	There are no designations within 1km of the site There are no designations within 1km of the site	Envirocheck Map info	No potential receptors identified
Property	Details	There are no adjacent conservation areas within 1km of the site	Map info	No potential receptors identified
	Details	Current landuse include potentially contaminanting activities including scrap yards and skip hire companies	WCC	Historic sources of water contamination identified

# Joint Waste Site Allocations Site Survey Report **Site: SW2 Chapel Farm, Swindon**

Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is River Ray, 700m to the west of the site. A small stream/drainage ditch runs across the site from South to North. A small pond feature is shown on the South-western boundary. Small drainage ditches and ponds are shown in the nearby area.	Map info	Drainage ditch and R Ray are potential receptors
		Nearest unspecified surface water feature is 8m north east of the site. No surface flow data available within 1km	Envirocheck	
	Current Discharge Consents	<b>P Rowland</b> Domestic sewage discharge – final/treated effluent into freshwater stream/river, 943m east of the site. Effective from 1st September 2004.	Envirocheck	1 potential source of contamination identified within 1km
	Historical Discharge Consents	arge No historical discharge consents identified. Envirocheck No historical poter	No historical potential sources identified	
	Pollution Incidents	One category 3 minor incident identified 234m north east of the site. Pollutant: miscellaneous – other. Incident date: 4th May 1999	Envirocheck	1 historical potential source of contamination identified off site
	Surface Water Quality	No sampling points identified within 1km of the site	Envirocheck	No surface water quality data available – should be obtained from the EA
Hydrogeology	Hydrogeological units	Site is directly underlain by Oxford Clay (non aquifer) Area 530m to southeast is underlain by a minor aquifer (Stanford Formation - limestones, marls etc). The River Ray fluvial plain is underlain by alluvium 700m west of site (minor aquifer)	Map info	Site underlain by a non aquifer Groundwater / minor aquifers are both potential receptors at distance from the site
		The site is situated on a non aquifer (negligible permeability)	Envirocheck	Non aquifer – low sensitivity potential receptor



Joint Waste Site Alloc	ations Site Survey Report		1	
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Likely direction of groundwater movement	Likely to be west to northwest direction with topography across the site and adjacent drainage patterns	Map info	
	Groundwater vulnerability	Non aquifer under site – formations classified as negligibly vulnerable Soil vulnerability is unclassified – no data available	Map info	Non aquifer is low sensitivity potential receptor
Licensed Abstractions	Surface Water Abstractions	No surface abstractions are recorded	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions	No public supply abstractions are within 1km of the site	Envirocheck	No potential receptors identified
	Private Groundwater Abstractions	No private water abstraction licences identified within 1km of the site	Envirocheck	No potential receptors identified
Flood risk	Details	The most westerly point of the site is adjacent to an area designated Flooding Risk Zone 2 (R Ray), although the site is not directly impacted. There is little elevation difference between the affected flood risk zones 2 and 3, and the site elevation	Map info	According to the flood risk zoning, the site is unlikely to be impacted by flooding directly, but as it is adjacent to a zoned flood risk area the site is potentially vulnerable to flooding
Land	Designations/Sensitive landuses	The site and area from the site to the R Ray watercourse is part of the nitrate vulnerable zone classification	Envirocheck	There are 3 potential receptors identified from Map info within 1km of the site, and the site is within a nitrate vulnerable zone
		There is 1 ancient and semi natural woodland 700m southeast of the site	Map info	
		There are 2 wildlife sites, Upper Widhill Copse 700m southeast of the site, and R Ray Fields 600m northwest of the site		

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Joint Waste Site	Allocations	Site Survey	Repor	rt

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Landuse	<ul> <li>There is a current active licensed landfill operation at Chapel Farm, authorised to accept:</li> <li>Asbestos (special waste)</li> <li>Construction, demolition, repair wastes</li> <li>Household, commercial and industrial waste</li> <li>Paint Sludge</li> <li>License to accept between 75,000 and 250,000 tonnes annually</li> <li>Off site there are multiple licensed waste sites in the site vicinity including:</li> <li>Landfill 180m southwest of site</li> <li>Asbestos, bonded asbestos, commercial and industrial waste, excavated natural materials, household wastes accepted</li> <li>Landfill treatment site 180m southwest of site</li> <li>Accepts leachate for treatment in lagoons</li> <li>Accepts between 10 to 25,000 tonnes annually</li> <li>an IPPC permitted operational landfill 320m northwest of site</li> <li>No waste types specified</li> <li>Lagoons and household, commercial and industrial waste transfer station both 380m northwest of site</li> <li>No waste types specified</li> </ul>	Envirocheck	Many potential historical and current contamination sources from multiple varied waste management landuses on site and in the vicinity. Specific, targeted monitoring is likely to be necessary to separate the potential impacts of each of these relevant current / previous operations.



loint Waste Site Allocations Site Surv	vev Report	

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		<ul> <li>operational landfill site 630m west of the site</li> <li>No waste types specified</li> <li>operational waste transfer station 670m northwest of the site</li> <li>Accepts degradable commercial, household, industrial waste and inert materials</li> <li>The area surrounding the site is rural / agricultural setting within open countryside.</li> </ul>	WCC Map	
Property	Details	There are no conservation areas within 1km recorded of the site	Map info	There are no identified potential receptors within 1km

## Joint Waste Site Allocations Site Survey Report Site: SW7 Land at Kendrick Industrial Estate, Swindon

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is River Ray, 400m to the northwest of the site. Unidentified water feature also immediately north of railway line forming north-eastern boundary.	Map info	River Ray and unidentified water features are potential receptors
		Nearest water feature, unspecified is on the site boundary to the south (Probably River Ray) The flow of the R Ray is estimated to be less than	Envirocheck	
		1.25 cumecs		
	Current Discharge Consents	Metal recycling sites (mixed) Has discharge consent for trade effluent into a tributary of R Ray On site Permitted June 2003	Envirocheck	1 current potential source of water contamination on site, 6 within 1km
		Thames Water Has 6 discharge consents: Final treated sewage effluent Permitted Mar 2005 400m west Discharge to R Ray		
	Historical Discharge Consents	Thames WaterHad 7 previous sewage discharge consents:6 have been revoked1 was a temporary permit350 to 470m west of siteKennet Social Housing	Envirocheck	10 historical sources of potential contamination identified within 1km of the site
		Discharge consent for surface water Revoked Mar 1992 645m south of site		
		Davison Developments Discharge consent for surface water lapsed Oct 1996 880m northeast of site		



Joint Waste Si	te Allocations	Site Surve	ev Report

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Mr Harvey Domestic property discharge consent for sewerage Date unavailable 950m northeast of site		
	Pollution Incidents	<ul> <li>There are 27 pollution incidents to controlled waters reported within 1km of the site including:</li> <li>Chemical spill 110m east recorded in Oct 1992 – significant incident</li> <li>Other pollutant incident 200m south recorded April 1999 – minor incident</li> <li>Other pollutant incident 230m east recorded Oct 1991 – significant incident</li> <li>Sewage spill 340m west recorded July 1994 – minor incident</li> <li>3 separate sewage spills from Swindon STW 450m west recorded Oct 1996 – minor incident, another minor incident date not supplied and a significant incident in Jan 1990</li> <li>3 oil spills (all minor incidents) were reported 460 to 490m northwest of site in Feb 1999, Oct 1998 and Apr 1990</li> <li>Chemical spill 560m east of site reported in Feb 1992 – minor incident</li> <li>2 oil spills 560m west of site reported in Jan 1996 and Nov 1990 – significant and minor incidents respectively</li> <li>Sewage spill from Cheney Manor Industrial Estate reported Jan 1996 560m north of site – minor incident</li> <li>2 Oil spills 640m south of site reported in Jan 1996 and Feb 1999 – both minor incidents</li> <li>Storm sewage spill 650m west reported in Jan 1999 – minor incident</li> </ul>	Envirocheck	Many historical potential sources of contamination identified, none specifically on site.



Joint Waste Site	Allocations Site	Survey	Report
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Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		<ul> <li>Oil spill 700m southwest of site reported in Mar 1996 – minor incident</li> <li>Oil spill 720m north of site reported in Feb 1999 – minor incident</li> <li>Unknown pollutant spill 730m northeast of site reported in Nov 1994 – minor incident</li> <li>Sewage spill 740m north of site reported in Dec 1989 – minor incident</li> <li>Oil spill 760m north reported Dec 1997 – minor incident</li> <li>Oil spill 765m south reported Apr 1990 – minor incident</li> <li>Oil spill 860m south reported June 2001, and reported 870m June 1999 – minor incident</li> <li>Sewage spill reported 990m southeast on unspecified date – minor incident</li> <li>Oil spill 900m southwest reported Dec 1993 – significant incident</li> <li>Chemical spill 960m northeast reported Apr 1993 – minor incident</li> <li>Z Oil spills 960m south reported Aug 1996, and June 1991 – minor incident</li> <li>Urban runoff pollution reported 960m northeast reported Feb 1991– minor incident</li> <li>Sewage spill 980m south of site reported July 1992 – significant incident</li> <li>Oil spill 1km northeast reported in Mar 1989 – major incident</li> </ul>		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Surface Water Quality	In 2000 the R Ray's Quality was recorded as being grade 'B' upstream of Swindon STW, and grade 'C' downstream at 400m and 530m west respectively River Quality Biology of the R Ray was consistently GQA Grade 'C' between 1990 and 2004 which is a 'fairly good' quality environment, other than being classified grade 'E' – poor in 1995., Samples were taken 470m west of the site. River Quality Chemistry of the R Ray was sampled further upstream of the biology sampling, at 765m south. The quality of the river chemistry was always compliant with the target grades, during the whole of the 1990 to 2004 data. GQA Grade 'D', fair, between 1990 and 1998 was consistent. During 1999-2000 the GQA grade improved to 'C' fairly good, and from 2001 onwards was Grade 'B', other than 2004 which was GQA grade C.	Envirocheck	The R Ray is a potential receptor
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a minor aquifer	Map info	Groundwater / Minor aquifer are both potential pathways and receptors
		There are no SPZ within 1km of the site	Envirocheck	There are no SPZ receptors within 1km
	Likely direction of groundwater movement	Likely to be in a northwest direction of topography and toward the River Ray i.e. north-west.	Map info	
	Groundwater vulnerability	Minor aquifer (variably permeable) – formations are regarded as potentially vulnerable, and non aquifer Soil vulnerability is unclassified – no data available	Map info	Minor aquifer / groundwater is a potential receptor
Licensed Abstractions	Surface Water Abstractions	No surface abstractions are recorded	Envirocheck	No potential receptors identified
	Public groundwater Abstractions	No groundwater abstractions recorded within 1km of site	Envirocheck	No potential receptors identified
	Private Groundwater Abstractions		Envirocheck	
Flood risk	Details	The western half of the site is within Flood Zones 2 and 3 as designated by the Environment Agency	Map info	Flooding may impact site directly Further consideration of flood risk is likely to be required

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Joint Waste Site All	ocations Site Survey Report			
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Fluvial flood plain borders site boundary on western side	Envirocheck	
Land	Designations/Sensitive	There are no designations within 1km of the site	Envirocheck	No potential receptors identified
	landuses	There are no designations within 1km of the site	Map info	
Property	Details	There are no adjacent conservation areas within 1km of the site	Map info	No potential receptors identified
	Details	The site and the surrounding areas are the location of several potentially contaminating activities	Map info, WCC	Presence of potential current and historic sources of water contamination on the site and in the immediate area.

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is an unnamed watercourse which is shown to flow northwards along the western boundary of the site. This watercourse flows into a canal approximately 5km downstream of the site	Map info	Adjacent watercourse is a potential receptor
		Nearest unspecified surface water feature is 77m north of the site. In 2000 the River Ray's River was measured as having a flow of less than 0.31 cumecs.	Envirocheck	
	Current Discharge Consents	Kier Property Developments Ltd         Discharge of surface water to the River Ray,         597m north of the site.         Effective 26th September 1986.         Thames Water Utilities         • Sewage discharges – pumping station WwTW	Envirocheck	3 potential sources of contamination identified off site within 1km
		<ul> <li>Into the River Ray, 911m north of the site. Effective from 2nd November 1989. Temporary Consent.</li> <li>Trade effluent discharge – site drainage, into the Elcombe Brook, 985m north of the site. Effective from 26th May 1993.</li> </ul>		
	Historical Discharge Consents	There are four revoked consents within 1km of the site.	Envirocheck	4 historical sources of contamination identified within 1km of the site



Joint Waste	Site	Allocations	Site	Survey	Report
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Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Pollution Incidents	1st January 1991, category three: minor incident, 221m east of the site. Pollutant: oils	Envirocheck	2 potential sources of contamination identified off site within 1km of site
		There are 12 pollution incidents between 500m and 1km from the site, summarized:		
		<ul> <li>August 1996, Category 3: minor incident, pollutant unknown sewage, 532m to northeast</li> </ul>		
		<ul> <li>July 1996, category 3: minor incident, pollutant: unknown sewage, 592m to west</li> </ul>		
		<ul> <li>November 1989, category 2: significant event, pollutant: unknown oils, 625m to north</li> </ul>		
		• 10th January 1990, category 3: minor incident, pollutant: unknown oils, 627m to south		
		<ul> <li>January 1991, category 3: minor incident, pollutant: unknown oils, 696m to southeast</li> </ul>		
		<ul> <li>April 1995, category 3: minor incident, pollutant: miscellaneous - unknown, 752m east</li> </ul>		
		<ul> <li>Date unknown, category 3: minor incident, pollutant: misc. unknown, 753m east</li> </ul>		
		<ul> <li>December 1991, category 3: minor incident, pollutant: oils unknown, 774m east</li> </ul>		
		<ul> <li>March 1995, category 3: minor incident, pollutant: misc. – unknown, 825m east</li> </ul>		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		April 1992, category 3: minor incident, pollutant: misc. unknown, 896m northwest		
		<ul> <li>March 1998, category 3: minor incident, pollutant: oils – unknown, 936m north</li> </ul>		
		<ul> <li>June 1994, category 2: significant incident, pollutant: oils unknown, 941m north</li> </ul>		
		<ul> <li>Date unknown, category 3: minor incident pollutant: oils unknown, 963m east</li> </ul>		
	Surface Water Quality	In 2000 the River Ray's River Quality 569m east of the site was classed as 'B'	Envirocheck	Obtain EA surface water quality data
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a non aquifer (Ampthill Clay Formation and Kimmeridge Clay Formation) 10m to the northeast of the site is a minor aquifer (Mudstone from the same formation)	Map info	Site underlain by non aquifer (low sensitivity) Nearby minor aquifer is a potential pathway / receptor (off site)
		The site is situated on a non aquifer (negligible permeability)	Envirocheck	
	Likoly direction of	The site is not located within 1km of an SPZ.	Man info	-
	groundwater movement	the site	Map IIIO	
	Groundwater vulnerability	Non aquifer– formations are regarded as having low vulnerability	Map info	
		Soil vulnerability unclassified – no data available		
Licensed Abstractions	Surface Water Abstractions	No surface abstractions are recorded within 1km of the site	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions	No public supply abstractions are recorded within 1km of the site		
	Private Groundwater Abstractions	No private water abstractions are recorded within 1km of the site		
Flood risk	Details	The majority of the site area and the adjacent watercourse stretch is at risk of Zones 2 and 3 Flooding as designated by the Environment Agency	Map info	Flooding is likely to be a significant consideration for this site, with the majority of this site having been designated to be both at risk of Zones 2 and 3 risk
Land	Designations/Sensitive	The site is situated within a nitrate vulnerable zone.	Envirocheck	There are at least 4 potential receptors



Joint Waste Site Alloc	ations Site Survey Report				
Aspect Type of information		Summary of available information Data Sources		Comments / Outcome	
	landuses	There are at least 2 Scheduled Ancient Monuments within 1km of the site, with the nearest being approximately 230m east of the site. There is a group of SAMs approximately 800m southeast of the site There are 2 Wildlife sites within 1km: Kingshill Canal And Old Railway 230m east of the site, and Rushy Platt Swamp WWT Reserve 530m east of the site	Map info	which have been identified within 1km of the site	
	Landuse	Site has known to historically be used as a Municipal Depot including potentially contaminative activities The site is situated on the outskirts of a built up area (Swindon) although separated from adjacent residential estates by a road. A rail line forms the southern boundary	WCC Map	Potential current and historical contamination sources on site and off site The site appears to be located within a small industrial / transport corridor which is close to built up and residential areas, although seems to be separated from these by the infrastructure corridors.	
Property	Details	There are no conservation areas within in 1km	Map info	No potential receptors have been identified	

Aspect Type of information Summary of available information		Data Sources	Comments / Outcome	
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is a tributary of the Biss Brook on site, and the Biss Brook which is adjacent to the western site boundary	Map info	Biss Brook and an unnamed tributary are potential receptors
		Nearest surface water feature (unspecified) is 2m west of site Flow of Biss Brook is less than 0.31 cumecs	Envirocheck	
	Current Discharge Consents	<b>Techprep Ltd</b> permitted Sept 2000 for site drainage (contaminated surface water not waste site) into Biss Brook 10m west of the site	Envirocheck	8 potential current sources of contamination identified within 1km
		<b>D Brown</b> Has 2 discharge consents: Domestic property soakaway Permitted Nov 1990 400m northeast Discharge to tributary of Biss Brook		
		UIn UK Ltd Trade discharge Permitted June 1964 575m northeast		
		J Coleman-Tye Domestic treated sewage discharge to soakaway Permitted June 2005 600m northeast		
		N Pollock Domestic treated sewage discharge to soakaway Permitted Oct 2001 750m northeast		
		<b>T James</b> Domestic treated sewage discharge to soakaway Permitted Jan 1989 800m south		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		P Elloway         Domestic treated sewage discharge to soakaway         Permitted Aug 1994         830m south         D Townsend         Domestic treated sewage discharge to soakaway         Permitted Aug 1994         830m south		
	Historical Discharge Consents	United Milk Plc         Process water         Permitted Jan 2002         500m northwest	Envirocheck	4 historical sources of off site contamination identified within 1km of the site
		J Munday Domestic sewage discharge into the Biss Brook Permitted Oct 1996 600m northwest		
		Wessex Water Had 1 temporary discharge consent for sewage In Oct 1989 930m northeast		
		<b>P O'Hara</b> Sewage discharge and soakaway Permitted Oct 1996 980m southwest		
	Pollution Incidents	Successful prosecution for pollution of River Biss with farm effluent at Penleigh Farm 600m south of site	Envirocheck	Potential historical source of contamination identified
	Surface Water Quality	In 2000 the Biss Brook's River Quality was recorded as being grade 'A' 80m west of the site.	Envirocheck	The Biss Brook is a potential receptor
		River Quality Biology data is not available.		
		consistently of a compliant level since 1994, being generally of GQA Grade 'B', good until 2000, and generally GQA Grade 'A', very good from 2000-4 Samples were taken 630m south of the site.		
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a minor aquifer	Map info	Groundwater / Minor aquifer are both potential pathways and receptors



Asnect	Type of information	Summary of available information	Data	Comments / Outcome
Азреен	Type of information	Summary of available mornation	Sources	
		No source protection zones within 1km of site	Envirocheck	No potential receptors identified
	Likely direction of groundwater movement	Surface drainage running in a northwest direction across the site.	Map info	
		Likely to be south to northwest direction towards surface drainage		
	Groundwater vulnerability	Minor aquifer (highly permeable) – formations are regarded as highly vulnerable	Map info	Minor aquifer / groundwater is a potential receptor
Licensed Abstractions	Surface Water Abstractions	ECC Quarries Ltd Has a river abstraction permit of 7m <sup>3</sup> /d or 1818m <sup>3</sup> /y for aggregate mining from the Biss Brook immediately to the west of the site	Envirocheck	1 potential receptor identified adjacent to the site
	Public Groundwater Abstractions Private Groundwater Abstractions	No groundwater abstractions within 1km of site	Envirocheck	No potential receptors identified
Flood risk	Details	The Biss Brook is at risk of Flood Zones 2 and 3 as designated by the Environment Agency The site is almost entirely within the flood zones indicated	Map info	Flooding may impact site directly and should be further assessed
Land	Designations/Sensitive landuses	Westbury Ironstone Quarry is an SSSI for geological conservation 600m southwest of the site There are 2 wildlife sites within 1km: 380m southwest – Fairwood Road Railway Line 600m northeast – Westbury Lakes There are 3 Scheduled Ancient Monuments within 1km: 80m west	Envirocheck 300m northwest 600m southeast Westbury Ironstone Quarry SSSI is 550m southwest of the site Map info	6 potential receptors identified within 1 km of the site


Joint Waste Site Alloca	ations Site Survey Report			
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Current landuses on site and in adjacent areas include industrial and waste processing and railways land		Potential on-site and off site sources of historical and current contamination
Property	Details	There are no conservation areas identified within 1km	Map info	No receptors identified

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest identifiable surface water feature to the site is a stream, 1080m to the east of the site. The stream drains into the River Wylye 4.5km to the south.	Map info	2 identified water features are potential receptors
		No description – nearest feature 40m east of site at NGR 397370 143460	Envirocheck	
	Current Discharge Consents	None recorded within 1 km of the site	Envirocheck	No sources identified
	Historical Discharge Consents	None recorded within 1 km of the site	Envirocheck	No sources identified
	Pollution Incidents	Minor incident recorded December 1990 250m northwest of the site Oils – NGR 396600 143800	Envirocheck	One historical source of off site contamination identified
	Surface Water Quality	In 2003 the Wylye River (upstream of the confluence with the Chitterne Brook was recorded as being of River Quality 'A', and River Quality 'B' for 4.5 km upstream of this, close to Littleton Panell River Quality Biology upstream at Woodbridge		The overall quality (and specific biological and chemical quality) of Chitterne Brook have consistently been of grade A or B i.e. good or very good quality.
		Bridge was consistently GQA Grade 'B' between 1990 and 2004. Upstream at Littleton Panell the GQA Grade 'B' in 1990 and Grade 'A' from 1995 to 2004.		
		River Quality Chemistry sampling close to Littleton Panell in 1990 was GQA Grade 'C', from 1993 to 1999 was Grade 'B' and from 2000 to 2003 was Grade 'A'. In 2004 the Grade was 'B'. 1989 and 1993-4		
		Downstream at Woodbridge Bridge the chemistry sampling results were identical.		
Hydrogeology	Hydrogeological units	Site and surroundings directly underlain by a major aquifer	Map info	Major aquifer /groundwater could be a potential pathway and a potential receptor



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Site not within an SPZ. 2 source protection zones (zone I) – Chitterne boreholes Ref Sw048 400m north of site Codford Borehole Ref SW053 900m west of site	Envirocheck	2 off-site SPZs could be potential receptors
	Likely direction of groundwater movement	Likely to be moving west to east across site with topography, towards nearest surface water course	Map info	Groundwater could be a potential pathway and a potential receptor
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil classified as vulnerability = 1 i.e. high leaching potential	Map info	Major Aquifer / groundwater are potential pathways and receptors
Licensed Abstractions	Surface Water Abstractions	None recorded within 1km of the site	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions	None recorded within 1km of the site	Envirocheck	No potential receptors identified
	Private Groundwater Abstractions	L Rice at Quebec Barn has a farming/domestic abstraction from a borehole, volume unknown Held since Sept 1969 825m northwest of site J & W Collins on Manor Farm have two abstractions: Well no 1 - farming/domestic, volume unknown, held since July 1966, repermitted April 2001. 1.9kms south of site Well no 2 – farming/domestic, volume unknown, held since July 1966. 1.1km south of site W Lockyer has a borehole, Chitterne no 1 for farming/domestic, volume unknown Held since Dec 1966 1.4km east of site	Envirocheck	<ul><li>There are 8 licensed abstractions which are potential receptors, although only one of these is within 1km of the site.</li><li>The closest abstraction at Quebec Barn is a potential receptor, the others have not been considered due to distance from site.</li></ul>



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		W Wallis has 2 wells at Manor House, Chitterne. Both permits for unknown volume and held since Jan 1984 1.5km east of site		
		J M Stratton has farming/domestic abstraction from a borehole, point no 1. Permitted in 1967 and renewed in July 2000 Volume unknown 1075m south of site		
		V Pryor also has a permit for well point 1 at the same site, permitted in Jan 1977		
Flood risk	Details	The site is not directly affected by any flood risk zones.	Map info	Flooding unlikely to impact site directly although local flood risks exist
		All of the local watercourses in the vicinity of the site are at risk of Zone 3 Flooding as designated by the Environment Agency		
Land	Designations / Sensitive landuses	<ul> <li>There are several designations within 1km of the site:</li> <li>2 Scheduled Ancient Monuments at 375m south of the site, and 650m north of the site</li> <li>2 Wildlife sites at 400m south of site (ST9409) and 990m southwest of the site (Knock Down)</li> </ul>	Map info	There are 4 potential receptors within 1km of the site, 2 SAMs and 2 Wildlife sites
		<ul> <li>1km of the site:</li> <li>Salisbury Plain SAC, SPA and SSSI, 1.25km north of the site</li> <li>Cranbourne Chase AONB 1.2km southwest of the site</li> </ul>		
	Landuses	Inert landfill / land raise site adjacent to the site	WCC maps	Potential source of nearby, off-site historical and current contamination
Property	Designations	Chitterne is a conservation area	Map info	The conservation area is a potential receptor

# Joint Waste Site Allocations Site Survey Report Site: WW15 Warminster Business Park

Aspect Type	of information	Summary of available information	Data	Comments / Outcome
Hydrology Surface and Flo	ce Water Level	Nearest adjacent surface water feature to the site is The Were located 50m from the eastern boundary of the site. There is also a tributary of the R Wylye 150m south of the site. The tributary flows for approximately 2.4km before its confluence with the R Wylye.	Map info	The adjacent watercourse is a potential receptor.
	-	The nearest (unspecified) water feature is 200m east of the site. There is no routine Environment Agency surface water guality monitoring point within 1km of the site.	Envirocheck	
Curren Conse	nt Discharge ents	<b>D Lux</b> Industrial estate property soakaway         Permitted Feb 2000         150m north <b>Gibbs Transport</b> Retail distribution sewage discharge         Permitted Feb 2004         200m east         Weir via partial soakaway <b>Woodlands Stp Ltd</b> Multiple domestic properties treated sewage         discharge to soakaway         Permitted Augn1987         450m south <b>R Robson</b> Domestic treated sewage discharge to soakaway         Permitted Aug 1987         450m south <b>B Candy</b> Domestic treated sewage discharge to soakaway         Permitted July 2000	Envirocheck	15 potential current sources of contamination identified within 1km



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Orchard maintenance company Domestic treated sewage discharge to soakaway Permitted June 1997 540m east		
		<b>C Barkshire</b> Domestic treated sewage discharge to soakaway Permitted Jan 2000 680m east		
		J Oakley Domestic treated sewage discharge to soakaway Permitted Dec 1995 730m southeast		
		R Hadlow Domestic treated sewage discharge to soakaway Permitted Apr 1997 720m southeast		
		<b>D Nolan</b> Domestic treated sewage discharge to soakaway Permitted Apr 1997 720m southeast		
		<b>S Williams</b> Domestic treated sewage discharge to soakaway Permitted Dec 1995 750m southeast		
		<b>C &amp; A Pierson</b> Domestic treated sewage discharge to soakaway Permitted Feb 1996 800m southeast		
		Granada Motorway Services Surface runoff discharge Permitted Aug 1988 800m northwest		
		Energy Cost Advisors Group Surface runoff discharge Permitted Aug 1988 800m northwest		



Joint waste Site Alloc	Turne of information	Summary of quailable information	Dete	Commente / Outcome
Aspect	Type of information	Summary of available information	Data	Comments / Outcome
		Wessex Water Services Domestic treated sewage discharge to soakaway Permitted Feb 2006 970m southeast		
	Historical Discharge Consents	<b>J Oakley</b> Soakaway permit lapsed in Oct 1996 720m southeast	Envirocheck	1 potential historical source of off-site contamination identified within 1km of the site
	Pollution Incidents	Agricultural spill of slurry had a significant water impact in April 2001 610m south	Envirocheck	1 historical source of contamination identified off-site
	Surface Water Quality	There is no water quality data, biological or chemical quality data available	Envirocheck	Should obtain surface water quality data from Environment Agency
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a major aquifer	Map info	Groundwater / Major aquifer are both potential pathways and receptors
		The site is within Zone II of a SPZ. No SPZ Zone 1 off-site but SPZ nearby to site Zone I SPZ is 525m northeast of site (Wessex Water groundwater abstraction point)	Envirocheck	SPZ is an off-site potential receptor
	Likely direction of groundwater movement	Likely to be southeast direction with topography across the site	Map info	
	Groundwater vulnerability	Major aquifer (highly permeable) – formations are regarded as highly vulnerable Soil classified as vulnerability = 1 i.e. high leaching potential	Map info	Major aquifer / groundwater is a potential receptor
Licensed Abstractions	Surface Water Abstractions	No surface abstractions are recorded	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions	Wessex Water Services Ltd Have 2 permits relating to a public supply well 880m northeast of the site Unspecified volumes Permitted in Oct 1989	Envirocheck	2 potential receptors identified
	Private Groundwater Abstractions	There are 2 private groundwater abstractions, over 1km from the site	Envirocheck	No potential receptors identified within 1km of the site



Joint Waste Site All	locations Site Survey Report			
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Flood risk	Details	The adjacent stretch of river is part of Flooding Zone 3 as designated by the Environment Agency The site is not directly affected by the area indicated, although the site shares a boundary with the zoned flood plain	Map info	Flooding may directly impact site directly, as although this is not zoned, the area immediately adjacent to the site is part of the flood plain. Therefore, there may be a risk to this site
Land	Designations/Sensitive	No designations within 1km	Envirocheck	6 potential receptors identified
	landuses	There is an ancient planted woodland 450m west of the site There are 2 wildlife sites – Coldharbour Meadows 300m away and Arn Hill 500m to east There are 3 Scheduled Ancient Monuments within 1km Existing household recycling centre on the site	Map info	Potential for historic and current contamination on site
	Landuse	There are several undifferentiated buildings within 500m of the site. There is also a motel marked 400m northwest of site, adjacent to the A350. 50m to the east is a railway embankment. The site is 350m north of Warminster (built up area).	WCC Map	The site is located close to an urban residential area and to major transport links (road and rail). There is a potential for contamination to be derived from any of these adjacent landuses (potential sources).
Property	Details	Warminster is a conservation area 350 southwest of the site	Map info	Warminster is a potential receptor

## Joint Waste Site Allocations Site Survey Report Site: WW16 West Ashton Employment Allocation, Trowbridge

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature is an unnamed tributary of the River Biss located immediately adjacent the northern boundary of the Site. River Biss 100m south west.	Map info	R Biss and tributaries are potential receptor adjacent to the site
		R Biss is a high quality river, being graded 'B' by the Environment Agency Flow has been measured by the EA to be less than	Envirocheck	
	Current Discharge Consents	<b>S K Fruits</b> Sewage discharges into the R Biss         Permit issued Nov 2004         270m south of site <b>D Smith</b> Sewage discharge into the R Biss         Permitted Jan 2005         330m southeast <b>E Shanley &amp; Son Ltd</b> Trade discharge into the R Biss         490m northeast <b>West Wiltshire DC</b> Single Domestic treated sewage discharge to R         Biss         Permitted Feb 1990         580m northeast <b>Tesco Stores</b> Has 5 discharge permits of surface water         Permitted Sept 1991	Envirocheck	15 potential sources of contamination identified within 1km



Joint Waste Site Allocations Site Survey Report				
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		Kendrick and Son Sewage discharge into R Biss Permitted 800m northeast From Apr 1966		
	Historical Discharge Consents	R Vigar Sewage Effluent Revoked Sept 2004 250m southeast	Envirocheck	No potential historical sources of contamination
	Pollution Incidents	General biodegradable waste spill reported – minor impact 300m west of site at west Ashton Road	Envirocheck	1 historical potential source of contamination identified
	Surface Water Quality	No water quality, biological or chemical data available	Envirocheck	Seek data from the Environment Agency
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a minor aquifer	Map info	Groundwater / Minor aquifer are both potential pathways and receptors
		There are no SPZs on site or within 1km of it	Envirocheck	There are no specific receptors close to West Ashton
	Likely direction of groundwater movement	Likely to be moving in either a southerly direction or a south easterly direction	Map info	
	Groundwater vulnerability	Minor aquifer (variably permeable) – formations are regarded as vulnerable	Map info	Minor aquifer / groundwater is a potential receptor
		Soil classified as vulnerability = 1		
Abstractions	Surface Water Abstractions	No surface abstractions are recorded	Envirocheck	No potential receptors identified
	Public Water Abstractions	No groundwater abstractions recorded	Envirocheck	No potential receptors identified
	Private Water Abstractions		Envirocheck	
Flood risk	Details	The adjacent watercourse stretch is at risk of Zones 2 and 3 Flooding as designated by the Environment Agency, as the site boundary borders the flood zoned area	Map info	Site may be impacted by flooding directly
Land	Designations/Sensitive	No designations within 1km	Envirocheck	No potential receptors identified
	landuses	No designations within 1km	Map info	
Property	Details	No adjacent areas of conservation within 1km	Map info	No identified potential receptors

## Joint Waste Site Allocations Site Survey Report Site: WW17 West Wilts Trading Estate, Westbury

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is Biss Brook, which shares its boundary with the western edge of West Wiltshire trading estate	Map info	Biss Brook is a potential receptor adjacent to the site
		Nearest water feature (unspecified) is 10m southwest of site (likely to be the Biss Brook)	Envirocheck	
	Current Discharge Consents	IPIF         Holds 6 permits:         Industrial park estate         Permitted Feb 1997         400m northwest, 530m north, 570m northwest         580m north, 680m northwest and750m northeast         Discharge to the R Biss         UIn         Dairies – trade effluent permit         Domestic property soakaway         Permitted June 1964         540m southeast         Discharge to tributary of R Biss         T Regler         Surface water discharge to unnamed ditch         Permitted Nov 1997         560m northwest         N Pollock         Domestic treated sewage discharge to soakaway         Permitted Sept 2001         600m southeast         Westbury Wilts Car and Commercial Breakers         Domestic treated sewage discharge to unnamed         water course         Permitted July 1995         640m northwest	Envirocheck	15 potential sources of contamination identified within 1km of the site



Joint Waste Site Allo	ocations Site Survey Report			1
Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
		Faccenda Group		
		2 discharge permits		
		Trade discharge to soakaway		
		Permitted Aug 1993		
		650m northwest		
		J Coleman Tye		
		Sewage discharge to soakaway		
		Permitted June 2005		
		680m southeast of site		
		DBrown		
		Holds 2 permits		
		Brook Lane sewage discharge to soakaway		
		Permitted Nov 1990 780m and 810m southeast of		
		Site		
		HI Storage and Distribution		
		Discharge of sufface water		
		Permitted Aug 1989		
	Llisteries   Discharge	880m northeast of site	En de ala ala	40 meteorial bistoriael sources of
	Historical Discharge	Legal and General	Envirocheck	10 potential historical sources of
	Consents	Discharge of surface water to ditch		site
		400m northwest 540m north 680m northwest and		Sile
		750m northeast		
		United Milk		
		Trade process water		
		Permit revoked		
		Previously discharging into R Biss		
		550m south		
		Wessex Water Services		
		Temporary sewage discharge permitted in Oct 1989		
		R Biss		
		560m east of site		
		Spectra Coach Building		
		Permitted July 1988 for surface discharge into		
		stream		
		Revoked Oct 1994		
		780m northeast from site		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		<b>J Munday</b> Domestic sewage discharge Permit lapsed Oct 1996 900m southwest of site		
	Pollution Incidents	No recorded incidents within 1km of the site	Envirocheck	No potential sources of contamination identified
	Surface Water Quality	In 2000 the Biss Brook's River Quality was recorded as being grade 'A' upstream, 400m west of the site. The Brook was recorded as grade 'C' 800m northwest of the site in 2000. River Quality Biology of the Biss Brook was consistently GQA Grade 'C', good, between 2000 and 2004. In 1995 the grade was 'B'. There is no surface water chemistry data available.	Envirocheck	Biss Brook is a potential receptor. Obtain surface water quality to support further assessment from the Environment Agency
Hydrogeology	Hydrogeological units	Site and surroundings are directly underlain by a non aquifer	Map info	Groundwater / non aquifer have limited potential pathways / receptors
		No SPZs within 1 km of the site	Envirocheck	No potential receptors identified
	Likely direction of groundwater movement	Likely to be in a northwest direction	Map info	
	Groundwater vulnerability	Non aquifer (variable permeable) – formations are regarded as highly vulnerable Soil classified as vulnerability = 1 i.e. high leaching potential	Map info	Non aquifer / groundwater is a potential receptor
Licensed Abstractions	Surface Water Abstractions	No surface abstractions are recorded	Envirocheck	No potential receptors identified
	Public Groundwater Abstractions	No public supply abstractions are within 1km of the site	Envirocheck	Flooding likely to impact significant part of site directly
	Private Groundwater Abstractions	No groundwater abstractions are within 1 km of the site	Envirocheck	
Flood risk	Details	Western half of site lies within Flood Zones 2 and 3 as designated by the Environment Agency Site is directly affected by flood risk	Map info	
Land	Designations / Sensitive	No designations within 1km	Envirocheck	No potential receptors identified



Joint Waste Site Alloca	ations Site Survey Report			
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Landuses	There is an unnamed Scheduled Ancient Monument on the site, and an additional 2 SAMs approximately 1km from the site to the south There are 6 wildlife sites all approximately 950m from the site Map info	Map info	9 potential receptors identified
		Site currently a trading estate with numerous possible existing contaminantion sources	Map info	Potential source of historical and current contamination
Property	Details	No information available from Map info	Map info	No potential receptors identified



#### **Geological Assessment Supporting Information**

#### Appendix B

#### Site: NW18 Low Lane Extension, Compton Bassett

Aspect	Type of information	Summary of available information	Data Sourcos	Comments / Outcome
Geology	Major stratigraphy	<ul> <li>There are three bedrock formations underlying the site:</li> <li>Lower Greensand Group (sandstone) underlies most of the site – major aquifer, (highly permeable) – formation is regarded as highly vulnerable</li> <li>Gault Formation (mudstone) underlies the southeast corner of the site</li> <li>Amphill Clay Formation and Kimmeridge Clay Formation (mudstone) underlies most northern part of the site</li> <li>There are no superficial (drift) deposits or drift deposits (alluvium) on the site. There is no recorded made ground (artificial geology) or mass movement on site or within 1km</li> <li>Map products available for the site, if further geological information is required include:</li> <li>BGS 1:50k Marlborough Sheet 266</li> <li>County Sheet 6 inch map – Solid geology Wiltshire27FS</li> </ul>	Map info BGS GeoIndex	On site and surrounding the site there is no drift geology or made ground recorded The Lower Greensand is a major aquifer, and the Gault and Amphill Clay Formations are non aquifers There are no drift, made ground or landslipped materials recorded on or within 1km of the site
	Significant Structures	No geological structures including faults shown within 1km of the site	Map info	No geological structures identified
	Borehole information	There are 122 confidential boreholes within 1km of the site Further 13 non-confidential boreholes within 1km of the site (Compton Bassett BH3 to BH15 inclusive)	GeoIndex	Should further site specific information be required, the logs for the 13 identified boreholes could be obtained from BGS which are all between 10 and 30m deep

### **ATKINS**

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Regionally Important Geological Sites (RIGS)	Pearce's Old Pit RIGS site is 390m south-southwest of site	Map info	RIGS site is closeby
	AONB Designation	Site is adjacent (within 200m) of North Wessex AONB	Map info	AONB overall landscape character of the area is a potential receptor
	Open Cast Coal Sites	None recorded within 1km of the site	BGS GeoIndex	None identified
	Water Wells	1 recorded approximately 1km southeast of the site at NGR 403200 171000 (Compton Bassett House). Installed to a depth of 94.5m. BGS reference SU07/26	BGS GeoIndex	1 water well registered – potential receptor
	Site Investigation Reports	<ul> <li>There have been 8 site investigation reports within 1km of the site which may be available from BGS including:</li> <li>Sands Farm, Calne – Ref 1A</li> <li>Calne Quarry – Ref 43570</li> <li>Freeth Farm – Ref 43572</li> <li>Sands Farm Calne – Ref 31955</li> <li>Compton Bassett Landfill Site – Ref 31961</li> <li>Compton Bassett Refuse Site – Ref 31983</li> <li>Compton Bassett – Ref 31945</li> <li>Compton Bassett Landfill Site – Ref 32165</li> </ul>	BGS GeoIndex	Substantial information available within local site investigation reports, which may contribute to site information
	Mineral Assessment Reports, DTI Mineral Reports and MRP Reports Mineral Occurrences	None recorded within 1km of the site	BGS GeoIndex	No potential receptors identified
	Active Mines and Quarries	<ul> <li>2 sand and gravel extraction operations within 1km of the site:</li> <li>Sands Farm, Calne – NGR 402150 170900</li> <li>Compton Bassett – NGR 401400 170750</li> </ul>	BGS GeoIndex	Nearby sand and gravel quarrying activities identified
		<ul> <li>There are three quarries within 1km of the site:</li> <li>Compton Bassett immediately to the south and southwest of the proposed site</li> <li>Freeth Farm 360m northeast of site</li> <li>High Penn Farm 650m northwest of site</li> </ul>	Map info	



Joint Waste Site Alloca	ations Site Surve	y Report				
Aspect	Type of in	formation	Summary of available information	Data		Comments / Outcome
_				Source	s	
	Current	Surrounding	Agricultural land / rural setting	WCC,	BGS	Potential sources of historical and current
	Landuses	-		GeoInde	x	contamination off site
			2 existing landfills within 1km of site:			
			Sands Farm			
			Compton Bassett			

# Joint Waste Site Allocations Site Survey Report **Allocations Site Survey Report**

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Geology	Major stratigraphy	<ul> <li>The site is underlain by the Oxford Clay formation which is a non aquifer</li> <li>Off site the Hazelbury Bryan Formation (sandstone, siltstone and mudstone) and Stanford Formation (limestone, marl and mudstone) outcrop approximately 1km southeast of the site.</li> <li>Both of these off site formations are minor aquifers (negligibly permeable/vulnerable).</li> <li>There are no superficial (drift) deposits on the site recorded. There are drift deposits (alluvium) within the Thunder Brook flood plain, which is immediately adjacent to the southwestern site boundary, although the channel is 150m to the south.</li> <li>There is no recorded made ground (artificial geology) or mass movement on site or within 1km</li> <li>Map products available for the site, if further geological information is required include:</li> <li>BGS 1:50k Swindon Sheet 252</li> <li>1:10k quarter sheets available with sheets SU08SE, SU08SW covering parts of the site</li> <li>County Sheet 6 inch map – Solid geology Wiltshire27FS</li> </ul>	Map info BGS GeoIndex	The Oxford Clay is a non aquifer underlying the site, and the nearest outcrop of a minor aquifer is approximately 1km from the site There are no drift, made ground or landslipped materials recorded on or within 1km of the site
	Significant Structures	No geological structures including faults shown within 1km of the site	Map info	No geological structures identified
	Borehole information	Off site there are 24 intrusive investigation points including auger holes, inspection points, trial pits and boreholes within 1km of the site Of these there are 11 boreholes to a maximum depth of 30mbgl (M4 BH3 to BH15 inclusive)	GeoIndex	Should further site specific information be required, the logs for the 24 identified positions/boreholes could be obtained from BGS
	Regionally Important Geological Sites (RIGS)	No RIGS sites are within 1km of site	Map info	No RIGS sites identified



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	AONB Designation	The site is more than 1km from North Wessex AONB	Map info	No AONB designations within 1km of the site
	Open Cast Coal Sites	None recorded within 1km of the site	BGS GeoIndex	None identified
	Water Wells	3 recorded each approximately 2.6km from the site	BGS GeoIndex	3 water wells registered – potential receptors
	Site Investigation Reports	<ul> <li>There have been 3 site investigation reports within 1km of the site which may be available from BGS including:</li> <li>Whitehill Lane Wootton Bassett – Ref 45958</li> <li>Hookers Gate Embankment M4 – Ref 32024</li> <li>Oakend Way Gerrards Cross – Ref 45970</li> </ul>	BGS GeoIndex	Substantial information available within local site investigation reports, which may contribute to site information
	Mineral Assessment Reports, DTI Mineral Reports and MRP Reports Mineral Occurrences	The area is covered by the MAR Report "Summary regional assessment of the sand and gravel resources of the Middle and Upper Thames and its tributaries." By PM Hopson Ref WF/MN/82/5 No mineral occurrences reported within 1km of the site No DTI Mineral and MRP Reports within 1km of the site	BGS GeoIndex	No potential receptors identified
	Active Mines and Quarries	No sand and gravel extraction operations within 1km of the site Wootton Bassett Rail Aggregate Depot (Crushed Rock) is at NGR 406501181816 approximately 2.6km from the site	BGS GeoIndex Map.info	No quarries within 1km of the site Nearby crushed rock activities identified



Joint Waste Site Allocations Site Survey Report							
Aspect	Type of i	nformation	Summary of available information	Data		Comments / Outcome	
				Source	s		
	Current Landuses	Surrounding	<ul> <li>Agricultural land / rural setting with several areas of ancient woodland to the north and northeast of the site, all approximately 1km away</li> <li>2 existing landfills within 1km of site: <ul> <li>Parkgrounds Farm – on site and potentially off site also</li> <li>Hookers Gate – 800m southwest of site</li> </ul> </li> <li>1 closed landfill within 1km of site: <ul> <li>Whitehill Lane – 750m south of site</li> </ul> </li> </ul>	WCC, GeoInde	BGS ex	Potential sources of historical and current contamination on and off site	

### **ATKINS**

#### Joint Waste Site Allocations Site Survey Report

### Site: NW29 Studley Grange Waste Management Facility, Wooton Bassett

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Geology	Major stratigraphy	Amphill Clay Formation and Kimmeridge Clay Formation (mudstone) entirely underlies the site, and most of the surrounding 1km radius, with the exception of a small outcrop of Lower Greensand Group (sandstone) to the southeast. The Amphill Clay Formation is a non aquifer, and the Lower Greensand is a minor aquifer (variably permeable) There is no superficial geology (drift), artificial geology (made ground) or mass movement (landslips) recorded on site, or within 1km Map products available for the site, if further geological information is required include:	BGS Goolodex	On site and surrounding the site there is no drift geology or made ground recorded The Amphill Clay Formation is a non aquifer, and the Lower Greensand is a minor aquifer
		<ul> <li>BGS 1:50k Swindon Sheet 252</li> <li>BGS 1:10k sheets SU08SE and SU18SW</li> <li>County Sheet 6 inch map – Solid geology Wiltshire15SW</li> </ul>	Geomaex	
	Significant Structures	No geological structures including faults shown within 1km of the site	Map info	No geological structures identified
	Borehole information	There are 8 borehole within 1km of the site all to the north or northeast , although none of these are on site	GeoIndex	Should further site specific information be required, the logs for the 8 identified boreholes could be obtained from BGS which are up to 32m deep
	Regionally Important Geological Sites (RIGS)	None recorded within 1km of the site	Map info	No potential receptors identified
	AONB Designation	Site is 1.7km from North Wessex AONB, which is southeast of the site	Map info	AONB overall landscape character of the area is a potential receptor
	Open Cast Coal Sites	None recorded within 1km of the site	BGS GeoIndex	None identified



Joint Waste Site Alloca	Joint Waste Site Allocations Site Survey Report					
Aspect	Type of information	Summary of available information	Data	Comments / Outcome		
			Sources			
	Water Wells	3 are recorded within 1km of the site:	BGS	3 water wells registered – potential		
			GeoIndex	receptors		
		North of the site at NGR 410100 182430 (Upper				
		Studley Farm).				
		Installed to an unknown depth				
		BGS reference SU18/11				
		East of the site at NGR 410840 182150 (Finebush				
		Nursery).				
		Installed to a depth of 32m				
		BGS reference SU18/52				
		Southeast of the site at NGR 410800 181080				
		(Lower Salthrop Farm).				
		Installed to an unknown depth				
		BGS reference SU18/10				



Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
	Site Investigation Reports	<ul> <li>There have been 27 site investigation reports within 1km of the site which may be available from BGS including:</li> <li>Whitehill Lane, Wootton Bassett– Ref 45958</li> <li>Western Relief Sewer Stage III – Ref 20122</li> <li>Market Place Wroughton – Ref 20223</li> <li>Elcombe Landfill Site, Swindon – Ref 12407</li> <li>Swindon Even Junior School – Ref 1A</li> <li>Development at Hillside Avenue, Swindon – Ref 43759</li> <li>Swindon Hospital – Ref 43452</li> <li>Toothill Footbridge Thamesdown – Ref 20710</li> <li>Whitton Bassett Road, Swindon – Ref 19616</li> <li>Shaw Road, Swindon – Ref 15651</li> <li>Westmead Drive Westlea Down Swindon – Ref 23398</li> <li>Great Western Way Swindon – Ref 5197</li> <li>Mannington Roundabout Swindon – Ref 31927</li> <li>Brell West Site, Swindon – Ref 32058</li> <li>Trigonos Windmill Hill Swindon – Ref 12034</li> <li>Swindon A 420 – Ref 32130</li> <li>Toothill Footbridge – Ref 32146</li> <li>8 Haddon Close Grange Park Swindon – Ref 42213</li> <li>Trigonos Whot Swindon – Ref 17620</li> <li>Rose Street Swindon Wiltshire – Ref45932</li> <li>Commercial Road Swindon – Ref 45959</li> <li>Shelley Street Swindon – Ref 45959</li> <li>The Bungalow Ashford Road Swindon Wiltshire – Ref45991</li> </ul>	BGS GeoIndex	Substantial information available within local site investigation reports, which may contribute to site information
	Minoral Accessor	Indish Falm Swindon - Kei 23398 The grap is severed by the MAD Depart "Comments	PCS	
	Reports DTI Minoral	regional assessment of the sand and gravel	Geolodey	
	Peports and MPP	regional assessment of the Sand Upper Themes and its	Geolindex	
	Reports	tributaries."		



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Mineral Occurrences	By PM Hopson Ref WF/MN/82/5		
		There are no DTI or MRP Reports or Mineral Occurrences reported within 1km of the site		
	Active Mines and Quarries	An active quarry is co-located at the Studley Grange Farm site – NGR 410000 182000 (clay and shale)	BGS GeoIndex	On site clay and shale quarrying activities identified
		The site is co-located with a former quarry	Map info	
	Current Surrounding Landuses	Agricultural land / rural setting	WCC, BGS GeoIndex	Potential sources of historical and current contamination on and off site
		Existing landfill/quarrying activities on site, and another waste site 300m southwest of the site on Hay Lane (transfer site)		
		In area surrounding the site there are several nurseries and garden centres, with the rail / canal corridor to the north of the site. There are isolated dwellings nearby.		

# Joint Waste Site Allocations Site Survey Report **Allocations Site Survey Report**

Aspect	Type of information	Summary of available information	Data	Comments / Outcome	
			Sources		
Geology	Major stratigraphy	The site is underlain by the <b>Oxford Clay formation</b> which is a non aquifer Off site the <b>Hazelbury Brvan Formation</b>	Map info	The Oxford Clay is a non aquifer underlying the site, and the nearest outcrop of a minor aquifer is approximately 1km from the site	
		(sandstone, siltstone and mudstone) and Stanford			
		<b>Formation</b> (limestone, marl and mudstone) outcrop approximately 1km southeast of the site.		There are no drift, made ground or landslipped materials recorded on or within 1km of the site	
		Both of these off site formations are minor aquifers			
		(negligibly permeable/vulnerable).			
		There is no superficial geology (drift), artificial			
		geology (made ground) or mass movement			
		(landslips) recorded on site, or within 1km	DCC		
		map products available for the site, in further	BGS Geolodey		
		BGS 1:50k Swindon Sheet 252	Geomdex		
		BGS 1:10k sheet SU19SW			
		No County Sheet 6 inch map sheets available			
	Significant Structures	No geological structures including faults shown within 1km of the site	Map info	No geological structures identified	
	Borehole information	There are no borehole within 1km of the site, although there are 20 trial pits which relate to various phases of the Chapel Farm site development (i.e. off site but in the vicinity)	GeoIndex	Should further site specific information be required, the logs from the trial pits could be obtained from BGS which are up to 32m deep	
	Regionally Important Geological Sites (RIGS)	None recorded within 1km of the site	Map info	No potential receptors identified	
	AONB Designation	No AONB designations within 1km of the site	Map info	No potential receptors identified	
	Open Cast Coal Sites	None recorded within 1km of the site	BGS GeoIndex	None identified	
	Water Wells	None recorded within 1km of the site	BGS GeoIndex	None identified	



Joint Waste Si	ite Allocations	Site Survey	Report

Aspect	Type of information	Summary of available information	Data	Comments / Outcome	
			Sources		
	Site Investigation Reports	<ul> <li>There have been 2 site investigation reports within 1km of the site which may be available from BGS including:</li> <li>A419</li> <li>Down Ampney near Cricklade, Wiltshire – Ref 28605</li> </ul>	BGS GeoIndex	Substantial information available within local site investigation reports, which may contribute to site information	
Mineral Assessment Reports, DTI Mineral Reports and MRP <u>Reports</u> Mineral Occurrences		The area is covered by the MAR Report "Summary regional assessment of the sand and gravel resources of the Middle and Upper Thames and its tributaries." By PM Hopson Ref WF/MN/82/5 And "The sand and gravel resources of the Thames Valley, the country around Cricklade, Wiltshire" By PR Robson Ref MAR 018 No DTI Mineral and MRP Reports within 1km of the site	BGS GeoIndex	No potential receptors identified	
	Active Mines and Quarries	No operations identified within 1km. The Lower Widhill operation is 1.3km west of the site adjacent to the River Ray, and extracts clay and shale at NGR 411482 191032 No former extractive industries identified within 1km	BGS GeoIndex Map info	Nearby clay and shale quarrying activity identified, more than 1km from site No potential receptors identified	
		of the site			
	Current Surrounding Landuses	Agricultural land / rural setting	WCC, BGS GeoIndex	Potential sources of historical and current contamination from earlier phases of Chapel Farm site	
		Chapel Farm. There are no other landfill sites within 1km of site		onaport ann aic	



**Contaminated Land Assessment Supporting Information** 

#### Site: K1 Broadway, Market Lavington

Table 1: Contaminated Land, Environmental Information and results

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is an unnamed stream which flows in a north-westerly direction 200m west from the western site boundary. The site is close to the origin of the stream, which is southeast of the site.	Map info	The nearby streams/drains are potential receptors Semington Brook and unnamed streams and tributaries are receptors
		1:50,000 OS Map		
		Envirocheck		
	Current Discharge Consents	Wessex Water Storm overflow to watercourse and treated sewage effluent (relicensed in 2001) Semington Brook receives discharge 300m southwest	Envirocheck	potential sources of off site ontamination identified within 1km
		West Park Farm Agricultural and surface discharge (food production) since 1966 325m east Discharge to tributary of Semington Brook		
		Lavington Station Yard Trade discharge – process effluent since 1966 920m southwest Discharge to land/watercourse		
	Historical Discharge Consents	Wishmead Trout Farm Fish farming 1997 to 2005 Semington Brook	Envirocheck	1 historical potential source of off site contamination identified within 1km of the site



Aspect Type of information		Summary of available information	Data Sources	Comments / Outcome
	Pollution Incidents	No pollution incidents relevant to the water environment recorded within 1km	Envirocheck	No potential sources of contamination identified within 1km
	Surface Water Quality	In 2000 the Semington Brook was recorded as being of River Quality 'A' at Woodbridge Bridge, and River Quality 'B' for 4.5 km upstream of this, close to Littleton Panell	Envirocheck	The overall quality (and specific biological and chemical quality) of Semington Brook have consistently been of grade A or B i.e. good or very good quality.
		River Quality Biology upstream at Woodbridge Bridge was consistently GQA Grade 'B' between 1990 and 2004. Upstream at Littleton Panell the GQA Grade 'B' in 1990 and Grade 'A' from 1995 to 2004.		No records obtained for small streams/drains
		River Quality Chemistry sampling close to Littleton Panell in 1990 was GQA Grade 'C', from 1993 to 1999 was Grade 'B' and from 2000 to 2003 was Grade 'A'. In 2004 the Grade was 'B'.		
		Downstream at Woodbridge Bridge the chemistry sampling results were identical.		
Hydrogeology	Hydrogeological units	Gault mudstone – Non aquifer under site, and surrounding site	Map info	Non aquifer may be a low sensitivity potential pathway/receptor, underlain by major aquifer.
		Alluvium – superficial geology, associated with the Semington Brook / tributary west of the site		Underlying minor and major aquifers are potential receptors
		No artificial geology (made ground) or mass movements recorded within 1km of the site		
		Upper Greensand - Major aquifer 540m south and east of the site		
		Portland Limestone – Minor aquifer two outcrops 380m northwest and 800m north-northeast of the site		
		No geological structures identified within 1km of the site	Facility (1994)	
		ivon aquiter (negligibly permeable)	Envirocheck	



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Likely direction of groundwater movement	Likely to be west to southwest direction towards principle surface drainage features.	Map info	
	Groundwater vulnerability	Underlying the site, Non aquifer (negligibly permeable) – formations are regarded as containing insignificant groundwater quantities, although groundwater flow does occur and this requires consideration for persistent pollutants Soil not classified – no data available Whole site part of a Nitrate Vulnerable Zone	Envirocheck	Non aquifer / any contained groundwater below the site is a low sensitivity potential receptor The adjacent major aquifer (Upper Greensand) and minor aquifers (Portland Limestone and Alluvium) are potential receptors
		Gault mudstone – non aquifer - under site, and surrounding site Upper Greensand – major aquifer Portland Limestone – minor aquifer Both some distance from the site as previously described Alluvium – minor aquifer	Map info	
Licensed Abstractions	Surface Water Abstractions	No surface water abstractions within 1km of the site	Envirocheck	No potential receptors identified
	Abstractions       Private     Groundwater       Abstractions	T Sharp at West Park Farm has a private (agricultural) abstraction of 36m3/d from a borehole (10660 m3/y) 400m east of site D Hawkins has a license to abstract from a stream or series of wellpoints of unspecified volume Aquaculture 1075m south of site R Gregory had a previous permit for this purpose at a very similar location 1140m south of site		4 licensed abstractions which are potential receptors, although only one of these is within 1km of the site.



	A Hartley has an unanacified source shotes the	Jources		
	license to abstract 1659m3/y 1975m southwest of site			
Details	The site is not directly affected by any flood zones. The nearest flood risk zones (2 or 3) is approximately 150m west of the site All of the local watercourses in the vicinity are at risk of Zone 3 Flooding as designated by the Environment Agency The site is not directly affected by the area indicated, but Semington Brook and its tributaries (200m from the site) are at risk of flooding.	Map info Envirocheck	The site is not directly affected by flood zoning, although flood zones are located within 200m of the site	
Designations/Sensitive landuses	<ul> <li>The site has 3 wildlife sites within 1km:</li> <li>440m to the northeast</li> <li>995m to the northeast</li> <li>860m to the south-southeast</li> <li>The site has 2 ancient woodlands within 1km:</li> <li>475m to the northeast</li> <li>880m to the south-southeast</li> <li>There is 1 unnamed SAM 950m to the north</li> </ul>	Map info WCC data	6 different potential receptors have been identified within 1km of the site	
	Details Designations/Sensitive landuses	1975m southwest of site         Details         The site is not directly affected by any flood zones. The nearest flood risk zones (2 or 3) is approximately 150m west of the site         All of the local watercourses in the vicinity are at risk of Zone 3 Flooding as designated by the Environment Agency         The site is not directly affected by the area indicated, but Semington Brook and its tributaries (200m from the site) are at risk of flooding.         Designations/Sensitive landuses       The site has 3 wildlife sites within 1km:         440m to the northeast         995m to the northeast         860m to the south-southeast         The site has 2 ancient woodlands within 1km:         475m to the northeast         880m to the south-southeast         There is 1 unnamed SAM 950m to the north         None within 1km of the site	1975m southwest of siteDetailsThe site is not directly affected by any flood zones. The nearest flood risk zones (2 or 3) is approximately 150m west of the siteMap infoAll of the local watercourses in the vicinity are at risk of Zone 3 Flooding as designated by the Environment AgencyEnvirocheckThe site is not directly affected by the area indicated, but Semington Brook and its tributaries (200m from the site) are at risk of flooding.Map infoDesignations/Sensitive landusesThe site has 3 wildlife sites within 1km: • 440m to the northeast • 860m to the south-southeastMap info WCC dataThe site has 2 ancient woodlands within 1km: • 475m to the northeast • 880m to the south-southeastThere is 1 unnamed SAM 950m to the north None within 1km of the siteEnvirocheck	



Joint Waste Sit	e Allocations	Site Surve	v Report

Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
	1:2,500	<ul> <li>1980 - Site occupied by brick and the works with small clay pit. Water wells shown on site. Excavations also shown immediately north of the site. West Park Farm to east, with rural setting including tree lined field boundaries</li> <li>1900 - railway line in construction to east of site, no other significant change from previous map</li> <li>1924 - Clay pit expanded with cutting defined including the northern section of the pit which has reeds/marsh marked. Pockets of woodland marked to east and south of site.</li> <li>1939 - Internal structure of site has changed including a ditch and further reeds/marsh areas, no other updates</li> <li>1979-82 - Railway and site extent unchanged, but site use now undefined as a 'works' with an attached Morbra House. 150m to the west of the site a poultry farm is marked. The clay pit on site and to the north appears infilled. 300m to the southwest a sewage works has been constructed. The surrounding area is marked as fields.</li> <li>1994- land use as previous map.</li> </ul>	maps	<ul> <li><u>Chay Pit</u></li> <li>There is likely to have been partial/total infilling of the original clay pit. The type of materials used for infilling is unknown but there is a potential for buried and surface contamination and a potential for gas generation.</li> <li>Although not reported on the historical maps the clay pit could have been associated with other allied activities occurred on site/ in the vicinity, e.g. brick works, manufacturing of goods, metal working, power generation, furnace or engine room etc.</li> <li>The cumulative potential impact of such landuses might result in a diverse range of contaminant on site and off site, including metals, hydrocarbons, solvents, PCBs and putrecible waste. Such processes may have also generated a variety of wastes which may have a potential to contaminate the site / surroundings, especially if any of that waste was stored on site or used as a fill material at any time.</li> <li>Pottery Works, Brick and Tile works If a kiln was associated with any paint / glaze / coatings could have contaminate the areas used for preparation / site of the kiln. It is likely there has been some transport infrastructure to bring raw products in (and a stockpiling / storage area) and take out the finished articles.</li> </ul>



_ Joint Waste Site Allocations Site Survey Report					
Aspect	Type of information	Summary of available information	Data	Comments / Outcome	
-		-	Sources		
	Historical 1:10,560	<b>1888</b> – rural area with occasional farms and areas of fields / woodland. Brick and tile works indicated on site. To southwest a cork mill at Woodbridge Mill is shown.	Historical OS maps	See above	
		<b>1901</b> – Railway in construction as with larger scale map. No useful additional information.			
		<b>1926</b> – as previous map			
		<b>1961</b> – worked area of former clay pit appears flooded. Works shown as previously.			
	Historical	<b>1982-4</b> – as for 1:10,560 map	Historical OS	No additional information	
	1:10,000		maps		
		<b>2005</b> –, further detail of internal site infrastructure shown.			

## **ATKINS**

Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
	Current (observations of site visit conducted in 14/7/06)	<ul> <li>On site landuses include:</li> <li>Wooden pallets / fencing yard – Elm Tree Fencing</li> <li>Compound labelled 'Hochtief' on fence including shipping containers, skips and empty mobile huts on rough gravel surface</li> <li>Gaiger Bros Ltd brickyard with ceramics, some waste rock / hard core piles. Area of ash from previous bonfire.</li> <li>Thermal Designs unit, east side of estate, has a building and concrete hardstanding with gravel car park behind. No services or drains visible.</li> <li>AMC Unit south of Thermal Designs, behind the building</li> <li>Mike Garbutt Transport removals yard with unit and hardstanding including petrol interceptor, above ground fuel (diesel)I tank, propylene tank near gates.</li> <li>Yard has large concrete covered hard standing including interceptors.</li> <li>There is a ditch which runs along the former eastern site boundary, in a north-south direction (dry during visit)</li> <li>Easterton Joinery compound south of Transport yard.</li> <li>Dust blowing across site, Drain by entrance to Elm Tree Fencing compound</li> <li>Elevation drop along southern boundary of site of 1- 2m.</li> </ul>	Site visit	Site has numerous current uses including general storage of materials and vehicles. Site was very dusty at the time of inspection with a variety of hardstanding and uncovered surfaces. No visual or olfactory evidence of significant contamination was observed during the sit6e visit. Overall the contamination potential of the activities appears medium although materials storage and handling could have lead to local spillage which could have impacted the ground.



Joint	Waste	Site	Allocations	Site	Surve	/ Re	port

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Current (observations of site visit conducted in 14/7/06)	<ul> <li>Surrounding landuses include:</li> <li>Pond at front of site by road</li> <li>Pond in garden of Mowbray House</li> <li>Chicken farm to west – trench being dug for services near site boundary, filled with water, partly due to elevation difference along western boundary of former tip site</li> <li>Sweetcorn crop fields planted to south</li> <li>Sewage treatment works beyond fields, to the south</li> <li>Railway with access road alongside to STW to southeast of site</li> <li>Pond other side (east) of railway</li> </ul>	Site visit	See comments above



Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
	Additional Environmental Information	<ul> <li>Broadway Landfill Site <ul> <li>Located on site.</li> <li>Closed December 1976</li> <li>Kennet District Council/Wiltshire County Council and</li> <li>BGS records for site</li> <li>Accepted household waste</li> <li>Statement of no threat to surface water or groundwater</li> </ul> </li> <li>Market Lavington Brickpit <ul> <li>On site</li> <li>Former opencast Gault Clay pit, reference 8367</li> <li>No longer operational, no closure date</li> <li>25m southwest of site</li> </ul> </li> <li>Heron Bridge / Black Dog Cross Roads Landfill Site</li> <li>677m north west of the site</li> <li>Operational status unknown</li> <li>Kennet District Council, Wiltshire County Council and BGS records for site</li> <li>Accepted household, commercial, sewage sludge waste</li> <li>Statement of no threat to surface water or groundwater</li> </ul> <li>Lavington Station Yard on Webb's Lane – Waste Transfer Station</li> <li>845m south west</li> <li>Devizes Reclamation Co Ltd held license</li> <li>Waste Transfer Station operated from July 1991, current operational status unknown</li> <li>Licensed to transfer dry non-hazardous solid commercial and industrial waste only</li> <li>845m southwest of site</li>	Envirocheck	Confirmation of the presence of the landfill on site and the type of waste it was licensed to accept, see also comments above. On site source of contamination.



loint Waste	Site Allocations	Sito Survo	Report	
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Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Additional Environmental Information	Adjacent businesses to site: <b>Artisan Measurement and Control</b> On site Testing and calibration equipment manufacture Active business <b>Mike Garbutt Transport Ltd</b> On site Depot Active	Envirocheck recent OS Map	See above comments
	Current	Site currently used for unspecified light industry / commercial use	Map info	Potential for current landuses to be sources of contamination on site
Property	Details	There is a conservation area 770m south- southwest of the site (Broadway, Market Lavington) There is a built up area 800m south-southwest of the site (Littleton Panell)	Map info	The conservation area and built up area are also potential off site sources of current and historical contamination
	Other site information	Broadway landfill site was filled with 77000cu. M of domestic waste and closed in 1976. Area of site 3.5 ha, potential development will be 1 ha or less Site currently in light industrial / storage / distribution use. Chicken farm is on the northwest boundary of the site, with Mowbray house a residential dwelling located at the western entrance to the estate. Broadway cottages are opposite the eastern end of the site.	WCC	<ul> <li>Potential issues cited include: <ul> <li>Land stability</li> <li>Impact of former tipping activities</li> <li>Noise levels</li> <li>Nuisance including odour, dust, vermin</li> <li>Site traffic</li> </ul> </li> <li>Potential receptors include: <ul> <li>Mowbray House</li> <li>Broadway Cottages</li> <li>Industrial Units, all owned by Gaiger Bros.</li> <li>Surface water bodies</li> </ul> </li> </ul>


## Site: K11 Tinkersfield Farm, Monument Hill, Devizes

## Contaminated Land Assessment Information and results table

#### Site name – Tinkersfield Farm

NGR at centre of site – 402300 159960

Location description – Existing waste handling facility within generally rural setting, immediately adjacent to the A342, 2km southeast of Devizes Area of site (ha) – 3.5

Table 1: Contaminated Land, Environmental Information and results

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Hydrology	Surface Water Level and Flow	Nearest surface water feature to the site is an unnamed stream which flows south from the most southerly boundary of the site. The stream origin is located close to / on / within the site boundary.	Map info	The nearby stream and unspecified surface water feature are potential receptors (see also site observations)
		Nearest unspecified surface water feature to the site is 150m southwest of the site.	Envirocheck	
	Current Discharge Consents	Monument Hill Landfill SiteStorm / emergency overflow to watercourse230m south, Stert watercourse receives discharge,possibly containing site effluent dischargesDomestic properties 3-5 Old Sleight FarmCottagesSewage discharges – final treated effluent800m southwestDischarge to land / soakaways	Envirocheck	4 potential sources of on/off site contamination identified within 1km
		Spout Cottage Sewage discharges – final treated effluent 950m southeast Discharge to soak to tributary of R Avon Sleight Farm Sewage discharges – final treated effluent 1000m southwest Discharge to tributary of Sominaton Brook		



Joint Waste Site Alloc	ations Site Survey Report			
Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Historical Discharge Consents	Manor Farm Trade discharge – agricultural and runoff Livestock / food production 1965 to 2003 Tributary of Semington Brook	Envirocheck	1 historical potential source of off site contamination identified within 1km of the site
	Pollution Incidents	No pollution incidents relevant to the water environment recorded within 1km	Envirocheck	No potential sources of current or historical contamination identified within 1km of the site
	Surface Water Quality	There are no Environment Agency surface water quality, biological quality or chemical quality sampling points within 1km of the site	Envirocheck	No data available – should be obtained from the Environment Agency for the nearest available location to the site
		There is no data available		
Hydrogeology	Hydrogeological units	Upper Greensand – Major aquifer under site, and surrounding site Gault Mudstone - 300m south of the site West Melbury Chalk – 120m northeast and 800m southwest of the site Alluvium – superficial geology, associated with the watercourse adjacent to the site, with the nearest exposure 180m from the site No artificial geology (made ground) or mass movements recorded within 1km of the site No geological structures identified within 1km of the	Map info	Major aquifer on site is a potential receptor / pathway Off site potential receptors / pathways include 2 adjacent major aquifers and a minor aquifer No Made Ground shown but site known to be landfilled
		Site Major aquifer (highly permeable) on site	Envirocheck	-
		No SPZ located within 1km of the site	Envirocheck	No potential receptors identified
		INU SFZ IUCALEU WILLIN I KITI OI LITE SILE.		
	groundwater movement	across the site	wap mo	



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Groundwater vulnerability	Major aquifer (highly permeable) with known/probable presence of significant fracturing. May be highly productive and able to support large abstraction rates. Soil of intermediate leaching potential (I1) can possibly transmit a large range of pollutants Whole site part of a Nitrate Vulnerable Zone	Envirocheck	Major aquifer / groundwater below the site are a potential receptor and pathway
Licensed	Surface Water	No surface water abstractions recorded within 1km	Envirocheck	No potential receptors identified
Abstractions	Abstractions	of the site		· · ·
	Public Groundwater Abstractions	No public supply abstractions recorded within 1km of the site		No potential receptors identified
	Private Groundwater Abstractions	T Cartwright has a private (agricultural) abstraction of 4m3/d from a borehole and a well 240m northeast of site M Oram has a well (Nursteed Farm Well 2) unknown licensed volume, and a borehole abstraction licence for 227m3/y Farming / domestic – groundwater 300m east of site M Oram also has Nursteed Farm Well 3 for general farming / domestic with yearly permitted abstraction of 113m3/y 400m west of site M Oram also has another borehole Nursteed Farm Well 1 with permit for 1486m3/y abstraction 550m north of site, Well 3 405m west of the site W Armitage has a licensed groundwater borehole for farming / domestic for 1m3/d or 331m3/y 380m northwest of site R Martin has a groundwater borehole licensed to abstract 284m3/y for horticultural watering 825m southeast of site A Edwards has a groundwater borehole abstraction license for up to 23 m3/d or 8300m3/y for spray irrigation and agriculture		7 licensed abstraction points have been identified as potential receptors, within 1km of the site.



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
Flood risk	Details	There is an unnamed watercourse classified as being at risk from flooding from (zone 3) 200m south of site (drains in southwesterly direction overall) The southern most tip of the site is directly affected flood zones 2 and 3, and the unnamed watercourse draining from the southern boundary of the site is affected by flood zoning in its entirety	Map info	A small part of the site is directly affected by flood risk zoning, and the entire length of the adjacent watercourse also has the same flood risk zoning
		identified as being at risk of flooding	Envirocneck	
Land	Designations / Sensitive landuses	<ul> <li>North Wessex Downs AONB is 760m east of site</li> <li>The site has 2 wildlife sites within 1km:</li> <li>Directly adjacent to the southern site boundary</li> <li>850m to the northeast</li> </ul>	Map info WCC data	3 potential receptors have been identified within 1km of the site – the AONB and 2 wildlife sites
		North Wessex Downs AONB is 700m east of site	Envirocheck	



Aspect	Type of information	Summary of available information	Data	Comments / Outcome
			Sources	
Property	Historical 1:2,500	<ul> <li>1886 - saw pit with sluice on the site. Railway line 150m to south, within track of woodland. Drainage to the south in ditches with a spring marked at the southern boundary. Surrounding landscape fields with farm.</li> <li>1900, 1924, 1939 - as previous map but with less woodland</li> <li>1975-82 - Railway dismantled. Southern part of the site labelled as a 'refuse tip'. Development of additional adjacent dwellings including Grounds Farm 200m to west, Parklands Farm 300m to southwest and Ridgecroft Farm 100m to northeast</li> <li>1994-95- Dwellings as previous map. Area of Refuse Tip delineated including relationship to draining water feature with an 'issue' point marked in the south</li> </ul>	maps	<ul> <li>Saw Pit on site noted to be used as a refuse pit from at least 1970s (predominantly in eastern part of the site)</li> <li>The type of materials used for infilling is unknown but there is a potential for buried and surface contamination and a potential for gas generation. A drainage point is shown to be issuing from the 'refuse' area.</li> <li>In addition, the saw pit may have resulted in contamination from processes/products including: <ul> <li>Stains</li> <li>Preservatives</li> <li>Fixatives</li> <li>Glues</li> <li>Sawdust (or other wood off-cuts) to generate ground gases under the right conditions for decomposition).</li> </ul> </li> <li>It is possible that allied activities occurred on site/ in the vicinity, e.g. manufacturing of goods, metal working etc.</li> <li>The former sluice on site may also be a potential source of contamination, depending on what industry the sluice / water management was associated with. There is a potential for the water and sediment to have been affected by this activity. If the water was contaminated then it is possible / likely that the sediment which collects around a sluice to also have been affected. The quantity of sediment collected will depend upon the flow rate of water.</li> </ul>



Joint Waste Site Alloca	tions Site Survey Report			
Aspect	Type of information	Summary of available information	Data	Comments / Outcome
-			Sources	
	Historical	1888-9 - Stern Valley and associated woodland	Historical OS	As above
	1:10,560	indicated in rural area with occasional farms and	maps	
		areas of fields / woodland		
		<b>1901, 1926, 1938-9, 1961</b> – as previous map		
	Historical	1983 - relevant area not shown. Devizes now	Historical OS	As above
	1:10,000	shown as built up area.	maps	
		<b>1984-90</b> – extent of refuse heap shaded, consistent		
		with the 1:2,500 1994-5 map.		
		2005-6 – as previous map, some indication of		
		internal site infrastructure shown.		

Joint Waste Site Allocations Site Survey Report

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Current (observations of site visit conducted in 14/7/06)	<ul> <li>Site currently occupied by Wiltshire Waste, observations on site include:</li> <li>Fuel oil tank next to reception building, has a concrete bund surrounding it</li> <li>Additional fuel tank, with pipe and stained earth / oil aroma indicating spill or leak</li> <li>Many disused / scrap tanks standing on site (which may not be empty) amongst skips, rock piles and waste heaps</li> <li>Disused areas of site left to revegetate</li> <li>Small standing water body / pond on west of site</li> <li>Collection of oil drums without containment marked "protectosil 100"</li> <li>Site traffic emissions and leaks</li> <li>Tyre collection area including various tanks and containers, surrounded by concrete walls with reinforced rods, filling in the former clay pit area</li> <li>Numerous piles of unsorted rubble/demolition arisings and tarmac fragments</li> <li>Concrete stand with refuse on, free draining into an interceptor</li> <li>Wetland treating leachate from former WCC waste site, which is owned/maintained by WCC. There is either aeration for this wetland/ gas venting through the wetland. There is an access road to this.</li> <li>Outfall of treated water to south of site, along with emergence of culverted watercourse which runs along the western site boundary</li> <li>Wind blown dust across site</li> </ul>	Site visit	Potential on site current sources of contamination Several aspects of historical waste management on site may be a potential source of contamination: • Discharging water from wetland • On going discharges of contamination to groundwater • Gas releases from former tip • Contamination within buried soils Additional current <u>potentially</u> contaminating activities on site include: • Leaking oil tanks and drums • Oil spills, where uncontained • Waste piles degrading • Drainage from concrete stand if interceptor not working / overwhelmed • Dust from operations and site traffic
		B - 115		



laint Maata Cit	Allogationa Cita	Curryov Donort
Joint waste Sit	e Anocations Site	Survey Report

Aspect Type of info	ormation Su	ummary of available information	Data Sources	Comments / Outcome
Current (ot of site visit co 14/7/06)	bservations Su onducted in	<ul> <li>urrounding the site:</li> <li>Rough grazing to west, occasional abandoned car in corner of field</li> <li>Downslope to south of site there is naturally vegetated woodland</li> <li>Grass fields and a stable attached to Tinkersfield Farm to east of site</li> <li>Ridgecroft domestic dwelling opposite site to north of Broadway road, surrounded by fields</li> </ul>	Site visit	Potential receptors identified surrounding the site



Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Additional Environmental Information	Numerous landfill/waste management entries relating to the site (NB some entries relate to the same site):	Envirocheck	Confirms presence of historic landfilling operations, Potential issues as detailed above.
		Monument Hill Landfill Site On site Closed December 1987 Was operated by Kennet District Council Accepted household, commercial and industrial non-hazardous waste		
		Tinkfield Tip, Monument Hill On site Closed December 1998 Operated by Kennet District Council / Wiltshire County Council Accepted soil, subsoil and construction and industrial waste Wiltshire Waste Recycling Ltd On site Special Waste Transfer Station operated by Wiltshire County Council from July 1977 Operational as far as is known with license dated January 2000 Licensed to transfer many wastes including all other special waste, degradable commercial and industrial waste, inert waste, metal and scrap metal 1994 license permitted large inputs up to 250kt 250m southeast of site Wiltshire Waste Recycling On site		
		Operational as far as is known Accepts - as listed above		



Joint Wa	aste Site /	Allocations	Site	Survey	Report

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
		<b>Tinkfield Farm</b> On site Operational status unknown Operated by Kennet District Council Accepts/ed builders rubble, soil, subsoil 250m southeast of site		
		N Grist On site Licence probably superceeded Accepts ceramics, empty used containers, fabrics, glass, bonded asbestos, paper and cardboard, metal, plastics, rubble, soil, subsoil and wood (Special waste prohibited)		
		Roundway Hospital Operational status unknown Operated by Kennet District Council Accepts/ed construction waste 775m west of site		
		Park View Farm Operational status unknown, from July 1977 Operated by unknown, licensed to N Grist Accepts/ed large number of wastes including ceramics, fabric, glass, hard waste included bonded asbestos, paper, inert building materials, metal, plastic, rubble, soil, subsoil and wood. 10-25 kt annual input At site		
		HTW Gay and Co Disused railway cutting Closed in February 1977 No known restriction on waste sources 940m southeast of site		



Aspect	Type of information	Summary of available information	Data	Comments / Outcome
Acpool	Type of mornation		Sources	
		Adjacent businesses to site:	Envirocheck recent OS	Current potential sources of off site contamination have been identified
		Artisan Measurement and Control Testing and calibration equipment manufacture Active business 60m northeast of site Mike Garbutt Transport Ltd	Мар	
		Active 125m east of site		
		No landuse indicated on or within the site boundary	Map info	No current potential on site sources of contamination identified from this data source
	Details	There are no recorded conservation areas within 1km of the site There is a built up area 700m northwest of the site (Devizes) and 550m southeast of the site (Stert)	Map info	The built up areas are potential off site sources of current and historical contamination



Joint V	Vaste	Site	Allocations	Site	Survey	Report	

Aspect	Type of information	Summary of available information	Data Sources	Comments / Outcome
	Other site information	<ul> <li>Additional information from WCC:</li> <li>1986 <ul> <li>Plans of proposed planning application for a garden centre on the western part of the site. Shows site layout and areas labelled existing tip and 'car dismantling yard'.</li> </ul> </li> <li>1987 <ul> <li>Letter report on ground conditions by Harwell (UAEA)</li> <li>Survey to test landfill gas emissions</li> <li>Trial pit excavations to confirm cover / filled materials</li> <li>Standpipe monitoring to determine methane concentrations</li> </ul> </li> <li>1990 <ul> <li>Latter from WCC re health issues associated with use of the site</li> <li>Soil erosion from cap, which could allow leachate to drain directly into the stream</li> <li>Emission of landfill gases including methane, monitoring indicated methane was being produced</li> </ul> </li> </ul>	WCC	<ul> <li>Potential risks highlighted include:</li> <li>Survey found corridors of elevated landfill gas emissions (methane)</li> <li>Trial pits found typical household wastes across most of the site. An area of supposed building and inert wastes had 1 out of 3 trial pits which also encountered wood, paper etc, with 0.5% methane.</li> <li>Consistently high methane seen across most of the site indicating a high rate of production</li> <li>Cap was reported to be releasing very small volumes of landfill gas to atmosphere via cracks in the soil/clay cap</li> <li>Depth of waste understood to be 25m deep, so significant potential for lateral migration (has been observed)</li> <li>Vegetation roots penetrating cap</li> <li>Uneven settlement resulting in poor drainage</li> <li>Ingress of landfill gas into adjacent buildings and structures</li> <li>Possibility of leachate escaping from the site and effecting stream is recognised</li> </ul>



#### **Appendix C – Appropriate Assessments**

Wiltshire County Council and Swindon Borough Council – Waste Sites

Record of Assessment of Likely Significant Effect on a European Site Required by Regulation 48 of the Conservation (Natural Habitats & c.) Regulations 1994

#### ADVISORY NOTES

#### General advisory notes on Assessment

Advice contained in Planning Policy Statement 9 and accompanying circular was that Appropriate Assessment was not required for development plans (Planning Policy Statement 9: Biodiversity and Geological Conservation, August 2005 and Government Circular: on Biodiversity and Geological Conservation - Statutory Obligations and their impact within the Planning System, August 2005) but that planning authorities were required to undertake sufficient assessment of any proposal in a development plan likely significantly to affect a European site." However, a letter to the planning authorities was sent from the Office of the Deputy Prime Minister dated 09 March 2006, which relates the failure of the UK to make land-use plans (including Development Plan Documents) subject to Appropriate Assessment. An amendment to the Habitats Regulations is expected to come into force on 1 September 2006 that will make Appropriate Assessment apply to Regional Spatial Strategies (RSS), transitional plans, Development Plan Documents (DPD) and Supplementary Planning Documents (SPD) to satisfy the requirements of Article 6 (3) of the Regulations. The AA should be undertaken by the Regional Planning Body or Local Planning Authority and should be undertaken before revisions to an RSS or the adoption of a Local Development Document. In the transitional period, before the amendment to the Habitats Regulations comes into place, it is advised that the LPA should form a view on whether the landuse plan is likely to have a significant effect on a European site and whether there is enough information to carry out an Appropriate Assessment.

Screening has been carried out by Wiltshire County Council and Swindon Borough Council to identify those waste sites proposed in Wiltshire & Swindon Waste Site Allocation Development Plan Document Issues and Options Report (March 2006) that require assessment of likely significant effect (LSE) under the Habitats Regulations. Eleven (11) proposed waste sites have been identified as requiring an assessment of LSE. Atkins was not involved in this process. These waste sites are listed below together with the European site that Wiltshire County Council and Swindon Borough Council, in their screening exercise, have identified as the potential receptor.

For the purpose of assessment a 'European site' is any site included in the Natura 2000 network, namely:

- Special Areas of Conservation (SAC) designated under European Council Directive 92/43/EEC(a) on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive); and,
- Special Protection Areas (SPA) designated under the European Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive).

The UK Government (in the accompanying circular to Planning Policy Statement 9) as a matter of policy has chosen to apply the Appropriate Assessment procedures in respect of Ramsar sites even though these are not European sites as a matter of law. There are no Ramsar sites currently identified relating to the waste proposals in Wiltshire.



District	Site	Inset	Waste Allocation	Potential
District	Rof	Number	Site Name	Furopean Site
	I CO	Number	Site Marile	Pocontor
North	NIMC	22	Eveny Manar	North Moodow
NOITI M/itebire	INVVO	32	Eysey Marior,	
vviitsnire			Cricklade	SAC
West	VVVV4	57	Chitterne Waste	Salisbury Plain
Wiltshire			Management	SAC/SPA
			Facility	
Salisbury	S12	13	Harnham Business	River Avon SAC
			Park, Salisbury	
Salisbury	S9	41	Kingsway Trading	River Avon SAC
-			Estate, Wilton	
Salisburv	S16	44	Salisbury Road	River Avon SAC
<b>,</b>			Industrial Estate.	
			Downton	
Salisbury	S3	45	Brickworth Quarry	New Forest
Callobary	00	10	and Landfill	SAC/SPA
			Whiteparish	
Saliebury	\$21	12	Churchfieds	River Aven SAC
Salisbuly	521	42		River Avon SAC
			Soliobury	
Callahumu	010	40		Caliabum, Diain
Salisbury	519	43	Thorney Down	Salisbury Plain
			vvaste	SAC/SPA and
			Management	Porton Down SPA
			Facility	
Salisbury	S15	9	Ratfyn	River Avon SAC
Kennett	K15	28	Salisbury Road	River Avon SAC
			Business Park,	
			Pewsey	
Kennett	K4	29	Everleigh Waste	Salisbury Plain
			Management	SAC/SPA
			Facility	
Salisbury Kennett Kennett	S15 K15 K4	9 28 29	Facility Ratfyn Salisbury Road Business Park, Pewsey Everleigh Waste Management Facility	River Avon SAC River Avon SAC Salisbury Plain SAC/SPA

Following the screening exercise Atkins was appointed to carry out various environmental assessments of the waste sites according to the Wiltshire County Council and Swindon Borough Council screening process, including the assessment of LSE.

#### Assessment Proforma

A proforma has been produced by Atkins Limited for Wiltshire County Council and Swindon Borough Council to record the assessment of LSE on a European site. The proforma has been produced, and the LSE assessment has been undertaken using the following guidance:

- English Nature (Habitats Regulations Guidance Notes 1 to 6)
- European Commission guidance (Assessment of plans and projects significantly affecting Natura 2000 sites, 2001)
- Appropriate Assessment of Plans: Discussion Paper [DRAFT], (Scott Wilson, Lovett-Therivel, Treweek Environmental Consultants, Land Use Consultants, June 2006)
- Protecting the Hampshire Avon Essential advice notes for forward planners and development control planners (The River Avon SAC Planning Forum Final Version – Issue for Trial, October 2005)
- Horizontal Guidance Note IPPC Technical Guidance Note H1 Integrated Pollution Prevention and Control (IPPC) Environmental Assessment and Appraisal of BAT, Environment Agency 2002



- Habitats Directive Handbook, Environment Agency, which gives guidance for completion of permits under the Pollution Prevention and Control (England and Wales) Regulations 2000 and licences under the Waste Management Regulations 1994 from the Environment Agency including particularly:
  - Habitats Directive: Work Instruction (Appendix 6): Further guidance on applying the Habitats Regulations to Waste Management Facilities, Version 3, 07/07/04 [http://www.environment-

agency.gov.uk/commondata/103599/52\_02v3\_waste\_mgmt\_295862.doc]

 Habitats Directive: Work Instruction (Appendix 7): Further guidance on applying the Habitats Regulations to Integrated Pollution Control (IPC), Pollution Prevention and Control (PPC) and Control of Major Accident Hazards (COMAH), Comprising of Appendix 7A for IPC and PPC and Appendices 7b and 7c for COMAH, Version 3, 01/07/04

[http://www.environment-agency.gov.uk/commondata/103599/37\_02v3\_ipc\_295866.doc]
 Habitats Directive: (Appendix 13) Habitats and Species protected under the Habitats and

Birds Directives, Version 3, 03/06/04 (not currently available on-line).

The purpose of the Environment Agency Habitats Directive Handbook is to provide a technical methodology for the application of the Habitats Regulations to Waste Management Facilities. Due to the nature of the proposed sites, the Environment Agency guidance has been used heavily in the assessments. The guidance is based on the judgement of the Environment Agency, English Nature and the Countryside Council for Wales.

#### Proforma Table 1

Table 1 of the proforma to record assessment of LSE deals with information on the proposed waste site and the Euroopean site potentially affected by the waste facility.

The description of the waste facility includes information such as the size, scale and landtake requirements, resource requirements (abstractions), any predicted significant emissions, and duration of construction/operation/decommissioning where known. Due to the proposals being only site boundaries identified in the Waste Site Allocation Development Plan Document Issues and Options Report there is very little information at this stage on the proposals and there are no outline designs available. However, the assessments have been carried out assuming certain design parameters and designed measures to avoid/mitigate for adverse environmental impacts using Atkins knowledge of existing waste management facilities and design considerations which are required under the Waste Management and IPC Regulations.

In Table 1 of the proforma (in the list of interest features of the European site) there is a list of the Annex I habitats and Annex II species listed in European Council Directive 92/43/EEC(a) on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive) or Annex I birds listed in the European Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive) which are a primary reason or qualifying feature for selection of the European site.

Citations for the SACs and SPAs were obtained from the Joint Nature Conservation Committee website (<u>www.jncc.org.uk</u>). The citations give general information on the European site and list the features for which the European site is designated. Information on the conservation objectives for the European sites and general trends affecting their integrity was requested from English Nature.

Proforma Table 2

Table 2 of the proforma is based on sensitivity matrices within the EA Habitats Directive Handbook Appendix 6 and Appendix 7.



Certain waste management facilities that keep, treat and/or dispose of waste in a manner that results in significant emissions to air, such as incineration and solvent recovery need to be considered under Appendix 7 of the EA guidance which deals with sites requiring permissions under the Pollution Prevention and Control (England and Wales) Regulations 2000.

Only one of the 11 identified waste sites is likely to fall under the IPC regulations (Ratfyn) due to a proposed energy-from-waste facility. The other 10 waste facilities proposed are likely to require Waste Management Licences under the Waste Management Regulations 1994 as they are not predicted to cause significant emissions to air. Appendix 6 of the EA guidance applies to these sites.

The sensitivity matrices in Appendix 6 and Appendix 7 of the EA guidance list hazards which could be present as a result of the waste management facility against a list of habitat and species receptors for which European sites can be designated. The matrix then identifies which of the habitats and species are potentially sensitive to each of the hazards.

The hazards potentially arising from facilities requiring Waste Management Licences (and not IPC permits) and therefore using the sensitivity matrix from Appendix 6 are listed below. These hazards are potentially relevant to all of the 11 waste sites apart from Ratfyn:

- Toxic contamination emissions from waste activities that could be harmful or toxic to the fauna and flora of the European site. Potential sources include leachate produced from organic wastes and leakage of oils and battery acids stored on recycling facilities. Waste sites usually have a contained surface water drainage system so the only pathway for leachate to get from source to receptor is through leakage from a containment barrier or overtopping the containment system (such as during a flood). Toxic contamination can also result from landfill gas although none of the 11 waste sites requiring assessment include landfilling facilities;
- Nutrient Enrichment- from leachate, surface water discharges or dust and particulate emissions;
- Habitat loss through direct physical damage or access through the European site etc...;
- Siltation physical damage through surface water discharges containing suspended solids, particularly affecting aquatic habitats;
- Smothering physical damage caused from the deposit of solid materials from the air such as dust and litter. Smothering can affect photosynthesis and transpiration in plants. Dust may also have a toxic element which can have affects over a wide area if windblown and deposited on sensitive receptors. An exceptionally large volume of litter would have to escape from a facility to have a smothering affect but may lead to other impacts such as physical access required to clean up the litter;
- Disturbance from noise, increased access to/through the European site, visual intrusion;
- Predation from gulls, corvids and rodents, particularly affecting the eggs and young of nesting birds.

Due to the proposed energy-from-waste plant at Ratfyn, this facility may require an IPC permit. Therefore the sensitivity matrix from EA Habitats Directive Handbook Appendix 7 was used in Table 2 for the proforma for Ratyn. The hazards which may result from this type of waste facility are:

- Toxic contamination from process emissions to air and water which could cause acute (short-term) or chronic (long-term) exposure of toxic affects to fauna and flora resulting in lethal (death) or sub-lethal (changes in sub-cellular structure or behaviour of the organism) effects;
- Nutrient enrichment through aquatic discharges of process water or through deposition of nitrogen (from nitrous oxides and ammonia);
- Acidification from emissions of acid gases (NOx and SOx);
- Changes in salinity and thermal regime associated with discharges to water;
- Habitat loss and physical damage as above;
- Smothering as above;



- Entrainment/entrapment fish kills associated with cooling or process water intakes, only
  applicable if species involved are an interest feature of the European site, form part of a
  community that is an interest feature or if the effect is large enough to affect prey availability
  of an interest feature;
- Disturbance as above.

It is also proposed to construct facilities at Ratfyn which will deal with local scale recycling and composting, facilities which would come under Waste Management Regulations rather than the IPC Regulations. Therefore, the effect of predation (which does not appear as a hazard in the sensitivity matrix in Appendix 7 but does appear in the matrix in Appendix 6) has been added to Table 2 for Ratfyn.

Due to many of the European sites being potentially sensitive to surface water and groundwater impacts, particularly the River Avon SAC, two additional hazards were added to Table 2 for all waste sites: Impacts due to altered surface water drainage and Impacts due to altered groundwater flows/levels. These were added following recommendations in the River Avon SAC Planning Forum guidance for developers. As there was no guidance available for sensitivity of species to these hazards, a precautionary approach was taken. It was assumed that every receptor was potentially sensitive to changes in surface water and groundwater flows.

In Habitats Directive Handbook Appendix 13, Annex 1 habits and Annex II species are sorted into groups which have similar sensitivity to hazards potentially arising from operation of waste management facilities. Habitats and species for which SACs may be designated are sorted into 13 groups that have similar sensitivities. Birds protected under the Birds Directive are listed into 10 groups which, by virtue of the habitat that supports them, also have similar sensitivities to hazards identified in the sensitivity matrix.

The habitat/species in bold in Table 1 correspond to Habitats Directive Handbook Appendix 13 which groups Annex 1 habits and Annex II species into groups which have similar sensitivity to hazards which could potentially arise from operation of a waste management facility. Habitats and species are listed in Appendix 13 into 13 groups that have similar sensitivities to particular hazards identified within the sensitivity matrix. Birds protected under the Birds Directive are listed into 10 groups which, by virtue of the habitat that supports them, also have similar sensitivities to hazards identified in the sensitivity matrix.

It should be noted that although the Environment Agency are happy for the sensitivity matrices and accompanying guidance to be used outside of the Environment Agency, the Environment Agency were not involved in this assessment process for Wiltshire County Council/Swindon Borough Council. The sensitivity matrices should not be viewed as entirely comprehensive or exhaustive but are currently the only structured impact assessment guidance for appropriate assessment concerning waste sites available in England.

Proforma Tables 3 & 4: Assessment 'Alone' and 'In-Combination'

Each site has been assessed for LSE alone, in-combination with other plans and projects and cumulatively taking into account effects such as management of the European site and natural processes.

Information on other plans and projects which could have an effect on the European site has been requested from competent authorities. Any relevant information obtained on other plans and projects have been summarised in Table 3 of the proforma. The competent authorities consulted were:

- Wiltshire County Council
- Swindon Borough Council
- West Wiltshire District Council
- North Wiltshire District Council

# **ATKINS**

- Kennet District Council
- Dorset County Council
- Christchurch Borough Council
- Gloucestershire County Council
- Wessex Water
- The Environment Agency
- English Nature
- The Forestry Commission
- The Highways Agency
- Ministry of Defence
- RSPB
- Wiltshire Wildlife Trust

A summary of the conclusions of the alone and in-combination tests are given in Table 4 of the proforma.

It should be noted that the assessment of LSE for some sites proposed for allocation may conclude that it is uncertain whether there will be likely significant effects and that further baseline information is required before any firm conclusion can be drawn. It is important to note the precautionary principle enshrined within the Habitats Regulations. If information is not available at this stage or if the results of the LSE assessment are inconclusive (i.e. the scale or magnitude of an impact is not known) current guidance indicates that an Appropriate Assessment would normally be required.

If the LSE concludes that there will be a likely significant effect on the European site then an Appropriate Assessment will be required.

#### Consultation

Consultation on the proforma and the method of assessment has been undertaken with English Nature, Wiltshire Wildlife Trust, the Environment Agency, the Royal Society for the Protection of Birds and the Cotswold Water Park Society.

The following organisations will be consulted on some or all of the conclusions of the LSE assessment:

- Natural England (formerly English Nature)
- Wiltshire Wildlife Trust
- Environment Agency
- RSPB
- Cotswold Water Park Society

#### **Nature Conservation Evaluation**

Ecological features have been evaluated for their nature conservation value using the following criteria:

- International importance: Special Areas of Conservation, Special Protection Areas, Ramsar sites;
- National importance: Sites of Special Scientific Interest;
- Regional/county importance: Local Nature Reserves, County Wildlife Sites, ancient woodlands, large area(s) of priority Biodiversity Action Plan habitat;
- Local (parish) importance: Notable ecological features such as old hedges, woodlands, ponds;
- Negligible importance: Would usually be applied to areas of built development, active mineral extraction, or intensive agricultural land.

#### **Ecological Impact Assessment Criteria**

The assessment of the potential impacts of the proposed development needs to take into account both onsite impacts as well as those which may occur to adjacent areas of ecological value. Impacts can be permanent or temporary, direct or indirect and can include:

- Direct loss of wildlife habitats;
- Fragmentation and isolation of habitats;
- Disturbance to species from noise, light or other visual stimuli.

The significance of an adverse impact (or a beneficial result) is determined by the magnitude of the impact and the value or sensitivity of the nature conservation resources affected. There is no definitive method for assessing the significance of adverse impacts on nature conservation receptors/features. Nevertheless, a high significance will generally be ascribed to large impacts on receptors/features of high nature conservation value and low significance will generally be ascribed to small impacts on receptors/features of high nature conservation value or large impacts on receptors/features of low nature conservation value. The criteria used for assessing the significance of adverse and beneficial impacts are set out in the table below. These criteria are used for guidance and judgement is required in their application to take account of the particular circumstances of a project.

#### **Criteria for Impact Assessment**

Major adverse	Loss of, permanent damage to or adverse impact on integrity of any part of a site of international or national importance; Loss of a substantial part or key feature of a site of county importance;
	Loss of favourable conservation status (FCS) of a legally protected species; Loss of or damage to a population of nationally rare or scarce species.



	Temporary disturbance to a site of international or national
	Loss of or permanent damage to any part of a site of county
	importance:
	Loss of a key feature of local importance;
Moderate adverse	A substantial reduction in the numbers of legally protected
	species such that there is no loss of FCS but the population
	is significantly more vulnerable;
	Reduction in the amount of habitat available for a nationally
	rare or scarce species, or species that are notable at a
	Tegional of county level.
	nermanent damage.
	Loss of, or permanent damage to, a feature with some
	ecological value in a local context but that has no nature
Minor odvoroo	conservation designation;
Minor adverse	A minor impact on legally protected species but no
	significant habitat loss or reduction in FCS;
	A minor impact on populations of nationally rare or scarce
	species or species that are notable at a regional or county
	level
	importance.
	importance; Temporary disturbance or damage to a small part of a
	importance; Temporary disturbance or damage to a small part of a feature of local importance;
Negligible	importance; Temporary disturbance or damage to a small part of a feature of local importance; Loss of or damage to land of negligible nature conservation
Negligible	importance; Temporary disturbance or damage to a small part of a feature of local importance; Loss of or damage to land of negligible nature conservation value;
Negligible	importance; Temporary disturbance or damage to a small part of a feature of local importance; Loss of or damage to land of negligible nature conservation value; No reduction in the population of legally protected, nationally
Negligible	importance; Temporary disturbance or damage to a small part of a feature of local importance; Loss of or damage to land of negligible nature conservation value; No reduction in the population of legally protected, nationally rare, nationally scarce or notable (regional/county level)
Negligible	importance; Temporary disturbance or damage to a small part of a feature of local importance; Loss of or damage to land of negligible nature conservation value; No reduction in the population of legally protected, nationally rare, nationally scarce or notable (regional/county level) species on the site or its immediate vicinity.
Negligible	<ul> <li>importance;</li> <li>Temporary disturbance or damage to a small part of a feature of local importance;</li> <li>Loss of or damage to land of negligible nature conservation value;</li> <li>No reduction in the population of legally protected, nationally rare, nationally scarce or notable (regional/county level) species on the site or its immediate vicinity.</li> <li>A small but clear and measurable gain in general wildlife interest of a general value.</li> </ul>
Negligible Minor beneficial	<ul> <li>importance;</li> <li>Temporary disturbance or damage to a small part of a feature of local importance;</li> <li>Loss of or damage to land of negligible nature conservation value;</li> <li>No reduction in the population of legally protected, nationally rare, nationally scarce or notable (regional/county level) species on the site or its immediate vicinity.</li> <li>A small but clear and measurable gain in general wildlife interest, e.g. small-scale new habitats of wildlife value</li> </ul>
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# Volume 1 Kennet District

K1 Broadway, Market Lavington K4 Everleigh Waste Management Facility K5 Castledown Business Park, Ludgershall K7 Garden Estate, Devizes K8 Hopton Industrial Estate, Devizes K11 Tinkersfield Farm, Monument Hill, Devizes K14 Salisbury Road Buisness Park, Marlborough K15 Salisbury Road Business Park, Pewsey

## Site: K1 Broadway, Market Lavington

### Landscape and Visual Survey

#### K1 Broadway, Market Lavington

#### 1. Introduction

The site is located off an unclassified road, Broadway Ledge, which links Market Lavington and the A360. A railway embankment lies immediately to the south-east of the site. The site lies on a flood plain, with flat arable fields to the south. A handful of residential properties are scattered along Broadway Ledge around the site. The site is currently used for light industrial, storage and distribution use.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency): Landscape Character Area: Avon Vales Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mix of arable and pasture.
- Wide river corridor, cut through by numerous tributaries of the River Avon, with ancient pattern of flood meadows but much influenced by modern development.
- Uses such as landfill are widespread, with more substantial urban fringe areas than in neighbouring landscapes. The 'land in between' is often neglected.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Trowbridge Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on Clay.
- Mixed arable and pastoral, with pasture concentrated around the water courses.
- Variable field pattern with network of full hedgerows and mature hedgerow trees.
- Presence of streams marked by lines of willows and crossed by modest bridges.
- Woodland blocks including some ancient woodland and wet woodland of high ecological value plus scattered mature trees.
- Scattered settlement of towns, small villages and farmsteads, many using vernacular materials of brick, half timber, stone, tiles and thatch.
- Roads largely minor and rural with a few trunk roads and sections of motorway.
- Views vary from semi-enclosed by intact hedgerows, riparian vegetation and woodland blocks to more open with views to the rising scarps of the chalk uplands.
- A largely peaceful, rural landscape.

Generally the condition of the landscape character area is considered by WCC to be 'good', with a 'moderate' strength of character.

The strategy for the area is to conserve its peaceful rural landscape and strengthen its character through minimising urban influence.

#### Kennet Landscape Conservation Strategy (Kennet Borough Council)

Landscape Character Area: Bristol Avon Clay Vale Key characteristics relevant to the site:



- Topographically almost flat
- Complex geological mix of greensand, Kimmeridge and Oxford clays, gault, Portland Beds and Calcareous grit.
- The area is dominated by a strong structure of hedgerows and trees. Field sizes vary, with the hedgerow pattern being largely a result of post-medieval enclosures.
- Hedgerow structure gives a feeling of enclosure, with low intervisibility,

#### Landscape Designations and Rights of Way:

- A public footpath runs offsite parallel to the site's southwest boundary
- A public footpath runs parallel to the site's eastern boundary, on the other side of the railway embankment

#### Local Authority Consultation:

Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

Flat site with mixed industrial use including workshops, distribution depots, storage yards and a chicken factory. Buildings are industrial in character and generally 1 to 2 storeys in height. The site also includes a large red-brick historic business unit which fronts onto Broadway Ledge. Adjacent to the site, north and west there are a small number of detached residential properties along Broadway Ledge, including a substantial detached house, Mowbray House, immediately adjacent to the site boundary.

A railway line runs on an embankment to the south-east of the site, enclosing the site. A historic farm track subdivides the site, with mature hedge banks providing screening and reflecting the wider rural landscape character. Arable fields surround the site, with native hedgerow tree species including oak. The western setting of the site is characterised by a minor floodplain, with willows hedgerow trees.

A public right of way runs through the field to the south-west of the site, coming under the railway embankment and joining the A360.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: Medium

Although the wider setting is tranquil and rural in character, the presence of the railway line and the existing industrial site uses have eroded this character within the site itself, giving it a poor landscape quality. Historically the site has been associated with former extraction and disposal uses which has associated land stability and contamination concerns. The railway embankment screens the site from views from the south and one lane with remnant field hedge banks subdivides the site providing additional internal screening which would enable the site to accommodate change.

#### 5. Potential Landscape Impacts

- Loss/damage to historic lane/track with hedge banks and mature hedgerows within site
- Loss/damage to mature trees on frontage of adjacent road (Broadway Ledge)
- Further erosion of rural character to west and north of site

#### 6. Potential Landscape Mitigation Measures

• Site planning – facilities to be located so as to utilise existing screens such as the railway embankment and existing hedgerows and trees



- Earth bunds and native woodland planting around site boundaries to west and along Broadway Ledge frontage to screen views into the site and strengthen rural character
- The following 'Broad Management Objectives' for the Rolling Clay Lowlands in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - o Retaining and managing the dense hedgerow network and nurturing new hedgerow trees
  - Strengthening the enclosed character of the landscape and screening views to urban edges through nurturing existing and planting new woodland.
- The following Enhancement Priorities proposed for the Bristol Avon Clay Vale landscape character area in the Kennet Landscape Conservation Strategy are relevant to the site:
  - Encourage repair, replanting, widespread extension of hedgerow network, and development of hedgerow trees using typical native species such as ash and oak.
  - Maintain existing roadside hedgerows and trees and replace where these have been weakened through neglect or Dutch Elm Disease.
  - Improve landscape structure and land management around the fringes of settlements and along main roads to mitigate adverse impacts on the landscape.
  - o Encourage better boundary maintenance of fringe land uses
  - Small copses and groups of trees can be easily accommodated into the landscape structure, although the scope for large scale planting is somewhat limited.
  - New tree planting along hedgerows and roads should be encouraged with oak, field maple and ash dominating the drier land
  - The establishment of woodland blocks and smaller tree groups, to mitigate the effects of sporadic settlement development into the countryside, is of importance to retain the intimate, pastoral character of the area.
  - Existing woodlands and trees should be managed to maximise ecological and landscape value.

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Residents of Broadway Ledge in vicinity of site	High	Slight – Moderate adverse	<ul> <li>Location of large structures to south of site</li> </ul>
Users of Broadway Ledge road	Low	Slight Adverse	<ul> <li>Bund/ hedgerow planting/tree planting along site frontage</li> </ul>
Workers on industrial estate	Low	No change	<ul> <li>Structure planting around site boundary</li> </ul>
Rail passengers/employees	Low	No change	
Users of footpath to south of site	High	Slight adverse	<ul> <li>Bund/native woodland planting along southern boundary of site</li> </ul>

#### 7. Visual Impact and Mitigation

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on residences on Broadway Ledge and the footpath to the south of the site, could be almost entirely mitigated through sensitive site planning and screen planting. Site planning should avoid the loss of the lane with hedge banks that runs through the site.

#### 9. Recommended further landscape and visual surveys

- Visual survey from footpath to south of site
- Visual survey from train on adjacent railway embankment

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- Winter-time visual surveys. Night-time visual survey ٠
- •



#### **Noise Assessment**

#### K1 Broadway, Market Lavington (Inset Map 26)

#### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Broadway to assess the site's suitability for a waste plant or recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Mowbray House located on Broadway to the north edge of the proposed site.
- 1.3 There are a number of properties off Broadway located at a similar proximity however at the time of the survey development work was being undertaken at these properties.
- 1.4 The site currently contains small businesses including a fencing firm. The site is flanked to the north-west by Broadway, to the south-east by the local railway line, south-west by fields and to the north-west by a chicken farm and properties known as Broadway Cottages.

#### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 18<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of traffic noise from nearby roads and industrial noise such as forklifts, drilling and sawing and condensers. The noise climate at the most sensitive receiver consists predominantly of traffic noise from nearby Broadway and environmental sources such as birdsong, insects, and wind in tress, etc. Industrial noise emanating from the nearby businesses is perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	12:47	50.1	65.5	35.3
MEASUREMENT 2	12:53	51.9	70.6	34.5
MEASUREMENT 3	12:59	56.5	76.7	30.1
AVERAGE		53.7		33.3

2.3 The average background noise level at the most sensitive receiver was measured as 33.3dB L<sub>A90</sub>.

#### 3. SITE SUITABILITY

3.1 The proposed use for the site at Broadway is for either a Waste Transfer Station or Materials Recovery Facility or recycling. The boundary of the site area proposed for use is adjacent to the most sensitive receivers. Given the background noise level, L<sub>A90</sub> of 33.3dB at the most noise



sensitive receiver, it is expected that any new waste development would need to be located a minimum distance of 860m from such noise sensitive receivers.

- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

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## **Air Quality Report**

#### K1 Broadway, Market Lavington, 2.7ha

#### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) currently accommodates light industrial/ storage/ distribution units. The setting is rural, bounded on the south by the railway line. It is adjacent to a sewage treatment works to the southwest.



#### Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>1</sup> sources within 1km of the site: road traffic on the A360, B3098 and minor roads; gas/oil/solid fuel space heating for scattered buildings. The sewage works is a potential source of

 $<sup>^1</sup>$  Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>) PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>) Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



bioaerosols and odour. Agricultural activities in the area are potential sources of dust, bioaerosols,  $NH_3$  and odour.

- 1.3 Estimated background annual mean levels of priority pollutants<sup>2</sup> for 2005 and comparable standards<sup>3</sup> are: 10.1µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 7.9µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 17.7µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate very good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential dwelling known as Mowbray House at the western entrance to the estate; and other dwellings nearby at Broadway Cottages. There are two County Wildlife sites within 1km: Parham Wood and Manor House Wood.

#### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH₃	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (dwelling on Broadway)	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Residential beyond 100m of site	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Ecological designation within 1km of site (Parham Wood and Manor House Wood)	N/A	1 (1)	1 (1)	N/A	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

#### 3. MITIGATION

3.1 Dust control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

#### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low without mitigation. Mitigation for dust is recommended. Further assessment should not be necessary.

<sup>&</sup>lt;sup>2</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>3</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)

## **ATKINS**

## Traffic and Transport Review

#### K1 Broadway, Market Lavington

#### Proposed Site Usage

This 3.5 ha site is proposed to be used as a small material recovery facility, waste transfer station or local scale recycling facility.

#### **Existing/Potential Access**

The site is located 2 km north west of Market Lavington off Broadway. The site is currently used for light industry, storage and distribution.

The site is currently accessed directly from Broadway through two priority T-junctions. The western access point is close to a residential property which shares the same access road. Broadway is a single two lane carriageway subject to national speed limit. The speed limit reduces to 40 mph approximately 1 km to the east of the site and then reduces to 30 mph on the approach to Market Lavington.

A railway forms the eastern boundary of the site. A railway bridge takes the railway over Broadway. There is a height restriction of 15" 6' under this bridge.

The existing access points are suitable to form the access to the propose uses of the site. However, in order to minimise the impact on the residential property and the farm, sole use of the eastern access may be more appropriate.

#### Impacts on Local Settlements

The site is adjacent to one residential property which is located off Broadway and a Poultry farm which is on the western boundary of the site.

Should the existing access adjacent to the residential property be adopted for site access then the impacts on the amenity of this property and the neighbouring farm are likely to be significant

#### **On-site Infrastructure**

The site is relatively large therefore there is scope to provide storage/queuing capacity on site to prevent blocking Broadway.

#### Off Site Highway Network

The off site highway network is unlikely to be unduly affected by the proposed operation. The traffic levels generated form the existing usage of the site appears to be low. Therefore all the trips generated from the potential usage might be regarded as new.

#### Constraints

The effect of the proposed uses on the amenity of the residential property adjacent to the site may have a bearing in the location of the access to the site and the height limit under the railway bridge might be constraints that could affect the use of the site.

#### Mitigation

Possible reduction of speed limit to 40 mph on Broadway.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.



## **Contaminated Land Assessment**

#### K1 Broadway, Market Lavington

Information and results table. Site name – Broadway

NGR at centre of site - 400000 155330

Location description – Rural setting, immediately adjacent to the A360, 2km northwest of Market Lavington and 5km south of Devizes Area of site (ha) – 3.5

Table 1: Contaminated Land, Environmental Information and results - See Appendix B

CSM

By assessing all available information and tabulating the key results as above, the contaminated land and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment
	Receptor		Significance of	Measures (to be considered as oppropriate)	Requirements
				(to be considered as appropriate)	
Contaminat	Groundwater	Future operations -	Medium/nigh	Plan mitigation requirements	Environmental management during
ed Land		Contaminate non aquifer		during construction	construction
and		on site and surrounding			Approach Environment Agency for
Environmen		site (Gault Mudstone)		Layout planning of site	monitoring requirements
τ		O antennin etc			Produce working Plan for site
		Contaminate major		Cite treffic plan	Review runon treatment requirements
		aquiler (Upper		Site traffic plan	Monitoring borenoies and surface water
		Greensand) and minor		Surface drainage plan	reatures (may be required for obtaining
		Limestene and Alluvium)		Surface drainage plan	Eventing permit
		off site at distance and			examine current requirements for
		underlying the Coult		Importantia hardatanding	Access current impact of contamination
		undenying the Gault.		Impermeable hardstanding	Formal assessment of risk to local
				Runoff collection system	water environment as part of a permit /
		Disrupt current			license application
		hydrological balance at			
		the site leading		Spill kits, bunded storage and	Formal assessment of risk to local
		to/increasing leachate		designated liquid handling areas if	water environment as part of a permit /
		and contamination		site might accept	license application
		discharge to the		liquids/hydrocarbons	
		groundwater			Adequate monitoring to differentiate
		Ĭ		Consider limiting types of waste	between any impact this proposed site
				handled at site e.g. solid wastes	may have, and the other existing and
				only, inert wastes	historical and current on site potential

Category	Potential Receptor	Potential Risk Issue	Potential Significance of Impact	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
	Surface water body	<ul> <li>water Future operations - Contaminate adjacent Watercourse (unnamed tributary of Semington Brook)</li> <li>Contaminate adjacent ponds/ditches</li> </ul>		Engineered liner system to reduce surface water percolation Remediation/risk management of the effects/potential effects of existing contamination prior to new operations commencing.	pollution sources (discharge consents, pollution incidents, contaminative adjacent activities etc) Detailed site investigation to assess geo-environmental issues.
		Impact on baseflow / runoff to watercourse	Medium		
		Flood event causes contamination of surface water and disruption of operations Site is 200m from Flood Risk Zones 2 and 3	Medium	Engineered flood defence or mitigation	Approach Environment Agency for requirements Check flood risk assessment requirements
	Groundwater Abstraction point Contaminate abstractions of T Sharp (and 3 others between 1- 2km from site)	Medium	Refer to groundwater/surface potential risk mitigation measures listed above Treatment of abstracted water	Check status of abstractions with Environment Agency / landowner Approach Environment Agency for monitoring requirements	
	Surface water Abstraction point	Impact abstraction of W Coleman for aquaculture /agriculture / domestic	Low / Medium	Decommission abstraction point	Check availability of data of groundwater and surface water quality sampling locations from Environment Agency
	Humans (site occupants and visitors)	During construction and operation phase potential health risk derived from historical contamination and ground gas	Medium/high	Risk management/remediation of contaminated land: Removal of soil Use of cover/capping systems Installation of gas management within new buildings and across paved areas	As for ground and surface water risks, in particular requirement for detailed site investigation to assess geo- environmental issues.

Category	Potential Receptor	Potential Risk Issue	Potential Significance of	Potential Risk Mitigation Measures	Likely Further Assessment Requirements
			Impact	(to be considered as appropriate)	
	Structures (including buildings/ slopes and general landscape)	Potential for instability in landfilled materials leading to structural distress and other geo hazards. Structural distress could also led to environmental damage,	Medium/high	Consideration of engineering implications of future operations and requirement for special geotechnical design	Detailed site investigation to assess geotechnical characteristics of the site prior to development.
	Designated sites/ Adjacent sensitive landuses	<ul> <li>3 Wildlife sites and 2</li> <li>Ancient Woodlands within 1km</li> <li>1 Scheduled Ancient Monument within 1km</li> </ul>	Low / Medium	Refer to groundwater/surface potential risk mitigation measures listed above Management of windborne material at site boundaries	Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored Approach Environment Agency for requirements

Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Broadway is:

Many potentially significant issues identified – review further assessment requirements and risk mitigation is considered practicable to address most issues although long term environmental management is highly likely to be required Review further assessment requirements

It should be noted that the condition of the site including the condition and chemical profile of any soil or surface water features identified during the desk study can only be assessed during a detailed site investigation. A site investigation is likely to be required to determine the requirement for risk management and /or remediation.

## Site: K4 Everleigh Waste Management Facility

#### Landscape and Visual Survey

#### K4 Everleigh Waste Management Facility

#### 1. Introduction

This linear site is located in a remote, rural setting, between Everleigh and Pewsey. It currently comprises a Household Recycling Centre at its northern end and a municipal Waste Transfer Station at its southern end, connected by an access road. The site is adjacent to a former landfill facility that was restored to grassland in 1996. The site is located in close proximity to the North Wessex Downs AONB and Everley Ashes Wildlife site, in a setting characterised by open chalk downland with arable fields and scattered woodland.

#### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

- Extensive open, rolling Chalk plateau dominated by large arable fields.
- Scattered copses and shelterbelts.
- Outstanding prehistoric ritual landscape with widespread earthworks and monuments prominent in an open landscape,
- Pressures for development are a potential threat to archaeological features that do not have statutory protection.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: High Chalk Plain Landscape Character Area: Salisbury Plain East Key characteristics relevant to the site:

- Very large scale and open, exposed landscape.
- Rolling plateau land form with panoramic views over the surrounding lowlands creating a sense of elevation.
- Large regular arable fields are bounded mainly by ditches or fences with occasional hedgerows.
- Copses and woodland belts, at various stages of growth occur throughout the area with sinuous older plantations contrasting with more recent tree planting in geometrical blocks.
- Archaeological remains and sites of historic importance,
- The majority of the High Chalk Plain Landscape Type sits on a belt of chalk from the Upper Cretaceous period that runs east to west across the county. The majority of the area comprises of Upper Chalk with Middle Chalk and Lower Chalk occurring on the steep slopes and at the base of slopes respectively. Steep scarp slopes rise to form an upstanding plateau, with wide flat areas incised by a complex network of dry valleys forming an expansive rolling landscape. Small isolated areas of Clay with Flint and Sandstone also occur. The underlying chalk geology has lead to the predominance of free draining calcareous soils, and a lack of surface water.
- Strong sense of remoteness and isolation accentuated by absence of settlement.
- Wide views across the plain and out over the surrounding lowlands.
- Scattered woodlands and plantations.
- Outstanding sites of archaeological interest; numerous sites.



WCC notes that the non-MOD areas have seen a loss of biodiversity through the intensification of arable farming methods for instance the removal of hedgerows, however the overall condition of the Chalk High Plain Landscape Type is considered to be 'good' with a 'strong' character.

The management strategy for the area is to conserve the open and isolated character of the plain.

#### District Landscape Character Assessment: Kennet Landscape Conservation Strategy

Landscape Character Area: Salisbury Plain Key characteristics relevant to the site:

- Geology dominated by upper chalk
- gently rolling landscape dissected by dry valleys
- Intensively farmed arable land.
- Large parts of the area are unenclosed and treeless, giving Salisbury Plain a unique, very remote character, with extensive views across the southern half of Wiltshire.
- Around the periphery of the military ranges arable land dominates, mostly in the ownership of the MoD
- The historic landscape and archaeology of Salisbury Plain are particularly well preserved

The Strategy promotes the retention of the open character of the area and its long views and discourages tree or hedgerow planting in areas of traditionally unenclosed chalk downland. It also encourages the removal of inappropriate tree and woodland belts and discourages the intrusion of further signage, structures, tracks or fencing. Essential features should be sited as discretely as possible to minimise visual intrusion. *"The treeless nature of Salisbury Plain is largely the result of prehistoric woodland clearance, and as such should be considered an ancient landscape."* 

#### Landscape Designations and Rights of Way:

- The site is adjacent to a Special Landscape Area on three sides.
- Boundaries to North Wessex Downs AONB lie within 1km of the site to the north, west and east.
- Everleigh Ashes Wildlife Site is within 1Km of the site, to the north of the site
- A public footpath runs along part of the eastern boundary of the site
- A bridleway runs to the north of the site, along the western boundary of Everleigh Ashes woodland

#### Local Authority Consultation:

Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

This linear site cuts across the historic field pattern, on the side of a dry valley, dropping from approximately 200m AOD at its northern end to 180m at its southern end. The site is currently dominated by its Waste usage, with recycling skips, a weigh bridge, tarmac surfacing, portacabin office and mesh fencing. At its southern end the Waste Transfer Station has been set in a cutting, helping to screen it from the wider landscape to the south.

Although set within a wider landscape characterised by open rolling chalk downs, the site itself is relatively well-integrated with the surrounding landscape which is relatively intimate due to the presence of scattered woodlands such as Everleigh Ashes, Milking Bushes and Wiren Copse. The site is relatively well-screened from views from the north and east by the presence of conifers and pines on site and although not native to the area, these help minimise the visual impact of the existing Household Recycling Centre.

## **ATKINS**

A number of archaeological landscape features lie within close proximity to the site, including tumuli and Everleigh Barrows.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: Medium

To the south of the site a former WCC landfill facility has an appearance of disturbed land, thus reducing the visual quality and condition of the landscape setting. The rural character of the site itself has been eroded by the presence of the current waste uses. The site is relatively well screened by vegetation to the north and east and by its sunken topography to the south.

#### 5. Potential Landscape Impacts

- Loss/damage to existing mature trees on site, especially evergreens which form an important screening function
- Further erosion of rural character of the site setting

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning of facilities to minimise impact on views from AONB, adjacent lane and public footpaths
- Use of bunds and native and evergreen woodland planting around site boundaries to screen views into the site.
- The following 'Broad Management Objectives' for the Chalk High Plain landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.
- The following Enhancement Priorities proposed for the for the Salisbury Plain landscape character area in the *Kennet Landscape Conservation Strategy* are relevant to the site:
  - Where historically and ecologically appropriate, encourage the replanting and extension of hedgerows and the planting of hedgerow trees using native species.
  - Tree planting should be confined to that absolutely necessary for military training purposes and should primarily comprise native species.
  - All new planting should be confined to previously cultivated land or improved grassland.
  - Woodland design should take particular care to follow the topography of the land, and be of a scale in keeping with the area.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Users of adjacent lane	Medium	Slight Adverse	Structure planting/ bunds     around site boundary
Workers on site	Low	No change	
Users of footpath to south of site	Medium (path currently appears unused)	Slight Adverse	<ul> <li>Sensitive location of large structures to minimise visual impact</li> </ul>

#### 8. Summary: Residual Landscape and Visual Impacts


Due to its semi-enclosed setting and existing waste-dominated character, the site could accommodate change. The main visual impacts, on users of the lane and the footpath to the south of the site, could be almost entirely mitigated through sensitive site planning and screen planting. Ideally the footpath should be diverted, as regardless of the proposals, it is already in close proximity to the waste treatment works and is unmanaged. Site planning should avoid the loss of the mature vegetation within the site and along its boundaries.

#### 9. Recommended further landscape and visual surveys

- Visual survey from footpaths to south and north of site
- Winter-time visual surveys.
- Night-time visual surveys.



## **Cultural Heritage Report**

#### K4 Everleigh Waste Management Facility

#### **DESK STUDY INFORMATION**

## Known heritage assets within Study Area None

#### Known heritage assets within 500m of Study Area boundary

WSMR No:	SU15NE666
Site Name:	Circular feature
Grid Ref:	SU190565
Description:	4 or 5 ring ditches seen from ground level as crop marks.
Designation:	None
WSMR No:	SU15NE650
Site Name:	Field system
Grid Ref:	SU18635622
Description:	A field system, probably Romano-British plotted by the RCHME in 1995 from
-	aerial photographs.
Designation:	None

#### FIELD SURVEY INFORMATION

No visible features identified within the Study Area.

#### SITE ASSESSMENT

**Cultural Heritage value**: There are no known heritage assets within the immediate Study Area. However, the presence of two sites within 500m (Wiltshire SMR Nos SU15NE666 and SU15NE650) of the Study Area indicates the potential for buried archaeological deposits to exist within the Study Area. There are three Scheduled Monuments within 1km of the Study Area.

**Potential Cultural Heritage Impacts:** The risk of potential impact is unknown, but probably low. The three Scheduled Monuments in the vicinity are screened from the Study Area, so there is no potential for impact on their setting.

**Further Evaluation and Potential Mitigation:** Any proposals for development at this site must be accompanied by an archaeological field evaluation in accordance with PPG 16 (Planning & Archaeology), to define the character and extent of the archaeological remains that exist in the area of the proposed development. It is essential that the County Archaeologist and English Heritage are consulted at the earliest possible stage regarding the undertaking and results of such an evaluation. Where unrecorded features of archaeological importance are found, the advice of the County Archaeologist and English Heritage will be essential as to the appropriate action required. As with identified features of archaeological interest in proximity to the site, development should mitigate any potential impacts through careful design and landscaping and, where required, through preservation in situ of any remains.

Assessment: Further evaluation is required as to the suitability of this site at the Planning Application stage.



## Water (Quality and Environment) Assessment

#### Site name – Everleigh Waste Management Facility

NGR at centre of site – SU 192563 Location description – Rural setting, just north of the A342, 2.4km northwest of Everleigh Area of site (ha) - 2

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Contaminate major aquifer Contaminate Source Protection Zone	Medium / High Medium/High	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> </ul>	<ul> <li>Environmental management during Construction</li> <li>Relevant licensing requirements</li> </ul>
	Surface water body	Contaminate watercourse on site Impact on baseflow/runoff to watercourse	Low	<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>(PPC) to be assessed</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>

## **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
					<ul> <li>Assessment of current impacts of adjacent landfill</li> </ul>
		Flood Risk	Low	<ul> <li>None likely</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Designated sites / Adjacent sensitive landuses	North Wessex Downs AONB, 3 SAMs and an Ancient Woodland	Low / Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for</li> </ul>
	Other adjacent landuses	Contamination from adjacent landuses	Medium / High	<ul> <li>Appropriate monitoring and sampling to inform decision making process for mitigation</li> </ul>	requirements

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Everleigh Waste Management Facility is:

- Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## **Ecological Report**

#### K4, Everleigh Waste Management Facility

#### **DESK STUDY INFORMATION**

#### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

Everleigh Ashes Wildlife Site (mixed woodland): Located approximately 150m north-east of the site, on opposite side of main road.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

Within 500m of the site there are five records of brown hare, one record of a grizzled skipper (a butterfly species) and two records of rare vascular plant species in Wiltshire (including sainfoin and meadow saffron). The closest of these notable species records is located approximately 40m north of the site.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

Site consists of a Waste Management Facility which is currently in use. This facility is located along a lane with steep banks covered in semi-improved grassland (with tall ruderal patches and some semi-mature trees also present in these areas). The site is bound by fences with an area of semi-natural broadleaved woodland, a line of mature Scots pine trees and a species-rich hedgerow present adjacent to the eastern boundary of the site.

#### Field Evidence of notable species:

There a number of semi-mature trees with bat roosting potential present within the site. None of the structures present within the site are suitable for roosting bats.

There were no ponds identified within 500m of the site. No other field evidence of notable species was observed.

#### OTHER INFORMATION

None identified

#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (hard standing and operational areas of the site). However the woodland, the species-rich hedgerow and mature Scots pine trees that bound the site to the east are of local nature conservation value.

#### Potential Ecological Impacts:

- There are no predicted impacts on the Everleigh Ashes Wildlife Site.
- There will be possible loss of semi-improved grassland areas, hedgerows and semi-mature trees.
- Overall, the proposed works are likely to have a negligible ecological impact.
- Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of Salisbury Plain Special Area of Conservation (SAC)/ Special Protection Area (SPA). The SAC is located



approximately 2200m south-west of this site. Atkins has undertaken an assessment of the likely significant effect of the waste proposals on the SAC/SPA.

#### Potential mitigation:

- Retention of hedgerows and woodland around the outside of the site.
- Retention of semi-mature trees wherever possible.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If all of the recommended mitigation is undertaken, the proposed waste facility will have a negligible impact on the ecology of the site, given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

• Bat surveys on semi-mature trees within the site boundary if they require felling.

#### Legal and policy implications:

If bats are found to be roosting within any trees to be felled a development licence will be required from Defra.

• Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of Salisbury Plain SAC/SPA. Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SAC/SPA. See Appendix C for details of the Appropriate Assessment.

The Nature Conservation policies in the Kennet District Local Plan that are potentially relevant to this site include:

- Policy NR1
- Policy NR5



Phase 1 Habitat Map





Number	Target Notes	Species Notes
1	Portacabin	No Bat potential
2	Line of semi-mature Scot's Pine on semi-improved grassland road verge	
3	2 semi mature ivy covered oak trees.	Bat potential - survey if removed
4	Semi-improved grassland with patches of tall ruderal species	False oat grass, nettle, bind weed, woodarens, hedge woundwort, hogweed, ground elder
5	Mature oak tree	Low bat potential, some cracks and crevices of use
6	Thin strip of amenity grassland next to road. Behind boundary fence is defunct species rich hedgerow with trees	
7	No access	Oak and Ash mature woodland
8	No access	Oak woodland with elder and blackthorn understorey

### **Protected Species and Designated Sites**



## **ATKINS**

## Site: K5 Castledown Business Park, Ludgershall

### Landscape and Visual Survey

#### K5 Castledown Business Park, Ludgershall

#### 1. Introduction

The site is located on the A3206 between the village of Ludgershall and military camp of Tidworth. The site currently consists of a large open meadow, although it is described as a brownfield site and allocated for employment use.

#### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

- Extensive open, rolling Chalk plateau dominated by large arable fields.
- Military structures, airfields, tracks and signs.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)): Landscape Type: High Chalk Plain Landscape Character Area: Salisbury Plain East Key characteristics relevant to the site:

• Settlement limited to a scattering of small villages and military installations including camps and abandoned or specially constructed villages used by the army for training operations.

Due to its flat, enclosed character, in close proximity to the Ludgershall and Tidworth and associated MoD barracks, the site is not typically characteristic of the remote, open rural character of the High Chalk Plain landscape type in terms of its visual and vegetative quality. It is, however, strongly influenced by its military setting, a human influence that strongly dominates the Salisbury Plain, making it more intimate in places.

WCC recognises the negative impacts of military activity within the area, but considers that the overall condition of the Chalk High Plain landscape is 'good' and with a 'strong' sense of character.

WCC state that landscape sensitivities in this area typically relate to the open and exposed nature of parts of this landscape type and its management strategy is to conserve its open and isolated character and the vast areas of calcareous grass land and sites of historic interest. This strategy is not directly relevant to this site.

#### District Landscape Character Assessment: Kennet Landscape Conservation Strategy

Landscape Character Area: Chute Forest Key characteristics relevant to the site:

- Extensive deposits of clay with flints over the chalk, give the area an appearance similar to that of the Hampshire Downs rather than the wide open spaces of Salisbury Plain.
- Rolling, wooded downland dissected by a number of dry valleys, creating a much more intimate landscape than the wide open spaces of other chalk downlands of the District.



- The military presence in the south west corner of the area is significant and associated with the settlements of Ludgershall and Tidworth, the latter of which is a major army garrison.
- Light spill from Tidworth, is a visually intrusive features in the landscape.
- Field systems are generally post-medieval in origin.

#### Landscape Designations and policies:

- The North Wessex Downs AONB lies to the north of Ludgershall, approximately 1Km away from the site.
- The site lies close to a Special Landscape Area.

#### Local Authority Consultation:

Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The site consists of a large open flat meadow lying at approximately 130m AOD. The surrounding area is underlain by upper chalk, although the typical characteristics associated by this geology have been eroded by the military setting of the site. The site currently forms an important rural setting to the village of Ludgershall, reducing the influence of the military barracks to the south. However the site is described as brownfield and is allocated for employment use. As such this assessment must assume that the rural character of the site will ultimately be lost, regardless of its potential for waste management.

The site currently consists of meadow, with strong hedgerow boundaries to the north-west and southwest which respectively provide some screening to a military depot and school beyond. Its boundary to the south-east, along the A3026 is weak, consisting of a varied fence, including remnant metal estate fencing, but lacking a hedgerow. Beyond the site to the north and west, the land gently rises, forming a wooded backdrop to the site and village of Ludgershall. To the south-east of the site, on the other side of the A3026, an MoD barracks gives a strong military setting to the site.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Good Capacity to Accept Change in Current Site Condition: Low Capacity to Accept Change Following Construction of Business Park: Medium / High, depending on location within site.

#### 5. Potential Landscape Impacts

• Erosion of rural landscape character (although this could be lost in any event, with construction of a business park)

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning of facilities to minimise impact on views from A3026 and adjacent school
- Use of native and evergreen hedgerows and trees site boundaries to screen views into the site.
- The following 'Broad Management Objectives' for the Chalk High Plain landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.
- The following Enhancement Priorities proposed for the for the Chute Forest landscape character area in the *Kennet Landscape Conservation Strategy* are relevant to the site:



- Conserve and enhance the woodland matrix as representative of an historic landscape and recognising its importance as a former 'Royal Forest'.
- Maintain existing roadside hedgerows and trees, including avenues, and replace where these have been removed or weakened through neglect.
- Strengthen landscape structure and the quality of boundaries around military areas to reduce the impact of intrusive structures, fencing and land uses.
- Establish strong landscape structure to accommodate existing or new development on the fringes of urban areas and settlements.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor (assuming site to be developed as business park)	Potential Visual Mitigation Measures
Users of A3026	Medium	Slight adverse – no change	<ul> <li>Location of waste site away from road.</li> <li>Native and evergreen screen planting.</li> </ul>
Employees of MoD depots to north and south of site	Low	Slight adverse – no change	<ul> <li>Native and evergreen woodland screen planting.</li> </ul>
School Children and employees of school to south-west of site	Medium	Slight adverse- no change	<ul> <li>Location of waste site away from school boundary.</li> </ul>

#### 8. Summary: Residual Landscape and Visual Impacts

With its current open, semi-rural character, it would be difficult for the site to accommodate works without compromising the rural setting and open chalkland character of the landscape around Ludgershall. However if the site is developed for business use, the residual impact of waste treatment works will be far less. Given the size of the site, with sensitive siting and vegetative screening, the proposals could have a negligible impact on school children, users of the A3026 and employees of the MoD depots to the north and south of the site.

#### 9. Recommended further landscape and visual surveys

- Further assessment following receipt of business park proposals.
- Winter-time visual surveys.
- Night-time visual surveys.



## **Noise Assessment**

#### K5 Castledown Business Park, Ludgershall (Inset Map 1)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Castledown Business Park to assess the site's suitability for a waste recovery and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be properties facing the A3026 Tidworth Road located approximately 30m to the south of the site.
- 1.3 The site is currently brownfield and is flanked to the south by the A3026 Tidworth Road and to the north by railway sidings. Castledown School is located approximately 115m to the south-west of the site.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 26<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site and at the most sensitive receivers predominantly consists of traffic noise from nearby roads and environmental sources such as birdsong, insects, and wind in trees, etc
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	11:00	54.4	66.9	37.8
MEASUREMENT 2	11:06	50.8	62.7	39.9
MEASUREMENT 3	11:11	49.8	61.9	38.6
AVERAGE		52.1		38.8

2.3 The average background noise level at the most sensitive receiver was measured as 38.8dB L<sub>A90</sub>.

### 3. SITE SUITABILITY

3.1 The proposed uses for the site at Castledown Business Park include Household and Local Recycling and Materials Recovery Facility. The boundary of the site area proposed for use passes within 30m of the most sensitive receivers. Given the background noise level, L<sub>A90</sub> of 38.8dB at the most noise sensitive receivers, it is expected that any new waste development would need to be located at a minimum distance of 460m away from such receivers.



- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



## **Ecological Report**

#### K5 Castledown Business Park, Ludgershall

#### **DESK STUDY INFORMATION**

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

There are no known statutory or non-statutory designated sites within 500m of the site. Within approximately 600m of the site are County Wildlife Sites Windmill Down and Pickpit Hill to the west. Located approximately 1km north of the site are County Wildlife Sites Heaven Corner/Heron's Copse and Cockshord, Great Wickheath, Sawpit and Oxdown Copses.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Slow worm, grass snake and common lizard have all been recorded along the railway line bordering the north of the site. Serotine and pipistrelle bats and field Gromwell (Wiltshire rare plant species) are recorded within 500m of the site. Butterfly species small blue, grizzled skipper and marsh fritillary have also been recorded within 1km of the site using the railway line habitat.

#### Details of surveys already undertaken (where known):

No details available of previous surveys undertaken but evidence on site for possibly newts and/or reptile surveys. Attempts in contacting the Development Control Team at Kennet DC have been made to no avail (constantly busy lines).

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The entire area was covered in red poppies and rosebay willow herb at the time of the visit; there were few other species and much bare ground suggesting recent colonisation. An area of rough grassland around the entire periphery of the field was fenced off with what is probably reptile fencing (plastic "Herpetosure" style). Numbered refugia (roofing felt) were also present in the fenced off area.

Photos taken of the site.

#### Field Evidence of notable species:

Skylarks were seen and heard overhead directly above the site and they may well be using the site for breeding.

The presence of reptile fencing clearly suggests that the site is/was good for reptiles. The remaining rough grassland around the peripheries may also be good for invertebrates. Reptiles have been found near to the site using the railway line habitat.

Trees along the railway line may be used as a flight path for bats and bat species have been recorded nearby. Railway embankments can be good places for badgers to build setts due to the lack of human disturbance; the railway land could not, however, be accessed on this visit.

#### **OTHER INFORMATION**

The entire field was fenced off with chestnut pale fencing.



To the north and north-west of the site is rail land (fenced off), which was bordered by broad leaved trees (mainly sycamore). On the opposite side of the road is a ditch which was dry at the time of the visit and is probably dry for most if not all of the year (absence of any aquatic species).

#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

Overall, site is of negligible value; visually pleasing but of limited biodiversity value now that all vegetation has been cleared.

#### Potential Ecological Impacts:

- The land has already been cleared of vegetation and so little remains to be assessed. However, there would be a loss of skylark nesting habitat if the field is developed.
- Loss of rough grassland around site peripheries which may be important for invertebrates, reptiles and small mammals.
- Introduction of lighting in a currently un-lit area may have adverse effects on wildlife such as bats which may use the adjacent railway habitat

#### Potential mitigation:

- Leave the edge habitat intact so a corridor of rough grassland remains for invertebrates and small mammals
- Any landscaping should be done in consultation with ecologist and use native species of local provenance
- Lighting plans should be discussed with an ecologist in relation to limiting potential disturbance to wildlife in adjacent habitats
- Avoid the bird nesting season due to skylarks using the field, developing only part of the field may avoid total loss of habitat for this species (nesting season February to August depending on weather)

#### **Residual impacts:**

Loss of ground nesting bird habitat.

#### Opportunities for enhancement:

- Impacts of clearing the site should be addressed through planting; ecological landscaping to address loss of rough grassland.
- Any buildings constructed should be considered for green roofs
- Consider managing any un-developed sections of the site for invertebrates and reptiles through planting and appropriate management

#### Recommended further ecological work/surveys:

Bat surveys may be necessary depending on the exact location of the development in relation to the surrounding trees and railway line.

Area of woodland and embankment along railway line should be checked for badger activity if development of the site is to come within 30m of the existing site fencing.

Contact should be made with the Development Control Department at Kennet DC to establish what the site was important for before it was cleared.

# **ATKINS**

*Legal and policy implications:* Relevant policies in the Kennet District Local Plan (April 2004): Natural Resources: NR3, NR4, NR5

## **ATKINS**

Phase 1 Habitat Map





Number	Target Note	Species Notes
1	Band of broad-leaved trees (mainly sycamore), on other side of railway line and thus inaccessible.	
2	Band of rough grassland around entire perimeter of site (approx. 2m wide), reptile fencing and reptile refuges present. Band of rough grassland around entire perimeter of site (approx. 2m wide), reptile fencing and reptile refuges present.	
3	Overgrown dry ditch - not accessible as on railway depot land, no sign of aquatic species so assume dry for most/all of year	
4	Brownfield site - colonised by red poppies and rose-bay willow herb, skylarks flying above	red poppy, rose-bay willow herb, common fumitory

## **ATKINS**

### **Protected Species and Designated Sites**





## Site: K7 Garden Estate, Devizes

### Landscape and Visual Survey

#### **K7** Garden Estate, Devizes

#### 1. Introduction

The site comprises an existing industrial estate on the north-east edge of Devizes. The estate consists of a small number of relatively large units, some of which are visible from a rural lane to the west (Folly Road) and the A361 (London Road) to the east.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Berkshire and Marlborough Downs Key characteristics relevant to the site:

Due to its urban industrial character the site is not typical of this landscape character area, which is generally dominated by open chalk downland.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Greensand Vale Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

Due to its urban, industrial character, the site is not typical of the wider landscape of the area, which generally consists of low-lying chalk foothills with numerous streams, pasture and arable fields. It is, however, flat in character as a result of its vale setting. To the west of the estate, the rural landscape is more typical of this character area, with flat agricultural fields rising up to hillside farmland and woodlands.

WCC judge both the condition and strength of the Greensand Vale Landscape Type to be 'moderate', due to the loss of hedgerows and hedgerow trees and riparian vegetation, urbanisation of rural roads and inappropriate modern development on settlement edges. Views across the open vale landscape are considered sensitive and the overall strategy is to 'conserve' and 'improve' the rural agricultural character of the vale.

#### District Landscape Character Assessment: Kennet Landscape Conservation Strategy

Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

Due to its urban industrial character the site is not typical of this landscape character area, however the character area is typified by a high number of settlements, of which Devizes is one.

#### Landscape Designations and Rights of Way:

- The boundary of the North Wessex AONB lies approximately 1 km to the north of the site, north of Roundway.
- The Quakers Walk long distance trail runs within 1 km of the western and northern boundaries of the site (part within AONB)
- The White Horse long distance trail runs approximately 1 km from the northern boundary of the site (within AONB).



#### Local Authority Consultation:

Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

This is a relatively flat site at approximately 135m AOD, lying on the edge of Devizes. The site appears to date back to at least the 1960s, with a small number of varied 2 storey industrial units, constructed of brick, breeze blocks and metal and used for distribution and workshop purposes. The units are set within wide areas of concrete hardstanding. To the west of the site, the London Road is similarly urban in character, although recent brownfield residential development appears to be eroding the industrial and military character of the area. A limited amount of mature trees on the site boundaries soften views of the site but do not screen it, even during the summer months. Folly Road, leading to the village of Roundway to the west of the site is rural in character, and the western boundary of the site provides a sharp, urban contrast to this countryside setting.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: Medium

The industrial character of the site and its lack of vegetation and poor scenic quality has eroded its landscape quality. This poor quality combined with the fact that it is generally well screened from the wider public means that it could accommodate change, although this could be limited by the proximity of a number of residential dwellings along the London Road on the eastern boundary of the site.

#### 5. Potential Landscape Impacts

- Further erosion of rural character of landscape to the west of the site
- Given that the landscape condition of the site is currently poor, there could be opportunities to enhance its landscape character.

#### 6. Potential Landscape Mitigation Measures

- Planting of strong native and evergreen landscape buffers along all site boundaries, other than to the north-east. These could be on low bunds.
- Sensitive site planning to locate facilities as far away as possible from the London Road and Folly Road.
- The following Enhancement Priorities proposed for the Vale of Pewsey landscape character area in the *Kennet Landscape Conservation Strategy* are relevant to the site:
  - Encourage repair, replanting and widespread extension of hedgerow network and development of mature hedgerow trees, using native species typical of this locality.
  - Improve landscape structure and land management on the fringes of settlements and along main roads, to mitigate adverse impacts on the landscape.
  - Establish strong landscape structure to absorb existing or new development on the fringes of urban areas and settlements.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of	Potential Residual Impact	Potential Visual Mitigation
-	Receptor	on Receptor	Measures



Housing on London Road	High	Slight adverse – slight beneficial depending on proposals	Screen planting with     potential buffer around site     boundary
House on Folly Road	High	Slight adverse – slight beneficial depending on proposals	Sensitive site planning with large facilities located in
New housing on Folly Road	High	Slight adverse	centre of site.
Workers on Garden Industrial Estate	Low	Slight adverse	
Workers on industrial site to south-west of site	Low	No change	
Users of London Road	Low	Slight adverse	
Users of Folly Road	Low	Slight adverse	
Users of Quakers Walk	Medium	Slight adverse – slight beneficial (depending on scale and location of proposals)	
Users of White Horse Trail (potential impact – subject to further survey)	Medium	Slight adverse – slight beneficial depending on proposals	

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its partially enclosed setting and existing industrial character, the site could accommodate some change, although this would need to be managed carefully, due to the presence of residential properties to the east and open countryside to the west. The proposals would need to be located away from these visual receptors and planting screens and bunds used around the boundaries to protect the rural setting.

#### 9. Recommended further landscape and visual surveys

- Visual survey from the Quakers Walk long distance trail and White Horse Trail
- Visual survey from AONB
- Winter-time visual surveys.
- Survey following completion of business park
- Night time visual survey

## **ATKINS**

## **Traffic and Transport Review**

### K7 Garden Estate, Devizes

#### **Proposed Site Usage**

This 6.5 ha site is proposed to be used as a local scale recycling facility or waste transfer station.

#### **Existing/Potential Access**

The site is located on the northern fringes of Devizes to the west of the A361 London Road. The site comprises an existing industrial estate with a mix of B2 and B8 uses.

The site is currently accessed from Folly Road off the A361 London Road. Folly Road forms the minor arm of a major minor priority junction with the A361. The speed limit on the A360 is 30 mph which changes to national speed limit just south of Folly Road. There are cycle lanes along the A361 in both directions.

The site of for the proposed uses could be accessed via the existing access for the site. Alternatively a fourth arm could be added on the three arm roundabout of A361 London Road/Windsor Drive or a by means of a new priority access from The A361.

#### Impacts on Local Settlements

There are two residential properties on the corner of Folly Road/ A361 London Road, but the main residential settlement lies on the eastern side of the A36. The residential properties are located within culde-sacs off the main road and will not be affected by the traffic generated from the site.

#### **On-site Infrastructure**

The existing access roads to the industrial estate are of reasonable standard to accommodate the anticipated traffic generated from the proposed land uses. However, a new access road by means of a fourth arm on to the roundabout or a priority junction off A361 would minimise the traffic impact on the two residential properties.

#### Off Site Highway Network

Considering that currently there is a household recycling centre on the industrial estate adjoining this site provision of a similar facility on the site is unlikely to generate significant additional traffic and therefore its impact on the immediate junctions and the local network is likely to be minimal.

#### Constraints

No traffic related constraint has been identified.

#### Mitigation

Possible provision of an appropriate new/amended access junction on to Folly Road to accommodate the queue of the traffic resulting from the usage of the proposed facility.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.

## **ATKINS**

## Site: K8 Hopton Industrial Estate, Devizes

### Landscape and Visual Survey

#### **K8** Hopton Industrial Estate, Devizes

#### 1. Introduction

Existing industrial and business park on the north-eastern edge of Devizes, with the North Wessex Downs AONB immediately to the north and west.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

**3.** Landscape Character Area: Berkshire and Marlborough Downs Key characteristics relevant to the site:

Due to its urban, industrial character, the site is not typical of the wider landscape of the area (see below)

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Greensand Vale Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

Due to its urban, industrial character, the site is not typical of the wider landscape of the area, which generally consists of low-lying chalk foothills with numerous streams, pasture and arable fields. It is however, influenced by the vale topography, being generally flat in character, rising up generally at its northern end towards the North Wessex Downs. To the north of the estate, the rural landscape is more typical of this character area, with open agricultural fields rising up to the downs north of the village of Roundway.

WCC judge both the condition and strength of the Greensand Vale Landscape Type to be 'moderate', due to the loss of hedgerows and hedgerow trees and riparian vegetation, urbanisation of rural roads and inappropriate modern development on settlement edges. Views across the open vale landscape are considered sensitive and the overall strategy is to 'conserve' and 'improve' the rural agricultural character of the vale.

### District Landscape Character Assessment: Kennet Landscape Conservation Strategy

Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

Due to its urban industrial character the site is not typical of this landscape character area, however the character area is typified by a high number of settlements, of which Devizes is one.

#### Landscape Designations and Rights of Way:

- The boundary of the North Wessex AONB lie immediately to the north and west of the site
- A footpath runs from London Road opposite the site in a north-easterly direction to Bishops Cannings.

#### Local Authority Consultation:



Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 4. Baseline Landscape Character and Features: Site Survey

The site is a relatively large, diverse industrial park that is in places still under construction. Units include workshops, a children's indoor play centre and Kennet Borough Council offices. A recent addition has been a Local Recycling Centre. The estate is well managed and maintained with a series of units connected by wide estate roads with footways. A relatively strong landscape structure including ornamental trees, grass verges and street lighting gives the site a more attractive feel than similar such estates. The site is generally flat, although at its northern end some vacant plots slope gently up towards the North Wessex Downs AONB. To the north the site is set within the rolling rural valley side east of Roundway, whilst to the south, the topography flattens towards the Kennet and Avon Canal, limiting views to those of the urban land uses along the A361 (London Road).

#### 5. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor-Ordinary Capacity to Accept Change: High

The industrial character of the site has eroded its landscape quality, although to a lesser degree than other industrial estates. This poor quality combined with the fact that the site is generally well screened from the wider public means that it could be well placed to accommodate change.

#### 6. Potential Landscape Impacts

• Impact on the rural character of the North Wessex Downs AONB to the north and west of the site.

#### 7. Potential Landscape Mitigation Measures

- Planting of native/evergreen woodland planting belts to the north of the site
- Sensitive site planning to minimise adverse views of the facilities from the AONB
- Sensitive levels design to minimise the impact on the valley-side topography of the northern end of the site and utilise its natural enclosure for screening any development

#### 8. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Pot Mea	ential Visual Mitigation asures
Visitors to the site (eg users of children's play centre and recycling centre, shoppers at architectural salvage yard, visitors to council officers)	Low	Slight adverse	•	Strong native woodland/evergreen planting screens, around facility. Potential for use of earth bunds. Sensitive site planning to locate facility away from majority of visitors
Workers on Hopton Industrial Estate	Low	Negligible		
Users of London Road	Low	Negligible	•	Strong native



Walkers on footpath to Bishops Cannings (subject to further survey)	Medium	Slight adverse impact during winter months		woodland/evergreen planting screen along road boundary. Potential for use of earth bunds.
			•	Location of facility away from eastern edge of site.

#### 9. Summary: Residual Landscape and Visual Impacts

Due to its existing industrial character, some parts of this site could accommodate change, although care would need to be taken to avoid harming the rural character of the adjacent AONB. The main visual impacts would be on employees and visitors to the Industrial estate, and new facilities would need to be discretely sited to minimise visual impact. A structure of large trees and hedgerows would help to mitigate visual impact. Consideration will need to be given to the visual impact on local footpaths. To mitigate visual impact on walkers on-site or off-site planting could screen views.

#### 10. Recommended further landscape and visual surveys

- Visual survey from the Quakers Walk long distance trail and White Horse Trail
- Visual survey from AONB
- Winter-time visual surveys.
- Night-time visual surveys.



## Traffic and Transport Review

#### **K8 Hopton Industrial Estate, Devizes**

#### **Proposed Site Usage**

This 26 ha site is proposed to be used as a local scale recycling facility, material recovery facility or waste transfer station.

#### **Existing/Potential Access**

The site is located on the northern fringes of Devizes to the west of the A361 London Road. The site comprises an existing industrial estate with mix of B2 and B8 uses. Currently there is a recently implemented household recycling facility is operational on the site.

The industrial estate lies within the limits of the development and landscape setting for Devizes. The site is currently accessed from three junctions on the A361 London Road. The two southern access points are in the form of roundabouts onto the A361 and the northern one is a priority junction with single lane dualling with nearside auxiliary lane and merge taper. The right turn out of the site at this access is prohibited. The A361 is subject to national speed limits up to the northern access roundabout. The speed limit within the industrial estate is 30 mph.

#### **Impacts on Local Settlements**

The main nearby residential settlement lies on the south eastern quadrant of the A361/Horton Road roundabout. The residential properties are located within cul-de-sacs off the main road and will not be affected by the traffic generated from the site.

#### **On-site Infrastructure**

The existing access roads to the industrial estate and the access roundabouts are of good standard for the traffic generated from the proposed land uses.

#### **Off Site Highway Network**

Considering that currently there is a household recycling centre on the site provision of a similar facility on the site is unlikely to generate significant additional traffic and therefore its impact on the immediate junctions and the local network is likely to be minimal.

#### Constraints

No traffic related constraint has been identified.

#### Mitigation

Provision of an appropriate access junction on to the main industrial access road (Gort Road) to facilitate access to the site and accommodate the queue of the traffic resulting from the usage of the proposed facility.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.

## **ATKINS**

## Site: K11 Tinkersfield Farm, Monument Hill, Devizes

### Landscape and Visual Survey

#### K11 Tinkersfield Farm, Monument Hill, Devizes

#### 1. Introduction

The site is located to the south-east of Devizes, just outside the town on the A342. It is currently in use as a skip hire service, including a waste transfer station and inert recycling. Bunds have been constructed to screen the site and a significant amount of earthworks have affected the topography of the site.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Avon Vales Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture
- Uses such as landfill are widespread.

Generally, due to the disturbance of the land resulting from its existing usage, including extensive earthworks, the site does not reflect the general character of the area.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Greensand Vale Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

Due to its urban, industrial character, the site is not typical of the wider landscape of the area, which generally consists of low-lying chalk foothills with numerous streams, pasture and arable fields. It is, however, set within a gently undulating valleyside, setting its vale setting. To the north, south and east of the estate, the rural landscape is more typical of this character area, with agricultural fields rising up the side of Etchilhampton Hill to the north-east and down to the Stert Valley to the south.

WCC judge both the condition and strength of the Greensand Vale Landscape Type to be 'moderate', due to the loss of hedgerows and hedgerow trees and riparian vegetation, urbanisation of rural roads and inappropriate modern development on settlement edges. Views across the open vale landscape are considered sensitive and the overall strategy is to 'conserve' and 'improve' the rural agricultural character of the vale.

#### District Landscape Character Assessment: Kennet Landscape Conservation Strategy

Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

Due to its disturbed, waste-dominated character the site is not typical of this landscape character area; however the setting of the site, with its agricultural fields and belts of riparian vegetation reflect the wider character.

#### Landscape Designations and Rights of Way:



- The boundary of the North Wessex Downs AONB lies approximately 1 Km to the east of the site.
- A bridleway connects the A342 opposite the site entrance with Etchington Hill to the north-east of the site and beyond.
- The Wessex Ridgeway trail runs to the north-east of the site
- A number of bridleways and footpaths run around the Stert valley and Sleight Farm to the south of the site
- Nursteed Farm Woods Wildlife Site lies to the south of the site.

#### Local Authority Consultation:

Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The site character is currently dominated by its use as a skip hire service, with earth bunds around the boundaries providing visual screening. A mature hedgerow along the A342 screens the site and reinforces the rural character of the wider setting. This includes species such as willow, together with non-native coniferous evergreens. Within the site, earthworks, containers, vehicles and a brick building associated with the waste transfer facility have eroded the rural character of the site, although a number of mature trees remain, including a group of oak, ash and sycamore within the centre of the site. The earth bunds have not been planted but have colonised with herbaceous plants.

The site entrance is relatively well-concealed, with a dog-leg turn into the site screening wider views from the A342.

The only residential property in the area is a 20<sup>th</sup> century, detached property, Ridgecroft, in an elevated position to the north of the site on the A342. At a further distance, Parklands Farm and Tinkersfield Farm lie to the west and east respectively. To the south of the site, the Nursteed Farm Woods Wildlife Site focuses on the Steer Valley watercourse and associated woodland vegetation. The embankments of a dismantled railway line running parallel to the A342 adjoin the southern end of the site on each side.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

Due to the erosion of its rural character and existing use as a waste management facility, including the presence of screening bunds, this site would be able to accommodate change and may even benefit from the process.

#### 5. Potential Landscape Impacts

- Loss of existing site vegetation, including mature trees within centre of site and mature hedgerow boundary along A342 boundary
- Creation of new, wider site entrance on the A342 could open up views into the site, eroding the rural character of the road.

#### 6. Potential Landscape Mitigation Measures

- The following 'Broad Management Objectives' for the Greensand Vale landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Introduce new tree planting along watercourses using typical riparian species such as alder and willow.



- Encourage repair, replanting and extension of the hedgerow network, improved maintenance of the existing hedgerows
- Restore hedgerow treescape by nurturing new hedgerow trees.
- The following Enhancement Priorities proposed for the Vale of Pewsey landscape character area in the *Kennet Landscape Conservation Strategy* are relevant to the site:
  - Encourage repair, replanting and widespread extension of hedgerow network and development of mature hedgerow trees, using native species typical of this locality.
  - Reinstate and restore wet meadows, wetland and riverine habitats.
  - Improve landscape structure and land management on the fringes of settlements and along main roads, to mitigate adverse impacts on the landscape.
  - Establish strong landscape structure to absorb existing or new development on the fringes of urban areas and settlements.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of	Potential Residual	Potential Visual Mitigation	
	Receptor	Impact on Receptor	Measures	
Users of the A342	Low	No change – Slight adverse (depending on site entrance design)	<ul> <li>Conserve and enhance existing hedge boundary.</li> <li>Ensure site entrance is</li> </ul>	
Residents of Ridgecroft	High	Slight adverse – slight beneficial (depending on site access design)	appropriately designed to minimise views into site.	
Users of adjacent footpaths and bridleways (potential impact – confirmation required subject to path walkover)	Medium (views distant and limited/ screened by bunds and intervening vegetation)	Slight adverse – slight beneficial (depending on scale of proposals and site access design)		
Workers in the site	Low	No change – slight beneficial (depending on site layout)	<ul> <li>Retention of existing vegetation. Planting of additional vegetation around site boundaries and within site.</li> <li>Enhance access and working layout within site</li> </ul>	

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its enclosed setting and existing waste-dominated character, the site is well placed to accommodate change. Site planning should avoid the loss of mature hedgerows and trees around and within the site, but make use of the existing earth bunds to continue screening views. Care will need to be taken when designing the site entrance to ensure that views into the site from the A342 and Ridgecroft are not opened up.

#### 9. Recommended further landscape and visual surveys

- Visual survey from the surrounding footpaths and bridleways
- Visual survey from AONB
- Winter-time visual surveys.



• Night-time visual surveys.



## **Noise Assessment**

#### K11 Tinkersfield Farm, Monument Hill, Devizes (Inset Map 25)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Monument Hill to assess the site's suitability for waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be Turnpike Cottage and Hope Cottages located on Sleight Lane to the west of the proposed site.
- 1.3 There are a number of properties at Ridgecroft located at a similar proximity however traffic along the A342 would likely offer some masking noise thus reducing the sensitivity of these receivers.
- 1.4 The site currently contains a skip hire firm involving waste transfer and recycling. The site is flanked to the north by the A342, and surrounded by fields containing small farms.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 18<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of traffic noise from nearby roads and noise from the skip hire firm. The noise climate at the most sensitive receiver consists predominantly of traffic noise from nearby roads and environmental sources such as birdsong, insects, and wind in tress, etc. Intermittent metallic "banging" noises emanating from the nearby farm land is perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90	
MEASUREMENT 1	13:50	46.7	65.1	41.9	
MEASUREMENT 2	13:55	46.4	59.2	41.5	
MEASUREMENT 3	14:00	45.9	64.9	38.7	
AVERAGE		46.3		40.7	

2.3

2.4 The average background noise level at the most sensitive receiver was measured as 40.7dB L<sub>A90</sub>.



### 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Monument Hill is for Waste Transfer Station, Local Recycling, Outdoor Composting, and Materials Recovery Facility. The boundary of the site area proposed for use passes within 75m of the most sensitive receiver. Given the background noise level, L<sub>A90</sub> of 40.7dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 1160m away from this receiver depending on the proposed activities of the development. It may be possible for the development to be located closer to other nearby receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



## **Air Quality Report**

#### K11 Tinkersfield Farm, Monument Hill, Devizes 3.5ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located on southeast of Devizes at Monument Hill on the A342. The site is currently used as a skip hire service, involving a WTS and inert recycling.



#### Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>4</sup> sources within 1km of the site: A342 and minor roads. Agricultural activities in the area are potential sources of dust, bioaerosols, NH<sub>3</sub> and odour.

<sup>&</sup>lt;sup>4</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>5</sup> for 2005 and comparable standards<sup>6</sup> are: 11µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 8.5µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 17.8µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate very good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential premises in the surrounding area. There are two County Wildlife sites within 1km: Nursteed Farm Woods (Stert Walley Wood) and Etchilhampton Hill.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	1 (1)	2 (2)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential between 100 and 250m	1 (1)	1 (1)	N/A	N/A	3 (3)	1 (1)	3 (3)
Residential beyond 250m	1 (1)	1 (2)	N/A	N/A	2 (2)	1 (1)	2 (2)
Potentially sensitive ecology within 1km of site (Nursteed Farm Woods and Etchilhampton Hill)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

### 3. MITIGATION

3.1 Dust, bioaerosol and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to high without mitigation. Mitigation for dust, bioaerosols and odour is recommended. Detailed assessment should be undertaken.

<sup>&</sup>lt;sup>5</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>6</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)


### **Contaminated Land Assessment**

### K11 Tinkersfield Farm, Monument Hill, Devizes 3.5ha

Site name – Tinkersfield Farm. NGR at centre of site – 402300 159960

Location description – Existing waste handling facility within generally rural setting, immediately adjacent to the A342, 2km southeast of Devizes Area of site (ha) – 3.5

Table 1: Contaminated Land, Environmental Information and results - See Appendix B

### CSM

By assessing all available information and tabulating the key results as above, the contaminated land and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigat	Likely	Further	Assessment
	Receptor		Significance of	Measures	Requirements	.S	
			Impact	(to be considered as appropriate			
Contaminat ed Land and Environmen t	Groundwater	Future Operations: Contaminate major aquifer on site and surrounding site (Upper Greensand) Contaminate major aquifer off site (West Melbury Chalk) Contaminate minor aquifer off site (Alluvium) Disrupt current hydrological balance at the site leading to/increasing leachate	<u>Impact</u> High	<ul> <li>(to be considered as appropriate</li> <li>Plan mitigation requiremeduring construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage adesignated liquid handlareas if site might acculiquids/hydrocarbons</li> </ul>	<ul> <li>Environm constructi</li> <li>Approach monitorin</li> <li>Produce</li> <li>Review requireme</li> <li>Monitorin water fea obtaining</li> <li>Examine operation</li> <li>Assess contamina</li> <li>Approach gather a quality data</li> </ul>	ental manag ion Environmer g requiremen Working Plan runoff ents g boreholes itures (may b operating pe current req of inert landf current ation Environmer available sr ata (none av	gement during nt Agency for nts of or site treatment and surface be required for rmit) uirements for fill impact of nt Agency to urface water vailable within
		to/increasing leachate discharge to the groundwater		<ul> <li>Consider limiting types waste handled at site e solid wastes only, inert wast</li> </ul>	1km of sit • Formal a water en permit / lic	te from search ssessment o ivironment a cense applica	h) If risk to local as part of a ation

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Significance of Impact	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
	Surface water body	Future Site operations: Contaminate immediately adjacent watercourse (unnamed stream in the south) Contaminate nearby Stert watercourse with current adjacent discharge consents including storm overflow and discharges Contaminate adjacent ponds including at front of site by road, pond in garden of Mowbray house (residence) and pond adjacent to railway line Disrupt current hydrological balance at the site leading to/increasing leachate discharge to the stream/discharge point	High	<ul> <li>Engineered liner system to reduce surface water percolation</li> <li>Remediation/risk management of the effects/potential effects of existing contamination prior to new operations.</li> </ul>	<ul> <li>Adequate monitoring to differentiate between any impact this proposed site may have, and the other existing and historical off site potential pollution sources (discharge consents, pollution incidents, contaminative adjacent activities etc)</li> <li>Detailed site investigation to assess geo-environmental and geotechnical issues.</li> </ul>
		Impact on baseflow / runoff to watercourse	High		

Category	Potential Receptor	Potential Risk Issue	Potential Significance of Impact	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood event causes contamination of surface water and disruption of operations Small section of site and all of adjacent watercourse are directly covered by Flood Risk Zones 2 and 3	High	Engineered flood defence or mitigation	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater Abstraction point	Current risk exists to 7 private abstractions within 1km of site. Future site operations could increase contamination potential	High	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above, plus</li> <li>Treatment of abstracted water</li> <li>Decommission abstraction points</li> </ul>	<ul> <li>Check status of abstractions with Environment Agency / landowner</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Check availability of data of groundwater and surface water quality sampling locations from Environment Agency</li> </ul>
	Humans (site occupants and visitors)	During construction and operation phase potential health risk deriving from historical contamination and ground gas	Medium/High	Risk management/remediation of contaminated land: Removal of soil Use of cover/capping systems Installation of gas management within new buildings and across paved areas	As for ground and surface water risks, in particular requirement for detailed site investigation to assess geo- environmental issues.
	Structures (including buildings/ slopes and general landscape)	Potential for instability in landfilled materials leading to structural distress and other geo hazards. Structural distress could also led to environmental damage,	Medium/high	Consideration of engineering implications of future operations and requirement for special geotechnical design	Detailed site investigation to assess geotechnical characteristics of the site prior to development.

Category	Potential	Potential Risk Issue	Potential	Potential	Risk	Mitigation	Like	ely Further	As	sessment
	Receptor		Significance of	Measures			Rec	quirements		
			Impact	(to be consid	ered as a	ppropriate)				
	Designated sites / Adjacent sensitive landuses	2 Wildlife sites within 1km North Wessex Downs AONB is within 1km	Low / Medium	<ul> <li>Refer to g potential r measures</li> <li>Managem material a</li> </ul>	roundwat isk mitiga listed abo ent of t site bour	er/surface tion ove windborne ndaries	•	Consider environmental landuses have appropriate env can be measure Approach Enviro Requirements	the impact e, and ironmenta ed/monitor onment A	potential adjacent how an al baseline red gency for

Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Tinkersfield Farm is:

- Many potentially significant issues identified review further assessment requirements and risk mitigation is considered practicable to address most issues although long term environmental management is highly likely to be required
- o Review further assessment requirements

It should be noted that the condition of the site including the condition and chemical profile of any soil or surface water features identified during the desk study can only be assessed during a detailed site investigation. A site investigation is likely to be required to determine the requirement for risk management and /or remediation.



### **Ecological Report**

### K11 Tinkersfield Farm, Monument Hill, Devizes

### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

Within the site boundary to the south is Nursteed Farm Woods Non statutory County Wildlife Site. Approximately 700m to the east is Etchilhampton Hill County Wildlife Site.

### Records of notable species within 500m: (legally protected, BAP, RDB)

There are numerous badger records within 500m of the site, there are also records from within the site itself although these are not necessarily records of setts. Butterfly species records comprise marsh fritillary and small blue. Flora records from the Wiltshire rare plants list are sanfoin, wood vetch and field Gromwell. There are also records of adder and bat species (naterer's and pipistrelle) within 500m of the site.

### Details of surveys already undertaken (where known):

None known.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

Some parts of the site are being used for dumping on a daily basis, these are marked on the Phase 1 habitat map and are to the east and south east of the site office at the entrance. The western side of the site, however, where materials and machinery were once dumped is now disused or only partly used; these are colonised by a diverse range of flora.

In the extreme north western corner is a stand of broad-leaved trees (mainly sycamore and mature beech), dense bramble and sedges. A mature line of oak and ash trees border the site at Grounds Farm.

In the south of the site is a recently created pond and reed bed (Wilts CC owned), fenced off. It was created for treatment of gases coming off the old landfill site. Around the edges of this pond, Japanese knotweed has been treated which is now growing back.

To the south of the site the ground is steep and slopes down to the disused railway line. Vegetation has been cleared to create a pathway; either side of the path is dense vegetation which is inaccessible. A stream and willow carr and mature woodland lie at the bottom of the slope.

Giant hogweed and Japanese knotweed were present on the site; the locations of these have been noted on the Phase 1 habitat map.

### Field Evidence of notable/invasive species:

The pond has been recently created and appears to provide no suitable aquatic habitat for great crested newts at present. This could change in the future if/when more plants start to colonise; it should be borne in mind for any future development.

The row of trees in the north west of the site (bordering Grounds Farm) and a mature oak near to the site office provide suitable features for roosting bats. Trees to the south may also provide these features but could not be accessed.



The areas of dense vegetation (north west and south of the site) provide good habitat for nesting birds. Bird species seen using the site included wrens, tits and blackbirds.

Plenty of butterflies and other invertebrates were exploiting the variety of flowers around the less used parts of the site where spoil had been dumped and is now being colonised.

Much of the site is particularly suitable for reptiles (foraging and hibernating habitat). The most suitable areas have been marked on the Phase 1 habitat map.

Stands of both Giant hogweed and Japanese knotweed were noted and are marked on the Phase 1 habitat map.

Suitable habitat exists on site to the south and north-west for dormice.

Fox scat was seen around the site and there may be a den nearby or around the peripheries of the site.

### OTHER INFORMATION

The site manager was made aware of the invasive species on site.

### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

### Nature conservation evaluation:

The site is assessed as being of negligible value, although further surveys for reptiles and invertebrates will be needed for a proper valuation.

### Potential Ecological Impacts:

- Loss of habitat for wildlife such as reptiles, invertebrates and nesting birds.
- Water quality impacts on stream to the south of the site
- Increased disturbance on the woodland to the south of the site

### Potential mitigation:

- By using only part of the site the wooded areas can be avoided.
- Retain all mature trees on site
- If reptiles are found, alternative habitat should be provided for them or the mounds of spoil on the site peripheries should be retained and enhanced to increase the suitability of the habitat further
- Any landscape planting should be done in consultation with the ecologist and address the loss of flora
- Depending upon the results of botanical and invertebrate surveys, -some areas of the site may be worth retaining or the top soil stored and re-used in suitable locations
- Avoid encroachment on any of the land south of the pond and CWS
- Clear the site of invasive species in the appropriate manner
- Adherence to Environment Agency Pollution Prevention Guide notes when working close to water courses, particularly PPG01, PPG03, PPG05, PPG06 and PPG21

### Residual impacts:

Unknown at this stage due to the site requiring further surveys. However, if the above mitigation is followed, residual impacts should be minimal.

### **Opportunities for enhancement:**

- Ecological planting through any landscaping proposals
- Green roof any buildings



- Provide bat and bird nesting boxes on site
- Retain south-facing spoil heaps and enhance further for reptiles and invertebrates
- Management of the CWS to enhance its value further?

### Recommended further ecological work/surveys:

- Reptile and botanical surveys needed over entire western side of site
- Invasive species surveys needed over entire site
- Invertebrate surveys particularly in western site of the site
- Bat surveys of mature trees along Grounds Farm boundary and mature oak tree near to site office
- Check habitat linkages to site with respect to dormice and possibly do dormice surveys in denser vegetated areas if these are to be affected

### Legal and policy implications:

Relevant policies in the Kennet District Local Plan (April 2004): Natural Resources: NR3, NR4, NR5, NR14, NR16, NR18



Phase 1 Habitat Map





Number	Target Note	Species Notes
1	Site offices - low if any bat potential	
2	Good potential for reptiles. Piles of rubble surrounding tipping areas, colonised by ruderal sp.	
3	Mature oak tree covered in ivy, potential bat roost in woodpecker hole and under ivy	
4	Row of mature oak and ash trees bordering site with Grounds Farm, potential bat roosts	
5	Area of dense broad-leaved trees and shrubs, good bird nesting habitat, suitable for dormice, full of butterflies	Sycamore, elder, beech, thistles, nettle, rose-bay willow herb, broad-leaved dock, pendulous sedge, bramble, black medic, hedge woundwort, bent sp. Yorkshire fog, false oat grass, common ragwort, hogweed, hard rush.
6	Patch of Giant hogweed	
7	Patch of Japanese knotweed	
8	Pond and reed bed - Wilts CC owned and managed, for treating pollutants from old land fill. J knotweed growing around edges inside and outside pond fencing. Some has been treated but is growing back. Pond currently unsuitable for great-crested newts - monitor if developing site in the future	
9	Dense vegetation (mainly bramble) along edges of path leading from tip to stream at bottom. Path steep and area at the bottom is inaccessible. Suitable for nesting birds and dormice	Willow carr, sycamore, bramble



### **Protected Species and Designated Sites**

# Site: K14 Salisbury Road Business Park, Marlborough

### Landscape and Visual Survey

### K14 Salisbury Road Business Park, Marlborough

### 1. Introduction

New business and industrial park located on the south-western edge of Marlborough and to the north of the Savernake Forest. The site has yet to be completed and has a number of vacant plots. It is allocated as an employment area in the Kennet District Local Plan.

### 2. Baseline Landscape Character and Designations: Desk Survey

### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Berkshire and Marlborough Downs Key characteristics relevant to the site:

- Well-wooded dip-slope characterised by mixed farming with tree-lined arable fields.
- Wherever clay -with- flints caps the chalklands this creates areas of damp heavy soils which support
  major areas of woodlands such as Savernake Forest.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)): Landscape Type: Wooded Downland

Landscape Character Area: Savernake Plateau Key characteristics relevant to the site:

- Rolling downlands with scarp slopes
- Intensive and widespread arable farmland enclosed within a wooded framework including hedgerows with many wooded trees
- Floristically rich chalk grassland, in particular on scarp slopes
- Historic landscape is rich in burial, settlement, agricultural and territorial features dating from the Neolithic to the modern era
- The steep valley sides and scarp slopes and are devoid of settlement although the pattern of paths, tracks and field boundaries tend to reflect past patterns of land use linking the downs with the valleys and plateaus.
- Upper Chalk overlain by drift deposits creating heavier soils that supporting a highly wooded character of this area

WCC judge the condition of the Wooded Downland Landscape Type to be 'good', in part due to its varied woodland cover, full hedgerows and visual interest. It is considered to have a strong landscape character, resulting from its varied chalk geology, including its steep scarps, and its rich history. The overall strategy is to 'conserve' the rural, peaceful character of the area with its varied topography and land cover.

#### District Landscape Character Assessment: Kennet Landscape Conservation Strategy Landscape Character Area: Savernake Plateau Key characteristics relevant to the site:

• scarp slopes



This character area is typified by a strong woodland and farmland character and as such, the site does not conform. The scarp slope to the east of the site however, is typical of the geomorphology of the area.

### Landscape Designations and policies:

- The site lies within the North Wessex Downs AONB
- The Tottenham House and Savernake Forest Registered Park and Garden lies to the south-east of the site
- A public footpath lies to the south-east of the site along the Postern Hill escarpment

### Local Authority Consultation:

Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

### 3. Baseline Landscape Character and Features: Site Survey

The site is relatively flat in character, although it is enclosed to the north, south and east by chalk escarpment topography. These slopes are covered with scrub, together with scattered native trees, including hawthorn, ash and willow.

The site has been partially completed and consists of a series of office blocks and industrial units arranged around an access road with street lighting. A number of plots remain vacant along the southern, A346 frontage and to the north of the site. A new structure of ornamental and native planting has been put in place, although this is currently immature and poorly maintained. None of the buildings are yet occupied and construction offices and compound remain in place. There is currently no public access to the site.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Low Capacity to Accept Change: High

The site has been significantly disturbed through construction and its rural character eroded. It is relatively well enclosed and screened and would therefore be able to accommodate change well.

### 5. Potential Landscape Impacts

 Further erosion of rural character of wider area through loss of vegetation and introduction of urban/industrial elements.

### 6. Potential Landscape Mitigation Measures

- Planting of native woodland buffer around proposed facility
- Location of facility to northern end of site, away from A346
- The following 'Broad Management Objectives' for the Wooded Downland landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.
- The following Enhancement Priorities proposed for the Savernake Plateaud landscape character area in the *Kennet Landscape Conservation Strategy* are relevant to the site:



 Plant blocks and belts of native broadleaved woodland, on arable or cultivated land and within estate farmland, to link with existing woodlands and to restore or reinforce a mosaic of woodland and farmland.

### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Impact on Receptor	Potential Visual Mitigation Measures
Residents to north of site on Five Stiles Road	High	No change – Slight adverse (depending on scale and location of proposals)	
Employees of business park	Low	Slight adverse – No change (given that site is already allocated for industrial use)	<ul> <li>Buffer planting/bunds around facility to screen it.</li> <li>Location of facility to</li> </ul>
Users of footpath to south-east of site (potential)	Medium	Slight adverse – No change (given that site is already allocated for industrial use)	northern end of site to minimise number of visual receptors affected, but with 15m + planted buffer between facility and
Users of A346	Low	Slight adverse – No change (given that site is already allocated for industrial use)	residential boundaries.

### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting and existing commercial character, the site could accommodate change, especially away from the A346. The main visual impacts, on users of this road, and, during the winter, residents to the north, could be almost entirely mitigated through sensitive site planning and screen planting.

### 9. Recommended further landscape and visual surveys

- Visual survey from footpath to south-east of site
- Winter-time visual survey
- Night-time survey.

# **ATKINS**

## **Traffic and Transport Review**

### K14 Salisbury Road business Park, Marlborough

### Proposed Site Usage

This 6 ha site is proposed to be used for local recycling and as a material recovery facility.

### **Existing/Potential Access**

The site is located on the southern fringes of Marlborough on the A346. The site is being developed as a business park.

The existing access to the site is directly from the A346 Salisbury Road via a purpose built roundabout. At this location Salisbury Road is a single two lane carriageway with 30 mph speed limit.

The highway infrastructure appears adequate to accommodate the existing and proposed HGV volumes.

### **Impacts on Local Settlements**

Marlborough lies to the north of the site. With appropriate routing of HGVs the impact on this settlement can be minimised. There is also one residential property just north of the site which could be affected.

### **On-site Infrastructure**

The existing site access junction is of good standard however any proposals must ensure that sufficient queuing space is provided to accommodate the development traffic without blocking back onto the local highway network. This is of particular importance should the site be used as a community facility; as it would be likely to attract a relatively high number of trips at peak times (weekends 11:00 - 16:00).

### **Off Site Highway Network**

The local recycling site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. As the peak traffic generated by this type of facility is likely to be at the weekend and will not coincide with the weekday AM and PM peaks on the highway network no off site highway mitigations are anticipated.

### Constraints

The impact of the proposed development on the industrial and office uses on the site should be considered as the impacts of noise and vibration associated with the transportation of waste can be an issue.

### Mitigation

In order to alleviate the impact of the proposal on the potential users of the site, the facility should be located at an appropriately within the site. Appropriate routes for the HGV movements should be identified to minimise the impact of the development on Marlborough.

### Conclusion

This site is suitable, in traffic terms, for the proposed uses.



## **Ecological Report**

### K14 Salisbury Road Business Park, Marlborough

### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

Savernake Forest SSSI (3 parcels): Located directly adjacent to southern boundary of the site.

Postern Hill Chalk Wildlife Site: Located approximately 250m east of the site.

Rivers Kennet and Og Wildlife Site: Located approximately 430m north of the site.

Savernake Forest Ancient Woodland Wildlife Site (3 parcels): Located approximately 420m south of the site.

### Records of notable species within 500m: (legally protected, BAP, RDB)

Within the site there are three record adders, three records of slow worm and two records of brown longeared bats. Within 500m of the site there are records of:

- Badger;
- Bats (including records of western Barbarstelle, Brandt's bat, brown long-eared, common pipistrelle, Daubenton's bat, Natterer's bat, serotine and whiskered bats);
- Water vole;
- Reptiles: Including slow worm, adder and grass snake; and
- Frog orchid

### Details of surveys already undertaken (where known):

None known.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The majority of site consists of bare, exposed earth (plateaus prepared for development). Four newly constructed industrial units are present within the site and small areas of landscape planting are located adjacent to these buildings. A strip of semi-improved grassland is present through the entire length of the site (with patches of tall ruderal species also present). A large surface water storage lagoon is also present within the site.

The site is bound by to the west by Salisbury Road, to the north by a disused railway (the embankment is covered in dense scrub) and to the south by Savernake Forest SSSI. The semi-improved grassland and areas of plantation woodland and other landscape planting within the site are suitable terrestrial habitats for great crested newts to forage and rest within.

### Field Evidence of notable species:

One pond is present within the site, the surface water storage lagoon. This is considered suitable to support great crested newts and other amphibians (frogs observed at the site).

There a large number of semi-mature and mature trees present on the railway embankment and at the edge of the Savernake Forest which have the potential to support roosting bats.

A buzzard was observed flying over the site and landing in a tree present within the Savernake Forest present to the south of the site.

### OTHER INFORMATION None identified. EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

Nature conservation evaluation:



The majority of site is of negligible nature conservation value (bare earth, hard standing and newly constructed industrial units). However the surface water storage lagoon present within the site and the woodland and disused railway embankment that bound the site are of local nature conservation value.

### Potential Ecological Impacts:

The site is ready for development and as such there are very few ecological impacts to consider. The possible loss of areas of semi-improved grassland with areas of tall ruderal species (which may result in potential loss of habitat used by great crested newts). The possible disturbance to Savernake Forest SSSI present directly adjacent to the site through noise and vibration, during construction and operation of the site. There are no predicted impacts to the other designated sites of nature conservation value that surrounding the site. Overall works likely to have negligible ecological impact. However if significant disturbance to Savernake Forest SSSI occurs this will have adverse impact of moderate significance.

### Potential mitigation:

- Retention of semi-mature and mature trees wherever possible within site.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.
- Mitigation put in place to ensure that the noise and vibration caused by the construction and operation of the new site will not cause disturbance to the Savernake Forest SSSI and the animal species using this woodland (e.g. construction of a noise barrier).

### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

### **Opportunities for enhancement:**

 Management of the surface water storage lagoon and habitat surrounding this waterbody in northeastern corner of site for biodiversity (rough grassland and scattered trees/young plantation woodland). This will help provide suitable foraging and resting habitats for great crested newts (if present), other amphibians, small mammals and wild birds. Could also be managed to help provide suitable habitat for a range of invertebrate species (including butterflies).

### Recommended further ecological work/surveys:

- Great crested newt surveys of the surface water storage lagoon present within the site.
- Bat surveys on semi-mature and mature trees if require felling. To include a daytime inspection assessing trees for potential to support bat roost(s), followed by an evening emergence survey if appropriate.

### Legal and policy implications:

- If great crested newts are found to be using the surface water storage lagoon a great crested newt development licence will be required from Defra.
- If bats are found to be roosting within any trees to be felled a development licence will be required from Defra. Further mitigation will also be required to compensate for the loss of roosting habitat.
- Any direct impacts on the Savernake Forest SSSI are likely to require a Section 28 notification and consent from English Nature (Natural England).

The Nature Conservation policies in the Kennet District Local Plan that are potentially relevant to this site include:

- Policy NR2
- Policy NR5

Phase 1 Habitat Map





Number	Target Note	Species Notes
1	Newly built red brick offices. In good condition. Pitched tile roofs	Very low bat potential
2	Newly built industrial unit. Red brick with metal cladding roof	Low bat potential
3	Woodland strip - no access up steep slope + behind fence. If any part of woodland o be lost check all trees for potential to support bats	Ash, oak, elder, hawthorn. Some mature and lots of semi-mature (some ivy covered)
4	SI neutral grassland	Cock's-foot, false oat grass, rosebay willowherb, yorkshire fog, hogweed, yarrow.
5	Buzzard seen landing in tree	
6	Railway embankment - covered in dense scrub and semi-mature trees	Bind weed, hawthorn, blackthorn, elder, ash, dogrose, bramble, sycamore
7	Pond - SUDS for industrial estate, fed by a culvert. Large 15x18m. Gently sloping banks. Depth unknown	little marginal, aquatic or emergent veg present (some water lily + ornamental reed). Water fowl noted. Recommend GCN survey. Small fogs noted. Surrounded by young plantation woodland, an overgrown disused railway line
8	Compound area with portacabins	





# ΛTKINS

# Site: K15 Salisbury Road Business Park, Pewsey

### Landscape and Visual Survey

### K15 Salisbury Road Business Park, Pewsey

### 1. Introduction

Existing Business Park located on the south-western periphery of Pewsey, a small rural town on the River Avon in the Vale of Pewsey.

### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

- Extensive open, rolling Chalk plateau dominated by large arable fields.
- Scattered copses and shelterbelts.
- Woodland confined mainly to valleys and steep slopes.
- River valleys with common settlements and narrow floodplains, dominated by former floated flood meadows and meandering rivers.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Greensand Vale Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

- Broad, low lying level vale flanking the sides of a series of low undulating foothills of Lower Chalk
- Contained and enclosed by the dramatic escarpments of chalk upland to either side.
- Varied land cover with pasture along tributaries and arable in medium to large fields enclosed by hedgerows.
- Chalk foothills in arable land use with very open large scale fields.
- Threaded by numerous minor streams draining to the headwaters of the River Avon, lined by riparian
  vegetation with strips of alder and willow and some important wetland habitats meadow, marsh and
  wet woodland.
- A settled landscape with compact small towns, clustered villages, hamlets and many dispersed residential and farm buildings.
- Compact nucleated villages (such as Pewsey)
  - Network of minor waterways with waterside pastures and riparian woodlands add variety and biodiversity value.
  - Localised intrusion of roads, overhead power lines and pylons all of which are highly visible in the flat low lying landscape.
  - Intense development pressures, particularly for new housing which impacts on the character of the villages and their edges so that settlements are less assimilated into the landscape.

WCC judge the condition and strength of the Greensand Vale Landscape Type to be 'moderate' due to the loss of hedgerows, hedgerow trees and riparian vegetation and some modern development at settlement edges. The overall strategy is to 'conserve' and 'improve' the rural, agricultural character of the vale, maintaining the pattern of discrete small villages set within a quiet rural landscape.

### District Landscape Character Assessment: Kennet Landscape Conservation Strategy



Landscape Character Area: The Vale of Pewsey Key characteristics relevant to the site:

- Predominantly greensand vale running from the County boundary to the east, through the head waters of the Salisbury Avon
- Dominated by intensive agriculture
- The village of Pewsey lies at the centre of the Vale and surrounding it are the largest concentration of villages, hamlets and farms in the District.

### Landscape Designations and Rights of Way:

- The site lies within the North Wessex Downs AONB
- Public footpath around fields to south of site
- Public bridleway around field to north of River Avon, connecting Sharcott with Pewsey

### Local Authority Consultation:

Kennet District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

### 3. Baseline Landscape Character and Features: Site Survey

The site consists of a business park, including workshops and a veterinary surgery. These buildings are functional in their design, consisting of modern two storey units of brick and/or metal. Two residential properties also fall within the site boundary, a bungalow, and a detached house, Hill View. The site includes a number of vacant plots. A cul-de-sac access road runs through the site, connecting it to the A345.

The topography of the site flat, reflecting its flood plain setting, close to the River Avon. A sewage works is located to the north-west of the site, adjacent to the river, although this is not visible from the site during the summer months. A wide strip of riparian vegetation forms a backdrop to the site to the north, with mature willows and oaks screening views. To the south of the site, the landscape is far more open, with views across open arable fields. In the immediate vicinity of the A345 the topography is relatively flat and includes a public footpath and a series of pylons. Further south, the land rises up to the Pewsey Hill chalk downland.

Within the site there are a number of groups of mature trees, including oak. In the north-eastern area of the site, a series of mature, ornamental trees demarcate the boundary of Hill View. Although some of the trees on site appear to be of a poor condition, they are an important feature in retaining the rural character of the site and minimising visual impact.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

### Landscape Quality and Condition of site: Poor-Ordinary Capacity to Accept Change: Medium

The quality and condition of the site have been eroded through its existing industrial use. However its relatively leafy setting with mature trees retains a degree of riparian and rural character. With additional screening on the A345, the site could accommodate further change.

### 5. Potential Landscape Impacts

- Loss of mature native trees
- Further erosion of rural character of AONB and River Avon

### 6. Potential Landscape Mitigation Measures



- Sensitive site planning to avoid the need to remove healthy mature native trees and to minimise visual impact on the residential properties on site, New Farm and East Sharcott (to the west), and the A345 to the south.
- Native woodland, riparian and evergreen screen planting around proposed facility, especially along the A345 frontage and around the residential properties on site.
- The following 'Broad Management Objectives' for the Greensand Vale landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Introduce new tree planting along watercourses using typical riparian species such as alder and willow.
  - Encourage repair, replanting and extension of the hedgerow network, improved maintenance of the existing hedgerows
  - Restore hedgerow treescape by nurturing new hedgerow trees.
  - o Monitor road engineering to safeguard the rural character of the lanes.
- The following Enhancement Priorities proposed for the for the Vale of Pewsey landscape character area in the *Kennet Landscape Conservation Strategy* are relevant to the site:
  - In the more open vale floor areas, introduce new tree planting along watercourses and in rows and groups using typical riparian species such as willow and alder.
  - Encourage repair, replanting and widespread extension of hedgerow network and development of mature hedgerow trees, using native species typical of this locality.
  - Improve landscape structure and land management on the fringes of settlements and along main roads, to mitigate adverse impacts on the landscape.
  - Establish strong landscape structure to absorb existing or new development on the fringes of urban areas and settlements.

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Residents of properties on site	High	Slight adverse	<ul> <li>Woodland buffer planting around facility</li> </ul>
Workers on industrial estate	Low	Negligible	<ul> <li>Native hedge and tree</li> </ul>
Walkers on footpath to south of site (Potential impact)	Moderate	No change	planting along A345 frontage
Walkers on footpath to north of River Avon (Potential impact: winter only)	Moderate	No change	<ul> <li>Sensitive location of facility, away from receptors</li> <li>Use of earth bunds with</li> </ul>
Users of A345	Low	No change	planting if necessary to
Residents on Sharcott Drove to west of site (Potential impact: winter only)	Moderate	No change	further mitigate views in

### 7. Visual Receptors

### 8. Summary: Residual Landscape and Visual Impacts

Due to its existing commercial character, the site could accommodate change with little change to the visual amenity of the area, although sensitive site planning would have to ensure that existing residential properties on the site would not be adversely affected. It is also likely that additional planting would be needed along the A345 frontage of the site and along the northern boundary to screen views from the river valley.



### 9. Recommended further landscape and visual surveys

- Visual survey from footpaths to south of siteWinter-time visual surveys including Sharcott Drove and footpath to north of River Avon
- Night time visual survey



### Water (Quality and Environment) Assessment

### Site name – Salisbury Road Business Park, Pewsey

NGR at centre of site – SU 157592 Location description – Rural setting 750m southwest of Pewsey immediately adjacent to the A345 Area of site (ha) - 5

### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater Surface water body	Contaminate major aquifer Contaminate adjacent watercourse (R Avon) Impact on baseflow/runoff to watercourse	Medium / high High / medium Medium	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Environmental management during construction</li> <li>Relevant licensing requirements (PPC) to be assessed</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Baseline monitoring of adjacent surface water bodies may</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> <li>Assessment of current impact of landuses</li> </ul>
		Flood event causes	Medium / High	Engineered flood defence or	<ul> <li>Approach Environment Agency for</li> </ul>

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		contamination of surface water and disruption of operations Flood zoning directly affects northern part of site		mitigation	requirements Check flood risk assessment requirements
	Groundwater Abstraction point	Contaminate two private abstractions of J Strong and O Gates	Medium / High	Refer to groundwater/surface potential risk mitigation measures listed above	Check status of abstractions with Environment Agency / landowner
	Surface water Abstraction point	Impact abstraction of Malmesbury Potatoes Ltd, Pewsey Partnership Holdings, Dhillon's and H Thompson	Medium	<ul> <li>Decommission abstraction point</li> </ul>	Approach Environment Agency for monitoring requirements Check availability of data of groundwater and surface water quality sampling locations from Environment Agency
	Designated sites/ Adjacent sensitive landuses	Site is within an AONB R Avon SAC / SSSI is within 1km. Part of the R Avon watercourse is a wildlife site Deteriorate area of high ecological value Impact conservation area	High	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for requirements</li> </ul>
	Other adjacent landuses	Mixed light industrial uses within a business park, sewage treatment works and farmland with farms	Low		

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Salisbury Road Business Park, Pewsey is:



- Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



### **Ecological Report**

### K15 Salisbury Road Business Park, Pewsey

### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory designated habitats within 500m: River Avon SAC: Located 50m north of the site.

Sharcott Wood Wildlife Site: Located approximately 230m north-west of the site.

#### **Records of notable species within 500m: (legally protected, BAP, RDB)** There are no records of notable species within the site.

Within 500m of the site there are two records of water vole (on a drain to the north of the River Avon), two records of bat species (included long eared and pipistrelle bats) and one record of Des Moulins' Whorl Snail, a UK BAP species. There are also records of three rare vascular plants in Wiltshire (including yew, common bistort and fine leaved sandwort). The closest of these records (the Des Moulins' Whorl Snail) is 45m north of the site.

#### Details of surveys already undertaken (where known): None known.

#### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The majority of the site within the waste allocation boundary consists of hard standing with modern and newly built industrial units. Three red brick houses (in good condition) and three dilapidated wooden sheds are also present. Areas of bare earth, semi-improved grassland and tall ruderal species are present within the business park where development has not yet taken place.

The site is bound to the south by the A345, to the north by semi-natural broadleaved woodland (adjacent to the River Avon) and to the east and west by hedgerows (overgrown and unmanaged). A number of semi-mature and mature trees are present within the site (as marked on the Phase 1 habitat plan). A small part of the River Avon flows adjacent to the northern boundary of the site.

#### Field Evidence of notable species:

There a number of semi-mature and mature trees with bat roosting potential (present throughout the site and within hedgerows and woodland which bound the site). The buildings present within the site have a low potential to support roosting bats.

The River Avon running adjacent to part of the northern boundary of the site has the potential to support water voles, otters and white-clawed crayfish. It is known that the river supports migrating salmon, lamprey and bullhead.

There is anecdotal evidence of owls (from the workers at this site) using the three dilapidated wooden sheds for roosting and possibly for nesting. No field evidence was noted to confirm this.

There were no ponds identified within 500m of the site. No other field evidence of legally protected species was identified.

### OTHER INFORMATION

None identified.

### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (areas of hard standing within a business park). However the hedgerows and woodland areas that bound the site are of local nature conservation value (with value for nesting birds) and some of the mature trees surrounding the site have the potential to be used by roosting bats.

#### Potential Ecological Impacts:



The proposals would result in the loss of semi-improved grassland, areas of tall ruderal species and areas of bare earth. There would also be possible loss of hedgerows and semi-mature and mature trees and there are potential impacts on the water quality impacts of the River Avon SAC, which flows close to the northern boundary of the site. There are no predicted impacts on the Sharcott Wood Wildlife Site.

The overall works are not likely to have a significant adverse impact in terms of direct habitat effects. However if there are impacts on the water quality of the River Avon SAC, this could have a significant adverse impact that will need to be avoided or mitigated.

#### Potential mitigation:

- Retention of hedgerows around the outside of the site, particularly where these link with linear features such as the River Avon and the area of broadleaved woodland to the north of the site. If any of the mature hedgerows are to be lost these should be replaced.
- Retention of semi-mature and mature trees wherever possible.
- Retention of at least a 20m strip of natural ground between the edge of River Avon and the new development.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines as working in close proximity to the River Avon. These measures will help to prevent detrimental impacts on water quality of the River Avon System SSSI whilst the site is constructed.
- Closed surface water drainage system within the design of the facility and the use of silt traps and Sustainable Urban Drainage Systems (SUDS) best practice;
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### **Residual impacts:**

If all mitigation is undertaken, the residual impacts are likely to be minor given the size and type of habitat to be lost. Providing the Environment Agency PPGs are strictly adhered to and SUDs principles are employed during the operation of the site residual impacts on the River Avon SAC can be avoided. The facility would need to be designed to have no water quality impacts upon the River Avon SAC and construction and operation would require method statements and monitoring programmes to ensure the continued absence of adverse effects on the River Avon SAC.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

- Bat surveys on semi-mature and mature trees (within hedgerows and woodland) if require felling.
- Bat surveys on any buildings if to be demolished. Although there was low potential for these buildings to support bats and no evidence at the time of the survey it is possible that a small number of bats could use the structures in the future as a temporary summer roost or feeding roost.
- Survey of three dilapidated wooden sheds for owls and other nesting birds if to be demolished (and demolition outside of the bird breeding season).

### Legal and policy implications:

If bats are found to be roosting within any trees to be felled or in any buildings to be demolished a development licence will be required from Defra.

 Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of River Avon SAC. Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SAC/SPA. See Appendix C for details of the Appropriate Assessment.

The Nature Conservation policies in the Kennet District Local Plan that are potentially relevant to this site include:

- Policy NR1
- Policy NR5







Number	Target Note	Species Notes
1	Mature Willow tree - has cracks and crevices of use to bats - retain. If to be lost then survey for bats.	
2	Broadleaved semi-natural woodland strip. If to be lost then survey for bats.	Ash, hawthorn, willow, blackthorn. Some mature trees (mostly willow).
3	Three newly built industrial units. Metal units with flat roofs.	Low bat potential
4	Modern industrial units. Red brick with metal cladding at top of walls. Pitched, corrugated metal roofs.	Low bat potential
5	Newly built red brick house (Vet surgery). In good condition. Pitched tiled roof.	Low bat potential
6	Semi-mature oak tree. Some cracks and crevices of use to bats. Retain - if to be lost then survey for bats.	
7	Semi-mature sycamore tree. Trunk ivy covered. Some cracks and crevices of use to bats. Retain - survey for bats if to be lost	Low bat potential
8	Overgrown unmanaged hedgerow (hawthorn and wych elm predominantly). Mature Oak trees present (with low-medium bat potential). Retain entire hedgerow. If to be removed then survey for bats.	
9	Area of tall ruderal species. Young scattered trees present (ash & hawthorn)	Ragwort, willowherb, derch, thistle, teasel, nettle, rosebay willowherb, hogweed, mugwort, self heal, white clover, russian cumfrey, cock's-foot.
10	Area of semi-improved grassland. Three mature oak trees also present. Retain trees, if to be lost then survey for bats.	(Yorkshire fog, creeping bent, cock's-foot, ragwort, dock, ground ivy, teasel, nettle, thistle)
11	Mature large leaved lime. Retain - if to be lost then survey for bats	
12	Mature horsechestnut. Retain - if to be lost then survey for bats.	
13	Private residence. No access. Surveyed from a distance. House in good condition - red brick with pitched, tiled roof. Survey for bats if to be lost. House located in amenity grassland grounds	
14	2 mature copper beech. Retain - survey for bats if to be lost.	

15	Private residence. No access. Red brick bungalow with pitched tile roof. Survey for bats if to be lost. Located in amenity grassland grounds. Wooden shed present (pitched felt roof) with low bat potential.	Private residence. No access. Red brick bungalow with pitched tile roof. Survey for bats if to be lost. Located in amenity grassland grounds. Wooden shed present (pitched felt roof) with low bat potential.
16	Three wooden sheds with asbestos roofing (pitched). Very open and exposed, sheds in disrepair but still in use.	Three wooden sheds with asbestos roofing (pitched). Very open and exposed, sheds in disrepair but still in use.
17	Watercourse 4-5m wide, shallow (30cm max). Cobble and stone substrate. Fast flowing, clear water, gently sloping banks standing maximum of 2m above water. Willow trees stand at top of banks.	Banks covered in cumfrey, nettle, thistle, meadowsweet, bittersweet, water forget-me-not, fools water cress present in water. Recommend water vole and white-clawed crayfish surveys if works within 20m
18	Mature ivy covered field maple. Survey for bats if to be removed.	



### **Protected Species and Designated Sites**

# Volume 2

# **North Wiltshire District**

**NW2 Bumpers Farm Industrial Estate, Chippenham NW3 Hills Resource Recovery Centre, Compton Bassett** NW6 Eysey Manor Farm, Cricklade NW16 Land East of HRC & WTS, Stanton St Quintin NW17 Leafield Industrial Estate, Corsham NW18 Low Lane Extension, Compton Bassett NW20 Parkgate Farm, Purton NW21 Parkgrounds Farm, Wooton Bassett NW22 Porte Marsh Industrial Estate, Calne **NW23 Purton Brickworks Employment Action** NW25 Sands Farm Quarry and Landfill, Calne NW27 Thingley Junction, Chippenham NW28 Whitehills Industrial Estate, Wooton Bassett NW29 Studley Grange Waste Management Facility, Wooton Bassett **NW31 Barnground, South Cerney** NW33 Land off Hartham Quarry, Corsham

# Site: NW2 Bumpers Farm Industrial Estate, Chippenham

### **Noise Assessment**

### NW2 Bumpers Farm Industrial Estate, Chippenham (Inset Map 34)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Bumpers Farm Industrial Estate to assess the site's suitability for a waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be properties located at Longstone Road to the east edge of the industrial estate.
- 1.3 There are a number of properties off Frogwell located at a similar proximity however traffic along Frogwell would likely offer some masking noise thus reducing the sensitivity of these receivers.
- 1.4 The site currently contains small businesses including small manufacturing and engineering businesses. The site is flanked to the east by properties on Longstone Road, to the south by Frogwell with properties located on the opposite side of the road and flanked to the wet and north by the A350.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 13<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of traffic noise from nearby roads and vehicle and HGV movement within the site. The noise climate at the most sensitive receiver consists predominantly of traffic noise from nearby roads and environmental sources such as birdsong, insects, and wind in tress, etc.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	15:07	42.4	56.5	40.1
MEASUREMENT 2	15:15	42.3	55.2	40.1
MEASUREMENT 3	15:20	42.2	53	40.6
AVERAGE		42.3		40.3

2.3 The average background noise level at the most sensitive receiver was measured as 40.3dB L<sub>A90</sub>.

### 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at Bumpers Farm Industrial Estate include Waste Transfer Station, Materials Recovery Facility and recycling. The boundary of the site area proposed for use is adjacent to the most sensitive receivers. Given the background noise level, L<sub>A90</sub> of 40.3dB at the most noise sensitive receivers, it is expected that any new waste development would need to be located a minimum distance of 385m away however it may possible for the development to be located closer to other nearby receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of the development within the site, existing buildings within the site may also offer some screening effects allowing a closer proximity to be achieved.
- 3.3 Given that the minimum separation distance can achieved within the site boundary and that careful positioning of the development would reduce the separation distance required, indications are that this site would potentially be suitable for the proposed development.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

### **Traffic and Transport Review**

### NW2 Bumpers Farm Industrial Estate, Chippenham

### Proposed Site Usage

This 16.5 ha site is proposed to be used as a household recycling centre, a recycling and waste transfer station or locale scale recovery facility.

### **Existing/Potential Access**

The site is located close on the western edge of Chippenham with direct access from the A350/A420 roundabout. The site is in use for a wide range of employment uses including: offices, storage, distribution and light industry. It is assumed that the majority existing uses on the site will continue and the proposed facility will be an addition to the existing usage.

The existing access to the site is via a long cul-de-sac that is directly connected to the A350/A420 roundabout. The speed limit at the major road at the site is national speed limit which changes to 30 mph within the site. A public right of way cuts through the centre of the site.

### Impacts on Local Settlements

The site is enclosed by residential settlements to the north east and south. However, there is no direct access from the site to any of these areas and it is likely that there will be little or no traffic impact on the local settlements as a result of the proposal.

### **On-site Infrastructure**

The site access road runs in the centre of the estate with industrial units on either side. All of the units have their own parking area. However there is extensive parking present along the main access road. As a result only one-way traffic can currently pass along the road. It would be required to restrict parking along the main road to allow free movement of vehicles to the recycling facility.

The proposed facility should be positioned such that the queue resulting from its usage is contained within the access road and any adverse impact on the A350/A420 roundabout is avoided. On this basis the appropriate location will be towards the middle of the site. If it is located close to the roundabout then a long internal road should be provided.

### **Off Site Highway Network**

The local recycling site itself will typically attract HGV traffic in the period 9 AM to 5 PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. The peak traffic generated by this type of facility is likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks on the highway network, no off site highway mitigations are anticipated.

### Constraints

Parking along the main access road is the main problem at this site which could potentially have adverse capacity and safety implications.

### Mitigation

It would be required to restrict parking on the main access road by provision of double yellow lines along the access road.

Considering the peak site periods are at weekends, it is unlikely that off site highway mitigations will be required.

### Conclusion

This site is suitable, in traffic terms, for the proposed uses.
# Site: NW3 Hills Resource Recovery Centre, Compton Bassett

## Landscape and Visual Survey

### NW3 Hills Resource Recovery Centre, Compton Bassett

#### 1. Introduction

The site is located to the east of Calne off an unclassified road, Spreckley Road, which links Compton Bassett and the A4. The site is located within an operational Waste Management Facility with a landfill and a Household Recycling Centre. A small cluster of residential properties is located to the south of the site off Spreckley Road, as well as a few scattered residential properties to the east along Spreckley Road.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Avon Vales, on the cusp of Berkshire and Marlborough Downs Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture
- Large historic parks and mansions
- Uses, such as landfill, are widespread, with more substantial urban fringe areas than in neighbouring landscapes. The 'land in between' is often neglected.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Calne Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on clay
- Largely rural, tranquil landscape
- Variable field pattern of arable and pasture with hedgerows, though often replaced by fences and hedgerow trees are sparse
- Sparsely scattered settlement of towns, small villages and farmsteads, many using vernacular materials of local clay brick, stone and red roof tiles.
- Criss cross of rural roads

Generally the condition of the landscape character area is considered by WCC to be 'good', with a 'moderate' strength of character.

The strategy for the area is to conserve its peaceful rural landscape and strengthen its character through minimising urban influence.

#### North Wiltshire Landscape Character Assessment (North Wiltshire District Council)

Landscape Character Area: Hilmarton Rolling Lowland Key characteristics relevant to the site:

- Low lying mixed agriculture based on clay
- Scattered dwellings and small settlements away from Calne; mix of stone and brick
- Patchworks of small to medium sized fields, mainly pasture with arable on lighter soils
- Hedged boundaries predominantly well managed, but becoming discontinuous
- Peaceful rural character

#### Landscape Designations and Rights of Way:

- To the east of the site is a designated Area of Outstanding Natural Beauty (AONB).
- A public bridleway runs immediately adjacent to the north, along the Waste Management Facilities' northern boundary.

#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed area comprises a flat site with the domed topography of a landfill to the immediate west and screening bunds to the north and east with immature deciduous trees. Compton Bassett hill is to the west, with Compton Bassett Park overlooking the site. Penn Hill is to the north-west, from which the existing landfill can be seen. The White Horse of Uffington is in the distance to the south. Views of the site from the White Horse are screened by existing planting and intervening topography however the location of the site is identifiable by dust rising from the landfill. To the south of the site a well established deciduous planting screen fully contains the site.

Waste Management operations include landfill, landfill gas electricity generation, Household Recycling Centre, consolidated composting operations, Materials Recovery Facility and a skip waste recycling operation. Site buildings are large scale industrial sheds, temporary site offices and landfill associated plant and machinery. The site is cluttered with wiremesh security fencing with barbed wire tops, utility poles and lighting columns, floodlighting as well as security and directional signage. Landscape remediation has begun to the northern sections of the landfill, now used for grazing sheep. The site is highly active with public traffic to the Recycling Centre and landfill traffic including lorries and machinery travelling throughout the site creating a threatening atmosphere.

A historic farm track, leads from Spreckley Road to the residential Old Camp Farm at the northeast corner of the proposed site with a pasture to the south used to keep horses. The track connects into the busy landfill site track network. North of Old Camp Farm are several derelict farm buildings within the empty fields of a former camp site.

The site is enclosed to the east along Spreckley road by hedgerows. North of Old Camp Farm, following Spreckley road, the site is enclosed by planted screening bunds, which wrap around the northern boundary of the site. A historic farm track, now a public bridleway runs along the northern boundary of the site leading from Spreckley Road to the Sands Farm Quarry and Landfill offsite to the west, edged by hedgerows and native hedgerow trees, many of which are diseased or dead. The site is enclosed to the east along Spreckley road by hedgerows. There are arable fields to the north of the site, with clumps of woodland, hedgerows and isolated mature deciduous trees.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The existing industrial uses of the site are incongruous with the wider tranquil and rural landscape character and have degraded the landscape character within the immediate vicinity of the site, giving it a poor landscape quality. The existing bunds to the north and east, and planting to the south enclose the Waste Management Facility site and screen it from local residents. Extension of the works within this contained boundary would prevent further disruption of the characteristic local field patterns. Therefore the site has a High capacity to accommodate change.

#### 5. Potential Landscape Impacts

• Erosion of rural character to views from the northwest.

#### 6. Potential Landscape Mitigation Measures

- Site planning development to be kept within a restricted area located in proximity to the existing industrial complex. Large scale buildings to be treated subtle external finish to minimize impact of non-characteristic elements.
- Native woodland planting to site boundaries to the south, west and north. Hedgerow enhancements along Spreckley Road frontage to strengthen the rural character
- The following 'Broad Management Objectives' for the Rolling Clay Lowlands in the *Wiltshire* Landscape Character Assessment are relevant to the site:
  - Retaining and managing hedgerow network and nurturing new hedgerow trees
  - Strengthening the enclosed character of the landscape and screening views to urban edges through nurturing existing and planting new woodland.
- The following Enhancement Priorities proposed for the Hilmarton Rolling Lowland landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:
  - Encourage repair, replanting, widespread extension of hedgerow network, and development of hedgerow trees where hedgerows are in poor condition.
  - Conserve mature trees, woodland clumps and shelterbelts
  - o Discourage development in rural areas
  - Encourage less intensive farming on arable land introducing headlands and margins
  - Identify and seek opportunities to create new woodland belts and copses, in particular to help screen and contain development

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Old Camp Farm Residents	High	Negligible	<ul> <li>Facilities to be located in proximity to existing facilities, with an</li> </ul>
Tudor Lodge Residents	High	No Change	external treatment to the have minimal visual intrusion
Speckley Road / Lower Compton Residents	High	Negligible	<ul> <li>Hedgerow and woodland enhancement planting along site boundary</li> </ul>
Users of Speckley Road	Low	Slight adverse	<ul> <li>Hedgerow enhancement planting along site boundary</li> </ul>
Users of Cherhill Down bridleway	High	Slight adverse	<ul> <li>Native woodland planting along western and northern boundaries</li> </ul>
Users of Penn Hill footpath	High	Slight adverse	of the site

#### 7. Visual Impact and Mitigation

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its enclosed setting and existing industrial character, the site has a high ability to accommodate change. The main visual impacts, on residences to the south and east and the bridleway to the north of the site could be almost entirely mitigated through sensitive site planning and screen planting.

#### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

## **Traffic and Transport Review**

### NW3 Hills Resource Recovery Centre, Compton Bassett

#### Proposed Site Usage

This is an extension to an existing Strategic Materials Recovery Facility and Centralised Composting Facility.

#### **Existing/Potential Access**

The site is located to the east of Calne and accessed via a mini-roundabout with kerbed central island. The site is approximately 1 km north of the A4 and accessed via single two lane carriageway road which forms the minor arm of a ghost island priority junction with the A4. The existing site access itself, from the mini-roundabout to the site, is traffic calmed by means of speed humps with a 20 mph speed limit.

#### **Impacts on Local Settlements**

There are two pockets of residential properties in close proximity of the site, one on the south east corner of the access mini-roundabout and the other on the south west side. There is some screening for the properties on the south east side of the roundabout but those on the south west of the roundabout have no screening and share the same access from the roundabout.

#### **On-site Infrastructure**

The existing site access is traffic calmed with road narrowing close to the access junction which only allows one stream of traffic at any one time with the priority given to the traffic entering the site. There are also speed humps on the access road to reduce the speed of vehicles. The road narrowing restricts the capacity of the road and in light of the intensification of the usage of the sight the appropriateness of this measure may have to be reconsidered. Due to the noise generated from braking and accelerating, the speed humps may not be ideal at a location with high HGV usage or close proximity to the residential properties. This measure may also have to be reconsidered.

#### **Off Site Highway Network**

The traffic flows on the local network are very light and therefore unlikely to require any off site work. Provision of a ghost island right turn on the A4 further assists the vehicles movements to the site.

#### Constraints

The main constraint is the impact on the residential properties in the area. The impact of the proposed development on the existing residential properties in proximity of the site should be considered in relation to potential noise and vibration from site.

#### Mitigation

The widening of the site access road to allow two-way movement along the whole length should be considered as would the suitability of road humps in relation to the noise and vibration impact of HGV traffic. Some removal/management of mature vegetation along the site access may be required to improve forward visibility. No measures are deemed necessary at the junction of A4.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.

## **Ecological Report**

### NW 3 Hills Resource Recovery Centre, Compton Bassett

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m: Calne Sand Pits and Pearce's Old Pit (Calne) Wildlife Site: Located approximately 350m north-west of the

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

Within 500m of the site there are eight records of badgers (the closest being 170m south-west of the site), two records of bats (species not identified) and one record of pale sedge (a rare vascular plant in Wiltshire).

#### Details of surveys already undertaken (where known):

None known.

site.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

Western half of site taken up by operational Materials Recovery Centre (MRF). This part of the site is covered in hard standing, amenity grassland, semi-improved grassland and large compost piles.

Eastern half of site consists of semi-improved grassland (part of which is used for pasture). A large screening bund covered in semi-improved grassland (and young plantation trees at its southern end) separates the MRF from the surrounding semi-improved grassland.

A drainage ditch (dry for majority of its length) runs along the western boundary of the site.

#### Field Evidence of notable species:

Four ponds present within 500m, one located within the site (a large lagoon storing leachate from compost piles) and three are located approximately 20m from the site (on the western side of the access road within the industrial estate). Two of the ponds outside the site are considered suitable to support great crested newts and other amphibians. The two remaining ponds (the pond within the site and the other pond located outside the site) are considered unsuitable for great crested newts as they both store leachate from compost piles (making the water too acidic for this species).

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

This site is of negligible nature conservation value consisting predominantly of hard standing (including the operational areas of the site) and semi-improved grassland.

#### Potential Ecological Impacts:

There are no predicted impacts on the Calne Sand Pits and Pearce's Old Pit (Calne) Wildlife Site. Ecological impacts will include the loss of semi-improved grassland and/or areas of hard-standing and associated habitats within the existing MRF site. Overall works are likely to have a negligible ecological impact.

#### Potential mitigation:

- Retention of at least 2m strip between edge of drainage ditch and new development.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines when working in close proximity to, or within, the drainage ditch.

• All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

• Great crested newt surveys of two ponds approximately 20m west of the site that do not store leachate from compost piles.

#### Legal and policy implications:

• If great crested newts are found to be using either pond located approximately 20m from the site a great crested newt development licence will be required from Defra. This will also require additional mitigation to that described above to prevent the injury or death of any great crested newts present in the working areas and to compensate for the loss of any suitable terrestrial habitat.

The Nature Conservation policies in the North Wiltshire Local Plan that are potentially relevant to this site include:

- Policy NE 9;
- Policy NE 10;
- Policy NE 11;
- Policy NE 22;
- Policy NE 23.

Phase 1 Habitat Map



### Joint Waste Site Allocations Site Survey Report



Number	Target Notes	Species Notes
1	Existing household recycling centre. c0ncrete with portacabins and large metal containers	
2	Compost piles	
3	Lagoon - storage of leachate from compost. No aquatic, marginal, emergent vegetation. Gently sloping sides covered with grass. Oil on surface of water. Very murky and dark water. Unknown depth. 20m x10m	
4	Car park	
5	Car park	
6	Large metal factory building. Sloping metal roof with no suspended ceiling. Low bat potential.	
7	Leachate treatment works lagoon.	
8	Small house, pitched tile roof. In good condition.	
9	On site drainage ditch. Almost completely dry. Puddles of water present. Large amounts of sediment and mud as substrate. Steeply sloping banks [45 degrees]	typha and cow parsley in channel. grass covered banks [with nettle]
10	Two semi-mature poplars with low bat potential	
11	Semi-improved grassland field used for pasture.	
12	Pasture field grazed by horses.	

## Protected Species and Designated Sites

Joint Waste Site Allocations Site Survey Report



# Site: NW6 Eysey Manor Farm, Cricklade

## **Noise Assessment**

### NW6 Eysey Manor Farm, Cricklade (Inset Map 32)

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Eysey Manor to assess the site's suitability for waste recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Alex Farm located approximately 1700m north-east of the nearest point of the A419 and approximately 240m from the proposed site's north-east boundary. Eysey Manor is also located nearby, approximately 780m north-east of the nearest point of the A419 and approximately 50m from the proposed site's south-east boundary. Alex Farm was deemed likely to be more sensitive due to its greater distance from the A419.
- 1.3 The site currently consist of what is understood to be an operating sand and gravel quarry including adjacent fields and is located adjacent to the A419 between the Cricklade and Down Ampney junctions and extends eastwards towards the boundary of Alex Farm.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 26<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site consists predominantly of noise from activities within the site and traffic noise from the A419. The current noise climate at the most sensitive receiver predominantly consists of environmental sources such as birdsong, cows mooing, insects, and wind in tress, etc. Road traffic noise from the nearby road leading to Down Ampney is perceptible at this point. It is understood that the farm is a working Milk Farm and pump noise from what is understood to be the milking shed was perceptible.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	15:15	48.6	60.6	44.5
MEASUREMENT 2	15:20	47.4	56.8	43.3
MEASUREMENT 3	15:25	48.5	59.5	44.5
AVERAGE		48.2		44.1

2.3 The average background noise level at the most sensitive receiver was measured as 44.1 L<sub>A90</sub>.



## 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Eysey Manor is for Inert Waste Recycling. The boundary of the site area proposed for use passes within 240m of Alex Farm and 50m of Eysey. Given the average background noise level, L<sub>A90</sub> of 44.1dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 250m away from any noise sensitive receivers.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance can be achieved within the site boundary, indications are that this site is likely to be suitable for the proposed development with considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

### NW6 Eysey Manor Farm, Cricklade

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is situated to the north east of Cricklade and is adjacent to the A419. The site is currently a working sharp sand and gravel quarry.



### Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>1</sup> sources within 1km of the site: road traffic the A419 and minor roads; gas/oil/solid fuel space heating for buildings; Tarmac Southern Ltd sharp sand and gravel quarry at Eysey Manor Farm (additional potential emissions of dust). The site has been permitted to landfill inert wastes to restore the quarry.

 $<sup>^1</sup>$  Of concern to public health include: Nitrogen dioxide (NO<sub>2</sub>) PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>) Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>2</sup> for 2005 and comparable standards<sup>3</sup> are: 14.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 11.6µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 18.5µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential properties in Cricklade and the surrounding area. There are two County Wildlife sites within 1km: River Thames and River Ray. North Meadow SSSI is in close proximity.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	<b>PM</b> <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	1 (1)	2 (2)	N/A	N/A	N/A	2 (2)	N/A
Residential beyond 100m	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	N/A
Ecological designation within 1km of site (River Thames, River Ray and North Meadow SSSI)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low to moderate without mitigation. Mitigation for dust is recommended. Further assessment should not be necessary.

<sup>&</sup>lt;sup>2</sup> Priority pollutants are those presenting most problems for local air quality management in the UK: i.e.  $NO_2$  and  $PM_{10}$ . Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>3</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



## Water (Quality and Environment) Assessment

#### Site name – Eysey Manor, Cricklade

NGR at centre of site – SU 110946 Location description – Rural setting, northeast of Cricklade, adjacent to the A419 Area of site - 80 ha

#### Table 1: Water Quality and Environmental Information and results - See Appendix B.

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Significance of Impact	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater Surface water	Contaminate minor aquifer Contaminate Source Protection Zone Contaminate water	High Medium / High	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> </ul>	<ul> <li>Environmental management during construction</li> <li>Relevant licensing requirements (PPC) to be assessed</li> <li>Approach Environment Agency for</li> </ul>
	body	bodies 'new lakes and pits' on site Contaminate watercourse on site (Ampney Brook) Contaminate adjacent watercourse (R Thames)		<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of</li> </ul>	<ul> <li>monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Monitoring boreholes and surface water features (may be required for obtaining operating permit)</li> <li>Examine current requirements for</li> </ul>
	Impact on baseflow/runoff High to watercourse	<ul><li>waste handled at site e.g.</li><li>solid wastes only, inert wastes</li><li>Engineered liner system</li></ul>	<ul> <li>operation of inert landfill</li> <li>Assess current impact of contamination</li> </ul>		
		Flood event causes contamination of surface water and disruption of operations	High	Engineered flood defence or mitigation	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>

#### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Significance of Impact	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Site is within Flood Risk Zones 2 and 3			
	Groundwater and surface water	Adverse impact on current environmental management measures of existing landfill	Medium	<ul> <li>Ensure site mitigation measures are complementary to those already in place</li> </ul>	<ul> <li>Assess extent of current risk management measures</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Part of adjacent watercourse downstream is a wildlife site (River Ray) North Meadow NNR / SAC / SSSI near site 3 Scheduled Ancient Monuments within 1km	Medium / High	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for requirements</li> </ul>
	Other adjacent landuses	Operational quarry / inert waste recycling on site Farmland and farms surrounding site 2 current discharge consents and several recent pollution incidents	Low /Medium		

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Eysey Manor, Cricklade is:

- Many / serious issues identified review further assessment requirements. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

The site is currently operational as an inert landfill. Risk mitigation is likely to be practical, and must meet the compliance issues which landfill sites may require. This would be significant risk mitigation given the water environment sensitivity in the context of this site.

Joint Waste Site Allocations Site Survey Report

# **ATKINS**

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

## NW6 Eysey Manor, Cricklade

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory designated sites within 500m:

North Meadow and Clattinger Farm SAC (which is also a SSSI and NNR) is approximately 250m west of the waste allocation boundary. The SAC is designated due to the presence of the Annex I Habitat, lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*), representing an exceptional survival of the traditional pattern of management with a high proportion (>90%) of the UK population of fritillary *Fritillaria meleagris*.

Wiltshire Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of North Meadow and Clattinger Farm SAC. Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SAC. See Appendix C for details of the Appropriate Assessment.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

The following records are from discussions with the Unit Manager, Suzy Offord, who has commissioned previous ecological surveys of the site:

- Badgers (main and outlier setts within site boundary)
- Otters recorded on Ampney Brook (commuting) and River Thames (commuting, foraging, and using holts) within and adjacent to the site.
- Water voles present on the River Thames and starting to move up the Ampney Brook within the site.
- No white-clawed crayfish in watercourses within site but non-native American signal crayfish recorded within Ampney Brook.
- Little ringed plover in Phase 1 (close to proposed development areas)
- Tree sparrows (moving from Phase 5 into Phase 1)
- Sand martins using man-made sand banks in Phase 2
- Skylarks using stripped land within Phase 2
- Deer [species unknown] graze on vegetation along the disused canal
- Frogs have been recorded using water bodies on site

There are no other records of notable species within 1km of the site.

#### Details of surveys already undertaken (where known):

Eysey Manor Farm, owned by Tarmac has been extensively surveyed due to past planning applications and site monitoring. Documents containing ecological information on the site include:

• Ecological Surveys, Protected Species Surveys Water Vole & Otter Eysey Manor Quarry, Eysey, Cricklade (Cotswold Water Park Society, September 2005)

- Survey for great crested newt at Eysey Manor Quarry, NR Cricklade, Wiltshire (Andrew Ward Associates, 2006)
- Eysey Manor Ecological Planning Conditions Results of Survey, 2004 (Andrew Ward Associates, 2004)
- Eysey Manor Ecological Planning Conditions Results of Survey, 2006 (Andrew Ward Associates, 2006).
- Letter to Suzy Offord from Gareth Harris (Biodiversity Officer, Cotswold Water Park Society) on 23 July 2006 regarding protected species surveys of Phase 2B prior to topsoil stripping.
- Letter to Mr Rose (Principal Planner, Wiltshire CC) from P Hopkins (Estates Manager, Tarmac Ltd) regarding the proposed seed mix for noise and visual attenuation bunds in Phase 1 and Phase 2.

It should be noted that there was no evidence found on site of great crested newts, reptiles or bat roosts although there are several badger setts within the site, mainly around the disused canal.



#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

Eysey Manor is a large site comprising agricultural land (mix of pasture and arable) with managed hedgerows, and natural and man-made water-courses. Some ephemeral water bodies occur throughout the site which contain water November through to January but which dry up through March and June.

There is a disused canal running through the site east to west, which is heavily overgrown with scrub and immature trees. This canal is now dry.

Ampney Brook runs through the site north-west to south-east into the River Thames which runs along the sites most southern boundary.

#### Field Evidence of, or potential for, notable species:

The site has ditches, brooks and settling lagoons and, being close to the Cotswold Water Park, supports visiting birds. Those birds observed during the survey included mute swan, shelduck, lapwing and little ringed plover, all close to Phase 1 of the guarry development.

The site has been extensively surveyed and information on other protected species is included above.

#### OTHER INFORMATION

The size of the proposed development is dependent upon further discussions with Tarmac. However during the ecology site visit, the Unit Manager Suzy Offord indicated that the inert waste recycling centre would be on one of the areas close to the existing site office where sand and gravel extraction is currently taking place or where there is existing hard-standing and disturbed ground (Phase 1). Due to the size of the site and operations currently being undertaken on site the field survey was restricted to those parts of the site likely to support the proposed inert waste recycling (Phase 1 of the quarry development) and ecological information already collected for the site was requested from the Unit Manager. The Phase 1 Habitat Plan was partially completed from aerial photos of the site.

The site has only been worked as a sand and gravel quarry for two years and was opened in November 2005. Biodiversity is regularly monitored on the site and the site is managed sensitively. There is a BAP and management plan already in place for the site.

Groundwater monitoring is undertaken at North Meadow and Clattinger Farm SAC in consultation with English Nature to ensure there are no adverse affects on groundwater levels at the SAC as a result of 'dry' mineral extraction at Eysey Manor (pumping of groundwater).

Soil bunds in Phase 1 of the operation of the site have been sown with wildflower mixes to encourage invertebrates in consultation with Jenny Ford, Wiltshire County Ecologist.

Tree boxes have been erected for tree sparrows on the site.

Mink are trapped during spring and autumn on Ampney Brook.

The whole of the site is within the 1:100 year floodplain.

#### **EVALUATION, POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

Given the scale of habitats within the site and the variety of fauna and flora it supports it has the potential to be important at least at a local level.

However the areas indicated by Tarmac that would be used for the proposed inert waste recycling operations are either hard-standing or currently worked for sand and gravel extraction and have negligible nature conservation value. This nature conservation evaluation is only valid whilst the mineral areas are being worked as the pits



created by sand and gravel extraction and bare ground could have local value for nesting and foraging birds if left undisturbed following extraction.

#### Potential Ecological Impacts:

If development occurs where Tarmac has indicated then this would cause direct loss of habitat of negligible nature conservation value. There would be some minor disturbance of species close to this area such as nesting birds although the area is already at the centre of the quarry operation. The additional noise and vehicular traffic from an inert waste recycling operation is unlikely to cause a significant cumulative impact on fauna.

Surface water and ground water impacts from an inert waste recycling facility is unlikely to be significant and the site already has a scheme of ecological monitoring, mitigation and enhancement in place.

North Meadow SAC may be vulnerable to dust (smothering of plants) and groundwater impacts. However the proposed recycling operation would be approximately 850m from the SAC and separated from it by a main road (A419) with mature trees and hedgerows. In addition, the generation of dust can be controlled on-site. Groundwater levels in the vicinity of North Meadow and Clattinger Farm SAC are monitored due to pumping for sand and gravel extraction within the quarry. It is unlikely that a waste recycling facility on hard standing would have any adverse impact on local groundwater levels.

Overall development of the area indicated by Tarmac is likely to have an adverse impact of minor significance within the site boundary. For an assessment of impacts upon the SAC the record of assessment of Likely Significant Affect should be referred to.

#### Potential mitigation:

- Retention and management of some of bare areas left after sand and gravel extraction in Phase 1 of the quarry operation to encourage species such as little ringed plover. These should be at least 50m from operations and soil bunds should be placed between the development and the bare areas to reduce the level of noise and visual disturbance to birds.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.
- Measures to ensure that dust is kept to a minimum such as damping down facilities (water sprays). The
  operation of the inert waste recycling facility should have a dust management plan detailing methods for
  reducing dust generation on-site and avoiding dust plumes travelling beyond the waste site boundary.
- No direct discharges to water courses. Surface water run-off should be directed through silt traps or through balancing ponds prior to any discharges.
- Adherence to Environment Agency Pollution Prevention Guide notes during construction when working close to water courses, particularly PPG01, PPG03, PPG05, PPG06 and PPG21.

#### Residual impacts:

If mitigation undertaken, the residual impacts on the ecology of the proposed site are likely to be negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

The disused canal running through the centre of the site would benefit from some management for biodiversity to clear some scrub and encourage a species rich woodland/scrub edge. Any management would need to consider the presence of badgers using the dry canal.

It should be noted that Tarmac already has a BAP in place and are carrying out a programme of enhancements for biodiversity.

#### Recommended further ecological work/surveys:

- Update badger survey to ensure no new setts within 50m of proposed construction areas (works within 30m of setts are likely to require a badger disturbance licence from English Nature).
- Breeding bird surveys particularly for little ringed plover as this is a species receiving special protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
- Discussions with English Nature regarding the potential affects of the development on North Meadow and Clattinger Farm SAC.

#### Policy and Legal Implications

If badger setts are present within 30m of works a badger disturbance licence from English Nature is likely to be required.

Birds protected under Schedule 1 of the Wildlife and Countryside Act 1981 (such as little ringed plover) receives protection against disturbance whilst using or building their nest. If construction works are likely to cause disturbance to Schedule 1 birds during the nesting season then there may need to be a change in programme of the works or a suitable exclusion zone where no 'disturbing' works are allowed within an appropriate distance of the nest site (in discussion with an experienced ecologist/ornithologist or from advice from the RSPB).

- Relevant policies from the North Wiltshire Local Plan 2011 (June 2006):
- NE5 NATURE CONSERVATION SITES OF INTERNATIONAL IMPORTANCE (requirements of Appropriate Assessment)
- NE6 NATURE CONSERVATION SITES OF NATIONAL IMPORTANCE (requirement for Environmental Impact Assessment where they may be an impact upon a SSSI)
- NE9 PROTECTION OF SPECIES
- NE10 MANAGING NATURE CONSERVATION FEATURES
- NE11 CONSERVING BIODIVERSITY
- NE14 TREES, SITE FEATURES AND THE CONTROL OF NEW DEVELOPMENT
- NE22 SURFACE WATER RUN-OFF
- NE23 WATER COURSES

Phase 1 Habitat Map



Number	Target Note
1	Bridge over Ampney Brook where American (signal) crayfish have been found. No native white-clawed crayfish have been found within the brook.
2	Proposed bridge to be built over the Ampney Brook. Recent surveys found no evidence of water voles within 250m
3	Disused old canal, now dry and covered in dense woody vegetation. Several badger setts are known to be located along the line of the disused canal (main and outlier setts).
4	The River Thames is known to support otters and water voles. Otters use Ampney Brook to commute and forage and water voles appear to have recently started moving from the river upstream along Ampney Brook.

### **Protected Species and Designated Sites**



# Site: NW16 Land East of HRC & WTS, Stanton St Quinton

## Landscape and Visual Survey

### NW16 Land East of HRC & WTS, Stanton St Quintin

#### 1. Introduction

The site is located immediately to the south of the M4 off junction 17 on the B4122. The site is currently in use as arable field. To the immediate west of the site is a Waste Management Facility and Highways Agency depot. To the south and west of the site are scattered farms, private residences and commercial properties.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Avon Vales Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture
- Uses, such as landfill, are widespread, with more substantial urban fringe areas than in neighbouring landscapes. The 'land in between' is often neglected.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Limestone Lowland Landscape Character Area: Malmesbury-Corsham Limestone Lowland Key characteristics relevant to the site:

- A peaceful and rural landscape
- Mix of permanent pasture and arable farmland with a strong network of hedgerows and hedgerow trees
- Settlements in the form of historic market towns, villages and scattered farmstead distributed through the linked by a network of rural roads

Generally the condition of the landscape character area is considered by WCC to be 'good', with a 'moderate' strength of character.

The strategy for the area is to conserve those elements intrinsic to the landscape character, such as the distinctive stone villages and strengthen locally degraded elements such as flailed hedgerows.

#### North Wiltshire Landscape Character Assessment (North Wiltshire District Council)

Landscape Character Area: Hullavington Rolling Lowland Key characteristics relevant to the site:

- Patchwork of irregular, medium sized fields, mainly pasture, and larger more recent enclosures used for arable
- · Continuous hedges with many mature oaks
- Fine stone villages with muted colours and dispersed farms
- Detractors of the M4, the edge of Chippenham and Hullavington airfield.

#### Landscape Designations and Rights of Way:

• There are no known landscape designations or public rights of way within the immediate vicinity of the site



#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site generally flat, comprises a medium scale arable field, fully enclosed to the west, south and east by hedgerows with hedgerow trees. There is a small woodland copse in the northwest corner of the site. The M4 runs immediately along the northern boundary of the site, with a low hedgerow boundary, only a few mature trees along the site boundary act as screening.

To the immediate south of the site is the B4122, a busy commuter road carrying fast moving traffic. The southern boundary of the site follows the curving sweep of the B4122 so that the entire site is only visible at once from the northern boundary. Opposite the B4122 the ground slopes away, with a mix of residential, commercial and farm buildings.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Low Capacity to Accept Change: High

Though the site itself is in keeping with the local landscape character, it is entirely isolated by the M4 and B4122 and does not contribute towards the overall character, giving it a low landscape quality. The site is well enclosed from all but the north by mature hedgerows. Speed of travel of users of the M4 and the potential to screen the site gives the site has a high capacity to accommodate change without adversely affecting the local landscape character.

#### 5. Potential Landscape Impacts

- Deterioration of the rural character as experienced by M4 users
- Reduction in agricultural land

#### 6. Potential Landscape Mitigation Measures

- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to screen views into the site and strengthen rural character
- Site buildings to be in keeping with the local building vernacular, using traditional building materials where possible
- The following 'Broad Management Objectives' for the Limestone Lowlands in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Conserve the network of hedgerows, hedgerow trees and woodland copses and take opportunities for new planting where this will strengthen local character
  - o Resist urbanisation of the country lanes
  - С
- The following Enhancement Priorities proposed for the for the Hullavington Rolling Lowland landscape character area in the North Wiltshire Landscape Character Assessment are relevant to the site:
  - Conserve hedgerows and mature tress, including planting new trees in existing hedges and planting specimen trees in field corners
  - Ensure development reinforces the locally distinctive character and respects the vernacular. The use of traditional building materials including limestone are important in this area
  - Discourage development in the rural hinterland

#### 7. Visual Impact and Mitigation



Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Westbrook Farm Storage Compound	Low	Slight adverse	<ul> <li>Facilities to be in keeping with the local vernacular/agricultural</li> </ul>
Farmhouse Residents (adjacent to site - southeast corner)	High	Slight adverse	<ul> <li>style</li> <li>Use of native and evergreen hedgerows and trees and native woodland planting to site</li> </ul>
Bungalow Residents (adjacent to Westbrook Farm)	High	Substantial adverse	boundaries to screen views into the site
B4122 Travellers	Low	No change	
M4 Travellers	Low	Slight adverse	<ul> <li>Native woodland planting along north boundary of site to enhance M4 screen planting</li> </ul>

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its isolated and enclosed setting the site has a high capacity to accommodate change. The main visual impacts, on users travelling along the M4, could potentially be mitigated through screen planting.

#### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night time visual surveys.

## **Noise Assessment**

### NW16 Land East of HRC & WTS, Stanton St Quintin (Inset Map 6)

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Stanton St Quintin to assess the site's suitability for waste recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Hunters Lodge located adjacent to the B4122 and the south-east corner of the site.
- 1.3 The site is currently arable land flanked to the north by the M4 motorway, to the west by the existing recycling centre, to the south by the B4122 and to the east by fields. Several other small farms are located near by.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 25<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site and at the most sensitive receiver predominantly consists of road traffic noise from the nearby M4 and B4122 and environmental sources such as birdsong, insects, and wind in tress, etc.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	16:00	65.3	80.0	47.5
MEASUREMENT 2	16:08	66.0	79.2	48.2
MEASUREMENT 3	16:15	64.6	79.7	47.6
AVERAGE		65.3		47.8

2.3 The average background noise level at the most sensitive receiver was measured as 47.8 LA90.

## 3. SITE SUITABILITY

3.1 The proposed use for the site at Stanton St Quintin is for Energy from Waste, Mechanical Biological Treatment, Material Recovery Facility, In-vessel Composting and Waste Transfer Station. The boundary of the site area proposed for use is adjacent to the most sensitive receiver. Given the background noise level, LA90 of 47.8dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 515m away.



- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

### NW16 Land East of HRC & WTS, Stanton St Quintin, 3 ha

## 1. BASELINE CONDITIONS

1.1 The site near Stanton St Quintin (Figure 1) is currently agricultural land (arable). It is adjacent to a Highways Agency depot and existing household recycling facility and WTS to the west. The nearest roads are the A350 and M4 (junction 17).



### Figure 1.1 – The site and its surroundings

1.2 Air pollutant4 sources within 1km of the site: road traffic on the M4 north of the site, and A429, B4122 and minor roads; gas/oil/solid fuel space heating for scattered buildings. There are no notable industrial sources of air pollutants. The main potential source of dust and odour is the adjacent household recycling facility and WTS. Surrounding agricultural activities are also a potential source of dust, bioaerosols, NH3 and odour.

<sup>&</sup>lt;sup>4</sup> Of concern to public health include: NO<sub>2</sub>, PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: NO<sub>x</sub>, Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants5 for 2005 and comparable standards6 are: 19.9µg/m3 NOx (standard for protection of vegetation 30µg/m3); 16.4µg/m3 NO2 (standard 40µg/m3); 19.4µg/m3 PM10 (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential housing and farms scattered around St Quintin and Clanville. Stanton St Quintin Quarry and Motorway Cutting SSSI is within 1km, however the designation is for geology and not potentially sensitive habitat. There is one County Wildlife Site at North Draycot Park.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	3 (3)	3 (3)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential between 100 and 250m	3 (3)	3 (3)	N/A	N/A	3 (3)	1 (1)	3 (3)
Residential beyond 250m (St Quintin and Clanville)	2 (2)	2 (2)	N/A	N/A	1 (1)	1 (1)	2 (2)
Ecological designation within 1km of site (North Draycot Park)	N/A	1 (1)	1 (1)	N/A	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

## 3. MITIGATION

3.1 Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bioaerosols should be required. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 Air quality risks for the intended use are moderate to high without mitigation. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bioaerosols should be required. Detailed assessment is recommended.

<sup>&</sup>lt;sup>5</sup> Priority pollutants are those presenting most problems for local air quality management in the UK: i.e. NO<sub>2</sub> and PM<sub>10</sub>. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>6</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)

## **Traffic and Transport Report**

### NW16 Land East of HRC & WTS, Stanton St Quintin

#### Proposed site usage

This 3ha site is proposed to be used for energy, mechanical biological, and other industrial waste treatment/recovery. All of these uses are not planned at the same time due to the small size of the site.

#### **Existing/Potential Access**

The site is located close to junction 17 of the M4 on the B4122 and lies immediately south of the motorway. The existing use is arable agricultural land with a minor, gated access point used by farm vehicles only. To the west is the existing WCC HRC and WTS and adjacent to these the Highways Agency depot.

The existing access to the site is via a small gated access for farm vehicles on the outside of a sweeping bend. Visibility along the majority of the frontage of the site will meet standards because the road is on the outside of the bend. The most appropriate access appears to be via the centre of the bend at the location of the existing gated access where visibility is marginally improved.

The potential to share an access with the existing waste transfer station and household recycling centre could also be investigated.

#### Impacts on Local Settlements

The site is located well away from local settlements and it is likely that there will be little or no traffic impact on the local settlements as a result of the proposal.

#### **On-site infrastructure**

The site is relatively small and, as a result of this and the nature of the waste facility, is unlikely to be particularly busy. Nevertheless, proposals should ensure sufficient on-site storage/queuing for vehicles arriving at site.

#### Off Site Highway Network

Observed HGV flows on the B4122 appear relatively high for the class of road. This is largely due to those HGVs accessing the service area for lorry drivers located to the south of the site. The route also appears to be used as an alternative route to the A350 to gain access to the M4 from the South. As such, HGV use of the route has already been established as acceptable.

To the west of the site is junction 17 of the M4. This is a non-signalised five-arm roundabout where the impacts of this size of development will be negligible.

To the east of the site is a priority T junction with the B4069. The B4122 joins the B4069 at the outside of a bend in the road. Whilst the visibility is good in both directions, observations indicate that larger HGVs have difficulty in turning into and out of this junction due to the tight radii and inadequate lane widths. As a result larger HGVs have been observed overrunning lanes on the major road when turning left onto the B4069.

#### Constraints

HGV traffic from/to the east has some difficulty using the B4069/B4122 priority junction. Traffic accessing the proposed site from this direction is likely to be minimal.

#### Mitigation

Some removal/management of mature vegetation at the site access may be required to improve ensure good visibility but the location of the site on the outside of a bend largely overcomes any potential visibility issues. No measures are deemed necessary at the B4069/B4122 junction as any increase in use of the junction related to the site would be negligible.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.

## **Ecological Report**

### NW16 Land East of HRC and WTS, Stanton St Quintin

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

Stanton St Quintin Quarry and Motorway Cutting SSSI (Geological, 2 parcels): Located approximately 550m west of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site boundary.

Within 500m of the site there are two records of harvest mouse, one record of great burnet (a rare plant in Wiltshire) and four records of badgers (all located over 350m from the site).

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The site consists predominantly of arable farmland. The site is bound to the north and south by species poor hedgerows and to the east and west by semi-natural broadleaved woodland. The woodland to the west of the site falls partly within the site boundary.

Two mature trees (an oak and a sycamore) are present at the edge of the woodland located to the east of the site.

A 2m wide grassland strip was present between the crop in the arable field and the hedgerows and woodlands adjacent to the site.

#### Field Evidence of notable species:

A badger latrine was noted adjacent to the hedgerow on the southern boundary of the site. No other evidence of badger activity was noted within the site.

The two mature trees have a low to medium potential to support roosting bats.

There are four ponds present within 500m of this site. However these waterbodies are located to the north of the M4, a barrier that great crested newts are unlikely to cross.

No other field evidence of legally protected species was identified.

#### OTHER INFORMATION

None identified.

#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

The majority of the habitats present within the site are of negligible nature conservation value (predominantly arable farmland). The area of semi-natural broadleaved woodland at the western edge of the site is of local importance for nature conservation.

#### Potential Ecological Impacts:

There are no predicted impacts on the Stanton St Quintin Quarry and Motorway Cutting SSSI.

The potential ecological impacts include loss of arable farmland, possible loss of the semi-natural broadleaved woodland present in the western part of the site and the loss of the two mature trees with the potential to support bat roosts. The overall works are likely to have a negligible ecological impact.

#### Potential mitigation:

- Retention of the broadleaved woodland present within the western part of the site.
- Retention of the hedgerows present to the north and south of the site where possible.
- Retention of two mature trees present adjacent to the eastern boundary of the site.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

- Bat surveys on any trees to be felled (including the two mature trees on the eastern boundary of the site and any trees within the woodland which will need to be removed). This should include a daytime inspection using an endoscope, ladders, torch and mirror on a stick and, if appropriate, should be followed be an emergence survey.
- A walkover of the site for badgers is recommended prior to commencement of works.

#### Legal and policy implications:

 If bats are found to be roosting within any trees to be felled a development licence will be required from Defra. Further mitigation measures will be required in order to compensate for the loss of roosting habitat.

The Nature Conservation policies in the North Wiltshire Local Plan that are potentially relevant to this site include:

- Policy NE 9;
- Policy NE 10;
- Policy NE 11;
- Policy NE 12;
- Policy NE 14;
- Policy NE 22.

#### Phase 1 Habitat Map



Number	Target Note	Species Notes
1	Buffer strips at edge of arable field [approx 2-5m wide] between crop and hedgerow.	common cleavers, barren brome, soft brome, cranes bill, forget-me- not, poppy, cats-tail, ground ivy,
2	Badger latrine by hedgerow.	
3	Rabbit activity noted	sycamore [semi-mature], ash [semi-mature], hawthorn shrubs, ivy ground cover, nettle, some blue bells, lords and ladies
4	Large, mature oak tree. Ivy covered trunk. Lots of broken and split limbs with peeling bark. Medium to high bat potential.	
5	Mature sycamore. Ivy covered trunk. Low to medium bat potential	
6	Line of 15 to 20 young, semi-mature ash trees located outside site (within highways boundary).	
7	Semi mature woodland, appears semi-natural although the younger trees present suggest it could be plantation. Recommend woodland is kept [will act as screen and maintain biodiversity value of site]. Rabbit activity noted in woodland [no badgers].	sycamore, ash, wych elm, hawthorn, ivy ground cover with bluebells, common cleavers, ground ivy, herb robert
8	broadleaved [semi-mature ash] tree, low bat potential	
9	broadleaved [semi-mature ash] tree	
10	semi-mature sycamore tree	

## Protected Species and Designated Sites
#### Joint Waste Site Allocations Site Survey Report

## **ATKINS**



# Site: NW17 Leafield Industrial Estate, Corsham

## **Traffic and Transport Review**

### NW17 Leafield Industrial Estate, Corsham

#### Proposed Site Usage

The potential use for this site is for a household recycling centre/local scale recycling/materials recovery facility.

#### **Existing/Potential Access**

The site is a vacant plot on Leafield industrial estate situated to the south west of Corsham, which at present has a mix of B2 and B8 uses. As there is potential to use for this site for a household recycling centre/local scale recycling it should be noted that this proposed use will generate not only HGV traffic but also vehicular traffic as residents will access the site to recycle their household waste. The peak traffic generated by this type of facility is however likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks for the existing B2 and B8 uses or the peak on the wider highway network.

The main access to the site is via Potley Lane and Valley Road. These roads are subject to 30mph speed limits and are bound by residential properties and a school. The road width of Potley Lane is 6m however this is reduced to approximately 4m by the presence of on carriageway residents' parking on one side of the lane. Design Bulletin 32 (Residential Roads and Footpaths), produced by the Department of Transport, states that a carriageway width of 5.5m is required to enable the largest type of vehicles to pass each other and 4.8m required to allow a HGV and a car to pass each other. The road width of 4m is therefore just about sufficient to allow two cars to pass each other with extreme care.

There are two access roads to the industrial estate, one from Potley Lane in the north and one from Elley Green in the south. Both accesses are in the form of a priority T junction. To the west of both accesses there are 7.5T environmental weight restrictions to protect the residential amenity of the Greenhill area. Visibility at the Potley Lane access in both directions is good however visibility to the right at the Elley Green access is sub standard.

#### **Impacts on Local Settlements**

The impact on Corsham is likely to be minimal however residential properties in the immediate vicinity of the site are more likely to feel adverse impacts associated with the proposed development. These impacts may include the effects of noise and vibration associated with the transportation of waste.

#### **On-site infrastructure**

The exact location of the facility has not been established; however any proposals must ensure that there is sufficient infrastructure in place on the site itself to accommodate the development traffic without blocking back onto the local highway network or the local industrial estate road network. This is of particular importance as the site is to be used as a community facility and as such is likely to attract a relatively high number of vehicular trips at site peak times (weekends 11:00 - 16:00) particularly given that there are currently no other such facilities in the Corsham area.

#### **Off Site Highway Network**

The local recycling site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when



traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. The peak traffic generated by this type of facility is likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks of the current mix of B2 and B8 uses on the estate and the on the local highway network.

#### Constraints

The impact of this proposed development on the residential amenity of the area should be considered as the impacts of noise and vibration associated with the transportation of waste can be an issue given the proximity of the main access road to residential properties. The reduced road width, a result of on carriageway parking, is likely to be a constraining issue at this location as any additional traffic would exacerbate any existing problems. Observed flows along Potley Lane did appear low with no major problems created as a result of the narrow road widths. These observations were however made in off peak conditions and a more detailed analysis in peak flow conditions may be required.

#### Mitigation

Although the possible impact of this proposed development on the residential amenity of the area is of concern there is little that can be done to alleviate such issues. Prohibition of parking would increase the width of the road to levels more suitable for HGV usage however such a proposition would be likely to face local opposition.

#### Conclusion

The proposed site would be likely to have an adverse impact on the residential amenity of the area and a potential minor adverse impact on the local highway network. Consideration could be given (in conjunction with the highway authority) to a removal of parking on Potley Lane. In all other traffic/highways aspects the site is suitable for the proposed uses.

## **Ecological Report**

### NW17 Leafield Industrial Estate, Corsham

#### **DESK STUDY INFORMATION**

Statutory designated sites within 1km and non-statutory sites within 500m: Corsham Railway Cutting SSSI (geological) 2 parcels approximately 250m north of the site.

Records of notable species within 500m (legally protected, BAP, RDB): There are no records of notable species within the waste allocation boundary.

Records within 500m include bat records within residential areas, badger records all to the north of the railway line and several records of County rare plants such as night-scented catchfly and harsh downy rose. The closest county rare plant record to the waste allocation boundary is for spiked star-of-Bethlehem approximately 170m east.

#### Details of surveys already undertaken (where known): None identified.

None identified.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The majority of the land within the site boundary is developed with hard standing and industrial units of varying sizes. Most of these units are occupied.

#### Field Evidence of notable species:

None observed

#### OTHER INFORMATION

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The site is large developed and hard-standing with very few areas of green space. Where these exist they are generally landscaped areas or amenity grassland. The site has negligible nature conservation value.

#### **Potential Ecological Impacts:** None identified

**Potential mitigation:** None identified

## *Residual impacts:* None identified

**Opportunities for enhancement:** None identified

Recommended further ecological work/surveys: None identified



*Legal and policy implications:* None identified







Number	Target Note	Species Notes
1	brook, flow blocked by soil and debris stagnant, tiny, restricted access due to vegetation 10cm water, less than 1m, mud banks, v. heavily shaded by scrub and trees	pendulous sedge, prob good for rats but no evidence of water vole [scattered]
2	ind est not many vacant plots unlikely ecological impact from any development if buildings removed may need bat/bird survey but v. low potential	
3	fishing pond, surrounded by scrub, separate bit 0n edge like a cur off ditch, approximately 40m x 20m, deep, between building and brook	flag, hard rush, mallard



#### **Protected Species and Designated Sites**



# Site: NW18 Low Lane Extension, Compton Bassett

## Landscape and Visual Survey

### NW18 Low Lane Extension, Compton Bassett

#### 1. Introduction

The site is located to the east of Calne off an unclassified road, Spreckley Road, which links Compton Bassett and the A4. To the south of the site is an operational Waste Management Facility with a landfill and a Household Recycling Centre. A handful of residential properties are scattered along the higher ground to the north and east. The site is currently arable agricultural land.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Avon Vales, on the cusp of Berkshire and Marlborough Downs Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture
- Large historic parks and mansions
- Uses, such as landfill, are widespread, with more substantial urban fringe areas than in neighbouring landscapes. The 'land in between' is often neglected.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Calne Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on clay
- Largely rural, tranquil landscape
- Variable field pattern of arable and pasture with hedgerows, though often replaced by fences and hedgerow trees are sparse
- Sparsely scattered settlement of towns, small villages and farmsteads, many using vernacular materials of local clay brick, stone and red roof tiles.
- Criss cross of rural roads

Generally the condition of the landscape character area is considered by WCC to be 'good', with a 'moderate' strength of character.

The strategy for the area is to conserve its peaceful rural landscape and strengthen its character through minimising urban influence.

#### North Wiltshire Landscape Character Assessment (North Wiltshire District Council)

Landscape Character Area: Hilmarton Rolling Lowland Key characteristics relevant to the site:

- Low lying mixed agriculture based on clay
- Scattered dwellings and small settlements away from Calne; mix of stone and brick
- · Patchworks of small to medium sized fields, mainly pasture with arable on lighter soils
- · Hedged boundaries predominantly well managed, but becoming discontinuous

• Peaceful rural character

#### Landscape Designations and Rights of Way:

- The land to the east of the site is designated an Area of Outstanding Natural Beauty (AONB).
- A public bridleway runs immediately adjacent to the south of the site, along the Waste Management Facilities' northern boundary.

#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed area comprises a gently rolling site falling to a shallow valley offsite to the north. A screening bund to the landfill has been established to the south and is planted with immature deciduous trees. Compton Bassett hill is to the west, with Compton Bassett Park overlooking the site. Penn Hill is to the north-west; the outer edge of Calne is to the northern slope with no views of the site. The White Horse of Uffington is in the distance to the south. Views of the site from the White Horse are screened by existing planting and intervening topography.

There are no structures on the site; however there are a small number of farm buildings and detached residential properties visible at a distance on the higher ground to the north and east. A line of utility poles runs through the centre of the site. The adjacent Waste Management site is highly active and landfill machinery can be seen above the screen bunding. Landscape remediation has begun to the northern sections of the landfill, now used for grazing sheep. The site is peaceful with a comfortable atmosphere.

A historic farm track, now a public bridleway runs along the southern boundary of the site leading from Spreckley Road to the Sands Farm Quarry and Landfill offsite to the west. The site is enclosed to the south, west and east by hedgerows and native hedgerow trees, many of which are diseased or dead elm. There are arable fields to the north of the site, with clumps of woodland, hedgerows and isolated mature deciduous trees.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Good Capacity to Accept Change: Low

The site comprises a well managed agricultural field in harmony with the wider tranquil and rural landscape character, giving it a good landscape quality. The open northern aspect of the site makes it an important landscape parcel within the overall landscape character. The existing bunds to the south screen the adjacent Waste Management Facility site from views from the north and east; however the rolling landform would make it difficult to provide the same level of screening to the proposed site and would further disrupt the characteristic local field patterns. Therefore the site has a low capacity to accommodate change.

#### 5. Potential Landscape Impacts

• Erosion of rural character to views from the north and east.

#### 6. Potential Landscape Mitigation Measures



- Site planning development to be kept low and in keeping with the local vernacular style. Facilities to be located to the southwest to have minimal encroachment on the open field pattern
- Native woodland planting around site boundaries to the south, west and north. Hedgerow enhancements to the east along Spreckley Road frontage to strengthen the rural character
- The following 'Broad Management Objectives' for the Rolling Clay Lowlands in the *Wiltshire* Landscape Character Assessment are relevant to the site:
  - o Retaining and managing hedgerow network and nurturing new hedgerow trees
  - Strengthening the enclosed character of the landscape and screening views to urban edges through nurturing existing and planting new woodland.
- The following Enhancement Priorities proposed for the Hilmarton Rolling Lowland landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:
  - Encourage repair, replanting, widespread extension of hedgerow network, and development of hedgerow trees where hedgerows are in poor condition.
  - o Conserve mature trees, woodland clumps and shelterbelts
  - o Discourage development in rural areas
  - Encourage less intensive farming on arable land introducing headlands and margins
  - Identify and seek opportunities to create new woodland belts and copses, in particular to help screen and contain development

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Freeth Farm	High	Moderate – High	Development to be kept low and in keeping
Residents		adverse	with the local vernacular style
Manor Farm	High	Moderate – High	<ul> <li>Facilities to be located to the southwest to</li> </ul>
Residents		adverse	have minimal encroachment on the open
Compton Bassett	High	Negligible	field pattern
House Residents			
Users of Speckley	Low	Slight adverse	<ul> <li>Hedgerow enhancement planting along</li> </ul>
Road			site boundary
Users of Cherhill	High	High adverse	<ul> <li>Native woodland planting along southern,</li> </ul>
Down bridleway	-	-	western and northern boundaries of the
Users of Penn Hill	High	Negligible	site
footpath	-		

#### 7. Visual Impact and Mitigation

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-open setting and existing rural character, the site has a low ability to accommodate change. The main visual impacts, on residences to the north and the bridleway to the south of the site would be difficult to mitigated, even through sensitive site planning and screen planting.

#### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

## **Noise Assessment**

### NW18 Low Lane Extension, Compton Bassett (Inset Map 4)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Hills Resource Recovery Centre/Low Lane to assess the site's suitability for waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers accessible in proximity to the site were deemed to be properties adjacent to Spreckley Road approximately 150m south of the site.
- 1.3 The site currently contains an energy from waste generation plant, a materials recovery facility and recycling of household and skip waste. Residential properties are located to the south of the site otherwise the site is surrounded by fields containing a few isolated farms.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 18<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of industrial noise from activities within the site and traffic noise from vehicles and HGV's on nearby roads and from within the site. The noise climate at the most sensitive receiver consists predominantly of traffic noise from nearby roads and environmental sources such as birdsong, insects, and wind in tress, etc. Industrial noise emanating from the site is perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receivers. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	15:10	50.6	69.6	42.8
MEASUREMENT 2	15:15	54.9	72.8	45.8
MEASUREMENT 3	15:20	56.6	76.7	44.9
AVERAGE		54.7		44.5

2.3 The average background noise level at the most sensitive receiver was measured as 44.5 L<sub>A90</sub>.

### 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Hills Resource Recovery Centre/Low Lane is for an extension to the existing non-hazardous landfill, centralised composting facility and the Materials Recovery Facility. Two plots are proposed development. The closest boundary of the site area proposed for use passes within 120m of the most sensitive receivers. Given the background noise level, L<sub>A90</sub> of 44.5dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 750m away from noise sensitive receivers.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 The minimum separation distance can be achieved with the area known as Low Lane Extension but not at the Resource Recovery Centre Area. However, depending on the location of the development within the site, existing buildings and ground topography within the site may offer some screening effects allowing a closer proximity to be achieved. Alternatively, mitigation measures may need to be implemented. Indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

NW18 Low Lane Extension, Compton Bassett (Inset Map 4), 20 ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1) is situated along Low Lane to the south west of Compton Bassett adjacent to an existing non-hazardous landfill. The site is currently agricultural land (arable).



Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>7</sup> sources within 1km of the site: road traffic from minor roads; gas/oil/solid fuel space heating for scattered buildings; United Utilities Green Energy Ltd landfill at Compton Bassett (potential additional pollutants including dust, odour and NH<sub>3</sub>). Surrounding agricultural activities are also potential sources of dust, bioaerosols, NH<sub>3</sub> and odour.

<sup>&</sup>lt;sup>7</sup> Of concern to public health include: Nitrogen dioxide (NO<sub>2</sub>)  $PM_{10}$  (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>) Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>8</sup> for 2005 and comparable standards<sup>9</sup> are: 11.2µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 8.8µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 18µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential housing in Compton Bassett village and farms; and wildlife sites including Calne Sand Pits, Pearce's Old Pit and Compton Bassett Home Wood.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential between 100 and 250m	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 250m (Compton Bassett, Sand Farm, Freeth Farm)	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	1 (2)
Ecological designation within 1km of site (Calne Sand Pits, Pearce's Old Pit and Compton Bassett Home Wood)	1 (1)	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

### 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low to moderate without mitigation. Dust and odour mitigation is recommended. Further assessment is recommended for odour.

<sup>&</sup>lt;sup>8</sup> Priority pollutants are those presenting most problems for local air quality management in the UK: i.e. NO<sub>2</sub> and PM<sub>10</sub> Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>9</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)

## **Traffic and Transport Review**

### NW18 Low Lane Extension, Compton Bassett

#### Proposed Site Usage

The proposal is for an extension to an existing adjacent non hazardous landfill

#### **Existing/Potential Access**

The 20 ha site is at present arable farmland and is located to the east of Calne approximately 1 km north of the A4. To the east of the site lies the village of Compton Bassett accessed from the A3102 in the north and the A4 in the South via a minor road with 7.5(T) environmental weight limit. Access from this minor road is not feasible from the north due to the impacts on the village of Compton Bassett. Lower Compton lies to the south of the site and is easily accessible from the A4 via single two lane carriageway road which forms the minor arm of a ghost island priority junction with the A4. This road currently provides access to an existing household waste recycling centre and resource recovery centre accessed via a mini-roundabout with kerbed central island. Access from Low Lane has been investigated and subsequently discounted due to the impacts on the village of Calne. It is recommended that access is taken via the existing resource recovery centre with an extension to the existing on site infrastructure. This has good access to the wider highway network from the A4 at Lower Compton to the south of the site.

#### Impacts on Local Settlements

There are two pockets of residential properties in close proximity of the proposed access to the south of the site, one on the south east corner of the access mini-roundabout and the other on the south west side. There is some screening for the properties on the south east side of the roundabout but those on the south west of the roundabout have no screening and share the same access from the roundabout. The settlements are currently impacted upon by HGV traffic to the existing household recycling centre, strategic materials recovery facility and current landfill operations. Any additional impact from the proposed extension to landfill operations should be considered.

#### **On-site Infrastructure**

There is existing on site infrastructure that would require extension for access to the site. The access to the existing waste management facilities that the extension to the landfill will share is traffic calmed with road narrowing close to the access junction which only allows one stream of traffic at any one time with the priority given to the traffic entering the site. There are also speed humps on the access road to reduce the speed of vehicles. The road narrowing restricts the capacity of the road and in light of the intensification of the usage of the site the appropriateness of this measure may have to be reconsidered. Due to the noise generated from braking and accelerating, the speed humps may not be ideal at a location with high HGV usage or close proximity to the residential properties. This measure may also have to be reconsidered.

#### Off Site Highway Network

The traffic flows on the local network are very light and therefore unlikely to require any off site work. Provision of a ghost island right turn on the A4 further assists the vehicles movements to the site.

#### Constraints

The main constraint is the impact on the residential properties in the area. The impact of this proposed development on the existing residential properties in proximity of the site should be considered in relation to potential noise and vibration from site.

#### Mitigation

The widening of the site access road to allow two-way movement along the whole length should be considered as would the suitability of road humps in relation to the noise and vibration impact of HGV traffic. Some removal/management of mature vegetation along the site access may be required to improve forward visibility. No measures are deemed necessary at the junction of A4.

Joint Waste Site Allocations Site Survey Report



#### Conclusion

This site is suitable, in traffic terms, for the proposed uses, however careful consideration would need to be given to the impact on the residential amenity of Lower Compton.

## **Geological Assessment**

#### NW18 Low Lane Extension, Compton Bassett

NGR at centre of site – SU 021719 Location description –1.5km west of Compton Bassett, 3km northeast of Calne Area of site (ha) - 20

Table 1: Geological Information and results - See Appendix B.

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Table 2: Environmental CSM for B (geological assessment)

Category	Potential	Potential Risk Issue	Potential	Potential	Risk	Mitigation	Likely	Further	Assessment	
	Receptor		Impact	Measures			Requireme	nts		
			Significance	(to be conside	ered as a	appropriate)				
Geology	Geology	Contaminate major aquifer – Lower Greensand Group	High	Refer to Wate	er (Qualit	y and Environ	nent) site assessment comments			
		Generation / migration of landfill gas through geological strata	High	Engineered system Consider limi landfilled at sit	gas r iting type ite	management es of waste	Approach monitoring Monitoring	Environment requirements boreholes (mag	Agency for y be required	
		Contamination potential through capped, closed site with new geological profile	Medium / High	Environmenta Working Plan	il Manag	ement Plan	for obtaining operating permit) Formal assessment of risk to I water environment as part of a per- license application			
	Designated sites/ Adjacent sensitive landuses	North Wessex Downs AONB and a RIGS site	Medium	Landscape appropriate p to avoid impace Management	surv blanning ct on AO of	ey and assessment NB windborne	Consider t impact adj how an baseline ca	the potential e acent landuse appropriate e n be measured	environmental s have, and environmental /monitored	
	Other adiacent	Farmland and farms surrounding site.	Low / Medium	material at site	e bounda	aries	Approach requiremer	Environment Its	Agency for	
	landuses	neighbouring landfill site		Ensure site de	evelopm	ent does not	Assess the	current risk mi	tigation at the	

Category	Potential	Potential Risk Issue	Potential	Potential	Risk	Mitigation	Likely	Further	Assessment
	Receptor		Impact	Measures			Requireme	nts	
			Significance	(to be considered as appropriate)			-		
		and 3 quarries		impact the	andfill risk	k mitigation	existing lan	ndfill site	
				measures					

Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Low Lane, Compton Bassett is:

Several / potentially significant geological issues identified, with risk mitigation considered to be practicable to address most issues Review further assessment requirements

It should be noted that the condition of the site including the ground conditions and geology features identified during the desk study can only be assessed during a detailed site visit and/or intrusive site investigation. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## Water (Quality and Environment) Assessment

### NW18 Low Lane Extension, Compton Bassett

NGR at centre of site – SU 021719 Location description –1.5km west of Compton Bassett, 3km northeast of Calne Area of site (ha) - 20

#### Table 1: Water Quality and Environmental Information and results - See Appendix B.

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Table 2: Environmental CSM for A	(environment and wate	r quality assessment)
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Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater Surface water body	Contaminate aquifermajor aquiferContaminate Protection ZoneSource Protection ZoneContaminate Brook and/orAbberd other other surface water featuresImpact on baseflow/runoff to watercourseSource Protection Zone	Medium / High Low Medium / High Medium	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Environmental management during construction</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Relevant licensing requirements (PPC) to be assessed</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> <li>Assess the impacts of the adjacent landfills</li> </ul>
		Flood Risk	High	Engineered flood defence or mitigation	Approach Environment Agency for requirements
	Groundwater abstraction	Contains groundwater abstraction points	Low/Medium		<ul> <li>Check libba risk assessment requirements</li> </ul>

#### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
	point				
	Designated sites/ Adjacent sensitive landuses	North Wessex Downs AONB, SAM and Woodland	Low	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne</li> </ul>	Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored
	Other adjacent landuses	Farmland and farms surrounding site, neighbouring landfill site and parkland Current discharge consents and several recent pollution incidents	Low / Medium	<ul> <li>material at site boundaries</li> <li>Ensure site development does not impact the landfill risk mitigation measures</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Assess the current risk mitigation at the existing landfill site</li> </ul>

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Low Lane, Compton Bassett is:

- Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

### NW18 Low Lane Extension 2, Compton Bassett

#### ECOLOGICAL REPORT

#### **DESK STUDY INFORMATION**

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

Calne Sand Pits and Pearce's Old Pit (Calne) Wildlife Site: Located approximately 350m south-west of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Within the site there are three records of great burnet, a rare vascular plant in Wiltshire.

Within 500m of the site there are:

- 22 records of brown hare;
- 1 record of badger;
- 149 records of notable beetle species;
- 2 records of yew, 3 records of dwarf spurge, three records of spotted medick, one record of meadow brome, two records of prickly poppy and one record of corn spurrey (all rare vascular plant species in Wiltshire).

Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The majority of site consists of arable farmland and arable set aside (now predominantly covered in arable weeds). The site is bound by species poor hedgerows (overgrown and unmanaged) with semi-mature and mature tree standards. There are three small areas of broadleaved semi-natural woodland which are present within the site. The Abberd Brook flows adjacent to the northern boundary of the site.

#### Field Evidence of notable species:

Four ponds present within 500m, all are considered suitable to support great crested newts and other amphibians. These ponds are located between 50m and 300m from the site boundary within the small woodland areas located to the east and south-east of the site. A small country road separates these ponds from the site. The hedgerows that bound the site and woodland areas within the site provide suitable terrestrial habitat for great crested newts to rest within.

Two active badger setts were noted at the edge of the woodland in north-western corner of site (marked on Phase 1 habitat plan). One sett has two active sett entrances and the second sett has one active sett entrance. Three badger latrines were located in the centre of the woodland.

There a large number of semi-mature and mature trees with bat roosting potential (present within hedgerows which bound the site and the woodlands located within the site).

The Abberd Brook running adjacent to the northern boundary of the site has the potential to support water voles and otters. This watercourse was inaccessible to survey for these species due to being covered with dense vegetation.

Two buzzards were observed flying over the site.

#### OTHER INFORMATION

None identified.



#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (arable and set-aside). However the woodlands, the hedgerows and the mature trees that bound the site are of local nature conservation value.

#### Potential Ecological Impacts:

There are no predicted impacts on Calne Sand Pits and Pearce's Old Pit (Calne) Wildlife Site.

There will be the loss of arable farmland and associated set aside habitat. The possible loss of broadleaved semi-natural woodland areas, hedgerows and semi-mature and mature trees (with associated impacts on known badger setts and possible bat roosts). The potential loss of terrestrial habitat used by great crested newts. There are also potential water quality impacts on Abberd Brook which flows adjacent to site. Overall works likely to have adverse impact of minor significance.

#### Potential mitigation:

- Retention of the three areas of broadleaved semi-natural woodland.
- Management of woodland areas for biodiversity (brief management plan to be submitted to planning authority for approval).
- Retention of hedgerows around the outside of the site, particularly where these link with linear features such as the Abberd Brook and the small areas of woodland within the site. If any of the mature hedgerows are to be lost these should be replaced.
- Retention of semi-mature and mature trees wherever possible.
- Retention of at least 10m strip between edge of Abberd Brook and new development.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines when working in close proximity to, or within, the Abberd Brook.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If the mitigation is undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

• Clearance of the dense vegetation from parts of the Abberd Brook flowing adjacent to the site.

#### Recommended further ecological work/surveys:

- Badger surveys in winter to map setts and territory (tall ruderal vegetation would make mapping at other times difficult). English Nature disturbance licence would be required for works within 30m of sett entrances. Provision of artificial setts may be required if setts are to be lost. Set aside area for badgers (defined by badger territory mapping) where development is not permitted.
- Great crested newts surveys of the four ponds located between 50m and 300m from the site boundary within the small woodland areas located to the east and south-east of the site.
- Bat surveys on semi-mature and mature trees (within hedgerows and woodlands) if require felling (including a daytime inspection assessing trees potential to support bat roost(s), followed by an evening emergence survey, if appropriate).
- Water vole and otter surveys of the Abberd Brook if work is to be undertaken within 25m of the watercourse.

#### Legal and policy implications:

- If great crested newts are found to be using any of the four ponds within 500m of the site a great crested newt development licence will be required from Defra.
- If bats are found to be roosting within any trees to be felled a development licence will be required from Defra.



- If works are required within 30m of a badger sett or a badger sett is to be lost a disturbance licence will be required from English Nature.
- If an otter holt or other resting place is to be lost as a result of the works a development licence will be required from Defra.
- It is recommended that if water voles are present on the Abberd Brook (and if otters commute along the watercourse but no holts are present) a method statement for works is compiled by an ecologist. This will help minimise disturbance to any water voles and otters present and protect their habitat from damage and destruction.

The Nature Conservation policies in the North Wiltshire Local Plan that are potentially relevant to this site include:

- Policy NE 7;
- Policy NE 9;
- Policy NE 10;
- Policy NE 11;
- Policy NE 12;
- Policy NE 14;
- Policy NE 22;
- Policy NE 23.

#### Joint Waste Site Allocations Site Survey Report



Phase 1 Habitat Map



Number	Target Note
1	The site is bound by species poor hedgerows (overgrown and unmanaged) with semi-mature and mature tree standards. Many of the trees within the hedgerows have the potential to support roosting bats.
2	Sighting of a red deer
3	Abberd Brook. This watercourse could not be surveyed for water vole and otter due to being covered with dense vegetation (including thick bramble).
4	Sighting of two buzzards flying above the arable field
5	One hole badger sett located at the edge of a semi-natural broadleaved woodland. Appeared to be well used.
6	Three badger latrines. All relatively fresh.
7	Two hole badger sett located at the edge of a semi-natural broadleaved woodland. Both appeared to be well used with tracks leading between the two sett entrances and into the woodland.
8	Area of arable set aside.

### **Protected Species and Designated Sites**



# Site: NW20 Parkgate Farm, Purton

## Landscape and Visual Survey

### NW20 Parkgate Farm, Purton

#### 1. Introduction

The site is located to the north of Purton, North Wiltshire. A railway line runs immediately adjacent to the north. Access to the site is restricted to a deeply rutted farm track in poor condition. The surrounding land uses include an active landfill to the east. The town of Purton overlooks the site from high ground to the south.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Upper Thames Clay Vales Key characteristics relevant to the site:

- Gently undulating clay lowland farmland with regular and well-ordered field patterns defined by thick hedgerows, however intensification of agricultural activities have resulted in the removal of hedgerows, enlarged fields and new farm buildings
- Open floodplain landscapes displaying gravel workings and flooded pits
- Brick built buildings reflect the widespread use of the local clay as a building material with plain tiled roofs

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Minety Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on clay
- Medium to large fields, mainly pastoral land use with pasture concentrated around the water courses
- Variable field pattern with network of hedgerows in good conditions and mature hedgerow trees
- Presence of streams marked by lines of willows and crossed by modest bridges
- Scattered settlement of towns, small villages and farmsteads, many using vernacular materials of brick, half timber, stone, tiles and thatch
- Roads largely minor and rural with a few trunk roads and sections of motorway
- A largely peaceful, rural landscape

Generally the condition of the landscape character area is considered by WCC to be 'moderate', with a 'moderate' strength of character.

The strategy for the area is to conserve the elements that contribute to the landscape character and enhance areas that are becoming degraded, such as the urban fringes

#### North Wiltshire Landscape Character Assessment (North Wiltshire District Council)

Landscape Character Area: Thames Valley Lowland Key characteristics relevant to the site:

- Low, level or undulating ground
- Continuous hedges with many mature oak and ash
- Field sizes vary from small and irregular to medium sized and regular shaped, predominantly pasture
- Dispersed or nucleated settlement on higher ground using vernacular materials of stone and local brick
- Generally contained views, but with some longer views and a sense of containment over the Thames floodplain

#### Landscape Designations and Rights of Way:

• There are public rights of way along the boundaries of the site to the south, east and west, as well as one crossing the centre of the site running north – south

#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site is well managed, flat pasture land with derelict farm buildings in a rural location within the Rural Buffer. The site comprises medium scale fields with a strong hedgerow pattern interspersed with mature hedgerow trees including Oak. There are however several dead Elm trees within the hedgerows. There are occasion clumps of mature deciduous trees located in the field corners. There is a slight rise to the east of the site and the adjacent landfill is visible over the railway cutting planting.

To the south of the site the land rises to Paven Hill, predominantly wooded with a handful of residential properties and agricultural fields scattered on the overlooking north hillside. A newly planted woodland shelter belt has been established on the north slope of Paven Hill to screen views to the adjacent landfill. The outer edge of Purton also overlooks the site. The River Key runs along the northern edge of the site.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Ordinary Capacity to Accept Change: Medium

Although the site is in keeping with the wider peaceful, rural landscape setting, the presences of the adjacent railway, and more significantly the existing landfill, have eroded the landscape character within the local area, giving the site a moderate landscape quality. Due to the previous layout of the site, with the location of the former farm buildings and well established screening, the site has a moderate capacity to accommodate change, provided facilities they are sensitively located to reduce intrusion into the existing field pattern and in keeping with the local agricultural style.

#### 5. Potential Landscape Impacts

• Further erosion of the rural character

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning –facilities to be located to utilise the surrounding topography to prevent intrusion into the rural character
- Facilities to be in keeping with the local vernacular/agricultural style



- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to strengthen the rural character
- The following 'Broad Management Objectives' for the Rolling Clay Lowlands in the *Wiltshire* Landscape Character Assessment are relevant to the site:
  - o Retaining and managing hedgerow network and nurturing new hedgerow trees
  - Strengthening the enclosed character of the landscape and screening views to urban edges through nurturing existing and planting new woodland.
- The following Enhancement Priorities proposed for the Thames Valley Lowland landscape character area in the North Wiltshire Landscape Character Assessment are relevant to the site:
  - Conserve hedgerows and mature trees, including planting new trees in existing hedges and planting specimen trees in field corners
  - o Encourage planting of new woodland copses
  - o Discourage development which would detract from the tranquil rural character

#### 7. Visual Impact and Mitigation

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Residential Properties on Paven Hill	High	Moderate adverse	Facilities to be in keeping with the local vernacular /
Residential Properties on the northwest fringe of Purton	High	Moderate adverse	<ul> <li>agricultural style</li> <li>Use of native hedgerows and trees and native woodland</li> </ul>
Public Footpath Users	High	Moderate adverse	planting to site boundaries to screen views into the site
Railway Users	Low	Negligible	Structure planting around site
Adjacent Landfill	Low	Negligible	boundary

#### 8. Summary: Residual Landscape and Visual Impacts

Due to the existing significant landscape and visual detractor of the adjacent landfill, and the relatively visually and physically isolation of the site, sensitive development within the site would minimize the adverse impact on the local and surrounding character and visual receptors. Therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.

#### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

## **Air Quality Report**

### NW20 Parkgate Farm, Purton 23 ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1) is located to the north of Purton and is currently pasture land (grade 4). The River Key runs along the northern edge of the site. The site is adjacent to the permitted extension to Purton landfill (household, commercial and industrial wastes).



### Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>10</sup> sources within 1km of the site: road traffic from minor roads; gas/oil/solid fuel space heating for scattered buildings; Purton landfill (potential additional pollutants including dust, odour and NH<sub>3</sub>). Agricultural activities in the area are also potential sources of dust, bioaerosols, NH<sub>3</sub> and odour.
- 1.3 Estimated background annual mean levels of priority pollutants<sup>11</sup> for 2005 and comparable standards<sup>12</sup> are: 10.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 8.5µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 17.2µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential housing including scattered farms and Purton and Wildham villages. There is one County Wildlife Site within 1km: Red Lodge Wood.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (Parkgate Farm)	1 (1)	2 (2)	N/A	N/A	3 (3)	3 (3)	3 (3)
Residential between 100 and 250m	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 250m (farms and villages of Purton and Wildham)	1 (1)	1 (1)	N/A	N/A	2 (2)	1 (1)	2 (2)
Ecological designation within 1km of site (Red Lodge Wood)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

<sup>&</sup>lt;sup>10</sup> Of concern to public health include: Nitrogen dioxide (NO<sub>2</sub>)  $PM_{10}$  (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to yegetation: Oxides of Nitrogen (NO<sub>x</sub>) Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>11</sup> Priority pollutants are those presenting most problems for local air quality management in the UK: i.e.  $NO_2$  and  $PM_{10}$  Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>12</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



### 3. MITIGATION

3.1 Control measures for dust, odour and bio-aerosols are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low to high without mitigation. Mitigation for dust, odour and bio-aerosols is recommended. Detailed assessment is recommended if residential premises remain within 250m (Parkgate Farm); the assessment should account for the influence of Paven Hill (to the south) on local air flows. In any case, further assessment is recommended for bioaerosols and odour at receptors beyond 250m.

## Traffic and Transport Review

### **NW20 Parkgate Farm Purton**

#### Proposed Site Usage

This 23 ha site is proposed to be used for centralised outdoor composting, in-vessel composting, mechanical biological treatment and materials recovery facility.

#### **Existing/Potential Access**

This site is located to the north of Purton in North Wiltshire. The site is currently pasture land with associated farm buildings. River Key forms the north western boundary of the site and the Gloucester to Swindon railway line forms the north eastern boundary of the site.

The site is currently accessed from Witts Lane. It is also possible to access the site via Mopes Lane utilising an existing accommodation bridge on the north side of the site. Mopes Lane is a single carriageway off Cricklade Road. The junction of Mopes Lane/Cricklade Road is a simple priority junction with approximately 15m corner radii. The visibility from Mopes Lane is good in both directions. Currently there is a 7.5T weight limit on Cricklade Road just south of its junction with Mopes Lane which would prohibit HGVs from turning right out of the site. The preferred site access is via Mopes Lane using the existing accommodation bridge.

#### Impacts on Local Settlements

The main residential settlement, close to the site, is along Witts Lane. There are also some farm houses adjacent to the site.

#### **On-site Infrastructure**

Mopes Lane currently operates as a cul-de-sac. The existing access road to the site is long enough to accommodate the vehicles using the facility. There are currently some HGV movements along Mopes Lane which are generated from the existing recycling facility on Mopes Lane and the works adjacent to it. The traffic generation from the future site is not expected to be significant and therefore the impact in traffic terms will be minimal. The track leading to the accommodation bridge spurs off Mopes Lane. However the priority at this junction is not clearly defined. In case of intensification of the traffic along Mopes Lane this junction may require to be appropriately improved.

#### Off Site Highway Network

The closest junction to the site is the junction of Packhorse Road (B4553)/Cricklade Road which is a priority junction where the B4553 is the major arm. The minor arm is located on the inside of a tight bend which restricts the visibility. As all of the HGVs will be using this junction, due to the weight limit on Cricklade Road, mitigation measures in the form of provision of a right turn lane from the major road may be required.

#### Constraints

Currently there is a 7.5T weight limit on Cricklade Road just south of its junction with Mopes Lane which prohibits HGVs from turning right out of the site.

#### Mitigation

Improvements to Mopes Lane may be required.

#### Conclusion

Provided access is gained off Mopes Lane via the existing accommodation bridge, this site is suitable, in traffic terms, for the proposed uses.

## **Ecological Report**

### NW20 Parkgate Farm, Purton

#### DESK STUDY INFORMATION

## *Statutory designated sites within 1km and non-statutory sites within 500m:* None identified.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There is a record for great crested newt within the site within the south-east edge. There are no other records within the site boundary.

There are several records for county rare plants within 500m (the closest over 80m from the site boundary), including smooth brome, midland hawthorn, pale toadflax, pink water-speedwell, and meadow brome. There is one record for redshank, a county notable bird approximately 190m south-east of the site boundary.

### Details of surveys already undertaken (where known):

None identified.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The site is mainly pasture land (neutral improved grassland) with species poor hedgerows (both managed and outgrown) surrounding the fields. There are small areas of young planted woodland. An area appears unused for development or grazing to the south-east of the site which contains ponds, mature trees, plantation woodland, and rough grassland.

There are disused farm buildings (Parkgate Farm) in the south-western corner of the site which are in disrepair.

The River Key forms the sites north-western boundary. This is a very small river with a channel of only 1-2m in width and very shallow water. A live railway line covered in dense scrub and trees forms to north-eastern boundary.

#### Field Evidence and suitable habitat for notable species:

Five ponds were identified on or within 500m of the site, four of which are considered suitable to support great crested newts and other amphibians, two of these within the site boundary in the south-east corner. There are existing records of great crested newt for this area of the site. The fifth pond could not be checked due to access restrictions.

There are mature trees; particularly a poplar at Target Note 2 (see Phase 1 Habitat Plan) with bat roosting potential and bats may use the hedges and young plantation, and the ponds and grassland within the south-east corner for foraging and commuting habitat.

Nesting swallows were observed in the disused farm outbuildings. The outbuildings have low bat roosting potential but the farm-house (which could not be internally inspected as it was not in a safe state of repair for entry) could support roosting bats and nesting birds.

There is low potential for white-clawed crayfish along most of the river (due to a silty substrate) although there was some potential under the bridge at the north-west corner of the site over the river. Stones and concrete/brick rubble provides potential crayfish refuges (no crayfish were observed during the survey).



#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

There are no designations on the site and the ecological features within the site boundary are of local nature conservation importance but the habitat in the south-east corner of the site, the disused farm buildings, and the River Key are particularly important features for local wildlife.

Hedgerows and rivers are listed as priority habitats in the Wiltshire BAP.

#### Potential Ecological Impacts:

Wide scale development of the site would cause loss of habitat of local nature conservation value including hedgerows, small areas of plantation woodland, rough grassland and ponds. There would also be small scale loss of bird nesting and potential bat roosting habitat (disused farm buildings and mature trees).

There would be potential water quality impacts on the River Key both during construction and operation and the banks of the river may be directly affected by construction activities.

Overall adverse ecological impacts are likely to be of minor significance pending the results of further surveys.

#### Potential mitigation:

- Buffer zone of at least 5m from the edge of the River Key
- Retention of rough grassland area with ponds and trees in the south-east corner of the site (adjacent to railway line) and management of this habitat for biodiversity. Management could include pollarding mature trees (willows surrounding water bodies), thinning of plantation woodland with coppicing/pollarding where appropriate, control of scrub on the edge of the water bodies and periodic (once per year) topping of the grassland at the end of the summer (late August – September).
- Retention of hedgerows around the outside of the site, particularly where these link with linear features such as the railway line and small strips of woodland. Replacement of mature hedgerows.
- Control of surface water run-off so that no direct discharge to the River Key and pre-treatment of any discharges via silt traps and oil interceptors.
- Retention of mature trees as marked on Phase 1 habitat plan
- Retention of old stable building where swallows nesting or replacement with a structure designed for swallows to nest in elsewhere on the site. No demolition within the bird nesting season (1 February to 31 August inclusive).
- No direct discharges to water courses. Surface water run-off should be directed through silt traps and oil interceptors if appropriate or through balancing ponds prior to any discharges.
- Adherence to Environment Agency Pollution Prevention Guide notes when working close to water courses, particularly PPG01, PPG03, PPG05, PPG06 and PPG21.

#### Residual impacts:

If all of the mitigation is undertaken the large loss of habitat of local value will still cause an adverse impact of minor significance in the short-term.

#### **Opportunities for enhancement:**

- Management for biodiversity of habitat in south-east corner of site (see mitigation section above)
- Management of grassland buffer zone to River Key

#### Recommended further ecological work/surveys:

- Great crested newt surveys of the two ponds on the site and the three ponds within 500m.
- Bat surveys on mature trees if require felling


- Bat surveys on old farm house prior to demolition (safety of buildings would have to be confirmed before entry. Surveys may have to be carried out as evening emergence surveys with the aid of bat detectors rather than through visual day-time inspection due to poor condition of structure).
- Crayfish surveys on River Key if any works proposed directly to the river, particularly around the bridge adjacent to the north-west corner of the site.

#### Policy and Legal Implications

Relevant nature conservation policies from the North Wiltshire Local Plan 2011 (June 2006): NE9 PROTECTION OF SPECIES NE10 MANAGING NATURE CONSERVATION FEATURES NE11 CONSERVING BIODIVERSITY NE14 TREES, SITE FEATURES AND THE CONTROL OF NEW DEVELOPMENT NE22 SURFACE WATER RUN-OFF NE23 WATER COURSES

A Defra development licence is likely to be required for most areas within the site boundary if great crested newts are found within any of the suitable ponds identified.

Phase 1 Habitat Map



### Joint Waste Site Allocations Site Survey Report



Number	Target Note	Species Notes
1	Very open farm buildings, derelict, one open barn with slate roof old swallows nests, rest of building in poor state of repair, little potential for bats apart from as temporary summer roost, not safe for internal inspection	
2	Mature poplar [P. tremulous]	
3	River approximately 1m wide steep banks approximately 2m height heavily vegetated with nettles one side electric fenced other side with tall unmanaged hedgerow with trees. Heavily shaded in areas, pasture area up to fence line within 0.5m of water 20cm dep	Marsh marigold, canary reed grass, gypsywort, water plantain, water-forget me not, crayfish potential, no water vole signs but access restricted
4	Pond 25m x 10m pollarded willows cloudy deep	sweet grass, broad leaved pondweed, soft rush, water forget-me- not, marsh foxtail, crowfoot, high potential for newts
5	Improved grassland fields with low species diversity, rotation grazing (sheep).	
6		ox-eye daisy , york fog, f.rubra, r. crispus, des ceas, vetchling, soft rush, common bindweed clover, shrews, vetch, crested dogs tail, brome, false oat grass, sweet vernal grass, chickweed, c. vulgare,
7	Young plantation	ash, oak



## **Protected Species and Designated**



# Site: NW21 Parkgrounds Farm, Wooten Bassett

## Landscape and Visual Survey

### NW21 Parkgrounds Farm, Wooten Bassett

#### 1. Introduction

The site is located just to the north of the M4 motorway, on the B4042 approximately 1.5km west of Wootton Bassett. The southern boundary of the site is defined by a railway line. To the south of the railway, between the site and the M4 is a former landfill. The site lies upon ground with a significant rise to the north. The site is currently in use for agriculture; predominantly pasture for livestock (dairy cattle).

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Upper Thames Clay Vales Key characteristics relevant to the site:

- Gently undulating clay lowland farmland with regular and well-ordered field patterns defined by thick hedgerows, however intensification of agricultural activities have resulted in the removal of hedgerows, enlarged fields and new farm buildings
- Open floodplain landscapes displaying gravel workings and flooded pits
- Brick built buildings reflect the widespread use of the local clay as a building material with plain tiled roofs

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Open Clay Vale

Landscape Character Area: Avon Open Clay Vale on the cusp of Minety Rolling Clay Lowland Key characteristics relevant to the site:

- Level land form with wide open skies and views to ridges and downs
- Predominantly intensively managed permanent pasture with some arable
- Hedgerows, gappy or low flailed in places with sparse hedgerow trees enclose fields of varying size.
- Sections of the area remain rural and tranquil despite major routes through (M4).
- Buildings in varied material of brick, render and stone

Generally the condition of the landscape character area is considered by WCC to be 'moderate', with a 'moderate' strength of character.

The strategy for the area is to conserve the elements that contribute to the rural, tranquil landscape and improve elements in decline such as hedgerows and hedgerow trees

#### North Wiltshire Landscape Character Assessment (North Wiltshire District Council)

Landscape Character Area: Swindon Fringe Key characteristics relevant to the site:

- Elevated ground with rolling hills and a steep escarpment to the north and west
- A mix of building ages and styles, from historic village centres to more recent brick and reconstituted stone houses with modern building materials



- Wide views from elevated positions on the scarp slope and high points over floodplain and lowland vales
- Degraded agricultural landscapes, including arable and pasture, with gappy hedgerows in poor conditions and lack of mature trees
- Presence of power lines, service section land uses and communication corridors
- Comprehensive network of public footpaths

#### Landscape Designations and Rights of Way:

- The Withy Bed County Wildlife site is adjacent to the east
- There are two public rights of way crossing the site, one loosely following the line of the railway, the second running roughly north to south to the south of Park Grounds Farm house and along the eastern edge of Withy Bed County Wildlife site

#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site comprises a sloping agricultural landscape with large fields bounded by low hedgerows, allowing views throughout the site. Access is from the north of the site off the B4042 at the top of the ridge. There are several residential properties along the B4042. At the base of the slope is Park Grounds Farm, located centrally on are relatively flat expanse of farmland. The farm comprises several farm sheds and buildings, as well as a traditional farm house.

To the south of Park Grounds Farm is a former landfill, currently being completed and restored. The site is exposed to the south, with uninterrupted views out over the M4 to the rolling agricultural landscape beyond. The landscape to the south is interlaced with woodland copses. The landform creates a broad east – west valley, with another rise further to the south. In the distance to the south the control tower and hangar a Royal Air Force base are visible.

The site is bounded by a mix of hedgerow and woodland copses. The hedgerow trees are predominantly oak, many are in poor condition. To the southwest / west of the site are several copses of woodland, potentially ancient woodland.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: Medium

The rural landscape is cleaved by the M4. South of the site is a former landfill, fully exposed to the south. The site is not a good example of the wider landscape character and therefore has a low landscape quality. The site topography will require careful planning of any development due to the exposure to the south. Locating facilities within the existing Park Grounds Farm cartilage at the base of the ridge, in a style in keeping with the rural agricultural style with minimise adverse impacts. Improvements to the locally characteristic hedgerow field boundaries will enhance the degraded landscape quality. Therefore the site has a moderate capacity to accommodate change.

#### 5. Potential Landscape Impacts

• Further erosion of the rural character and setting

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning –facilities to be located to the base of the ridge adjacent to Park Grounds Farm, development to avoid exposed areas at the top of the slope
- Facilities to be in keeping with the local vernacular/agricultural style
- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to screen views into the site and strengthen rural character
- The following 'Broad Management Objectives' for the Open Clay Vale in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - o Retain and manage the hedgerow network and nurture new hedgerow trees
  - Promote appropriate management of arable land including retaining area of fallow land and maintaining an unploughed margin around fields
  - Minimise small scale incremental change such as signage or fencing which could change the rural peaceful character of the landscape
  - Ensure both future construction and changes to existing buildings integrate with the existing character and structure of settlements
  - Screen views to intrusive urban edges through planting new woodland
- The following Enhancement Priorities proposed for the Swindon Fridge landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:
  - Restore hedgerows and specimen trees especially oak and ash
  - Discourage further ribbon development along roads
  - Discourage change of land use except where visual impact from the realm is minimised
  - Ensure development reinforces the locally distinctive character and respects the vernacular, and incorporates landscape mitigation to minimise adverse effects on the landscape and visual amenity

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Highgate Cottage Residents	High	Moderate adverse	<ul> <li>Facilities to be in keeping with the local vernacular / agricultural</li> </ul>
Highgate Cottages Residents	High	Substantial adverse	style
Highgate Farm Residents	High	Negligible	<ul> <li>Use of native hedgerows and trees and native woodland</li> </ul>
Residential properties in Callow Hill	High	Negligible	planting to site boundaries to screen views into the site
Residential Properties south of the M4	High	Slight adverse	
Footpath Users	High	Substantial adverse	
Railway Users	Low	Slight adverse	Facilities to be located to base of
M4 Motorway Users	Low	Moderate adverse (slight if development contained to south of site)	the ridge in proximity to the existing Park Gate Farm buildings
B4042 Users	Low	Slight adverse	<ul> <li>Structure planting around site boundary</li> </ul>

#### 7. Visual Impact and Mitigation



#### 8. Summary: Residual Landscape and Visual Impacts

The proximity of the M4 and the former landfill to the immediate south of the site have degraded the landscape character of the area, which strongly impacts on the site due to its exposed nature, this gives the site a poor landscape quality. Sensitive site planning and establishment of hedgerows and screen planting will improve the site enclosure allowing the site to accommodate change while minimising adverse landscape and visual impacts of development.

#### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys
- Night-time visual surveys

## **Noise Assessment**

### NW21 Parkgrounds Farm, Wooten Bassett

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Parkgrounds Farm to assess the site's suitability for a waste treatment plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be the property known as Lowgate Cottage (this has been marked on OS mapping as Highgate Cottage) located approximately 155m to the north of the sites western outcrop and approximately 440m south of the B4042.
- 1.3 There are a number of properties located on the B4042 at a similar distance to the site but traffic along the B4042 would likely offer some masking noise thus reducing the sensitivity of these receivers.
- 1.4 The site is currently used for farming livestock and is flanked to the south-west by the local railway line and, at the northern most boundary by the B4042. The M4 is located approximately 40m from the south-east of the site boundary.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 27<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site and at the most sensitive receiver predominantly consists of traffic noise from the M4 and B4042 and environmental sources such as birdsong, cows, and insects, etc
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	13:51	39.4	55.7	37.0
MEASUREMENT 2	13:58	40.5	53.5	38.8
MEASUREMENT 3	14:03	40.6	52.6	37.5
AVERAGE		40.2		37.8

2.3 The average background noise level at the most sensitive receiver was measured as 37.8dB L<sub>A90</sub>.



### 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at Parkgrounds Farm include landfill, outdoor composting and inert materials recovery facility. The boundary of the site area proposed for use passes within 155m of the most sensitive receiver. Given the background noise level, L<sub>A90</sub> of 37.8dB at the most noise sensitive receivers, it is expected that any new waste development would need to be located a minimum distance of approximately between 1630m and 515m away from such receivers depending on the proposed activities of the development. It may possible for the development to be located closer to other nearby receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Minimum separation distances may be achievable within the site boundary depending on the exact use of the site and background noise levels at other nearby sensitive receivers. Indications are that this site would potentially be suitable for the proposed development depending on these factors. It is likely that mitigation measures would be required at this site.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

NW21 Parkgrounds Farm, Wooten Bassett, 50 ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1) is located west of Wootton Bassett just north of the M4. It is currently in agricultural use, predominantly for livestock. To the south is a former landfill with ongoing completion and restoration operations, and - to the south of that - the M4.



### Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>13</sup> sources within 1km of the site: road traffic on the M4, B4696, B4042, and minor roads; gas/oil/solid fuel space heating for scattered buildings; completion and restoration activities at the adjacent landfill (potential additional pollutants including dust, odour and NH<sub>3</sub>). Agricultural activities in the area are also potential sources of dust, bioaerosols, NH<sub>3</sub> and odour.
- 1.3 Estimated background annual mean levels of priority pollutants<sup>14</sup> for 2005 and comparable standards<sup>15</sup> are: 22µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 17.4µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 18.8µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: scattered farms and properties including Callow Hill and Ballard's Ash villages. County Wildlife sites within 1km: Withybed, Wootton Bassett; Callow Hill Farm Meadow; Folly Wood; Hooker's Gate Farm Meadow; Midgegall Copse Ancient Woodland; Flaxlands Wood; Flaxlands Manor; Ballars Ash Road verge.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NΗ₃	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (Highgate Cottage)	2 (2)	2 (2)	N/A	N/A	3 (3)	3 (3)	3
Residential between 100 and 250m	1 (1)	1 (1)	N/A	N/A	3 (3)	2 (2)	3
Residential beyond 250m (Purton, Wildham, farms)	1 (1)	1 (1)	N/A	N/A	2 (2)	1 (1)	2 (2)
Ecological designation within 1km of site	N/A	1 (1)	2 (2)	2 (2)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

<sup>&</sup>lt;sup>13</sup> Of concern to public health include: Nitrogen dioxide (NO<sub>2</sub>)  $PM_{10}$  (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>) Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>14</sup> Priority pollutants are those presenting most problems for local air quality management in the UK: i.e. NO<sub>2</sub> and PM<sub>10</sub>. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>15</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



### 3. MITIGATION

3.1 Dust, odour and bio-aerosols control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low to high without mitigation. Mitigation for dust, odour and bioaerosols is recommended. Detailed assessment is recommended for bioaerosols and odour if the layout of the site is to include composting facilities within 250m of receptors; given the size of the site, there is potential for these activities to be located beyond 250m. The need for further assessment of impacts in-relation to NO<sub>x</sub> and NH<sub>3</sub> and ecology should be considered.

## **Traffic and Transport Review**

### NW21 Parkgrounds Farm, Wooten Bassett

#### Proposed site usage

This 60ha site is located north of the M4, 1.5km North West of Wootton Bassett. The proposed usage is for

landfill / outdoor composting and inert material recovery.

#### **Existing/Potential Access**

This note examines the suitability of the access to the site from the B4042. The land is currently in agricultural use and the only access is from a hard surfaced track from the B4042. The B4042 is a single carriageway road that is subject to a 60mph speed limit. The B4042 is a minor road linking Wootton Bassett with Malmesbury

Visibility from this current access is good with 250m+ in both directions however the traffic speeds on the B4042 were observed to be higher than the speed limit with a number of vehicles observed overtaking opposite the potential site access.

#### Impacts on Local Settlements

The village of Brinkworth lies to the West of the site where the B4042 is subject to a 50mph speed limit along the majority of the village length reducing to 30mph in parts. Increased HGV use through this linear settlement may face local opposition, due to the narrow nature of the road and the large numbers of houses with direct frontage on the B4042. Wootton Bassett lies to the South East of the site. HGV traffic is unlikely to impact significantly on this settlement.

#### **On-site infrastructure**

The existing access to the site is of considerable length and would be likely to easily accommodate the traffic arriving at site with no issues of blocking back to the highway network. It is considered that such infrastructure is suitable to accommodate traffic associated with the proposed facility.

#### Off Site Highway Network

The junction to the East of the site where the B4042 joins the A3102 is a 4 arm roundabout linking the South West and Wootton Bassett to Swindon. The M4 is accessed via a larger signalised roundabout slightly further to the East.

#### Constraints

The impact of HGV waste traffic on the village of Brickworth could create local opposition with a potential negative impact likely on the residential amenity of the area. Professional advice on the likely noise impacts should be considered.

#### Mitigation

Although the impact of this proposed development on the residential amenity of the area is of concern there would be little that could be done to alleviate such an issue except not developing the site for such uses. Specific advice relating to noise issues of HGV traffic might suggest potential mitigation measures related to such potential impact.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses. However the environmental implications on the residential amenity of the village of Brinkworth should be considered.

Joint Waste Site Allocations Site Survey Report



## **Geological Assessment**

#### NW21 Parkgrounds Farm, Wooten Bassett

NGR at centre of site – SU 049841 Location description – Close to the M4, 2.5km northwest of Wootton Bassett Area of site (ha) - 23

Table 1: Geological Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Table 2: Environmental CSM for A (geological assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Geology	Geology	Contaminate non aquifer (Oxford Clay) on site, or minor aquifer at distance – Hazelbury Bryan and Stanford Formations	Low / Medium	Refer to Water (Quality and Environ	ment) site assessment comments
		Generation / migration of landfill gas through geological strata	Low / Medium	Engineered gas management system Consider limiting types of waste landfilled at site	Approach Environment Agency for monitoring requirements Monitoring boreholes (may be required
		Contamination potential through capped, closed site with new geological profile	Medium / High	Environmental Management Plan Working Plan	for obtaining operating permit) Formal assessment of risk to local water environment as part of a permit / license application
	Designated sites	North Wessex Downs AONB at distance from the site	Low	Landscape survey and appropriate planning assessment to avoid impact on AONB	Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental
	Other adjacent	Close to M4 corridor Farmland and farms	Low / Medium	Management of windborne	baseline can be measured/monitored

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment
	Receptor		Impact	Measures	Requirements
			Significance	(to be considered as appropriate)	
	landuses	surrounding site,		material at site boundaries	Approach Environment Agency for
		neighbouring landfill site			requirements
		and 2 other landfills		Ensure site development does not	Assess the current risk mitigation at the
		nearby (one closed, one		impact the landfill risk mitigation	existing landfill site
		operational)		measures	

Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Parkgrounds Farm, Wootton Bassett is:

- Few / no geological issues identified, with risk mitigation considered to be practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the ground conditions and geology features identified during the desk study can only be assessed during a detailed site visit and/or intrusive site investigation. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## Water (Quality and Environment) Assessment

#### Site name – Parkgrounds Farm, Wootton Bassett

NGR at centre of site – SU 049841 Location description –Close to the M4, 2.5km northwest of Wootton Bassett Area of site (ha) -

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	PotentialRiskMitigationMeasures(to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Contaminate major aquifer	Medium / High	<ul> <li>Plan mitigation requirements during construction</li> </ul>	<ul> <li>Environmental management during construction</li> </ul>
		Contaminate Source Protection Zone	Low	Layout planning of site	<ul> <li>Approach Environment Agency for</li> </ul>
	Surface water C body B tri C da B In to	Contaminate watercourse adjacent to site (Thunder	Low / Medium	<ul> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of</li> </ul>	monitoring requirements
		Brook or unnamed tributary)			<ul> <li>Relevant licensing requirements (PPC) to be assessed</li> </ul>
		Contaminate watercourse downstream (Brinkworth Brook)	Low		<ul> <li>Produce Working Plan for site</li> </ul>
		Impact on baseflow/runoff to watercourse	Low		<ul> <li>Review runoff treatment requirements</li> </ul>
				<ul> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>
		Flood Risk	Low	• Engineered flood defence or	Approach Environment Agency for

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	PotentialRiskMitigationMeasures(to be considered as appropriate)	Likely Further Assessment Requirements
				mitigation	<ul><li>requirements</li><li>Check flood risk assessment requirements</li></ul>
	Designated sites/ Adjacent sensitive landuses	Deteriorate / impact areas of nearby ancient woodland	Low	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> </ul>
	Other adjacent landuses	Rural setting surrounding the site with areas of woodland	Low / Medium		<ul> <li>Approach Environment Agency for requirements</li> </ul>

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Parkgrounds Farm is:

- o Few / no significant issues identified. Risk mitigation is considered practicable to address issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

### NW21 Parkgrounds Farm, Wootton Bassett

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

Withy Bed, Wootton Bassett Wildlife Site: Woodland located directly adjacent to the north-western boundary of the site.

Callow Hill Farm Meadow Wildlife Site: Grassland field located directly adjacent to the western boundary of the site.

Folly Wood Wildlife Site (3 parcels): Located approximately 250m east of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Within the site there are two records of brown long-eared bats and one record of a common pipistrelle bat (45kHz). These records are located by the farm buildings in the centre of the site. The records do not specify whether these are roosting bats.

Within 500m of the site there are:

- Three records of badger: All located over 240m north-west of the site;
- Two bird records: Including one record of a redshank and one record of a skylark;
- One record of a brown hairstreak butterfly;
- Records of four rare vascular plants in Wiltshire: Including nine records of great burnett, three records of meadow brome, one record of narrow fruited watercress and one record of midland hawthorn).

#### Details of surveys already undertaken (where known):

Complete ecological surveys of the site were undertaken by Alexander Associates in 2004 (as part of a planning application). These surveys included all land within the site boundary identified by Wiltshire County Council for the survey undertaken in August 2006.

The previous surveys identified:

- Two bat roosts within two buildings at Parkgrounds Farm. A brown long-eared bat roost was found in the old farm house and a pipistrelle bat roost was found in an old barn (shown as T2 on the Phase 1 habitat map).
- Two ponds which support breeding populations of great crested newts (shown as T13 and T20 on the Phase 1 habitat map).

No evidence of badgers, water voles, otters or reptiles were noted during the surveys completed in 2004.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The majority of this site is covered in semi-improved neutral grassland used for pasture. Within the site there are a large number of species-poor hedgerows and a small number of species-rich hedgerows. Semi-mature tree standards are present within most of the hedgerows.

An area of semi-natural broadleaved woodland is present adjacent to the north-western boundary of the site (Withy Bed, Wootton Bassett Wildlife Site). This woodland consists predominantly of oak and ash.

There is one wet ditch within the site and four drains which were dry at the time of survey.



There are four ponds within the site (shown on Phase 1 habitat map). Two of these ponds were dry at the time of survey (T1 and T13).

#### Field Evidence of notable species:

The loft of the old farm house (with records of roosting bats) was checked for evidence of bat activity. A pipistrelle bat and a brown long-eared bat were found roosting on the ridge beam. A large number of bat droppings were also observed on the floor beneath the central ridge beam. The old barn (which also has records of roosting bats) was not checked for evidence of bat activity for health and safety reasons (there was no floor in the loft space). This building and the other old farm buildings have the potential to support roosting bats. The modern buildings present on the site have a lower potential to support bat roosts.

There are a large number of semi-mature and mature trees present within the site. These trees have the potential to support roosting bats.

Within the site there are four ponds. The previous ecological surveys of the site confirmed that two of these ponds support great crested newts (T13 and T20) and that one did not (T1). Pond T1 and T13 were dry at the time of the current survey. However both have the potential to support great crested newts. Pond T20 was wet at the time of the current survey and has a high potential to support great crested newts. Pond T18 is a newly constructed drainage lagoon which receives water from the composting activities which take place within the site. This lagoon was constructed in June 2006 and as such was not surveyed by Alexander Associates in 2004. This pond has a low potential to support great crested newts.

There are 14 ponds present within 500m of the site. The potential of these ponds to support great crested newts was not assessed as part of this survey (due to access constraints). It is possible that one or all of these ponds have the potential to support great crested newts.

Within the site there is one wet ditch. The water in this ditch is stagnant and has emergent and marginal vegetation within it. Due to the stillness of the water in the ditch and the present of vegetation suitable for great crested newts to lay eggs upon this ditch has the potential to support great crested newts.

Large amounts of swallows were observed flying within the site. They were seen above the farm buildings, the large grassland field and the large water storage lagoon (T18). Swallow nests were also noted on the farm buildings within the site.

No other field evidence of legally protected species was identified.

#### OTHER INFORMATION

None identified.

#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

The site is of local nature conservation value consisting of large areas semi-improved grassland. Within the site there are ecological features of high importance within the context of the site. This includes the two bat roosts and the two ponds which support breeding populations of great crested newts. There are also semimature and mature trees which may support bat roosts and two other ponds and a ditch which may support breeding populations of great crested newts.

#### Potential Ecological Impacts:

There may be disturbance (through noise and vibration) to the Withy Bed, Wootton Bassett Wildlife Site and Callow Hill Farm Meadow Wildlife Site which are directly adjacent to the proposed land fill site.

There are no predicted impacts on the Folly Wood Wildlife Site.

Potential ecological impacts include the loss of large areas semi-improved grassland. Other potential impacts include the possible loss of a large number of hedgerows and semi-mature and mature trees.

There may also be the loss of known bat roosts (and trees which may support bat roosts) and the loss of ponds that are known to support great crested newts (and three other waterbodies which may support great crested newts).

The overall works are likely to have minor ecological impacts.

#### Potential mitigation:

- Retention of the old farm buildings this will protect the bat roosts within these buildings;
- Retention of the semi-mature and mature trees present throughout the site;
- Retention of as many of the hedgerows within the site as possible;
- Retention of all ponds and the wet ditch within the site this will protect any great crested newts using these habitats;
- Strict adherence to Environment Agency's Pollution Prevention Guidelines. These measures will help to prevent detrimental impacts on water quality of the ponds, drains and ditches within the site;
- Strict adherence to current guidelines with regard to the levels of noise and vibration. This will help to reduce the impacts on the Withy Bed, Wootton Bassett Wildlife Site and Callow Hill Farm Meadow Wildlife Site present directly adjacent to the site;
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

- Bat surveys on semi-mature and mature trees that require felling. This should include a daytime inspection assessing trees for potential to support bat roost(s), followed by an evening emergence survey if appropriate.
- Bat surveys on any buildings to be demolished. This should include a daytime inspection assessing buildings potential to support bat roost(s) followed by an evening emergence survey if appropriate. This should include surveys of the known roost sites to confirm that
- Great crested newt presence/absence surveys of the four ponds and one wet ditch within the site if works are to be undertaken within 500m of these waterbodies.
- Assessment of the 14 ponds present within 500m of the site to establish their potential to support breeding populations of great crested newts. If works are proposed within 500m of any of these ponds which have the potential to support great crested newts, presence/absence surveys of these waterbodies should be completed.
- Badger surveys should be undertaken within the site and for a zone of 50m outside the site.
- Nesting bird surveys for house martins, swallows and swifts on any buildings if to be demolished.

#### Legal and policy implications:

- If bats are roosting in any buildings that are to be demolished a development licence will be required from Defra. Further mitigation will be required to compensate for the loss of roosting habitat.
- If great crested newts are found in any of the ponds within the site or 500m around the site a great crested newt development licence will be required from Defra. Further mitigation will be required to prevent the injury or death of any great crested newts present within the site and to compensate for the loss of any great crested newt breeding ponds and/or suitable terrestrial habitat.
- If works are required within 30m of a badger sett, or a badger sett is to be lost, a disturbance licence will be required from English Nature.



The Nature Conservation policies in the North Wiltshire Local Plan that are potentially relevant to this site include:

- Policy NE 7;
- Policy NE 9;
- Policy NE 10;
- Policy NE 11;
- Policy NE 14;
- Policy NE 22;
- Policy NE 23.



### Phase 1 Habitat Map



Number	Target Note
1	Dry pond. Full of reed canary grass (which is dying). Pond is approximately 10m x 10m. It is fenced off from the surrounding pasture fields and surrounded by bramble and the occasional hawthorn shrub.
2	Known bat roost locations. An old barn (constructed in 1868) and an old farm house. These are constructed from red brick, with pitched tiled roofs. Tiles are missing from the roofs in places and there are holes in the brick work which bats may be using to gain access to these loft spaces. There are a couple of other old farm buildings within the site, these have the potential to support bat roosts. The more modern buildings present have a low potential to support roosting bats. Swallow nests noted on a number of buildings within the site.
3	Dry drain approximately 0.5m wide. It is filled with grass and hard rush.
4	One semi-mature ash tree and two semi-mature oak trees in hedgerow. There are cracks and crevices which may be of possible use to bats. Retain if possible. If to be felled undertaken further bat surveys.
5	Dry drain approximately 1m wide. It is filled with large amounts of hard rush (on the banks and in the centre of the channel).
6	Predominantly oak and ash woodland (semi-mature). It is currently being thinned as has had no management for 25 years. The ground cover consists predominantly of ivy, bramble, nettle and ground ivy. The trees are generally too young to support roosting bats. However trees should be checked for bats if they are to be felled. A thin hawthorn hedgerow surrounds the edges of the woodland.
7	Semi-mature oak tree. Low potential to support roosting bats. Retain if possible. If to be felled undertaken further bat surveys.
8	Drain no longer present.
9	Semi-mature oak tree. Low potential to support roosting bats. Retain if possible. If to be felled undertaken further bat surveys.
10	One semi-mature oak tree and two semi-mature ash trees. Low potential to support roosting bats. Retain if possible. If to be felled undertaken further bat surveys.
11	Two semi-mature oak trees. Low potential to support roosting bats. Retain if possible. If to be felled undertaken further bat surveys.
12	Small barn, used as shelter by cattle using the pasture fields. Swallow nests present within the building. The barn is constructed from red brick and has a corrugated metal roof and is very exposed within the barn. Checked for bats but none seen. IF to be demolished undertake further bat survey to confirm results.
13	Small pond (approximately 5m x 10m) which is now dry. There are records of great crested newts using this pond two years ago. Waterbody surrounded by oak, hawthorn and blackthorn. Fence present around the majority of the pond but cattle are getting in and poaching the edges. Pond filled with grass. Large piles of brick surround the pond (good terrestrial habitat).
14	Rail embankment covered in rosebay willowherb, bramble and hawthorn shrubs. There are the occasional semi-mature and mature trees present (predominantly oak).
15	Mature multi-stemmed oak tree. Low potential to support roosting bats. Retain if possible. If to be felled undertaken further bat surveys.
16	Two semi-mature oak trees. Low potential to support roosting bats. Retain if possible. If to be felled undertaken further bat surveys.
17	Wet ditch with bare banks (only small amounts of grass present). The water present is stagnant and algae is present. Rushes, reed mace and floating sweet grass are present within the channel. No evidence of water vole activity was noted. This ditch has the potential to support great crested newts.
18	Large pond approximately 10m by 20m. Constructed in June 2006. Murky water with no marginal, aquatic or emergent vegetation.



	Banks are steep and bare of vegetation. This pond receives water from the composting activities which occur on site. Swallows were noted flying over and feeding above this pond.
19	Two semi-mature oak trees. Low potential to support roosting bats. Retain if possible. If to be felled undertaken further bat surveys.
20	Large pond approximately 20m by 30m. There are records of great crested newts using this pond two years ago. The water in the pond is murky with leaf litter on the base. It has gently sloping banks and shallow margins. The pond is surrounded by willow, ash and hawthorn trees and is quite heavily shaded as a result. The water level in this pond is quite low.





# Site: NW22 Porte Marsh Industrial Estate, Calne

## **Cultural Heritage Report**

### NW22 Porte Marsh Industrial Estate, Calne

### **DESK STUDY INFORMATION**

#### Known heritage assets within Study Area

WSMR No:	SU07SW307
Site Name:	Romano-British Linear Feature
Grid Ref:	SU00497280
Description:	A) Sherds were found in the fill of a heavily truncated ditch during an evaluation
-	in 1994 and 1999 which promotes the suggestion that a Romano-British
	settlement site is close by.
Designation:	None
WSMR No:	SU07SW309
Site Name:	SW end of Beverbrook Deserted Medieval Village (DMV)
Grid Ref:	SU00507263
Description:	Sherds and animal bone was found during an evaluation in 1999, from the
	Medieval holloway associated with Beversbrook DMV SU07SW450. The quantity
	was enough to suggest a settlement nearby, perhaps even pre-dating the
	Medieval settlement.
Designation:	None
WSMR No:	SU07SW462
Site Name:	Find Spot
Grid Ref:	SU00497280
Description:	A sherd of late medieval pottery was found in an area of ridge and furrow during
	an evaluation ahead of development in 1994
Designation	None
WSMR No:	SU07SW466
Site Name:	Holloway
Grid Ref:	SU00057263
Description:	Holloway to Beversbrook was seen in Trenches 1 & 2 of an evaluation in 1999.
	Terminus post quem of 17th century.
Designation:	None

#### Known heritage assets within 500m of Study Area boundary

WSMR No:	SU07SW450
Site Name:	Beversbrook Deserted Medieval Village
Grid Ref:	SU00417291
Description:	A) <i>Bevresbroc</i> in AD1086. B) Extensive well-preserved earthworks of a Deserted
-	Medieval Village survive. C) No features noted during a watching brief but 2
	pieces of pottery were found. D) Evaluation trench 1 in 1999 on earthwork
	interpreted as a holloway. E) The earthworks are linear in plan, 500m long with a
	holloway running almost the whole length on the eastern margin. Flanking this to
	the north west are a series of long rectilinear platforms. At the north east end of
	the holloway, the earthworks broaden into a series of well defined square



	platforms and enclosures. Most prominent of these is a square platform 1.5m			
	earthworks to the north and east. The village is listed in the Domesday Book of			
	1086, and was presented a chapel in 1298.			
Designation:	Scheduled Monument No SM 31656			
WSMR No:	SU07SW316			
Site Name:	Romano-British Linear feature			
Grid Ref:	ST99667231			
Description:	A) A series of weak anomalies may indicate the site of a Romano-British wooden			
-	farmstead. Only one anomaly was strong enough to be clearly archaeological,			
	and may form part of a boundary ditch enclosing the purported farmstead.			
Designation:	None.			

#### FIELD SURVEY INFORMATION

No visible cultural heritage features. The Beverbrook DMV Scheduled Monument is separated from the site by the modern link road.

#### SITE ASSESSMENT

**Cultural Heritage value**: The Study Area borders the edge of the site of Beverbrook Deserted Medieval Village (Scheduled Monument – SM 31656 / WSMR SU7SW450). Some related features of the site are known within the boundary of the Study Area.

**Potential Cultural Heritage Impacts:** Although the development of the existing business park and link road is already likely to have impacted on surviving archaeological deposits, the potential remains for more to be found in the event of further development.

**Further Evaluation & Potential Mitigation:** Any proposals for development at this site must be accompanied by an archaeological field evaluation in accordance with PPG 16 (Planning & Archaeology), to define the character and extent of the archaeological remains that exist in the area of the proposed development. It is essential that the County Archaeologist and English Heritage are consulted at the earliest possible stage regarding the undertaking and results of such an evaluation. Where unrecorded features of archaeological importance are found, the advice of the County Archaeologist and English Heritage will be essential as to the appropriate action required. As with identified features of archaeological interest in proximity to the site, development should mitigate any potential impacts through careful design and landscaping and, where required, through preservation in situ of any remains.

An assessment of any impacts from development of the site upon the Beverbrook DMV Scheduled Monument immediately north of the site must be undertaken, including impacts upon its setting and integrity. Development should mitigate any potential impacts upon this Scheduled Monument and its setting through careful design and landscaping. Where any impacts cannot be adequately mitigated planning permission may be refused.

**Assessment:** Further evaluation is required as to the suitability of this site at the Planning Application stage.



# Site: NW23 Purton Brickworks Employment Allocation

## Landscape and Visual Survey

### NW23 Purton Brickworks Employment Allocation

#### 1. Introduction

The site is located to the north of Purton, North Wiltshire. The Gloucester to Swindon railway line runs immediately adjacent to the south. Access to the site is via Mopes Lane, off an unclassified road, Cricklade Road, which links from Swindon to Purton, up to the B4553. The site currently comprises land in industrial uses, including a former brickworks and clay pit used for landfilling. There are several residential properties within the vicinity of the site along Cricklade Road.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Upper Thames Clay Vales Key characteristics relevant to the site:

- Gently undulating clay lowland farmland with regular and well-ordered field patterns defined by thick hedgerows, however intensification of agricultural activities have resulted in the removal of hedgerows, enlarged fields and new farm buildings
- Open floodplain landscapes displaying gravel workings and flooded pits
- Brick built buildings reflect the widespread use of the local clay as a building material with plain tiled roofs

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Minety Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on clay
- Medium to large fields, mainly pastoral land use with pasture concentrated around the water courses
- Variable field pattern with network of hedgerows in good conditions and mature hedgerow trees
- Presence of streams marked by lines of willows and crossed by modest bridges
- Scattered settlement of towns, small villages and farmsteads, many using vernacular materials of brick, half timber, stone, tiles and thatch
- Roads largely minor and rural with a few trunk roads and sections of motorway
- A largely peaceful, rural landscape

Generally the condition of the landscape character area is considered by WCC to be 'moderate', with a 'moderate' strength of character.

The strategy for the area is to conserve the elements that contribute to the landscape character and enhance areas that are becoming degraded, such as the urban fringes

#### North Wiltshire Landscape Character Assessment (North Wiltshire District Council)

Landscape Character Area: Thames Valley Lowland



Key characteristics relevant to the site:

- Low, level or undulating ground
- Continuous hedges with many mature oak and ash
- Field sizes vary from small and irregular to medium sized and regular shaped, predominantly pasture
- Dispersed or nucleated settlement on higher ground using vernacular materials of stone and local brick
- Generally contained views, but with some longer views and a sense of containment over the Thames floodplain

#### Landscape Designations and Rights of Way:

- The Withy Bed County Wildlife Site to the east
- There is a public right of way running north south through the site, with several side routes leading offsite in various directions
- A public Bridal Way runs east west across the site

#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site is flat industrial land in a rural location, the characteristic of which is protected by a Rural Buffer, on the outer fringe of the village of Purton. The site comprises various industrial uses, including the Purton Household Recycling Centre and Purton Landfill.

The site is parcelled into several industrial and commercial compounds, with a mix of building style from large industrial sheds and temporary cabins to brick construction offices. The site is cluttered with signage, active and disused utility poles, lighting columns including spot lights and CCTV columns, skips as well as a telecoms tower; wiremesh and palisade security fencing enclose most of the compounds. Unoccupied space is predominantly rough grassland and scrub, littered with construction waste.

The site extremely active; there is a high potential for conflict between public and business users with the industrial traffic including HGVs. Road surfaces and generally poor; minimal landscaping has been undertaken. The site is partially enclosed by unmanaged hedgerows; Dutch Elm disease has resulted in several dead trees within these.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: Moderate

The site is entirely incongruous with the wider rural / suburban fringe landscape setting. The unpleasant industrial atmosphere and degraded landscape within the site gives it a poor landscape quality. The site is currently a significant landscape detractor, uncontrolled expansion or intensification of which should be restricted. Sensitive site planning with facilities in keeping with the rural style, as well as restatement and enhancement of hedgerows and woodland planting would counter balance any adverse impact on the local landscape character. Therefore the site has a moderate ability to accommodate change.

#### 5. Potential Landscape Impacts

• Further erosion of the rural character

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning -facilities to be located to prevent intrusion into the rural character
- Facilities to be in keeping with the local vernacular/agricultural style
- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to strengthen the rural character
- The following 'Broad Management Objectives' for the Open Clay Vale in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - $\circ$   $\;$  Retain and manage the hedgerow network and nurture new hedgerow trees
  - Promote appropriate management of arable land including retaining area of fallow land and maintaining an unploughed margin around fields
  - Minimise small scale incremental change such as signage or fencing which could change the rural peaceful character of the landscape
  - Ensure both future construction and changes to existing buildings are designed to integrate with the existing character and structure of settlements
    - Screen views to intrusive urban edges through planting new woodland
- The following Enhancement Priorities proposed for the Thames Valley Lowland landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:
  - Conserve hedgerows and mature trees, including planting new trees in existing hedges and planting specimen trees in field corners
  - Encourage planting of new woodland copses
  - o Discourage development which would detract from the tranquil rural character

Visual Receptor	Sensitivity	Potential Residual	Potential Visual Mitigation
	of Receptor	Impact on Receptor	Measures
Hansell's Farm	High	Slight adverse	<ul> <li>Facilities to be low, single or double storey in keeping with the local vernacular / agricultural style</li> <li>Use of native hedgerows and</li> </ul>
Residents			
Pound Farm	High	Slight adverse	
Residents			
Residential	High	Negligible	
Properties along	_		trees and native woodland
Cricklade Road			planting to site boundaries to screen views into the site
Residential	High	Negligible	
Properties to the			
northwest fringe of			
Purton including			
Widham			
A419 Road Users	Low	Negligible	Structure planting around site boundary
Adjacent Landfill	Medium	Negligible	

#### 7. Visual Impact and Mitigation

#### 8. Summary: Residual Landscape and Visual Impacts

The site is currently a significant landscape detractor, sensitive site planning with low, single or double storey facilities in keeping with the rural style would have a minimal adverse impact. Therefore the site has a moderate ability to accommodate change.

The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.



### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

## **Traffic and Transport Review**

### NW23 Purton Brickworks Employment Allocation

#### Proposed Site Usage

This 3.5 ha site is proposed to be used for strategic materials recovery and a local scale recycling facility.

#### **Existing/Potential Access**

The site is located to the north of Purton in North Wiltshire. The Gloucester to Swindon railway line forms the southern boundary of the site.

The site comprises of land in industrial uses, the former brick works and the former clay pits. The site also accommodates the existing Purton Household recycling Centre which is accessed off Mopes Lane. The site is allocated for employment in the North Wiltshire Local Plan.

The site can be accessed from either Mopes Lane or New Road. However, New Road is a mainly residential road and its junction with Cricklade Road is not suitable for HGV use. Therefore the only feasible access option is off Mopes Lane where the existing recycling facility is located.

Mopes Lane is a single two lane carriageway off Cricklade Road. The junction of Mopes Lane/Cricklade Road is a simple priority with approximately 15m corner radii. The visibility from Mopes Lane is good in both directions. Currently there is a 7.5T weight limit on Cricklade Road just south of its junction with Mopes Lane which prohibits HGVs from turning right out of the site.

#### Impacts on Local Settlements

The main residential settlement in the close proximity to the site is Purton and there are a number of residential properties immediately adjacent to the site which is accessed off New Road. As noted above New Road is not suitable for accessing the site and therefore all of the traffic to the site will arrive/egress via Mopes Lane.

#### **On-site Infrastructure**

Mopes Lane currently operates as a cul-de-sac. However there is a possibility of a link through the proposed site to New Road. The future facility should remove this link so all the traffic accessing the site uses Mopes Lane. The existing access road to the site is long enough to accommodate the potential queue of vehicles using the facility. As part of the existing site is used for as a household recycling facility, the traffic generation from the proposed uses will be similar to existing levels and therefore the impact in traffic terms will be negligible. There is minor road that spurs off Mopes Lane. However the priority at this junction is not clearly defined. In case of intensification of the traffic along Mopes lane this junction may require to be appropriately improved

#### Off Site Highway Network

The closest junction to the site is the junction of Packhorse Road (B4553)/Cricklade Road which is a priority junction where the B4553 is the major arm. The minor arm is located on the inside of a tight bend which restricts the visibility. As all of the HGVs will be using this junction, due to the weight limit on Cricklade Road, mitigation measures in the form of provision of a right turn lane from the major road may be required.

#### Constraints

Currently there is a 7.5T weight limit on Crickdale Road just south of its junction with Mopes Lane which prohibits HGVs from turning right out of the site.

#### Mitigation

Joint Waste Site Allocations Site Survey Report



Improvements to Mopes Lane may be required.

### Conclusion

This site is suitable, in traffic terms, for the proposed uses.

## **Ecological Report**

### NW23 Purton Brickworks Employment Allocation

#### DESK STUDY INFORMATION

# *Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:* No designations or notable habitats.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

One record of badger, approximately 500m north-east of the site.

Two records of great crested newt, approximately 475m west of site.

Also present within 500m include two records of pink water speedwell (440m north-west of site), one record of smooth brome and meadow brome (185m south-west of site) and two records of redshank, a bird species (260m south-west of site).

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The site consists mainly of semi-improved grassland (rough and unmown) and large areas of hard-standing with some small areas of amenity grassland. A wet ditch forms the south-eastern boundary of the site (part of which flows through the centre of site adjacent to a species-poor overgrown hedgerow with mature tree standards). The majority of this ditch is covered by dense vegetation.

#### Field Evidence of notable species:

One pond present within 500m (located approximately 15m north-west of site). No access possible to this pond due to it being present behind tall fencing in the grounds of an industrial unit. However this pond observed from a distance (through the fencing). It is considered suitable to support great crested newts and other amphibians. Furthermore there are records of great crested newts within 500m of the site suggesting that great crested newts are in the vicinity.

Mature, ivy covered ash trees (see Phase 1 habitat plan) with bat roosting potential.

Four buildings present within industrial estate which have the potential to support roosting bats. It is unlikely that these buildings will be affected by the waste proposals.

Wet ditch has the potential to support water voles. This watercourse could not be surveyed due to dense vegetation coverage.

Red deer observed within site boundary.

#### **OTHER INFORMATION**

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

Local: No sites designated for their nature conservation value surround the site. However there are habitats of value to common species including hedgerows and semi-mature and mature trees.



#### Potential Ecological Impacts:

There is the possible loss of habitat of local nature conservation value including hedgerows, a number of semi-mature and mature trees and semi-improved (rough) grassland. There are potential water quality impacts on the wet ditch which flows through/adjacent to the site. Overall adverse ecological impacts are likely to be minor adverse.

#### Potential mitigation:

- Retention of hedgerows and semi-mature and mature trees scattered throughout site to help maintain biodiversity value of the site.
- Retention of wet ditch present within/surrounding site as an open channel.
- Once water vole surveys of the wet ditch have been completed (to confirm presence or absence of this species) some clearance of wet ditch present within/surrounding site. Retention of at least 2m strip between edge of ditch and new development.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines when working in close proximity to, or within, the wet ditch present within the site.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

• Clearance of dense vegetation covering the wet ditch.

#### Recommended further ecological work/surveys:

- Great crested newt surveys of pond located 15m north-west of the site.
- Bat surveys on semi-mature and mature trees if require felling.
- Bat surveys on any buildings to be lost prior to demolition (to include visual day-time inspection followed by evening activity survey if appropriate).
- Water vole surveys on the wet ditch if any works proposed will be undertaken within 25m of the watercourse. It was not possible to undertake these surveys due to the very dense nature of the vegetation covering this watercourse.

#### Legal and policy implications:

- If great crested newts are found to be using the pond located 15m north-west of the site a great crested newt development licence will be required from Defra and mitigation will be required to prevent the injury or death of any great crested newts present within the site and to compensate for the loss of any suitable terrestrial habitat.
- If bats are found to be roosting within any trees to be felled or buildings to be demolished a development licence will be required from Defra. Mitigation will need to be put in place to compensate for the loss of any roosting habitat.
- It is recommended that if water voles are present on the wet ditch a method statement for works is compiled by an ecologist. This will help minimise disturbance to any water voles present and protect their habitat from damage and destruction.

The Nature Conservation policies in the North Wiltshire Local Plan that are potentially relevant to this site include:

- Policy NE 9;
- Policy NE 10;
- Policy NE 11;
- Policy NE 14;
- Policy NE 22 and NE 23


Phase 1 Habitat Map





Number	Target Note	Species Notes
1	New build, modern, breeze block buildings and brick buildings with sloping asbestos roofs. Could not be inspected for possible bat access and egress points as buildings in use and access permission had not been obtained.	
2	Concrete building with metal cladding. Pitched asbestos roof. Could not be inspected for possible bat access and egress points as buildings in use and access permission had not been obtained.	
3	Area of rough, unmown grassland. This area is of possible use to reptiles as there are large blocks of brick, concrete and stone present underfoot.	silver weed, crested dogstail, dock, yarrow, tormentil, common vetch, birds foot trefoil, false oat-grass, thistle, ox-eye daisy, hard rush, ribwort plantain, pendulous sedge and other sedge species, rough stemmed meadow grass, cranesbill species, Yorkshire fog and willowherb. Some goat willow and hawthorn shrubs were also present.
4	Area of unmown grassland.	thistle, common mouse ear, six-rowed barley, cock's-foot, nettle, Yorkshire fog, meadow foxtail, common vetch, creeping buttercup and tufted hair grass.
5	A metal cladded building with sloping metal roof and a small portacabin (the latter is in bad repair as the flat felt roof is peeling away at the edges). Could not be inspected for possible bat access and egress points as buildings were fenced off from rest of the site.	
6	Area of unmown grassland.	thistle, common mouse ear, six-rowed barley, cock's-foot, nettle, Yorkshire fog, meadow foxtail, common vetch, creeping buttercup and tufted hair grass.
7	Pond – could not access as it is behind locked gates in the grounds of an industrial unit. Pond inspected through the fencing. It is large and appears to be deep. It has gently sloping banks with some marginal vegetation present.	No aquatic or emergent vegetation could be seen. This pond has the potential to support breeding populations of great crested newts.
8	Mature white willow (multi-stemmed) and a young sycamore. The willow tree has a few cracks and crevices that may be of use to bats.	
9	Heavily ivy covered ash tree with the potential to support roosting bats. This is part of an overgrown and unmanaged hedgerow with trees.	
10	Wet ditch. The majority of this ditch could not be seen or surveyed for water vole or otter due it being covered by dense vegetation (including bramble, bittersweet, willowherb and common cleavers).	There is a little amount of aquatic vegetation and marginal vegetation present (including fools' water cress and pendulous sedge). This watercourse has a low potential to support white-

	It is slow flowing and less than 30cm deep.	clawed crayfish and water voles.
11	Area of unmown grassland. Pond marked on OS Base searched for but not present.	thistle, common mouse ear, six-rowed barley, cock's-foot, nettle, Yorkshire fog, meadow foxtail, black medick, self heal, ox-eye daisy, common vetch, creeping buttercup and tufted hair grass.
12	Sighting of a fallow deer.	
13	Area of scrub (mostly nettle and bramble) with mature and semi- mature ash trees present. The trees have a low potential to support bats as they have very few cracks and crevices that would be suitable for use be roosting bats.	



#### **Protected Species and Designated Sites**



# Site: NW25 Sands Farm Landfill and Quarry, Calne

### Landscape and Visual Survey

### NW25 Sands Farm Landfill and Quarry, Calne

#### 1. Introduction

The site is located to the east of Calne off an unclassified road, Sandpit Road, with links to the new northern Calne relief road. The site is currently in use as a sand quarry and landfill site. The land surrounding the site is used for agricultural purposes; immediately adjacent to the west is a remediated landfill used for grazing beyond which is an active landfill site.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Avon Vales, on the cusp of Berkshire and Marlborough Downs Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture
- Dry valleys forming deep combes with steep slopes and some remnants of grazed chalk grassland
- Uses, such as landfill, are widespread, with more substantial urban fringe areas than in neighbouring landscapes. The 'land in between' is often neglected.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Calne Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on clay
- Largely rural, tranquil landscape
- Variable field pattern of arable and pasture with hedgerows, though often replaced by fences and hedgerow trees are sparse
- Sparsely scattered settlement of towns, small villages and farmsteads, many using vernacular materials of local clay brick, stone and red roof tiles.
- Criss cross of rural roads

Generally the condition of the landscape character area is considered by WCC to be 'good', with a 'moderate' strength of character.

The strategy for the area is to conserve its peaceful rural landscape and strengthen its character through minimising urban influence.

#### North Wiltshire Landscape Character Assessment (North Wiltshire District Council)

Landscape Character Area: Hilmarton Rolling Lowland Key characteristics relevant to the site:

- Low lying mixed agriculture based on clay
- Scattered dwellings and small settlements away from Calne; mix of stone and brick



- Patchworks of small to medium sized fields, mainly pasture with arable on lighter soils
- Hedged boundaries predominantly well managed, but becoming discontinuous
- Peaceful rural character

#### Landscape Designations and Rights of Way:

- Approximately 1km to the east of the site is the North Wessex Downs Area of Outstanding Natural Beauty (AONB)
- Adjacent to the site at Cherhill Low are a Site of Importance for Nature Conservation (SINC) and a Regionally Important Geological and Geomorphological Site (RIGS).
- A public bridleway runs along the southern boundary of the site
- A public footpaths runs along the Penn Hill ridge to the north of the site

#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site is contained within a deep valley with industrial works at the bottom and a sand extraction site on the southern slope. Penn Hill is to the north-west of the site with the outer edge of Calne starting to encroach over from the northern slope. Compton Bassett hill is to the west with parkland, mature trees and lawns. The White Horse of Uffington is in the distance to the south. Views of the site from the White Horse are partially screened by existing planting and intervening topography, however a landfill located to the south of the site is identifiable by dust rising from the works.

The site operations include sand quarry and cleaning, batching, block making and a product distribution site. As well, there is landfill site for industrial, commercial and household wastes. The site buildings are industrial in character; a mix of large sheds in the industrial complex at the bottom of the valley, with site huts, temporary offices and landfill associated plant facilities up the slope to the sand quarry, and associated aggregate stock piles. The large sheds have been located in the most discrete possible location at the bottom of the valley and have been painted a soft green to blend as well as possible with the surrounding landscape. The site is highly active with lorries and landfill machinery creating a threatening atmosphere. There are security palisade fences, safety and directional signage, skips and lighting columns including floodlighting throughout the site. To the north-west on the higher ground of Penn Hill are a small number of farms and detached residential properties that overlook the site.

The site is located over a minor aquifer, Abberd Brook, at the bottom of the valley. Newly laid tarmac tracks loop the site and are used for sand quarry associated traffic. Immature Birch trees have been planted to screen the site from the most open views. There are arable fields surrounding the site defined by hedgerows with native hedgerow tree species including oak.

A public bridal path runs along the south of the site, leading from Spreckley Road to the east on towards Calne to the west. A public footpath runs along the Penn Hill Ridge overlooking the site from the north.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The wider setting of the site is tranquil and rural in character, and though the existing industrial complex has been set out under relatively sympathetic site planning, the rural character within the immediate



vicinity of the site has been degraded, giving it a poor landscape quality. The site is well enclosed by the deep valley topography and in time will be further screened by the immature Birch tree planting. Therefore the site has a high capacity to accommodate change without adversely affecting the local landscape character.

#### 5. Potential Landscape Impacts

- Further erosion of rural character beyond the contained valley setting (although this is under threat in any event, with continuing expansion of Calne)
- Additional degradation of the wider landscape character when impacts are measured in conjunction with the adjacent Waste Management Facility.

#### 6. Potential Landscape Mitigation Measures

- Site planning facilities to be located within a contained area close to the existing industrial complex and arranged so as to utilise the natural topography and existing screens such as the newly established tree planting
- Facilities to be no larger than the existing buildings, with an external finish to match the existing buildings
- Native woodland planting around site boundaries to screen views into the site and strengthen rural character
- The following 'Broad Management Objectives' for the Rolling Clay Lowlands in the *Wiltshire* Landscape Character Assessment are relevant to the site:
  - Retaining and managing hedgerow network and nurturing new hedgerow trees
  - Strengthening the enclosed character of the landscape and screening views to urban edges through nurturing existing and planting new woodland.
- The following Enhancement Priorities proposed for the Hilmarton Rolling Lowland landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:
  - Encourage repair, replanting, widespread extension of hedgerow network, and development of hedgerow trees where hedgerows are in poor condition.
  - Conserve mature trees, woodland clumps and shelterbelts
  - Discourage development in rural areas
  - Identify and seek opportunities to create new woodland belts and copses, in particular to help screen and contain development

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Penn Hill Farm Residents	High	Slight adverse	Hedgerow planting/tree
Abberd House Farm	High	Negligible	planting along site boundaries
Residents			Large structures to located at
Sands Farm Residents	High	Slight adverse	the bottom of the valley the
High Penn Farm	High	No Change	Vicinity of existing units
Residents			Facilities to be no larger than     the evicting buildings, with on
Visitors to White Horse	High	Slight adverse	external finish to match the
Ancient Monument			external million to match the
Users of Penn Hill	High	Slight adverse	existing buildings
footpath			
Users of Cherhill Down	High	Slight adverse	
bridleway			

#### 7. Visual Impact and Mitigation



Residential Properties on	High	No change	
the Eastern Fringe of			
Calne			

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on Old Camp Farm and the residences on Speckley Road, could be partially mitigated through sensitive site planning and screen planting.

#### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

### **Ecological Report**

#### NW25 Sands Farm Quarry and Landfill, Calne

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory sites within 500m:

Calne Sand Pits and Pearce's Old Pit (Calne) Wildlife Site: Part of the Wildlife Site is present in the southeastern corner of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

However, within 500m of the site there are:

- 18 records of brown hare;
- 8 records of rare vascular plants in Wiltshire (including two records of great burnet, three records of dwarf spurge and three records of spotted medic); and
- 147 records of notable beetle species;

# *Details of surveys already undertaken (where known):* None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The majority of land within the allocation boundary consists of hardstanding including car park and roads as well as buildings for an existing factory. The southern part of the site also contains an area of 'wet' sand and gravel processing.

Unmanaged broad-leaved woodland surrounds the site on the eastern, northern and western edges (only thin strips present on the northern and western edges). This woodland is overgrown with scrub and tall grasses.

The Abberd Brook runs adjacent to the western boundary of the site. The brook contained no aquatic or emergent vegetation and was heavily shaded by scrub and trees on the banks.

#### Field Evidence of notable species:

Two ponds are present within the site boundary, which are suitable to support great crested newt. A large pond in the south-western corner contains large fish but has abundant emergent and marginal vegetation in which amphibians could find refuge. A significant number of juvenile frogs were observed on the edges of the pond and on the banks of the Abberd Brook next to the pond. The second pond is close to the sand and gravel processing area in the southern part of the site where water has ponded on an area of hardstanding, within an area which is brick walled on 3 sides.

Calne Sands Pits/Pierce's Old Pit, Calne Wildlife Site comprises large lagoons surrounded by rubble bunds and species rich grassland. The lagoons contain fish and are frequented by waders and wildfowl. They have little potential for great crested newt but their presence within the lagoons cannot be ruled out.

Badger tracks were found in the woodland to the eastern edge and badger latines were found close to the large pond in the south-western corner. No badger setts were found. Deer tracks were also present in the woodland areas.



There did not appear to be any trees with potential for roosting bats although bats could use the woodland edges for foraging and commuting.

No evidence of water voles was found within the Abberd Brook.

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (factory buildings and hardstanding). However the woodland, the ponds and the Abberd Brook have nature conservation value in a local context.

#### Potential Ecological Impacts:

There may be direct loss of a small part of Calne Sand Pits and Pearce's Old Pit (Calne) Wildlife Site. This will not affect the actual water bodies within the designation but will affect terrestrial habitat within the designation. It is unlikely that loss of this area will significantly affect the functioning of the Wildlife Site.

There is the potential for the loss of the majority of the woodland within the site, affecting deer and badger habitat (foraging/commuting). There will also be the potential loss of terrestrial habitat used by great crested newts and possible loss of two ponds which could contain great crested newts.

There could be water quality impacts on the Abberd Brook which flows adjacent to site.

Overall works likely to have adverse impact of minor significance.

#### Potential mitigation:

- Retention of areas of broadleaved semi-natural woodland within the allocation boundary.
- Management of woodland areas for biodiversity including the clearance of some scrub and trees and creation of glades (brief management plan to be submitted to planning authority for approval).
- Retention of the larger pond in the south-western corner of the site. If great crested newts are present mitigation could include removal of fish form the pond.
- Retention of the narrow woodland strip between the edge of Abberd Brook and new development.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines when working in close proximity to, or within, the Abberd Brook.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### **Residual impacts:**

If the mitigation is undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

- Clearance of the dense vegetation from parts of the Abberd Brook flowing adjacent to the site,
- Management of larger woodland areas, including some scrub clearance (although dead wood, logs and brash should be retained on site to act as wildlife habitat rather than being cleared off site).

#### Recommended further ecological work/surveys:

• Thorough survey within woodland areas for badger setts, ideally in winter when ground vegetation is not so high. English Nature disturbance licence would be required for works within 30m of sett entrances. Provision of artificial setts may be required if setts are to be lost.



• Great crested newts surveys of the two ponds within the allocation boundary and of the adjacent Calne Sand Pits.

#### Legal and policy implications:

- If great crested newts are found to be using ponds within 500m of proposed working areas on suitable habitat a great crested newt development licence will be required from Defra.
- If works are required within 30m of a badger sett or a badger sett is to be lost a disturbance licence will be required from English Nature.

The Nature Conservation policies in the North Wiltshire Local Plan that are potentially relevant to this site include:

- Policy NE 7;
- Policy NE 9;
- Policy NE 10;
- Policy NE 11;
- Policy NE 12;
- Policy NE 14;
- Policy NE 22;
- Policy NE 23.



#### Phase 1 Habitat Map



Number	Target Note	Species Notes
1	Sand and gravel processing area	
2	Very dense unmanaged woodland, impenetrable in parts, very dark and shaded with thick shrub layer.	Common hawthorn, oak, bird cherry, ash, hazel, field maple, common nettle, curled dock, broad-leaved dock, meadow vetchling, hogweed, bramble, bird's-foot trefoil, coltsfoot, mugwort, yarrow, red dead nettle. Mammal tracks present mainly deer and also deer laying-up areas but also some badger tracks (no latrines found within the wood but badger latrine on edge of wood).
3	Large 3-sided bund made of high sandstone walls containing pooled standing water which was very choked with vegetation but had areas of open water. Water surrounded by brick rubble.	Water milfoil, spike rush, horsetail, lesser reed mace, goat willow (saplings), sweet grass. Lots of damselflies observed and water body suitable for amphibians including great crested newt.
4	Abberd Brook, approx 1m wide, steep banks. Bed mix of sand/gravel/silt. Water around 20cm deep with deeper sections to up to 1m. Heavily shaded by bank vegetation (trees and shrubs), no emergent or aquatic vegetation within the brook.	No signs of water voles, one rat burrow found, generally not suitable for crayfish.
5	Large water body (originally part of site drainage) which has large area of clear open water and lush areas of marginal vegetation. Directly adjacent to woodland, Abberd Brook and meadows to the south.	Abundant fish fry, abundant juvenile frogs on edges of pond, abundant dragonflies and damselflies. White water lily, spike rush, yellow flag, lesser reed mace, and compact rush within pond.

#### **Protected Species and Designated Sites**



# Site: NW27 Thingley Junction, Chippenham

### **Noise Assessment**

### NW27 Thingley Junction, Chippenham (Inset Map 35)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Thingley Junction to assess the site's suitability for waste recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be the Thingley Travellers Site located adjacent to the site.
- 1.3 The site is currently unused and is derelict and brownfield, flanked on the south-west side by the local railway line and Thingley junction, and surrounded by fields containing a few isolated farms.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 25<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site and at the most sensitive receiver predominantly consists of environmental sources such as birdsong, insects, and wind in tress, etc. and rail traffic noise from the railway line which is a main route from the south-west to London.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	14:58	53.2	71.3	38.6
MEASUREMENT 2	15:03	43.8	61.7	37.8
MEASUREMENT 3	15:08	54.1	69.7	38.0
AVERAGE		52.1		38.1

2.3 The average background noise level at the most sensitive receiver was measured as 38.1 L<sub>A90</sub>.

### 3. SITE SUITABILITY

3.1 The proposed use for the site at Thingley Junction is for local and inert waste recycling and a waste transfer station. The boundary of the site area proposed for use is adjacent to the most sensitive



receiver. Given the background noise level,  $L_{A90}$  of 38.1dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 495m away.

- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

### **Air Quality Report**

#### NW27 Thingley Junction, Chippenham, 6 ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1) is 1.5km south west of Chippenham, immediately north of the Chippenham-Bath railway line at Thingley Junction. The site is despoiled land formerly used by the MoD. It is currently largely unused/ brownfield/ derelict land.



#### Figure 1.1 – The site and its surroundings



- 1.2 Air pollutant<sup>16</sup> sources within 1km of the site: road traffic from the A350 and from minor roads and gas/oil/solid fuel space heating for scattered buildings. There are no industrial sources of bioaerosols and odour in the area.
- 1.3 Estimated background annual mean levels of priority pollutants<sup>17</sup> for 2005 and comparable standards<sup>18</sup> are: 13.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 10.8µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 17.9µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: scattered farms; residential premises within Easton to the west.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NOx	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 100m	1 (1)	1 (1)	N/A	N/A	1 (1)	1 (1)	1 (1)

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

### 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low without mitigation. Some mitigation for dust and odour mitigation is recommended. Further assessment should not be necessary.

<sup>&</sup>lt;sup>16</sup> Of concern to public health include: Nitrogen dioxide (NO<sub>2</sub>) PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>) Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>17</sup> Priority pollutants are those presenting most problems for local air quality management in the UK: i.e. NO<sub>2</sub> and PM<sub>10</sub>. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>18</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)

### Traffic and Transport Review

#### NW27 Thingley Junction, Chippenham

#### **Potential Use**

The potential use for the 6 ha site is for a local recycling/inert waste recycling and waste transfer station.

#### **Existing/Potential Access**

The site is located 1 mile from the A4 along a relatively narrow road that links the A4 in the north to the A350 in the south. This road is, in parts, just 5m in width. Design Bulletin 32 (Residential Roads and Footpaths), produced by the Department of Transport, states that a carriageway width of 5.5m is required to enable the largest type of vehicles to pass each. In its present condition parts of this road have insufficient width to accommodate two HGVs passing at the same point in the road whilst to the south of the site over the railway bridge the road narrows still further to approximately 3.5m. The road width to the south would require any access to be controlled to ensure that the site is serviced only by the A4 to the north. This can be achieved through HGV weight/width restrictions and routing agreements.

The existing access from the A4 in the north is via a priority crossroads junction. The A4 is a single carriageway road with a 60 mph speed limit at about 7.3m width. The traffic speeds from the west appear high given the vertical alignment of the road however the visibility in both directions is good.

The access road from the A4 is currently used to access local farms and as such existing traffic levels are low however it is likely that the road is used by locals as a rat run to gain access to the A350 (S) from the A4 (W). The site itself is in open countryside and is currently despoiled land formerly used by the MOD.

#### Impacts on Local Settlements

The site is 1.5km south west of Chippenham and Corsham lies 2km to the East. The impacts on these settlements are considered to be negligible.

#### **On-site infrastructure**

The existing access to the site via the road from the A4 in the north is of considerable length and easily accommodates the traffic arriving at site with no issues of blocking back to the A4.

#### Off Site Highway Network

This site will has potential to be accessed by the public and as such the site will typically attract car vehicle traffic predominantly at the weekend as well HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be low and the impact of the additional trips associated with the new site on the surrounding road network is likely to be negligible.

A transport assessment in conjunction with the Highways Agency will be a likely requirement at a latter stage in order to ascertain the likely impacts on the trunk roads.

#### Constraints

The width of the access road from the A350 in the south is too narrow for HGVs and as such HGV access from this direction should be discouraged. The access road from the A4 in the north is also narrow and does not allow two HGVs to pass side by side.

#### Mitigation

The road width to the south would necessitate the need for any access to be carefully controlled to ensure that the site is serviced only by the A4 to the north. This can be achieved by imposing restrictions, advisory notices and/or entering into routeing agreements prior to planning permission consent. In order to allow two HGVs to pass, road widths in the north would need to be increased by at least 0.5m along the entire 1 mile



length of road. Alternatively regular passing places could be built into the road. Any such designs would need to be subject to more detailed design.

#### Conclusion

The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network however extensive physical changes to the site access will be required. Consideration ought to be given (perhaps in conjunction with the highway authority) to a removal/management regime for vegetation in the verge at the site access.

### **Ecological Report**

#### NW27 Thingley Junction, Chippenham

#### DESK STUDY INFORMATION

# Statutory designated sites within 1km and non-statutory or other notable habitats within 500m: None identified.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There is one record of a notable species within the site boundary: grizzled skipper, a butterfly, which is toward the northern end of the site.

There is one record for great crested newt approximately 340m west, although no pond can be identified from OS base plans. There is a local road between the record and the site which could be considered to be a barrier to movement of newts into the site although the road is not heavily used.

Within 500m there are also records of brown hare and several County rare plants such as lesser centaury and harsh downy rose, the closest being a record for French oat-grass, over 100m south-west.

#### Details of surveys already undertaken (where known):

None identified

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The site is a former rail sidings surrounded by local roads to the north-west and south-west, a live railway line to the south-east and a travellers' caravan site to the north. The majority of the site is hardstanding or ballast with opportunistic short perennial plant species growing on the ballast. There is some dense scrub and immature to semi-mature trees on the edges of the site. The north-west section of the site supports grassland which is fairly species rich supporting some calcicoles (plants preferring base rich substrate such as limestone).

There is one old hanger style building which pigeons are using to nest but which has very limited potential for roosting bats. However there is an underground concrete bunker-style building in the northern part of the site which could have potential for roosting bats. This building was not entered during the survey for health and safety reasons (i.e. surveyor did not know whether the structure was safe for entry in terms of structural integrity and in terms of it possibility being a confined space with the potential for accumulation of noxious gases, as the site has potential land contamination and land instability issues).

#### Field Evidence of notable species:

Common nesting birds using the hanger style building. The underground bunker may have the potential for roosting bats and needs to be investigated further.

No ponds identified within 500m.

#### **OTHER INFORMATION**

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The majority of the site which is hard-standing or bare ballast material has negligible nature conservation value. However the species rich grassland in association with scrub and trees has local value. The bunker requires checking for the presence of roosting bats before the structure can be evaluated.



#### Potential Ecological Impacts:

There would be no impact on any statutory or non-statutory designated site.

The site is largely brown field with few important ecological features. The main potential impacts are loss of all or part of the species rich grassland and scrub and trees of local nature conservation importance which would cause adverse impacts of minor significance.

No impacts are currently predicted on legally protected species although the underground bunker structure needs to be checked for the presence of roosting bats. If present, the demolition of this structure would have adverse impacts, the significance of which would depend on the species and population size of bats present (if any).

#### Potential mitigation:

- Retention of a strip of the species rich grassland along the north-western boundary of the site.
- Any mitigation required following the results of a bat survey of the underground bunker. If bats were present a Defra development licence would be required in order to damage or destroy the structure or to disturb bats whilst using the structure.
- Demolition of the hanger style building outside of the bird nesting season (which generally occurs between 1 February and 31 August dependent on seasonal factors although most birds will nest between March and July).

#### Residual impacts:

If all mitigation carried out the impacts would be negligible pending the results of the bat survey.

#### **Opportunities for enhancement:**

Management of the retained grassland including topping the grassland once a year at the end of the flowering and seeding season (late August – September) and removing all cuttings to avoid nutrient enrichment of the soil.

#### Recommended further ecological work/surveys:

Bat surveys would be required on the underground bunker structure. Prior to these surveys the structural integrity of the bunker would have to be confirmed and the air within the structure tested for noxious gases. A bat surveyor who also has confined space training may be required to carry out this survey.

#### Legal and policy implications:

If bats were present in the underground bunker a Defra development licence would be required to destroy or damage the structure or to disturb bats whilst using the structure.

Relevant nature conservation policies from the North Wiltshire Local Plan 2011 (June 2006): NE9 PROTECTION OF SPECIES NE10 MANAGING NATURE CONSERVATION FEATURES NE11 CONSERVING BIODIVERSITY NE14 TREES, SITE FEATURES AND THE CONTROL OF NEW DEVELOPMENT

Phase 1 Habitat Map



### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Number	Target Notes	Species Notes
1	rabbit burrows	S. dioica, arum lily, meadow cranesbill, salad burnett, com knapwe3d, vetchling, tuft vetch, f-f-m-n, I. cornic. A. millef, H. sphon, grd ivy, great burnett
2	open warehouse block based metal support metal corrugated roof	
3	mix of ruderals and opportunistic ann/pere on hard-standing and ballast [old sidings - tracks still present]	G. pratense, R. fruticosus, C. angustifolium, liverworts, T.officinale, H.perforatum, P.erecta, teasel, M.sativa, L.periclymenum, p. vulgare, S.acre, mouse-ear,
4	Old MoD 'bunker' not checked for health and safety reasons, bunker goes round corner and could not see past that point: bat potential	

#### **Protected Species and Designated Sites**



# Site: NW28 Whitehills Industrial Estate, Wooton Bassett

### **Traffic and Transport Review**

#### NW 28 Whitehills Industrial Estate, Wootton Basset

#### Proposed Site Usage

This 13 ha site is proposed to be used as a local scale recycling facility and a material recovery facility.

#### **Existing/Potential Access**

The site is located on the south western fringe of Wootton Basset. The site is an existing industrial estate with office, general industrial and warehousing uses.

The site is currently accessed from a priority junction with Whitehill Lane. Whitehill Lane itself forms the minor arm of a priority junction with the High Street (A3102). Both Whitehill Lane and the A3102 are single two lane carriageways subject to 30 mph speed limit. The speed limit on Whitehill Lane changes to national speed limit just west of the site access. The visibility to the left out of the site access is restricted by a bend in the road.

The section of Whitehill Lane between the site access and the High Street is residential with some properties having direct access onto Whitehill Lane. Whitehill Lane/High Street junction is a four arm priority junction with good visibility in all directions.

#### **Impacts on Local Settlements**

The main residential settlement in the close proximity of the site is located along Whitehill Lane on the east of the site. The main users of the facility are expected to be the residents of Wootton Basset, all of which arrive via the residential part of Whitehill Lane.

#### **On-site Infrastructure**

The existing access road to the site is suitable for HGV usage. The recycling facility should be located at a location on the site to provide sufficient queuing capacity for vehicles using the facility to prevent the potential queue of traffic using the site from blocking Whitehill Lane.

#### Off Site Highway Network

The majority of the traffic arriving from Wootton Basset has to turn right at the four arm priority junction of Whitehill Lane/High St. Therefore the impact of the proposed facility at this junction has to be assessed, particularly in relation to safety, and possible modifications to accommodate additional traffic and safe operation of the junction identified.

#### Constraints

Potential adverse impacts on the residential property adjacent to the site and visibility to the left at the site are potential concerns.

#### Mitigation

Possible modifications to the local junctions.

#### Conclusion

In terms of traffic impact the site and off-site highways are suitable to accommodate the proposed uses with possible minor improvement to the highway network and consideration of noise/air quality on adjacent properties.

# Site: NW29 Studley Grange Waste Management Facility, Wooton Bassett

### Landscape and Visual Survey

#### NW29 Studley Grange Waste Management Facility, Wooton Bassett

#### 1. Introduction

The site is located to the east of Wootton Bassett off junction 16 of the M4 on the B4005. The site is currently in use as a Waste Management Facility. A railway lies immediately to the north of the site, with the M4 motorway to the north of that. Immediately adjacent to the east is a Garden Centre and tree nursery with visitor attractions such as a butterfly garden. To the south and west of the site are scattered farms and private residences.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Upper Thames Clay Vales Key characteristics relevant to the site:

- Gently undulating clay lowland farmland with regular and well-ordered field patterns defined by thick hedgerows, however intensification of agricultural activities have resulted in the removal of hedgerows, enlarged fields and new farm buildings
- Deterioration of hedgerows due to a combination of under management and neglect
- Brick built buildings reflect the widespread use of the local clay as a building material with plain tiled roofs

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Calne Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on clay
- Largely rural, tranquil landscape
- Variable field pattern of arable and pasture with hedgerows, though often replaced by fences and hedgerow trees are sparse
- Sparsely scattered settlement of towns, small villages and farmsteads, many using vernacular materials of local clay brick, stone and red roof tiles with a few larger population centres including Swindon.

Generally the condition of the landscape character area is considered by WCC to be 'good', with a 'moderate' strength of character.

The strategy for the area is to conserve its peaceful rural landscape and strengthen its character through minimising urban influence.

#### North Wiltshire Landscape Character Assessment (North Wiltshire Borough Council)

Landscape Character Area: Hilmarton Rolling Lowland Key characteristics relevant to the site:

- Low lying mixed agriculture based on clay
- Scattered dwellings and small settlements; mix of stone and brick
- Patchworks of small to medium sized fields, mainly pasture with arable on lighter soils
- · Hedged boundaries predominantly well managed, but becoming discontinuous
- Peaceful rural character



#### Landscape Designations and Rights of Way:

- The site is located within the North Wiltshire / Swindon Rural Buffer
- Close proximity to Morningside Farm Meadow and Chaddington Lane Verge Wildlife sties
- A public footpath runs across the site running adjacent to the Red House.

#### Local Authority Consultation:

North Wiltshire District Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed area comprises a rolling site with non-natural topography including a landfill to the west and a temporary capping stock pile to the north. North of the site is a railway line within a deep cutting; the cutting is well screened by deciduous planting in keeping with the local hedgerow field divisions. The M4 runs to the north of this bisecting the landscape. The M4 embankments have been recently planted with blocks of deciduous and coniferous screen planting.

Waste management operations include non hazardous landfill for industrial and commercial waste. The only building on site is the Red House, a residential property converted into site offices. The Waste Management site is highly active with landfill machinery creating a threatening atmosphere. A security weldmesh fence rings the active landfill, safety and directional signage and traffic management has been set out on the access track. Landscape remediation has been completed to the southern sections of the landfill.

To the immediate north of the site, opposite the capping stock pile and railway, are a few scattered farms with disused farm outbuildings. Hedgerows with Elm trees suffering from Dutch Elm disease define the cow and horse pastures. To the northwest Wootton Bassett is visible. Beyond the M4 are motorway associated services facilities, including a multi-storey Travel Inn. To the northeast is industrial and commercial urban sprawl from Swindon. In the distance to the northeast the taller structures of downtown Swindon are visible. The site is open to the south, overlooking a number of farms and detached residential properties within a rolling pasture landscape with fields defined by hedgerows and hedgerow trees. The ground rises to a low wooded escarpment further south.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The landscape setting to the south of the site is tranquil and rural in character; however the existing landfill uses, proximity of the M4 and the encroaching urban sprawl of Swindon have eroded this character within the immediate vicinity and to the north of the site, giving it a poor landscape quality. The site is well enclosed from the north by the temporary stock pile bunds, however is open and overlooked from the south. Distance and intervening topography offer the potential to provide effective screening to the site. Therefore the site has a high capacity to accommodate change without adversely affecting the local landscape character.

#### 5. Potential Landscape Impacts

• Further erosion of the rural character (although this is under threat in any event, with continuing expansion of Swindon)

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning –facilities to be located to maximise natural screening provided by the surrounding topography to prevent intrusion into the rural character
- Facilities to be in keeping with the local vernacular/agricultural style
- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to screen views into the site and strengthen rural character



- The following 'Broad Management Objectives' for the Rolling Clay Lowlands in the *Wiltshire* Landscape Character Assessment are relevant to the site:
  - Retaining and managing hedgerow network and nurturing new hedgerow trees
  - Strengthening the enclosed character of the landscape and screening views to urban edges through nurturing existing and planting new woodland.
- The following Enhancement Priorities proposed for the for the Hilmarton Rolling Lowland landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:
  - Encourage repair, replanting, widespread extension of hedgerow network, and development of hedgerow trees where hedgerows are in poor condition.
  - o Conserve mature trees, woodland clumps and shelterbelts
  - o Discourage development in rural areas
  - Encourage less intensive farming on arable land introducing headlands and margins
  - Identify and seek opportunities to create new woodland belts and copses, in particular to help screen and contain development

Visual Receptor	Sensitivity of	Potential Residual	Potential Visual Mitigation
	Receptor	Impact on Receptor	Measures
Upper Studley Farm	High	Moderate adverse	<ul> <li>Facilities to be located to</li> </ul>
Residents			maximise natural screening
Wickfield Farm	High	Negligible	provided by the surrounding
Residents			topography
Padbrook Farm	High	Substantial adverse	<ul> <li>Facilities to be in keeping with the</li> </ul>
Residents			local vernacular/agricultural style
Can Court Farm	High	Moderate adverse	<ul> <li>Use of native and evergreen</li> </ul>
Residents			hedgerows and trees and native
Great Chaddington	High	Negligible	woodland planting to site
Farm Residents			boundaries to screen views into
Lower Salthrop	High	Negligible	the site
Residents			
Residential properties	High	Negligible	
on the outskirts of			
Wootton Bassett			
Residential properties	High	Negligible	
on the outskirts of			
Swindon			
Nursery at site	Low	Slight adverse	<ul> <li>Structure planting around site</li> </ul>
entrance			boundary
Railway Travellers	Low	No change	
M4 Travellers	Low	Negligible	<ul> <li>Native woodland planting along</li> </ul>
Travel Inn Guests	Low	Negligible	north boundary of site to enhance
Industrial and	Low	Negligible	M4 screen planting
Commercial units			
along the M4			

#### 7. Visual Impact and Mitigation

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting and the undulating topography to the south, the site could accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.

#### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys



### Noise Assessment

#### NW29 Studley Grange Waste Management Facility, Wooton

#### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Studley Grange Waste Management Facility to assess the site's suitability for waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be the property known as Can Court Farm located approximately 450m to the south of the site.
- Upper Studley Farm is located in closer proximity to the site but closer to the M4 and junction 16. Traffic along the M4 would likely offer some masking noise thus reducing the sensitivity of this receiver.
- 1.4 The site is currently in use as a strategic non-hazardous waste landfill and is flanked to the north by the local railway line and the north-west by the B4005. The remaining boundaries are surrounded by fields containing a number of isolated farms. The closest point on the M4 is located approximately 320m to the north-east of the site boundary.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 27<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of industrial noise from activities within the site such as diggers etc, road traffic noise from the M4 and B4005 and environmental sources such as birdsong, and insects, etc. The current noise climate at the most sensitive receiver predominantly consists of traffic noise from the M4 and B4005 and environmental sources such as birdsong, cows, and insects, etc. It was observed that noise emanating from the existing landfill site was perceptible at this location however noise from the site stopped prior to measurements being taken.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	12:57	48.3	62.7	41.8
MEASUREMENT 2	13:03	48.5	61.2	41.0
MEASUREMENT 3	13:14	53.9	67.8	40.6
AVERAGE		51.1		41.1



2.3 The average background noise level at the most sensitive receiver was measured as 41.1dB L<sub>A90</sub>.

#### 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at Studley Grange Waste Management Facility includes landfill, composting, materials recovery facility, waste transfer station, recycling and mechanical biological treatment. The boundary of the site area proposed for use passes within 450m of the most sensitive receiver. Given the background noise level, L<sub>A90</sub> of 41.1dB at the most noise sensitive receiver, it is expected that any new waste development would need to be located a minimum distance of approximately between 1104m and 350m away from such receivers depending on the proposed activities of the development. It may possible for the development to be located closer to other noise sensitive receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Minimum separation distances may or may not be achievable within the site boundary depending on the exact use of the site. Indications are that for this site to be suitable the proposed development would likely require the implementation of mitigation measures and considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



### **Air Quality Report**

#### NW29 Studley Grange Waste Management Facility, Wooton Bassett, 50 ha

#### 1. BASELINE CONDITIONS

1.1 The site (Figure 1) is situated off Junction 16 of the M4 on the B4005. The former Wilshire and Berkshire Canal runs along the southern boundary and the Swindon-Bristol railway forms the northern boundary. It is currently in use as a strategic non-hazardous waste landfill (household, industrial and commercial waste). A WTS and composting facility have also been permitted but are not currently in use.



#### Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>19</sup> sources within 1km of the site: road traffic on the M4, A3102, B4005 and other minor roads; gas/oil/solid fuel space heating for buildings; Biffa Waste Services Ltd landfill (potential additional pollutants including dust, bioaerosols, odour and NH<sub>3</sub>).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>20</sup> for 2005 and comparable standards<sup>21</sup> are: 28.5µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 20.4µg/m<sup>3</sup> NO<sub>2</sub>

 $<sup>^{19}</sup>$  Of concern to public health include: NO<sub>2</sub>, PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: NO<sub>x</sub>, Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



(standard 40µg/m<sup>3</sup>); 20.2µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas (AQMA) within 1km.

Potentially sensitive receptors within 1km: a number of isolated residential properties 1.4 surrounding the site; south-western outskirts of Swindon. There are two County Wildlife Sites: Morningside Farm Meadows and Hagbourne Copse.

#### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NOx	NΗ <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential at over 100m of site	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	2 (3)

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least) 2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

#### 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

#### CONCLUSIONS 4.

4.1 Air quality risks for the intended use are low to high (in-combination with existing landfill) without mitigation. Mitigation for dust and odour is recommended. Detailed assessment should be undertaken to examine cumulative odour impacts.

<sup>&</sup>lt;sup>20</sup> Priority pollutants are those presenting most problems for local air quality management in the UK: i.e. NO<sub>2</sub> and PM<sub>10</sub>. Estimates are from NETCEN, website www.airquality.co.uk/archive/index.php

<sup>&</sup>lt;sup>21</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



### Traffic and Transport Review

#### NW29 Studley Grange Waste Management Facility, Wooton Bassett

#### Proposed Site Usage

Strategic Landfill (for the disposal of industrial, commercial waste and hazardous waste)/ Material recovery facility/ composting/ waste transfer station/ local recycling/ Inert waste recycling/ Mechanical Biological treatment.

#### **Existing/Potential Access**

Part of this 50ha site is already in operation as a strategic non-hazardous waste landfill facility. The facility currently shares its access with a neighbouring garden centre.

The existing access to the site is directly from the B4005 via a priority crossroads junction (including a seemingly quiet access opposite the access to the landfill/garden centre) with a right turn filter lane from the B4005. The B4005 is a single carriageway road with a 60 mph speed limit at about 7.3m width widening to 9m at the site access. To the south of the existing access on Hay Lane a 7.5 tonne environmental weight restriction is in place. The road to the south of the site access reduces in width.

The access to the site is shared with a large garden and aquatic centre. This generates more traffic outside of the peak periods and at weekends especially in the spring/summer season. During these periods large numbers of trips are generated. It is assumed that the garden centre use would remain if the site were extended. The strategic landfill site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this shared access site will be fewer than at weekends and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible given likely relatively small increases in employee numbers.

During a half hour period of observation at the site access four HGVs were observed to arrive at and depart the site. Even if site traffic were to double this would result in an increase in off-peak traffic of some 16 two-way HGV movements. There are no residential properties adjacent to the highway network on the B4005 between M4 J16 and the site access.

Visibility to the left is sub-standard (50m approx) due to the horizontal alignment of the carriageway and the presence of mature vegetation. The standard visibility for a 60mph road is 215m, although lower speeds were apparent on this stretch of road. The majority of HGV traffic has been observed originating from and returning to the North in the direction of the motorway. The 7.5T weight limit to the right of the site access and the clear desire for HGV's to return in the direction of the motorway results in the visibility to the left of the access being of a lesser concern and no problems were apparent. Accident records could be checked at a more detailed stage of design.

Visibility to the right is reduced by the horizontal alignment of the road that restricts visibility to approximately 100m. This visibility is further reduced by the presence of overhanging vegetation that may need to be removed or subject to seasonal management.

#### Impacts on Local Settlements

Wootton Bassett is located 2km to the West of the site and Swindon 1km to the north east. The impacts on these settlements are likely to be minimal.

#### On-site infrastructure

The existing access to the site is of considerable length and easily accommodates the traffic arriving at site with no issues of blocking back to the highway network. It is considered that this infrastructure is suitable to accommodate traffic associated with a proposed extension to the site.

#### Off Site Highway Network



To the north of the site is Junction 16 of the M4, a large five-arm signalised roundabout from where the M4 motorway is accessed. It is possible that any application for extension of the site may require a more detailed transport statement. However, in purely traffic terms; the extension to the site is unlikely to have an unduly adverse traffic impact on the surrounding highway network.

#### Constraints

No major constraints however visibility at the access is reduced by vegetation

#### Mitigation

Although visibility is not considered a problem at the moment it is sub-standard. It is proposed that should the proposal for an increased size of the facility go forward that improvements to visibility are made at the site access by careful removal and management of vegetation at this location.

#### Conclusion

The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes to the site access. Consideration ought to be given (perhaps in conjunction with the highway authority) to a removal/management regime for vegetation in the verge at the site access.



### **Geological Assessment**

#### NW29 Studley Grange Waste Management Facility, Wooton Basset

NGR at centre of site – SU 100819 Location description – Close to the M4, 5km southwest of Swindon Area of site (ha) - 50

Table 1: Geological Information and results – See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Table 2: Environmental CSM for A (geological assessment)

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment	
	Receptor		Impact	Measures	Requirements	
			Significance	(to be considered as appropriate)		
Geology	Geology	Contaminate non aquifer (Oxford Clay) on site, or minor aquifer at distance – Hazelbury Bryan and Stanford Formations	Low / Medium	Refer to Water (Quality and Enviror	iment) site assessment comments	
		Generation / migration of landfill gas through geological strata	Low / Medium	Engineered gas management system Consider limiting types of waste landfilled at site	Approach Environment Agency for monitoring requirements Monitoring boreholes (may be required	
		Contamination potential through capped, closed site with new geological profile	Medium / High	Environmental Management Plan Working Plan	for obtaining operating permit) Formal assessment of risk to local water environment as part of a permit / license application	
	Designated sites	North Wessex Downs AONB at distance from the site	Low	Landscape survey and appropriate planning assessment to avoid impact on AONB	Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental	
	Other	Close to M4 corridor and	Low / Medium		baseline can be measured/monitored	
Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment	
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	Receptor		Impact	Measures	Requirements	
			Significance	(to be considered as appropriate)		
	adjacent	canal		Management of windborne		
	landuses	Farmland and farms surrounding site, nurseries and garden centres and some housing with 1 waste transfer station nearby		material at site boundaries Ensure site development does not impact the landfill risk mitigation measures	Approach Environment Agency for requirements Assess the current risk mitigation at the existing landfill site	

## Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Studley Grange, Wootton Bassett is:

Several / potentially significant issues identified and risk mitigation is considered practicable to address most issues Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## Water (Quality and Environment) Assessment

## Site name – Studley Grange, Wootton Bassett

NGR at centre of site – SU 100819 Location description – Close to the M4, 5km southwest of Swindon Area of site (ha) - 50

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater Surface water body	Contaminate non aquifer Contaminate Source Protection Zone Contaminate watercourses on and adjacent to the site Impact on baseflow/runoff to watercourse	Low / Medium Low Medium/High Low	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Relevant licensing requirements to be assessed</li> <li>Relevant licensing requirements (PPC) to be assessed</li> <li>Environmental management during construction</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> <li>Assess current impacts of landfill</li> </ul>
		Flood Risk	High	Engineered flood defence or mitigation	<ul><li>Operations</li><li>Confirm nature of existing on-site</li></ul>

## Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
	Groundwater abstraction point	Contaminated groundwater abstraction	Low/Medium		drainage/surface water features
	Designated sites/ Adjacent sensitive landuses	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> <li>Ensure landfill risk mitigation</li> </ul>		<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> <li>Consider the potential environmental impact adjacent landuses have, and</li> </ul>	
	Other adjacent landuses	Rural area current landfill operations farm houses, garden centre	Low /Medium	measures are not compromised	<ul><li>how an appropriate environmental baseline can be measured/monitored</li><li>Approach Environment Agency for requirements</li></ul>
		Current discharge consents and several recent pollution incidents	Low /Medium		<ul> <li>Assess current impacts and mitigation measures at the landfill site</li> </ul>

## Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Studley Grange, Wootton Bassett is:

- o Few / no significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## **Ecological Report**

## NW29 Studley Grange Waste Management Facility, Wootton Bassett

## DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory sites within 500m:

Chaddington Lane Verge Wildlife Site lies along a local road approximately 150m west.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Great crested newts are present on the site (the site has been subject to a Defra development licence for this species which is on-going).

There are no other records of notable species within the site. There is a badger record approximately 350m north-west. All other notable species records are for meadow brome and great burnet, which are both rare plants in Wiltshire, the closest records approximately 70m north-west.

#### Details of surveys already undertaken (where known):

Several ecological surveys have been undertaken on this site as part of Biffa's previous applications and monitoring of biodiversity on the site. Requests of survey reports have been made to the site manager but none have yet been received.

Great crested newt surveys were thought to have last been carried out over 5 years ago. Badger survey of entire site undertaken in Marsh 2006 (no evidence of badgers found)

## FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

There is an operation landfill in the southern part of the site and areas where clay is currently being stripped for further landfill operations. The clay has traditionally and is currently stored in the northern part of the site close to the railway line. The clay stockpiles have created hills and depressions which support shallow ponds and marsh and unimproved grassland has developed on the older clay slopes. Some of the new clay slopes/bunds to the east of the site have been seeded as well as natural colonisation taking place leading to a fairly diverse flora including orchids.

The site contains a residential farm (Studley Grange Farm) which is not owned by Biffa and is currently occupied.

The land in the western part of the site supports semi-improved grassland fields owned by Biffa which are cut periodically as part of a management plan which covers the site. These fields are surrounded by thick, unmanaged, mature hedgerows with trees. The most southerly filed is mown and the vegetation kept short in preparation for potential clay stripping and extension of the landfill operation.

The former Wiltshire and Berkshire Canal runs along southern site boundary. The canal has been partially filled and is no longer navigable but now forms a narrow, shallow watercourse supporting abundant marginal plant species. The canal adjacent to the site is currently owned by Biffa and surface water drainage from operational area drains to the canal.

#### Field Evidence and suitable habitat for notable species:

A large pond exists within the unimproved grassland close to Studley Grange Farm which has been confirmed as supporting great crested newts. Amphibians could also use the shallow pools created by surface water drainage on the clay stockpiles in the northern part of the site.



There is a stagnant drainage ditch opposite Red House (Biffa office) containing reed mace which is good habitat for newts and other amphibians.

There are three other ponds within 500m which are potentially suitable to support great crested newts and which have terrestrial habitat links with the site. Some ponds within 500m of the northern site edge could not be checked due to access restrictions. There are also ditches immediately adjacent to the sites that have the potential to support amphibians including great crested newts.

The unimproved grassland areas of the site close to the railway line is good habitat for common reptiles such as grass snake, common lizards and slow worms. This habitat is also good habitat for invertebrates.

Buzzards are potentially nesting in the broad-leaved woodland adjacent to the railway line.

Orchids were observed growing both on the bunded clay areas close to the railway line and within the northern edge of the semi-improved grassland fields close to the railway line.

#### **OTHER INFORMATION**

Some of site is already subject to a simple management plan, which includes periodic mowing of hay fields not otherwise in use (semi-improved grassland fields in the western part of the site).

The area that Biffa has indicated would be the most likely to be used as a landfill extension is in the south-west corner, in a regularly mown semi-improved grassland field bordered by steep dry ditches to the north and west.

Pest control at the site is undertaken by falconer.

#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

There are no nature conservation designations on the site and overall the site has local nature conservation value.

The northern part of the site with unimproved grassland close to the railway line however has the potential to support a wide range of common fauna and flora. These areas have a diverse habitat structure and could be considered for designation as a local wildlife site given the mix of habitats, the presence of great crested newts and the connection with the linear scrub along the railway line. Unimproved neutral grassland is a local BAP habitat.

#### Potential Ecological Impacts:

If the whole site was lost to development then there would be potential adverse impacts of moderate significance given the loss of diverse grassland, orchids and ponds of nature conservation value supporting great crested newts.

If development was restricted to the fields in the south-west of the site (within semi-improved grassland) impacts are likely to be negligible as there is similar habitat in the immediate vicinity and it would cause the least impact to protected species (although a Defra development licence for great crested newts is likely to be required for any development within the site boundary). The fields to the south-west are also adjacent to the existing landfill, and development here would reduce the amount of new access and infrastructure required. However, there would be an increase risk of water pollution within the disused canal from surface water runoff.

#### Potential mitigation:



- Buffer zone of at least 10m from the edge of former Wiltshire and Berkshire canal. It is understood that this would be in the footprint of the old canal basin which may be restored.
- Retention of the large pond near Studley Grange Farm and surrounding mosaic of habitats, including recently planted woodland areas, with a biodiversity management plan and clearly defined programme of implementation for this management (a brief management plan could be submitted to the planning authority for approval).
- Retention of mature hedgerows wherever possible, particularly where these link with linear habitat features such as the railway line and small strips of woodland. Replacement of mature hedgerows, where retention is not viable.
- Retention of mature trees wherever possible.
- Some treatment of surface water run-off from operational areas before discharging into the former canal such as using silt traps or sediment lagoons and oil interceptors.

#### Residual impacts:

If all the mitigation recommended is undertaken and development is restricted in the northern part of the site (with management of the habitat) there is the potential for minor beneficial impacts on ecology.

#### Opportunities for enhancement:

- Secure management plan for wildlife friendly re-instatement of canal and retention or replacement of some of the natural bank side vegetation along at least one bank.
- Retention and management for the unimproved grassland and mosaic of habitats in the northern section of the site close to the railway line (see mitigation section).

#### Recommended further ecological work/surveys:

- Great crested newt surveys of ponds on the site and within 500m, including those ponds which were surveyed 5 years ago as the results will require updating.
- Bat surveys on mature trees if trees require felling.
- Reptile surveys if any development is proposed on the northern clay spoil areas close to the railway line.
- Botanical surveys of the grassland close to the railway line if any development proposed in this area, particularly for the Wiltshire rare plants great burnet and meadow brome.
- Management plans for implementation of wildlife friendly management on identified areas submitted to local authority as part of planning conditions. In order to produce a detailed management plan a suite of surveys is recommended on the unimproved grassland areas to the north including surveys for amphibians, reptiles, flora and invertebrates.

## Legal and policy implications:

Relevant policies from the *North Wiltshire Local Plan 2011* (June 2006): NE9 PROTECTION OF SPECIES NE10 MANAGING NATURE CONSERVATION FEATURES NE11 CONSERVING BIODIVERSITY NE14 TREES, SITE FEATURES AND THE CONTROL OF NEW DEVELOPMENT NE22 SURFACE WATER RUN-OFF NE23 WATER COURSES

Pending the results of further surveys a Defra development licence is likely to be required for development anywhere within the site due to the presence of great crested newts.

Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Bare soil, stock piles of clay removed from landfill area. Some pits within the clays, particularly at the base of the stockpile have filled with water forming small ponds supporting reed mace.	Small ponds are potentially suitable to support amphibians including great crested newts.
2	Grassy slope, partially naturally colonised and containing a diverse mix of flora including orchids.	Ox-eye daisy, meadow buttercup, common hawthorne (sapling), yarrow, horsetail, self-heal, soft rush, field thistle, common spotted orchid (potentially also early purple orchid)
3	Damp areas of meadow surrounding small ponded areas on old clay stockpiles.	Damp areas contain false fox sedge, soft rush, compact rush, hard rush, teasel, field thistle, annual meadow grass, and mature willows. Ponded areas contain reed mace.
4	Large pond approximately 60m by 50m with small island in centre. Surrounded by scattered mature trees.	Mature trees predominantly willows. Pond edges supporting reed mace. Hawker dragonflies observed around perimeter of pond.
5	New area of young plantation trees planted by Biffa	Oak, ash, common hawthorn, field maple
6	Broad-leaved woodland edge to railway line, very dense.	Oak, Rosa sp., blackthorn, bramble. Possible buzzard nesting within the woodland strip and one observed flying and back and forth from the woodland.
7	Semi-improved grassland field, tall vegetation (not grazed and only periodically cut), fairly diverse meadow species.	False oat-grass, Yorkshire fog, meadow buttercup, Timothy, crested dog's-tail, pyramidal orchid?
8	Wiltshire and Berkshire canal, less than 1m in width, very choked with vegetation. Hedgerow along one edge of the canal with opposite bank open.	Canary reed grass, branched burr reed, yellow flag. Hedgerow containing bramble and common hawthorn, Rosa sp., blackthorn and ash.

## **Protected Species and Designated Sites**



# Site: NW31 Barnground, South Cerney

## Landscape and Visual Survey

## NW31 Barnground, South Cerney

## 1. Introduction

The site is located to the immediately south of South Cerney off an unclassified road, Ashton Road adjacent to Ashton Down. The Cotswold Water Park Spine Road runs eat to west approximately 1km south of the site. The site is a former minerals processing site and possible former landfill, currently pasture used for grazing sheep. To the south of the site is a cement manufacturing works, to the east the site overlooks one of the Cotswold Water Park lakes.

## 2. Baseline Landscape Character and Designations: Desk Survey

## Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Upper Thames Clay Vales Key characteristics relevant to the site:

- Gently undulating clay lowland farmland with regular and well-ordered field patterns defined by thick hedgerows, however intensification of agricultural activities have resulted in the removal of hedgerows, enlarged fields and new farm buildings
- Open floodplain landscapes displaying gravel workings and flooded pits
- Brick built buildings reflect the widespread use of the local clay as a building material with plain tiled roofs

## Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Open Clay Vale Landscape Character Area: Thames Open Clay Vale Key characteristics relevant to the site:

- · Level land form with wide open skies and views to ridges and downs
- Pastoral land use with some arable
- Large scale geometric fields with hedgerows or open drainage channels defining boundaries
- Presence of rivers, tributaries, drainage channels and open water bodies
- Settlement pattern varies from large towns and small scattered villages to sparse farmsteads linked by a network of minor roads
- Buildings in varied material of brick, render and stone

Generally the condition of the landscape character area is considered by WCC to be 'moderate', with a 'moderate' strength of character.

The strategy for the area is to conserve the elements that contribute to the rural, tranquil landscape and improve elements in decline such as hedgerows and hedgerow trees

## North Wiltshire Landscape Character Assessment (North Wiltshire Borough Council)

Landscape Character Area: Thames Valley Lowland Key characteristics relevant to the site:

- Low, level or undulating ground
- Continuous hedges with many mature oak and ash
- Field sizes vary from small and irregular to medium sized and regular shaped, predominantly pasture
- Dispersed or nucleated settlement on higher ground using vernacular materials of stone and local brick



General absence of woodland

#### Landscape Designations and Rights of Way:

 The site is located within close proximity to a number of Wildlife Sites: Cotswold Water Park, Pits 25, 26, 27 and 62

#### Local Authority Consultation:

North Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site comprises a rolling pastoral field bounded by low hedgerows with hedgerow trees, allowing views out of the site. The site is poor quality grassland; remediated from a former minerals processing site and a possible former landfill. Adjacent to the south of the site is a cement manufacturing plant with visible industrial buildings and silos, as well as a telecoms tower.

The site overlooks one of the Cotswold Water Park lakes to the east, evidently used for sailing and other water sports. To the west the land rises, restricting views. The landscape character is predominantly pastoral with some arable to the northwest in a irregular field pattern, with a few scattered farms and residential properties.

The site crests to the North, from which views out of the site far further reaching. South Cerney is approximately 600m north from the site; the southern fringe of the village overlooks and is overlooked by the site. Affected properties include residential homes, a school and a sports pitch / playing field.

The wider landscape is characterised by individual, linear belts and woodland blocks of deciduous trees.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Low Capacity to Accept Change: Medium

The site is a remediated landscape of poor grassland, immediately adjacent to a cement manufacturing works. The site is not a good example of the wider Cotswold landscape character and therefore has a low landscape quality. The site topography offers the potential to locate site works so as to reduce the impact on overall landscape character, while enhancing the locally characteristic hedgerow field boundaries. Therefore the site has a moderate capacity to accommodate change.

#### 5. Potential Landscape Impacts

• Erosion of the rural character and setting of the Cotswold Water Park (in combination with the adjacent cement works)

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning –facilities to be located to the south adjacent to the cement works to utilise the surrounding topography to prevent intrusion into the rural character
- Facilities to be in keeping with the local vernacular / agricultural style
- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to screen views into the site and strengthen rural character
- The following 'Broad Management Objectives' for the Open Clay Vale in the *Wiltshire* Landscape Character Assessment are relevant to the site:



- Retain and manage the hedgerow network and nurture new hedgerow trees 0
- Promote appropriate management of arable land including retaining area of 0 fallow land and maintaining an unploughed margin around fields
- Minimise small scale incremental change such as signage or fencing which 0 could change the rural peaceful character of the landscape
- Ensure both future construction and changes to existing buildings are designed 0 to integrate with the existing character and structure of settlements 0
  - Screen views to intrusive urban edges through planting new woodland
- The following Enhancement Priorities proposed for the Thames Valley Lowland landscape character area in the North Wiltshire Landscape Character Assessment are relevant to the site:
  - Conserve hedgerows and mature trees, including planting new trees in existing 0 hedges and planting specimen trees in field corners
  - Encourage planting of new woodland copses 0
  - Discourage development which would detract from the tranquil rural character  $\cap$

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Downs Farm Residents	High	High adverse	Facilities to be located to
Downs Farm Cottage	High	No Change	maximise natural screening
Residents			provided by the surrounding
Crossroads Farm	High	No Change	topography
Residents			<ul> <li>Facilities to be in keeping with</li> </ul>
Residential properties	High	No Change	the local vernacular / agricultural
opposite Downs Farm			style
Residential Properties on	High	Moderate adverse	Use of native hedgerows and
the southern fringe of			trees and native woodland
South Cerney			planting to site boundaries to
South Cerney Sports	Low	Slight adverse	screen views into the site
Pitch / Playing Field			
Ashton Road Users	Low	Slight adverse	Structure planting around site
Cotswold Water Park	Medium	Negligible	boundary
Users			
Adjacent Cement	Low	Negligible	
Manufacturing Works			

## 7. Visual Impact and Mitigation

## 8. Summary: Residual Landscape and Visual Impacts

Though a relatively open landscape, the rolling topography of the site with a significant fall away to the south provides for an opportunity to develop the site minimal adverse impact on the local and surround character and visual receptors, therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could potentially be mitigated through sensitive site planning and screen planting.

## 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

## **Noise Assessment**

## NW31 Barnground, South Cerney

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Cotswold Water Park to assess the site's suitability for waste recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Cotswold Community located just off Spine Road West approximately 630m south-west of the proposed site.
- 1.3 The site is located adjacent to Ashton Road and is currently a cement works. Surrounding land has been landfilled and restored to agriculture. Spine Road is located approximately 750m south of the proposed site.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 26<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site consists predominantly of industrial noise from activities within the site and traffic noise from HGV's within the site. The current noise climate at the most sensitive receiver predominantly consists of environmental sources such as birdsong, insects, and wind in tress, etc. Occasionally road traffic noise from the nearby Spine Road West is perceptible at this point. It should be noted that during the survey building works were being undertaken at the most sensitive receiver, whilst every effort was made to ensure that these works did not interfere with the background noise measurements it is possible that they may result in background noise levels being higher than might be expected at this location. It is understood that noise from the existing works at the proposed site is sometimes perceptible at this location, although this was not observed during the survey.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	13:30	44.6	56.9	41.5
MEASUREMENT 2	13:35	50.3	72.8	38.5
MEASUREMENT 3	13:55	45.6	64.3	35.7
AVERAGE		47.6		38.6

2.3 The average background noise level at the most sensitive receiver was measured as 38.6  $L_{\text{A90}}.$ 



## 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Cotswold Water Park is for Material Recovery Facility, Local and Inert Waste Recycling, and Waste Transfer Station. The boundary of the site area proposed for use passes within 630m of the most sensitive receiver. Given the average background noise level, L<sub>A90</sub> of 38.6dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 470m away.
- 3.2 Since extraneous noise sources may have contributed to the average background noise level, calculations have also been undertaken based on the minimum measured background noise level. When considering this L<sub>A90</sub> of 35.7dB, any new waste development may need to be located a minimum distance of 655m away.
- 3.3 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.4 Given that the minimum separation distance for the lowest measured background noise level can be achieved within the site boundary indications are that this site is likely to be suitable for the proposed development with the implementation of mitigation measures or considerate positioning of the development within the site boundary.
- 3.5 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

## NW31 Barnground, South Cerney, 1.5 ha<sup>22</sup>

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is situated to the southeast of South Cerney within a sharp sand and gravel quarry, part of which is being landfilled with commercial and industrial wastes. To the west is the Cotswold Community sharp sand and gravel quarry.



Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>23</sup> sources within 1km of the site: road traffic on the B4696 and other minor roads; gas/oil/solid fuel space heating for buildings; Hills Mineral & Waste Ltd quarries and landfill (potential additional pollutants including dust, bioaerosols, odour and NH<sub>3</sub>).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>24</sup> for 2005 and comparable standards<sup>25</sup> are: 10.5µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 8.3µg/m<sup>3</sup>

<sup>&</sup>lt;sup>22</sup> The size of the site precludes operation of all facilities at once

<sup>&</sup>lt;sup>23</sup> Of concern to public health include: Nitrogen dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



 $NO_2$  (standard 40µg/m<sup>3</sup>); 17.8µg/m<sup>3</sup>  $PM_{10}$  (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas (AQMA) within 1km.

1.4 Potentially sensitive receptors within 1km: residential properties including the village of South Cerney. There are a number of County Wildlife sites within 1km comprising of former sand and gravel workings.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	<b>PM</b> <sub>10</sub>	NO <sub>x</sub>	$\mathbf{NH}_3$	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 100m	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Ecological designation within 1km of site (former sand and gravel extractions)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low without mitigation. Some mitigation for dust and odour is however recommended. Detailed assessment should not be necessary.

 <sup>&</sup>lt;sup>24</sup> Priority pollutants are those presenting most problems for local air quality management in the UK:
 i.e. NO<sub>2</sub> and PM<sub>10</sub>. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>
 <sup>25</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



## **Traffic and Transport Review**

## NW31 Barnground, South Cerney

## **Proposed Site Usage**

This 1.5 ha site is proposed to be used as a local scale recycling facility, a material recovery facility, a waste transfer station or an inert waste recycling.

## **Existing/Potential Access**

The site is located on Ashton Road adjacent to Ashton Down and 600 meters south west of South Cerney. The Cotswold Water Park Spine Road runs east to west some 1 km south of the site. Part of the site is currently used as cement works.

The site is currently accessed from Ashton Road via a priority junction. Ashton Road at this location is a single two lane carriageway subject to national speed limit. Ashton Road at this location is relatively narrow. Currently there is some HGV movement on the road which is mainly associated with the cement works.

#### Impacts on Local Settlements

The main residential settlement in close proximity of the site is South Cerney which is located to the northeast of the site. There are no residential properties along Ashton Road in the vicinity of the site. The majority of the traffic from South Cerney is likely to use the junction of Ashton Road with Upper Up. This is a priority junction with Ashton Road forming the major arm. The visibilities out of the minor arms are good. Considering the location of the HGVs are unlikely to use the residential roads.

#### **On-site Infrastructure**

The existing access road to the site may require some modification to accommodate the potential queue of vehicles using the facility and prevent the blocking of Ashton Road.

#### Off Site Highway Network

The closest junctions to the site are the junctions of Ashton Road/ Upper Up and Aston Road/Spine Road (B4696) both of these junctions are priority junctions where Ashton Road is the major arm. The traffic from South Cerney is likely to use the Ashton Road/ Upper Up junction and the traffic from Ashton Keynes will use Aston Road/Spine Road (B4696).

Considering the narrow width of Ashton Road a right turn lane into the site may be required allow safe turning into the site.

## Constraints

None identifies.

## Mitigation

Provision of a right turn lane into the site.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.



# Site: NW33 Land off Hartham Quarry, Corsham

## Noise Assessment

## NW33 Land off Hartham Quarry, Corsham (Inset Map 36)

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Hartham Quarry to assess the site's suitability for waste recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be the property located at the very front of the site off Park Lane and other residential properties located approximately 20m north-east of the site.
- 1.3 The site is currently brownfield flanked on the south-west side by Hartham Quarry, to the north-west and north-east by Park Lane Industrial Estate, and to south-east by Park Lane.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 25<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site and at the most sensitive receiver predominantly consists of traffic noise from vehicles and HGV's on nearby roads and from activities within the Hartham Quarry site and environmental sources such as birdsong, insects, and wind in tress, etc.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	14:00	49.0	67.3	38.0
MEASUREMENT 2	14:05	50.5	66.0	40.0
MEASUREMENT 3	14:10	42.1	56.5	39.2
AVERAGE		48.4		39.1

2.3 The average background noise level at the most sensitive receiver was measured as 39.1  $L_{A90}$ .

## 3. SITE SUITABILITY

3.1 The proposed use for the site adjacent to Hartham Quarry is for local waste recycling. The boundary of the site area proposed for use is adjacent to the most sensitive receiver and



passes within 20m of other noise sensitive receivers. Given the background noise level,  $L_{A90}$  of 39.1dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 445m away.

- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation measures in place it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



## **Air Quality Report**

## NW33 Land off Hartham Quarry, Corsham, 1.5 ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is situated to the west of Corsham near to the Hartham Park Quarry.





- 1.2 Air pollutant<sup>26</sup> sources within 1km of the site: road traffic on the A4, B3109 and other minor roads; gas/oil/solid fuel space heating for buildings; Hanson Aggregates Hartham Park Quarry yard areas (potential additional pollutants including dust).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>27</sup> for 2005 and comparable standards<sup>28</sup> are: 13.2µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 10.4µg/m<sup>3</sup>

<sup>&</sup>lt;sup>26</sup> Of concern to public health include: Nitrogen dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

 <sup>&</sup>lt;sup>27</sup> Priority pollutants are those presenting most problems for local air quality management in the UK:
 i.e. NO<sub>2</sub> and PM<sub>10</sub>. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>
 <sup>28</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



 $NO_2$  (standard 40µg/m<sup>3</sup>); 17.8µg/m<sup>3</sup>  $PM_{10}$  (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas (AQMA) within 1km.

1.4 Potentially sensitive receptors within 1km: residential properties including the village of South Cerney. There are a number of County Wildlife sites within 1km comprising of former sand and gravel workings.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	$\mathbf{NH}_3$	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Residential beyond 100m	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Ecological designation within 1km of site (former sand and gravel extractions)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low without mitigation. Some mitigation for dust and odour is however recommended. Detailed assessment should not be necessary.

## **Traffic and Transport Review**

## NW33 Land off Hartham Quarry, Corsham

## Proposed Site Usage

The proposals for this site are for local recycling uses

## Existing/Potential Access

The 1.5ha site is currently derelict brownfield with one residential property towards the front of the site. Adjacent to the site in the east is a small industrial estate whilst to the west is a quarry. Opposite the site is a new build residential estate.

The proposal is for local recycling and it is therefore assumed that this will be for public access serving the surrounding Corsham area. Given the size of the site any recycling would need to be small scale.

The existing access to the site is directly from Park Lane to the west of Corsham. In its present condition the access is a narrow gated access to the west of a 4 arm roundabout from which the new residential estate and the single residential property adjacent to the site gain access. Park lane is a relatively quiet minor road with a 30 mph speed limit and speed camera warning signs, however no permanent speed cameras were obvious. Visibility from this access is adequate given the speed of the road.

Park Lane is an already established and well used route for HGVs accessing the quarry. Whilst the highway infrastructure appears adequate to accommodate the existing and proposed HGV volumes, the impact on the residential amenity of the area is a possible constraint, particularly given the increased noise and vibration that is likely to be associated with the transport of waste to the site.

#### Impacts on Local Settlements

Corsham lies to the east. The impact on this settlement is expected to be minimal.

## **On-site infrastructure**

The existing site has no on-site infrastructure; however any proposals must ensure that there is sufficient infrastructure in place to accommodate the development traffic without blocking back onto the local highway network. This is of particular importance should the site be used as a community facility which would then attract trips from the local community particularly at the sites peak times (weekends 11:00 - 16:00). Given that there are currently no facilities in the Corsham area it is anticipated that despite the small, local nature of the site relatively high numbers of trips will be generated in the peak hours.

## Off Site Highway Network

The local recycling site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network will be negligible. As the peak traffic generated by this type of facility is likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks on the highway network, no off site highway mitigation is deemed necessary.

## Constraints

The impact of this proposed development on the residential amenity of the area should be considered as the impacts of noise and vibration associated with the transportation of waste may be an issue given the sites close proximity to residential properties.

## Mitigation

The potential environmental impacts of HGV traffic (noise, vibration, air quality) should be considered. However no specific physical highway measures are considered appropriate.



## Conclusion

The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes to the site access. Consideration ought to be given (perhaps in conjunction with the highway authority) to a removal/management regime for vegetation in the verge at the site access.



## **Ecological Report**

## NW33 Land off Hartham Quarry, Corsham

## DESK STUDY INFORMATION

# *Statutory designated sites within 1km and non-statutory designated habitats within 500m:* Corsham Railway Cutting SSSI (2 parcels): Located approximately 800m south-east of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

Within 500m of the site there is one record of a grass snake and five records of bat species (including a pipistrelle, a noctule, a brown long-eared, an unidentified bat species and a greater horseshoe bat). All of these records are located over 315m from the site.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The majority of this site is covered in semi-improved neutral grassland and tall ruderal species. An area of broken tarmac is present in the centre of this site. Two semi-mature trees are also present within the site (marked on Phase 1 habitat map).

The site is bound on all sides by fencing. A thin strip of semi-natural broadleaved woodland (an overgrown, unmanaged hedgerow) is present on the inside of the fence in the south-eastern corner of the site. To the west of the site (on the outside of the fencing) is plantation woodland.

A small residential property is located in the southern corner of the site. This house a one storey stone block bungalow with a sloping tiled roof which is currently lived in. The building in good condition. The property is surrounded by gravel and unmown grassland and is bound on all sides be fencing.

## Field Evidence of notable species:

The small residential property present in the southern corner of the site has a low potential to support roosting bats.

There are no ponds present within 500m of this site.

A stand of Japanese Knotweed approximately 10m long and 5m wide was noted next to public footpath on the southern side of Park Land. This is located approximately 15m from the site and as such should not pose a risk to the proposals.

No other field evidence of legally protected species was identified.

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The site is of negligible nature conservation value consisting of areas semi-improved grassland and tall ruderal species.

#### Potential Ecological Impacts:

There are no predicted impacts on the Corsham Railway Cutting SSSI.



Potential ecological impacts include the loss of areas semi-improved grassland and tall ruderal species. There is also the possible loss of a thin strip of semi-natural broadleaved woodland from within the site.

The overall works are likely to have negligible ecological impacts.

## Potential mitigation:

- Retention of thin strip of semi-natural broadleaved woodland in the south-eastern corner of the site;
- Retention of the two semi-mature trees within the site if possible;
- Treatment of the Japanese knotweed present approximately 15m from the site. This is located over 7m from the site and therefore will not impact the works. However this is best practice in relation to conserving the biodiversity of the area surrounding the site.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

If the treatment of the Japanese knotweed is undertaken this will be a beneficial impact for the habitat surrounding this site.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

• Bat surveys if the private residence demolished. Although there was low potential for this building to support bats it is possible that a small number of bats could use the structure in the future as a temporary summer roost or feeding roost.

#### Legal and policy implications:

 If bats are found to be roosting in any buildings to be demolished a development licence will be required from Defra. Further mitigation will be required to compensate for the loss of roosting habitat.

The Nature Conservation policies in the North Wiltshire Local Plan that are potentially relevant to this site include:

- Policy NE 9;
- Policy NE 10;
- Policy NE 11;
- Policy NE 12;
- Policy NE 14;
- Policy NE 22.

Phase 1 Habitat Map



## Joint Waste Site Allocations Site Survey Report



Number	Target Notes	Species Notes
1	Caravan park	
2	Modern breeze block factory buildings. No access. Low bat potential	
3	Hanson Hartham Park Quarry. Large blocks of sandstone present in bare earth yard.	
4	Private residence. One storey stone block bungalow with sloping tiled roof. Building in good condition with low bat potential. Garden consists of area of unmown grass and gravel.	
5	Overgrown, unmanaged hedgerow. 5m wide	willow , elder, buddleia
6	Modern factory building. Breeze blocks with metal cladding. Gently sloping roof. Low bat potential.	
7	Very dense, tall veg interspersed with grass (cock's-foot and false oat grass)	spear mint, rosebay willow herb [lots], dogwood saplings, bramble, ox- eye daisy, nettle, dock, hogweed, creeping. buttercup
8	Mounds covered in nettle	
9	Rough grassland area. Vegetation grown on waste land and as such scrubby.	red clover, ribwort plantain, ox-eye daisy, thistle, cranes bioo, d0oci, creeping buttercup, common vetch, false oat grass, bramble, rosebay willowherb, bindweed, yorkshire fog,
10	Tarmac area, broken in places with vegetation [hogweed, false oat grass] growing through.	
11	Dense, young woodland strip. Could not access as outside site.	field maple, dogwood, bramble, ash, some elder and wych elm.
12	Stand of japanese knotweed next to public footpath (by road). Located over 7m from site so should not pose a risk to works (recommend it is treated though). Stand 10m long and 3m wide.	

## **Protected Species and Designated Sites**



# Volume 3 Salisbury District

- S3 Brickworth Quarry and Landfill, Whiteparish
- S4 CB Skip Hire, St Thomas Farm, Laverstock
- **S6 Employment Allocation, Mere**
- S9 Kingsway Trading Estate, Wilton
- S10 Sarum Centre, Salisbury
- S11 Maidments Skip Hire, Swallowcliffe
- S12 Harnham Business Park, Salisbury
- S15 Ratfyn, Amesbury
- S16 Salisbury Road Industrial Estate, Downton
- S17 Solstice Business Park, Amesbury
- S19 Thorney Down WTS, Winterslow
- S21 Churchfields Industrial Estate, Salisbury



# Site: S3 Brickworth Quarry and Landfill, Whiteparish

## Landscape and Visual Survey

## S3 Brickworth Quarry and Landfill, Whiteparish

## 1. Introduction

The site is currently a sand quarry lying to the south of the A36 west of Whiteparish. It is well enclosed by woodland, hedgerow vegetation and mature hedgerows. The site is being reinstated to agriculture by means of the selected deposition of dry commercial and industrial waste and other inert non-hazardous waste.

## 2. Baseline Landscape Character and Designations: Desk Survey

#### **Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

- Extensive open, rolling Chalk plateau dominated by large arable fields.
- Scattered copses and shelterbelts.

## Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Wooded downland Landscape Character Area: Witherington Wooded Downland Key characteristics relevant to the site:

- Large scale 'rooms' of arable farmland enclosed by woodland,
- Varying mix of two dominant land cover elements –open arable fields and woodland blocks and belts, which are linked and unified by the network of hedgerows and hedgerow trees.
- Network of lanes often rising up the dry valleys linking the high downs to the lowlands, with sunken shady lanes in some more wooded zones plus a few main roads crossing the areas.
- A peaceful, tranquil and secluded rural landscape, with sheltered enclosed woodland areas contrasting with more open, remote downland and steep uninhabited scarps.
- Sparsely settled with scattered farmsteads and occasional small villages

WCC judge the condition of the Wooded Downland landscape type to be 'good', due to its varied woodland cover and strong hedgerow network. It is considered to have a 'strong' character based on its chalk geology and ancient monuments and landscapes. WCC seek to 'conserve' the highly rural, peaceful character of this type with its varied topography and landcover. Elements requiring restoration are field boundaries and hedgerow trees.

## District Landscape Character Assessment: N/A

## Landscape Designations and Rights of Way:

- The site lies within a Special Landscape Area
- The site is located close to the boundary of the New Forest National Park, which runs approximately 0.5 Km south of the site, along Moor Lane
- A public footpath runs close to the western boundary of the site, within Sandland Copse and Goose Eye Copse
- A public footpath runs adjacent to the eastern edge of the site, from Lowdens Copse to the A36 and beyond.



## Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

## 3. Baseline Landscape Character and Features: Site Survey

This site currently consists of a sand quarry and associated arable fields that are due for extraction following the 2006 harvest. Part of the site has already been restored to rough grassland. Parts of the site currently being quarried have undergone significant change to their topography, with extraction to approximately 7m. The quarry includes associated portacabin offices, a weigh-bridge and digging machinery.

The site is set in a relatively remote rural location away from settlement, although the A36 Salisbury-Southampton road runs along its northern boundary, reducing the rural character and tranquillity of the site. Plantation woodland, including pine and birch with deciduous scrub margins is located around much of the site boundary, providing year-round screening from the west and south. Earth bunds have also been constructed to the north of the site, to screen it from the A36. Further screening along the A36 is provided by a strong, mature hedgerow, although this will be less effective during the winter months.

## 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The site has been significantly disturbed by the sand extraction that has been taking place, although this appears to have been well managed to minimise visual impact and allow on-going restoration. The surrounding plantation woodland provides a strong backdrop that is typical of the area, although the quality of the woods has been eroded through the planting of non-native pine.

Due to its large size, current state of disturbance and existing screening, the site would be able to accommodate a high degree of change without further impact.

## 5. Potential Landscape Impacts

• Reduced potential for the full restoration of the quarrying activity

## 6. Potential Landscape Mitigation Measures

- Sitting of facilities away from the A36 and public rights of way
- 15m native woodland screen around facilities to integrate with surrounding landscape
- The following 'Broad Management Objectives' for the Wooded landscape type in the *Wiltshire* Landscape Character Assessment are relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.

## 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Workers at quarry	Low	No change	<ul> <li>15m buffer</li> </ul>



Users of footpath to west of site	Medium (partially screened by existing woodland)	No change – slight adverse (depending on siting of facility)	planted buffer strip around facility
Users of footpath to east of site	High	No change – Slight adverse (depending on siting of facility)	<ul> <li>Location of facility away</li> </ul>
Drivers on A36	Low (already well screened, although glimpsed views of quarry possible)	No change	from direct proximity of footpaths and roads

## 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed wooded setting and existing quarried character, the site could accommodate change. The main visual receptor groups, walkers on nearby footpaths and drivers on the A36 are both already well screened, although this could be further enhanced with additional planting.

## 9. Recommended further landscape and visual surveys

- Visual survey from public footpaths
- Winter-time visual survey from A36 and footpaths

## Noise Assessment

## S3 Brickworth Quarry and Landfill, Whiteparish

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Brickworth Quarry and Landfill to assess the site's suitability for waste recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Moor Farm located approximately 670m south-west of the site.
- 1.3 The site is currently a sand quarry flanked on the north-east side by the A36 and surrounded by a copse and fields containing a few isolated farms.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 21<sup>st</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of traffic noise from vehicles and HGV's on nearby roads and from activities within the site. The noise climate at the most sensitive receiver consists predominantly of environmental sources such as birdsong, insects, and wind in tress, etc. and occasional traffic noise from nearby roads. No noise from the existing site was perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	13:00	47.5	63.0	35.6
MEASUREMENT 2	13:05	45.7	64.3	35.4
MEASUREMENT 3	13:10	43.5	56.8	34.9
AVERAGE		45.9		35.3

2.3 The average background noise level at the most sensitive receiver was measured as 35.3 L<sub>A90</sub>.

## 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Brickworth Quarry and Landfill is for inert waste recycling. The boundary of the site area proposed for use passes within 670m of the most sensitive receiver. Given the background noise level, L<sub>A90</sub> of 35.3.dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 680m away.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.

## Joint Waste Site Allocations Site Survey Report



- 3.3 Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Depending on the location of the development within the site, existing works and intervening ground topography may offer some screening effects allowing a closer proximity to be achieved.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



## **Air Quality Report**

## S3 Brickworth Quarry and Landfill, Whiteparish, 21ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) currently supports an open sand extraction operation (Lower Pensworth quarry, Hine Bros (Ringwood) Ltd). The setting is rural, bounded on southern and western margins by Lowdens Copse (woodland).



## Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>1</sup> sources within 1km of the site: road traffic on the A27 and A36, and minor roads; gas/oil/solid fuel space heating for scattered buildings; Lower Pensworth quarry. Lower Pensworth quarry is a potential source of nuisance dust. There are no industrial sources of bioaerosols and odour in the area.
- 1.3 Estimated background annual mean levels of priority pollutants<sup>2</sup> for 2005 and comparable standards<sup>3</sup> are: 11µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 8.4µg/m<sup>3</sup> NO<sub>2</sub>

<sup>&</sup>lt;sup>1</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub> <sup>2</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates

<sup>&</sup>lt;sup>2</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>



(standard  $40\mu g/m^3$ );  $18\mu g/m^3 PM_{10}$  (standard  $40\mu g/m^3$ ). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.

1.4 Potentially sensitive receptors within 1km: residential premises, including Newton and Whiteparish. There are five County Wildlife sites within 1km: Sandland Goose Eye Copse, Hanghill Copse, East Copse, Painter's Copse and Lowden's Copse. New Forest SSSI/cSAC is potentially sensitive habitat.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential at over 100m of site (Whiteparish & Newton)	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	N/A
Ecological designation within 1km of site (Sandland Goose Eye Copse, Hanghill Copse, East Copse, Painter's Copse and Lowden's Copse, New Forest SSSI/cSAC)	N/A	1 (1)	1 (1)	N/A	N/A	N/A	N/A
Notes: 1 = low risk, no further assessment requi	red. a ba	sic level	of mitia	ation is	recommende	ed (at least)	

2 = moderate risk, further assessment required, a basic level of mitigation is recommended.

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low. Dust mitigation is recommended. Detailed assessment should not be necessary.

<sup>&</sup>lt;sup>3</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)
## **Traffic and Transport Review**

### S3 Brickworth Quarry and Landfill, Whiteparish

### Proposed site usage

This 21ha site is proposed to be used for inert waste recycling only ancillary to landfill use, to cease on or before completion of any permitted land filling operations

### **Existing/Potential Access**

The site is located 1km west of Whiteparish, 10km south east of Salisbury and adjacent to the A36 (T). The existing use is as a sand quarry with reinstatement to agriculture to be undertaken by means of selected deposition of inert waste.

The existing access to the site is directly from the A36 (T) via a signalised crossroads from which there is a gated access to the site. There are left and right turn filter lanes into the site.

### Impacts on Local Settlements

The site is located close to the village of Whiteparish on the A27. The road is a single carriageway road with a 30 mph speed limit through the village. The road narrows through the village with parked cars on the carriageway outside residential properties that front the road. The impacts on the residential amenity of this settlement are likely to be significant

### **On-site infrastructure**

The site is relatively large. However, in terms of traffic generation; the proposed waste facility is likely to be similar to its existing use as a sand quarry. As such there appears to be the infrastructure already in place to provide sufficient on/off site storage/queuing for vehicles arriving at the site.

### Off Site Highway Network

The off site highway network is unlikely to be unduly affected by the proposed landfilling operation as it is probable that the existing quarrying of sand at the site will cease prior to the commencement of any landfilling/recycling operation. As such there will be a trade off of trips associated with the site with the quarry traffic being replaced by the landfill and recycling traffic.

### Constraints

Without suitable mitigation there is potential for an adverse impact on the village of whiteparish.

### Mitigation

Routeing agreements should be entered into to minimise the impact of traffic associated with the proposed facility on the village of Whiteparish and the A27. An environmental weight limit could be placed in the village of Whiteparish to ensure that all journeys are made via local and strategic lorry routes, as defined in Local Transport Plans.

### Conclusion

This site is suitable, in traffic terms, for the proposed uses.



## Water (Quality and Environment) Assessment

### Site name – Brickworth Quarry and Landfill, Whiteparish

NGR at centre of site – SU 230230 Location description – 1.5km southwest of Whiteparish village Area of site (ha) - 21

### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Contaminate minor aquifer	Medium / high	Plan mitigation requirements     during construction	Environmental management during construction
	Surface water body	Contaminate watercourse (tributary of the R Blackwater)	Low / medium	<ul><li>Layout planning of site</li><li>Site traffic plan</li></ul>	<ul> <li>Approach Environment Agency for monitoring requirements</li> </ul>
		Impact on baseflow/runoff to watercourse	Low	Surface drainage plan     Impermeable bardstanding	Relevant licensing requirements     (PPC) to be assessed
				<ul> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid bandling</li> </ul>	<ul> <li>Produce Working Plan for site</li> </ul>
				areas if site might accept liquids/hydrocarbons	Review runoff treatment requirements
				Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes	Baseline monitoring of adjacent surface water bodies may
		Flood on part of site	Low	Engineered liner system	Monitoring boreholes (may be required for obtaining operating permit)

### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
				Approach Environment Agency for Check flood risk assessment requir	requirements rements
	Designated sites/ Adjacent sensitive landuses	New Forest National Park and Forest Park are more than 800m away Impact on Whiteparish Conservation Area	Low	Refer to groundwater/surface potential risk mitigation measures listed above Management of windborne material at site boundaries	Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored Approach Environment Agency for
	Other adjacent landuses	Rural area with small villages and isolated dwellings scattered about	Low		requirements

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Brickworth Quarry and Landfill, Whiteparish is:

- o Few / no significant issues identified. Risk mitigation is considered practicable to address issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

### S3 Brickworth Quarry and Landfill, Whiteparish

### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

New Forest SSSI: Located approximately 810m south-east of the site. Lowden's Copse Wildlife Site: Located adjacent to southern boundary of the site. Sandland/Goose Eye Copse Wildlife Site: Located adjacent to western boundary of the site.

### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site. However there are two badger records adjacent to the eastern boundary of the site (the record does not specify if these are badger setts).

Within 500m of the site there is one record of harvest mouse, one record of redshank (a bird) and records of fifteen rare vascular plants in Wiltshire (including dwarf spurge, tutsan, butcher's broom, field woundwort, smooth brome, goldenrod, corn spurrey, corn marigold, slender parsley piert, yew, star sedge, nodding bur-marigold, field gromwell, alder buckthorn and spotted medick.

### Details of surveys already undertaken (where known):

None known.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The site consists of an active quarry site and areas of semi-improved grasslands and an arable field. The site is bound to the west and south by pine woodland and to the east and north by hedgerows (with tree standards present within them).

A small pond is present within the site (adjacent to the northern boundary of the site). This is approximately 8m long and 5m wide. It has murky water with large amounts of algae present within it. The banks of the pond are steep and covered in bramble and hawthorn and hazel shrubs.

Three portacabins are also present within the site (part of the active quarry site).

### Field Evidence of notable species:

The three portacabins present within the site have a low potential to support roosting bats.

The pond within the site has a low potential to support great crested newts. There are no other ponds present within 500m of the site.

Two lapwing were observed on site (approximately 20m north-west of the pond).

Evidence of deer, rabbit and hare activity was noted within the site (particularly around the arable field).

No other field evidence of legally protected species was identified.

### OTHER INFORMATION

None identified.

### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

### Nature conservation evaluation:

The habitats present within the site are of negligible nature conservation value (areas of arable farm land, bare earth, quarry and semi-improved grassland). However the woodland and hedgerows that bound the site are important for nature conservation at a local level.

### Potential Ecological Impacts:



There are no predicted direct impacts on the three designated sites of nature conservation value that surround the site.

Potential ecological impacts include the loss of semi-improved grassland, an arable field and an active quarry and the possible loss of parts of the hedgerows that bound the site to the north and east. The overall works are likely to have a negligible ecological impact.

### Potential mitigation:

- Retaining the hedgerows present to the north and east of the site;
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

### **Opportunities for enhancement:**

- Once landfilling at the site has been completed, the site should be restored using biodiversity principles.
- The pond located within the site could be enhanced by creating a gently sloping bank and shallow margin at the southern end of the waterbody. This will allow amphibians easy access and egress to the pond. The algae within the pond could also be removed and any run-off into the pond (which is possibly causing the algal blooms) could be diverted.

### Recommended further ecological work/surveys:

- Bat surveys on any trees within the hedgerows surrounding the site if to be felled (to include visual day-time inspection followed by evening activity survey if appropriate).
- Great crested newt presence/absence surveys on the pond within the site.
- Badger surveys to be undertaken within 50m of any proposed works.

### Legal and policy implications:

- If bats are found to be roosting within any trees to be felled a development licence will be required from Defra. Further mitigation will be required to compensate for the loss of roosting habitat.
- If great crested newts are found to be using the pond present within the site a great crested newt development licence will be required from Defra and mitigation will be required to prevent the injury or death of any great crested newts present within the site and to compensate for the loss of any suitable terrestrial habitat.
- If works are required within 30m of a badger sett, or a badger sett is to be lost, a disturbance licence will be required from English Nature.

The Nature Conservation policies in the Salisbury District Council Local Plan that are potentially relevant to this site include:

- Policy C11
- Policy C12
- Policy C13
- Policy C14
- Policy C15





Number	Target Notes	Species Notes
1	Two mature oak trees. Retain if possible. Some cracks and crevices of use to bats - low to medium potential	
2	Arable field (maize)	
3	Area that has been left and is not managed.	thistle, nettle, red campion, common cleavers, fern, bramble, dock. semi- mature hawthorn, holly, hazel trees.
4	3 portacabins with low bat potential	
5	2 lapwing observed flying. Possibly nesting near by.	
6	Large sand piles covered in scentless mayweed.	
7	Deer prints	
8	Bluebells.	
9	Woodland pond. Small (8m x 5m) and covered in large amounts of algae. The water murky (depth unknown). The pond has steep banks covered in tall ruderal and bramble. Great crested newt potential is low.	reed mace, water dock, arrowhead. shaded by surrounding hawthornand holly shrubs.

### **Protected Species and Designated Sites**



# Site: S4 CB Skip Hire, St Thomas Farm, Laverstock

## Landscape and Visual Survey

### S4 CB Skip Hire, St Thomas Farm, Laverstock

### 1. Introduction

This is a linear site to the west of a railway embankment, on the north-eastern edge of Salisbury. It is located on the River Bourne floodplain and consists of a grass paddock and a skip hire service.

### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

• River valleys with common settlements and narrow floodplains, dominated by former floated flood meadows and meandering rivers. The chalk grasslands and valley bottom wetlands, particularly the flood meadows, are an important characteristic of the area.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)): Landscape Type: Chalk River Valley Landscape Character Area: Bourne Chalk River Valley Key characteristics relevant to the site:

- Strongly enclosed valleys with an intimate scale contrasting with the surrounding open upland landscape.
- Pastoral land use along the valley floor with small scale fields contrasts with arable farmland on the valley sides with medium to large geometric fields.
- Hedgerows and hedgerow trees add to the lush and enclosed feel of the valleys.
- Valleys contain a concentration of settlement in contrast to the adjacent unsettled downs.
- Valley used as transport corridors with major roads and railway lines along valley sides.
- River corridor is characterised by lines of willows
- The presence of the northern fringes of Salisbury is felt in settlement on either side of the valley, which has a more suburban style.

WCC judge the overall condition of the *Chalk River Valley* Landscape Type to be 'good' with its chalk rivers of high water quality and rich biodiversity, its largely intact hedgerow network, riparian woodland and compact well kept villages. However there are some elements of declining condition with some hedgerows in poor condition for example. It has a 'strong' character with its generally narrow, steep sided landform, small scale rural settled and tranquil landscape of pastoral fields. The overall strategy for the area is to 'conserve' the tranquil, intimate and rural character of the landscape. There are opportunities for restoration of waterside pastures, replanting and management of hedgerows and limited native tree planting/regeneration.

### District Landscape Character Assessment: N/A

### Landscape Designations and Rights of Way:

- The site is covered by the Landscape Setting of Salisbury and Wilton policy C6 within the Salisbury Local Plan.
- A public footpath runs to the west of the site along the top of Cockey Down, at a distance of approximately 1 Km from the site

### Local Authority Consultation:



Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

### 3. Baseline Landscape Character and Features: Site Survey

The site lies within the floodplain of the River Bourne and is consequently flat in nature. It has a strong native hedgerow along its eastern boundary that allows glimpsed views out to the east, towards the linear village of Laverstock during the summer months. During the winter these views are likely to be more open. The site does not directly abut the River Bourne, but lies adjacent to rough grassland flood meadows west of the river. The western boundary of the site is defined by the embankment of a railway line and includes a cover of rough scrub.

The site can be divided into two separate areas. The northern part consists of CB skip hire, and includes an open barn, portacabin offices; breeze-block sheds and cement silos. The site is visually dominated by bare earth surface and numerous yellow skips. Historically the site appears to have been part of a farm yard. To the south of the skip hire yard, a transition area of rough grass and earth includes parked vehicles and three mobile phone masts. The southern end of the site consists of a pony paddock, with improved grass and a mature hedgerow to the east.

Although the site is varied in its use and is strongly influenced by the presence of the skip hire business and railway embankment, it maintains a rural, river valley character, with native vegetation and views to the elevated chalk downs, Cockey Down and Laverstock Down, to the east.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

### Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The rural quality of the site has been eroded by the presence of the skip hire business, phone masts, pony paddocks and railway embankment. Given its relatively secluded position it would be able to accommodate change relatively easily and may even benefit from mitigation measures associated with any proposed change.

### 5. Potential Landscape Impacts

- Loss of native hedgerows and vegetation on site.
- Visual impact on chalk downland and river valley to the east could erode the rural character.

### 6. Potential Landscape Mitigation Measures

- Careful siting of new facilities to prevent loss of hedgerows and vegetation
- Planting of additional woodland planting screens to integrate the facility with the surrounding riparian landscape including willows and alders
- Minimise impact on entrance to site, which retains a rural character
- The following 'Broad Management Objectives' for the Chalk River Valley landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Consider opportunities for re-planting hedgerows and hedgerow trees where these have been lost. In particular, the comparatively dense structure of willows, poplars and other moisture loving trees should be retained along field boundaries and the course of the river
  - Resist excessive signage associated with new development along the trunk roads and maintain a sense of landscape scale when planning new road junctions junctions that are too large will disrupt visual unity along the valleys.



### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures	
Users of CB Skip Hire	Low	No change		
Residents on western edge of Laverstock, off Church Road	Medium	Slight beneficial – No change	15m planted     buffer strip on     eastern edge of site	
Passengers and employees on railway line	Low	Slight adverse – No change	<ul> <li>Sensitive site planning and inclusion of tree planting within site.</li> </ul>	
Users of Park and Ride facility at Bishopdown	Low	No change	Planting of 15m     buffer at southern     end of site.	
Walkers on footpath on Cockey Down and Laverstock Down (potential impact)	Medium	No change	<ul> <li>Sensitive site planning and inclusion of tree planting within site.</li> </ul>	

### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on residences on Broadway Ledge and the footpath to the south of the site, could be almost entirely mitigated through sensitive site planning and screen planting. Site planning should avoid the loss of the lane with hedgebanks that runs through the site.

### 9. Recommended further landscape and visual surveys

- Visual survey from footpath on Cockey Down and Laverstock Down
- Winter-time visual survey
- Night time visual survey

## Air Quality Report

### S4 CB Skip Hire, St Thomas Farm, Laverstock, 2ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located to the northeast of Salisbury and currently accommodates a skip hire company.



### Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>4</sup> sources within 1km of the site: road traffic on the A30 and A338 and minor roads; gas/oil/solid fuel space heating for buildings; Salisbury Crematorium (CO, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, VOC); CB Skips concrete batching (additional potential emissions of dust).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>5</sup> for 2005 and comparable standards<sup>6</sup> are: 16.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 13.1µg/m<sup>3</sup> NO<sub>2</sub>

<sup>&</sup>lt;sup>4</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>5</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>



(standard  $40\mu g/m^3$ );  $18.9\mu g/m^3 PM_{10}$  (standard  $40\mu g/m^3$ ). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.

1.4 Potentially sensitive receptors within 1km: residential premises, including the areas of Bishopdown, Hampton Park and Laverstock. There are three County Wildlife sites within 1km: Bishopdown, Laverstock Down and Cockey Down WWT Reserve. The River Avon System SSSI/cSAC and Cockey Down SSSI are potentially sensitive habitats.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NOx	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	1 (2)	2 (2)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential between 100 and 250m	1 (2)	1 (2)	N/A	N/A	3 (3)	1 (1)	3 (3)
Residential beyond 250m	1 (2)	1 (2)	N/A	N/A	2 (2)	1 (1)	2 (2)
Ecological designation within 1km of site (Bishopdown, Laverstock Down, Cockey Down WWT Reserve, River Avon System SSSI/cSAC and Cockey Down SSSI)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A
Notes:							

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust, bioaerosol (with composting) and odour, control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to high without mitigation. Dust, bioaerosol (with composting) and odour mitigation is recommended. Detailed assessment should be undertaken if the site is intended for composting.

<sup>&</sup>lt;sup>6</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



## Water (Quality and Environment) Assessment

### Site name – CB Skip Hire, St Thomas' Farm, Laverstock

NGR at centre of site – SU 159318 Location description – near Laverstock, 2km northeast of Salisbury Area of site (ha) - 2

### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment	
	Receptor		Impact	Measures	Requirements	
			Significance	(to be considered as appropriate)		
Water	Groundwater	Contaminate major aquifer Contaminate Source Protection Zone	Medium / High Medium / High	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> </ul>	<ul> <li>Environmental management during construction</li> <li>Relevant licensing requirements (PPC) to be assessed</li> </ul>	
	Surface water body	Contaminate watercourse (R Bourne)	Medium		<ul> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> </ul>	

## Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Impact on baseflow / runoff to watercourse	Medium	<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Review runoff treatment requirements</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>
		Flood Risk	Low / Medium	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater Abstraction point	2 recorded private groundwater abstractions within 500m of site. Nearest public water abstraction over 1km from site	Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> </ul>	<ul> <li>Check status of abstractions with Environment Agency</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Check availability of data of</li> </ul>
	Surface water Abstraction point	Contaminate surface water supply for amenity abstraction	Low / Medium		groundwater and surface water quality sampling locations from Environment Agency
	Designated sites/ Adjacent sensitive landuses	Impact R Avon System Impact SSSI at Cockney Down and /or 3 wildlife sites	Low / Medium Low	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above Management of windborne</li> </ul>	<ul> <li>Consider the potential environmental impact on site and adjacent landuses have, and how an appropriate environmental baseline can be</li> </ul>

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment
	Receptor		Impact	Measures	Requirements
			Significance	(to be considered as appropriate)	
	Other	On site landuses include	Low / Medium	material at site boundaries	measured/monitored
	landuses	skip hire yard and undeveloped grassland Railway embankment adjacent to site			<ul> <li>Approach Environment Agency for requirements</li> </ul>
		Current discharge	Low / Medium		
		consents			

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of CB Skip Hire, St Thomas' Farm is:

- Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

### S4 CB Skip Hire, St Thomas Farm, Laverstock

### **DESK STUDY INFORMATION**

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m: River Avon System SAC/SSSI: Located approximately 120m south of the site.

### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site. However there are the following records present for the habitats surrounding the site, with the closest record being 160m from the site:

- 37 records of water vole and three records of otter along the River Bourne (which flows to the south of the site):
- Four bat records (including one brown long-eared bat, one pipistrelle and two noctule);
- One record of brown hare, one record of harvest mouse and one record of water shrew; and
- Two records of rare vascular plants in Wiltshire (one of cotton thistle and one of sainfoin).

## Details of surveys already undertaken (where known):

None identified.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The northern part of the site consists of a skip hire business which is currently in use. Habitats present include bare earth and five buildings (including two large barns, a portacabin and two smaller breeze block buildings).

The southern part of the site consists of semi-improved grassland used for pasture with small patches of tall ruderal species present.

The site is bound by a railway embankment covered in dense scrub to the west and by a species poor hedgerow to the east. A number of semi-mature and mature trees are present within this hedgerow.

### Field Evidence of notable species:

There a large number of semi-mature and mature trees with bat roosting potential (present within hedgerow which bounds the eastern side of the site). The buildings located within the site have a low potential to support roosting bats.

A large number of house martins observed flying above the CB Skip Hire yard. No evidence of house martins nesting on the buildings present on the site was observed.

### **OTHER INFORMATION**

None identified.

### EVALUATION OF SITE AND POTENTIAL IMPACTS. MITIGATION AND OPPORTUNITIES

### Nature conservation evaluation:

The CB Skip hire site and the semi-improved grassland field that form the majority of the site are of negligible nature conservation value. However this site is surrounded by habitats that are of local nature conservation value (i.e. hedgerows and dense scrub on railway embankment of value for nesting birds).

### Potential Ecological Impacts:

The loss of semi-improved grassland used for pasture and the possible loss of bare earth and buildings from within the CB Skip Hire site. There is also the possible loss of hedgerows and associated semimature and mature trees.

There may be potential water quality impacts on River Avon System SAC/SSSI present 120m south of the site due to runoff during construction and operation of new uses.



The overall works are not likely to have a significant adverse impact in terms of direct habitat effects within the site. However if there are impacts on the water quality of the River Avon SAC, this could have a significant adverse impact that will need to be avoided or mitigated.

### Potential mitigation:

- Retention of hedgerow to east and dense scrub on railway embankment to the south of the site.
- Retention of semi-mature and mature trees wherever possible.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines as working in close proximity to the River Avon System SAC/SSSI. These measures will help to prevent detrimental impacts on water quality of the River Avon System SAC/SSSI while the site is constructed.
- No direct discharge of run-off or other waste water from the site into the River Avon. Inclusion of Sustainable Urban Drainage systems (SUDs) and/or silt traps/sediment settling lagoons/infiltration areas within site. These measures will help to prevent detrimental impacts on water quality of the River Avon System SAC/SSSI when the site is in operation.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

### Residual impacts:

If all mitigation is implemented the residual impacts are likely to be negligible given the size and type of habitat to be lost.

Providing the Environment Agency PPGs are strictly adhered to and SUDs (or similar) are employed during the operation of the site the residual impacts on the River Avon System SAC/SSSI are also likely to be negligible.

### **Opportunities for enhancement:**

None identified.

### Recommended further ecological work/surveys:

- Bat surveys on semi-mature and mature trees if require felling. To include a daytime inspection
  assessing trees for potential to support bat roost(s), followed by an evening emergence survey if
  appropriate.
- Bat surveys on any buildings if to be demolished. To include a daytime inspection assessing buildings potential to support bat roost(s) followed by an evening emergence survey if appropriate.
- Nesting bird surveys for house martins, swallows and swifts on any buildings if to be demolished.

### Legal and policy implications:

- If bats are found to be roosting within any trees to be felled or buildings to be demolished a development licence will be required from Defra.
- It is recommended that a method statement is compiled by an ecologist for any works that may cause pollution, discharge or run-off into the River Avon System SAC/SSSI. This will help ensure that no detrimental impacts occur to this SAC as a result of the works.
- Wiltshire County Council/Swindon Borough Council have not identified this site as requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994.

The Nature Conservation policies in the Salisbury District Council Local Plan that are potentially relevant to this site include:

• Policy C10, Policy C13, Policy C14 and Policy C15

### Joint Waste Site Allocations Site Survey Report

## **ATKINS**

Phase 1 Habitat Map



## Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Number	Target Notes	Species Notes
1	Building gone	
2	Building gone	
3	Small breeze block building with asbestos roof. There is a gap between roof and walls. Low bat potential.	
4	Breeze block barn (half breeze block, half wood planks). Very open and exposed with pitched asbestos roof. Low bat potential.	
5	Large breeze block barn (half breeze block, half wooden planks) with sloping asbestos roof. Very open and exposed. Low bat potential.	
6	Skip hire yard - in use. Bare earth with lots of skips present. Small portacabin present in centre of the site.	large numbers of house martins seen flying above yard, may be nesting on barn buildings present within the site.
7	Small breeze block building with sloping asbestos roof. Very open and exposed. Low bat potential	
8	Portacabin	
9	Tall ruderal	nettle, evening primrose, thistle, dock, hogweed, scen5ed mayweed, poppy
10	Semi-improved grassland field used for pasture (grazing horses).	
11	Railway embankment covered in dense continuous scrub.	dog rose, nettle, bramble, rosebay willowherb, buddleia, young ash, young elder, hawthorn, blackthorn, young sycamore.
12	Overgrown, unmanaged hedgerow with semi mature hawthorn, hazel, blackthorn and willow. Some mature willows are present (check if to be lost). Retain hedgerow if possible.	
13	Hedgerow with occasional semi-mature and mature trees [e.g. willow]. Survey trees for bats if to be lost	

### **Protected Species and Designated Sites**



# Site: S6 Employment Allocation, Mere

## Landscape and Visual Survey

### **S6 Employment Allocation, Mere**

### 1. Introduction

Compact site located at the western end of the rural town of Mere, adjacent to a small business park. The site is currently greenfield and used for arable crops. It is relatively well screened from Mere and the adjacent B3095 by mature vegetation; however it would be seen from a short stretch of the A303 to the west.

### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Blackmoor Vale and the Vale of Wardour Key characteristics relevant to the site:

• A complex mosaic of mixed farming: undulating, lush, clay vales fringed by Upper Greensand hills and scarps.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Greensand Terrace Landscape Character Area: Kilmington Terrace Key characteristics relevant to the site:

- Flat aprons of land from which the dramatic chalk escarpments and hills rise.
- Dominated by arable fields of Parliamentary enclosure.
- Large geometric fields and open skies contrast with the smaller scale, enclosed landscape of the adjacent Wooded Greensand Hills.
- Upper Greensand geology giving rise to rich brown earth soils that have a high agricultural value.
- Land use is predominantly agricultural, including cereal cropping, grass rotations, dairy farming and stock rearing.
- Mixed woodland runs in discontinuous belts along the base of the chalk escarpment.
- Coniferous belts planted as game coverts.
- General absence of prehistoric earthworks in contrast to the surrounding chalk landscapes.

WCC judge the overall landscape condition of this landscape type to be 'moderate', due to the good condition of settlement but eroded biodiversity and landscape structure. The landscape is judged to have 'moderate' strength of character, due to its simple, open character with the weakening influence of settlement and transport corridors. The overall management strategy is to 'conserve' the open farmed character of the terrace with its distinct pattern of settlement and the contrast with the adjacent escarpment and 'improve' lost and/or declining features such as field boundaries and woodland.

### District Landscape Character Assessment: N/A

### Landscape Designations and Rights of Way:

- The Cranbourne Chase and West Wiltshire Downs AONB lies to the north of the A303, just north of the site.
- A public footpath runs up the side of Long Hill, to the north-east of the site
- The Monarch's Way long distance trail runs to the south of the site,

### Local Authority Consultation:



Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

### 3. Baseline Landscape Character and Features: Site Survey

Flat site at approximately 120m AOD, visually enclosed by low hill to the north-east and Nor Wood, a County Wildlife Site, to the north. The site is bounded by the B3092 to the south, which has a strong hedgerow boundary which screens views of the site during the summer months. South of the B3092 the parkland landscape of Zeals House includes mature roadside trees. To the east of the site, Dead Maid Quarry accommodates a small business park, its sunken situation and mature boundary trees meaning that the two sites are well screened from each other.

The site, and the wider field to which it belongs, is currently farmed for arable crops and has no built elements, although the site is allocated in the Salisbury Local Plan for employment use. There are no public rights of way over the site, although distant views of the site are likely from a public bridleway over Long Hill.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: High Capacity to Accept Change: Medium

The site has a strong hedgerow and woodland structure, meaning it is well screened from the B3095 as well as the adjacent business park, during the summer months. From the north and west however, the site is visually more open and less able to accept change.

### 5. Potential Landscape Impacts

- Loss of hedgerows
- Loss of rural character
- Disturbance to flat topography in surrounding area

### 6. Potential Landscape Mitigation Measures

- Sensitive site planning so as to minimise loss of hedgerows and mature trees on eastern boundary, including careful access design
- Planting of 15m+ wide woodland strip around facility, to link in with existing field pattern and mitigate views from surrounding rural area.
- The following 'Broad Management Objectives' for the Greensand Terrace landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Improve the condition and character of hedgerow boundaries by thickening and replanting where lost, apply consistent management techniques and replacing hedgerow trees where over mature and dying

### 7. Visual Receptors

Visual Receptor	Sensitivity of	Potential Residual	Potential Visual
	Receptor	Impact on Receptor	Mitigation Measures
Users of footpath on Long Hill	Medium (0.5Km away)	Slight adverse	Screen planting



Residents of new housing development	High (but 0.5 Km away and	No Change	around all site boundaries
at western end of	majority of		Miniming loop of
winter views only)	unlikely to		INITIMISE IOSS OF     existing hedgerows     when designing site
Users of B3095	Low	Slight adverse	access
Users of A303	Low	No Change	]
Employees of	Low	No Change	
business park at			
Dead Maid Quarry			
(potential impact,			
winter only)			

### 8. Summary: Residual Landscape and Visual Impacts

Compared to the majority of other sites, this is greenfield in character and to develop it for waste purposes would see a significant erosion of its rural character. Given that the site is allocated for employment use, however, it is likely that this character will change in any event. If the site was developed for business, and with careful siting of the proposed facilities away from the B3092 and adjacent industrial estate, and with the planting of additional screening vegetation, the residual adverse impact of the proposals would be slight - negligible.

### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys
- Visual survey from surrounding footpaths
- Night time visual surveys

## **Noise Assessment**

### S6 Employment Allocation, Mere (Inset Map 11)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Mere Employment Allocation to assess the site's suitability for a waste recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be the property known as Norwood House located adjacent to the west of the proposed site and approximately 30m to the north of the B3092.
- 1.3 The site is currently greenfield and is flanked to the south by the B3092, to the west by Norwood House and an industrial estate, and to the north and west by fields. The A308 is located approximately 250m north of the site.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 26<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site and at the most sensitive receiver predominantly consists of traffic noise from the B3092/B3095 and A308 and nearby local roads and environmental sources such as birdsong, insects, and wind in tress, etc
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	16:37	57.1	67.9	51.7
MEASUREMENT 2	16:47	57.8	71.2	50.7
MEASUREMENT 3	16:56	56.7	63.6	51.2
AVERAGE		57.2		51.2

2.3 The average background noise level at the most sensitive receiver was measured as 51.2dB  $L_{A90}$ .

### 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at Mere Employment Allocation includes Strategic or Local Recycling, Materials Recovery Facility or Waste Transfer Station. The boundary of the site area proposed for use is adjacent to the most sensitive receiver. Given the background noise level, L<sub>A90</sub> of 51.2dB at the most noise sensitive receivers, it is expected that any new waste development would need to be located a minimum distance of 110m away from such receivers.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.



- 3.3 Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Implementation of mitigation measures would serve to attenuate the noise levels from the site and possibly allow a closer proximity to be achieved.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Ecological Report**

### **S6** Employment Allocation, Mere

### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

Dead Maid Quarry SSSI (Geological): Adjacent to north-eastern boundary of the site. Norwood Wildlife Site: Located approximately 90m north of the site. Long Hill (Mere) Wildlife Site: Located approximately 300m north-east of the site.

### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

Within 500m of the site there are five records of badger (closest located approximately 135m east of the site), one record of an Adonis blue record (approximately 300m east of the site) and one record of a serotine bat (approximately 360m south-west of the site).

### Details of surveys already undertaken (where known):

None identified.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The site consists of part of an arable field which is now set aside (predominantly covered in the previous crop and arable weeds). The site is bound by species poor hedgerows (overgrown and unmanaged), with one hedgerow containing semi-mature and mature tree standards. One small area of broadleaved semi-natural woodland lies adjacent to the south-eastern boundary of the site.

### Field Evidence of notable species:

There is one pond present within 500m, located approximately 380m west of the site on southern side of B3095. This road acts as a barrier that great crested newts are unlikely to cross.

A number of semi-mature and mature trees with bat roosting potential (present within hedgerow which bounds the eastern edge of the site and the woodland strip located adjacent to the south-eastern boundary of the site).

### OTHER INFORMATION

None identified.

### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

### Nature conservation evaluation:

The arable field that forms the site is of negligible nature conservation value. However the hedgerows and woodland areas that form the boundaries of the site are of local nature conservation value.

### Potential Ecological Impacts:

There are no predicted impacts on the designated sites of nature conservation value surrounding the site.

Potential ecological impacts include the loss of arable farmland and the possible loss of broadleaved hedgerows, the small semi-natural woodland strip and semi-mature and mature trees. Overall works likely to have adverse impact of minor significance.

### Potential mitigation:

- Retention of the broadleaved semi-natural woodland strip.
- Retention of hedgerows around the outside of the site.
- Retention of semi-mature and mature trees wherever possible.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.



• Appropriate mitigation to ensure there are no detrimental impacts on the geological features present within the Dead Maid Quarry SSSI, located directly adjacent to the site.

### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

### **Opportunities for enhancement:**

None identified.

### Recommended further ecological work/surveys:

• Bat surveys on semi-mature and mature trees (within hedgerows and woodlands) prior to require felling. To include a daytime inspection assessing tress potential to support bat roost(s), followed by an evening emergence survey, if appropriate.

### Legal and policy implications:

- If bats are found to be roosting within any trees to be felled a development licence would be required from Defra to fell the tree. In addition to this further appropriate mitigation would be required to (supplementary than that described above) to ensure no bats are injured or killed during the works and to compensate for the loss of any roosting habitat
- Any direct impacts on the Dead Maid Quarry SSSI are likely to require a Section 28 notification and consent from English Nature (Natural England).

The Nature Conservation policies in the Salisbury District Council Local Plan that are potentially relevant to this site include:

- Policy C10
- Policy C11
- Policy C12
- Policy C13







Number	Target Notes		
1	Semi mature trees with bat potential		
2	Private residence - no access		
3	Arable field, currently not in use (left as set-aside)		
4	Mature oak trees present. Ivy covered. retain. If to be lost then survey for bats		
5	Mammal path through woodland. Ends when entering the field		

### **Protected Species and Designated Sites**



# Site: S9 Kingsway Trading Estate, Wilton

## Landscape and Visual Survey

### **S9 Kingsway Trading Estate, Wilton**

### 1. Introduction

The site consists of a small corner of land on a small business park on the north-eastern edge of the rural town of Wilton. Its north-eastern boundary is marked by a railway and its south-western boundary by the A36 (T).

### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

None. Given its industrial uses, the site generally lacks key characteristics that are typical of this area, such as open chalk arable fields, and large areas of woodland. It does, however, have a well-treed setting.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Wooded Downland Landscape Character Area: West Wiltshire Downs Wooded Downland Key characteristics relevant to the site:

None. (see above)

WCC judge the character of the Wooded Downland landscape type to generally be 'good', due to its strong structure of hedgerows and woodland. It recognises the negative impact of the localised influence of suburban edges of settlements though. WCC consider it to have a 'strong' character, based on its chalk geology and topography. The overall strategy for these areas is to 'conserve' their highly rural, peaceful character.

### District Landscape Character Assessment: N/A

### 3. Landscape Designations and Rights of Way:

- The site is surrounded by an area covered by Policy C6 of the Salisbury Local Plan, the Landscape Setting of Salisbury and Wilton, although this designation does not cover the site itself.
- Wilton Park is a Registered Park and Garden to the south-east of the site.

### Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

### 4. Baseline Landscape Character and Features: Site Survey

The site consists of a corner of a trading estate which currently includes a number of empty plots and units such as a saddlers, engineering depot and vacant car sales garage. These are scattered throughout the site in a somewhat random layout, with a high proportion of bitmac and concrete hard-standing between them. The units are relatively recent in origin and generally constructed of concrete, steel and glass, although the red-brick building housing the saddlers appears to be more historic. The site lacks a strong internal landscape structure, with the only vegetation being located around the periphery of the site.



The site is accessed through the Kingsway trading estate from the A36(T). It is elevated slightly above the A36 and is screened from the road by clumps of mature, predominantly native tree and hedgerow vegetation, including horse chestnuts, hawthorn and ash. A railway line runs at grade along the north-eastern boundary of the site and is separated from the site by a chain link fence.

The site is located within a setting of the lower slopes of rolling chalk uplands which extend northwards above the River Wyle, which runs through Wilton. It does not reflect this rural setting though, and is industrial in character.

### 5. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The site is in a poor landscape condition, with its rural character eroded through its relatively longterm trading use. The site is relatively secluded and well screened and could accommodate change well.

### 6. Potential Landscape Impacts

• Loss/harm to peripheral vegetation, especially if required for construction of wider/new site access

### 7. Potential Landscape Mitigation Measures

- Retention of existing vegetation to screen proposals
- Supplementary native planting around site boundary to screen views from the A36 and integrate the site with the wider landscape
- Fence/hedgerow planting along railway boundary to strengthen its rural character
- The following 'Broad Management Objectives' for the Wooded Downland landscape type in the Wiltshire Landscape Character Assessment are relevant to the site:
  - Minimise small scale incremental change such as signage, fencing or improvements to the road network which could change the rural peaceful character of the landscape.
  - Conserve the character of the small hamlets and villages.

### 8. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures	
Users / employees of businesses on site and adjacent businesses	Low	Slight adverse	<ul> <li>Sensitive site location away from other users. Use of hedgerow and tree planting to soften visual effects</li> </ul>	
Passengers / employees on railway	Low	No change	Hedgerow planting or fence     along railway line	
Users of A36	Low	Slight adverse	Retention of existing vegetation.     Additional planting buffer on	
Residents on A36/Kingsway House	High	No change	south-western edge of site	

### 9. Summary: Residual Landscape and Visual Impacts

Due to its enclosed setting and existing industrial character, the site could accommodate change. The main visual impacts, on the employees of the trading estate and the railway could be almost entirely mitigated through sensitive site planning and screen planting.

### 10. Recommended further landscape and visual surveys

• Winter-time visual survey from A36.

## Noise Assessment

### S9 Kingsway Trading Estate, Wilton (Inset Map 41)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Wilton Kingsway Trading Estate to assess the site's suitability for Waste Recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be properties located just of Kingsway approximately 100m from the south of the site.
- 1.3 The site located within an industrial estate comprises of several small business and industrial units. The site is flanked to the north-east by the local railway line, to the west by the A36 Warminster Road and to the south by the industrial estate.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 25<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site and at the most sensitive receivers consists predominantly of road traffic noise from Kingsway and the A36 and rail traffic noise from the nearby railway line.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	18:15	51.2	66.2	40.4
MEASUREMENT 2	18:21	52.7	72.9	41.3
MEASUREMENT 3	18:26	50.0	66.6	41.9
AVERAGE		51.4		41.2

2.3 The average background noise level at the most sensitive receiver was measured as 41.2 L<sub>A90</sub>.

## 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Wilton Kingsway Trading Estate is for local recycling. The boundary of the site area proposed for use passes within 100m of the most sensitive receivers. Given the average background noise level, L<sub>A90</sub> of 41.2dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of approximately 350m away from the most sensitive receivers.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of



the development within the site, existing buildings within the site may also offer some screening effects allowing a closer proximity to be achieved.

- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken

## **Air Quality Report**

### S9 Kingsway Trading Estate, Wilton, 6ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located to the west of Salisbury and currently accommodates commercial units, including a bakery.



Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>7</sup> sources within 1km of the site: road traffic on the A30, A36, A3094 and minor roads; gas/oil/solid fuel space heating for buildings; Quidhampton (chalk) Quarry (additional potential emissions of dust).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>8</sup> for 2005 and comparable standards<sup>9</sup> are: 12.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 18.2µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 18.9µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality in

<sup>&</sup>lt;sup>7</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>8</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>9</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)


the general area. There is one Air Quality Management Area within 1km: a stretch of the A36 at Wilton comprising King Street and a short section of Queen Street declared for annual mean  $NO_2 > 40 \mu g/m^3$  due to road traffic.

1.4 Potentially sensitive receptors within 1km: residential premises, including the areas of Wilton. There are three County Wildlife sites within 1km: Flouse Hole, River Wylye and Chilhampton Down. The River Avon System SSSI/cSAC lies in close proximity.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NOx	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	1 (3)	1 (2)	N/A	N/A	N/A	2 (2)	2 (2)
Residential between 100 and 250m	1 (3)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Residential beyond 250m	1 (3)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Ecological designation within 1km of site (Flouse Hole and Chilhampton Down, River Wylye, River Avon System SSSI/cSAC)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A
Notes: 1 = low risk, no further assessment requir 2 = moderate risk, further assessment is	ed, a ba	isic level ended. n	of mitig	ation is	recommende be required	ed (at least)	

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to high without mitigation. Dust and odour mitigation is recommended. A local air quality assessment should be undertaken for road traffic. Further assessment should be undertaken for dust and odour.



## Water (Quality and Environment) Assessment

### Site name – Kingsway Trading Estate, Wilton

NGR at centre of site – SU 099320 Location description – Edge of a built up area, immediately adjacent to the railway line near Wilton, 5km west of Salisbury Area of site (ha) - 1

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Significance of	Potential Risk Measures	Mitigation	Likely Requireme	Further ents	Assessment	
			Impact	(to be considered as	appropriate)				
Water	Groundwater	Contaminate major aquifer	Medium / high	<ul> <li>Plan mitigation during construction</li> </ul>	requirements	Environ     construct	mental manage	ement during	
		Contaminate Source Protection Zone	Low / Medium	<ul> <li>Layout planning o</li> </ul>	of site	<ul> <li>Approac</li> </ul>	ch Environmen	it Agency for	
	Surface water body	Contaminate adjacent watercourse (R Wylye)	adjacent High / medium • Site traffic plan			dium • Site traffic plan monitoring requirements			
		Impact on baseflow/runoff to watercourse	<ul> <li>ct on baseflow/runoff Medium</li> <li>tercourse</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> </ul>		plan dstanding system	<ul> <li>Relevant</li> <li>(PPC) to</li> </ul>	it licensing req be assessed	uirements	
	Spill kits, bunded storage and designated liquid handling		d storage and uid handling	Produce	Working Plan	for site			
			areas if site mi liquids/hydrocarbor	might accept	• Review run requiremen	runoff treatmei nents	nt		
			<ul> <li>Consider limitin waste handled at wastes only, inert</li> <li>Engineered liners</li> </ul>	g types of site e.g. solid wastes system	<ul> <li>Monitori required permit)</li> </ul>	ng boreholes ( I for obtaining c	(may be operating		
						<ul> <li>Baseline</li> </ul>	e monitoring of	adjacent	

#### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Significance of Impact	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
					<ul> <li>Assess impact of current landuses</li> </ul>
		Flood event causes contamination of surface water and disruption of operations	Medium	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater Abstraction point	Contaminate public water abstraction of Wessex Water Services Ltd	Low / Medium	Refer to groundwater/surface potential risk mitigation measures listed above	<ul> <li>Check status of abstractions with Environment Agency</li> </ul>
		Contaminate two private abstractions	Low / Medium		<ul> <li>Approach Environment Agency for monitoring requirements</li> </ul>
	Surface water Abstraction point	Impact abstraction of Wilton Royal Carpet Factory Ltd	Medium		<ul> <li>Check availability of data of groundwater and surface water quality sampling locations from Environment Agency</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Adjacent watercourse is part of the R Avon SPA / SAC / SSSI Part of adjacent watercourse is a wildlife site	Medium / High	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for requirements</li> </ul>
		ecological value			
	Other adjacent landuses	Mixed light industrial uses and infrastructure	Low		

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Kingsway Trading Estate, Wilton is:

- Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

### S9 Kingsway Trading Estate, Wilton

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

The River Avon Special Area of Conservation (SAC) lies approximately 75m west, separated from the trading estate by the A36.

Flouse Hole County Wildlife Site is approximately 470m south-west. Less than 100m away to the west is County Wildlife Site River Wylye.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are numerous protected species, notable species records within 500m of the site, these are: water vole (associated with the River Wylye), bullfinch, linnet, spotted flycatcher and song thrush (UKBAP species), kingfisher, barn owl and hobby bird records. Records for bat species comprise pipistrelle, noctule and serotine. There are also records of common lizard and slow worm. Plants on the Wiltshire rare plants list are various-leaved water starwort, perfoliate pondweed and common bistort.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The current trading estate is small and compact and all the available space is being used. Some of the buildings have bat roosting potential but are currently in use. The site is bounded on its north-north eastern edges by an active railway line, the western edge is the busy Warminster Road and to the south of the site is a continuation of the trading estate. No available plots are present. There is no soft landscaping or natural habitats on the site.

#### Field Evidence of notable species:

Possibility of suitable roosting features in some of the buildings but no evidence for the presence of bats observed.

#### **OTHER INFORMATION**

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The site is assessed as being of negligible nature conservation value. Bats are a target species in the local BAP and if any buildings were supporting roosting bats this would give them some local value.

#### Potential Ecological Impacts:

Negligible ecological impacts are currently envisaged for either construction or operation phases within the waste allocation boundary. There are no impacts predicted on Flouse Hole County Wildlife Site.

There are some off-site impacts possible on the River Avon SAC given its proximity to the site including:



- Siltation impacts during construction and run-off of silt laden water from hardstanding areas during operation;
- Air quality impacts from the deposition of nitrogen compounds from traffic associated with operation of the facility contributing to existing traffic emissions;
- Dust and litter generated during waste operations reaching the river.

Any adverse impact upon the River Avon SAC would be likely to be local in effect but would have the potential to result in an adverse impact of moderate significance and would require avoidance/mitigation.

#### Potential mitigation:

Any buildings to be demolished to facilitate a new development would need to be preceded by a bat survey through visual day-time inspection in the first instance followed by emergence surveys if deemed necessary. Mitigation in relation to bats would then need to be advised depending on the results of the survey.

To avoid adverse impacts on the River Avon SAC during construction and operation the following mitigation measures are recommended:

- Strict adherence to best practice guidance during construction, particularly the Environment Agency Pollution Prevention Guide notes PPG01, PPG05, PPG06 and PPG21, including the use of method statements to be approved by the Environment Agency and English Nature and the local authority stating what measures will be in place to avoid siltation and chemical spill into the SAC and what measures will be put in place in case of an accidental spillage.
- No direct discharges to surface water or groundwater;
- No surface water or ground water abstractions;
- Closed surface water drainage system within the design of the facility and the use of silt traps and Sustainable Urban Drainage Systems best practice;
- Damping down facilities (such as water sprays) to control dust on the site, particularly along vehicular access tracks during construction and operation and other industry best practice measures to control dust emissions;
- Reducing the risk of litter escaping from the site by using fencing/netting, having waste stored within a building (or total containment of litter) and/or not operating when wind speed and direction threaten the escape of litter to the SAC.

An air quality assessment of the potential impacts of this facility would be required in order for the potential affects on the River Avon SAC to be understood. The results of the air quality assessment would need to be used to recommend appropriate avoidance/mitigation measures regarding air quality effects.

#### Residual impacts:

If all of the mitigation recommended above is carried out there should be no residual impacts. However, detailed design of the facility and method statements and monitoring programmes would be required for construction and operation to ensure the continued absence of adverse effects on the River Avon SAC.

#### **Opportunities for enhancement:**

No specific opportunities within the trading estate are identified. Any new buildings could be considered for green roofing.

#### Recommended further ecological work/surveys:

A survey should be carried out for bats if any of the buildings on the estate are to be demolished.

A survey may be needed of the adjacent railway line in relation to badgers if any development is planned for the edge of the estate abutting the railway line.

#### Legal and policy implications:



If bats are found to be roosting within any buildings to be demolished a development licence will be required from Defra.

If any construction activities are required within 30m of a badger sett a badger disturbance licence may be required from English Nature.

• Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of the River Avon SAC. Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SAC. See Appendix C for details of the Appropriate Assessment.

Relevant policies from the Salisbury District Local Plan (June 2003) include: The Rural and Natural Environment Policies: C10, C13, C17, C18. General Principles for Development Policies: G1, G2, G8.

#### Joint Waste Site Allocations Site Survey Report

**ATKINS** 

Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Overall, the site offers little value for wildlife apart from some of the buildings supporting some bat roost features. No obvious vacant spaces available for any further development. All units are in use	Negligible bat potential

## **Protected Species and Designated Sites**



# Site: S10 Sarum Centre, Salisbury

## Landscape and Visual Survey

### S10 Sarum Centre, Salisbury

#### 1. Introduction

This site consists of two discrete areas, the Sarum Centre, a care centre owned by Wiltshire County Council together with a nursery/garden centre run by the Shaw Trust, and a business/industrial area consisting of Old Sarum Airfield, Sarum Business Park and Castle Gate. The sites differ greatly in character.

#### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

- Extensive open, rolling Chalk plateau dominated by large arable fields.
- Military structures, airfields, tracks and signs.
- Airfields are also conspicuous.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)): Landscape Type: High Chalk Plain

Landscape Character Area: Porton Down Key characteristics relevant to the site:

- Very large scale and open, exposed landscape.
- Rolling plateau land form with panoramic views over the surrounding lowlands creating a sense of elevation.
- Large regular arable fields are bounded mainly by ditches or fences with occasional hedgerows.
- Extensive areas of chalk grassland and scrub occur on the northern and central parts of the area under military ownership with arable farmland around the periphery.
- Copses and woodland belts, at various stages of growth occur throughout the area with sinuous older plantations contrasting with more recent tree planting in geometrical blocks.
- Settlement is sparse, limited to nucleated villages, military camps and isolated farmsteads.

WCC consider the condition of this landscape type to be 'good', as military activity has maintained large areas of the countryside. It has a 'strong' sense of character, due to its vast scale, remoteness and openness. They note however, that the 'long views and openness of the level plateau have a high visual sensitivity to change' and the overall management strategy of the area is to conserve the open and isolated character of the plain.

#### District Landscape Character Assessment: N/A

#### Landscape Designations and Rights of Way:

- Monarch's Way long distance trail to north and east of site.
- Distant views from rights of way on chalk downland to south-east of site
- Sarum Centre site : Landscape setting of Salisbury and Wilton

#### Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.



#### 3. Baseline Landscape Character and Features: Site Survey

#### Sarum Centre

The Sarum Centre site consists of three elements, a house and yard associated with Salisbury Coaches, a nursery/garden centre run by the Shaw Trust and a campus run by Wiltshire County Council Social Services, including Bradbury House and Adult and Community Services. The site has a strong character, apparently influenced by its history as a small country residence dating back to the early 20<sup>th</sup> century. As well as a main, large office, it now has a number of ancillary buildings, the majority also in red-brick, built at various points up to the present day. Whilst this, combined with car and coach parking, has eroded the domestic character of the estate, the strong structure of mature boundary and specimen trees set within mown amenity grass contributes to the setting and character of the site.

To the north of the Wiltshire County Council Social Services campus, the Shaw Trust's nursery is also set within a structure of mature trees, including an orchard to the north. The site includes a series of polytunnels and open plant sales area. To the east, a large open amenity spaces includes young standard trees, mown grass and mature hedgerow trees.

The Salisbury Coaches site takes up a small area in the western corner of the site. The coaches are visible from the road.

#### Industrial Estate

The industrial estate is a long, relatively narrow site, to the west of the Sarum Centre. It consists of three sub-areas; Old Sarum Airfield, Sarum Business Park and Castle Gate Business Park.

Castle Gate Business park lies at the south-western end. It is relatively open in character, with views over the airfield to the south and large areas of car parking. Units are generally large in scale and of modern design, generally constructed of grey steel. The site has a structure of young hedgerows and trees, which give some screening to the south. The site is well lit, with street lighting.

Sarum Business Park lies to the centre of the site and fronts on to the Portway Roman Road. It is situated on the site of an established military site, but the buildings are contemporary in design, with a number of identical two storey, cream units, used for businesses such as printing and laundry. The Portway frontage is generally well vegetated with mature hedgerow and the internal road layout is lined by mature lime and cherry trees.

Old Sarum Airfield consists of a number of hangars and ancillary brick buildings, some dating back to the 1917 when the airfield was requisitioned from farm land for use by fighter and training aircraft. It is the second oldest continuously operational aerodrome in the United Kingdom. The military presence ended in 1979 and following its use for aeroplane construction in the 1980s the site is now used for light aviation. The site retains a historic military character due to the architecture of the buildings and continued presence of aircraft within the area.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

Sarum Centre

Landscape Quality and Condition of site: Good quality, ordinary condition Capacity to Accept Change: Low – Medium

#### Industrial Estate

Landscape Quality and Condition of site: Ordinary Capacity to Accept Change: Low – Medium

Both sites have relatively strong landscape character, both due to their rural setting and history. Whilst they are relatively large in size, the numbers of existing user-groups that could be affected may be significant.

#### 5. Potential Landscape Impacts



#### Sarum Centre

- Loss of large-scale mature trees within site and around boundaries
- Loss of mature orchard
- Erosion of garden setting to social services campus

#### Industrial Estate

- Loss of large-scale mature trees and hedgerows, especially in Sarum Business Park and Old Sarum Airfield areas.
- Erosion of historic character of Old Sarum Airfield
- Erosion of open rural farmland to south of site.

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning to avoid loss of mature hedgerows, trees and avenue structures
- Location of facilities away from site boundaries, to minimise additional erosion of rural character of the countryside beyond
- The following 'Broad Management Objective' for the High Chalk Plain landscape type in the *Wiltshire Landscape Character Assessment* is relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Light aircraft – users of Old Sarum Airfield	High	Slight adverse	Retention of existing vegetation structure
Employees of business parks	Low	Slight adverse	Sensitive site planning
Users of A30	Low	Negligible	• Line of version and
Users of Portway	Low	Negligible – slight adverse	<ul> <li>Use of vegetation and bundle to corecon facilities</li> </ul>
Users of A345	Low	Negligible	builds to screen facilities
Users of road joining A345-A338 via Ford	Low	Negligible	
Users of Sarum Centre	High (special needs visitors)	Slight – Substantial adverse (significance of effects heavily dependent on scheme proposals)	
Workers/trainees at Shaw Trust	Medium	Slight – Substantial adverse (significance of effects heavily dependent on scheme proposals)	
Shoppers at Shaw Trust Garden Centre	Low	Negligible – slight adverse	
Users of Monarch Way long distance trail	Medium (reduced impact due to distance)	Negligible	
Users of distant footpaths to south- west of site	Medium (reduced impact due to distance)	Negligible	

#### 8. Summary: Residual Landscape and Visual Impacts



These sites are both relatively large, and it is difficult to summarise potential impacts without further information on specific proposals. It is important that both have a relatively strong historic character, albeit dating to the 19<sup>th</sup> century and this should be protected. Both sites are also well used, with a large number of visual receptors, both on-site and within the surrounding countryside, which is very open in character. Whilst they are brown-field sites, neither currently has a strong heavy-industry or waste-dominated character.

#### 9. Recommended further landscape and visual surveys

- Visual surveys from footpaths
- Winter-time visual survey

## **Cultural Heritage Report**

## S10 Sarum Centre, Salisbury

### **DESK STUDY INFORMATION**

#### Known heritage assets within Study Area

	014005500
WSMR NO:	SU13SE528
Site Name:	Old Sarum Airfield
Grid Ref:	SU15143345
Description:	Old Sarum airfield retains the most complete group of technical buildings representative of a Training Depot of the First World War period. It also, uniquely for any of the key surviving sites of the period up to 1918, retains its grass flying field with none of the perimeter tracks and other interventions characteristic of the post-1938 period. It was one of the Training Depot Stations in November 1918. It comprised three flying units, each having a coupled general service shed and one repair hangar (Old Sarum's being the only example to have survived). In February 1944 the hangars were converted into use for housing vehicles being specially prepared for D-Day. It closed as a military base in 1979. The most westerly of the 3 paired hangars was
Designation:	None (although Conservation Area status pending)

#### Known heritage assets within 500m of Study Area boundary

WSMR No:	SU13SE665
Site Name:	Linear Feature
Grid Ref:	SU15273326
Description:	Multiple linear ditches are visible on an aerial photograph.
Designation:	None
WSMR No:	SU13SK308
Site Name:	Roman Road
Grid Ref:	SU150335
Description:	The Roman road between Sorviodunum and Calleva Atrebatum.
Designation:	None
WSMR No:	SU13SW301
Site Name:	Roman Road
Grid Ref:	SU14523309
Description:	The conjectural route of the Portway was sectioned by a pipeline. The
-	alignment was confirmed and it had side ditches 100ft apart.
Designation:	None
WSMR No:	SU13SW108
Site Name:	Unassociated finds
Grid Ref:	SU14453348
Description:	Two Neolithic end scrapers and other flints which cannot be more closely
	dated than Neolithic/Bronze Age. Burnt flint was also found.
Designation:	None
WSMR No:	SU13SW331
Site Name:	Unassociated finds
Grid Ref:	SU14453348
Description:	23 sherds of pottery, mainly coarsewares except for 5 sherds of Samian ware,
	one fragment of New Forest coated ware, and a sherd of black burnished ware
	were found in 1998. Date range is mainly 1st-2nd century except for 3rd-4th
	century NF ware.
Designation:	None
WSMR No:	SU13SW4A1
Site Name:	Unassociated find



Grid Ref:	SU14393342
Description:	An enamel brooch and coins were found in 1998.
Designation:	None

#### FIELD SURVEY INFORMATION

The site is currently used as a business park, although the airfield is still in use for leisure purposes. The historic integrity of the site is still high. No extant archaeological remains were visible.

#### SITE ASSESSMENT

**Cultural Heritage value:** Old Sarum remains one of the oldest working airfields in England. Laid out in the First World War, it still contains a number of original early 20<sup>th</sup> century hangars and associated buildings. The site has been developed as a business park, but retains in use many of the ancillary RAF buildings. Its heritage value has now been recognised and the site has been subject to a Conservation Area Appraisal (Atkins Heritage, 2006) which is likely to lead to the site being designated a Conservation Area.

**Potential Cultural Heritage Impacts:** Although a number of pre-modern archaeological sites are known in the immediate vicinity of the Study Area, it is likely that the original construction and subsequent development of the airfield may have already impacted on buried archaeological remains. Potential for some survival remains, however. There is the potential for development to impact on the historic character of the area.

**Further Evaluation & Potential Mitigation:** Under PPG15 (Planning and the Historic Environment) consideration should be given to the impact on the setting of the proposed Conservation Area.

Any proposals for development at this site must be accompanied by an archaeological field evaluation in accordance with PPG 16 (Planning & Archaeology), to define the character and extent of the archaeological remains that exist in the area of the proposed development. It is essential that the County Archaeologist and English Heritage are consulted at the earliest possible stage regarding the undertaking and results of such an evaluation. Where unrecorded features of archaeological importance are found, the advice of the County Archaeologist and English Heritage will be essential as to the appropriate action required. As with identified features of archaeological interest in proximity to the site, development should mitigate any potential impacts through careful design and landscaping and, where required, through preservation in situ of any remains.

**Assessment:** Further evaluation is required as to the suitability of this site at the Planning Application stage.



## **Ecological Report**

### S10 Sarum Centre, Salisbury

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

The are no statutory designated sites within 1km or non-statutory or other notable habitats within 500m of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Within the site there is one record of a badger sett (in the northern corner of the site, an area of woodland).

Within 500m of the site there is one record of slow worm and one record of brown hare.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

Majority of site consists of the Sarum Centre (a series of relatively modern red brick buildings set in amenity grassland grounds). A garden centre (consisting of two small buildings and a series of polythene tunnels used to store plants) and a private residence (a two storey building with concrete render) are also present.

A large number of semi-mature and mature trees are present within the site (marked on Phase 1 habitat map). An orchard and an area of semi-natural broadleaved woodland (consisting predominantly of sycamore) are present in the northern part of the site.

All parts of the site are currently in use.

#### Field Evidence of notable species:

Two active badger setts were noted at the edge of the woodland in northern part of site (marked on Phase 1 habitat plan). One sett has three active sett entrances and the second sett has two active sett entrances.

There a large number of semi-mature and mature trees with bat roosting potential present within the site. The buildings present within the site (particularly the red brick buildings within the Sarum Centre) also have the potential to support roosting bats.

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (areas of hard standing and amenity grassland). However the woodland area and the semi-mature and mature trees present within the site are of local nature conservation value.

#### Potential Ecological Impacts:

Potential ecological impacts include the loss of amenity grassland and possible demolition of buildings with the potential to support bat roosts. The may be the possible loss of broadleaved semi-natural woodland areas (with associated impacts on known badger setts), hedgerows and large number of semi-mature and mature trees (with associated impacts on any bat roosts present). Overall works likely to have adverse impact of minor significance.

#### Potential mitigation:



- Retention of the orchard and area of broadleaved semi-natural woodland.
- Management of woodland area for biodiversity (brief management plan to be submitted to planning authority for approval).
- Retention of semi-mature and mature trees wherever possible.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat likely to be lost.

#### Opportunities for enhancement:

• As mentioned above, management of woodland area for biodiversity (brief management plan to be submitted to planning authority for approval).

#### Recommended further ecological work/surveys:

- Badger surveys in winter to map setts and territory (tall ruderal vegetation would make mapping at other times difficult). English Nature disturbance licence would be required for works within 30m of sett entrances. Provision of artificial setts may be required if setts are to be lost.
- Bat surveys on semi-mature and mature trees (within the site and within the woodland area) if require felling.
- Bat surveys on any buildings if to be demolished (including a daytime inspection assessing buildings potential to support bat roost(s), followed by an evening emergence survey if appropriate).

#### Legal and policy implications:

- If works are required within 30m of a badger sett, or a badger sett is to be lost, a disturbance licence will be required from English Nature.
- If bats are found to be roosting within any trees to be felled or any buildings to be demolished a development licence will be required from Defra. Further mitigation measures to compensate for the loss of roosting habitats will be required.

The Nature Conservation policies in the Salisbury District Council Local Plan that are potentially relevant to this site include:

- Policy C13
- Policy C14
- Policy C15

#### Joint Waste Site Allocations Site Survey Report







Number	Target Notes	Species Notes
1	Line of mature large leaved lime trees, some ivy covered	Bat potential - inspect it to be felled
2	Line of mature large leaved lime trees, some ivy covered	
3	All buildings in Sarum Centre - red brick, relatively modern, pitched tile roofs in good condition	Some cracks and crevices of use to bats - check buildings if to be demolished
4	Nursery/polythene tunnels with plants in amenity grassland grounds. Two buildings present - one storey with tiled pitched roofs	Low bat potential
5	3 hole badger sett - guard hairs found	
6	2 hole badger sett	
7	2 storey brick building with concrete render. Pitched tile roof in good condition	Low bat potential

## **Protected Species and Designated Sites**





### S10, Sarum Centre, Salisbury 2

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

There are no statutory designated sites within 1km and non-statutory (or other notable habitats) within 500m

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

Within 500m of the site there is one record of a badger sett (located approximately 360m north-west of the site), two records of brown hare, two records of slow worms and two records of rare vascular plants in Wiltshire (including yew and cotton thistle).

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The majority of site consists hard standing, industrial and factory units and aviation hangars. Areas of amenity grassland and landscape planting are also present. Most of the buildings present within the site are relatively modern and in good condition. However there are a number of older brick buildings which have tiled roofs that are in a state of disrepair.

The whole site appears to be in use.

A line of semi-mature and mature trees present adjacent to the road which runs through the centre of the site.

#### Field Evidence of notable species:

A number of the older brick buildings present within the site have the potential to support bat roosts. The more modern buildings have a low potential to support bat roosts.

The semi-mature and mature trees present adjacent to the road which runs through the centre of the site all have the potential to support roosting bats.

There are no ponds present within 500m of the site.

#### **OTHER INFORMATION**

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation

The majority of the site is of negligible nature conservation value (areas of hard standing and modern industrial units and aviation hangars). However the line of semi-mature and mature trees present adjacent to the road which runs through the centre of the site of local nature conservation value.

#### Potential Ecological Impacts:

The potential ecological impacts include the possible loss of the line of semi-mature and mature trees present adjacent to the road which runs through the centre of the site.

Overall works likely to have adverse impact of negligible ecological significance.

#### Potential mitigation:

• Retention of semi-mature and mature tree line present adjacent to the road which runs through the centre of the site.



• All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

- Bat surveys on any of the semi-mature and mature trees adjacent to the road which runs through the centre of the site if they require felling. To include a daytime inspection assessing trees for potential to support bat roost(s), followed by an evening emergence survey if appropriate.
- Bat surveys on any buildings if to be demolished. To include a daytime inspection assessing buildings for potential to support bat roost(s), followed by an evening emergence survey if appropriate.

#### Legal and policy implications:

• If bats are found to be roosting within any trees to be felled or any buildings to be demolished a development licence will be required from Defra. Further mitigation will be required to compensate for the loss of roosting habitat.

The Nature Conservation policies in the Salisbury District Council Local Plan that are potentially relevant to this site include:

- Policy C13
- Policy C14
- Policy C15

Phase 1 Habitat Map



Number	Target Notes
1	Large air hangar
2	Large air hangar
3	Large air hangar
4	Red brick buildings with some cracks and crevices of use to bats
5	Road lined by semi-mature and mature trees - retain. Inspect for bats if to be felled.
6	Modern factory/industrial units. Low potential for bats.
7	Newly built industrial units.
8	Newly built industrial unit
9	Airfield
10	All modern industrial units. Low bat potential
11	All units appear to be in use with no vacant lots present. Habitats consist of large amounts of hard standing, with areas of amenity grassland and landscape planting also present. Many units fenced off. Mostly modern. A number of older, red brick units in part of the site.

### **Protected Species and Designated Sites**



# Site: S11 Maidments Skip Hire, Swallowcliffe

## Landscape and Visual Survey

## S11 Maidments Skip Hire, Swallowcliffe

### 1. Introduction

Small skip-hire service fronting onto the A30, on the site of an old garage just outside the village of Swallowcliffe.

#### 2. Baseline Landscape Character and Designations: Desk Survey

### Countryside Character Volume 8 South West (Countryside Agency): Landscape Character Area: Blackmoor Vale and the Vale of Wardour

Key characteristics relevant to the site:

• A complex mosaic of mixed farming: undulating, lush, clay vales fringed by Upper Greensand hills and scarps.

To the south of the site, there are views over the Dorset Downs and Cranbourne Chase landscape character area, a rolling, chalk landscape with dramatic scarps and steep-sided, sheltered valleys. It is an open, mainly arable, downland landscape with isolated farmsteads and few trees.

#### Wiltshire Landscape Character Assessment:

Landscape Type: Wooded Downland Landscape Character Area: Fovant Down Wooded Downland Key characteristics relevant to the site:

- Elevated chalk upland, dominated by Upper Chalk with a capping of Clay-with-Flint with escarpments of Upper, Middle and Lower Chalk.
- Strongly rolling landform with gently domed hill tops, dry valleys and dramatic scarps eroded into rounded spurs and deep combes.
- Contrasts between wide open views of rolling downland, to large scale 'rooms' of arable farmland enclosed by woodland, to panoramic views of the valleys and plateaus from the scarp slopes and valley sides.
- The steeply rising scarp slopes are visually dominant in the surrounding lowland areas, enriched by highly visible historic features such as the Fovant badges and Neolithic hill forts and barrows.
- Varying mix of two dominant land cover elements the open arable fields and the woodland blocks and belts, which are linked and unified by the network of hedgerows and hedgerow trees.
- Remnant chalk grassland is an important habitat on the steep slopes of the scarps and valley sides.
- Field pattern dominated by large rectangular fields typical of eighteenth and nineteenth century enclosure with some remnant small scale medieval patterns close to villages.

#### District Landscape Character Assessment: N/A

#### Landscape Designations and Rights of Way:

- Cranbourne Chase and West Wiltshire Downs AONB
- Bridleway to north-west of site
- Footpath to north-eest of site
- Bridleway to south-east of site (Buxbury Hollow)
- Bridleway to south-west of site (Red House Farm/Stonehill Buildings)



#### Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

#### 3. Baseline Landscape Character and Features: Site Survey

The site is an active skip hire and recycling business. It is active with lorries and tractors and includes a selection of ancillary buildings together with a large garage building dating to the 1930s. Building materials include breeze blocks, concrete render and pebble bash. Overhead utilities cables are visible. There is minimal planting within the site, with some coniferous screening to the west and east and a native hedgerow to the north.

The site fronts on to the A30 and is much overlooked.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor.

**Capacity to Accept Change:** Medium. The site is currently visible from the A30 and possibly from surrounding footpaths.

#### 5. Potential Landscape Impacts

- Harm to/loss of existing 'Stainers' garage building, a local landmark, used during the war as an outstation for the Ministry of Supply to repair and maintain army vehicles.
- Impact on the surrounding rural landscape character which is designated an AONB, especially conflicting with the open chalk hills to the south.
- 6. Potential Landscape Mitigation Measures
- Retain existing native hedgerows and, if practical in short term, the coniferous hedging
- Plant native hedgerows, including evergreens, around site to screen views
- Operate new facilities within/behind Stainers Garage to reduce impact on rural views from A30/AONB
- The following suggestions are made for the Blackmoor Vale and Vale of Wardour landscape character area in the *Countryside Character Volume 8 South West* (Countryside Agency):
  - There is scope for replacing a whole generation of hedgerow trees particularly oaks planting new hedges and revitalising existing ones.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Road users on A30	Low	Negligible	Supplement
Agricultural workers	Low	Negligible	planting with additional
in surrounding area			native belt of trees and
Walkers and riders on surrounding	Medium (sensitive, but don't come in	Negligible – slight adverse (depending on	hedgerow species
footpaths/bridleway s (subject to detailed walkover)	close proximity to site)	proposals and visibility)	Use planted bund to give year round screening along A30 frontage.

#### 8. Summary: Residual Landscape and Visual Impacts

This site is located in a relatively sensitive position, within an AONB and adjacent to elevated open farmland and a relatively busy A road. The presence of the garage building which is of some



historical interest also adds to the character of the site. However, given that the site is already utilised for waste management purposes and that there are no high sensitivity visual receptors within the immediate vicinity of the site, the residual visual and landscape impacts could be negligible, so long as vegetation screens are provided and the site is carefully planned.

#### 9. Recommended further landscape and visual surveys

• Visual survey from footpath and bridleway network around site (see 2 above), in winter and summer.



## Noise Assessment

### S11 Maidments Skip Hire, Swallowcliffe (Inset Map 39)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Swallowcliffe Maidments Skip Hire to assess the site's suitability for Waste Treatment and Recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be properties known as Fourways Cottage located approximately 95m from the north-west of the site.
- 1.3 The site is currently a skip hire service and is flanked to the south-east by the A30 and to the south-west by a local road leading to Rookley Lane. The site is surrounded by fields containing a number of isolated properties and farms.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 26<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site consists predominantly of industrial noise from activities within the site such as diggers, environmental sources such as birdsong, insects, and wind in tress, etc and road traffic noise from the A30 and local roads. The current noise climate at the most sensitive receivers consists predominantly of environmental sources such as birdsong, insects, and wind in tress, etc and road traffic noise from the A30 and local roads.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	15:10	45.7	59.9	32.1
MEASUREMENT 2	15:16	43.5	58.4	30.0
MEASUREMENT 3	15:22	43.2	60.6	30.6
AVERAGE		44.3		30.9

2.3 The average background noise level at the most sensitive receiver was measured as 30.9 L<sub>A90</sub>.

## 3. SITE SUITABILITY

3.1 The proposed use for the site at Swallowcliffe Maidments Skip Hire is for local recycling. The boundary of the site area proposed for use passes within 95m of the most sensitive receivers. Given the average background noise level, L<sub>A90</sub> of 30.9dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of approximately 1135m away from the most sensitive receivers.



- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is highly unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation measures in place it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



## **Traffic and Transport Review**

### S11 Maidments Skip Hire, Swallowcliffe

#### **Proposed Site Usage**

The potential use is for an extension to existing waste management operations incorporating local scale recycling, material recovery facility and waste transfer station.

#### **Existing/Potential Access**

The 1.3ha site is located north east of Swallowcliffe on the A30, approximately 11km west of Salisbury. The site currently operates as a skip hire service, waste recycling and waste transfer station. The site is accessed directly from the A30 via a small gated access. The A30 has a speed limit of 60mph with 3m lane widths. Visibility from the existing access is good (250m+) whilst the traffic on the road appears low in off peak conditions.

The frontage to the road is predominantly agriculture and open space with a residential cottage adjacent to the site access the only concern.

#### Impacts on Local Settlements

Swallowcliffe is located to the west of the site. Swallowcliffe is a small village with less than 200 residents. The roads are narrow and any HGV use of the village roads could potentially reduce the residential amenity of the village. The impacts on this settlement are however likely to be minimal given its location away from the A30.

#### **On-site infrastructure**

The existing access to the site should accommodate the traffic arriving at site with no issues of blocking back to the A30. It is however recommended that this access is widened to accommodate any potential increase in traffic to the site.

#### Off Site Highway Network

It is assumed that the local scale recycling will be a community facility and as such will generate car based trips as well as HGV traffic. HGV traffic will generally access the site in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. The peak hours for community facilities tend to be on the weekend and as such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be low and the impact of any additional trips associated with the new waste sites on the surrounding road network is likely to be negligible, particularly given the small nature of the site.

#### Constraints

No major constraints

#### Mitigation

None required

#### Conclusion

The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes necessary to the site access.

# Site: S12 Harnham Business Park, Salisbury

## Landscape and Visual Survey

### S12 Harnham Business Park, Salisbury

#### 1. Introduction

Business Park on the south-eastern edge of Salisbury, including established trading estate units on its western side and a new business/retail park on its eastern part. The estate is located on the edge of the River Nadder floodplain and is generally flat in character, although rises slightly towards a small chalk scarp to the south.

#### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Dorset Downs and Cranbourne Chase Key characteristics relevant to the site:

- A rolling, chalk landscape with dramatic scarps and steep-sided, sheltered valleys.
- Scarp slopes with species-rich grassland, complex combes and valleys, spectacular views, prominent hillforts and other prehistoric features.
- Open, mainly arable, downland on the dip slope with isolated farmsteads and few trees.

The A3094 to the north of the site marks the boundary of the Salisbury Plain and West Wiltshire Downs Landscape Character Area. As well as having extensive open, rolling Chalk plateau dominated by large arable fields, this area is also typified by river valleys with common settlements and narrow floodplains, dominated by former floated flood meadows and meandering rivers as seen here at the River Nadder.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Wooded Downland Landscape Character Area: Fovant Down Wooded Downland Key characteristics relevant to the site:

- Elevated chalk upland, dominated by Upper Chalk with a capping of Clay-with-Flint with escarpments of Upper, Middle and Lower Chalk.
- Strongly rolling landform with gently domed hill tops, dry valleys and dramatic scarps eroded into rounded spurs and deep combes.
- Remnant chalk grassland is an important habitat on the steep slopes of the scarps and valley sides.
- Intensive and widespread arable cultivation

The site is not that typical of the Wooded Downland landscape type, which is generally includes more woodland and is sparsely settled. SCC judge the condition of this landscape type to be 'good' due to its strong woodland and hedgerow structure. It is considered to have a strong character based on its varied chalk topography. The overall strategy is to 'conserve' the highly rural, peaceful character of the area and its distinctive topography and landcover.

#### District Landscape Character Assessment: N/A

#### Landscape Designations and Rights of Way:

- No landscape designations
- Public footpath runs immediately adjacent to southern boundary of site

#### Local Authority Consultation:



Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

#### 3. Baseline Landscape Character and Features: Site Survey

The site lies on the south-western edge of Salisbury. To the east a new housing estate immediately abuts the site, while to the west there is a further industrial unit and arable countryside. The northern boundary of the site is marked by the A3094 while to the south a small chalk scarp with scrub and grassland marks a transitional area into open arable fields.

The site has two distinct character areas, the Trading Estate, to the east, and part of Business Park that is currently under construction. The Trading Estate appears to have established during the late 20<sup>th</sup> century and has a varied selection of industrial units, constructed of steel and brick, with wide areas of concrete and bitmac. The Business Park is partially complete and has a number of vacant plots. The southern end of this site does not appear to be within the proposed site boundary.

The Business Park and Trading Estate are both set within a mature, albeit low quality, landscape structure, with coniferous hedging between the two parts of the site and native scrub to the south. There are groups of mature beech along the A3094 Netherhampton Road frontage.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: Low-Medium

The quality and condition of the site landscape is generally poor, due to its industrial character and poor state of repair of much of the infrastructure.

Due to the proximity of the public footpath to the south, new housing overlooking the site to the east and the presence of the A3094 to the north, much of the site is relatively overlooked. However given that the site is already industrial in character, there would be no major impact on the character of the landscape if part of the site were used for waste management.

#### 5. Potential Landscape Impacts

- Loss of beech trees on northern frontage of site
- Erosion of rural character to landscape to the south of site

#### 6. Potential Landscape Mitigation Measures

- Retention of beech trees on northern boundary of site
- Planting of native woodland hedging and woodland around facility
- Location of facility away from footpath to south of site.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures	
Residents of new housing to east of site	High	No change - Slight adverse (significance of impact depends on location of	Retention of conifers in site for short term screening	
Users of A3094 Visitors and workers on estates	Low Low	No change – Slight adverse Negligible	Planting of 15m wide native woodland strip around new facility. This could be on an earth bund.	
Users of footpath to south of site	High	No change - Slight adverse (significance of impact depends on location of facility within site)	<ul> <li>Location of new facilities away from residents, footpath and A3094</li> </ul>	



#### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting at the foot of a low scarp and with some mature trees on its northern boundary, and its existing industrial character, the site could accommodate some change. However, due to its semi-rural location and the relatively high number of sensitive visual receptor groups in close proximity to the site, particular care will need to be taken when siting and screening any facility here, to mitigate visual impact.

#### 9. Recommended further landscape and visual surveys

- Visual survey from public footpath to south of site
- Winter-time visual survey from footpath to south of site and from footpath to the north of the A3094



## Water (Quality and Environment) Assessment

#### Site name – Harnham Business Park

NGR at centre of site – SU 126290 Location description – Urban setting, within the built up area of Salisbury Area of site (ha) - 5

#### Table 1: Water Quality and Environmental Information and results - See Appendix B.

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation Likely	/ Further Assessment
	Receptor		Impact	Measures Requi	irements
			Significance	(to be considered as appropriate)	
Water	Groundwater	Contaminate major aquifer and groundwater abstractions	Medium / High	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> </ul>	vironmental management during struction
	body	on site (River Nadder)	River Nadder)		monitoring requirements
		Impact on baseflow / runoff to watercourse	Medium	<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> <li>Rel (PP</li> <li>Rel (PP</li> <li>Rel (PP</li> <li>Rel (PP</li> <li>Rel (PP</li> <li>Rel (PP</li> <li>Mon required</li> </ul>	levant licensing requirements PC) to be assessed oduce Working Plan for site view runoff treatment juirements onitoring boreholes (may be juired for obtaining operating rmit)
				• Ass ope	sess current impact of on site erations
# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood Risk	Low	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater abstraction point	Contaminated groundwater abstraction. Around 20 licensed points.	Medium/High	<ul> <li>Mitigation as above</li> </ul>	
	Designated sites/ Adjacent sensitive landuses	Avon Valley ESA and SAC and West Harnham Chalk Pit SSSI Impact to 3 Conservation Areas	Low / Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for requirements</li> </ul>
	Other adjacent landuses	Current discharge consents and several recent pollution incidents	Low / Medium		

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Harnham Business Park is:

- o Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

### S12 Harnham Business Park, Salisbury

#### **DESK STUDY INFORMATION**

#### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

West Harnham Chalk Pit SSSI (geological) and West Harnham Limeworks are approximately 60m south-east.

The River Nadder is approximately 350 north-east and is part of the River Avon Special Area of Conservation (SAC).

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Greater horseshoe and Daubenton bat records associated with the River Nadder are within 500m of the site. Also associated with the river are water vole and otter records. Nearby records of plants of county rarity comprise green flowered helleborine, shining pondweed and rough poppy.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The waste allocation site boundary encompasses a current business park. A new housing estate borders the eastern edge of the site and a new trading estate is on the west. In the south-east corner is West Harnham Chalk Pit, to the north is the busy Netherhampton Road (A3094). The southern section of the business park is currently in use with fairly new units.

Landscaping around the used units is limited to a row of planted conifers, suitable for nesting birds but of little value for any other wildlife. Another area of planting is located between the existing car park and the area of hardstanding (TN6), comprising non-native species of shrubs and providing suitable bird nesting habitat.

The area abutting the Netherhampton Road is mainly hard-standing and has a recent road build to provide access to a large new unit which is situated immediately adjacent to the chalk pit. There is one small area which remains vegetated (TN1). This comprises tall rank grassland and patches of bare ground, species include hogweed, teasel, ragwort and rosebay willowherb. Between this area and the road was a band of evenly aged immature beech trees.

On the eastern side of the new access road (see map for location) is a mound of chalk which has now been colonised by a variety of early colonising plant species including scentless mayweed, common fumitory, ragwort and thistles. This is just outside of the waste allocation site boundary.

#### Field Evidence of notable species:

No evidence of notable/protected species was observed during the visit. There is little potential for protected species on any part of the site due to its man-made nature and limited vegetation apart from small areas of non-native planting. None of the industrial units within the business park appear to have bat roosting potential. There were no ponds identified within 500m of the site.

#### OTHER INFORMATION



The OS mapping data provided is now out of date. A new housing estate has been developed on the eastern edge of the waste allocation area and new units have appeared to the south of the business park.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

Due to the man-made nature and lack of habitat to support notable species the site is considered to be of negligible value for biodiversity.

#### Potential Ecological Impacts:

Due to the fact that there is little natural habitat on the site, and no evidence of notable species using the developed part of the site, on-site impacts are predicted to be negligible. There are no impacts predicted on West Harnham Chalk Pit SSSI.

There is a possibility of off-site impacts on the River Nadder (River Avon SAC) through surface water drainage during operation of the site. However, given the distance of the site from the river and the type of design the facility is likely to require under the Waste Management Regulations 1994 it is unlikely that there will be significant impacts upon the SAC.

#### Potential mitigation:

Any buildings to be demolished to facilitate a new development would need to be preceded by a bat survey through visual day-time inspection in the first instance followed by emergence surveys if deemed necessary. Mitigation in relation to bats would then need to be advised depending on the results of the survey.

To avoid adverse impacts on the River Avon SAC during construction and operation the following mitigation measures are recommended:

- Strict adherence to best practice guidance during construction, particularly the Environment Agency Pollution Prevention Guide notes PPG01, PPG05, PPG06 and PPG21.
- No direct discharges to surface water or groundwater;
- No surface water or ground water abstractions;
- Closed surface water drainage system within the design of the facility and the use of silt traps and Sustainable Urban Drainage Systems best practice;
- Damping down facilities (such as water sprays) to control dust on the site, particularly along vehicular access tracks during construction and operation and other industry best practice measures to control dust emissions;
- Reducing the risk of litter escaping from the site by using fencing/netting, having waste stored within a building (or total containment of litter) and/or not operating when wind speed and direction threaten the escape of litter to the SAC.

#### Residual impacts:

If all of the mitigation recommended above is carried out there should be no residual impacts.

#### **Opportunities for enhancement:**

Current landscaping is limited and non-native, more "soft" landscaping, designed in consultation with an ecologist or a suitably experienced landscape architect, would benefit the site.

Green roofs should be considered for any buildings constructed.

#### Recommended further ecological work/surveys:

Bat surveys are recommended if buildings require demolition. Although the potential for the industrial buildings to support bat roosts is considered low and current evidence of bats was observed, bat surveys should be recommended as a precaution in case bats colonise any buildings.



#### Legal and policy implications:

If bats are found to be roosting within any buildings to be demolished a development licence will be required from Defra.

• Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of the River Avon SAC. Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SAC. See Appendix C for details of the Appropriate Assessment.

Relevant policies from the Salisbury District Council Adopted Local Plan (June 2003) are: The Rural and Natural Environment Policies C10, C14, C15 and C18.

General Principles for Development Policies: G1, G2, G8 and G9.

Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Area of bare ground, ruderal species and rank grassland. No buildings in this area. Some hard-standing	Hogweed, teasel, false oat grass, common ragwort, rosebay willow herb
2	Band of beech trees - evenly aged and assume planted. No understorey	
3	New units in use	
4	Older units - half in use and half disused. Disused part some bat potential but not a lot as well sealed.	
5	Area of planting - conifers only. Suitable for bird nesting.	
6	Area of planting - conifers and other non-native species. Suitable bird nesting habitat.	
7	Mound of spoil (left over from development?) now colonised by ruderals	
8	New housing estate	common fumitory, thistles, scented mayweed, common ragwort

### **Protected Species and Designated Sites**



# Site: S15 Ratfyn, Amesbury

## Landscape and Visual Survey

### S15 Ratfyn, Amesbury

#### 1. Introduction

Area of gently sloping pony paddocks, improved grassland and fallow arable farmland to the northwest of Ratfyn, in close proximity to a sewage works and electricity sub-station.

#### 2. Baseline Landscape Character and Designations: Desk Survey

#### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

• River valleys with common settlements and narrow floodplains, dominated by former floated flood meadows and meandering rivers.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Chalk River Valley Landscape Character Area: Upper Avon Chalk River Valley Key characteristics relevant to the site:

- Strongly enclosed valleys with an intimate scale contrasting with the surrounding open upland landscape.
- Level, often narrow valley floors with relatively steep sides.
- Pastoral land use along the valley floor with small scale fields contrasts with arable farmland on the valley sides with medium to large geometric fields.
- Hedgerows and hedgerow trees add to the lush and enclosed feel of the valleys.
- Riparian woodlands, lines of poplar along ditches and willow pollards.
- Diverse mosaic of land cover and habitats includes meadows, fen and wet woodland on valley floor.
- Rural landscape sometimes interrupted by the large volume of traffic.

The overall condition of the *Chalk River Valley* Landscape Type is judged by WCC to be 'good' with its chalk rivers of high water quality and rich biodiversity, its largely intact hedgerow network, riparian woodland and compact well kept villages. However there are some elements of declining condition: some hedgerows in poor condition and the loss of traditional land management. The Landscape Type is considered to have a 'strong' character with its generally narrow, steep sided landform, small scale rural settled and tranquil landscape of pastoral fields bounded by hedgerows and the overall strategy is to 'conserve' this tranquil intimate rural character.

#### District Landscape Character Assessment: N/A

#### Landscape Designations and Rights of Way:

- No landscape designations
- Public footpath to the east of the site

#### Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

#### 3. Baseline Landscape Character and Features: Site Survey



The site lies on the eastern valley-side of the River Avon. Here the river is narrow and meandering and the valley relatively narrows. Further to the east of the site the valley widens, with wider rolling arable fields and a more open view. To the west and south of the site, the intimate topography and presence of waterside poplar grove provide a more secluded feel. The hamlet of Ratfyn lies to the south of the site although the rolling valleyside topography generally reduces intervisibility between the two. To the north of the site, open farmland rises up to the settlement of Durrington, where residential properties sit on a spur overlooking the valley. The relatively rural character of the site is diminished by the presence of a sewage works and electricity sub-station on the valley floor immediately to the east, and associated overhead power cables and pylons. The tranquillity of the site is also eroded by regular overhead flights of MoD jets and the presence of the A303 dual carriageway to the south.

The site itself consists of a number of pony paddocks, improved grassland and arable fields currently lying fallow. A hedgerow marks the northern boundary of the site, which includes a mixture of broadleaf native trees and shrubs as well as conifers.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: Medium

The rural qualities of the site have been eroded by numerous human influences. The site is relatively secluded to the south, but distant views from the north reduce its capacity to accept change

#### 5. Potential Landscape Impacts

- Further erosion of the rural character of Ratfyn, which has already been compromised by the construction of the A303, sewage works and electricity sub-station
- Loss of the strong hedgerow boundary to the north of the site.

#### 6. Potential Landscape Mitigation Measures

- Retention and protection of the hedgerow along the northern edge of the site. Ultimate replacement of coniferous species with natives.
- Planting of 15m woodland buffer strip around site, to include large-scale native tree species and a shrub understorey.
- The following 'Broad Management Objectives' for the Salisbury Plain and West Wiltshire landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Consider opportunities for re-planting hedgerows and hedgerow trees where these have been lost. In particular, the comparatively dense structure of willows, poplars and other moisture loving trees should be retained along field boundaries and the course of the river

#### 7. Visual Receptors

Visual Receptor	Sensitivity of	Potential Residual Impact on	Potential Visual Mitigation
	Receptor	Receptor	Measures
Residents of	Medium	No change – slight adverse	<ul> <li>15 native woodland</li> </ul>
southern edge of			buffer around site
Durrington			boundary
Employees and	Low	Slight adverse	
visitors to sewage			<ul> <li>Location of facility</li> </ul>
works			low down towards bottom
Users of A345	Low	Negligible	of valley slope



Visitors to	High	No change – negligible (subject	
Woodhenge		to winter visit)	
(subject to winter			
visit)			
Walkers on footpath	High	No change (subject to	
to east of site	-	woodland planting)	
Residents of Ratfyn	High	No change	

#### 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting, poor landscape condition and lack of sensitive visual receptors in close proximity, this site could accept some change, however a substantial visual buffer of woodland planting would be required to integrate the facility with the surrounding rural landscape and screen it from the adjacent footpath and more distant views from the north.

Further winter surveys are essential to establish whether the proposals would have a significant effect on visitors to Woodhenge Longbarrow, a World Heritage site to the north-west, on the A345

#### 9. Recommended further landscape and visual surveys

- Visual survey from public footpath to east of site and southern edge of Durrington
- Winter-time visual survey from A345 and Woodhenge

## Noise Assessment

### S15 Ratfyn, Amesbury (Inset Map 9)

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Ratfyn to assess the site's suitability for Waste Treatment plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be Ratfyn Bed and Breakfast and other nearby residential properties, located approximately 350m from the south of the site.
- 1.3 The site is currently pasture and is flanked to the west by the existing waste water treatment works with the remaining boundaries surrounded by fields. The A303 is located approximately 460m to the south of the site.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 26<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site and at the most sensitive receivers consists predominantly of road traffic noise from the A303 and other local roads, environmental sources such as birdsong, insects, and wind in tress, etc and the "humming" of the sub-stations located nearby.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	12:00	45.6	53.9	42.9
MEASUREMENT 2	12:10	49.0	64.9	42.5
MEASUREMENT 3	12:19	48.0	62.5	44.7
AVERAGE		47.8		43.4

2.3 The average background noise level at the most sensitive receiver was measured as 43.4 L<sub>A90</sub>.

## 3. SITE SUITABILITY

3.1 The proposed use for the site at Ratfyn is for Energy from Waste, Mechanical Biological Treatment, Materials Recovery Facility, In-vessel Composting and Waste Transfer Station. The boundary of the site area proposed for use passes within 350m of the most sensitive receivers. Given the average background noise level, L<sub>A90</sub> of 43.4dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of approximately 855m away from the most sensitive receivers.



- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that for this site to be suitable for the proposed development would likely require the implementation of mitigation measures combined with considerate positioning of the development within the site boundary.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

## S15 Ratfyn, Amesbury, 6ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located to the west of Salisbury and currently accommodates commercial units, including a bakery.



Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>10</sup> sources within 1km of the site: road traffic on the A303, A345 and local road network; and gas/oil/solid fuel for space heating for buildings; Cemex concrete batching, Durrington (dust and PM<sub>10</sub>); Rangers Garage waste oil burner, Durrington (NO<sub>x</sub> and PM<sub>10</sub>). There is also a waste water treatment works adjacent to the site, which is a potential source of bioaerosols and odour.
- 1.3 Estimated background annual mean levels of priority pollutants<sup>11</sup> for 2005 and comparable standards<sup>12</sup> are: 12.5µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 9.8µg/m<sup>3</sup> NO<sub>2</sub>

<sup>&</sup>lt;sup>10</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub> <sup>11</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates

<sup>&</sup>lt;sup>11</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>



(standard 40µg/m<sup>3</sup>); 18µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.

1.4 Potentially sensitive receptors within 1km: residential premises, including Durrington, Bulford and Amesbury area. There are three County Wildlife sites within 1km: Countess Farm Swamp, Woodhenge Verge and Durrington Meadows. The River Avon System SSSI is in close proximity.

#### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NOx	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	3 (3)	2 (2)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential between 100 and 250m	3 (3)	1 (1)	N/A	N/A	3 (3)	1 (1)	3 (3)
Residential beyond 250m	2 (2)	1 (1)	N/A	N/A	2 (2)	1 (1)	2 (2)
Ecological designation within 1km of site (Countess Farm Swamp, Woodhenge Verge, Durrington Meadows, River Avon System SSSI)	N/A	2 (2)	2 (2)	2 (2)	N/A	N/A	N/A
Notes:							

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

#### 3. **MITIGATION**

3.1 Local air quality (gas engines), dust, bioaerosol and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

#### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to high without mitigation. Local air quality (gas engines), dust, bioaerosol and odour mitigation is recommended. Detailed assessment should be undertaken.

<sup>&</sup>lt;sup>12</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



## Traffic and Transport Review

### S15 Ratfyn, Amesbury

#### **Proposed Site Usage**

The proposal is for a new strategic energy from waste, biological treatment, materials recovery, invessel composting and waste transfer station.

#### Existing/Potential Access

This 6ha site is currently pasture land and located north of Amesbury, adjacent to an existing waste water treatment works. The site is located to the north of the A303 whilst to the east is the Countess roundabout services.

The existing access to the site is via a 4 arm roundabout from which one of the arms forms the minor access road to the proposed site. This roundabout is accessed directly from Amesbury in the south via Porton Road and from Bulford in the north via the A3028. The A3028 is a single carriageway road with 60mph speed limits and 2.7m lane widths with no centre line markings. Speeds along this road appear excessive without exceeding the speed limits. The main east - west link is provided by the A303 from which a new slip road links to the roundabout. The A303 is a dual carriageway road with 60mph speed limits.

The access road from the roundabout is 4.8m in width with no centre line markings. The existing use of the track is low, providing access to Ratfyn farm and stables, the water treatment works and the electricity sub station. From observations these existing uses appear to generate infrequent trips. During a half hour period of observation at the site access one HGV was observed to arrive at and depart at the water treatment facility. Whilst at present traffic to the site appears relatively low the increase in traffic to the site would likely be a significant increase given this existing low usage.

The proposed use would typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this shared access site will be few and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. The impact on the existing access road and its present users is however likely to be more significant. The road is a designated bridleway and as such the potential conflict between these vulnerable road users is a major constraint on the existing access. The adverse impacts on the residential properties of Ratfyn Farm should be taken into account given their proximity to the site and the access road.

#### Impacts on Local Settlements

Amesbury is located to the South of the site and Bulford to the north. There is a potential negative impact on the residential amenity of both settlements given there proximity to the site.

#### On-site infrastructure

The existing access road to the site is of considerable length and easily accommodates the traffic arriving at site with no issues of blocking back to the highway network. It is considered that this infrastructure is of suitable length to accommodate traffic associated with a proposed waste site. The existing access road width (4.8m) whilst of sufficient width to allow two cars to pass would be insufficient to allow two HGVs to do so. As such the track may need widening to accommodate HGVs passing each other or alternatively a provision of a suitable number of passing places may be required.

#### **Off Site Highway Network**

Solstice Park, a £250 million mixed-use business park is currently under construction for a 160 acre (65 ha) site adjacent to and using the same road network/infrastructure as the proposed site. An assessment would need to be undertaken considering this business park as a committed development. The impact on the trunk road network would need to be considered in conjunction with the Highways Agency. However, in purely traffic terms, the proposed site is unlikely to have an unduly adverse traffic impact on the surrounding highway network.

Constraints



The conflict in use of the existing access road in relation to its use as a bridleway in particular could create a safety concern. The potential environmental impact on the residential properties of Ratfyn Farm should also be considered.

#### Mitigation

It is proposed that should the new facility go forward that improvements to the access are made or a new site access created from the A3208. The exact location of the new access would need to be subject to more detailed design at a later stage.

#### Conclusion

The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network however physical changes to the site access or the creation of a new site access may be required.

## **Cultural Heritage Report**

### S15 Ratfyn, Amesbury

### **DESK STUDY INFORMATION**

#### Known heritage assets within Study Area

WSMR No:	SU14SE812
Site Name:	Linear Feature
Grid Ref:	SU16074302
Description:	A ditch aligned SE/NW, a ditch/gully aligned E/W and a shallow scoop found
-	during a watching brief on a Wessex Water pipeline, 1991. The NGR is
	approximate.
Designation:	None

#### Known heritage assets within 500m of Study Area boundary

	014405400
WSMR NO:	S014SE103
Site Name:	Neolithic Long Barrow
Grid Ref:	SU16364304
Description:	A) A long barrow, aligned E-W. Ditches have been obliterated. B) Mound not
-	being cut into during ploughing when visited by the OS in June 1969.
Designation:	Scheduled Monument – SM28923
WSMR No:	SU14SE813
Site Name:	Linear Feature
Grid Ref:	SU16374294
Description:	Three ditches were found during a watching brief on a Wessex Water pipeline
	1991. Two are aligned ENE/WSW, one of these is steep sided The third ditch is
	U-shaped, 1m wide and 1m deep and was seen only in the west facing section.
	NGR is approximate.
Designation:	None
WSMR No:	ST14SE811
Site Name:	Linear Feature
Grid Ref:	SU15884316
Description:	A U-shaped ditch aligned NNW/SSE and a flat-bottomed hollow thought to be
	modern was discovered during a watching brief on a Wessex Water pipeline in
	1991. The NGR is approximate
Designation:	None

#### FIELD SURVEY INFORMATION

No visible evidence recorded on the ground. The site is visible from Woodhenge (Scheduled Monument) 850m to the east, a significant publicly accessible site within the Stonehenge World Heritage Site.

#### SITE ASSESSMENT

**Cultural Heritage value**: This is an area of high archaeological interest on the boundaries of the Stonehenge World Heritage Site. The site has been compromised with the development of a chemical works and electricity substation.

#### Potential Cultural Heritage Impacts:

**Further Evaluation & Potential Mitigation:** Any proposals for development at this site must be accompanied by an archaeological field evaluation in accordance with PPG 16 (Planning & Archaeology), to define the character and extent of the archaeological remains that exist in the area of the proposed development. It is essential that the County Archaeologist and English Heritage are consulted at the earliest possible stage regarding the undertaking and results of such an evaluation.

# **ATKINS**

Where unrecorded features of archaeological importance are found, the advice of the County Archaeologist and English Heritage will be essential as to the appropriate action required. As with identified features of archaeological interest in proximity to the site, development should mitigate any potential impacts through careful design and landscaping and, where required, through preservation in situ of any remains.

An assessment of any impacts from development of the site upon the Scheduled Monument (SM) at Longbarrow Clump immediately north east of the site must be undertaken, including impacts upon its setting and integrity. Development should mitigate any potential impacts upon this SM and its setting through careful design and landscaping. Where any impacts cannot be adequately mitigated planning permission will be refused. There is potential that any development at the site may have impacts upon the setting of Woodhenge and Durrington Walls (SM) 850 metres north west of the site. Applicants should also assess the impacts upon the World Heritage Site in these sites are located. Development should mitigate any potential impacts upon this SM and its setting through careful design and landscaping. Where any impacts cannot be adequately mitigated planning permission will be refused.

Any development proposal must assess the potential for impacts upon the earthwork remains of water meadows located to the south west of the site, and propose mitigation where the potential for impacts arises.

Any development must have regard to the setting of Ratfyn Farmhouse, a Grade II listed building – proposals for built development should achieve an appropriate separation between such development and the farmhouse.

**Assessment:** Further evaluation is required as to the suitability of this site at the Planning Application stage.



## Water (Quality and Environment) Assessment

#### Site name – Ratfyn, Amesbury

NGR at centre of site – SU 160428 Location description –Close to the A303, 0.5km northwest of Ratfyn, 1.5km northwest of Amesbury Area of site (ha) - 8

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment Requirements
	Receptor		Impact	Measures	
			Significance	(to be considered as appropriate)	
Water	Groundwater	Contaminate major	Medium / high	<ul> <li>Plan mitigation requirements during construction</li> </ul>	Environmental management during     construction
		Contaminate Source	Low / Medium	Layout plapping of site	Approach Environment Agency for
	Surface water	Contaminate adjacent	Medium	Site traffic plan	monitoring requirements
	body	watercourse (R Avon)	Wealdin		
		Impact on baseflow/runoff	Medium	Surface drainage plan	<ul> <li>Relevant licensing requirements</li> <li>(PPC) to be assessed</li> </ul>
		to watercourse		<ul> <li>Impermeable nardstanding</li> <li>Runoff collection system</li> </ul>	
				Spill kits, bunded storage and	Produce Working Plan for site
				designated liquid handling areas if site might accept	Review runoff treatment requirements
				<ul> <li>Consider limiting types of waste handled at site e.g. solid wastes only inert wastes</li> </ul>	Baseline monitoring of adjacent surface water bodies may be required
				Engineered liner system	<ul> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>
					Assess current impact of sewage waters

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood event causes contamination of surface water and disruption of operations	Low	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater Abstraction point	Contaminate two private abstractions of P Rowland and Dairy Crest Ltd	Low / Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> </ul>	<ul> <li>Check status of abstractions with Environment Agency</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Check availability of data of groundwater and surface water quality sampling locations from Environment Agency</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Site is close to R Avon SAC / SSSI is within 1km. Impact Countess Farm Swamp Wildlife site including potential impacts on hydrological regime Deteriorate area of high ecological value	Medium / High	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> <li>Integrate water management and protection plans with those operated by water treatment works</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for requirements</li> <li>Undertake hydrological / run off modelling to determine any impacts on wildlife areas</li> </ul>
	Other adjacent landuses	Farmland with farms, a waste water treatment works	Low/Medium	<ul> <li>Ensure capability of water treatment works to handle any liquid discharges</li> </ul>	<ul> <li>Examine capabilities and potential impacts on adjacent water treatment works during construction and operation</li> </ul>

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Ratfyn, Amesbury is:

- Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
   Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

### S15 Ratfyn, Amesbury

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

Approximately 100m south- west of the site is the statutory designated River Avon Special Area of Conservation (SAC).

Countess Farm Swamp County Wildlife Site is on the banks of the River Avon, also approximately 100m south-west.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Protected species records relating to the River Avon comprise otter and water vole. Other species records within 500m of the site comprise Daubenton, pipistrelle and brown long-eared bats, redshank, badger and county rarities heath dog violet and dwarf spurge.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The site is a mixture of horse-grazed fields, improved grassland (mainly perennial rye-grass and timothy) and ex-arable land. Each of the fields within the waste allocation site is cordoned off with electric fencing.

The northern site boundary has a band of broad-leaved trees and shrubs including hazel, elder and bramble which links into small pockets of woodland to the east and west of the site.

#### Field Evidence of notable species:

Two hares were seen in the ex-arable field and skylarks were heard and seen flying directly above this field.

Suitable bird-nesting and dormouse habitat is provided by the band of trees and shrubs along the northern boundary. The open ex-arable field also provides suitable nesting habitat for ground-nesting birds such as skylark.

There is suitable reptile habitat (for common reptiles such as common lizard and slow-worm) around the edge of the rough improved grassland and ex-arable field.

No ponds were identified within 500m of the site.

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:



The fields within the waste allocation boundary are of local value as skylarks and hares are using them.

#### Potential Ecological Impacts:

On-site/direct impacts:

• Loss of habitat for skylarks and hares in the rough ex-arable field;

- Loss of suitable reptile habitat;
- Increased noise and general human activity in an area which is currently remote and rarely accessed, leading to an increase of disturbance to species such as skylarks and hares;
- Potential loss of bird nesting habitat and suitable dormouse habitat in band of trees and shrubs bordering the northern edge of the site.

Off-site/indirect impacts (associated with the River Avon SAC):

- Changes to surface water regime in the local area, potentially causing increased silt laden and polluted run-off into the SAC during construction and operation;
- Air emissions from the processing of waste in an energy-from-waste plant causing chemical changes within the SAC and potentially decreasing habitat availability for species for which the SAC was designated;
- Dust and litter from the waste facility causing smothering of habitat and species within the SAC.

#### Potential mitigation:

- Retain the band of broad-leaved trees and shrubs to the north of the site and leave a buffer to reduce the effects of general human disturbance. It is recommended that the link this creates between the two woodlands (east and west of the site) remains unaffected by development;
- If reptiles are found on the site then appropriate mitigation will have to be designed in such as retention of rough grassland around the site boundaries, and enhancement of remaining habitat;
- Avoid the bird nesting season for any vegetation clearance activities (1 February to 31 August (weather dependent));
- Avoid hibernation period for reptiles (October to March (weather dependant));
- Due to close proximity of the site to the River Avon SAC, construction should strictly adhere to best practice guidance during construction, particularly the Environment Agency Pollution Prevention Guide notes PPG01, PPG03, PPG05, PPG06 and PPG21. Method statements should be approved by EA/EN and the local authority stating what measures will be in place to avoid siltation and chemical spill into the SAC and what measures will be put in place in case of an accidental spillage;
- No direct discharges to surface water;
- No surface water or ground water abstractions;
- Closed surface water drainage system;
- Damping down facilities (such as water sprays) to control dust on the site, particularly along vehicular access tracks during construction and operation and other industry best practice to avoid the movement and deposition of dust away form the site;
- Reduce risk of litter escaping from the site by using fencing/netting, having waste stored within a building (or total containment of litter) and/or not operating when wind speed and direction threaten the escape of litter to the SAC.

An air quality assessment of the potential impacts of this facility 'in-combination' with other projects would be required in order for the potential affects on the River Avon SAC to be understood. A flood risk assessment and more information on the potential of pollution of surface water and groundwater are required. Depending on the results of these assessments mitigation will need to be incorporated into the detailed design of the facility to avoid/mitigate adverse impacts upon the SAC and the associated CWS.

#### Residual impacts:



There will be a loss of suitable nesting habitat for skylarks and hares if the rough improved grassland and ex-arable fields are developed causing minor ecological impacts which would be difficult to mitigate.

If all of the mitigation recommended above is carried out there may still be some residual impacts on the River Avon SAC (depending on the results of further assessments required). Detailed design of the facility and method statements and monitoring programmes would be required for construction and operation to ensure the continued absence of adverse effects on the River Avon SAC or to ensure that adverse impacts were within acceptable levels (in discussion with English Nature).

#### **Opportunities for enhancement:**

• Consideration of the provision of green roofs on any buildings;

#### Recommended further ecological work/surveys:

Due to the close proximity of this site to the River Avon SAC, consultation must take place with the EA and EN. Further survey work can then be advised but is likely to include:

- Dormouse surveys of woodland and hedgerows along the northern site boundary (and suitable mitigation if present such as retaining and enhancing habitat, improving linkage between woodland/scrub in the area);
- Breeding bird surveys within the area of habitat to be directly lost and disturbed as a result of construction and operation (and suitable mitigation based on the results);
- Reptile surveys of habitat to be lost (and suitable mitigation if present such as exclusion of habitat lost, and enhancement for reptile of off-site habitat including provision of refugia/hibernacula);

#### Legal and policy implications:

If dormice are found to be using the woodland strip to the north of the site a development licence will be required from Defra for damage or disturbance of this habitat.

If reptiles are present a reptile exclusion exercise may be required from habitat to be lost (to ensure no injury or killing of reptiles).

• Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of the River Avon SAC. Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SAC. See Appendix C for details of the Appropriate Assessment.

Relevant policies from the Salisbury District Local Plan (June 2003): The Rural and Natural Environment Policies: C1, C2, C3, C10, C11, C13, C15, C17, C18. General Principles for Development Policies: G1, G2, G4, G6 G8.



Phase 1 Habitat Map



# **ATKINS**

Number	Target Notes	Species Notes
1	Dense bramble between sewage works and office block, links into woodland to the west. Good nesting bird habitat. Office block some bat potential - limited. Water body in sewage works needs checking	Just bramble
2	Horse-grazed fields - electric fencing surrounding them. Improved grassland, white clover dominant	
3	Horse-grazed fields - electric fencing surrounding them. Improved grassland, white clover dominant	
4	Improved grassland although some other species present, rough and grass allowed to grow tall.	Perennial rye-grass, timothy and white clover and broad-leaved dock present on edges.
5	Hares seen in this field (2) and skylarks seen and heard directly above. Ex-arable field, left fallow, not accessible due to electric fencing.	Ex-arable field, left fallow, not accessible due to electric fencing.
6	Band of broad-leaved trees which links into woodland to the west of the sewage works	Elder, hawthorn, hazel and bramble



### **Protected Species and Designated Sites**

# Site: S16 Salisbury Road Industrial Estate, Downton

## Landscape and Visual Survey

### S16 Salisbury Road Industrial Estate, Downton

#### 1. Introduction

Active Business Park to the north of the village of Downton, set within the flood plain of the River Avon.

#### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

• River valleys with common settlements and narrow floodplains, dominated by former floated flood meadows and meandering rivers.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Chalk River Valley Landscape Character Area: Lower Avon Chalk River Valley Key characteristics relevant to the site:

- Strongly enclosed valleys with an intimate scale contrasting with the surrounding open upland landscape.
- Hedgerows and hedgerow trees add to the lush and enclosed feel of the valleys.
- Riparian woodlands, lines of poplar along ditches and willow pollards.
- Valleys contain a concentration of settlement in contrast to the adjacent unsettled downs.
- Many long established villages, sited along the spring line and built of a rich variety of vernacular materials.
- Valley used as transport corridors with major roads and railway lines along valley sides.
- Rural landscape sometimes interrupted by the large volume of traffic.

These areas can have a diverse mosaic of land cover and habitats including meadows, fen and wet woodland on valley floor. This character has been lost within the site; however views out of the site to the east indicate a strong flood plain character beyond.

The Lower Avon Chalk River Valley is wider than the other chalk river valleys, containing the confluence of the Rivers Wylye, Nadder, Bourne and Ebble with the Avon. Major trunk roads follow the sides of the Lower Avon Chalk River Valley but despite their noise and movement this character area retains substantial areas of rural and remote pastoral landscape.

WCC judge the overall condition of the Chalk River Valley Landscape Type to be 'good' and its landscape character 'strong' with its chalk rivers of high water quality and rich biodiversity, its largely intact hedgerow network, riparian woodland and compact well kept villages. However there are some elements of declining condition such as some hedgerows in poor condition. The overall strategy is to 'conserve' the tranquil, intimate and rural character of the landscape. WCC also highlight opportunities for replanting and managing hedgerows and limited native tree planting/regeneration.

#### District Landscape Character Assessment: N/A

#### Landscape Designations and policies:

- The site lies within a Special Landscape Area
- Avon Valley long distance path runs to the east of the site

#### Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

#### 3. Baseline Landscape Character and Features: Site Survey

This is a flat site on flood plain of the River Avon, to the north of the village of Downton. The site is accessed from three points on the A338 and has a number of access roads running through it. To the south of the site, off Long Close West a disused building could also provide further access into the site. The site has a low-density structure, with wide roads; external storage yards and parking areas and some vacant plots. Surfacing is predominantly concrete and bitmac. There is little internal vegetation within the site although there are some mature boundary trees, including Lombardy poplars and oaks. There is ornamental hedging around the boundaries of some units.

The site consists of a varied selection of two storey business and industrial units, constructed at various times during the latter part of the 20<sup>th</sup> century, with materials including steel, render, glass, breeze-block and brick. Pavements with street lighting provide pedestrian access throughout the site. External features also include security fencing and chainlink fencing.

#### Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

Landscape Quality and Condition of site: Poor quality. Flood plain character has been eroded by construction of business units.

**Capacity to Accept Change:** Medium. Large site with little overlooking, other than from the A338, a busy road on the western frontage of the site.

#### 4. Potential Landscape Impacts

- Further erosion of flood plain character of Special Landscape Area
- Loss of existing trees on site

#### 5. Potential Landscape Mitigation Measures

- Wide buffers of planting, around the site boundaries, especially reflecting the riparian species of the flood plain, including willows, poplars and alders on the eastern parts of the site and oaks to the west.
- Sensitive site planning to minimise impact on the character of the river valley to the west
- The following 'Broad Management Objective' for the Chalk River Valley landscape type in the *Wiltshire Landscape Character Assessment* is relevant to the site:
  - Consider opportunities for re-planting hedgerows and hedgerow trees where these have been lost. In particular, the comparatively dense structure of willows, poplars and other moisture loving trees should be retained along field boundaries and the course of the river.

#### 6. Visual Receptors

Visual Receptor	Sensitivity of	Potential Impact on	Potential Visual Mitigation
	Receptor	Receptor	Measures

Users of A338	Low	No change – Slight adverse (significance of effect dependent on location of proposals)	<ul> <li>Location of facilities away from residential properties or with 15m woodland buffer strip</li> </ul>
Users of Avon Valley Path (subject to winter-time survey)	High	No change – Slight adverse (significance of effect dependent on location of proposals)	<ul> <li>Planting of native, riparian species around facilities, especially to north and east of site.</li> </ul>
Workers on industrial estate	Low	No change – slight adverse (significance of effect dependent on location of proposals)	<ul> <li>Planting of large scale hedgerow trees and hedgerows along A338</li> </ul>
Residents on Long Close	High	No change – slight adverse (significance of effect dependent on location of proposals)	<ul> <li>Location of facilities away from A338 frontage</li> </ul>
Residents on Salisbury Road (A338)	High	No change – slight adverse (significance of effect dependent on location of proposals)	
Users of service station on Salisbury Road (A338)	Low	No change	

### 7. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed setting and existing industrial character, the site could some accommodate change, however sensitive planning would be required to minimise adverse impacts on surrounding residential properties and existing users of the industrial estate. The rural floodplain character of the landscape to the east should be reflected in planting around new facilities to integrate them with their surroundings.

#### 8. Recommended further landscape and visual surveys

• Visual surveys from public Avon Valley Path (winter and summer)



## **Traffic and Transport Review**

### S16 Salisbury Road Industrial Estate, Downton

#### **Proposed Site Usage**

The proposed use for this site is for a household recycling centre/ local scale recycling/ enclosed waste transfer station

#### Existing/Potential Access

This 7 ha site is south of Salisbury and north of the village of Downton. The proposed site will be located on a small scale industrial estate immediately east of the A338 that is currently occupied by a number of low intensity B2 and B8 uses.

The site is accessed via the A338, Salisbury Road running in a north-south direction. There are two access points to the estate. The southerly access is via a priority T junction with a right turn filter lane, outside this access the road speed limit is reduced from 40mph north of the access to 30mph south of the access. The visibility is adequate for the speed of the road. The northerly access is via a three arm roundabout with the eastern arm providing access to the industrial estate. It is likely that this access will be used to access the proposed site given that any new development will take place in the north of the site.

The potential use for this site is for a household recycling centre/local scale recycling. It should be noted that this proposed use will generate not only HGV traffic but also vehicular traffic as residents will access the site to recycle their household waste. The peak traffic generated by this type of facility is likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks on the highway network.

The access to the site is shared with a mix of B2 and B8 uses. These uses will generate more traffic during the weekday peak periods with employees arriving for work. During these periods relatively large numbers of trips are generated. The household recycling centre site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours and with the likely peak periods being at weekends typically between the hours of 11:00 and 16:00. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this shared access site will be greater than at weekends however the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible given likely relatively small increases in trips at this peak time.

#### Impacts on Local Settlements

The villages of Downton and Redlynch lie to the east off the A338. There is a potential for adverse impacts associated with increased HGV traffic through these villages, particularly impacting on the residential amenity and the bridge within Downton. The route through these villages has the potential to provide a 'rat run' to the M27, enabling vehicles to avoid the additional journey time associated with the A338, A31 route to the M27. Any development should ensure that no additional HGV traffic uses this route as a 'rat run' in order to prevent further adverse impacts on the residential amenity of the villages. There are residential properties fronting the A338 however the impact of the additional trips associated with the proposed development are unlikely to provide a substantial increase in HGV impact given the existing levels of HGV use on the route.

#### **On-site infrastructure**

The exact location of the site access within the estate has not been established and it should therefore be ensured that the design of any such access provides sufficient capacity so that traffic does not block back onto the industrial estate roads or the wider highway network. It is anticipated that the access road to the estate will be of sufficient length to accommodate the traffic levels produced by the site, nevertheless, proposals should ensure sufficient on-site storage/queuing for vehicles arriving at site.

#### Off Site Highway Network



In purely traffic terms; the proposed site is unlikely to have an unduly adverse traffic impact on the surrounding highway network.

#### Constraints

Potential impacts of HGV traffic on the villages of Downton and Redlynch.

#### Mitigation

Routeing agreements should be entered into to minimise the impacts of the proposed development on the villages of Downton and Redlynch. Journeys should be made via strategic lorry routes, as defined in the Local Transport Plan. Environmental weight restrictions could be considered for the roads through the villages to reduce the impacts of HGV traffic.

#### Conclusion

The proposed site can be accommodated in traffic terms with little traffic impact on the wider highway network and no physical changes to the site access. There is a potential for adverse impacts on the residential amenity of the local villages and therefore any potential impacts should be addressed and if necessary mitigated against.



## Water (Quality and Environment) Assessment

#### Site name –Salisbury Road Industrial Estate, Downton

NGR at centre of site – SU 171218 Location description – Rural setting, immediately adjacent to the A338, 1km west of Downton Area of site (ha) – 2.6

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Groundwater Contaminate major Medium / High • Plan mitigation requirements during construction		<ul> <li>Plan mitigation requirements during construction</li> </ul>	<ul> <li>Environmental management during construction</li> </ul>
		Contaminate Source Protection Zone	Medium / High	<ul> <li>Layout planning of site</li> </ul>	<ul> <li>Approach Environment Agency for</li> </ul>
Surface water body	Surface water body	Contaminate water bodies 'new lakes and	Medium	<ul> <li>Site traffic plan</li> </ul>	monitoring requirements
	-	pits' on siteContaminatesurfacewater in the vicinityMediusImpact on baseflow/runoffMediusto watercourseImpact		<ul> <li>Surface drainage plan</li> </ul>	<ul> <li>Relevant licensing requirements</li> </ul>
			Medium	<ul> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> </ul>	(PPC) to be assessed
			Medium		<ul> <li>Produce Working Plan for site</li> </ul>
					<ul> <li>Review runoff treatment requirements</li> </ul>
				<ul> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		to watercourse	Medium		<ul> <li>Assess current environmental impact of on site operations</li> </ul>
Surface wate abstraction point Groundwater abstraction point Designated sites/ Adjacent sensitive landuses		Flood Risk	Medium	<ul> <li>Engineered flood defence or mitigation</li> </ul>	Approach Environment Agency for requirements
	Surface water abstraction point	2 surface water abstraction points	Medium/High		<ul> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater abstraction point	Contaminate 7 private water abstraction points	Medium		
	Designated sites/ Adjacent sensitive landuses	North Wessex Downs AONB / 3 Scheduled Ancient Monuments / Ancient and Replanted Woodland	Low / Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for requirements</li> </ul>

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of **Downton Waste Management Facility** is:

- o Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## **Ecological Report**

### S16 Salisbury Road Industrial Estate, Downton

#### DESK STUDY INFORMATION

# *Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:* A small stretch of the River Avon SAC comes within approximately 500m of the site on its eastern edge.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Associated with the River Avon system are records of water vole, otter and crayfish. Other records of notable/protected species comprise river water-crowfoot, shining pond weed and rough poppy (both county rarity species), brown long-eared and pipistrelle bat species and adder.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The entire industrial estate was being used and had no vacant plots apart from a small plot on the western edge (marked on the Phase 1 habitat map). The plot was not accessible due to high fencing. It was rank grassland (mainly false oat grass, ragwort, nettle and mugwort) bounded on two sides by roads and two sides by hard standing. No soft landscaping was apparent on estate.

Two areas which appeared to be vacant on the map were actually built on with new units, these have been shown on the Phase 1 habitat map.

#### Field Evidence of notable species:

None seen and little, if any, habitat exists on site for wildlife due to its built up nature.

#### **OTHER INFORMATION**

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The site is assessed as being of negligible value.

#### Potential Ecological Impacts:

None envisaged as entire site, bar one small plot, are all developed.

#### Potential mitigation:

None needed unless units are being demolished and then a bat survey should be carried out (3 bat species have been recorded within 1km of the site).

#### **Residual impacts:**

None envisaged.

#### **Opportunities for enhancement:**

Consider green roof of any buildings being constructed and soft landscaping if appropriate; this is probably unlikely due to the limited space available in the vacant plot.

#### Recommended further ecological work/surveys:

We would recommend that bat surveys are carried out if any buildings are to be demolished.



#### Legal and policy implications:

Relevant policies from the Salisbury District Local Plan (June 2003): The Rural and Natural Environment Policies: C10, C13, C17, C18. General Principles for Development Policies: G1, G2, G8.
Phase 1 Habitat Map



# Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Number	Target Notes
1	3 hole badger sett - guard hairs found

# **Protected Species and Designated Sites**



# Site: S17 Solstice Business Park, Amesbury

# Landscape and Visual Survey

# S17 Solstice Business Park, Amesbury

# 1. Introduction

Flat, vacant site to the north of Amesbury off the A303, with new business and leisure facilities in immediate vicinity.

# 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

• Extensive open, rolling Chalk plateau dominated by large arable fields.

## Wiltshire Landscape Character Assessment:

Landscape Type: High Chalk Plain Landscape Character Area: Salisbury Plain East Key characteristics relevant to the site:

- Very large scale and open, exposed landscape.
- Rolling plateau land form with panoramic views over the surrounding lowlands creating a sense of elevation.
- Large regular arable fields are bounded mainly by ditches or fences with occasional hedgerows.
- Steep and incised slopes down to the surrounding river valleys.
- The underlying chalk geology of the area has lead to the predominance of free draining calcareous soils, and a lack of surface water. The landform undulates between 100m and 230m AOD.

The strong sense of remoteness and isolation accentuated by the absence of settlement is considered by WCC as a positive landscape feature. WCC judge the condition of this landscape type to be 'good' and with a 'strong' character, strongly influenced by its MOD management. The overall management strategy for the landscape type is to 'conserve' the open and isolated character of the plain along with the vast areas of calcareous grass land and sites of historic interest.

# District Landscape Character Assessment: N/A

## Landscape Designations and Rights of Way:

- No landscape designations
- Public footpath along eastern boundary of site, connecting eastern Amesbury with Bulford Camp.
- Public bridleway to south-west of site, linking New Barn with the above footpath to Amesbury

## Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

# 3. Baseline Landscape Character and Features: Site Survey



Open and exposed site, highly visible from the A303 dual carriageway, forming part of a wider panoramic view of gently rolling chalk farmland with large arable fields contrasting sharply with the new business park. The site itself has a flat topography and has been prepared for development. Three identical industrial units and one office building have been recently constructed at the eastern end of the site. All are two-three storeys in height, grey in colour and with gently arching roofs. Supporting infrastructure has also been constructed, including pavements, a road, verges and street-lighting.

The site has generally been cleared of vegetation although the eastern boundary is marked by a native hedgerow. Some new hedge and standard tree planting has been implemented along the frontages of the new buildings

To the west of the site, the earlier stages of the Solstice Business Park are now occupied, including a drive-through fast-food outlet; petrol station/supermarket; restaurant and pub.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor (business park) -Ordinary (surrounding farmland) Capacity to Accept Change in Current Site Condition: Low

The site is extremely exposed and highly visible to users of the A303 and visitors/workers at the business park, thus reducing its capacity to accommodate change.

#### 5. Potential Landscape Impacts

- Erosion of the open, rural character of the wider area
- Erosion of the neat, contemporary style promoted across the rest of the Business Park

#### 6. Potential Landscape Mitigation Measures

- Planting of 15m woodland buffer around facility
- Strategic tree planting throughout wider area of Business Park to soften views from A303 and integrate the facilities with the wider countryside
- Street tree planting throughout Business Park to soften views from offices and integrate it with the structure of the Business Park.
- The following 'Broad Management Objectives' for the Chalk High Plain landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.

## 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor (assessment based on assumption that site will be developed for employment uses in any event)	Potential Visual Mitigation Measures
8. Users of the A303	Low	Slight adverse	<ul> <li>Sensitive site planning, with the</li> </ul>
Workers/visitors to business units on Solstice Business Park	Low	No change – slight adverse	facilities placed away from offices and the A303



Visitors to catering	Medium	No change – slight	
facilities		adverse	<ul> <li>Planting of 15m</li> </ul>
Residents on north-	Medium	No change – slight	woodland strip
eastern periphery of	(distant views)	adverse (depending on	around the facility
Amesbury		extent of woodland	
		screening)	Strategic tree
Workers at MoD	Low	No change	planting throughout
Boscombe Down		_	wider area of
Users of bridleway to	High	No change - slight	Business Park to
west of site		adverse (depending on	screen from the
		extent of woodland	elevated position of
		screening)	the A303
Users of footpath to	High	No change - slight	l
east/south of site	-	adverse (depending on	
(Amesbury Road)		extent of woodland	
		screening)	

# 9. Summary: Residual Landscape and Visual Impacts

This is an extremely open site, forming part of a wider landscape praised for its sense of remoteness and strong rural character. Although not directly overlooked by residential properties, it is highly visible to users of the busy A303. Whilst woodland planting could help to mitigate the impacts of the proposals on landscape character and visual amenity, this would still erode the open, exposed character of the area. In assessing the effects of the proposals however, it is important to recognise that the land is allocated for employment use and will be developed in any event, thus reducing the overall effects. Such uses may be less industrial in character than a waste site however and careful consideration should be given to how such a facility could be suitably accommodated on this site.

## 10. Recommended further landscape and visual surveys

• Visual survey from Amesbury Road footpath and MoD Boscombe Down



# **Cultural Heritage Report**

# S17 Solstice Business Park, Amesbury

# **DESK STUDY INFORMATION**

## Known heritage assets within Study Area

WSMR NO:	SU14SE864
Site Name:	Linear Feature
Grid Ref:	SU17384208
Description:	An E-W aligned linear feature measuring at least 3m in length x 500mm in width
	and continuing NW beyond an evaluation trench (2002)
Designation:	None
WSMR No:	SU14SE670
Site Name:	Bronze Age Round Barrow
Grid Ref:	SU17444211
Description:	A ring ditch noted from an aerial photograph confirmed as a barrow by fieldwork
	and appears as a spread mound under the plough. The barrow site was
	confirmed by a geophysical survey in 2001.
Designation:	None
WSMR No:	SU14SE212
Site Name:	Evaluation
Grid Ref:	SU17554206
Description:	Late Iron Age or early Romano-British sherds were recovered from an evaluation
-	trench through large boundary ditch SU14SE745
Designation:	None
WSMR No:	SU14SE870
Site Name:	Geophysical anomaly
Grid Ref:	SU17784218
Description:	A faint circular trend was noted during a geophysical survey in 2001. Possibly a
	small ring ditch.
Designation:	None
WSMR No:	SU14SE156
Site Name:	Associated finds
Grid Ref:	SU17424199
Description:	Seven pieces of the rim of a collared urn found in 3m area by Ordnance Survey
-	staff. Possibly the rest of the vessel is still buried beneath the surface but no
	soilmarks of the barrow are visible.
Designation:	None
WSMR No:	SU14SE470
Site Name:	Associated finds
Grid Ref:	SU17554206
Description:	Medieval pottery was recovered from the upper fill of an evaluation excavation
•	trench during 2002. Further medieval pottery, occurring in a distinct band in the
	north-eastern zone, was collected in 1998.
Designation:	None

# Known heritage assets within 500m of Study Area boundary

WSMR No:	SU14SE866
Site Name:	Enclosure
Grid Ref:	SU17454185
WSMR No:	SU14SE871
Site Name:	Geophysical anomaly
Grid Ref:	SU17604180

WSMR No:	SU14SE674
Site Name:	Round Barrow
Grid Ref:	SU17864222
Designation:	Scheduled Monument - WI12197
WSMR No:	SU14SE675
Site Name:	Round Barrow
Grid Ref:	SU17924217
WSMR No:	SU14SE695
Site Name:	Round Barrow
Grid Ref:	SU17724180
Designation:	Scheduled Monument - WI12200
WSMR No:	SU14SE696
Site Name:	Round Barrow
Grid Ref:	SU17854189
Designation:	Scheduled Monument – WI12200
WSMR No:	SU14SE697
Site Name:	Round Barrow
Grid Ref:	SU17824181
Designation:	Scheduled Monument – WI12200

#### FIELD SURVEY INFORMATION

No features were visible on the ground – much of the site has already been levelled as part of the Solstice Park development.

#### SITE ASSESSMENT

**Cultural Heritage value**: This is an area of high archaeological interest and sensitivity lying close to the east of the Stonehenge World Heritage Site. There are two Scheduled Monuments to the immediate east Study Area and a number of other sites nearby, including those that have revealed archaeological deposits. Much of the site has already been evaluated in advance of the recent Solstice Park development. Any views between Scheduled Monuments has already been compromised.

**Potential Cultural Heritage Impacts:** As the site has already been developed, evaluation has already been undertaken, so the potential for impact is reduced but not eliminated.

**Further Evaluation & Potential Mitigation:** Any proposals for development at this site must be accompanied by an archaeological field evaluation in accordance with PPG 16 (Planning & Archaeology), to define the character and extent of the archaeological remains that exist in the area of the proposed development. It is essential that the County Archaeologist and English Heritage are consulted at the earliest possible stage regarding the undertaking and results of such an evaluation. Where unrecorded features of archaeological importance are found, the advice of the County Archaeologist and English Heritage will be essential as to the appropriate action required. As with identified features of archaeological interest in proximity to the site, development should mitigate any potential impacts through careful design and landscaping and, where required, through preservation in situ of any remains.

**Assessment:** Further evaluation is required as to the suitability of this site at the Planning Application stage.

# **Ecological Report**

# S17 Solstice Business Park, Amesbury

# **DESK STUDY INFORMATION**

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

There are no statutory or non-statutory designated sites within 500m of the site. Approximately 700m to the west of the site is Salisbury Plain SAC/SPA. Approximately 1km to the north-west is River Avon SAC.

## Records of notable species within 500m: (legally protected, BAP, RDB)

Numerous butterfly records exist for the area around the edges of this site which comprise Adonis blue (UKBAP species), grizzled skipper, marsh fritillary and small blue. There is also a record of narrowbordered bee hawkmoth (UKBAP species). Plant species on the Wiltshire rare plants list comprise basil thyme and sainfoin.

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The vast majority of this site has already been cleared of vegetation as part of the new development including a hotel, petrol station, restaurant and new office units. Areas where natural habitats remain are restricted to the south of the site, an area of rape seed and rough grassland is all that remains.

The northern boundary is the busy A303 dual carriageway. The eastern boundary is an old track bounded on both sides by a hedgerows and long un-managed grassland comprising a variety of native species such as greater knapweed, dog-rose, yarrow, birds foot trefoil and nettle. Both sides of this rough track were being used by a range of butterflies, moths and other invertebrates.

#### Field Evidence of notable species:

Not applicable as site cleared.

#### OTHER INFORMATION

## **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The value of this site in terms of habitat which remains and species which may be present is negligible.

## Potential Ecological Impacts:

The site has already been cleared of vegetation and thus no further impacts due to construction or operation are anticipated as long as no further habitats around the edges of the site are touched such as the old track. There may be further impacts on existing habitats to the east due to new lighting introduced as part of the development.

## Potential mitigation:



Do not affect either side of the rough track on the eastern edge of the site and do not use for site access. Ensure that any designs for lighting introduced onto the site has been discussed with an ecologist in relation to reducing potential impacts on foraging bats which may be using the old track as a flight path.

#### Residual impacts:

Because the majority of this site has already been cleared, there will be few if any residual impacts from the development itself if the above advice is adhered to.

#### **Opportunities for enhancement:**

- Consideration should be given to green roofing any new buildings
- · Landscape proposals should be drawn up in consultation with an ecologist
- New roads should be planted up with hedges on either side (native, species-rich) and link into the wider landscape
- The southern corner is the only area on site where vegetation remains, consider creating wildflower meadow habitat in place of the rough, species poor grassland and rape which is present there now.

#### Recommended further ecological work/surveys:

If the track bounding the eastern edge of the site is being affected in any way, botanical, invertebrate, dormouse, bat and reptile surveys will need to be carried out. The need for these surveys is strengthened by the presence of existing records for UKBAP species narrow-bordered bee hawkmoth and Adonis blue butterfly and county notables for plants. A badger survey will also need to be carried out if this track, or any of the remaining vegetation around the peripheries of the site, is to be cleared (the desk study records showed badger records exist for this area although nature of the record was unknown (ie. sett, casualty etc.)).

#### Legal and policy implications:

Relevant policies from the Salisbury District Local Plan (June 2003): The Rural and Natural Environment Policies: C1, C2, C3, C10, C13. General Principles for Development Policies: G1, G2, G8.

# Joint Waste Site Allocations Site Survey Report

**ATKINS** 

Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Rough track lined with tall grasses and scrub, lots of butterflies. Excellent habitat for nesting birds, invertebrates and reptiles	Nettle, greater knapweed (dominant), dogrose, hogweed, false oat grass, hawthorn, yarrow, birds-foot trefoil, welted and spear thistle.
2	All hard-standing. The majotiry of the site has already been cleared of vegetation and little remains apart from around the edges.	
3	Area of Rape Seed	
4	Rough un-managed grassland - species poor. Suitable for reptiles which may be present along adjacent track also.	Broad-leaved dock, thistles, mugwort and common toadflax
5	New units and car park	
6	New area of landscaping - related to new unit development?	





# Site: S19 Thorny Down WTS, Winterslow

# Landscape and Visual Survey

# S19 Thorny Down WTS, Winterslow

# 1. Introduction

The site lies to the north of the A30, close to Winterbourne Down, adjacent to the former Thorny Down Landfill site. The western part of the site is used as a Waste Transfer Station while the eastern part of the site is currently unused.

# 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

- Extensive open, rolling Chalk plateau dominated by large arable fields.
- Scattered copses and shelterbelts.

# Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: High Chalk Plain Landscape Character Area: Porton Down Key characteristics relevant to the site:

- Very large scale and open, exposed landscape.
- Rolling plateau land form with panoramic views over the surrounding lowlands creating a sense of elevation.
- Large regular arable fields are bounded mainly by ditches or fences with occasional hedgerows.
- Copses and woodland belts, at various stages of growth occur throughout the area with sinuous older plantations contrasting with more recent tree planting in geometrical blocks.

WCC judge that military land use throughout this landscape type has maintained large areas of the *Chalk High Plain* Landscape Type in 'good' condition and the vast sense of scale and openness gives this landscape a 'strong character. The overall landscape strategy is to 'conserve' this open and isolated character.

## District Landscape Character Assessment: N/A

## Landscape Designations and Rights of Way:

- Special Landscape Area
- Footpath to east of site

## Local Authority Consultation:

Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

# 3. Baseline Landscape Character and Features: Site Survey

The site lies to the north of the A30, within a false cutting. A wide vehicular entrance provides access to the site, but the dog-leg design reduces views into the site. To the north of the site, the restored Thorny Down landfill site lies at a higher level, mimicking the rolling chalk landscape of the



area and screening the site from the north. The site is therefore well-contained and intimate in character, although its rural character has been eroded through changes to topography and vegetation. Embankments within the site have been planted with native woodland species and these are establishing well.

The western part of the site is in use as a Waste Transfer Station and includes a portacabin office, large-scale waste containers, a weigh-bridge and large bitmac turning areas for lorries. The eastern end of the site is narrower and has been laid out to include a wide access road with embankments each side, with an area of covered hard-standing at its eastern end. This part of the site is currently used for storage of gas containers and is not generally accessible to lorries. From this end of the site there are glimpsed views out to the Thorny Down landfill site which currently managed as a meadow, and rolling arable fields with strips of woodland beyond.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The landscape quality of the site is poor, although as planting matures its condition is slightly improving. The general quality of the landscape has been severely damaged and this, combined with the existing screening that is in place would enable the site to easily accommodate change.

## 5. Potential Landscape Impacts

• Loss of embankment vegetation, which is establishing well.

#### 6. Potential Landscape Mitigation Measures

- Continue to maintain existing vegetation on embankments
- Maintain the high degree of visual enclosure that the site currently affords, thus conserving the rural character of the surrounding landscape.
- The following 'Broad Management Objectives' for the Wooded landscape type in the *Wiltshire* Landscape Character Assessment are relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.

## 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Workers/visitors to waste transfer site	Low	No change	Additional native woodland planting at
Walkers on footpath to east of site (subject to walkover survey)	Medium	No change – slight adverse	eastern end of site

#### 8. Summary: Residual Landscape and Visual Impacts

Given that this site is well-concealed and already predominantly given over to use as a waste transfer station, there would be negligible landscape and visual impacts.

#### 9. Recommended further landscape and visual surveys

• Visual survey of footpath to east of site



# Water (Quality and Environment) Assessment

# Site name – Thorny Down WTS, Winterslow

NGR at centre of site – SU 213340 Location description – 0.7km northwest from Firsdown, on the A30 Area of site (ha) – 2.6

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Contaminate major aquifer Contaminate Source	Medium / High Low / Medium	Plan mitigation requirements during construction	<ul> <li>Environmental management during construction</li> </ul>
	Surface water body	Protection Zone Contaminate watercourse on site (unnamed stream)	Low	<ul> <li>Layout planning of site</li> <li>Site traffic plan</li> </ul>	<ul> <li>Approach Environment Agency for monitoring requirements</li> </ul>
		Impact on baseflow/runoff to watercourse	Low	<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> </ul>	<ul> <li>Relevant licensing requirements (PPC) to be assessed</li> </ul>
				Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons	<ul> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> </ul>
				<ul> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>

## Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Recentor	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment
	Receptor		Significance	(to be considered as appropriate)	Requiremento
		Impact on baseflow/runoff to watercourse	Low		<ul> <li>Assess impact of current landuse and existing landfill and the potential for impact on existing mitigation measures.</li> </ul>
		Flood Risk	Low	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment</li> </ul>
	Groundwater abstraction point	Contaminate groundwater abstraction	Low/Medium	None likely	Requirements
	Designated sites/ Adjacent sensitive landuses	Thorney Down NNR and Porton Down SSSI near site	Low / Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for</li> </ul>
	Other adjacent landuses	Farmland and farms surrounding site Current discharge consents and several recent pollution incidents	Low /Medium		requirements

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Thorny Down, Winterslow is:

- Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

# ΛΤΚΙΝ

# **Ecological Report**

# S19 Thorny Down Waste Management Facility, Winterslow

# **DESK STUDY INFORMATION**

# Statutory designated sites within 1km and non-statutory designated habitats within 500m:

Porton Down SPA/SSSI: Located approximately 250m east of the site. Thorny Down Road Verge Wildlife Site: Located approximately 15m south of the site.

# Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of badger within the site.

Within 500m of the site there is one record of badger (located approximately 100m north-east of the site), one record of Duke of Burgundy (a butterfly) and two records of rare vascular plants in Wiltshire (including hound's-tongue and juniper).

# Details of surveys already undertaken (where known):

None known.

# FIELD SURVEY INFORMATION

## General Habitat: (ref Phase 1 habitat plan)

This operational waste management site is covered in hard standing. The edges of the site are formed by steep chalk slopes that are covered in shrubs and some flowering and grass plant species. Fencing is present at the top of these slopes, marking the boundary of the operation waste management facility. To the north of the site (adjacent to the boundary fencing) is dense, continuous scrub and to the south of the site (adjacent to the boundary fencing) is an area of young plantation woodland (present at the top of the A30 road embankment).

Three small buildings are present within the site. These include two small metal portacabins which are in good condition and a small breeze block building (in the south-eastern corner of the site).

#### Field Evidence of notable species:

The buildings present within the site have low a low potential to support roosting bats.

Anecdotal evidence (from the workers at the waste management site) suggests that a badger sett is located approximately 20m north of the north-western corner of the site. It was not possible to access the area outside the waste management site to check for the presence of this sett.

There are no ponds present within 500m of this site.

Three pyramidal orchids were noted on the chalk slopes in the north-eastern corner of the site (marked on the Phase 1 habitat map).

No other field evidence of legally protected species was identified.

## **OTHER INFORMATION**

None identified.

## **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (areas of hard standing within an operational waste management facility). However the pyramidal orchids noted at the site are of local nature conservation value.

## Potential Ecological Impacts:



The loss of, or possible extension, to hard-standing areas. There is also the possible loss of vegetation present on the steep chalk slopes (with one area supporting pyramidal orchids). There may be potential water quality impacts on River Avon System SAC/SSSI present 120m south of the site due to runoff during construction and operation of new uses.

The potential effect of the proposal on the Porton Down SPA is not likely to be significant as there will be no direct or significant emissions or discharges to air, surface water or groundwater and no chemical waste processing on-site. Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of Porton Down SPA to the site (approximately 250m east pf the site). Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SPA

The overall works are not likely to have a significant adverse impact in terms of direct habitat effects and are likely to have negligible ecological impacts.

#### Potential mitigation:

- Retention of chalk slope which supports the pyramidal orchids. If this slope is to be altered or lost, the translocation of these orchids should be undertaken (this is good practice in relation to the conservation of biodiversity).
- Closed surface water drainage system within the design of the facility and the use of silt traps and Sustainable Urban Drainage Systems (SUDS) best practice;
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

- Bat surveys on any buildings if to be demolished. Although there was low potential for these buildings to support bats it is possible that a small number of bats could use the structures in the future as a temporary summer roost or feeding roost.
- Orchid surveys of the entire site between May and July to determine if any other species of orchid are present at the site and locate any orchids which need to be translocation.

#### Legal and policy implications:

- If bats are found to be roosting in any buildings to be demolished a development licence will be required from Defra.
- Wiltshire County Council has identified this facility as potentially requiring an Appropriate Assessment under the Conservation (Natural Habitats & c.) Regulations 1994 due to the proximity of Porton Down SPA. Atkins has undertaken an assessment of the likely significant affect of the waste proposals on the SPA. See Appendix C for details of the Appropriate Assessment.

The Nature Conservation policies in the Salisbury District Council Local Plan that are potentially relevant to this site include:

- Policy C10
- Policy C11
- Policy C12
- Policy C13
- Policy C14
- Policy C15

# Joint Waste Site Allocations Site Survey Report



# Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Chalk slopes (steep). Covered in goat willow, dogwood, bramble, ribwort, plantain, knapweed, evening primrose, hawthorn, shrubs, false oak grass, buddleia, teasel, hogweed.	
2	Chalk slope covered in field maple, hawthorn, blackthorn and rosa species.	Field maple, hawthorn, blackthorn, rosa sp
3	Three pyramidal orchids.	Orchids (3)
4	Small breezeblock building. Pitched corrugated metal roof.	Low Bat potential
5	Anecdotal evidence from workers at site suggesting that a badger sett is present in this location. Could not access to confirm (no permission).	Known Badger Sett (approximate location). Could not visit due to access problems (no permission).
6	Gas burner. 3 metal cabinets and 1 metal chimney.	No Bat potential
7	Yellowhammers heard singing.	Yellow Hammers heard singing
8	Two small metal portacabins in good condition.	Low Bat potential
9	Young to semi-mature plantation woodland	Ash, beech, hawthorn, nettle and leaf litter form. Lots of nesting birds. Trees too young for bat potential.

# **Protected Species and Designated Sites**





# Site: S21 Churchfields Industrial Estate, Salisbury

# Landscape and Visual Survey

# S21 Churchfields Industrial Estate, Salisbury

## 1. Introduction

Large mixed industrial/trading estate close to Salisbury station and city centre. Flat site in a floodplain location with meadows to east and west and low ridgelines to the south and north.

## 2. Baseline Landscape Character and Designations: Desk Survey

## Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

• River valleys with common settlements and narrow floodplains, dominated by former floated flood meadows and meandering rivers.

Due to its industrial, urban character, the site is not typical of the Salisbury Plain and West Wiltshire Downs landscape character area. However it does occupy a flat, floodplain site, and the land to the west and east of the site has a strong river valley character.

## Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Chalk River Valley

Landscape Character Area: Bourne Chalk River Valley

- Strongly enclosed valleys with an intimate scale contrasting with the surrounding open upland landscape.
- Level, often narrow valley floors with relatively steep sides.
- Hedgerows and hedgerow trees add to the lush and enclosed feel of the valleys.
- Riparian woodlands, lines of poplar along ditches and willow pollards.
- Valleys contain a concentration of settlement in contrast to the adjacent unsettled downs.
- Valley used as transport corridors with major roads and railway lines along valley sides.

WCC judge the overall condition of the *Chalk River Valley* Landscape Type to be 'good' with its chalk rivers of high water quality and rich biodiversity, its largely intact hedgerow network, riparian woodland and compact well kept villages. It has a 'strong' character although suburban edges of some settlements (such as this site) are seen to detract from the rural, peaceful small-scale landscape. The overall strategy for this landscape type is to 'conserve' the tranquil, intimate and rural character of the landscape.

## District Landscape Character Assessment: N/A

## Landscape Designations and Rights of Way:

- No landscape designations
- Public footpath across floodplain to west of site
- Public footpath across floodplain to east of site

## Local Authority Consultation:



Salisbury District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. We are informed that a co-ordinated consultation response has already been provided to Wiltshire County Council.

## 3. Baseline Landscape Character and Features: Site Survey

Large mixed industrial/trading estate arranged a network of access roads. Flat, floodplain site, with views in and out of the site limited by topography and floodplain vegetation beyond the site boundaries. Low, wooded ridgelines to the north and south visually enclose parts of the site.

The site shows a great deal of activity, with a varied mix of businesses including car dealerships. Car parking appears to be a problem, with access roads heavily parked up. Infrastructure includes security fencing (palisade and wire mesh), bollards, barriers, signage and advertising boards, giving a cluttered appearance. Buildings are generally a maximum of two storeys in height and urban in character, lacking any local distinctiveness.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The site is very urban and industrial and does not reflect the local landscape character. It has a high capacity to accept change as it is already in industrial use and has few sensitive visual receptors in the immediate vicinity.

## 5. Potential Landscape Impacts

• Erosion of chalk river floodplain character of landscape to east and west of site

#### 6. Potential Landscape Mitigation Measures

- Use of riparian native tree and shrub species (such as willow, poplar and alder) within the site, to integrate it with the surrounding floodplain landscape
- Use of large scale street trees along northern frontage to integrate it with the surrounding urban townscape

## 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Impact on Receptor	Potential Visual Mitigation Measures
Workers in adjacent offices on	Low	No change – slight adverse	<ul> <li>Native buffer planting around site</li> </ul>
Employees/ visitors to industrial estate	Low	No change – slight adverse	Limit height of
Residents on ridge to south of site (Harpham)	Medium	No change - slight adverse	on site
Walkers using footpath to west of site	Medium	No change - slight adverse	<ul> <li>Sensitive site planning to minimise visual impact</li> </ul>
Walkers using footpath to east of site	Medium	No change - slight adverse	



# 8. Summary: Residual Landscape and Visual Impacts

Due to its semi-enclosed wooded setting and existing quarried character, the site could accommodate change. The main visual receptor groups, walkers on nearby footpaths and drivers on the A36 are both already well screened, although this could be further enhanced with additional planting.

# 9. Recommended further landscape and visual surveys

• Winter-time visual survey from footpaths to west and east of site



# Noise Assessment

# S21 Churchfields Industrial Estate, Salisbury (Inset Map 42)

# 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Churchfields to assess the site's suitability for recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be the property adjacent to the site north-east corner located on the Churchfields Road.
- 1.3 The site is currently an industrial estate containing small industry and business. The site also currently contains a household recycling centre. The site is flanked to the north by Churchfields Road and to the east and west by fields.

# 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 28<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site and at the most sensitive receiver predominantly consists of road traffic noise from nearby roads and vehicle and HGV movement within the site.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	10:37	63.7	73.8	53.7
MEASUREMENT 2	10:43	64.8	79.3	56.9
MEASUREMENT 3	10:48	65.1	81.5	57.1
AVERAGE		64.6		55.9

2.3 The average background noise level at the most sensitive receiver was measured as 55.9dB  $L_{A90}$ .

# 3. SITE SUITABILITY

3.1 The proposed uses for the site at Churchfields Industrial Estate include recycling and waste transfer station. The boundary of the site area proposed for use is adjacent to the most sensitive receiver. Given the background noise level, L<sub>A90</sub> of 55.9dB at the most noise sensitive receiver, it is expected that any new waste development would need to be located a minimum distance of approximately 64m away from such receivers.



- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of the development within the site, existing buildings within the site may also offer some screening effects allowing a closer proximity to be achieved.
- 3.3 Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Implementation of mitigation measures would serve to attenuate the noise levels from the site a possibly allow a closer proximity to be achieved.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



# **Traffic and Transport Review**

# S21 Churchfields Industrial Estate, Salisbury

## **Potential Use**

The potential use of the site is local scale recycling and waste transfer station.

#### **Existing/Potential Access**

The site is located west of Salisbury City Centre and the railway station, south of the railway line along Churchfields Road. The proposed site is on the existing, 20ha, well established Churchfields industrial estate with largely B2 and B8 uses.

Access to the site from the primary road network is poor. The main access is from the A36 via a large 4 arm signalised roundabout. Observed traffic congestion on approach to this junction from the west even in off peak conditions highlights the necessity to assess the impact of the new development on the trunk road network in conjunction with the Highways Agency. Where Fisherton Street meets South Western Road the mini roundabout provides a tight turn for HGVs whilst the mini roundabout at the eastern end of Churchfields Road provides similar conditions. Churchfields road itself is a busy single carriageway road with existing observed high HGV flows. Residents only parking on one side of the carriageway reduces the road width to 5m in parts preventing two HGVs passing each other and narrowly allowing a car and a HGV to pass simultaneously. This results in traffic having to give way causing queuing. This is likely to create congestion in the peak hours

National cycle route 24 passes along Churchfields Road and as such there might be an issue with a potential increase in HGV traffic and the conflict with vulnerable road users. High Vehicles (Over 4.3m) are required to take a route along Mill Road to the south of the Churchfields Road junction due to a low bridge along Fisherton Street. This alternative route passes through a narrow residential access road with a 20mph zone and vertical traffic calming in the form of speed humps. It is assumed that all traffic associated with this new development will be below this 4.3m threshold as any re-routing of HGV traffic along Mill Road is unlikely to be appropriate.

#### Impacts on Local Settlements

Salisbury lies to the east. The impacts on this size of settlement are likely to be minimal; however impacts on local roads have been discussed above.

#### **On-site infrastructure**

The exact location of the site within the industrial estate would need to be established in order for the scale of on-site infrastructure to be assessed. The access should however be of sufficient length to accommodate the traffic without blocking back to the local highway network.

#### Off Site Highway Network

To the north of the site is the A36/Fisherton Street junction, a large four-arm signalised roundabout. It is probable that any application for development of the site may require a more detailed transport statement with particular emphasis on this junction. In purely traffic terms; the proposed site is likely to have a minimal peak hour traffic impact on the surrounding highway network. However potential environmental impacts on the local roads of Churchfields Road and Mill Road should be considered

#### Constraints

The access to the site from the primary road network is poor. The potential for conflict between the vulnerable road users along the National Cycle Route 24 and the HGV traffic exists.

#### Mitigation

There may be the potential to upgrade some of the junctions to accommodate the increased traffic flows.

## Conclusion



More detailed assessment would need to be undertaken in order to determine whether the proposed extension to the site can be accommodated in traffic terms within the wider highway network. Consideration ought to be given to the upgrade/modification of the local junctions given the existing access problems even without the additional traffic to the proposed site.



# Water (Quality and Environment) Assessment

# Site name – Churchfields

NGR at centre of site – SU 131299 Location description – Urban setting, within the built up area of Salisbury Area of site (ha) - 20

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Measures (to be consid	Risk dered as a	Mitigation	Likely Requireme	Further ents	Assessment
Water	Groundwater	ContaminatemajoraquiferContaminateSourceProtection ZoneContaminateSource	High Medium / High	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> </ul>		Plan mitigation requirements during construction     Igh     Layout planning of site     Approach Environment Agenc		ement during It Agency for	
	Surface water body	Contaminate watercourse on site (River Nadder) Impact on baseflow/runoff to watercourse	Medium / High Medium	<ul> <li>Site traffic</li> <li>Surface d</li> <li>Impermea</li> <li>Runoff co</li> <li>Spill kits, designate areas if si liquids/hyd</li> <li>Consider waste har wastes or</li> <li>Engineered</li> </ul>	c plan Irainage pl able hards Illection sy bunded st diquid ha te might a drocarbon limiting ty ndled at si nly, inert w ed liner sy	lan standing vstem torage and andling iccept is pes of te e.g. solid vastes vstem	<ul> <li>monitori</li> <li>Relevar (PPC) to</li> <li>Produce</li> <li>Review requirer</li> <li>Monitor requirec permit)</li> <li>Assessi impacts</li> </ul>	ng requiremen it licensing req be assessed Working Plan runoff treatme nents ing boreholes ( for obtaining of ment of curren	ts uirements for site nt (may be operating at and historical

## Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements	
		Flood Risk	Medium / High	Engineered flood defence or mitigation	<ul> <li>Approach Environment Agency for requirements</li> </ul>	
	Groundwater abstraction points	Contaminate 2 public water sources and 3 private groundwater abstraction points at a distance from the site	Low		<ul> <li>Check flood risk assessment requirements</li> </ul>	
	Designated sites/ Adjacent sensitive landuses	River Avon SAC / SSSI / SPA Several Ancient Woodlands and conservation areas	Medium / High	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for</li> </ul>	
	Other adjacent landuses	Current discharge consents and several recent pollution incidents	Medium / High		requirements	

# Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of **Churchfields** is:

- o Many / serious issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



# **Ecological Report**

# S21 Churchfields Industrial Estate, Salisbury

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

The River Nadder (part of the River Avon SAC) borders the western edge of the industrial estate and lies immediately to the south also. Also bordering the western edge of the site are the County Wildlife Sites Bemerton Meadows West, Fitgerald Farm Meadows, Bemerton Mainland Meadow and Island Meadow. Within approximately 800m (to the west) is County Wildlife Site Bull Plot Meadow. Approximately 300m south-east of the site is County Wildlife Site Harnham Water Meadows which are part of the River Avon SAC. West Harnham Chalk Pit SSSI lies approximately 700m to the south.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

Due to the presence of the River Nadder. various CWS and the variety of habitats near to this site, there are a number of records for protected and notable species. In no particular order these are: reptiles (slow worm, grass snake and common lizard), bat species (noctule, pipistrelle, greater horseshoe, serotine and Daubenton), 7 notable species of beetle (northwest of the site), water vole, otter, water shrew and Desmoulins whorl snail. Notable plant species, rare within the county, comprise green flowered helleborine, pink water speedwell, good king Henry and buck's horn plantain. Bird species recorded within the 500m buffer comprise redshank and bullfinch (UKBAP species).

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

Overall the entire industrial estate is a mixture of varying ages of buildings, all of which seem to be in use. Each individual building was not assessed for its potential to support bat roosts as this would have been very time-consuming, furthermore, it was assumed that existing buildings will not be demolished if in use.

The River Nadder and associated habitat border the industrial estate on its east, west and southern edges. Access to the river was only possible at two locations on the western edge at Brunel Road and Newton Road (these are shown on the Phase 1 habitat map). At both of these locations, new units were present and being used.

#### Field Evidence of notable species:

No evidence seen although the River Nadder is known to support crayfish and looked suitable for both otters and water voles in the two locations which could be accessed. It also provides good habitat for invertebrates such as damsel and dragonflies.

#### OTHER INFORMATION

There did not appear to be any vacant plots of land within the industrial estate.

#### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES



#### Nature conservation evaluation:

The entire site is built up and all units currently occupied, potential for wildlife is low apart from roosting possibilities in some of the buildings. Overall value is negligible.

#### Potential Ecological Impacts:

As long as the banks of the River Nadder and associated habitat are avoided there are anticipated to be no construction or operation impacts if building within the existing boundaries of the industrial estate.

#### Potential mitigation:

- If any buildings are to be demolished to accommodate the new development, they must first be checked for bat roosting potential. Appropriate mitigation would then be advised if bats were found to be present.
- If any development is to take place near to the edge of the River Nadder, the EA must be consulted and appropriate mitigation implemented. Mitigation will include, but not be limited to, following appropriate Environment Agency Pollution Prevention Guide notes when working close to water courses, particularly PPG01, PPG03, PPG05, PPG06 and PPG21.
- Control of surface water run-off so that no direct discharge to the River Nadder and pre-treatment of any discharges via silt traps and oil interceptors.
- Any new lighting should be diverted away from the edge of the river to reduce adverse effects on wildlife due to lighting pollution.

#### Residual impacts:

None envisaged at this stage.

## **Opportunities for enhancement:**

- Consider developing green roofs into the development.
- The entire industrial estate lacks any natural landscaping, this could be addressed and the whole area "softened" through planting. Any landscaping proposals should involve consultation with an ecologist.
- Bat/bird boxes (if appropriate to the location) could be erected on the new development.

#### Recommended further ecological work/surveys:

- Any demolition of buildings must be preceded by a bat survey.
- If any development is to take place near to the edge of the River Nadder, the EA and EN must be consulted.

#### Legal and policy implications:

Relevant policies from the Salisbury District Local Plan (June 2003): The Rural and Natural Environment Policies: C10, C11, C13, C15, C17, C18. General Principles for Development Policies: G1, G2, G6, G8.

Phase 1 Habitat Map



Number	Target Notes
1	Overall target note for the site: Complete mixture of old and new units, all in use. No natural habitat within the estate at all apart from a few planted trees. Varying degrees of suitability for bats in the buildings but individually assessed as too numerous.
2	Access to River Nadder at these 2 points. Units at these locations are new and currently in use. A walk along the River Nadder is possible at Brunel Road. Grey wagtail and numerous damsel and dragonfly seen.

# **Protected Species and Designated Sites**


# Volume 4 Swindon Borough

SW1 Brindley Close/Derby Close, Swindon SW2 Chapel Farm Swindon, Area A SW3 Chapel Farm Swindon, Area B SW4 Land within Dorcan Industrial Estate, Swindon SW6 Land within Groundwell Industrial Estate, Swindon SW7 Land at Kendrick Industrial Estate, Swindon SW8 Mannington Depot Site, Swindon SW10 Land within South Marston Industrial Estate, Swindon SW13 Transfer Bridges Industrial Estate, Swindon SW14 Waterside Park, Swindon

# Site: SW1 Brindley Close/ Darby Close, Swindon

### **Noise Assessment**

### SW1 Brindley Close/ Darby Close, Swindon (Inset Map 46)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Brindley Close/Darby Close to assess the site's suitability for Waste Treatment and Recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Hreod Parkway School located approximately 470m from the north of the site.
- 1.3 The site located within an industrial estate comprises of several small business and industrial units. The site is flanked to the south-west by the local railway line with the remaining boundaries surrounded by small businesses including small manufacturing and engineering businesses. The B4006 is located approximately 3xm to the east of the site.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 27<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site consists predominantly of industrial noise from activities within the site and from the adjacent industrial estate and traffic noise from the industrial estate. The current noise climate at the most sensitive receiver consists predominantly of road traffic noise from the Akers way and "humming" from the schools air conditioning system. Building works for extension to the school were being carried out near by and activities such as sawing and drilling were perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	14:10	50.7	68.9	42.9
MEASUREMENT 2	14:15	47.7	60.6	41.5
MEASUREMENT 3	14:20	48.4	58.6	41.8
AVERAGE		49.1		42.1



2.3 The average background noise level at the most sensitive receiver was measured as 42.1 L<sub>A90</sub>.

### 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Brindley Close/Darby Close is for local recycling, or materials recovery facility, waste transfer station and possibly in-vessel composting subject to further investigations. The boundary of the site area proposed for use passes within 470m of the most sensitive receiver. Given the average background noise level, L<sub>A90</sub> of 42.1dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of approximately 315m away from the most sensitive receivers.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of the development within the site, existing buildings within the site and intervening ground topography may also offer some screening effects allowing a closer proximity to be achieved.
- 3.3 Given that the minimum separation distance for the average background noise level is less than the distance between the site and the most sensitive receiver indications are that this site is likely to be suitable for the proposed development.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



### **Air Quality Report**

### SW1 Brindley Close/ Darby Close, Swindon, 3.6ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) currently comprises a number of small scrap yards, skip hire businesses and general industrial units. The setting is industrial within the Swindon urban area, adjacent to the Cheney Manor Industrial Estate.



Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>1</sup> sources within 1km of the site: road traffic on the B4006, B4534, B4587 and minor roads; gas/oil/solid fuel space heating for buildings; BTR Graphic Products Ltd (PM<sub>10</sub> and VOC) on Cheney Manor Industrial Estate; Thames Water Utilities Ltd sewage treatment works (additional potential emissions of odour, NH<sub>3</sub> and bioaerosols).

<sup>&</sup>lt;sup>1</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>),  $PM_{10}$  (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>2</sup> for 2005 and comparable standards<sup>3</sup> are: 20.4µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 16.7µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 19.9µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential premises, including Rodbourne, Roughmoor and Moredom, with one school in Moreden. There are four County Wildlife sites within 1km: Moredon Copse, Moredon Meadow, Swindon Sewage Treatment Works Lagoons and Cheney Manor Ponds.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential within 250m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 250m (Rodbourne, Roughmoor and Moredom)	1 (1)	1 (1)	N/A	N/A	1 (1)	1 (1)	1 (2)
Potentially sensitive ecology within 1km of site (Moredon Copse, Moredon Meadow, Swindon STW Lagoons & Cheney Manor Ponds)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A
Notoo							

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

### 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to moderate (in-combination) without mitigation. Dust and odour mitigation is recommended. Further assessment should be undertaken for odour.

<sup>&</sup>lt;sup>2</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>3</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



### Water (Quality and Environment) Assessment

### Site name – Brindley Close/Darby Close, Swindon

NGR at centre of site – SU 130861 Location description – within Swindon Area of site (ha) – 3.3

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater Surface water body	Contaminate minor aquifer Contaminate adjacent watercourse (River Ray is	Medium / High Medium / High	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> </ul>	<ul> <li>Environmental management during construction</li> <li>Confirm the presence of surface water features within the vicinity of the site</li> </ul>
		at site boundary) Impact on baseflow/runoff to watercourse	Medium	<ul> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Relevant licensing requirements (PPC) to be assessed</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Baseline monitoring of adjacent surface water bodies</li> <li>Assess the impact of current and historic potentially contaminating activities on the site</li> <li>Monitoring boreholes (may be required</li> </ul>

#### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood event causes contamination of surface water and disruption of operations Flood zoning directly	Medium / High	Engineered flood defence or mitigation	<ul> <li>for obtaining operating permit)</li> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Designated sites/ Adjacent sensitive landuses	No designated sites	Low	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above.</li> <li>Management of windborne</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent and on site landuses have, and how an appropriate environmental baseline can be measured/monitored</li> </ul>
	Other adjacent landuses	Residential areas of Swindon plus a sewage treatment works, industrial estate and playing fields close by with rail/road infrastructure	Medium to high	material at site boundaries	<ul> <li>Approach Environment Agency for requirements</li> </ul>

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Brindley Close, Swindon is:

- o Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

### **Ecological Report**

### SW1 Brindley Close/Darby Close, Swindon

### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory sites within 500m:

- Cheney Manor Ponds (2 parcels) Wildlife Site 25m from the south-east edge of the site boundary.
- Swindon Sewage Treatment Works Lagoons Wildlife Site approximately 200m south-west and on the other side of a live railway line.
- Moredon Meadows Wildlife Site (in two parts) just within 500m to the north.

#### Records of notable species within 500m (legally protected, BAP, RDB):

There are no records of notable species within the waste allocation boundary although there are otters recorded on the River Ray adjacent to the north-western edge of the site.

Swindon Sewage Treatment Works Lagoons Wildlife Site supports many notable species including:

- Great crested newt
- UK BAP bird species linnet, reed bunting, tree sparrow and spotted flycatcher,
- Schedule 1 species (Wildlife and Countryside Act 1981) stone-curlew, little ringed plover, kingfisher and barn owl
- Water vole
- Badger

Other records within 500m (but beyond 300m) include slow-worm and adder.

#### *Details of surveys already undertaken (where known):* None identified.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The area within the site boundary largely comprises hard standing with a number of small industrial units (such as a skip hire business, scrap yard and current local recycling facility).

There is a small area at the north-western extent of the site which is undeveloped just beyond the skip hire business. This area is bordered by a live railway line to the south-west and a river to the north-west. A large metal fence separates the area from Swindon Borough Council's local recycling centre to the north-east. This area is dominated by tall ruderals (common nettle) and shorter grassland along an informal footpath/track. The banks of the river are steep and marshy and the river was not entered at the time of the survey (due to health and safety issues, with the surveyor being lone working at the time and the banks being high and steep).

### Field Evidence of notable species:

The river offers good crayfish habitat and is potentially used by commuting otters (no evidence of spraints or holts observed from the banks. The river also has the potential to act as a good foraging and commuting habitat for bats although the scrub and trees along the river bank have low potential to support roosting bats. There is a brick culvert taking the river beneath the railway line that has the potential to support roosting bats although access to the culvert was not possible.

There are a number of water bodies within 500m of the site boundary.

The river forms a barrier to movement of great crested newts in Swindon Sewage Treatment Works Lagoons Wildlife Site although newts could access the waste allocation site along the railway line.



There are two ponds/lakes to the north-east within the industrial estate but the amount of hard-standing and buildings form a barrier to movement of great crested newts from these water bodies onto the site.

Cheney Manor Ponds are generally unsuitable amphibian habitat as they are stocked with fish (fishing platforms and several people seen fishing during the survey) with little marginal vegetation for egg laying.

There is a large linear water body within the grounds of the existing local recycling facility. This was formerly part of the river before it was separated from the main river to be used as an emergency water supply. This water body is approximately 150m north of the site boundary. The water body is 100m long by 7m wide and has abundant marginal and aquatic vegetation and is very good amphibian habitat. There are direct terrestrial links between this water body and the area of tall ruderals and grassland at the north-western extent of the site.

The majority of buildings within the industrial estate had very low potential for roosting bats and no nesting birds were observed using the buildings.

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The majority of land within the site boundary contains industrial buildings and hard standing and is of negligible nature conservation value. The area of undeveloped land in the north-west is of local nature conservation value, particularly as it links to the riparian habitat and the 'cut-off' section of river which now forms a standing water body.

#### Potential Ecological Impacts:

Any development within the already developed land will cause negligible ecological impacts although any additional surface water run-off or discharges to the river could decrease the water quality and quality of riparian habitat.

Development within the undeveloped north-western part of the site would have adverse ecological impacts of minor significance and would increase the risks of reduced water quality in the river and degradation of the river bank habitat during construction and operation of the site.

#### Potential mitigation:

- Buffer zone of at least 10m from the edge of the river, retaining bank-side habitat and reducing the risk of diffuse surface water run-off polluting the water course.
- Appropriate mitigation if great crested newts are found to be present within the old section of river, now forming a linear pond within the local recycling facility (detailed mitigation would need to be formulated by an ecologist if great crested newts are present).

#### Residual impacts:

If the mitigation measures above are implemented development should have negligible impacts.

#### **Opportunities for enhancement:**

The linear water body within the existing local recycling facility may be suitable for designating as a Wildlife Site given the habitat and the potential for the support of amphibians and invertebrates (pending further surveys). Although this water feature is not directly within the waste allocation boundary it should be considered by Swindon Borough Council for designation with an appropriate management plan.

There is little opportunity for enhancement within the site boundary.

#### Recommended further ecological work/surveys:

• Great crested newt surveys of the linear pond within the local recycling facility following advice in the *Great crested newt mitigation guidelines* (English Nature, 2001).



• If any works are to be undertaken directly to the river (such as development works on the banks or insertion of discharge pipes) a thorough survey will be required of the river for the presence of crayfish and water voles and also for any evidence of otters (note that there are difficulties in carrying out surveys and waders and life jackets are recommended). However it is strongly recommended that there are no development works on the river banks.

### Legal and policy implications:

Relevant policies relating to nature conservation in the Swindon Borough Local Plan 2011 (Revised Deposit Draft, October 2003):

ENV18 Habitats and Species Protection (includes the protection of BAP priority habitats) ENV22 Ground & Surface Water Protection

**ENV24 Riparian and other Buffer Zone** (includes the requirements for development free buffers along the edges of river corridors based on the intrinsic value of the river)

If great crested newts are found to be present in the brick structure a Defra development licence would be required for any development works within the site boundary.

Phase 1 Habitat Map



### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Number	Target Notes	Species Notes		
		Common nettle, common hawthorn, elder, blackthorn, canary reed grass		
1	Area of tall ruderals adjacent to River Ray.	(closer to river).		

### **Protected Species and Designated Sites**



# Site: SW2 Chapel Farm Swindon, Area A

### Landscape and Visual Survey

### SW2 Chapel Farm Swindon, Area A

### 1. Introduction

The site is located to the north of Swindon, off the A419. The site comprises two separate areas, Area A and Area B. Both are agricultural land. The surrounding land uses include an active landfill to the north and a recycling facility to the south. There are also a number of residential properties located along the A419 and to the south along the ridge.

### 2. Baseline Landscape Character and Designations: Desk Survey

### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Upper Thames Clay Vales on the cusp of Midvale Ridge Key characteristics relevant to the site:

- Large geometrically spaced field divided by regular pattern of hedgerows and trees supporting both arable and pastoral farming
- Low irregular wooded limestone ridge contrasting surrounding low lying clay vales.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Open Clay Vale Landscape Character Area: Thames Open Clay Vale Key characteristics relevant to the site:

- · Level land form with wide open skies and views to ridges and downs
- Pastoral land use with some arable
- Large scale geometric fields with hedgerows or open drainage channels defining boundaries
- Presence of rivers, tributaries, drainage channels and open water bodies
- Settlement pattern varies from large towns and small scattered villages to sparse farmsteads linked by a network of minor roads
- Buildings in varied material of brick, render and stone

Generally the condition of the landscape character area is considered by WCC to be 'moderate', with a 'moderate' strength of character.

The strategy for the area is to conserve the elements that contribute to the rural, tranquil landscape and improve elements in decline such as hedgerows and hedgerow trees

### North Wiltshire Landscape Character Assessment (North Wiltshire Borough Council)

Landscape Character Area: Thames Valley Lowland Key characteristics relevant to the site:

- Low, level or undulating ground
- Continuous hedges with many mature oak and ash
- Field sizes vary from small and irregular to medium sized and regular shaped, predominantly pasture
- Dispersed or nucleated settlement on higher ground using vernacular materials of stone and local brick
- General absence of woodland

### Landscape Designations and Rights of Way:

• There are no known landscape designations of public rights of way within the vicinity of the site.



### Local Authority Consultation:

North Wiltshire Borough Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site comprises an open rolling agricultural landscape character with a ridge running east – west to the south. The A419 cuts through the landscape, introducing incongruous landscape elements such as street lighting, signage and traffic.

Area A is located immediately to the west of Chapel Farm, south of an existing active landfill. The area comprises small scale pastoral fields bounded by low hedgerows with intermittent deciduous hedgerow trees allowing views out of the site. Chapel Farm contains a Grade II listed Farmhouse, as well as remnant farm sheds, cattle buildings and silage tanks. The site fields are divided by low barbed wire fences. A narrow stream runs through the site. Utility poles and overhead wires criss cross the site.

Area B is immediately adjacent to an existing recycling centre, to the south of Area A. It comprises an open pasture rising to the southwest. The field is bounded by mature hedgerows with intermittent deciduous hedgerow trees to the south and east. To the north and west the hedgerows are lower, allowing views out of the site. A tarmac access track to the recycling centre runs adjacent to the north of the site and is busy with landfill traffic including HGVs.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Area A – Ordinary, Area B – Ordinary Capacity to Accept Change: Area A – Medium, Area B – High

Area A is immediately adjacent to a residential Historic Farmhouse. The site is a well managed agricultural landscape, with several significant offsite detractors giving it a moderate landscape quality. The site is located within a discorded wider landscape which could accommodate sensitive development. Therefore the site has a moderate ability to accept change.

Area B is immediately adjacent a recycling centre, close to the busy A419. The site is a well managed agricultural landscape, isolated by several significant offsite detractors giving it a moderate landscape quality. The site topography offers the potential to locate site works so as to reduce the impact on overall landscape character, while mitigation measures could enhance the locally characteristic hedgerow field boundaries. Therefore the site has a high capacity to accommodate change.

### 5. Potential Landscape Impacts

• Further erosion of the rural character

### 6. Potential Landscape Mitigation Measures

- Sensitive site planning –facilities to be located to utilise the surrounding topography to prevent intrusion into the rural character
- Facilities to be in keeping with the local vernacular/agricultural style
- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to screen views into the site and strengthen rural character
- The following 'Broad Management Objectives' for the Open Clay Vale in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - o Retain and manage the hedgerow network and nurture new hedgerow trees



- Promote appropriate management of arable land including retaining area of fallow land and maintaining an unploughed margin around fields
- Minimise small scale incremental change such as signage or fencing which could change the rural peaceful character of the landscape
- Ensure both future construction and changes to existing buildings are designed to integrate with the existing character and structure of settlements
- o Screen views to intrusive urban edges through planting new woodland

The following Enhancement Priorities proposed for the Thames Valley Lowland landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:

- Conserve hedgerows and mature trees, including planting new trees in existing hedges and planting specimen trees in field corners
- Encourage planting of new woodland copses
- o Discourage development which would detract from the tranquil rural character

### 7. Visual Impact and Mitigation

#### Area A

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Chapel Farm Residents	High	High adverse	• Facilities to be in keeping with the local vernacular /
Grove Farm Residents	High	Moderate adverse	<ul><li>agricultural style</li><li>Use of native hedgerows and</li></ul>
Marshfield Cottages Residents	High	Moderate adverse	trees and native woodland planting to site boundaries to
Chapel Farm Bungalow Residents	High	High adverse	screen views into the site
A419 Road Users	Low	No change	Structure planting around site
Adjacent Landfill	Medium	No change	boundary

#### Area B

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor		Potential Visual Mitigation Measures
Newlands Farm	High	Moderate	•	Facilities to be located to
Residents		adverse		maximise natural screening
Widhill House	High	Moderate		provided by the surrounding
Residents		adverse		topography
Upper Widhill Farm	High	Moderate	•	Facilities to be in keeping with
Residents		adverse		the local vernacular /
Marshfield Cottages	High	Moderate		agricultural style
Residents		adverse	•	Use of native hedgerows and
Residential properties	High	Moderate		trees and native woodland
along the A419		adverse		planting to site boundaries to
				screen views into the site
A419 Road Users	Low	No change	•	Structure planting around site
Recycling Centre	Low	No change		boundary

### 8. Summary: Residual Landscape and Visual Impacts



Though a relatively open landscape, the rolling topography of the site with a significant fall away to the south provides for an opportunity to develop the site minimal adverse impact on the local and surround character and visual receptors, therefore the site has a moderate ability to accommodate change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.

### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

### **Noise Assessment**

### SW2 Chapel Farm Swindon, Area A (Inset Map 14)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Chapel Farm to assess the site's suitability for landfill in relation to the potential noise impact.
- 1.2 Background noise measurements were due to undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Chapel Farm located adjacent to site's northern boundary. This site was not accessible for the purposes of the noise survey however and a location adjacent to Chapel Farm at Lower Widhill Farm was chosen as an appropriate alternative and is deemed to be representative of the background noise level likely to be experienced at Chapel Farm.
- 1.3 The site is currently agricultural land adjacent to an existing landfill site. The site is surrounded by agricultural land with the nearest point of the A419 located approximately 480m to the north-east.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 26<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site and at the most sensitive receiver consists predominantly of road traffic noise from the A419 and environmental sources such as birdsong, insects, and wind in tress, etc.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	16:00	48.5	76.1	37.5
MEASUREMENT 2	16:05	53.2	73.3	39.7
MEASUREMENT 3	16:10	62.9	73.2	56.5
AVERAGE		51.5		38.6

2.3 During measurement 3 a tractor started to trim the hedges directly opposite the measurement position and showed no signs of stopping the activity anytime in the near future. The average background noise level at the most sensitive receiver is based on the first two measurements only and was measured as 38.6 L<sub>A90</sub>.

### 3. SITE SUITABILITY

3.1 The proposed use for the site at Chapel Farm is for landfill. The boundary of the site area proposed for use is adjacent to the most sensitive receiver. Given the average background



noise level,  $L_{A90}$  of 38.6dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 1480m away from any noise sensitive receivers.

- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance cannot be achieved within the site boundary, indications are that this site is unlikely to be suitable for the proposed development without the implementation of mitigation measures, and even with mitigation measures in place it may still be difficult to achieve the attenuation required for the development to be located within the proposed site boundaries.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

### SW2 Chapel Farm Swindon, Area A,10.5ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) currently comprises of agricultural land within open countryside. The site is in close proximity to farm dwellings and adjacent to the existing Chapel Farm landfill site and recycling facility.



### Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>4</sup> sources within 1km of the site: road traffic on the A419, B4534 and minor roads; gas/oil/solid fuel space heating for scattered buildings; Chapel Farm landfill (additional potential emissions of dust, NH<sub>3</sub> and odour). Agricultural activities in the area are potential sources of dust, bioaerosols, NH<sub>3</sub> and odour.

<sup>&</sup>lt;sup>4</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>5</sup> for 2005 and comparable standards<sup>6</sup> are: 13.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 10.8µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 17.7µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors are residents of the farms within 1km of the site: Chapel Hill Farm, Lower Widhill Farm, Upper Widhill Farm, Newlands Farm and Grove Farm. There are three County Wildlife sites within 1km: River Ray, River Ray Fields and Upper Widhill Copse.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	<b>PM</b> <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (Chapel Hill Farm)	1 (1)	2 (2)	N/A	N/A	N/A	2 (2)	3 (3)
Residential beyond 100m (Lower Windhill Farm, Upper Windhill Farm, Newlands Farm and Grove Farm)	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	2 (2)
Potentially sensitive ecology within 1km of site (River Ray, River Ray Fields and Upper Widhill Copse)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A
Notes:							

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

### 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to high without mitigation. Mitigation for PM<sub>10</sub>, dust and odour is recommended. Detailed assessment should be undertaken for odour. Further assessment should be undertaken for PM<sub>10</sub> and dust.

<sup>&</sup>lt;sup>5</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>6</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)

### **Geological Assessment**

### SW2 Chapel Farm Swindon, Area A,10.5ha

NGR at centre of site – SU 126911 Location description – Close to the A419, 1.5km north of the outskirts of Swindon, 2.7km southeast of Cricklade Area of site (ha) – 10.5

Table 1: Geological Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Table 2: Environmental CSM for A (geological assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Geology	Geology	Contaminate non aquifer (Oxford Clay) on site, or minor aquifer at distance – Hazelbury Bryan and Stanford Formations	Low / Medium	Refer to Water (Quality and Environ	iment) site assessment comments
		Generation / migration of landfill gas through geological strata	Low / Medium	Engineered gas management system Consider limiting types of waste landfilled at site	Approach Environment Agency for monitoring requirements Monitoring boreholes (may be required for obtaining operating permit) Formal assessment of risk to local water environment as part of a permit / license application
		Contamination potential through capped, closed site with new geological	Medium / High	Environmental Management Plan Working Plan	

### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		profile			
	Designated sites/ Adjacent sensitive landuses	Ancient Woodland and 2 Wildlife areas near site	Low / Medium	Refer to groundwater / surface potential risk mitigation measures listed above Management of windborne material at site boundaries	Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored
	Other adjacent landuses	Many phases and types of waste management facilities within 1km of the site Farmland and open countryside surrounding site 1 current discharge	Medium	Ensure site development does not impact the landfill risk mitigation measures	Approach Environment Agency for requirements Assess the current risk mitigation at the existing landfill site
		consent in vicinity recorded			

Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Chapel Farm, Swindon is:

Few / no significant issues identified – review further assessment requirements and risk mitigation is considered practicable to address most issues Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



### Water (Quality and Environment) Assessment

### Site name – Chapel Farm, Area A, Swindon

NGR at centre of site – SU 126911 Location description – Close to the A419, 1.5km north of the outskirts of Swindon, 2.7km southeast of Cricklade Area of site (ha) – 10.5

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater Surface water body	Contaminate non aquifer Contaminate watercourse on site (unnamed ditch) Contaminate watercourse off site (R Ray) Impact on baseflow / runoff to watercourse	Low / Medium Medium/High Medium	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Environmental management during Construction</li> <li>Relevant licensing requirements (PPC) to be assessed</li> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> <li>Assessment of current impact of adjacent waste management</li> </ul>

#### Table 2: Environmental CSM for A (environment and water quality assessment)

### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood Risk on site	Low / Medium	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>operations</li> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Ancient Woodland and 2 Wildlife areas near site	Low / Medium	<ul> <li>Refer to groundwater / surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for</li> </ul>
	Other adjacent landuses	Many phases and types of waste management facilities within 1km of the site Farmland and open countryside surrounding site	Medium		requirements
		1 current discharge consent in vicinity recorded			

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Chapel Farm is:

- Several / potentially significant issues identified review further assessment requirements. Risk mitigation is considered practicable to address most issues
- o Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

### **Ecological Report**

### SW2 Chapel Farm Swindon, Area A

### **DESK STUDY INFORMATION**

### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

Close to watercourse which joins the River Ray. No designations.

### Records of notable species within 500m: (legally protected, BAP, RDB)

There is one record of brown hare (a UKBAP species) within 500m of the site boundary. There are no other records within 500m although there are records of brown hare and badgers within 1km of the site.

#### *Details of surveys already undertaken (where known):* None identified.

#### FIELD SURVEY INFORMATION

#### General Habitat: (please refer to accompanying Phase 1 habitat plan)

Mainly pasture (horse grazed), semi-improved neutral grassland with mature unmanaged hedgerows. A large pond in the centre of the site is shaded by trees and scrub. The site is surrounded and contains species poor unmanaged hedgerows.

The adjacent ditch that connects to the River Ray was dry at the time of the survey and choked with vegetation.

Immediately south of the site (outside of the boundary identified on the Phase 1 map) is an area of landfill restored to pasture.

#### Field Evidence of, or potential for, notable species:

There is the potential for great crested newts and other amphibians to use the pond as breeding habitat. No other water bodies suitable for great crested newts were identified within 500m.

Almost the entire terrestrial habitat within site boundary is also suitable for use by amphibians including great crested newts for foraging, commuting and refuge.

### **EVALUATION, POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The site contains no designations but supports habitat of potential use to common species particularly along the hedgerows and within the pond. Therefore the site is considered to have local nature conservation value.

### Potential Ecological Impacts:

Development would cause loss of species poor hedgerows and semi-improved grassland (loss of common bird nesting habitat). The pond within the site is also likely to be lost, which has the potential to support amphibians and other aquatic species including great crested newt. Overall the clearance of the site for development (pending further survey of pond) is likely to have adverse impact of minor significance.

There are currently no identified ecological impacts on operation of a landfill, composting or recycling facility at this site although in winter surface water run-off could carry contaminants via the ditch to the River Ray causing a decrease in water quality which would need to be avoided. Any landfill would have to be lined and separated from the water table and therefore there is no ground water impact predicted that could impact on the River Ray.

#### Potential mitigation:

Retention and management of as much hedgerow as possible (including trimming and possible hedgerow laying) particularly the hedgerow and ditch around the south and west edges of the site to keep continuity with the small strips of woodland outside of the site boundary.



- Retention of pond and habitat within at least 5m of pond edge. Thinning of trees and shrub surrounding pond. Alternatively if pond cannot be retained it should be replaced like for like elsewhere. Further mitigation of the pond and surrounding terrestrial habitat may be required pending amphibian surveys. If great crested newts are present a more detailed mitigation would be required and the pond may have to be retained insitu.
- Some clearance of the dry drainage ditch particularly on the northern site boundary or replacement with an
  open water channel. Retention of at least a 2m strip of grassland between the edge of the ditch and any new
  development.
- Measures within the design of development for the treatment of surface water prior to eventual discharge into the River Ray (to potentially include silt traps and oil interceptors and/or settling ponds/surface water storage lagoons).

#### **Residual impacts:**

Even with mitigation the majority of habitat within the site boundary is likely to be lost to development (at least in the short term until restoration) and therefore the adverse impact would remain of minor significance (pending results of an amphibian survey on the pond).

#### **Opportunities for enhancement:**

There is the opportunity to enhance the existing pond habitat by clearing some of the shading scrub on the edges (see mitigation section). Enhancement of this pond or provision of alternative aquatic habitat would be required if great crested newts were present within the pond.

#### Recommended further ecological work/surveys:

Great crested newt surveys following methodology in the *Great crested newt mitigation guidelines* (English Nature, 2001) on the pond within the site boundary.

Pre-development surveys within woodland strips to the east and north-west to confirm that there are no badger setts (as mammal activity has been identified but no setts found at the time of survey).

#### Legal and policy implications

Policy ENV22 in the *Swindon Borough Local Plan 2011* states that development will only be permitted where it can be demonstrated that surface water discharge would not be adversely affected. Appropriate attenuation, mitigation and pollution control measures should be taken to achieve this such as Sustainable Urban Drainage Systems.

If great crested newts are present in the pond within the site boundary then a Defra development licence would be required in order for any development to take place.





Number	Target Notes	Species Notes			
1	Pond approximately 10m x 15m, heavily shaded by overgrown scrub.	Marginal plants include water plantain, gypsywort, and soft rush. Abundant damselflies.			
2	Mammal tracks between woodland and grassland and across dry ditch (origin not identified)				
3	Dry ditch, completely choked with ruderal vegetation.				
4	Grazed pasture	Timothy, creeping thistle, field buttercup, red clover, sheep's fescue, common bent, curled dock.			



### **Protected Species and Designated Sites**

# Site: SW3 Chapel Farm Swindon, Area B

### Landscape and Visual Survey

### SW3 Chapel Farm Swindon, Area B

### 1. Introduction

The site is located to the north of Swindon, off the A419. The site comprises two separate areas, Area A and Area B. Both are agricultural land. The surrounding land uses include an active landfill to the north and a recycling facility to the south. There are also a number of residential properties located along the A419 and to the south along the ridge.

### 2. Baseline Landscape Character and Designations: Desk Survey

### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Upper Thames Clay Vales on the cusp of Midvale Ridge Key characteristics relevant to the site:

- Large geometrically spaced field divided by regular pattern of hedgerows and trees supporting both arable and pastoral farming
- Low irregular wooded limestone ridge contrasting surrounding low lying clay vales.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Open Clay Vale Landscape Character Area: Thames Open Clay Vale Key characteristics relevant to the site:

- Level land form with wide open skies and views to ridges and downs
- Pastoral land use with some arable
- Large scale geometric fields with hedgerows or open drainage channels defining boundaries
- Presence of rivers, tributaries, drainage channels and open water bodies
- Settlement pattern varies from large towns and small scattered villages to sparse farmsteads linked by a network of minor roads
- Buildings in varied material of brick, render and stone

Generally the condition of the landscape character area is considered by WCC to be 'moderate', with a 'moderate' strength of character.

The strategy for the area is to conserve the elements that contribute to the rural, tranquil landscape and improve elements in decline such as hedgerows and hedgerow trees

### North Wiltshire Landscape Character Assessment (North Wiltshire Borough Council)

Landscape Character Area: Thames Valley Lowland Key characteristics relevant to the site:

- Low, level or undulating ground
- Continuous hedges with many mature oak and ash
- Field sizes vary from small and irregular to medium sized and regular shaped, predominantly pasture
- Dispersed or nucleated settlement on higher ground using vernacular materials of stone and local brick
- General absence of woodland

### Landscape Designations and Rights of Way:



• There are no known landscape designations of public rights of way within the vicinity of the site.

#### Local Authority Consultation:

North Wiltshire Borough Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The proposed site comprises an open rolling agricultural landscape character with a ridge running east – west to the south. The A419 cuts through the landscape, introducing incongruous landscape elements such as street lighting, signage and traffic.

Area A is located immediately to the west of Chapel Farm, south of an existing active landfill. The area comprises small scale pastoral fields bounded by low hedgerows with intermittent deciduous hedgerow trees allowing views out of the site. Chapel Farm contains a Grade II listed Farmhouse, as well as remnant farm sheds, cattle buildings and silage tanks. The site fields are divided by low barbed wire fences. A narrow stream runs through the site. Utility poles and overhead wires criss cross the site.

Area B is immediately adjacent to an existing recycling centre, to the south of Area A. It comprises an open pasture rising to the southwest. The field is bounded by mature hedgerows with intermittent deciduous hedgerow trees to the south and east. To the north and west the hedgerows are lower, allowing views out of the site. A tarmac access track to the recycling centre runs adjacent to the north of the site and is busy with landfill traffic including HGVs.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

Landscape Quality and Condition of site: Area A – Ordinary, Area B – Ordinary Capacity to Accept Change: Area A – Medium, Area B – High

Area A is immediately adjacent to a residential Historic Farmhouse. The site is a well managed agricultural landscape, with several significant offsite detractors giving it a moderate landscape quality. The site is located within a discorded wider landscape which could accommodate sensitive development. Therefore the site has a moderate ability to accept change.

Area B is immediately adjacent a recycling centre, close to the busy A419. The site is a well managed agricultural landscape, isolated by several significant offsite detractors giving it a moderate landscape quality. The site topography offers the potential to locate site works so as to reduce the impact on overall landscape character, while mitigation measures could enhance the locally characteristic hedgerow field boundaries. Therefore the site has a high capacity to accommodate change.

### 5. Potential Landscape Impacts

• Further erosion of the rural character

#### 6. Potential Landscape Mitigation Measures

- Sensitive site planning –facilities to be located to utilise the surrounding topography to prevent intrusion into the rural character
- Facilities to be in keeping with the local vernacular/agricultural style
- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to screen views into the site and strengthen rural character
- The following 'Broad Management Objectives' for the Open Clay Vale in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - o Retain and manage the hedgerow network and nurture new hedgerow trees



- Promote appropriate management of arable land including retaining area of fallow land and maintaining an unploughed margin around fields
- Minimise small scale incremental change such as signage or fencing which could change the rural peaceful character of the landscape
- Ensure both future construction and changes to existing buildings are designed to integrate with the existing character and structure of settlements
- o Screen views to intrusive urban edges through planting new woodland
- The following Enhancement Priorities proposed for the Thames Valley Lowland landscape character area in the *North Wiltshire Landscape Character Assessment* are relevant to the site:
  - Conserve hedgerows and mature trees, including planting new trees in existing hedges and planting specimen trees in field corners
  - Encourage planting of new woodland copses
  - o Discourage development which would detract from the tranquil rural character

### 7. Visual Impact and Mitigation

#### Area A

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor		Potential Visual Mitigation Measures	
Chapel Farm Residents	High	High adverse	•	Facilities to be in keeping with the local vernacular /	
Grove Farm Residents	High	Moderate adverse	•	agricultural style Use of native hedgerows and	
Marshfield Cottages Residents	High	Moderate adverse		trees and native woodland planting to site boundaries to	
Chapel Farm Bungalow Residents	High	High adverse		screen views into the site	
A419 Road Users	Low	No change	٠	Structure planting around site	
Adjacent Landfill	Medium	No change		boundary	

### Area B

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures			
Newlands Farm	High	Moderate	Facilities to be located to			
Residents		adverse	maximise natural screening			
Widhill House	High	Moderate	provided by the surrounding			
Residents		adverse	topography			
Upper Widhill Farm	High	Moderate	<ul> <li>Facilities to be in keeping with</li> </ul>			
Residents	adverse		the local vernacular /			
Marshfield Cottages	High Moderate		agricultural style			
Residents		adverse	<ul> <li>Use of native hedgerows and</li> </ul>			
Residential properties	High	Moderate	trees and native woodland			
along the A419		adverse	planting to site boundaries to screen views into the site			
A419 Road Users	Low	No change	Structure planting around site			
Recycling Centre	Low	No change	boundary			

### 8. Summary: Residual Landscape and Visual Impacts

Though a relatively open landscape, the rolling topography of the site with a significant fall away to the south provides for an opportunity to develop the site minimal adverse impact on the local and surround character and visual receptors, therefore the site has a moderate ability to accommodate



change. The main visual impacts, on surrounding residences and farms, could be almost entirely mitigated through sensitive site planning and screen planting.

### 9. Recommended further landscape and visual surveys

- Winter-time visual surveys.
- Night-time visual surveys.

# **Air Quality Report**

### SW3 Chapel Farm Swindon, Area B, 3.4ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) currently comprises of agricultural land within open countryside. The site is close to farm dwellings and adjacent to the existing Chapel Farm landfill site and recycling facility.



### Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>7</sup> sources within 1km of the site: road traffic on the A419, B4534 and minor roads; gas/oil/solid fuel space heating for scattered buildings; Chapel Farm landfill (additional potential emissions of dust, NH<sub>3</sub> and odour). Agricultural activities in the area are potential sources of dust, bioaerosols, NH<sub>3</sub> and odour.

<sup>&</sup>lt;sup>7</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>8</sup> for 2005 and comparable standards<sup>9</sup> are: 14.9µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 11.7µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 18.1µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km of the site: farms and residents along Roman Road in Lower Blunsdon and Blunsdon St Andrew. There is one County Wildlife site within 1km: Upper Widhill Copse.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NΗ <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	1 (1)	2 (2)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential between 100 and 250m	1 (1)	1 (1)	N/A	N/A	3 (3)	1 (1)	3 (3)
Residential beyond 250m (Lower Windhill Farm, Upper Windhill Farm, Newlands Farm and Grove Farm)	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	2 (2)
Potentially sensitive ecology within 1km of site (Upper Widhill Copse)		1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

### 3. MITIGATION

3.1 Dust, bioaerosol and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to high without mitigation. Dust, bioaerosol and odour mitigation is recommended. Detailed assessment is recommended for bioaerosols and odour with account for local topography. Further assessment should be undertaken for PM<sub>10</sub> and dust.

<sup>&</sup>lt;sup>8</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>9</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)
# **Ecological Report**

#### SW3 Chapel Farm Swindon, Area B

#### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m: Upper Widhill Copse Wildlife Site (broad-leaved woodland): Located approximately 300m south-east of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site or within 500m of the site.

#### Details of surveys already undertaken (where known):

None known

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The site consists of improved neutral grassland which had been recently cut for silage. Two small areas of broad-leaved woodland are present adjacent to south-eastern and south-western edges of the site (as marked on the Phase 1 habitat map).

A drainage ditch is present in front of a species rich hedgerow approximately 85m east of the site.

#### Field Evidence of, or potential for, notable species:

A brown hare was observed within site boundary.

Skylarks were seen flying above the adjacent fields.

There are no ponds present within 500m of this site. However the drainage ditch located approximately 85m east of the site has the potential to support great crested newts.

#### **EVALUATION, POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (areas of improved grassland). However the two areas of woodland that are present adjacent to the south-eastern and south-western edges of the site are of local nature conservation value.

#### Potential Ecological Impacts:

There are no predicted impacts on the Upper Widhill Copse Wildlife Site.

Potential ecological impacts include the loss of improved grassland and potential loss of habitat from within the woodlands that surround the site. If great crested newts are present within the drainage ditch located approximately 85m east of the site this proposal may cause the loss of terrestrial habitat used by great crested newts for foraging, commuting and or resting. There are also possible water quality impacts on the drainage ditch present to the east of the site.

Overall works likely to have adverse impact of negligible ecological significance. However if great crested newts are present within the ditch this may increase to minor significance.

#### Potential mitigation:

- Retention and management of adjacent woodland stands and retention of a woodland/grassland transition habitat of at least 2m.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines when working in close proximity to, or within, the Abberd Brook.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.



#### **Residual impacts:**

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

 Great crested newt presence/absence surveys on the ditches present approximately 85m east of the site.

#### Legal and policy implications:

 If great crested newts are found to be using the ditch located 85m east of the site a great crested newt development licence will be required from Defra. Further mitigation will be required to prevent the injury or death of any great crested newts present within the site and to compensate for the loss of any suitable terrestrial habitat.

The Nature Conservation policies in the Swindon Borough Local Plan that are potentially relevant to this site include:

• Policy ENV18

#### Phase 1 Habitat Map



Number	Target Notes
1	Semi-mature broadleaved woodland strip. Consists of willow, hawthorn, ash and some elder. All trees are generally semi-mature and young with a low potential to support roosting bats. The understory consists of cow parsley, bramble, dock, common cleavers, nettle, dog rose and hogweed. An area of unmown grassland approximately 3m wide is present in front of the woodland (within the site). Species present include common cleavers, dock, hogweed, thistle, bramble, false oat-grass, Timothy and great horsetail.
2	Improved grassland field which has been recently mown for haylage. Majority of the field is flat.
3	Sighting of a brown hare.
4	Small area of semi-mature broadleaved woodland. Consists of field maple, hawthorn, ash, oak with a 2m wide strip of nettles in the field in front of the woodland. Woodland not surveyed as fencing prevented access
5	Wet ditch at the base of the hedgerow. Very little water present (less than 5cm) and moving very slowly. The ditch has gently sloping banks and a muddy substrate. No aquatic, marginal or emergent vegetation present for majority of ditch, however northern end of ditch becomes choked with reed canary grass and rushes. Ditch has a low potential for water voles and white-clawed crayfish. This ditch may support breeding populations of great crested newts.
6	Mature ivy covered ash tree with the potential to support roosting bats.
7	Semi-mature oak tree with broken limbs and peeling bark. It has the potential to support roosting bats.
8	Sky larks heard singing above adjacent semi-improved grassland field

#### **Protected Species and Designated Sites**





# Site: SW4 Land within Dorcan Industrial Estate, Swindon

### Noise Assessments

### SW4 Land within Dorcan Industrial Estate, Swindon (Inset Map 16)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Dorcan Industrial Estate to assess the site's suitability for Waste Treatment and Recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be properties located on Mallard Close located approximately 220m from the site's northern boundary.
- 1.3 The site is currently land and buildings located within an industrial estate. The site is flanked to the east by the A419 with the remaining boundaries surrounded by small businesses including small manufacturing and engineering businesses. Residential properties are also located approximately 380m to the north of the site.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 27<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the proposed site and at the most sensitive receiver consists predominantly of road traffic noise from the A419 and local roads and environmental sources such as birdsong, insects, and wind in tress, etc.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	12:55	51.4	71.9	40.9
MEASUREMENT 2	13:00	54.5	70.9	41.7
MEASUREMENT 3	13:05	57.7	74.5	42.4
AVERAGE		55.3		41.7

2.3 The average background noise level at the most sensitive receiver was measured as 41.7 L<sub>A90</sub>.

### 3. SITE SUITABILITY

3.1 The proposed use for the site at Dorcan Industrial Estate is for household recycling, waste transfer station, recycling facility and/or materials recovery facility. Subject to further

investigations the site may be proposed for small-scale Energy from waste, mechanical biological treatment, anaerobic/aerobic digestion and in-vessel composting. The boundary of the site area proposed for use passes within 220m of the most sensitive receiver. Given the average background noise level,  $L_{A90}$  of 41.7dB at the most noise sensitive receiver, any new waste development may need to be located an approximate minimum distance of between 1040m or 330m away from any noise sensitive receivers depending on the proposed activities of the development.

- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of the development within the site, existing buildings within the site may also offer some screening effects allowing a closer proximity to be achieved.
- 3.3 Depending on the proposed activities for the site, minimum separation distance may be achieved within the site boundary. Implementation of mitigation measures combined with careful positioning of the development within the site boundary would reduce the separation distance required and indications are that this site would potentially be suitable for the proposed development.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



# **Air Quality Report**

### SW4 Land within Dorcan Industrial Estate, Swindon, 3.6ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) currently includes land and buildings associated with a former electricity board depot within the Dorcan Industrial Estate on the eastern edge of Swindon.



Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>10</sup> sources within 1km of the site: road traffic on the A419, B4006 and minor roads; gas/oil/solid fuel space heating for buildings; Dorcan Industrial Estate including Romney Packaging Operator (PM<sub>10</sub>). Agricultural activities to the east are potential sources of dust, bioaerosols, NH<sub>3</sub> and odour.

<sup>&</sup>lt;sup>10</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>11</sup> for 2005 and comparable standards<sup>12</sup> are: 25.2µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 18.9µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 21.1µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km of the site: residents in Dorcan, Eldene, Liden and Covingham including a school. There are three County Wilidlife sites within 1km: two tributaries of the River Cole and Wanborough Meadows.

# 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential between 100 and 250m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 250m (Dorcan, Eldene, Liden and Covingham)	1 (1)	1 (1)	N/A	N/A	1 (1)	1 (1)	1 (1)
Potentially sensitive ecology within 1km of site (two tributaries of the River Cole and Wanborough Meadows)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

### 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note. If energy from waste occurs then mitigation of generation and combustion of biogas is recommended.

### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low without mitigation. Dust and odour mitigation is recommended. If the site does accommodate small-scale energy from waste, MBT, anaerobic / aerobic digestion and in vessel composting, screening assessment is recommended. Detailed assessment should not be necessary.

<sup>&</sup>lt;sup>11</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>12</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



# **Traffic and Transport Review**

#### SW4 Land within Dorcan Industrial Estate, Swindon

#### Proposed Site Usage

This 3.6 ha site is proposed to be used as a household recycling centre, waste transfer station or material recovery facility. Subject to further investigation the site may also have potential to accommodate small scale energy from waste usage, mechanical/biological treatment, and anaerobic/aerobic digestion and in vessel composting.

#### **Existing/Potential Access**

The site is located within Dorcan Industrial Estate on the eastern edge of Swindon near the A419. The site is currently unoccupied and comprises of buildings associated with former electricity board depot.

The site can be accessed directly the A419 via a left in/left out junction with standard merge and diverge or via a roundabout off Dorcan Way.

The A419 is subject to national speed limit and the local roads are subject to a 30 mph speed limit.

#### Impacts on Local Settlements

Residential settlements are located on three sides of the industrial estate. However most of the properties are located on residential roads or cul-de-sacs off the main road and are unlikely to be directly affected by the traffic from the site.

#### **On-site Infrastructure**

The existing site access is off Faraday Road which is a standard two lane single carriageway. Parking is restricted along the roads on the estate by means of double yellow lines. Should the site be developed as a recycling facility then sufficient queuing space is provided within the site to accommodate the development traffic without blocking back onto the local highway network.

#### **Off Site Highway Network**

The local recycling site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. As the peak traffic generated by this type of facility is likely to be at the weekend and will not coincide with the weekday AM and PM peaks on the highway network, no off-site highway mitigation is anticipated.

#### Constraints

The impact of this proposed development on the existing industrial and office uses on the site should be considered as the impacts of noise and vibration associated with the transportation of waste can be an issue...

#### Mitigation

Provision of an appropriate access road into the site.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.

# Site: SW7 Land at Kendrick Industrial Estate, Swindon

# **Air Quality Report**

### SW7Land at Kendrick Industrial Estate, Swindon 3.5ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) currently is home to a number of small scrap yards, skip hire businesses and general industrial units. The setting is industrial within the Swindon urban area, adjacent to the Cheney Manor Industrial Estate.

### Figure 1.1 – The site and its surroundings





- 1.2 Air pollutant<sup>13</sup> sources within 1km of the site: road traffic on the B4006, B4534, B4587 and minor roads; gas/oil/solid fuel space heating for buildings; BTR Graphic Products Ltd (PM<sub>10</sub> and VOC) on Cheney Manor Industrial Estate; Thames Water Utilities Ltd sewage treatment works (additional potential emissions of odour, NH<sub>3</sub> and bioaerosols).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>14</sup> for 2005 and comparable standards<sup>15</sup> are: 26.6µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 19.6µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 21.1µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential premises, including Rodbourne, Roughmoor, Even Swindon and Moredom, with one school in Moreden. There are three County Wildlife sites within 1km: Moredon Meadow, Swindon Sewage Treatment Works Lagoons and Cheney Manor Ponds.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential between 100 and 250m (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 250m (Rodbourne, Roughmoor and Moredom)	1 (1)	1 (1)	N/A	N/A	1 (2)	1 (1)	1 (2)
Potentially sensitive ecology within 1km of site (Moredon Copse, Moredon Meadow, Swindon STW Lagoons & Cheney Manor Ponds)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol risks are limited to within 250m of the site

<sup>&</sup>lt;sup>13</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>14</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>15</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



### 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to moderate (in-combination). Mechanical Biological Treatment (MBT) increases the risk to bioaerosols and odour; further assessment is recommended. As a minimum, basic dust and odour mitigation is recommended. Detailed assessment should not be necessary.

# **Traffic and Transport Review**

### SW7 Kendrick Industrial Estate, Swindon

#### **Potential Uses**

Local scale recycling and waste transfer uses.

#### **Existing/Potential Access**

The site is located within the Swindon urban area; sewage works lie directly to the south and the railway directly to the north. The site currently surrounded by small scrap yards and skip hire businesses. The site is accessed via Galton Way which is in turn accessed from the Great Western Way dual carriageway via a priority T junction with central Island. This is the only access to the site. The national cycle route 45 passes the Galton Way junction on the footway with elephant footprints across the junction mouth to alert drivers as to the likely presence of cyclists at the junction.

It should be noted that the proposals are for local scale recycling and as such suggests that this facility will be accessed by the public.

#### Impacts on Local Settlements

The impact on Swindon is likely to be minimal.

#### **On-site infrastructure**

The on-site infrastructure is in place for the existing waste uses for the surrounding sites. This infrastructure will be sufficient for the proposed uses.

#### **Off Site Highway Network**

The local recycling/ waste transfer uses will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. The peak hours for public access are likely to at the weekend between the hours of 11:00 and 12:00. As such, the only peak hour impacts on the wider highway network are likely to be as a result of minimal employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible.

#### Constraints

None

### Mitigation

None required.

#### Conclusion

In purely traffic terms the site is suitable for the proposed uses.



## Water (Quality and Environment) Assessment

#### Site name – Kendrick Industrial Estate, Swindon

NGR at centre of site – SU 133858 Location description – within Swindon settlement Area of site (ha) – 4.6

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Contaminate aquiferminorContaminate Protection ZoneSource	Medium / High Low	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> </ul>	<ul> <li>Environmental management during construction</li> <li>Relevant licensing requirements (PPC) to be assessed</li> </ul>
	Surface water body	Contaminate adjacent watercourse (unspecified water body on site boundary) and Lydiard Brook / River Ray further from site	adjacent Medium (unspecified y on site and Lydiard r Ray further Site traffic plan • Surface drainage pla • Impermeable hardsta • Runoff collection sys • Spill kits, bunded sto	<ul> <li>Site traffic plan</li> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and</li> </ul>	<ul> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> </ul>
	Impact on baseflow/runoff to watercourse	<ul> <li>designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> </ul>	<ul> <li>Baseline monitoring of adjacent surface water bodies may</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>		

#### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
				Engineered liner system	<ul> <li>Confirm the presence of surface water bodies</li> <li>Assess the impact of current and historic potentially contaminating activities on the site</li> </ul>
		Flood event causes contamination of surface water and disruption of operations Flood zoning directly affects western half of site	High	Engineered flood defence or mitigation	Approach Environment Agency for requirements Check flood risk assessment requirements
	Other adjacent landuses	Residential areas of Swindon plus a sewage treatment works and rail/road infrastructure	Low	Management of windborne material at site boundaries	Consider the potential environmental impact current on site and adjacent landuses have, and how an appropriate environmental baseline can be measured / monitored Approach Environment Agency for requirements

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Kendrick Industrial Estate, Swindon is:

Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
 Review further assessment requirements

# **Ecological Report**

#### SW7 Land at Kendrick Industrial Estate, Swindon

#### DESK STUDY INFORMATION

#### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

Cheney Manor Ponds Wildlife Site (2 parcels): Located approximately 50m north of the site. Swindon Sewage Treatment Works Lagoons Wildlife Site: Located approximately 400m west of the site.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

Within 500m of the site there are:

- Three records of great crested newts: Located 180m south-east of the site. However these records are old (1979);
- Six records of otter on the River Ray: All located over 490m from the site;
- Three records of kingfisher;
- Three records of common snipe; and
- Three records of shining pond weed (a rare vascular plant in Wiltshire)

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

All units within the industrial estate are in use. Hard-standing and bare earth form the ground cover. All the industrial units consisted of relatively modern buildings including portacabins, concrete and brick buildings. All industrial units had rubble, rubbish and debris (including tyre piles) present in their yards. A sand and gravel quarry was present in the south-eastern corner of the site.

The site is bound to the north by a semi-improved grassland strip (adjacent to a railway line). Two drains are marked on the OS map. These could not be accessed as one was present within an operation al quarry site and a band of dense scrub (shown on Phase 1 habitat map) blocked access to the other.

#### Field Evidence of notable species:

The buildings present within the site have a low potential to support roosting bats.

The two lagoons that form the Cheney Manor Ponds Wildlife Site (located approximately 50m north of the site) may have the potential to support great crested newts. The lagoons present as part of the Swindon Sewage Treatment Works Lagoons Wildlife Site (located approximately 400m west of the site) may also have the potential to support great crested newts. Access was not possible to these Wildlife Sites to assess the suitability of the lagoons to support breeding populations of great crested newts.

No other field evidence of legally protected species was identified.

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The habitats present within the site are of negligible nature conservation value (areas of hard standing, bare earth, scrub and quarry).



#### Potential Ecological Impacts:

There are no predicted impacts on the two designated sites of nature conservation value that surround the site.

There are potential impacts on the water quality of the two drains present in the south-eastern corner of the site. The overall works are likely to have a negligible ecological impact.

#### Potential mitigation:

- Strict adherence to Environment Agency's Pollution Prevention Guidelines as working in close proximity to the two drains present within the site. These measures will help to prevent detrimental impacts on water quality of these watercourses whilst the site is constructed.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

None identified.

#### Recommended further ecological work/surveys:

- Bat surveys on any buildings if to be demolished. Although there was low potential for these buildings to support bats it is possible that a small number of bats could use the structures in the future as a temporary summer roost or feeding roost.
- Great crested newt presence/absence surveys on the
- Assessment of the lagoons present in Cheney Manor Ponds Wildlife Site (located approximately 50m north of the site) and in the Swindon Sewage Treatment Works Lagoons Wildlife Site (located approximately 400m west of the site) to establish their potential to support breeding populations of great crested newts. If any are found to have the potential to support great crested newts presence/absence surveys of these waterbodies should be completed prior to work beginning on site.
- If works are to directly impact the channel of the two drains within the site it is recommended that water vole and otter surveys are undertaken.

#### Legal and policy implications:

- If bats are found to be roosting within any trees to be felled or in any buildings to be demolished a development licence will be required from Defra.
- If great crested newts are found to be using any of the ponds present within 500m a great crested newt development licence will be required from Defra and mitigation will be required to prevent the injury or death of any great crested newts present within the site and to compensate for the loss of any suitable terrestrial habitat.
- It is recommended that if water voles and otters are present on the either watercourse present adjacent to the site a method statement for works is compiled by an ecologist. This will help minimise disturbance to any water voles and otters present and protect their habitat from damage and destruction.

The Nature Conservation policies in the Swindon Borough Local Plan that are potentially relevant to this site include:

Policy ENV18

Phase 1 Habitat Map



Number	Target Notes
1	All units in use could not survey all industrial units with lots of rubble, rubbish and debris [tyre piles] present. tarmac and mud ground cover. portacabins, concrete and brick buildings also present. All modern buildings.
2	Area of bare earth where it is being dug out by JCBs. Sand and gravel quarry
3	Area of rough grassland
4	Could not access stream [due to dense scrub] or river [no access through units]

### **Protected Species and Designated Sites**



# Site: SW8 Mannington Depot Site, Swindon

# **Traffic and Transport Review**

#### SW8 Mannington Depot Site, Swindon

#### **Proposed Site Usage**

This 1.6 ha site is proposed to be used for household recycling centre and other waste management uses.

#### **Existing/Potential Access**

The site is located within a retail park on the southeast quadrant of the Great Western Way (the A43102) / Wootton Basset Road (the A43102) signalised roundabout. The site can be accessed through the internal retail park roads which itself is accessed via a one-way slip off the Great Western Way and the site egress is located on the Wootton Basset Road. The speed limit on the A43102 Great Western Way where the site entrance is located is national speed limit and on Wootton Basset Road it is 40 mph.

#### Impacts on Local Settlements

There are no residential settlements in the vicinity of the site and considering its proximity to the network of principal roads it is unlikely to have any adverse traffic impact on any residential areas.

#### **On-site Infrastructure**

The site is accessed through the internal roads of the retail park which is currently used by HGVs. However to access the site the vehicles have to cross a small bridge over a brook. The suitability of this route for HGV usage has to be assessed.

#### **Off Site Highway Network**

The local recycling site itself will typically attract HGV traffic in the period 9 AM to 5 PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. The peak traffic generated by this type of facility is likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks on the highway network, no off site highway mitigations are anticipated.

#### Constraints

The bridge that may not be suitable for HGV usage.

#### Mitigation

Possible junction improvements to the internal road network. .

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.



### Water (Quality and Environment) Assessment

#### Site name – Mannington Depot Site, Swindon

NGR at centre of site – SU 129837 Location description – Situated in south Swindon, adjacent to the railway line, 3km northeast of J16 of the M4 Area of site (ha) – 1.6

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Contaminate minor aquifer close to, but off site	Medium	Plan mitigation requirements     during construction	<ul> <li>Environmental management during Construction</li> <li>Relevant licensing requirements</li> </ul>
	Surface water body	Contaminate watercourse adjacent to site (unnamed stream)	Medium	<ul><li>Layout planning of site</li><li>Site traffic plan</li></ul>	<ul><li>(PPC) to be assessed</li><li>Approach Environment Agency for monitoring requirements</li></ul>
		Impact on baseflow/runoff to watercourse	Medium	<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling</li> </ul>	<ul> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> </ul>
				<ul> <li>areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> <li>Assessment of current and historical impact of on-site and adjacent landuses</li> </ul>

#### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood Risk	High	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Kingshill Canal and Old Railway NNR and Rushy Platt Swamp WWT near site, plus 2 SAMs	Low / Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact current and historical on site and adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> </ul>
	Other adjacent landuses	Site formerly used as a Municipal Depot and is located within a narrow industrial corridor Current discharge consents and several recent pollution incidents.	Low / Medium		<ul> <li>Approach Environment Agency for requirements</li> </ul>

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Mannington Depot site is:

- o Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



# Site: SW10 Land within South Marston Industrial Estate, Swindon

# **Traffic and Transport Review**

#### SW10 Land within South Marston Industrial Estate, Swindon

#### Proposed Site Usage

This 24 ha site is proposed to be used for strategic mechanical biological treatment, energy from waste, recycling, material recovery facility and waste transfer station.

#### **Existing/Potential Access**

The site is located within an industrial estate on eastern edge of Swindon near the A420. The site is currently unoccupied and comprises of cleared land but there is some established warehousing usage on the adjacent site which shares the same access off the A420. The site can be accessed directly from the A420 via an existing roundabout. The speed limit

on the A420 is 40 mph. There is a Sainsbury's superstore on the south side of the A420 which gains access off the same roundabout.

#### Impacts on Local Settlements

There are no residential settlements in the vicinity of the site and considering its proximity to the network of principal roads it is unlikely to have any adverse traffic impact on any residential areas.

#### **On-site Infrastructure**

A stub of the access roundabout has been provided to access the site. The roundabout is of reasonably high standard and suitable for usage by HGVs.

#### **Off Site Highway Network**

The local recycling site itself will typically attract HGV traffic in the period 9 AM to 5 PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. The peak traffic generated by this type of facility is likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks on the highway network. Considering that Sainsbury's is accessed of the same roundabout on the A420 the combined effect of a recycling centre and the store on a weekend peak should be considered.

The other main junction close to the site is the grade separated roundabout between the A419/A420. Depending on the type of development on the site this junction may also require to be assessed.

#### Constraints

The only constraint identified is the impact on the capacity of the site access/A420 roundabout.

#### Mitigation

Possible junction improvements may be required at the site access/A420.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.



# **Ecological Report**

#### SW10 Land within South Marston Industrial Estate, Swindon

#### DESK STUDY INFORMATION

*Statutory designated sites within 1km and non-statutory sites within 500m:* The River Cole Wildlife Site forms the northern site boundary.

Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the waste allocation boundary.

There are records of water vole in the water course approximately 90m west of the site. The only records of notable species within 500m are for bats within residential areas of South Marston.

#### Details of surveys already undertaken (where known): None identified.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The site consists largely of a hard-standing and gravel area currently being used as a truck park. There is one warehouse style industrial building on-site (currently disused) but it was not possible to gain entry for internal inspection.

On the edges of the site is unmanaged tall grassland, ruderals and scrub. The River Cole forms the northern site boundary and is over shaded in areas by dense scrub and trees, ruderal plants and areas of dumped rubbish on the southern bank (such as old pallets and wooden boards). A tall wooden fence and gate forms the sites southern boundary and at the eastern and western boundaries are tall unmanaged species poor hedgerows.

In the grassland and ruderal area on the western edge of the site were old brick structures which were holding water, with some kind of associated metal pumping apparatus.

#### Field Evidence of notable species:

Smooth newts were observed in the brick structures in the western part of the site and it is possible that great crested newts may also be present in these structures.

There were no other water bodies suitable for great crested newts within 500m of the site which had terrestrial habitat links with the site.

There were fox scats observed on the site but no fox earths were identified. No badger setts were observed on-site.

The warehouse style building has low potential for roosting bats although it is likely that it is used by common nesting birds such as pigeons as these were observed flying into the building where windows were smashed.

Some of the more mature trees along the River Cole have the potential to support roosting bats. There was no evidence of water vole or otter along the river and the habitat is unsuitable for crayfish.

#### **OTHER INFORMATION**

The site is adjacent to a flood plain although Thornhill Flood Storage Area is just west of the site and is likely to protect the site from flooding.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**



#### Nature conservation evaluation:

The River Cole has county value as a wildlife Site although the habitats within the remainder of the site are of local nature conservation value.

Rivers and Streams, neutral grassland and scrub habitat are all listed as priority habitats in the Swindon BAP. In additions rivers and hedgerows are also priority habitats in the Wiltshire BAP.

#### Potential Ecological Impacts:

Within the site boundary there the adverse impacts from development are likely to be of negligible significance on those areas of hard standing and gravel and where disused warehouse stands. However there is the potential for breeding amphibians, including great crested newt, within the brick structures in the western part of the site. Loss of the western strip of grassland and brick structures, which are the only standing water bodies in the immediate vicinity, are likely to have an adverse impact of minor significance.

There is also the potential for a decrease in the water quality of the River Cole and damage to the bank side habitat from construction of the proposed waste facility and surface water runoff during operation of the facility.

Overall development of the site is likely to cause adverse impacts of minor significance.

#### Potential mitigation:

- When working close to the River Cole the Environment Agency Pollution Prevention Guide notes should be followed with particular reference to PPG 01, PPG03, PPG05, PPG06 and PPG21).
- A buffer of at least 5m should be retained between the River Cole and the development.
- Retain and manage the hedgerows and scrubby vegetation around the edge of the site.
- Mitigation will be required for breeding amphibians if the brick structures in the western part of the site require removal including the provision of an alternative aquatic habitat (pond) either on-site or in the immediate vicinity preferably at least twice the area of the existing brick structure. Amphibians (and other fauna) would then require removal from the brick structure and surrounding terrestrial habitat to be transferred to the new pond. The new pond should be constructed at least 6 months in advance of the transfer of amphibians to give the pond time to establish, for marginal plants to grow and for the water to settle. Note that if great crested newts are found within the brick structure more detailed mitigation will be required.
- Demolition of the disused warehouse and clearance of vegetation outside of the bird breeding season (which generally runs between 1 February and 31 August depending on seasonal factors although most birds breed between March and July).

#### Residual impacts:

If all the mitigation measures are implemented the development of the site should have negligible impacts.

#### **Opportunities for enhancement:**

- Management of the alternative pond provided as mitigation for removal of the brick structures, including keeping some of the water open and free of species such as duck weed.
- Management of hedgerows which are retained around the site including hedgelaying.
- Possible clearance of some of the scrub and litter on the banks of the River Cole adjacent to the River Cole in consultation with Wiltshire Wildlife Trust.



#### Recommended further ecological work/surveys:

Great crested newt surveys of the brick structure in the western part of the site following the *Great crested newt mitigation guidelines* (English Nature, 2001).

Surveys of any mature trees along the River Cole for roosting bats if they require felling (although it is strongly recommended that these are retained).

#### Legal and policy implications:

Relevant policies relating to nature conservation in the Swindon Borough Local Plan 2011 (Revised Deposit Draft, October 2003):

**ENV18 Habitats and Species Protection** (includes the protection of BAP priority habitats) **ENV22 Ground & Surface Water Protection** 

**ENV24 Riparian and other Buffer Zone** (includes the requirements for development free buffers along the edges of river corridors based on the intrinsic value of the river)

If great crested newts are found to be present in the brick structure a Defra development licence would be required for any development works within the site boundary.

Phase 1 Habitat Map



#### Joint Waste Site Allocations Site Survey Report

|--|

Number	Target Notes	Species Notes
1	Thornhill flood storage area, surrounded by soil bund, part of River Cole [County Wildlife Site]	
2	Short rabbit grazed grassland, abundant debris	R. crispus, U. glabra, R. fruticosus, L. corniculatus, R. repens, P. vulgaris, H. sphondylium, teasel, green sedge, chickweed, clover, goat willow, field-forget-me-not, P.vulgaris
3	Ruderal area dominated by common nettle. old brick structures holding water contain smooth newts [seen during day] and water boatman.	
4	River Cole, 2m wide, in steep cut channel, banks approximately 3m high. shallow , fast flowing, clear water. abundant debris dumped in river [pallets, metal sheets]. Areas 0f the river are heavily shaded by scrub.	
5	Abandoned warehouses, constructed from metal and plastic corrugated sheeting. Pigeons and ravens observed entering the building. Negligible potential as a bat roost.	







# SW13 Transfer Bridges

### **Traffic and Transport Review**

#### SW13 – Transfer Bridges Industrial Estate, Swindon

#### Proposed Site Usage

This 3.1 ha site is proposed to be used as a local scale recycling facility, material recovery facility or waste transfer station.

#### Existing/Potential Access

The site is located within the Swindon urban area. The main London to Bristol railway line forms the northern boundary of the site. Existing uses of the site include an area of railway siding to the south of the site and general industrial and warehousing use. The site has been identified in the Wiltshire and Swindon Rail Aggregate Depot study as a preferred area for a rail aggregates facility.

The site is currently accessed from a mini-roundabout on Octal Way which is connected via a short link to a roundabout on the A4259 County Road. The A4259 at this location is a single two lane carriageway with a 30 mph speed limit. An industrial estate/retail park, which lies immediately to south of the site, shares the same access from the A4259.

#### Impacts on Local Settlements

The main residential settlement in the close proximity of the site is located on the west side of the A4259. The issue of noise and vibration from the site on these residential properties should be considered.

#### **On-site Infrastructure**

The existing access road to the site requires some modification to accommodate the queue of vehicles using the facility and prevent the blocking of the site access mini-roundabout roundabout and the A4259 roundabout.

#### Off Site Highway Network

The local recycling site itself will typically attract HGV traffic in the period 9 AM to 5 PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible. The peak traffic generated by this type of facility is likely to be at the weekend and unlikely to coincide with the weekday AM and PM peaks on the highway network, no off site highway mitigations are anticipated

Considering that the retail park is also accessed off the same mini-roundabout on the A4259 the combined effect of a recycling centre and the retail park on a weekend peak may be significant. Thus the junction would require further dedicated analysis and possibly improvements dependent on the scale of impact.

The other main junction close to the site is the dumbbell layout roundabout between the A4559 and A4311 which may require assessment for capacity at weekend peak hours.

#### Constraints

Adverse impacts on the residential property adjacent to the site and the height limit under the railway bridge are the constraints that may affect the use of the site.

#### Mitigation



Possible modifications to the local junctions may be required.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses.

# Volume 5 West Wiltshire District

WW1 Bowerhill Industrial Estate, Melksham WW2 Brook Lane Trading Estate, Westbury WW3 Canal Road Industrial Estate, Trowbridge WW4 Chitterne Waste Management Facility WW6 Hampton Business Park (Part of), Melksham WW7 LaFarge Cement Works WW9 Northacre Trading Estate, Westbury WW15 Warminster Business Park WW16 West Ashton Employment Allocation, Trowbridge WW17 West Wilts Trading Estate, Westbury WW18 Westbury Waste Management Facility

# <u>Site: WW1 Bowerhill Industrial Estate,</u> <u>Melksham</u>

## **Noise Assessment**

### WW1 Bowerhill Industrial Estate, Melksham (Inset Map 52)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Bowerhill Industrial Estate to assess the site's suitability for a waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be properties located at Bader Park and Duxford Close at the bottom end of Halifax Road, located on the south-east edge of the industrial estate.
- 1.3 There are a number of properties on Halifax Road located at a similar proximity however traffic along the Halifax Road would likely offer some masking noise thus reducing the sensitivity of these receivers.
- 1.4 The site currently contains small businesses including small manufacturing and engineering businesses and a household recycling centre. The site is flanked to the east by Halifax Road with properties located on the opposite side of the road and flanked to the south by fields. The A350 is located approximately 150m to the west and the A365 approximately 150m to the north.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 13<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of traffic noise from nearby roads and vehicle and HGV movement within the site. The noise climate at the most sensitive receiver consists predominantly of traffic noise from nearby roads and environmental sources such as birdsong, insects, and wind in tress, etc.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	13:35	44.8	63.3	42.3
MEASUREMENT 2	13:40	45.6	67.0	41.1
MEASUREMENT 3	13:46	52.4	74.2	41.9
AVERAGE		49.0		41.8



2.3 The average background noise level at the most sensitive receiver was measured as 41.8dB  $L_{A90}$ .

### 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at Bowerhill Industrial Estate include Waste Transfer Station, Materials Recovery Facility and Recycling. The boundary of the site area proposed for use passes within 20m of the most sensitive receivers and a similar distance to properties located on nearby roads. Given the background noise level, L<sub>A90</sub> of 41.8dB at the most noise sensitive receivers, it is expected that any new waste development would need to be located a minimum distance of 325m away however it may possible for the development to be located closer to other nearby receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of the development within the site, existing buildings within the site and ground topography may also offer some screening effects allowing a closer proximity to be achieved.
- 3.3 Given that the minimum separation distance can achieved within the site boundary and careful positioning of the development would reduce the separation distance required, indications are that this site would potentially be suitable for the proposed development.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.
# **Air Quality Report**

WW1 Bowerhill Industrial Estate, Melksham, 32 ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located on Bowerhill Industrial Estate, just west of Bowerhill residential areas and 0.5km south of Melksham. The site is currently occupied by commercial units. There are some existing waste uses including a Household Recycling Centre. There is also a sports and leisure centre and it is adjacent to a golf course / sports facility in the west. Land to the south of the site is in agricultural/Greenfield use and land just 1km north of the site includes the Melksham Conservation Area.



### Figure 1.1 – The site and its surroundings



- 1.2 Air pollutant<sup>1</sup> sources within 1km of the site: road traffic on the A365, A350 and minor roads; gas/oil/solid fuel space heating for scattered buildings. A sewage treatment works just west of the site is a potential source of bioaerosols and odour.
- 1.3 Estimated background annual mean levels of priority pollutants<sup>2</sup> for 2005 and comparable standards<sup>3</sup> are: 20.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 16.9µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 22.5µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: Bowerhill residential housing to the east, including schools, and Melksham residential housing to the north of the site including a Hospital. There is one County Wildlife site within 1km: Kennet and Avon Canal.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NΗ <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (Bowerhill, Melksham)	1 (1)	2 (2)	N/A	N/A	N/A	2 (2)	2 (2)
Residential beyond 100m (Bowerhill)	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	1 (1)
Ecological designation within 1km of site (Kennet and Avon Canal)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust and odour control measures should be required. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low to moderate without mitigation. Mitigation for dust and odour is recommended. Detailed assessment should not be necessary.

<sup>&</sup>lt;sup>1</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>2</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>3</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



## **Traffic and Transport Review**

### WW1 Bowerhill Industrial Estate, Melksham

### **Proposed Use**

Local scale Materials Recovery Facility / Waste Transfer Station / Recycling (for dry, non hazardous wastes)

### **Existing/Potential Access**

Bowerhill Industrial estate is located immediately west of Bowerhill, 0.5km south of Melksham. The estate is predominantly occupied by B2 and B8 uses ranging from small scale businesses to large distribution, storage and other industrial uses. There is an existing household waste recycling centre on the estate. Access to the estate is gained via a four arm roundabout in the north east of the estate. From this access the residential properties of Bowerhill are also accessed.

### **Impacts on Local Settlements**

Bowerhill is a predominantly residential area whose western boundary is separated from the industrial estates eastern boundary by Halifax Road. The access to the estate is from the north westerly corner of the residential estate and as such there will be no through traffic impacting upon the residential amenity of the area.

### **Off Site Highway Network**

The access from the A365 in an east/west direction is good and similarly access to the A350 in a north south direction is equally good. The site is an established industrial estate with existing HGV traffic accessing the site. It is unlikely that any increase in traffic associated with the proposals would have a 'material' impact on the local highway network.

Constraints

None

### Mitigation

None

### Conclusion

In purely traffic terms the site is considered suitable for the proposed uses.

# Site: WW2 Brook Lane Trading Estate, Westbury

## **Traffic and Transport Review**

### WW2 Brook Lane Trading Estate, Westbury

### Proposed Site Use

Proposals are for recycling including inert waste recycling and waste transfer station.

### **Existing/Potential Access**

The 3 ha site is located to the west of Westbury and has existing uses as industrial and waste processing. The access is currently taken from the B6097 via a mini roundabout leading to Brook Lane. The B6097 also provides access to the north west of Westbury including the residential areas, the train station, West Wiltshire trading estate and Brook Lane trading estate.

Part of this site is already in operation as a waste processing facility and it is assumed that the proposal is to provide an extension to this existing facility. This existing facility currently gains access via a narrow (3m wide) track off Brook Lane. Design Bulletin 32 (Residential Roads and Footpaths), produced by the Department of Transport, states that a carriageway width of 5.5m is required to enable the largest type of vehicles to pass each other. In its present condition this access is of insufficient width to accommodate this and as such on occasions when two HGVs meet on the access road one vehicle must give way, often resulting in backing up to an appropriate passing point. Given the proposal for an extension to the existing facilities at the site and with the likelihood of generating increased HGV traffic there is a necessity to improve the present access arrangements.

The site is adjacent to the Northacre Business Park. Currently under construction is a link from this business park to the narrow access road which provides access to the existing facility from the Brook Lane trading estate. A link is also under construction from the Brook lane trading estate to the business park adjacent to the current access road for the existing facility. These new link roads will provide the opportunity to access the site from either Brook lane or via the Northacre Business Park to the North West.

Whilst the new link roads will improve access to the site, the link must provide a continuous improved access terminating at the entrance to the facility or beyond. It is not known at this stage whether the intention is to continue the new access road to the entrance of the existing facility or to terminate it short of the access. The present alignment appears to terminate the new link road at the mid point of the narrow track thus providing access improvements to just half of the access road. Whilst the new link is not yet complete the present access is not sufficient to sustain any increased use and as such the completion of the new link road prior to any extension to existing uses is necessary, however, improvements to the entire access must be ensured.

The existing access to Brook Lane is taken from the B6097 via a mini roundabout. Brook Lane itself is in parts approximately 4.5m in width and is also insufficient to allow two HGVs to pass each other unopposed. As such it is recommended that access to the waste facility is taken from the Northacre link road given the possibility of traffic backing onto the local highway network at peak times.

### Impacts on Local Settlements

Westbury lies to the south east of the site and there is the potential for adverse impacts on the residential amenity of the area given the necessity for HGVs to pass through these residential areas in order to gain access to the site from the south. The small residential district of The Ham lies to the north of the site and is the area most likely to be impacted upon by vehicles accessing the site from the north via the A350 Westbury Road or returning to the to the A350 northbound from the site. Through the Ham there is a 30 mph speed limit with speed activated signs in operation. Priority build outs are also present to help reduce traffic speeds.



### On-site infrastructure

The existing access to the site is of considerable length and could easily accommodate the traffic arriving at site with no issues of blocking back to the highway network. However it is considered that this infrastructure is unsuitable to accommodate traffic associated with a proposed extension to the site given the lack of width in the existing access road.

### Off Site Highway Network

The existing/proposed site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be fewer and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible given likely relatively small increases in employee number. The 4 arm roundabout providing access to the Northacre Business Park is likely to be more suitable for increased HGV use than the mini roundabout at Brook Lane and as such proposals should seek to ensure access is taken from the new link road on the Northacre Business Park once completed.

### Constraints

The access road is currently substandard to accommodate an extension to the existing facility. Given the likely increase in the number of trips to the site it is recognised that the access will be required to give two-way access allowing for two HGVs to pass unopposed. At its present width this is not possible and as such mitigating measures will be required.

### Mitigation

Improve existing access road or complete the Northacre Business Park link road currently under construction prior to the commencement of extended waste treatment facilities.

### Conclusion

The existing access to the site is of considerable length and could easily accommodate the traffic arriving at site with no issues of blocking back to the highway network. As such the proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network. However physical changes to the site access will be required, a process already seems to be taking place with the construction of the new access from the Northacre Business Park.



## Water (Quality and Environment) Assessment

### Site name – Brook Lane Trading Estate, Westbury

NGR at centre of site – ST 856515 Location description – Immediately west of Westbury Area of site (ha) - 2

### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
Water	Groundwater	Contaminate minor aquifer Contaminate Source Protection Zone	Medium / High Low	<ul> <li>Plan mitigation requirements during construction</li> <li>Layout planning of site</li> </ul>	<ul> <li>Environmental management during construction</li> <li>Relevant licensing requirements (PPC) to be assessed</li> </ul>
	Surface water body	Contaminate adjacent watercourse (Biss Brook)	Medium / High	Site traffic plan	Approach Environment Agency for monitoring requirements
		Impact on baseflow/runoff to watercourse	Medium/High (due to on-site tributary)	<ul> <li>Surface orainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid</li> </ul>	<ul> <li>Produce working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Baseline monitoring of adjacent surface water bodies may</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>
		Flood event causes	Medium /High	<ul> <li>wastes only, inert wastes</li> <li>Engineered liner system</li> <li>Engineered flood defence or</li> </ul>	<ul> <li>Assess impact of current on site and off site landuses</li> <li>Approach Environment Agency for</li> </ul>



Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment Requirements
	Receptor		Impact	Measures	
			Significance	(to be considered as appropriate)	
		contamination of surface water and disruption of operations Flood zoning directly affects the majority of the site		mitigation	<ul> <li>requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Surface water Abstraction point	Contaminate surface water supply for quarrying	Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> </ul>	<ul> <li>Check status of abstractions with Environment Agency</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Impact designated SSSI (geological designation)	Low		<ul> <li>Approach Environment Agency for monitoring requirements</li> <li>Check availability of data of groundwater and surface water quality sampling locations from Environment Agency</li> </ul>
	Other adjacent landuses	Some residential dwellings but predominantly business parks	Low	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for Requirements</li> </ul>

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Brook Lane Trading Estate, Westbury is:

- o Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



# **Ecological Report**

### WW2 Brook Lane Trading Estate, Westbury

### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory sites within 500m:

Fairwood Road Railway Line Wildlife Site: Located approximately 400m south-west of the site. Westbury Lakes Wildlife Site: Located approximately 450m east of the site. Westbury Ironstone Quarry SSSI: Located approximately 550m south-east of the site.

### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the site.

However, within 500m of the site there are:

- Eight records of water vole: four records are on the Biss Brook (approximately 40m from the western boundary of the site) and four are located next to a rail line (approximately 80m south of the southern boundary of the site);
- Four records of grass snake: Two records are located approximately 150m south of site and two
  are located approximately 390m east of the site.
- Six records of slow worm: all records are located approximately 390m east of site.
- Two records of corn flower (a rare vascular plant in Wiltshire), located approximately 460m southeast of the site.

*Details of surveys already undertaken (where known):* None identified.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The site largely comprises hardstanding and buildings and is generally of negligible nature conservation value.

The Biss Brook and a tributary of this watercourse lie immediately adjacent to the western boundary of the site.

### Field Evidence of notable species:

Some of the buildings on site have potential for roosting bats. The Biss Brook has potential for water voles and native crayfish. House sparrows were observed nesting under the roof tiles of an old brick farmhouse. Some minimal potential for reptiles around edge of the site but no significant reptile habitat is present.

No other evidence of notable species was observed. No ponds were identified within 500m.

### OTHER INFORMATION

None identified.

### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

### Nature conservation evaluation:

The site itself has negligible nature conservation value but is directly adjacent to the tributary of the River Biss which supports a population of water voles that could be important in a county context.

### Potential Ecological Impacts:

There will be no impacts on designated features of nature conservation value.

The main potential impact is on a decrease in water quality within the Biss Brook and loss of bank side habitat which may have an adverse impact of moderate significance on the water vole population using the brook.



Bird nesting habitat will be lost with the demolition of buildings and there is the potential for impacts on bat roosts.

No other potential significant impacts are identified.

### Potential mitigation:

- Retain a buffer zone of at least 10m from the edge of the water course to both retain bank side habitat for water voles and reduce the impact from noise and visual disturbance to the species.
- Direct works to the water course should be avoided.
- Direct surface water discharge to the water course should be avoided. Any surface water should be collected within the site and directed through silt traps and oil interceptors or through a Sustainable Urban Drainage System.

### Residual impacts:

If all of the mitigation measures are implemented the development should have negligible impact on nature conservation.

### **Opportunities for enhancement:**

There are opportunities to carry out enhancement for nature conservation of some sections of the Biss Brook, including partial clearance of scrub from the banks and digging out areas which have become silty and which are clogged with debris. Due to the presence of water voles this work would need to be carried out under a method statement in the presence of a suitably experienced ecologist and no water vole burrows should be directly affected.

### Recommended further ecological work/surveys:

Bat surveys of buildings identified as having potential for roosting bats (see Phase 1 habitat plan).

Crayfish surveys in on Biss Brook if the Brook will be directly affected by proposals.

### Legal and policy implications:

Although water voles are not legally protected (although their habitat is) the quinquennial review of the Wildlife and Countryside Act 1981 was considering water voles for full legal protection which may mean that any development adjacent to the water course would have to be carried out under a development licence which would probably be issued by Defra. It is not known when the decision will be made regarding the change in the legal protection of water voles.

Defra development licences are required for damaging or demolishing a bat roost.

### Relevant policies from the West Wiltshire District Local Plan, 1st Alteration (June 2004) are:

C1 Countryside Protection C7 Protected Species C9 Rivers









Number	Target Notes	Species Notes
1	Breeze block house. pitch tiled roof. in use.medium potential for bats.	
2	3 portacabins. in use.	
3	1 breeze block bldg, 1 open sided. in use. low bat pot.	
4	area of hardstanding. some reptile pot around edges. old disused portacabin but no access so viewed from afar.	
5	very little veg on perimeter fence.	
6	old brick farmhouse. lived in. med to high bat pot. house sparrows nesting under roof tiles. nice mature garden.	
7	buildings not there	
8	brook has pot 4 crayfish and w voles. fairly fast flow at time of visit. garden goes straight down to brook. upper reaches not possible to access.	mature oak, ash, willow and sycamore lining brook.



### **Protected Species and Designated Sites**





# Site: WW3 Canal Road Industrial Estate, Trowbridge

## Noise Assessment

## WW3 Canal Road Industrial Estate, Trowbridge

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Canal Road Industrial Estate to assess the site's suitability for a waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receivers in proximity to the site. In this case the most noise sensitive receivers in proximity to the site were deemed to be the row of houses located at Greenway Gardens, located on the east edge of the industrial estate.
- 1.3 There are a number of properties on Wyke Road and The Down located in similar proximity to the site and properties located on Canal Road and Horse Road located at a slightly greater distance. Traffic along these roads would likely offer some masking noise thus reducing the sensitivity of these receivers.
- 1.4 The site currently contains small businesses including small manufacturing and engineering businesses and a household recycling centre. The site is flanked to the east by properties located along The Down and Wyke Road, to the north by properties located on Horse Road, to the south by properties located on Canal Road and to the west by factories located on Canal Road. The local railway line is located approximately 200m from the west boundary of the site.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 13<sup>th</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of traffic noise from nearby roads and vehicle and HGV movement within the site. The noise climate at the most sensitive receiver consists predominantly of traffic noise from nearby roads and HGV movement within the site and environmental sources such as birdsong, insects, and wind in tress, etc.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	12:25	44.0	56.0	40.1
MEASUREMENT 2	12:30	43.6	55.1	39.3
MEASUREMENT 3	12:35	43.0	59.8	37.2
AVERAGE		43.6		38.9

2.3 The average background noise level at the most sensitive receiver was measured as 38.9dB  $L_{A90}$ .



## 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at Canal Road Industrial Estate include Waste Transfer Station, Materials Recovery Facility and Recycling. The boundary of the site area proposed for use is adjacent to the most sensitive receivers and a similar distance to properties located on nearby roads. Given the background noise level, L<sub>A90</sub> of 38.9dB at the most noise sensitive receivers, any new waste development would need to be located a minimum distance of 450m away however it may possible for the development to be located closer to other nearby receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of the development within the site, existing buildings within the site and ground topography may also offer some screening effects allowing a closer proximity to be achieved.
- 3.3 Given that the minimum separation distance can achieved within the site boundary and careful positioning of the development would reduce the separation distance required, indications are that this site would potentially be suitable for the proposed development.
- 3.4 To confirm this situation however would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



# **Air Quality Report**

## WW3 Canal Road Industrial Estate, Trowbridge

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located to the northwest of Trowbridge. It is adjacent to Green Belt and its western boundary is formed by the Kennet and Avon Canal and a railway line. The site is currently occupied by an existing industrial estate including a mix of commercial and light industrial uses. There are existing waste uses on this estate including a Household Recycling Centre.



## Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>4</sup> sources within 1km of the site: road traffic on the A361, B3105 and minor roads; Asda Stores Ltd and Tesco Stores (additional potential emissions of VOCs), Wessex Water Services Ltd sewage treatment works (additional potential emissions of bioaerosols, NH<sub>3</sub> and odour). Waste uses on this estate currently in-place are potential sources dust and odour.

<sup>&</sup>lt;sup>4</sup> Of concern to public health include: Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>),  $PM_{10}$  (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>5</sup> for 2005 and comparable standards<sup>6</sup> are: 15.7µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 12.3µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 19.2µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential housing in Hilperton to the east and Trowbridge to the south which includes schools and a hospital. Furthermore, land allocated for future housing development lies to the immediate north and northwest of the site. There are two County Wildlife sites within 1km: the Kennet & Avon and Bristol Avon Canals.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	2 (2)	2 (2)	N/A	N/A	N/A	2 (2)	2 (2)
Residential beyond 100m	2 (2)	2 (2)	N/A	N/A	N/A	1 (1)	1 (1)
Potentially sensitive ecology within 1km of site (Kennet & Avon and Bristol Avon Canals)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A
Nataa							

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust and odour control measures should be required. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to moderate without mitigation. Mitigation for dust and odour is recommended. Detailed assessment should not be necessary.

<sup>&</sup>lt;sup>5</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>6</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



## **Traffic and Transport Review**

### WW3 Canal Road Industrial Estate, Trowbridge

### **Proposed Site Use**

It is proposed that part of this site is to be used as a materials recovery facility/ waste transfer station/ recycling facility.

### **Existing/Potential Access**

This 30 ha industrial estate is located to the northwest of Trowbridge. and it is proposed that part of this site is to be used as a materials recovery facility/ waste transfer station/ recycling. The site is an existing and well established industrial estate with a mix of B1, B2, B8 and A1 uses. On the estate there are existing waste uses and a household waste recycling centre with public access.

Access to the estate is via a 4 arm mini roundabout at the southern end of the estate. To the northern end is a large 4 arm roundabout with one arm leading to a residential area with a 7.5 tonne environmental weight restriction. The estate is in a linear arrangement around Canal Road, a wide road, at about 7.3m wide with industrial frontage and suitable for the existing and potential HGV use.

### Impacts on Local Settlements

The location of the site within Trowbridge and its proximity to residential areas is the greatest constraint on this development. Access to the estate must pass through the built up mix of sensitive land uses such as schools, hospitals and residential areas of Trowbridge and as such the impact of transporting waste to the site is a potential issue. The industrial estate however does already in its present capacity generate significant HGV trips through these areas and any additional trips are likely to be insignificant considering the existing usage of the routes into the estate.

### **Off Site Highway Network**

The proposed facility itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours with no public access anticipated. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be fewer than at weekends and the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible.

### Constraints

The major constraint in traffic terms is the necessity to access the site through the residential areas of Trowbridge and the associated adverse impacts on the residential amenity of the area.

### Mitigation

Due to the location of the site and the lack of alternative routes it is difficult to see any alternative to the use of access roads for HGV access to the site.

### Conclusion

Whilst the proposed site can be accommodated in traffic terms with little impact on the wider highway network and no physical changes to the site access, consideration ought to be given to the impacts on the residential amenity of the areas through which the HGVs will pass.



# Site: WW4 Chitterne Waste Management Facility

## Landscape and Visual Survey

### WW4 Chitterne Waste Management Facility

### 1. Introduction

Greenfield site located to the south-west of the village of Chittern on the B390, adjacent to a landfill site. The site is currently improved grassland, set within a wider setting of rolling open arable fields within a chalk landscape.

### 2. Baseline Landscape Character and Designations: Desk Survey

Countryside Character Volume 8 South West (Countryside Agency): Landscape Character Area: Salisbury Plain and West Wiltshire Downs Key characteristics relevant to the site:

- Extensive open, rolling Chalk plateau dominated by large arable fields.
- Scattered copses and shelterbelts.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: High Chalk Plain Landscape Character Area: Salisbury Plain East Key characteristics relevant to the site:

- Very large scale and open, exposed landscape.
- Rolling plateau land form with panoramic views over the surrounding lowlands creating a sense of elevation.
- Large regular arable fields are bounded mainly by ditches or fences with occasional hedgerows.
- Steep and incised slopes down to the surrounding river valleys and numerous dry valleys.
- Copses and woodland belts, at various stages of growth occur throughout the area with sinuous older plantations contrasting with more recent tree planting in geometrical blocks.
- Many sites of historic and archaeological importance, often preserved due to military use
- Sparse settlement limited to nucleated villages, military camps and isolated farmsteads.
- Areas outside MOD control are predominantly intensively farmed and arable.

Due to military activity the area retains large amounts of chalk grassland, and WCC judge the overall condition of the *Chalk High Plain* Landscape Type to be 'good', with a 'strong' character due to its vast scale and openness. The overall management strategy is to 'conserve' the open and isolated character of the plain along with the vast areas of calcareous grass land and sites of historic interest.

### District Landscape Character Assessment: N/A

### Landscape Designations and policies:

- Special Landscape Area
- Imber Range Perimeter path to the north



### Local Authority Consultation:

West Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

### 3. Baseline Landscape Character and Features: Site Survey

The site lies within a relatively remote rural area of open rolling arable fields. The chalk geology has led to the predominance of free draining calcareous soils and a lack of surface water and the site is situated on the lower northern slope of a dry valley. A strong belt of mature trees runs to the north of the site and also along its southern perimeter. An area of young woodland planting has also been planted to the north of the site. It is possible that an ancient field system lies in the vicinity of the site, although this was not apparent on the ground. The majority of the site has been recently enclosed with stockproof fencing and consists of improved grassland, grazed by cattle at the time of the survey.

To the east of the site there is a large scale inert landfill / landraise site. The B390 runs to the south of both of both sites, along a ridgeline. From here, there are views across the dry valley to the northern part of the proposed site, although the landfill facility is less visible, at least during the summer, due to the presence of roadside vegetation.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: High Capacity to Accept Change: Medium

Although the site is low in biodiversity it forms an integral part of a wider rural landscape. The southern, valley bottom, part of the site is relatively well concealed and of poorer quality due to the presence of an access road and disturbed ground. This could accommodate change with little impact. The northern part of the site is more elevated and here, change would be more visible.

### 5. Potential Landscape Impacts

- Harm to mature trees and new planting along site boundaries
- Erosion of rural character of wider area, especially when viewed from B390
- Potential harm to ancient field system

### 6. Potential Landscape Mitigation Measures

- Planting of 15m woodland buffer around site boundaries to screen views into the site, integrating it with surrounding rural character. The woodland should connect with existing trees and planting within the area.
- Strategic off-site hedgerow planting, along the B390 to reduce perceptions of the erosion of the rural landscape character of the area.
- The following 'Broad Management Objective' for the High Chalk Plain landscape type in the *Wiltshire Landscape Character Assessment* is relevant to the site:
  - Conserve the sense of remoteness and isolation, with sparse settlement and road network and limited visible development.

### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Impact on Receptor	Potential Visual Mitigation Measures
Users of the B390	Low	Slight adverse	<ul> <li>15m woodland</li> </ul>
Visitors/employees at the existing landfill site	Low	No change	buffer around site boundaries



Agricultural workers	Low	Slight adverse	
			<ul> <li>Location of most</li> </ul>
			visually obtrusive
			elements to
			southern area of site

### 8. Summary: Residual Landscape and Visual Impacts

This is a greenfield site in an open, rural location that is designated as a Special Landscape Area. Its use for waste treatment would therefore contribute to the erosion of the countryside. With strategically placed, substantial woodland buffers, the visual impact of the proposals could be reduced however. Due to its remote location, few visual receptors would be significantly affected, although until vegetative screens establish, users of the B390 would have glimpses of the site.

### 9. Recommended further landscape and visual surveys

- Visual survey from Imber Range Perimeter path to north of site
- Further investigation into potential ancient field system.
- Night-time visual surveys.

## Noise Assessment

### WW4 Chitterne Waste Management Facility (Inset Map 57)

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Chitterne Waste Management Facility to assess the site's suitability for waste treatment plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver in proximity to the site was deemed to be Valley Farm located approximately 130m north of the B390 and approximately 1020m east of the site.
- 1.3 The site is currently pasture located adjacent to an existing large scale inert landfill/landrise site. The site is surrounded by fields containing a few isolated farms. The B390 is located approximately 230m to the south of the proposed site

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 21<sup>st</sup> July 2006. The weather was hot and dry. The current noise climate within the site predominantly consists of traffic noise from vehicles and HGV's on nearby roads and from within the site. The noise climate at the most sensitive receiver consists predominantly of traffic noise from nearby roads and environmental sources such as birdsong, insects, and wind in tress, etc. No noise from the existing site was perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	11:12	48.3	68.3	40.0
MEASUREMENT 2	11:17	47.1	62.1	41.6
MEASUREMENT 3	11:35	50.6	64.6	38.8
AVERAGE		48.9		40.1

2.3 The average background noise level at the most sensitive receiver was measured as 40.1 L<sub>A90</sub>.

## 3. SITE SUITABILITY

- 3.1 The proposed use for the site at Chitterne Waste Management Facility is for inert waste recovery associated with landfill inputs and outdoor composting of green waste. The boundary of the site area proposed for use passes within 1020m of the most sensitive receiver. Given the background noise level, L<sub>A90</sub> of 40.1dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 1240m away.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.

### Joint Waste Site Allocations Site Survey Report



- 3.3 Given that the minimum separation distance can be achieved within the site boundary, indications are that this site would potentially be suitable for the proposed development. Depending on the location of the development within the site, existing buildings/works and intervening ground topography may offer some screening effects allowing a closer proximity to be achieved.
- 3.4 To confirm this situation would require further investigation. Further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.



## **Air Quality Report**

### WW4 Chitterne Waste Management Facility, 13 ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located north of the B390 west of the village of Chitterne Special Landscape Area (SLA). It is currently pasture land located to a large scale inert landfill /landraise site.



### Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>7</sup> sources within 1km of the site: road traffic on the B390 and minor roads. There are no notable industrial sources. Other than surrounding agricultural areas, there are no notable sources of bioaerosols and ammonia.
- 1.3 Estimated background annual mean levels of priority pollutants<sup>8</sup> for 2005 and comparable standards<sup>9</sup> are: 8.6µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 6.7µg/m<sup>3</sup> NO<sub>2</sub>

<sup>&</sup>lt;sup>7</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

<sup>&</sup>lt;sup>8</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>



(standard  $40\mu g/m^3$ );  $16.1\mu g/m^3 PM_{10}$  (standard  $40\mu g/m^3$ ). The levels indicate good air quality, typical of rural areas. There are no Air Quality Management Areas within 1km.

1.4 Potentially sensitive receptors within 1km: scattered residential properties including Valley and Quebec Farms. There is one County Wildlife site within 1km: Codford Down (chalk grassland).

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential between 100 and 250m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential beyond 250m (Valley and Quebec Farms)	1 (1)	1 (1)	N/A	N/A	2 (2)	1 (1)	1 (1)
Potentially sensitive ecology within 1km of site (Codford Down)	N/A	1	1	1	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low. Dust and odour mitigation is recommended. Detailed assessment should not be necessary.

<sup>&</sup>lt;sup>9</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



## **Traffic and Transport Review**

### WW4 Chitterne Waste Management Facility

### **Proposed Site Use**

The site has potential for use as an inert waste recovery associated with landfill inputs and outdoor composting of green waste.

### **Existing/Potential Access**

The site is located north of the B390 1km west of the village of Chitterne. The A36 is located 4.5 km to the west and the A360 is located 6 km to the east. The site is currently pasture land adjacent to a large scale inert landfill site. The total site area is 13ha however development will be limited to no more than 4 ha. It is assumed that the proposed site will share its access with the existing facility.

Access to the inert landfill site adjacent to the proposed site is taken directly off the B390. It is assumed and recommended that the proposed site will share this access. Whilst visibility from the access at present is sub standard (standard visibility for a 60mph road is 215m) for low vehicles due to the overgrown nature of the vegetation in the verge, HGV traffic is likely to have good visibility as they will be above the current level of the vegetation.

From the east traffic speeds are high with 80+mph speeds observed on the single carriageway road which is subject to a 60mph speed limit. The high speeds are a likely result of the straight nature of the road whilst the vertical alignment provides high visibility and results in frequent overtaking. There is an abrupt speed change on entering the village of Chitterne that also lies to the East of the proposed site. Due to the military training area that straddles the road, heavy military vehicle crossing points are located along the length of this eastern section of the B390. To the west of the proposed site the B390 provides good access to the A36 and observed traffic speeds were lower to the west of the village of Chitterne than to the east.

### Impacts on Local Settlements

The village of Chitterne is located 1km to the east of the proposed site. The village is a small settlement with approximately 300 inhabitants. The B390 when passing through the village is subject to a 30mph speed limit and has a 17T weight restriction that is signed from where the A36 and A360 join the B390. Speed camera signs are present within the village to assist in slowing traffic speed however no speed cameras were in evidence. The road width within the village varies between 4.4 and 5m. Design Bulletin 32 (Residential Roads and Footpaths), produced by the Department of Transport, states that a carriageway width of 5.5m is required to enable the largest type of vehicles to pass each whilst 4.8m is required for a HGV and car to pass. In its present condition this road is sub-standard to accommodate two HGVs passing at the same point in the road whilst parts of the road are too narrow for a car and a HGV to pass. The road frontage in the village is predominantly residential.

### **On-site infrastructure**

The existing access to the inert landfill site is of considerable length and easily accommodates the traffic arriving at site with no issues of blocking back to the highway network. It is considered that should this infrastructure be used to access the proposed site it would be suitable to accommodate traffic associated with a proposed site.

### **Off Site Highway Network**

The B390 connects the A36 in the West to the A360 in the East. In the east the junction of the B390 and A360 is a priority T junction with a left turn filter lane accessing the B390. The visibility at this junction is good. To the west the junction of the A36 and B390 is again a priority T junction with a left turn filter lane which provides good visibility.

The proposed site will in traffic generation terms be similar in nature to the existing inert landfill site and will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this proposed shared access site will be fewer than at weekends and the impact of the additional trips associated with the new waste site on the surrounding road network is likely to be negligible given likely relatively small increases in employee number. There will however be a need to assess the impact on the trunk road network in consultation with the Highways Agency.



### Constraints

Traffic impacts on the village of Chitterne is a key issue and there is potential for a negative impact on the residential amenity of the village given the possible increase in noise, vibration and congestion associated with the transportation of waste.

Visibility at the existing access to the inert landfill is sub standard for non HGV traffic.

### Mitigation

Access to the proposed site should be controlled by condition or legal agreement to prevent vehicles accessing/leaving the site via the village roads. This could be enforced by imposing a lower environmental weight restriction limit through the village to ensure that access and exit of the site is via the A36 to the West.

Although visibility is not considered a problem at the moment it is sub-standard for low vehicles. It is suggested that should the proposal for an increase in use of the access go forward that improvements to visibility are made at the site access by careful removal and seasonal management of vegetation at this location.

### Conclusion

The proposed extension to the site can be accommodated in traffic terms with little impact on the wider highway network and minimal physical changes to the site access. Consideration ought to be given (perhaps in conjunction with the highway authority) to a removal/management regime for vegetation in the verge at the site access. The impact on the village of Chitterne should be carefully managed and controlled through condition, legal agreement, or possible 7.5T environmental weight restriction.



## Water (Quality and Environment) Assessment

### Site name – Chitterne Waste Management Facility

NGR at centre of site – ST 969435 Location description – Rural setting, 1.4km east of Chitterne Area of site (ha) - 14

### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential	Potential Risk Issue	Potential	Potential Risk Mitigation	Likely Further Assessment
	Receptor		Impact	Measures	Requirements
			Significance	(to be considered as appropriate)	
Water	Groundwater	Contaminate major	Medium / High	<ul> <li>Plan mitigation requirements</li> </ul>	Environmental management during
		aquifer		during construction	Construction
		Contaminate Source	Medium		<ul> <li>Relevant licensing requirements</li> </ul>
		Protection Zone		<ul> <li>Layout planning of site</li> </ul>	(PPC) to be assessed
	Surface water	Contaminate watercourses near site	Low /Medium	<ul> <li>Site traffic plan</li> </ul>	<ul> <li>Approach Environment Agency for monitoring requirements</li> </ul>
	,	Impact on baseflow/runoff	Low	<ul> <li>Surface drainage plan</li> </ul>	Produce Working Plan for site
		to watercourse	2011	Impermeable hardstanding	Ŭ
				Runoff collection system	Review runoff treatment requirements
				<ul> <li>Spill kits, bunded storage and</li> </ul>	
				designated liquid handling areas if site might accept liquids/hydrocarbons	<ul> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>
				<ul> <li>Consider infiniting types of waste handled at site e.g. solid wastes only, inert wastes</li> <li>Engineered liner system</li> </ul>	<ul> <li>Assessment of current impacts of adjacent landfill</li> </ul>
					Confirm the presence of local
					watercourses

### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood Risk	Low/Medium	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater abstraction point	Contaminate groundwater abstraction point	Low (Groundwater flowing away from abstraction point. Only 1 point within 800m of site)		
	Designated sites/ Adjacent sensitive landuses	2 SAMs and Wildlife sites within 1km of the site Conservation Area	Low / Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for</li> </ul>
	Other adjacent landuses	Farmland and farms surrounding site	Low /Medium		requirements
		Current discharge consents and several recent pollution incidents	Low		

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Chitterne Waste Management Facility is:

- o Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

Joint Waste Site Allocations Site Survey Report

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

# **Ecological Report**

### WW4 Chitterne Waste Management Facility

### DESK STUDY INFORMATION

Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

Within approximately 300m to the south of the site is County Wildlife Site Codford Down, however, a B road lies between the CWS and the site. Knook Down and Knook down Coombe lie approximately 700m to the west of the site. Salisbury Plain SPA, SAC lies just over 1km away to the north.

Records of notable species within 500m: (legally protected, BAP, RDB)

Brown hare records (UKBAP species) exist for the nearby CWS Codford Down. There are records of badger (not known whether sett records) nearby.

Details of surveys already undertaken (where known):

None known.

### FIELD SURVEY INFORMATION

General Habitat: (ref Phase 1 habitat plan)

The entire site is cow grazed pasture consisting mainly white clover, perennial rye-grass with scentless mayweed and creeping buttercup. The eastern end of the field is slightly rougher and disturbed (cow feeder in this section); perennial rye-grass and Yorkshire fog dominate together with creeping buttercup, spear thistle and dock.

A rough track forms part of the southern edge of the site, adjoining this track is a band of broad-leaved trees and Scot's pine (TN1 on map). Some of the trees are mature and provide features for bat roosts. Many butterflies, moths and other invertebrates were utilising the habitat along this track.

Where the track finishes, fencing carries on and along the fence line are three stands of particularly mature beech trees, their positions are marked on the map.

At TN 6 is an area of long un-managed grassland mixed with rubble. This area is particularly suitable for reptiles and invertebrates.

The western edge of the site comprises a hedge of hawthorn, larch, mature beech and elder, this links into a dense band of mature beech trees to the north-west of the site.

The north and east site boundaries are fenced with no hedgerow. The surrounding landscape is arable.

Field Evidence of notable species:

Owl pellets were found along the rough track on the southern edge of the site (see TN7 on Phase 1 habitat map).

The southern edge of the site could support reptiles in the areas of tall grassland and where the rubble pile is situated (south facing aspect).

The field itself offers little for fauna but around the edges, where trees and shrubs are present, the habitat could be suitable for reptiles, invertebrates and small mammals (southern and western edges of the field). These habitats will undoubtedly be important to nesting birds and would probably be used by bats as flight paths also. The western side boundary appears to be suitable dormice habitat, especially as it links into the wider landscape.



### OTHER INFORMATION

The site was once a landfill which has been fairly recently covered over and restored to grassland.

### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

Based on current knowledge, the field itself is of negligible value but the mature trees could be of local value due to their maturity and size. Edge habitat cannot be assessed due to lack of surveying. Hedgerows, woodlands and arable farmland are local BAP habitats.

### Potential Ecological Impacts:

If just the field is developed, impacts will be limited; however, if edges habitats are affected then there could be impacts on birds, bats, reptiles, dormice, bats and invertebrates. These impacts would be felt during both the construction and operation phases of the development potentially. There is already a waste site to the east of the site and thus noise levels and general human activity is already in the area and may not be such an issue at this site. There is, however, currently no lighting.

### Potential mitigation:

All edge habitat and mature trees should be retained and a buffer left between them and the development. This should help reduce effects on wildlife and habitats during the construction and operational phases of the development.

If the area at TN6 is to be affected, reptile surveys would need to be carried out and appropriate mitigation put in place which may involve re-locating and providing appropriate habitat elsewhere on site or nearby.

Any lighting introduced into the area should consider the issue of foraging bats using nearby woodlands and hedgerows. The ecologist should be involved in lighting design for the site due to its remote location.

Residual impacts:

There should be few if any residual impacts if the above is implemented.

### Opportunities for enhancement:

Consideration should be given to green roofing any buildings which are constructed on the site.

Any landscaping should be done on conjunction with the ecologist. Planting of species-rich grassland on the remainder of the site not being developed would enhance habitat for invertebrates which are currently using the rank grassland at TN6 and along the track. Planting up a hedge to replace the fencing on the northern and eastern edges would also enhance conditions for wildlife, especially if they are linked into the existing landscape (ie. join the band of beech trees in the north-west corner and parcel of woodland to the east).

Consider scrub control along the track to ensure it remains suitable for invertebrates due to its current open nature.

### Recommended further ecological work/surveys:

If edges of the field are to be affected, surveys for reptiles, bats and dormice should be carried out. Consultation should take place with EN because of the site's location in relation to the Salisbury Plain SPA, SAC.

Legal and policy implications:

Relevant policies from the West Wiltshire District Plan (June 2004): The Countryside: C1, C3, C4, C5.

## Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Mixture of broad-leaved and Scot's pine trees	
2	Very large mature beech trees	
3	Semi-improved grassland - cow grazed	Scentless mayweed, white clover, creeping buttercup, spear thistle, scarlet pimpernel and mainly perennial rye-grass
4	Band of native trees and shrubs forming un-managed thick hedge - good bird nesting habitat	Hawthorn, larch, mature beech and elder
5	Rougher area of grassland, same species as TN 3 but more thistle plus others	Scentless mayweed, white clover, creeping buttercup, spear thistle, scarlet pimpernel and mainly perennial rye-grass plus black medick, Yorkshire fog and some common dock
6	Area of un-managed scrub and grassland where rough track ends (possibly access area if site used). Piles of rubble make this good reptile habitat.	Cock's foot, false oak and bent sp. grasses, dog rose, hog weed, teasel, bramble, lots of butterflies
7	Owl pellet on rough track	



### **Protected Species and Designated Sites**

# <u>Site: WW6 Hampton Business Park (Part of),</u> <u>Melksham</u>

## Landscape and Visual Survey

### WW6 Hampton Business Park (Part of), Melksham

### 1. Introduction

The site is located south of Melksham within the Hampton Business Park, off the A350. To the east of the site is the Bower Hill Industrial Estate. Opposite the A350 to the west is the recently developed Ashville Centre Business Park, part of the wider employment allocation known as Hampton Business Park. The site is currently greenfield, partially used as pasture for grazing (cattle).

### 2. Baseline Landscape Character and Designations: Desk Survey

### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Avon Vales Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture
- Low ridges from which the frequent medium sized towns are viewed
- Wide river corridor with ancient pattern of flood meadows but much influences by modern development

## Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Open Clay Vale

Landscape Character Area: Avon Open Clay Vale on the cusp of Minety Rolling Clay Lowland Key characteristics relevant to the site:

- · Level land form with wide open skies and views to ridges and downs
- Predominantly intensively managed permanent pasture with some arable
- Hedgerows, gappy or low flailed in places with sparse hedgerow trees enclose fields of varying size.
- Sections of the area remain rural and tranquil despite major routes through (M4).
- Buildings in varied material of brick, render and stone

Generally the condition of the landscape character area is considered by WCC to be 'moderate', with a 'moderate' strength of character.

The strategy for the area is to conserve the elements that contribute to the rural, tranquil landscape and improve elements in decline such as hedgerows and hedgerow trees

### Landscape Designations and Rights of Way:

• A public right of way crosses the site in a zig-zag running north to south, with access out to the Bower Hill Industrial Estate. A non-segregated public footpath and cycleway also runs adjacent to the site, along the A350.

### Local Authority Consultation:

West Wiltshire Borough Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

### 3. Baseline Landscape Character and Features: Site Survey

The proposed site is a flat area of greenfield and pasture, parcelled by degraded hedgerows with decaying hedgerow trees. To the west of the site, along the A350 is a public footpath / cycleway,



separated from the site by a low embankment and timber post and rail fence. Near the south end of the site is a roundabout to the A350 with a potential future turning into the site.

East of the site is the Bower Hill Industrial estate, a collection of large industrial sheds, many in disrepair with broken windows and rusting metal siding, and newer low brick offices. Between the site and Bower Hill are brownfields of rough grass and scrub. Rusting wire mesh fencing topped with barbed wire runs along the brownfield boundaries. To the north of the site is a private golf course accessed from Bower Hill Industrial Estate.

The site is fairly well contained to the east, however is open to the major traffic route of the A350 to the west with long views to the north and south. The area is urban / urban fringe in character with a mix of new commercial development and run down industrial units.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The site is an isolated, exposed area within a partially run down urban / urban fringe setting. There are several significant landscape detractors in the vicinity of the site and it has no connection to the wider landscape character. As such, the site has a poor landscape character. Development in this area would have no impact on the overall landscape character due to the isolated nature of the site, and existing surrounding land uses. Therefore the site has a high capacity to accommodate change.

### 5. Potential Landscape Impacts

• Further erosion of the rural character and setting

### 6. Potential Landscape Mitigation Measures

- Facilities to be small to medium in scale, in keeping with an agricultural style
- Use of native and evergreen hedgerows and trees and native woodland planting to site boundaries to screen views into the site and repair rural character
- The following 'Broad Management Objectives' for the Open Clay Vale in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Retain and manage the hedgerow network and nurture new hedgerow trees
  - Promote appropriate management of arable land including retaining area of fallow land and maintaining an unploughed margin around fields
  - Minimise small scale incremental change such as signage or fencing which could change the rural peaceful character of the landscape
  - Ensure both future construction and changes to existing buildings are designed to integrate with the existing character and structure of settlements
  - Screen views to intrusive urban edges through planting new woodland

### 7. Visual Impact and Mitigation

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor		Potential Visual Mitigation Measures
Public Footpath / Cycleway Users	Medium	Moderate adverse	•	Facilities to be in keeping with an agricultural style
Golf Course Users	Medium	Moderate adverse	Use of native hedgerows and trees and native woodland planting to site boundaries to	
A350 Road Users	Low	Slight adverse		
Ashville Centre Business Park	Low	Slight adverse		screen views into the site
Bower Hill Industrial	Low	Slight adverse		
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Estate				

### 8. Summary: Residual Landscape and Visual Impacts

Due to the disconnection of the site from the wider rural landscape character and existing adjacent land uses the site has a high capacity to accommodate change. There are no landscape or visual receptors in the vicinity with a high sensitivity to change within the site. The main visual impacts could be almost entirely mitigated through sensitive facility design and screen planting.

### 9. Recommended further landscape and visual surveys

• Winter-time visual surveys



### **Traffic and Transport Review**

### WW6 Hampton Business Park (Part of), Melksham

#### Proposed Site Use

The site has potential for use as Energy from waste/mechanical biological treatment facility/material recovery facility/In-vessel composting /waste transfer station and recycling.

### Existing/Potential Access

The site is located to the east of Bowerhill and is part of the 12ha wider employment allocation known as Hampton Business Park. To the west of the A350 has been developed, for a mix of B1, B2 and B8 uses whilst some of the land to the east has been developed for industrial use. It is on this eastern side of the A350, on an area that is currently greenfield, that the proposed development will take place.

The 3 arm roundabout that currently provides access to the existing B1, B2 and B8 uses has a signalised pedestrian crossing on the northern arm. There is the potential to take access to the site directly from the A350 via this existing three arm roundabout that could potentially be converted to a four arm roundabout to provide the access. The access road has been partially constructed from the roundabout and initial assessments reveal that visibility appears to be adequate.

### **Impacts on Local Settlements**

Bowerhill lies to the East of the site, Melksham to the north and Semington to the South. The impact on these settlements is likely to be insignificant due to the Semington to Melksham by-pass (A350) which will reduce the impact of the development on these local settlements. It should however be ensured that the Semington Road is not used as an alternative to the A350.

### **Off Site Highway Network**

The A350 provides a good access to the proposed site. It is a single carriageway road with a speed limit of 60mph. The waste site itself will typically attract HGV traffic in the period 9AM to 5PM with employees possibly arriving and leaving in the peak hours. As such, the only peak hour impacts on the wider highway network are likely to be as a result of employee traffic. During the weekday AM and PM peak hours when traffic on the network is greatest the trips to this site will be relatively low and therefore the impact of the additional trips associated with the new waste sites on the surrounding road network is likely to be negligible.

#### Constraints

No major constraints

### Mitigation

None required

#### Conclusion

The proposed site can be accommodated in traffic terms with little impact on the wider highway network.

## **Ecological Report**

### WW6 Hampton Business Park (Part of), Melksham

### DESK STUDY INFORMATION

*Statutory designated sites within 1km and non-statutory designated habitats within 500m:* No statutory designated sites within 1km or non-statutory designated habitats within 500m.

### Records of notable species within 500m: (legally protected, BAP, RDB)

Within the site there are two records of small blue butterflies and two records of rat's-tail fescue (a rare vascular plant in Wiltshire).

Within 500m of the site there are 22 records of great crested newts:

- Six records of great crested newt are located approximately 250m north of the site, within the golf course (Grid Ref: ST 906623);
- Four records of great crested newt are located approximately 115m west of the site, to the south of Shails Lane, on the opposite side of the A350 (Grid Ref: ST 903619);
- Four records of great crested newt are located approximately 210m west of the site, to the south of Shails Lane, on the opposite side of the A350 (Grid Ref: ST 902619); and
- Twelve records of great crested newt are located approximately 310m west of the site, to the south of Shails Lane, on the opposite side of the A350 (Grid Ref: ST 901619).

Also present within 500m of the site are:

- Six records of badger: Including two records located approximately 150m east of the site, two
  records located approximately 150m south-west of the site and two records located over 300m
  west of the site;
- Eight bat records: Including two records of common pipistrelle, two records of soprano pipistrelle, two records of a myotis bat species and two records of an unspecified pipistrelle bat species (the records do not specify whether these are roost sites);
- Four records of reptiles: Including two records of adder and two records of slow worm;
- Two records of redshank (a bird species);
- Two records of marsh fritillary (a butterfly species);
- Eight records of rare vascular plants in Wiltshire: Including two records of rat's-tail fescue, two records of greater chickweed and four records of meadow brome.

#### Details of surveys already undertaken (where known): None known.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

The site consists predominantly of semi-improved grassland fields. A sports field forms the northern part of the site. The fields in the southern part of the site are grazed be cattle and are surrounded by species poor intact hedgerows. The road verges adjacent to the A350 also consist of semi-improved grassland with some young plantation trees present.

Two drainage ditches are present within the site (marked on the Phase 1 habitat map). One of these ditches is almost dry (the more northern of the two ditches) and one has very stagnant water within it (the more southern of the two ditches).

A mature oak tree is present in the south-eastern corner of the site within the hedgerow marking the eastern boundary of the site (marked on the Phase 1 habitat map).

Within the site two areas of temporary amphibian fencing were noted (at the northern end of the site, by the golf course and on the western side of the site by the roundabout in the A350).

### Field Evidence of notable species:

The mature oak tree present in the south-eastern corner of the site has a low to medium potential to support roosting bats.



The presence of temporary amphibian fencing within the site suggests that great crested newts are present within and around the site. In addition to this there are 22 records of great crested newts within 500m of the site (in four locations surrounding the site). The two ditches present within the site may provide suitable breeding habitat to support great crested newts (particularly the more southern of the two ditches). Two other ponds are present within 500m of the site (located approximately 250m west of the site, within the Police Headquarters, and 450m south of the site). It was not possible to access these ponds and assess their potential to support great crested newts.

Swallows were noted flying above the amenity grassland present in the Golf Course to the north of the site.

An orchid (species not identified) was noted within the semi-improved grassland sports ground in the northern part of the site.

No other field evidence of legally protected species was identified.

#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The habitats present within the site are of negligible nature conservation value with only semi-improved grassland and species poor hedgerows). However if following further survey work great crested newts are found to be using the habitats within this site for foraging, commuting and/or resting the nature conservation value of the site will increase to local importance.

### Potential Ecological Impacts:

Potential ecological impacts include the loss of semi-improved grassland (part which supports orchid species) and possible loss of species poor hedgerows and a mature oak with the potential to support roosting bats. The loss of these habitats will have a detrimental impact on any great crested newts using these habitats within the site for foraging, commuting and/or resting. There are also potential impacts on the water quality of the two drainage ditches within the site. The overall works are likely to have a minor ecological impact.

#### Potential mitigation:

- Retention of the mature oak tree present in the south-eastern corner of the site with the potential to support roosting bats;
- Retention of grassland field which supports the orchid species. If this area of grassland is to be altered or lost, the translocation of any orchids present should be undertaken (this is good practice in relation to the conservation of biodiversity).
- Strict adherence to Environment Agency's Pollution Prevention Guidelines as working in close
  proximity to the two drains present within the site. These measures will help to prevent detrimental
  impacts on water quality of these watercourses whilst the site is constructed.
- Closed surface water drainage system within the design of the facility and the use of silt traps and Sustainable Urban Drainage Systems (SUDS) best practice;
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### **Opportunities for enhancement:**

• The drainage ditch present within the southern part of the site could be enhanced at its eastern end, where the channel has become choked with mud and silt. This part of the ditch could be dug out to allow water to flow freely within the ditch. This **must not** be completed until it has been confirmed whether great crested newts are present or absent from this ditch.



### Recommended further ecological work/surveys:

- Bat surveys on the mature oak tree in the south-eastern corner of the site if it is to be felled. This should include a daytime survey of the tree using an endoscope, a mirror on a stick, a set of ladders and a torch. If appropriate, this should be followed by an evening emergence survey.
- Great crested newt presence/absence surveys on the two ditches present within the site and all
  ponds within 500m of the site. This should include presence/absence surveys of the four
  waterbodies with records of great crested newts within them and assessment of the two ponds
  located 250m west (within the Police Headquarters) and 450m south of the site to establish their
  potential to support breeding populations of great crested newts. If either of these ponds are found
  to have the potential to support great crested newts presence/absence surveys of these
  waterbodies should be completed prior to work beginning on site.
- Orchid surveys of the entire site between May and July to determine if any other species of orchid are present at the site and locate any orchids which need to be translocation.
- If works are to directly impact the channel of the two drains within the site it is recommended that water vole are undertaken.

#### Legal and policy implications:

- If bats are found to be roosting within any trees to be felled a development licence will be required from Defra. Further mitigation will be required to compensate for the loss of roosting habitat.
- If great crested newts are found to be using any of the ponds present within 500m of the site a great crested newt development licence will be required from Defra. Further mitigation will be required to prevent the injury or death of any great crested newts present within the site and to compensate for the loss of any suitable terrestrial habitat.
- It is recommended that if water voles are present on the either watercourse within the site a method statement for works is compiled by an ecologist. This will help minimise disturbance to any water voles present and protect their habitat from damage and destruction.

The Nature Conservation policies in the West Wiltshire District Council Local Plan that are potentially relevant to this site include:

• Policy C7

Phase 1 Habitat Map



Number	Target Notes
1	Large factory buildings constructed from metal sheeting. Pitched roofs (felt) are in good condition. Low bat potential.
2	Drainage ditch. Almost dry with a very silty and muddy substrate. Steep banks 30cm high, grass covered. Some rush also lines the ditch. It is covered with vegetation (bramble) in places
3	Area of concrete
4	Area of rough grassland
5	Temporary amphibian newt fencing - suggests great crested newts may be present in area.
6	Red asphalt track
7	Orchid (1) - maybe common spotted but does not have black spots on leaves.
8	Grassland field used for pasture.
9	Pond - has been filled in.
10	Wet ditch at field boundary. Water very stagnant, not moving. Algae in water. Muddy substrate. Surrounded by nettles ad cow parsley and some great willowherb, bramble, rush and reed mace present. The ditch is fenced off from the field.
11	Mature oak tree. Low to medium bat potential
12	Derelict building with no roof. Only half of the walls remain.
13	One way newt fencing appears to be present around the new roundabout.
14	Unmown grass roadside verge. A few planted trees (young cherry) are also present
15	Swallows seen feeding over grassland
16	Pond located within grounds of golf course - could not access.



### **Protected Species and Designated Sites**

## Site: WW7 LaFarge Cement Works

### Landscape and Visual Survey

### WW7 LaFarge Cement Works

### 1. Introduction

This large site is situated to the north-east of Westbury adjacent to a railway line running along the foot of a chalk escarpment. The site includes an active cement works and area with planning permission for the development of a strategic Waste Transfer System.

### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Avon Vales Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture.
- Wide river corridor with ancient pattern of flood meadows but much influenced by modern development.
- Wide views across the area from the higher surrounding chalk downs.
  - Away from the built-up areas, the land cover is predominantly agricultural with a mosaic of arable and pasture uses.
  - The hedge cover on the arable land is often poor. However in the pasture areas, especially the lower lying meadows around the many small streams, the hedges are frequent and overgrown. Hedgerow trees are also characteristic.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Trowbridge Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on Clay.
- Mixed arable and pastoral land use with pasture concentrated around the water courses.
- Variable field pattern with network of full hedgerows and mature hedgerow trees.
- Presence of streams marked by lines of willows and crossed by modest bridges.
- Small number of meadows of neutral and unimproved grassland.
- Roads largely minor and rural with a few trunk roads and sections of motorway.
- Views vary from semi-enclosed by intact hedgerows, riparian vegetation and woodland blocks to more open with views to the rising scarps of the chalk uplands.
- A largely peaceful, rural landscape.
- Semi-enclosed landscape allowing intermittent views to the steep scarps of the Chalk uplands.

The condition of the *Rolling Clay Lowland* is judged by WCC to be generally 'good' however the strength of character is judged to be 'moderate' with the varied land use and urbanising influences having weakened it. The overall strategy is to 'conserve' the peaceful rural landscape and strengthen its character to minimise the urbanising elements.

### District Landscape Character Assessment: N/A

### Landscape Designations and policies:

- Special landscape area
- Public footpath to north-west of site



• Public footpath through north-east edge of site

### Local Authority Consultation:

West Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

### 3. Baseline Landscape Character and Features: Site Survey

The site is located on flat floodplain at the foot of a series of chalk downlands which rise up to the south. A number of claypit ponds lie in close proximity to the site and a tributary of the River Biss runs to the north east forming part of the site boundary. The site is heavily dominated by its industrial character, with a large chimney forming a local landmark visible from a wide distance. At its western end the site consists of a formal driveway, lined by an avenue of mature chestnut tees. This opens out into a wider area, with the Waste Treatment Facility site to the north-east. The site has strictly controlled access, being a private facility with health and safety risks, however a public footpath skirts its north-eastern edge. This has a hedgerow running adjacent to it, which helps screen the site during the summer months.

An established rail link forms the southern boundary of the site, and immediately beyond this is an employee recreation facility including golf course and fishing lake. The site is well screened from this area with mature riparian woodland vegetation. Further south, the chalk escarpment rises from 70m AOD to 223m AOD and includes the Westbury White Horse carved on its face. The Wessex Ridgeway long distance path runs along the top of this hill and the site would be a noticeable feature when viewed from this area, albeit forming part of a wider long distance panorama.

To the north of the site, the hamlet of Heywood has a remote rural character, with a narrow rural lane meandering across the floodplain. A number of residential properties are located in this area, although hedgerow vegetation restricts views towards the site.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The site is physically and visually dominated by the cement works, which contrasts starkly with its rural context. Given the poor condition of the site and degree of existing visual intrusion, it is well placed to accept change. The strong structure of floodplain hedgerows help to screen the site in its immediate proximity.

### 5. Potential Landscape Impacts

- Loss of mature on-site vegetation such as the horse-chestnut avenue
- Harm to geomorphology and biodiversity of tributary
- Loss of footpath route

### 6. Potential Landscape Mitigation Measures

- Ensure existing vegetation is protected
- Retain/divert footpath to ensure that recreational access between Park Lane and Horse Croft Farm is maintained
- The following 'Broad Management Objectives' for the Rolling Clay Lowland landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Consider strengthening the enclosed character of the landscape and screening views to intrusive urban edges through nurturing existing and planting new woodland.

### 7. Visual Receptors



Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Visitors to Westbury Hill	High	No change	<ul> <li>Retain and manage existing vegetation</li> </ul>
Residents on Park Lane	High	No change	screens
Users of LaFarge leisure facilities to south of site	Medium	No change	<ul> <li>Additional planting around site boundary to reduce</li> </ul>
Users of railway to south of site	Low	No change	visual impact for footpath users
Users of footpath to north-east/through site	High	No change – slight adverse	
Users of footpath to north-west of site	High	No change	
Users of A350 (winter views only?)	Low	No change	

### 8. Summary: Residual Landscape and Visual Impacts

Given the large scale of the site, much of it is relatively well concealed during the summer months at least, by the strong hedgerow boundaries within its immediate vicinity. The site would be most visible to recreational visitors to Westbury Hill to the south. Given its existing weak rural character, any changes to the site would have little impact, either in landscape or visual terms. Indeed with additional native woodland buffer planting, there may be the opportunity to enhance parts of the site in visual or landscape terms.

### 9. Recommended further landscape and visual surveys

- Visual survey from footpaths, including Wessex Ridgeway/Westbury Hill (summer and wintertime)
- Full walk-over survey of site (access restricted at time of visit)

## **Air Quality Report**

### WW7 LaFarge Cement Works, 25 ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is situated within the Lafarge Cement Works estate and adjacent to a landfill site off the A350 from Trowbridge to Westbury.



Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>10</sup> sources within 1km of the site: road traffic on the A350, B3098 and minor roads; gas/oil/solid fuel space heating for buildings; Blue Circle Industries Plc (1,3-butadiene, Benzene, Benzo(a)pyrene, CO, SO<sub>2</sub>, PM<sub>10</sub>, Pb, VOCs), Westbury Phase II operated by Viridor Waste Disposal Ltd (Benzene, CO, NO<sub>x</sub>, PM<sub>10</sub>, VOCs) and Westbury Power Plant operated by Viridor Waste Management Ltd (Benzene, CO, NO<sub>x</sub>, PM<sub>10</sub>, VOCs).

<sup>&</sup>lt;sup>10</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



- 1.3 Estimated background annual mean levels of priority pollutants<sup>11</sup> for 2005 and comparable standards<sup>12</sup> are: 12.1µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 9.51µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 20.5µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: residential properties in Frogmore to the south west and scattered properties mainly consisting of farms. Bratton Downs SSSI just touches the 1km border south east of the site however the designation is for geology and not potentially sensitive habitat. The Blue Circle Cement Works Clay Pit is classified as a Regionally Important Geological Site.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	<b>PM</b> <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential between 100 and 250m	3 (3)	2 (2)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential beyond 250m	2 (2)	2 (2)	N/A	N/A	2 (2)	1 (1)	2 (3)

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

### 3. MITIGATION

3.1 Measures to control emissions of local air pollutants (gas engines), and of dust, odour and bioaerosols should be required. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 Air quality risks for the intended use are moderate to high. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bio-aerosols are recommended. Detailed assessment should be undertaken.

<sup>&</sup>lt;sup>11</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>12</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)

## Site: WW9 Northacre Trading Estate, Westbury

### Landscape and Visual Survey

### WW9 Northacre Trading Estate, Westbury

### 1. Introduction

The site lies on the north-western fringe of Westbury, fronting onto Storridge Road. It includes a new trading estate, Northacre Trading Estate, and part of the Brook Lane Trading Estate. To the south of the site there is open countryside whilst to the north, the West Wilts Trading Estate contributes to the general industrial/urban fringe character of the area. A number of residential properties on Storridge overlook the site along its north-eastern boundary.

### 2. Baseline Landscape Character and Designations: Desk Survey

**Countryside Character Volume 8 South West (Countryside Agency):** Landscape Character Area: Avon Vales Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture.
- Wide river corridor with ancient pattern of flood meadows but much influenced by modern development.
  - Away from the built-up areas, the land cover is predominantly agricultural with a mosaic of arable and pasture uses.
  - The hedge cover on the arable land is often poor. However in the pasture areas, especially the lower lying meadows around the many small streams, the hedges are frequent and overgrown. Hedgerow trees are also characteristic.

### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Trowbridge Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on Clay.
- Mixed arable and pastoral land use with pasture concentrated around the water courses.
- Variable field pattern with network of full hedgerows and mature hedgerow trees.
- Small number of meadows of neutral and unimproved grassland.
- Views vary from semi-enclosed by intact hedgerows, riparian vegetation and woodland blocks to more open with views to the rising scarps of the chalk uplands.
- A largely peaceful, rural landscape.

The characteristics listed are typical of the countryside to the south-west of the site, which is currently highly visible. As the site is increasingly developed, this visual connection with its rural surroundings will diminish, and its industrial/commercial character predominates.

The condition of the Rolling Clay Lowland is judged by WCC to be generally 'good', in part due to its areas of mixed pastoral and arable farmland with intact hedgerows and woodlands. However its varied farming, coniferous planting and influence of prominent urban edges etc give it a 'moderate' strength of character. The overall management strategy is to 'conserve' the peaceful rural landscape with its hedgerow network, rich riparian vegetation, remnant meadows for example, and to 'strengthen' its character through measures to minimise the urbanising influence of large towns, new settlement and transport routes retaining or enhance their biodiversity and historic character of farms.

### District Landscape Character Assessment: N/A

### Landscape Designations and Rights of Way:

- Special Landscape Area
- Footpath immediately to west of site
- Footpath along Brook Drove

### Local Authority Consultation:

West Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

### 3. Baseline Landscape Character and Features: Site Survey

This is a large, flat site on the edge of a floodplain, with the Biss Brook running close to/along the western site boundary. Until recently much of the site was a greenfield agricultural site, but the Northacre Trading Estate is currently being constructed, with a new access roundabout and road, signage and lighting installed and a number of industrial units established, including a large milk processing dairy. Much of the trading estate currently consists of vacant plots, and a link road connecting the site to another industrial estate to the south-west, Brook Lane Trading Estate, is currently blocked. The site currently is semi rural in character, with open views out across the floodplain to the south and some remaining farmland in the southern corner of the.

The site also includes the northern part of the Brook Lane Trading Estate and a sewage works. This part of the site is a well-established industrial estate with a mixture of large and small units. It also includes three residential properties fronting onto Brook Lane. This part of the site differs in character to the Northacre Trading Estate, having a more enclosed, urban character. A number of detached, two-storey suburban houses face the Trading Estate on Storridge Road.

There is little important vegetation on the site, although some field boundary hedgerows remain. Mature trees front the existing Storridge Road/Brook Lane plot. Vacant plots include disturbed soil and include some semi-improved grassland and scrub.

### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: Poor Capacity to Accept Change: Medium – High

Given its partial greenfield character and open views to the west, some areas of the site will be less able to accept change, however given its allocation for employment, this character will be changing in the coming months and years, reducing the significance of its effects on the landscape.

### 5. Potential Landscape Impacts

- Erosion of rural floodplain character
- Loss of hedgerow vegetation

### 6. Potential Landscape Mitigation Measures

- 15m wide woodland planting buffer along the western site boundary if it fronts onto open countryside, with high proportion of riparian species such as willow and alder
- Bund with native tree and hedgerow planting around site boundary
- Location of facility away from Storridge Road
- Retain existing trees and hedgerows on site
- The following 'Broad Management Objectives' for the Rolling Clay Lowland landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - o Retain and manage the dense hedgerow network and nurture new hedgerow trees.
  - Introduce new tree planting along watercourses using typical riparian species such as alder and willow.



- Minimise small-scale incremental change such as signage, fencing or improvements to the road network, which could change the rural peaceful character of the landscape.
- Consider strengthening the enclosed character of the landscape and screening views to intrusive urban edges through nurturing existing and planting new woodland.

### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor (assuming North Acre Trading Estate developed for Employment use in any event)	Potential Visual Mitigation Measures
Workers on North Acre Trading Estate	Low	No change	Retain existing vegetation and plant
Workers on West WiltsTrading Estate	Low	No change	additional street trees and hedges to soften
Workers on Brook Lane Trading Estate	Low	No change	views into site
Residents on Storridge Road	High	No change – slight adverse	Plant 15m woodland buffer along western
Users of Storridge Road	Low	No change – slight adverse	boundary of site
Public footpath to west of site	High	No change – slight adverse	Avoid locating facilities close to residential
Users of Brook Lane	Low	No change	properties or western
Users of footpath to south-west of site (winter)	Medium	No change – slight adverse	edge of site

### 8. Summary: Residual Landscape and Visual Impacts

Given the size and diverse character of this site, it is not possible to make firm conclusions on the significance of the landscape and visual impact, however given that the site is allocated for Employment use and will ultimately be developed, the residual impact is likely to be slight. Given the urban fringe location of the site and proximity of some residential properties and footpaths however, it is essential that sensitive site planning and visual mitigation measures are incorporated.

### 9. Recommended further landscape and visual surveys

- Winter-time footpath surveys to south-west of site
- Night time visual survey

### **Noise Assessment**

### WW9 Northacre Trading Estate, Westbury (Inset Map 20)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Northacre Trading Estate to assess the site's suitability for a waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 The most noise sensitive receiver in proximity to the site was deemed to be Brook Farm, located to the south west of the industrial estate at the end of Brook Lane. It was not possible to access this location however, and an alternative position representative of this location was chosen. Background noise level measurements were taken at the site boundary where an access road within the site meets Brook Lane. This was the most representative location accessible for the undertaking of measurements. A fence currently prevents access to Brook Lane from the site.
- 1.3 There are a number of properties located on Storridge Road and The Ham which are closer in proximity to the site but traffic along these roads would likely offer some masking noise thus reducing the sensitivity of these receivers.
- 1.4 The site currently contains small businesses including small manufacturing and engineering businesses and is understood to contain a sewage works. The site is flanked to the east by The Ham and properties located on Storridge Road, to the south-east by Westbury Train Station and Brook Lane Industrial Estate, to the west by fields with a small number of farms and to the north by West Wiltshire Trading Estate. The local railway line is located approximately 150m from the south-east boundary of the site.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 13<sup>th</sup> July 2006. The weather was slightly overcast, hot and dry. The current noise climate within the site predominantly consists of industrial noise such as drilling and sawing with traffic noise and rail noise from nearby sources. The noise climate at the most sensitive receiver consists predominantly of noises emanating from the businesses located within the Northacre Trading Estate, environmental sources such as birdsong, insects, wind in tress, etc and noise from nearby rail traffic including slow moving trains and train horns. Traffic noise from nearby roads is perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	10:55	61.2	79.2	43.3
MEASUREMENT 2	11:00	46.0	60.3	42.1
MEASUREMENT 3	11:05	50.3	70.7	42.2
AVERAGE		56.9		42.6



2.3 The average background noise level at the most sensitive receiver was measured as 42.6dB  $L_{A90}$ .

### 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at Northacre Trading Estate include Energy from Waste, Mechanical Biological Treatment, In-Vessel Composting, Local Recycling, Waste Transfer Station, Materials Recovery Facility and Household Recycling Centre. The boundary of the site area proposed for use passes within 50m of the most sensitive receiver and a similar distance to properties located on Storridge Road. Given the background noise level, L<sub>A90</sub> of 42.6dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 940m away from this receiver depending on the proposed activities of the development. It may possible for the development to be located closer to other nearby receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Minimum separation distances may be achievable within the site boundary depending on the exact use of the site and background noise levels at other nearby sensitive receivers. Indications are that this site would potentially be suitable for the proposed development depending on these factors. It is likely that mitigation measures would be required at this site.
- 3.4 To confirm this situation however would require further investigation. Consideration must be paid to the varying nature of the noise climate surrounding the site due to the proximity of some noise sensitive receivers to roads and others relative isolation. This, combined with further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

### WW9 Northacre Trading Estate, Westbury, 37 ha

### 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located to the northwest of Westbury on the Northacre Trading Estate.





- 1.2 Air pollutant<sup>13</sup> sources within 1km of the site: road traffic on the B3097 and minor roads; gas/oil/solid fuel space heating for buildings; existing landfilling and waste management operations in the area (additional potential emissions of dust, bioaerosols, NH<sub>3</sub> and odour); sewage treatment works (additional potential emissions of bioaerosols, NH<sub>3</sub> and odour).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>14</sup> for 2005 and comparable standards<sup>15</sup> are: 12.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 10µg/m<sup>3</sup> NO<sub>2</sub>

<sup>&</sup>lt;sup>13</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub> <sup>14</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates

<sup>&</sup>lt;sup>14</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>15</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



(standard  $40\mu g/m^3$ );  $18.9\mu g/m^3 PM_{10}$  (standard  $40\mu g/m^3$ ). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.

1.4 Potentially sensitive receptors within 1km: scattered residential properties, and residential properties of Frogmore and Eden Vale. There are four County Wildlife sites within 1km: Fairwood Road Railway Line, Hawkeridge Lane and two parcels land comprising Westbury Lakes. Westbury Ironstone Quarry SSSI is designated for geology and not potentially sensitive habitat.

### 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	3 (3)	2 (2)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential between 100 and 250m	3 (3)	2 (2)	N/A	N/A	3 (3)	1 (1)	3 (3)
Residential beyond 250m	2 (2)	1 (1)	N/A	N/A	2 (2)	1 (1)	2 (2)
Ecological designation within 1km of site (Fairwood Road Railway Line, Hawkeridge Lane, Westbury Lakes)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

### 3. MITIGATION

3.1 Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bio-aerosols should be required. See 'Air Emissions Mitigation Options' technical note.

### 4. CONCLUSIONS

4.1 Air quality risks for the intended use are moderate to high. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bioaerosols recommended. Detailed assessment should be undertaken.

## **Ecological Report**

### WW9 Northacre Trading Estate, Westbury

### DESK STUDY INFORMATION

### Statutory designated nature conservation sites within 1km and non-statutory sites within 500m:

Westbury Lakes (2 parcels) County Wildlife Site approximately 400m east but separated by live railway line and other industrial areas.

### Records of notable species within 500m: (legally protected, BAP, RDB)

There is one notable record within the site of nodding bur-marigold (a County rare plant) in the northern part of the site. There are records of water vole along Biss Brook which runs along the western boundary of the site. There are also several records of bats within 500m (unknown whether these records are roosts records) and also of grass snake and slow-worm particularly in the vicinity of the railway line to the south.

Hare's-foot clover, a county rare plant, is present within West Wiltshire Trading Estate which is adjacent to Northacre Trading Estate.

### Details of surveys already undertaken (where known):

None identified.

### FIELD SURVEY INFORMATION

### General Habitat: (ref Phase 1 habitat plan)

Large industrial estate containing several vacant lots which support neutral semi-improved grassland, scrub, hedgerows and soil and rubble piles. Farmland is present in the southern corner of the site (greenfield).

### Field Evidence and suitable habitat for notable species:

Red deer observed within the site.

Several badger setts (including at least one main sett), badger tracks and badger foraging areas identified across the site on vacant lots, particularly to the south and around the sewage works.

Orchids (pyramidal orchids) growing within grassland on a vacant lot in the northern-eastern part of the site.

Ponds and habitat with low potential for great crested newts present in the northern part of the site.

Some habitat suitable for reptiles although none observed during the survey.

### OTHER INFORMATION

None identified

### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

### Nature conservation evaluation:

The developed parts of the site are generally of negligible nature conservation value. However, the undeveloped parts of the site support species such as badger, common birds and have the potential to support amphibians and reptiles and therefore have local value.

### Potential Ecological Impacts:

- Damage, destruction or disturbance to badger setts and foraging areas
- Water quality impacts on Biss Brook (and subsequent impacts on species using the Brook such as water voles)



• Potential damage/destruction of ponds and habitat used by great crested newts

### Potential mitigation:

- Further badger surveys and exclusion and closure of setts under licence prior to development.
- Further amphibian surveys and mitigation according to results of the survey.
- Adherence to Environment Agency Pollution Prevention Guide notes during construction when working close to water courses, particularly PPG01, PPG03, PPG05, PPG06 and PPG21.
- No development zone within 10m of Biss Brook.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

### Residual impacts:

Loss of badger territory.

#### Opportunities for enhancement:

Management of some of the scrub/vegetation overhanging Biss Brook as parts of the Brook are very overgrown and shaded.

### Recommended further ecological work/surveys:

- Badger surveys in winter to map setts and territory (tall ruderal vegetation would make mapping at other times difficult). English Nature disturbance licence would be required for works within 30m of sett entrances. Provision of artificial setts may be required.
- Reptile surveys, particularly on areas in vacant lots where there are rubble piles and a mix of spoil heaps, rubble and shorter grassland/ruderal species. Mitigation would be required as necessary depending on results which may include exclusion of reptiles from development areas and provision of alternative habitat (refuges, hibernacula, basking areas).
- Great crested newt surveys on ponds in northern part of the site.
- Botanical surveys of area around sewage works (particularly for hare's-foot clover) and retention of floristically rich areas

### Policy and Legal Implications

If badger setts are present within 30m of works a badger disturbance licence from English Nature is likely to be required.

If great crested newts are present in water bodies within 500m of any development then a Defra licence may be required.

• Relevant policies from the West Wiltshire District Local Plan, 1<sup>st</sup> Alteration (June 2004) are:

C1 Countryside Protection

C7 Protected Species C9 Rivers

Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Drainage lagoon (no access for detailed inspection)	
2	Semi-improved grassland field with woodland edge containing a small unmanaged pond approx 15m x10m covered in duckweed and heavily shaded by trees. A wet open ditch runs through the field from the pond. Evidence that water level has lowered significantly in the pond quite recently.	Pond surrounded by common nettle and willows, hazel, common hawthorn. Soft rush and canary reed grass in very small patches now outside of water (due to reduction in pond size). Ditch contains canary reed grass, lesser reed mace, reed sweet grass, water dropwort, horsetail, false fox sedge, great willowherb.
3	Unused development plots containing lots of ruderals and rubble piles.	
4	Dry drainage lagoon with steep grassy slopes (no aquatics)	
5	Small sewage treatment works with managed grassland within fence surrounded by scrub. Grassland had the potential to be fairly rich in species but no access for detailed inspection.	
6	Undeveloped plot covered with mosaics of semi-improved grassland, ruderals and scrub.	Pyramidal orchids
7		4 hole badger sett, very recently dug, lots of bedding (main sett probably used for breeding). In same area was a day-bed and latrines and very clear paths between this sett and one at target note 8. Very difficult to see the sett due to tall ruderals.
8		2 hole badger sett in hedgerow, no signs of recent occupation but guard hairs found in the entrance.



### **Protected Species and Designated Sites**

## Site: WW15 Warminster Business Park

### **Noise Assessment**

WW15 Warminster Business Park (Inset Map 56)

### 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at Warminster Business Park to assess the site's suitability for a waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 Background noise measurements were undertaken at the most noise sensitive receiver in proximity to the site. In this case the most noise sensitive receiver was deemed to be the row of houses located to the east of the site at Arn View. There are a number of properties located in closer proximity to the site but these are positioned adjacent to the B3414 which would offer some masking noise thus reducing the sensitivity of these receivers.
- 1.3 The site currently contains a local household recycling centre and other small businesses including small manufacturing and engineering businesses. The site is flanked to the west by the B3414 and to the east by the properties at Arn View. The local railway line is located to the east and the A350 approximately 500m to the north.

### 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 5<sup>th</sup> July 2006. The weather was overcast and damp with light drizzle at times. The current noise climate within the site predominantly consists of industrial noise such as the humming of generators, drilling etc. The noise climate at the most sensitive receiver consists predominantly of noise from environmental sources such as birdsong, insects, and wind in tress, etc. Noise from Warminster Business Park and traffic noise from nearby roads are perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	11:41	48.5	63.4	44.2
MEASUREMENT 2	11:48	59.9	76.9	43.1
MEASUREMENT 3	11:53	47.8	58.4	42.4
AVERAGE		55.7		43.2

2.3 The average background noise level at the most sensitive receiver was measured as 43.2dB  $L_{A90}$ .

### 3. SITE SUITABILITY

3.1 The proposed use for the site at Warminster Business Park is for Local Recycling, Waste Transfer Station and Materials Recovery Facility. The boundary of the site area proposed for



use passes within 50m of the most sensitive receivers. Given the background noise level,  $L_{A90}$  of 43.2dB at the most noise sensitive receiver it is expected that any new waste development at the site would need to be located approximately 280m away from these receivers, at a minimum.

- 3.2 These calculations are based on any plant being located being out of doors. Should the facilities be housed within a building then a closer proximity may be achieved.
- 3.3 Given that the minimum separation distance can be achieved within the site boundary and the current use of the site, indications are that this site would potentially be suitable for the proposed development.
- 3.4 To confirm this situation however would require further investigation. Consideration must be paid to the varying nature of the noise climate surrounding the site due to the proximity of some noise sensitive receivers to roads and others relative isolation. This, combined with further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

### WW15 Warminster Business Park, 8.6 ha

#### 1. **BASELINE CONDITIONS**

1.1 The site (Figure 1.1) is to the north of Warminster on an existing industrial estate. The industrial estate includes a Household Recycling Centre. There are new residential areas to the east of the site and new commercial premises to the west at Bath Road Business Park.



Figure 1.1 – The site and its surroundings

- Air pollutant<sup>16</sup> sources within 1km of the site: road traffic on the A36/A350, B3414 and minor 1.2 roads. Other than surrounding agricultural areas, there are no notable sources of bioaerosols and ammonia.
- Estimated background annual mean levels of priority pollutants<sup>17</sup> for 2005 and comparable 1.3 standards<sup>18</sup> are: 13µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 10.2µg/m<sup>3</sup> NO<sub>2</sub>

<sup>&</sup>lt;sup>16</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub> <sup>17</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates

are from NETCEN, website www.airquality.co.uk/archive/index.php

<sup>&</sup>lt;sup>18</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



(standard 40µg/m<sup>3</sup>); 18.2µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.

1.4 Potentially sensitive receptors within 1km: scattered residential properties to the north and Warminster residents to the south, including schools and a hospital. There are a number of County Wildlife sites within 1km: Arn Hill, Warminster Verge, Coldharbour Meadow and Norridge Wood.

#### POTENTIAL IMPACTS (WITHOUT MITIGATION) 2.

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	1 (1)	2 (2)	N/A	N/A	N/A	2 (2)	2 (2)
Residential beyond 100m	1 (1)	1 (1)	N/A	N/A	N/A	1 (1)	2 (2)
Potentially sensitive ecology within 1km of site (Arn Hill, Warminster Verge, Coldharbour Meadow and Norridge Wood)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A
Notes:							

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

#### **MITIGATION** 3.

3.1 Dust and odour control measures are recommended. See 'Air Emissions Mitigation Options' technical note.

#### 4. CONCLUSIONS

4.1 Air quality risks for the intended use are low to moderate without mitigation. Dust and odour mitigation is recommended. Detailed assessment should not be necessary.

## **Traffic and Transport Review**

### WW15 Warminster Business Park

### Proposed site usage

The proposal is for Recycling/ Waste Transfer Station/ Materials recovery Facility

### **Existing/Potential Access**

The site lies to the north of Warminster on an existing industrial estate with existing class B uses. It is assumed that this facility will not be for access by the public however there is an existing household recycling centre on the estate.

The estate is accessed directly off the B3414 0.5km south of the A36/A350 Warminster – Westbury interchange. There are two access points to the estate, Furnax Way to the south and Roman Way to the north. The B3414 is subject to a 60 mph speed limit from the A36/A350 interchange roundabout junction to just north of the access at Roman Way. The access at Roman Way is a mini roundabout with coloured surfacing to reduce the circulatory carriageway width. The alternative site access is via a priority T junction at Furnax Way.

### Impacts on Local Settlements

The site is located on the fringe of the residential areas of Warminster. The 7.5 (T) environmental weight restrictions through Warminster will minimise the impacts on the residential amenity in these areas and in particular the school that fronts the road. Providing the 7.5 (T) limit is adhered to the impact on Warminster is unlikely to be significant.

### On-site infrastructure

Being an existing industrial estate the on-site infrastructure is likely to be sufficient to accommodate any additional trips without blocking back to the local highway network

#### **Off Site Highway Network**

The observed traffic flows on the B3414 appeared low in off peak conditions. Due to the HGV restrictions through Warminster, any HGV access is currently, and should continue to be required to take access from the north via the A36/A350 Warminster Westbury Interchange. This is a large 4 arm roundabout with road side services (petrol filling station, hotel, fast food) that takes access from the B3414 and exits via the A350. There will be a need to assess the impact on this junction and the wider trunk road network in consultation with the Highways agency. This should take place once the proposed land use and scale of the facility has been finalised as there is significant variation in vehicle movements depending on the nature of work and mode of collection and transfer of waste.

#### Constraints

All HGV traffic from/to the site must gain access from the north via the A36/A350 interchange. Any increase in use of the junction related to the site is likely to be negligible however an assessment may be required to ensure the facility will not have a 'material impact' on the local highway network. **Mitigation** 

No measures are deemed necessary at the A36/A350 junction as any increase in use of the junction related to the site is likely to be negligible. Access through Warminster is unlikely to be desirable.

### Conclusion

This site is suitable, in traffic terms, for the proposed uses.



### Water (Quality and Environment) Assessment

### Site name – Warminster Business Park

NGR at centre of site – ST 866460 Location description – Immediately north of Warminster, close to the A350 Area of site (ha) - 13

### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact	Potential Risk Mitigation Measures	Likely Further Assessment Requirements
			Significance	(to be considered as appropriate)	
Water	Groundwater	Contaminate major aquifer	Medium/High	<ul> <li>Plan mitigation requirements during construction</li> </ul>	<ul> <li>Environmental management during construction</li> </ul>
		Contaminate Source Protection Zone	Medium/High	<ul> <li>Layout planning of site</li> </ul>	<ul> <li>Approach Environment Agency for</li> </ul>
	Surface water body	Contaminate adjacent watercourse (R Were)	Medium / High	Site traffic plan	monitoring requirements
		Impact on baseflow/runoff to watercourse	Medium	<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> </ul>	<ul> <li>Relevant licensing requirements (PPC) to be assessed</li> </ul>
				<ul> <li>Spill kits, bunded storage and designated liquid handling</li> </ul>	<ul> <li>Produce Working Plan for site</li> </ul>
				areas if site might accept liquids/hydrocarbons	<ul> <li>Review runoff treatment requirements</li> </ul>
				<ul> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> </ul>	<ul> <li>Baseline monitoring of adjacent surface water bodies may</li> </ul>
				Engineered liner system	<ul> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> </ul>
					<ul> <li>Assess current and historical impact of</li> </ul>

### Joint Waste Site Allocations Site Survey Report

# **ATKINS**

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Measures (to be considered a	Mitigation	Likely Further Assessment Requirements
					,	landuses on the site
		Flood event causes contamination of surface water and disruption of operations Flood zoning directly affects the area adjacent site	Medium	<ul> <li>Engineered floo mitigation</li> </ul>	d defence or	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Groundwater Abstraction point	Public water supply groundwater abstractions	Medium	<ul> <li>Refer to ground potential risk mit measures listed</li> </ul>	water/surface tigation above	<ul> <li>Check status of abstractions with Environment Agency</li> </ul>
	Surface water Abstraction point	No surface water abstractions	Low / Medium			<ul> <li>Approach Environment Agency for monitoring requirements</li> <li>Check availability of data of groundwater and surface water quality sampling locations from Environment Agency</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Impact designated ancient planted woodland, wildlife sites and Scheduled Ancient Monuments and Warminster Conservation Area	Low / Medium	<ul> <li>Refer to ground potential risk mit measures listed</li> <li>Management of material at site b</li> </ul>	water/surface tigation above windborne boundaries	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for requirements</li> </ul>
	Other adjacent landuses	The site is located close to mixed landuses including residential dwellings and major transport links (road and rail). Surrounding landuses are potential contamination sources.	Medium			

### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of Warminster Business Park has:

- Several/potential significant issues identified review further assessment requirements. Risk mitigation should be practicable to address some or most identified issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## **Ecological Report**

### WW15 Warminster Business Park

### DESK STUDY INFORMATION

### Statutory designated sites within 1km and non-statutory designated habitats within 500m:

Norridge Wood Wildlife Site: Located approximately 300m west of the site. Warminster Verge Wildlife Site: Located approximately 300m north-east of the site. Am Hill Wildlife Site: Located approximately 400m north-east of the site. Cold Harbour Meadows Wildlife Site: Located approximately 450m south of the site.

### Records of notable species within 500m: (legally protected, BAP, RDB)

Within the site there is one record of a serotine bat and one record of long-eared bats (on the western boundary near to Bath Road).

Within 500m of the site there are:

- Nine records of badger (all located over 90m from the site);
- Eight records of water vole (present on drains immediately north and south of the site);
- One record of an unidentified bat species;
- One record of a grass snake;
- Three bird records (including redshank, linnet and snipe);
- Two butterfly records (including Duke of Burgundy and adonis blue); and
- Two records of rare vascular plants in Wiltshire (including stinking hellebore and marsh willowherb).

Details of surveys already undertaken (where known): None known.

### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

All units currently present within the industrial estate are in use. Hard-standing and bare earth form the majority of the ground cover although there are areas of semi-improved grassland and tall ruderal present (marked on Phase 1 habitat map).

All the industrial units consisted of modern brick and/or metal buildings which are in good condition.

An old orchard was noted in the north-western corner of the site. Five mature trees were noted in the hedgerows to the north and west of this orchard (marked on the Phase 1 habitat map).

Two ponds are present within the site and two ponds are present outside the site (approximately 20m south and 30m south-east of the site). These waterbodies are marked on the Phase 1 habitat map. A small wet ditch is present in the south-western corner of the site.

#### Field Evidence of notable species:

The buildings present within the site have a low potential to support roosting bats. The five mature trees noted in the hedgerows to the north and west of the old orchard in the north-western corner of the site have a medium potential to support roosting bats.

Both of the ponds within the site have the potential to support great crested newts. Smooth newts were observed in the more southern of the two ponds on the site. The pond located 20m south of the site also has the potential to support great crested newts. Access was not possible to the pond located 30m south-east of the site to assess the suitability of the waterbody to support breeding populations of great crested newts.

No other field evidence of legally protected species was identified.

#### OTHER INFORMATION

None identified.



### EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES

#### Nature conservation evaluation:

The majority of the habitats present within the site are of negligible nature conservation value (areas of hard standing, bare earth, scrub, tall ruderal and semi-improved grassland).

### Potential Ecological Impacts:

There are no predicted impacts on the four designated sites of nature conservation value that surround the site.

Potential ecological impacts include the loss of semi-improved grassland and tall ruderal areas (areas of terrestrial habitat within 500m of the four ponds which are possibly used by great crested newts, if present, for resting or foraging). There may also be the loss of the old orchard and the five mature trees that surround this orchard. The overall works are likely to have a negligible ecological impact.

### Potential mitigation:

- Retaining the old orchard and five mature trees that surround this orchard to the north and west.
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

### **Residual impacts:**

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

### **Opportunities for enhancement:**

None identified.

### Recommended further ecological work/surveys:

- Bat surveys on any buildings if to be demolished. Although there was low potential for these buildings to support bats it is possible that a small number of bats could use the structures in the future as a temporary summer roost or feeding roost.
- Bat surveys on any semi-mature or mature trees to be felled (particularly of the five mature trees present to the north and west of the old orchard).
- Great crested newt presence/absence surveys on the two ponds present within the site and the pond present approximately 20m south of the site.
- Assessment of the pond present approximately 30m south-east of the site to establish their
  potential to support breeding populations of great crested newts. If found to have the potential to
  support great crested newts presence/absence surveys of this waterbody should be completed
  prior to work beginning on site.

### Legal and policy implications:

- If bats are found to be roosting within any trees to be felled or in any buildings to be demolished a development licence will be required from Defra. Further mitigation will also be required to compensate for the loss of any roosting habitat.
- If great crested newts are found to be using any of the ponds present within 500m a great crested newt development licence will be required from Defra and mitigation will be required to prevent the injury or death of any great crested newts present within the site and to compensate for the loss of any suitable terrestrial habitat.

The Nature Conservation policies in the West Wiltshire District Plan that are potentially relevant to this site include:

• Policy C7



Phase 1 Habitat Map


Number	Target Notes	Species Notes
1	Newly constructed brick and metal cladded industrial units.	Low bat potential
2	Newly constructed metal industrial units	Low bat potential
3	Old orchard	Many fruit trees present (young, semi-mature and mature)
4	Small ornamental pond 4 x 5. concrete lined. water murky lots of algae. Surrounded by tarmac on all sides, very little terrestrial habitat for newts. Pond not shaded at all.	Water lily and reed mace present in small amounts.
5	3 mature and semi-mature ivy covered ash trees	Bat potential
6	Mature ivy covered ash tree and dead ivy covered tree	Bat potential
7	Private residence, no access	
8	3 modern red brick buildings in hardstanding grounds	
9	Woodland strip, impenetrable (tall nettle and bramble)	Semi-mature trees including hawthorn, cherry, poplar and sycamore
10		Thistle, dock, cow parsley, mugwort, rosebay willowherb, nettle, bristly ox-tongue, teasel and creeping buttercup
11	No access in private land	
12	No access. Large lagoon	
13	Large area of standing water in area of waste ground with tall ruderals. Water clear, aquatic and emergent veg present, very little marginal. Looks as though manmade, gently sloping sides and shallow margins.	Floating sweet grass, pond weeds, some rush. dragon flies and damselflies observed.
14	No access to woodland. Surveyed from behind fence. Mostly young and semi-mature trees. If works are to occur nearby recommend detailed survey for badgers and bats.	Predominantly willow, ash, cherry, hazel, hawthorn, field maple.
15	Swallows seen flying	
16	Pond	



### **Protected Species and Designated Sites**



# Site: WW16 West Ashton Employment Allocation, Trowbridge

## Landscape and Visual Survey

### WW16 West Ashton Employment Allocation, Trowbridge

#### 1. Introduction

This is a greenfield site on the south-west edge of Trowbridge, on the West Ashton Road. It lies within the floodplain of the River Bliss and is currently used as grazing pasture, however it is allocated for employment uses in the West Wiltshire District Local Plan.

#### 2. Baseline Landscape Character and Designations: Desk Survey

Countryside Character Volume 8 South West (Countryside Agency): Landscape Character Area: Avon Vales

Key characteristics relevant to the site:

- Low ridges from which the frequent medium-size towns are viewed.
- Small woods.
- Wide views across the area from the higher surrounding chalk downs.
- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture.
- Wide river corridor with ancient pattern of flood meadows but much influenced by modern development.
  - Away from the built-up areas, the land cover is predominantly agricultural with a mosaic of arable and pasture uses.
  - The hedge cover on the arable land is often poor. However in the pasture areas, especially the lower lying meadows around the many small streams, the hedges are frequent and overgrown. Hedgerow trees are also characteristic.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Trowbridge Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on Clay.
- Mixed arable and pastoral land use with pasture concentrated around the water courses.
- Variable field pattern with network of full hedgerows and mature hedgerow trees.
- Presence of streams marked by lines of willows and crossed by modest bridges.
- Woodland blocks including some ancient woodland and wet woodland of high ecological value plus scattered mature trees, giving a semi-enclosed character allowing intermittent views to the steep scarps of the Chalk uplands.
- Small number of meadows of neutral and unimproved grassland.
- Scattered settlement of towns, small villages and farmsteads, many using vernacular materials of brick, half timber, stone, tiles and thatch.
- Roads largely minor and rural with a few trunk roads and sections of motorway.
- Views vary from semi-enclosed by intact hedgerows, riparian vegetation and woodland blocks to more open with views to the rising scarps of the chalk uplands.
- A largely peaceful, rural landscape, although this has been somewhat eroded around Trowbridge, with some large scale industrial buildings and modern housing estates, the A350 trunk road and a concentration of railway lines



WCC judge the condition of this landscape type to be 'good' due to its mixed farmland, intact hedgerows and woodland and hay meadows. Its strength of character is 'moderate', weakened by elements such as its varied land use and influence of prominent urban edges and transport corridors including noise and light pollution. The overall strategy for the landscape type is to 'conserve' the peaceful rural landscape with its hedgerow network, rich riparian vegetation, remnant meadows, ancient woodlands and pattern of small villages and scattered farmsteads and to 'strengthen' its character through measures to minimise the urbanising influence of large towns, new settlement and transport routes and to improve the woodlands and farmlands by encouraging management to retain or enhance their biodiversity and historic character.

#### District Landscape Character Assessment: N/A

#### Landscape Designations and Rights of Way:

- Special Landscape area
- Public footpath through the centre of the site, and across the floodplain to the east
- Public footpath to the west of the site across the River Biss floodplain before forking towards Lower Studley and Drynham
- Public footpath to the west of the site adjacent to the West Ashton Road to Longfield

#### Local Authority Consultation:

West Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

This is a flat, floodplain site, located close to the River Biss. It consists of a relatively large, open pasture field, currently used for cattle grazing. It is enclosed by a strong hedgerow on its south-western boundary adjacent to the West Ashton Road. Its south-western boundary is weaker, with large gaps. The northern boundary is marked by a narrow, meandering tributary of the River Biss with scattered waterside tree and scrub species. Beyond the site, the southern edge of Trowbridge is defined by mature tree belts which provide an enclosed semi-rural backdrop to the site during the summer months.

The site lies in an area well-served by public footpaths running through the floodplain and connecting with the residential neighbourhoods on the southern edge of Trowbridge and North Bradley. It is therefore important for providing recreational access to the countryside.

Approximately 2Km to the south-east of the site the village of West Ashton and A350 have elevated views across the countryside, although Biss Wood and Biss Farm help to screen views of the site.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

# Landscape Quality and Condition of site: High Capacity to Accept Change: Low-Medium

The site has a rural character, with strong hedgerow and tributary boundaries. In the summer it is well screened from the West Ashton Road, although is likely to be more visible during the winter months. The site is highly visible to users of a public footpath that runs through it. Residential properties on the south-east of Trowbridge, A350 and Biss Farm, are also likely to have views of it, especially in the winter. In its current condition, the use of this site would have significant landscape and visual effects and it therefore has a low capacity to accept change.

#### 5. Potential Landscape Impacts

- Loss of hedgerow along West Ashton Road
- Loss of pasture
- Erosion of open rural character of farmland and settings of tributary of River Biss, Biss Farm and southern edge of Trowbridge
- Loss of recreational access to countryside to residents of Trowbridge

• Harm to geomorphology of River Biss

#### 6. Potential Landscape Mitigation Measures

- Protection of tributary alignment and setting
- Protection of hedgerow adjacent to West Ashton Road
- Strengthening of hedgerow along south-eastern boundary of site.
- Planting of 15m wide woodland buffer around facility, linking it in to existing hedgerows/landscape pattern
- The following 'Broad Management Objectives' for the Rolling Clay Lowland landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - o Retain and manage the dense hedgerow network and nurture new hedgerow trees.
  - o Retain and manage hay meadows.
  - Introduce new tree planting along watercourses using typical riparian species such as alder and willow.
  - Minimise small-scale incremental change such as signage, fencing or improvements to the road network which could change the rural peaceful character of the landscape.
  - Consider strengthening the enclosed character of the landscape and screening views to intrusive urban edges through nurturing existing and planting new woodland.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor (assuming site developed for employment use in any event)	Potential Visual Mitigation Measures
Residents of Biss Farm/ Biss Barn B&B	High	No change	<ul> <li>Retain hedge along West Ashton</li> </ul>
Residents on A350/north-western edge of West Ashton	Medium	No change	<ul> <li>Road</li> <li>Plant 15m wide</li> </ul>
Users of West Ashton Road	Low	Slight adverse	strip of woodland around site
Residents of The Spinney/ south- eastern edge of Trowbridge	High	Slight adverse	<ul> <li>Locate facility away from residents and road users</li> </ul>
Users of right of way through site	High	Moderate adverse	Divert footpath
Users of public right of ways to west of site	Medium	No change – slight adverse	to south-east of site

#### 8. Summary: Residual Landscape and Visual Impacts

There is currently a greenfield site forming part of the setting of Trowbridge. Whilst it is relatively well screened by hedgerows and intervening off-site woodland vegetation in the summer months, it is likely to be visible to a wider audience in the winter. The site contributes to the semi-enclosed, rural floodplain character of the area and this would be significantly affected if the site were to be developed. It is important to consider that the site is already allocated for Employment use however, in the West Wiltshire District Local Plan, and could therefore be developed in any event. If this was to occur, the residual landscape and visual effects would be minimal, either resulting in no change or slight adverse effects.



#### 9. Recommended further landscape and visual surveys

• Winter and summer visual surveys from footpaths



## Water (Quality and Environment) Assessment

#### Site name – West Ashton Employment Allocation, Trowbridge

NGR at centre of site – ST 869571 Location description –Close to the A350, 2km east of Trowbridge Area of site (ha) - 13

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential Receptor	Potential Risk Issue	Potential Impact	Potential Risk Mitigation Measures	Likely Further Assessment Requirements
	•		Significance	(to be considered as appropriate)	
Water	Groundwater	Contaminate minor aquifer	Medium / High	<ul> <li>Plan mitigation requirements during construction</li> </ul>	<ul> <li>Environmental management during construction</li> </ul>
		Contaminate Source Protection Zone	Low	<ul> <li>Layout planning of site</li> </ul>	Relevant licensing requirements (PPC) to
	Surface water body	Contaminate adjacent watercourse (R Avon)	Medium/High	Site traffic plan	be assessed
		Impact on baseflow/runoff to watercourse	Medium	<ul> <li>Surface drainage plan</li> <li>Impermeable hardstanding</li> <li>Runoff collection system</li> <li>Spill kits, bunded storage and designated liquid handling areas if site might accept liquids/hydrocarbons</li> <li>Consider limiting types of waste handled at site e.g. solid wastes only, inert wastes</li> </ul>	<ul> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Baseline monitoring of adjacent surface water bodies may</li> <li>Monitoring boreholes (may be required</li> </ul>
				Engineered liner system	for obtaining operating permit)
		Flood event causes contamination of surface	Medium/High	Engineered flood defence or mitigation	Approach Environment Agency for requirements

Category	Potential Receptor	Potential Risk Issue	Potential Impact	Potential Risk Mitigation Measures	Likely Further Assessment Reguirements
	•		Significance	(to be considered as appropriate)	
		water and disruption of operations			Check flood risk assessment requirements
		Flood zoning affects the land immediately adjacent to this allocation			
	Groundwater Abstraction point	No recorded groundwater abstractions	Low	Refer to groundwater/surface potential risk mitigation measures listed above	Check status of abstractions with Environment Agency
	Surface water Abstraction point	No recorded surface abstractions	Low		Approach Environment Agency for monitoring requirements Check availability of data of groundwater and surface water quality sampling locations from Environment Agency
	Designated sites/ Adjacent sensitive landuses	No designated sites	Low	Refer to groundwater/surface potential risk mitigation measures listed above Management of windborne material at site boundaries	Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored Approach Environment Agency for
	Other adjacent landuses	Set on the periphery of Trowbridge, amongst agricultural land with some isolated farm dwellings	Low		requirements

#### Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of West Ashton Employment Allocation is:

- Several / potentially significant issues identified
   Risk mitigation is considered practicable to address most issues
- Review further assessment requirements 0

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.

## **Ecological Report**

#### WW16 West Ashton Employment Allocation, Trowbridge

#### **DESK STUDY INFORMATION**

#### Statutory designated sites within 1km and non-statutory or other notable habitats within 500m:

No designated sites within the defined range although Biss Wood Wildlife Site and Green Lane Wood and Meadow and Smith's Well Wood WWT Reserve are just beyond 500m east. These sites are known for their breeding bat colonies of international importance.

A tributary of the River Biss and its flood plain lies immediately adjacent to the northern and north-eastern site boundaries.

#### Records of notable species within 500m: (legally protected, BAP, RDB)

There are no records of notable species within the waste allocation site.

There are records of water vole, badgers and bats within 500m of the site although none of these records are immediately adjacent to the site. The closest badger record is approximately 115m north, the closest water vole record approximately 250m west. There is also a record for corncockle, a County rare plant approximately 70m west.

## Details of surveys already undertaken (where known):

None identified

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The entirely of the site consists of improved grassland (ex-arable land) which has recently been cut. An unmanaged hedgerow with semi-mature trees borders West Ashton Road along the south-western boundary. A fence forms the south-eastern boundary (beyond which is arable land) and the River Biss tributary forms the northern and north-eastern boundary.

#### Field Evidence of notable species:

Evidence of water voles was found along the entire stretch of the water course adjacent to the site, including latrines, feeding stations, feeding evidence on vegetation and burrows.

Mammal tracks were observed on the banks of the water-course which were not clearly defined but are likely to be from a mammal such as a badger or fox.

No other evidence of notable species was observed. No ponds were identified within 500m.

#### **OTHER INFORMATION**

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The site itself has negligible nature conservation value but is directly adjacent to the tributary of the River Biss which supports a population of water voles that could be important in a county context.

#### Potential Ecological Impacts:

The main potential impact would be on the water course and on water voles using the water course from: water pollution, lost of bank side habitat and disturbance from use of the site. If the development was to negatively affect the water course this could potentially have an adverse impact of moderate significance due to a decrease in numbers of, or loss of the water vole population.

The site itself is unlikely to be important to foraging species such as bats or badgers and, due to the presence of similar land in the immediate surrounds the loss of the habitat within the site boundary would have negligible impacts.



It is possible that lighting from the site could have an adverse impact on the local bat population.

#### Potential mitigation:

- Retain a buffer zone of at least 10m from the edge of the water course to both retain bank side habitat for water voles and reduce the impact from noise and visual disturbance to the species.
- Either avoid or minimise the use of night-time lighting, particularly flood lighting to reduce light spill to the wider countryside and avoid/reduce impacts on the local bat population and on water voles within the water course.
- Retain the hedgerow adjacent to the road as a visual screen and as a linear feature which some smaller mammals may use as refuge or commuting and common song birds may use as for nesting.
- Direct works to the water course should be avoided.
- Direct surface water discharge to the water course should be avoided. Any surface water should be collected within the site and directed through silt traps and oil interceptors or through a Sustainable Urban Drainage System.

#### **Residual impacts:**

If all of the mitigation measures are implemented the development should have negligible impact on nature conservation.

#### **Opportunities for enhancement:**

Some of the water course is clogged with grasses and has become shallow and wide. These small sections could be dug out; creating a better water flow and allowing a better plant cover to develop for water voles. The bramble which is heavily shading sections of the water course could be cut back and managed allowing light to reach the water course and marginal plant species to develop. Due to the sensitivity of water voles this work should be undertaken under a method statement prepared by a suitably experienced ecologist and supervised by an ecologist.

#### Recommended further ecological work/surveys:

It would be useful to conduct bat activity surveys to check whether the water course is used as foraging and commuting habitat by bats. If so then the lighting impacts could be greater and more measures would be required to avoid light spill from the operation of the site onto the adjacent water course.

#### Legal and policy implications:

Although water voles are not legally protected (although their habitat is) the quinquennial review of the Wildlife and Countryside Act 1981 was considering water voles for full legal protection which may mean that any development adjacent to the water course would have to be carried out under a development licence which would probably be issued by Defra. It is not known when the decision will be made regarding the change in the legal protection of water voles.

• Relevant policies from the West Wiltshire District Local Plan, 1<sup>st</sup> Alteration (June 2004) are:

C1 Countryside Protection C7 Protected Species

C9 Rivers

Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Badger dropping on bank next to bridge, silty, choked with vegetation, small brook, approximately 0.5m wide at base, restricted access for survey [overgrown]	fp, latrine and feeding station of water voles [burrows difficult to find due to dense vegetation, lesser pond sedge, P. arund, I. pseudo, spur reed, fools water cress, sweet grass,
2	Brook banks common comfry, A. sylv, R. rep, R. crisp, cut leaved cranesbill, H. sphon, D. glom, L. per, P. preten, willow,	L.corn, com bindweed, rus comfrey, H.luna,
3	along n boundary brook shallow and wider with $\boldsymbol{v}$ little water, large willows restricting flow	tadpole
4	next to farm bridge brook overgrown with bramble for approximately 25m	
5	unmanaged hedgeline next to busy local road	R. frut, black thorn, C. mon, A. campes, Rosa sp.,



### **Protected Species and Designated Sites**

# Site: WW17 West Wilts Trading Estate, Westbury

## Noise Assessment

### WW17 West Wilts Trading Estate, Westbury (Inset Map 19)

## 1. INTRODUCTION

- 1.1 A background noise survey was undertaken at West Wiltshire Trading Estate to assess the site's suitability for a waste treatment and recycling plant in relation to the potential noise impact.
- 1.2 The most noise sensitive receiver in proximity to the site was deemed to be Brook Farm, located to the north of the trading estate. It was not possible to access this location however, and an alternative position representative of this location was chosen. Background noise level measurements were taken at the gate to Brook Farm approximately halfway along the path leading from Victory Way to Brook Farm.
- 1.3 There are a number of properties located on Storridge Road and The Ham which are slightly closer in proximity to the site but traffic along these roads would likely offer some masking noise thus reducing the sensitivity of these receivers.
- 1.4 The site currently contains small businesses including small manufacturing and engineering businesses. The site is flanked to the south by The Ham and properties located on Hawkeridge Park, to the east by Hawkridge Road and a small number of properties located on this road, and to the east by Storridge Road and Storridge Farm. The local railway line is located approximately 500-600m from the east and south boundaries of the site.

## 2. NOISE ASSESSMENT AND RESULTS

- 2.1 Background noise measurements were undertaken on 5<sup>th</sup> July 2006. The weather was overcast and damp with light drizzle at times. The current noise climate within the site predominantly consists of industrial noise such as drilling and sawing and traffic noise from HGV's within the site. The noise climate at the most sensitive receiver consists predominantly of a mid-frequency humming type noise from industry located nearby within the trading estate and environmental sources such as birdsong, insects, wind in tress, etc. Noise from other sources within West Wiltshire Trading Estate and traffic noise from nearby roads are perceptible at this location.
- 2.2 Three consecutive background noise measurements were taken at the most sensitive receiver. Each measurement was 5 minutes in duration. The results can be seen in the table below.

SAMPLE	START TIME	LAEQ	LAMAX	LA90
MEASUREMENT 1	13:25	43.2	53.2	41.3
MEASUREMENT 2	13:30	56.3	70.1	42.5
MEASUREMENT 3	13:35	42.6	58.5	41.4
AVERAGE		51.9		41.6



2.3 The average background noise level at the most sensitive receiver was measured as 41.6dB  $L_{A90}$ .

## 3. SITE SUITABILITY

- 3.1 The proposed uses for the site at West Wiltshire Trading Estate include Energy from Waste, Mechanical Biological Treatment, In-Vessel Composting, Local Recycling, Waste Transfer Station, Materials Recovery Facility and Household Recycling Centre. The boundary of the site area proposed for use passes within 300m of the most sensitive receiver and approximately 50m of the farm located on Storridge Road. Given the background noise level, L<sub>A90</sub> of 41.6dB at the most noise sensitive receiver, any new waste development may need to be located a minimum distance of 1000m away from this receiver depending on the proposed activities of the development. It may be possible for the development to be located closer to other nearby receivers due to possible greater background noise levels at these locations.
- 3.2 These calculations are based on any plant being located out of doors. Should the facilities be housed within a building then a closer proximity may be achieved. Depending on the location of the development within the site, existing buildings within the site and ground topography may also offer some screening effects allowing a closer proximity to be achieved.
- 3.3 Given that the minimum separation distance can be achieved within the site boundary and the current use of the site, indications are that this site would potentially be suitable for the proposed development.
- 3.4 To confirm this situation however would require further investigation. Consideration must be paid to the varying nature of the noise climate surrounding the site due to the proximity of some noise sensitive receivers to roads and others relative isolation. This, combined with further development design details and information as to the precise position and nature of the proposed development within the site boundary, would enable more detailed calculations to be undertaken.

## **Air Quality Report**

## WW17 West Wilts Trading Estate, Westbury, 60 ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located to the northwest of Westbury on the West Wilts Trading Estate.



### Figure 1.1 – The site and its surroundings

- 1.2 Air pollutant<sup>19</sup> sources within 1km of the site: road traffic on the B3097 and minor roads; gas/oil/solid fuel space heating for buildings existing landfilling and waste management operations in the area (additional potential emissions of dust, bioaerosols, NH<sub>3</sub> and odour); sewage treatment works (additional potential emissions of bioaerosols, NH<sub>3</sub> and odour).
- 1.3 Estimated background annual mean levels of priority pollutants<sup>20</sup> for 2005 and comparable standards<sup>21</sup> are: 12.8µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 10µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 18.9µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.

<sup>&</sup>lt;sup>19</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern in-relation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>

 <sup>&</sup>lt;sup>20</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>
 <sup>21</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values

<sup>&</sup>lt;sup>21</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)



1.4 Potentially sensitive receptors within 1km: scattered residential housing and farms. There are a number of County Wildlife sites including: Hawkeridge Lane (2 parcels), Westbury Lakes (2 parcels), and Brokerswood and Hazel Wood, and Round Wood.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	PM <sub>10</sub>	NOx	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site	3 (3)	2 (2)	N/A	N/A	3 (3)	2 (2)	3 (3)
Residential between 100 and 250m of site	3 (3)	2 (2)	N/A	N/A	3 (3)	1 (1)	3 (3)
Residential beyond 250m	2 (2)	2 (2)	N/A	N/A	2 (2)	1 (1)	2 (2)
Ecological designation within 1km of site (Hawkeridge Lane, Westbury Lakes, and Brokerswood and Hazel Wood, and Round Wood)	N/A	1 (1)	1 (1)	1 (1)	N/A	N/A	N/A

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Measures to control emissions of local air pollutants (gas engines), and of dust, odour and bioaerosols should be required. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 Air quality risks for the intended use are moderate to high without mitigation. Measures to control emissions of local air pollutants from combustion plant, and of dust, odour and bio-aerosols are recommended. Detailed assessment should be undertaken.

## **Traffic and Transport Review**

### WW17 West Wilts Trading Estate, Westbury

#### Proposed site usage

Energy from waste / mechanical biological treatment facility / in-vessel composting / material recovery facility / waste transfer station / recycling and a household recycling centre.

#### Existing/Potential Access

The site is located to the north west of Westbury and is an established and large trading estate. The site encompasses many uses including some small scale waste uses, processing industries, light industrial uses and car sales. There are two existing access points to the estate. The primary access is taken via the B3097 Hawkeridge Road. Hawkeridge Road is subject to a 50mph speed limit at the access, a priority T junction with ghost island right turn filter lane. The secondary access is taken via a four arm roundabout off Storridge Road. This roundabout also provides the access to adjacent the Northacre business Park that appears to be largely unoccupied at present and is still in its development stage.

#### Impacts on Local Settlements

There is potential for the residential properties of Hawkeridge Park at The Ham to be significantly impacted upon given their proximity to the site and their frontage on the road passing on the east side of the estate. This residential area is subject to a 30mph speed restriction with speed activated signs and priority build-outs to control traffic speed. The southern most access would cater for any vehicle movements from the Westbury area without the need for vehicles entering this small residential area however the transportation of waste through Westbury itself is not considered ideal. It is anticipated that the majority of HGV vehicular access will approach from the north via the A350/A363 interchange and enter the estate via the northern most access, again avoiding the necessity for vehicles to pass through the residential area at The Ham.

#### **Off Site Highway Network**

To the north of the site is the A363/A350 interchange, a large 4 arm roundabout. To the south a mini roundabout provides access to the site from Westbury. No improvements to either of these junctions are deemed necessary. If the proposal for a household recycling facility is implemented then due to their nature as public facilities this site will generate significant numbers of private car trips in addition to HGV trips. The peak trip generation periods in these developments however do tend to occur on the weekend and as such do not correspond with the weekday highway network peak periods. It is therefore envisaged that this site will not impact significantly on the capacity of the local highway network. The impact on the Trunk Road network will be required to be investigated in consultation with the Highways Agency prior to any development.

#### Constraints

In purely traffic terms there are no constraints given the existing use of the site as a large and well established industrial estate and the likely insignificant increase in traffic associated with the proposals as a proportion of the total existing traffic generated by the estate. The location of the site as a potential waste site is however constrained by the potential impact of the proposals on the residential amenity of Hawkeridge Park. The potential adverse impacts associated with the transportation of waste include the effects of noise and vibration.

#### Mitigation

In order to ensure the residential amenity of Hawkeridge Park is not unduly impacted upon by the proposals it should be ensured that the site is accessed from the south via the Storridge Road access. Signing should direct all traffic approaching the site from the south to this southern access. Similarly any traffic from the north should be directed to the northerly access off Hawkeridge Road. This should ensure that The Ham is not used as a through route for waste traffic.

#### Conclusion

This site is suitable, in traffic terms, for the proposed uses subject to small scale mitigation measures.

## **Cultural Heritage Report**

### WW17 West Wilts Trading Estate, Westbury

### **DESK STUDY INFORMATION**

#### Known heritage assets within Study Area

WSMR No:	ST85SE451
Site Name:	Moated Site
Grid Ref:	ST85695286
Description:	A trapezoidal moated site surviving as a roughly rectangular enclosure aligned
-	NW-SE and with a maximum internal dimension of c100m square. On the north-
	east side the island is surrounded by a ditch 10m
Designation:	Scheduled Monument – WI 12048
WSMR No:	ST85SE474
Site Name:	Medieval Deer Park
Grid Ref:	ST85555342
Description:	A deer park mentioned in a document dated 1323. Leland mentioned a 'fayre
-	park and fine greyned oaks'. The park was disparked by 1582, and sub-divided.
	No evidence of the park survives today.
Designation:	None

#### Known heritage assets within 500m of Study Area boundary

WSMR No:	ST85SE452
Site Name:	Brooke House
Grid Ref:	ST85135335
Description:	Brooke House on site of Brook Hall, a substantial Medieval manor house of
	some importance, some elements survive within current fabric. Earthworks
	survive to the south-east and east of the house.
Designation:	None
WSMR No:	ST85SE301
Site Name:	Unassociated finds
Grid Ref:	ST86155220
Description:	Well containing iron object, coarse ware sherds and samian ware.
Designation:	None
WSMR No:	ST85SE402
Site Name:	Linear Feature
Grid Ref:	
Description:	A ditch feature located in Trench 1 of an evaluation excavation in 2002 produced
	small fragments of pottery in one of the three fills contained within it. The pottery
	was made of a moderately coarse sandy fabric, including one unoxidised sherd.
	Possibly early medieval / Anglo-Saxon
Designation:	None
WSMR No:	ST85SE529
Site Name:	Watermeadow
Grid Ref:	ST853524
Description:	A detailed plan of former watermeadows was drawn. It consists of three sets of
	ridges and adjacent channels, separated by other linear earthworks. There are
	also stone and brick structures present in the field. Some of the brickwork
	suggests a 19th century date.
Designation:	None
WSMR No:	ST85SE619
Site Name:	Cropmark
Grid Ref:	ST86315287
Description:	Cropmark of a small square enclosure with an annexe and a linear feature
	running to the north. May be part of the drainage system.
Designation:	None



#### FIELD SURVEY INFORMATION

The area has been heavily developed but incorporates the moated site (Scheduled Monument) within the overall layout. The SM is heavily overgrown and barely visible.

#### SITE ASSESSMENT

**Cultural Heritage value**: The area is clearly of some medieval interest, notably the moated site within the deer park associated with the earlier Brooke Hall. However, the development of the business park is likely to have negatively impacted on other archaeological features.

#### **Potential Cultural Heritage Impacts:**

**Further evaluation and potential mitigation:** Any proposals for development at this site must be accompanied by an archaeological field evaluation in accordance with PPG 16 (Planning & Archaeology), to define the character and extent of the archaeological remains that exist in the area of the proposed development. It is essential that the County Archaeologist and English Heritage are consulted at the earliest possible stage regarding the undertaking and results of such an evaluation. Where unrecorded features of archaeological importance are found, the advice of the County Archaeologist and English Heritage will be essential as to the appropriate action required. As with identified features of archaeological interest in proximity to the site, development should mitigate any potential impacts through careful design and landscaping and, where required, through preservation in situ of any remains.

An assessment of any impacts from development of the site upon the Moated Site Scheduled Monument must be undertaken, including impacts upon its setting and integrity. Development should mitigate any potential impacts upon this SM and its setting through careful design and landscaping. Where any impacts cannot be adequately mitigated planning permission may be refused.

**Assessment:** Further evaluation is required as to the suitability of this site at the Planning Application stage.



## Water (Quality and Environment) Assessment

#### Site name – West Wiltshire Trading Estate, Westbury

NGR at centre of site – ST 856528 Location description –1.5km northwest of Westbury Area of site (ha) - 60

#### Table 1: Water Quality and Environmental Information and results - See Appendix B

By assessing all available information and tabulating the key results as above, the water quality and environmental information will be screened using the following proposed CSM matrix. The CSM matrix will deal with current and future proposed landuses.

#### Table 2: Environmental CSM for A (environment and water quality assessment)

Category	Potential	Potential Risk Issue	Potential	Potential Risk	Mitigation	Likely Further Assessment Requirements
	Receptor		Impact	Measures		
			Significance	(to be considered a	as appropriate)	
Water	Groundwater	Contaminate non aquifer	Low	<ul> <li>Plan mitigation r</li> </ul>	requirements	<ul> <li>Environmental management during</li> </ul>
		Contaminate adjacent watercourse (Biss Brook)	Medium / High	during constructi	ion	Construction
	Surface water body	Impact on baseflow/runoff to watercourse	Medium	<ul><li>Layout planning</li><li>Site traffic plan</li></ul>	of site	<ul> <li>Relevant licensing requirements (PPC) to be assessed</li> </ul>
				<ul> <li>Surface drainage</li> <li>Impermeable ha</li> <li>Runoff collection</li> <li>Spill kits, bundee designated liquid areas if site migh liquids/hydrocart</li> <li>Consider limiting waste handled a wastes only, iner</li> <li>Engineered liner</li> </ul>	e plan ardstanding n system d storage and d handling ht accept bons g types of at site e.g. solid rt wastes r system	<ul> <li>Approach Environment Agency for monitoring requirements</li> <li>Produce Working Plan for site</li> <li>Review runoff treatment requirements</li> <li>Baseline monitoring of adjacent surface water bodies may</li> <li>Monitoring boreholes (may be required for obtaining operating permit)</li> <li>Assess impact of current landuses</li> </ul>

Category	Potential Receptor	Potential Risk Issue	Potential Impact Significance	Potential Risk Mitigation Measures (to be considered as appropriate)	Likely Further Assessment Requirements
		Flood event causes contamination of surface water and disruption of operations Flood zoning directly affects western half of site	High	<ul> <li>Engineered flood defence or mitigation</li> </ul>	<ul> <li>Approach Environment Agency for requirements</li> <li>Check flood risk assessment requirements</li> </ul>
	Designated sites/ Adjacent sensitive landuses	Impact SAM and or Wildlife sites	Low/Medium	<ul> <li>Refer to groundwater/surface potential risk mitigation measures listed above</li> <li>Management of windborne material at site boundaries</li> </ul>	<ul> <li>Consider the potential environmental impact adjacent landuses have, and how an appropriate environmental baseline can be measured/monitored</li> <li>Approach Environment Agency for</li> </ul>
	Other adjacent landuses	Residential areas of Westbury close by with leisure and light industrial landuses	Low / Medium / High		requirements

Summary of site findings

Outcome of initial screening to indicate that the environmental suitability of West Wiltshire Trading Estate is:

- o Several / potentially significant issues identified. Risk mitigation is considered practicable to address most issues
- Review further assessment requirements

It should be noted that the condition of the site including the condition of any surface water features identified during the desk study can only be assessed during a detailed site visit. A site visit should be undertaken to confirm the applicability of the above information. A site visit may help to define further assessment requirements.



## **Ecological Report**

### WW17 West Wiltshire Trading Estate, Westbury

#### DESK STUDY INFORMATION

*Statutory designated sites within 1km and non-statutory designated habitats within 500m:* No statutory designated sites within 1km and non-statutory designated habitats within 500m.

## Records of notable species within 500m: (legally protected, BAP, RDB)

Within the site there are two records of pipistrelle bats on Engineer Road. It is unknown whether these are records of a roost.

Within 500m of the site there are two records Hare's-foot trefoil and two records of Nodding Bur-Marigold (rare vascular plants in Wiltshire).

#### Details of surveys already undertaken (where known):

None known.

#### FIELD SURVEY INFORMATION

#### General Habitat: (ref Phase 1 habitat plan)

The estate is covered in modern factory buildings and industrial units all of which appear to be in use. There are large expanses of hard-standing present (forming roads, pavements and factory yards). There are also areas of amenity grassland on road verges with some young plantation trees also present (including cherry trees). The site is bounded by semi-mature trees and hedgerows. Two watercourses run adjacent to the western and northern boundaries of the site (the Biss Brook and another small stream respectively).

Within the site there is one area of dense scrub, two areas covered tall ruderal plant species and one large area of semi-improved grassland (marked on Phase 1 habitat map). One large waterbody is also present within the site (marked on Phase 1 habitat map).

#### Field Evidence of notable species:

There a number of semi-mature and mature trees with bat roosting potential (present within hedgerows and trees which bound the site). The buildings present within the site have a low potential to support roosting bats. Records of bats on Engineer Road within the industrial estate, suggest that bats commute within the site and may possibly roost within the buildings in the site.

The Biss Brook running adjacent to western boundary of the site has the potential to support water voles, otters and white-clawed crayfish. The small watercourse flowing adjacent to the northern boundary of the site has the potential to support water voles and otters.

There is one large pond present within the site that has the potential to support great crested newts. A second pond within the site is noted on the OS base (within the area of dense scrub shown on the Phase 1 habitat map). It was not possible to access this pond and confirm its presence due to the very dense scrub in the area surrounding this pond. Seven other ponds are present within 500m of the site. Two are located over 400m away to the west of Hawkeridge Road, a barrier that great crested newts are unlikely to cross. Three ponds are present to the north of the industrial estate (between 10m and 175m north of the site boundary). It was not possible to access these three ponds and assess their potential to support breeding populations of great crested newts. Two ponds are also present to the south of the site. One of these is a large lagoon present approximately 30m south of the site boundary. This has the potential to support great crested newts. It was not possible to access the second pond present to approximately 25m south of the site (due to tall fencing prohibiting access).

No other field evidence of legally protected species was identified.



#### OTHER INFORMATION

None identified.

#### **EVALUATION OF SITE AND POTENTIAL IMPACTS, MITIGATION AND OPPORTUNITIES**

#### Nature conservation evaluation:

The majority of the site is of negligible nature conservation value (areas of hard standing within a business park). However the pond present within the site and the hedgerows and woodland areas that bound the site are of local nature conservation value (with value for nesting birds). A number of the mature trees surrounding the site have the potential to be used by roosting bats.

#### Potential Ecological Impacts:

If development were to place within this industrial estate it is likely the proposals would be located within the areas of semi-improved grassland, dense scrub or tall ruderal species. The proposals are therefore likely to result in the loss of semi-improved grassland, dense scrub and/or tall ruderal species. Depending on where the new proposals are located there would also be possible loss of hedgerows and semi-mature and mature trees from the edges of the site and potential impacts on the water quality of the Biss Brook and the other small watercourse which flow along the western and northern boundaries of the site.

The overall works are likely to have a minor adverse ecological impact.

#### Potential mitigation:

- Retention of hedgerows around the edge of the site. If any of the mature hedgerows are to be lost these should be replaced.
- Retention of semi-mature and mature trees wherever possible.
- Strict adherence to Environment Agency's Pollution Prevention Guidelines as working in close proximity to the Biss Brook and other small watercourse. These measures will help to prevent detrimental impacts on water quality of these watercourses whilst the site is constructed.
- It is recommended that if water voles and otters are present on the either watercourse present adjacent to the site a method statement for works is compiled by an ecologist. This will help minimise disturbance to any water voles and otters present and protect their habitat from damage and destruction.
- Closed surface water drainage system within the design of the facility and the use of silt traps and Sustainable Urban Drainage Systems (SUDS) best practice;
- All vegetation clearance to be undertaken outside of bird nesting season (1 February to 31 August) or to be checked by an ecologist immediately prior to clearance.

#### Residual impacts:

If mitigation undertaken, the residual impacts are likely to negligible given the size and type of habitat to be lost.

#### Opportunities for enhancement:

None identified.

#### Recommended further ecological work/surveys:

- Bat surveys on semi-mature and mature trees (within hedgerows and woodland) if require felling.
- Bat surveys on any buildings if to be demolished. Although there was low potential for these buildings to support bats it is possible that a small number of bats could use the structures in the future as a temporary summer roost or feeding roost.
- Great crested newt presence/absence surveys of the two ponds within the site and the pond approximately 30m south of the site if works are to be undertaken within 500m of these waterbodies.
- Assessment of the four ponds present within 500m of the site (three to the north and one to the south) to establish their potential to support breeding populations of great crested newts. If works are



proposed within 500m of any of these ponds which have the potential to support great crested newt, presence/absence surveys of these waterbodies should be completed.

• If works are to directly impact the channel of the Biss Brook or other small watercourse (located adjacent to the northern boundary of the site) it is recommended that water vole and otter surveys are undertaken. White-clawed crayfish surveys should be also undertaken on Biss Brook.

#### Legal and policy implications:

- If bats are found to be roosting within any trees to be felled or in any buildings to be demolished a development licence will be required from Defra.
- If great crested newts are found to be using one or both of the two ponds within the site or one or more
  of the five ponds that are present within 500m (which are not separated from the site by barrier
  features such as roads) a great crested newt development licence will be required from Defra and
  mitigation will be required to prevent the injury or death of any great crested newts present within the
  site and to compensate for the loss of any suitable terrestrial habitat.
- If white-clawed crayfish are found to be present in the Biss Brook it will be necessary to apply to Defra for a development licence to allow any works required in this watercourse to be undertaken.

The Nature Conservation policies in the West Wiltshire District Council Local Plan that are potentially relevant to this site include:

• Policy C7

Phase 1 Habitat Map



Number	Target Notes	Species Notes
1	Area of very dense scrub and tall ruderal species. Bound by fences and trees. Area could be cleared out and developed. Pond present on OS base. Could not access due to the very dense vegetation.	thistle, nettle, bramble, hawthorn and goat willow shrubs, common cleavers, dock, willowherb species, meadowsweet, false oat-grass and hogweed.
2	Area of bare ground (ballast and gravel covered). Appears not to be in use by anyone.	
3	SUD drainage lagoon. Large waterbody (30m x40m). Over 75% filled with reed mace. Open water present at the southern end of lagoon. Water relatively clear with some duck weed present on surface. Willowherb and marsh marigold also present.	Banks of waterbody steep and covered in bramble, false oat-grass, bind weed, bittersweet, wych elm shrubs, cow parsley, teasel, goat willow shrubs and white poplar shrubs. Medium potential to support great crested newts.
4	Area of tall ruderal and grass. Predominantly thistle and dock with hogweed, cow parsley, teasle, willowherb species, willow shrubs and false oat-grass also present.	South-western boundary is made up by a number of mature white poplar trees and semi-mature ash trees (retain if possible). These trees have a low potential to support roosting bats
5	Area of tall ruderal species including dock and cow parsley. Bound by species- poor hedgerows.	
6	Plot of semi-improved grassland for sale. Located just outside site boundary.	
7	Small stream flowing along northern edge of industrial estate next to mature willow, oak woodland strip. Approx 1m to 2m wide and shallow (less than 10cm). Very silty substrate. Banks approx 30cm high, no veg.	Some parts of the banks are covered in cow parsley and grass species. Small areas of reed canary grass and rush is present in the watercourse. This stream has a low potential to support water vole and white-clawed crayfish.
8	Semi-improved grassland. Mature oak present in hedgerow adjacent tot road which has the potential to support roosting bats.	false oat-grass, cockÆs-foot, bindweed, thistle, hogweed, bramble, creeping buttercup, tormentil.
9	Biss Brook: Fast flowing watercourse with clear water. It is approximately 2-3m wide with a cobble and silt substrate. The banks are 30-50cm above the water and are gently sloping.	Banks are covered in ivy, willowherb, nettle, bindweed, bramble, bittersweet and cow parsley. Yellow flag, willowherb and reed canary grass present in the stream itself. A dense hawthorn and ash hedgerow separates this stream from the industrial site. The stream is of possible use to water voles and white-clawed crayfish.
10	Pond identified from OS Base. This could not be accessed due to tall fencing forming a barrier.	
11	Large water storage lagoon. The lagoon is approximately 150m by 50m and the water present is murky with algae. The lagoon has long shallow margins with reed mace, water forget-me-not and rushes present in patches around the edge of the waterbody. Ducks were seen using the lagoon.	
12	General notes about the industrial estate: The estate is covered in modern factory buildings and industrial units all of which appear to be in use. There are large expanses of hard-standing present (forming roads, pavements and factory yards). There are also large areas of amenity grassland on road verges with some young plantation trees	



also present (including cherry trees). The site is bound by semi-	
mature trees and hedgerows.	

### **Protected Species and Designated Sites**





# Site: WW18 Westbury Waste Management Facility

## Landscape and Visual Survey

### WW18 Westbury Waste Management Facility

#### 1. Introduction

This large site is situated to the north-east of Westbury adjacent to a railway line running along the foot of a chalk escarpment. The site includes an active cement works and area with planning permission for the development of a strategic Waste Transfer System.

#### 2. Baseline Landscape Character and Designations: Desk Survey

### Countryside Character Volume 8 South West (Countryside Agency):

Landscape Character Area: Avon Vales Key characteristics relevant to the site:

- Undulating clay vale with varied hedgerow pattern and a mixture of arable and pasture.
- Wide river corridor with ancient pattern of flood meadows but much influenced by modern development.
- Wide views across the area from the higher surrounding chalk downs.
  - Away from the built-up areas, the land cover is predominantly agricultural with a mosaic of arable and pasture uses.
  - The hedge cover on the arable land is often poor. However in the pasture areas, especially the lower lying meadows around the many small streams, the hedges are frequent and overgrown. Hedgerow trees are also characteristic.

#### Wiltshire Landscape Character Assessment (Wiltshire County Council (WCC)):

Landscape Type: Rolling Clay Lowland Landscape Character Area: Trowbridge Rolling Clay Lowland Key characteristics relevant to the site:

- Gently rolling lowland based on Clay.
- Mixed arable and pastoral land use with pasture concentrated around the water courses.
- Variable field pattern with network of full hedgerows and mature hedgerow trees.
- Presence of streams marked by lines of willows and crossed by modest bridges.
- Small number of meadows of neutral and unimproved grassland.
- Roads largely minor and rural with a few trunk roads and sections of motorway.
- Views vary from semi-enclosed by intact hedgerows, riparian vegetation and woodland blocks to more open with views to the rising scarps of the chalk uplands.
- A largely peaceful, rural landscape.
- Semi-enclosed landscape allowing intermittent views to the steep scarps of the Chalk uplands.

The condition of the *Rolling Clay Lowland* is judged by WCC to be generally 'good' however the strength of character is judged to be 'moderate' with the varied land use and urbanising influences having weakened it. The overall strategy is to 'conserve' the peaceful rural landscape and strengthen its character to minimise the urbanising elements.

#### District Landscape Character Assessment: N/A

#### Landscape Designations and policies:

- Special landscape area
- Public footpath to north-west of site
- Public footpath through north-east edge of site

#### Local Authority Consultation:

West Wiltshire District Council Planning Department has been consulted with respect to the landscape and visual effects associated with this site. No response has yet been received.

#### 3. Baseline Landscape Character and Features: Site Survey

The site is located on flat floodplain at the foot of a series of chalk downlands which rise up to the south. A number of claypit ponds lie in close proximity to the site and a tributary of the River Biss runs to the north east forming part of the site boundary. The site is heavily dominated by its industrial character, with a large chimney forming a local landmark visible from a wide distance. At its western end the site consists of a formal driveway, lined by an avenue of mature chestnut tees. This opens out into a wider area, with the Waste Treatment Facility site to the north-east. The site has strictly controlled access, being a private facility with health and safety risks, however a public footpath skirts its north-eastern edge. This has a hedgerow running adjacent to it, which helps screen the site during the summer months.

An established rail link forms the southern boundary of the site, and immediately beyond this is an employee recreation facility including golf course and fishing lake. The site is well screened from this area with mature riparian woodland vegetation. Further south, the chalk escarpment rises from 70m AOD to 223m AOD and includes the Westbury White Horse carved on its face. The Wessex Ridgeway long distance path runs along the top of this hill and the site would be a noticeable feature when viewed from this area, albeit forming part of a wider long distance panorama.

To the north of the site, the hamlet of Heywood has a remote rural character, with a narrow rural lane meandering across the floodplain. A number of residential properties are located in this area, although hedgerow vegetation restricts views towards the site.

#### 4. Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey

#### Landscape Quality and Condition of site: Poor Capacity to Accept Change: High

The site is physically and visually dominated by the cement works, which contrasts starkly with its rural context. Given the poor condition of the site and degree of existing visual intrusion, it is well placed to accept change. The strong structure of floodplain hedgerows help to screen the site in its immediate proximity.

#### 5. Potential Landscape Impacts

- Loss of mature on-site vegetation such as the horse-chestnut avenue
- Harm to geomorphology and biodiversity of tributary
- Loss of footpath route

#### 6. Potential Landscape Mitigation Measures

- Ensure existing vegetation is protected
- Retain/divert footpath to ensure that recreational access between Park Lane and Horse Croft Farm is maintained



- The following 'Broad Management Objectives' for the Rolling Clay Lowland landscape type in the *Wiltshire Landscape Character Assessment* are relevant to the site:
  - Consider strengthening the enclosed character of the landscape and screening views to intrusive urban edges through nurturing existing and planting new woodland.

#### 7. Visual Receptors

Visual Receptor	Sensitivity of Receptor	Potential Residual Impact on Receptor	Potential Visual Mitigation Measures
Visitors to Westbury Hill	High	No change	<ul> <li>Retain and manage existing vegetation</li> </ul>
Residents on Park Lane	High	No change	screens
Users of LaFarge leisure facilities to south of site	Medium	No change	<ul> <li>Additional planting around site boundary to reduce</li> </ul>
Users of railway to south of site	Low	No change	visual impact for footpath users
Users of footpath to north-east/through site	High	No change – slight adverse	
Users of footpath to north-west of site	High	No change	
Users of A350 (winter views only?)	Low	No change	

#### 8. Summary: Residual Landscape and Visual Impacts

Given the large scale of the site, much of it is relatively well concealed during the summer months at least, by the strong hedgerow boundaries within its immediate vicinity. The site would be most visible to recreational visitors to Westbury Hill to the south. Given its existing weak rural character, any changes to the site would have little impact, either in landscape or visual terms. Indeed with additional native woodland buffer planting, there may be the opportunity to enhance parts of the site in visual or landscape terms.

#### 9. Recommended further landscape and visual surveys

- Visual survey from footpaths, including Wessex Ridgeway/Westbury Hill (summer and winter-time)
- Full walk-over survey of site (access restricted at time of visit)



## Air Quality Report

### WW18 Westbury Waste Management Facility, 1.2 ha

## 1. BASELINE CONDITIONS

1.1 The site (Figure 1.1) is located north-east of Westbury and is adjacent to the Lafarge Cement Works and landfill site off the A350.



### Figure 1.1 – The site and its surroundings

1.2 Air pollutant<sup>22</sup> sources within 1km of the site: road traffic on the A350 and minor roads; gas/oil/solid fuel space heating for buildings; Blue Circle Industries Plc (1,3-butadiene, Benzene, Benzo(a)pyrene, CO, CO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, Pb, VOCs), Westbury Phase II operated

<sup>&</sup>lt;sup>22</sup> Of concern to public health include: Nitrogen Dioxide (NO<sub>2</sub>), PM<sub>10</sub> (small particles less than 10 micrometers in diameter), Sulphur Dioxide (SO<sub>2</sub>), Benzene & 1,3-butadiene. Of concern inrelation to vegetation: Oxides of Nitrogen (NO<sub>x</sub>), Ammonia (NH<sub>3</sub>), Ozone (O<sub>3</sub>) & SO<sub>2</sub>



by Viridor Waste Disposal Ltd (Benzene, CO, NO<sub>x</sub>, PM<sub>10</sub>, VOCs) and Westbury Power Plant operated by Viridor Waste Management Ltd (Beznene, CO, NO<sub>x</sub>, PM<sub>10</sub>, VOCs).

- 1.3 Estimated background annual mean levels of priority pollutants<sup>23</sup> for 2005 and comparable standards<sup>24</sup> are: 12.1µg/m<sup>3</sup> NO<sub>x</sub> (standard for protection of vegetation 30µg/m<sup>3</sup>); 9.51µg/m<sup>3</sup> NO<sub>2</sub> (standard 40µg/m<sup>3</sup>); 20.5µg/m<sup>3</sup> PM<sub>10</sub> (standard 40µg/m<sup>3</sup>). The levels indicate good air quality. There are no Air Quality Management Areas within 1km.
- 1.4 Potentially sensitive receptors within 1km: scattered residential properties mainly consisting of farms.

## 2. POTENTIAL IMPACTS (WITHOUT MITIGATION)

Potentially Sensitive Receptor	NO <sub>2</sub>	<b>PM</b> 10	NOx	NH <sub>3</sub>	Bio- aerosol*	Nuisance dust	Odour
Residential within 100m of site (none)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential between 100 and 250m	2 (3)	2 (3)	N/A	N/A	2 (2)	1 (2)	2 (3)
Residential beyond 250m	1 (2)	1 (2)	N/A	N/A	1 (2)	1 (1)	1 (2)

Notes:

1 = low risk, no further assessment required, a basic level of mitigation is recommended (at least)

2 = moderate risk, further assessment is recommended, mitigation should be required

3 = high risk, detailed assessment should be undertaken to confirm whether or not impacts could be satisfactorily mitigated

Values in brackets denote potential 'in-combination' or cumulative impacts

N/A = risk is not applicable in these circumstances

\* Bioaerosol high risk is limited to within 250m of the site

## 3. MITIGATION

3.1 Measures to control dust, bioaerosols and odour should be required. See 'Air Emissions Mitigation Options' technical note.

## 4. CONCLUSIONS

4.1 All air quality risks for the intended use are low to high (in-combination). Mitigation for dust, bioaerosols and odour is recommended. Detailed assessment should be undertaken to examine cumulative impacts.

<sup>&</sup>lt;sup>23</sup> Priority pollutants are those presenting most problems for air quality management duties. Estimates are from NETCEN, website <u>www.airquality.co.uk/archive/index.php</u>

<sup>&</sup>lt;sup>24</sup> Air Quality (England) Regulations 2000 (amended 2002) and (mandatory) Air Quality Limit Values Regulations 2003 (amended 2004)