

**Waste Core Strategy
Site Options Consultation**

Waste Site Assessment

Appendix C.86: Site 544 - Stroudwater Area

October 2009

Site Maps and Images

Site Map



© Crown copyright. All rights reserved. Gloucestershire County Council 100019134 2008.

Aerial Photo



Imagery copyright Getmapping PLC. www.getmapping.com

Appendix C.86: Site 544 - Stroudwater Area

Site Images



Locational Information

Site Details

District	Stroud		
Parish	Eastington Stonehouse		
Easting	379547	Northings	205846
Approximate Site Area (hectares)	79		
Reasons for inclusion <i>NB: Slight anomalies in site boundaries may have arisen from 'clustering' of sites from more than one source and/or the absence of detailed site plans in source documents.</i>	The site was identified in the Stroud Local Plan and listed in Stroud District Council's Employment Land Review.		
Date of WPA officer visit	25th November 2008		

Appendix C.86: Site 544 - Stroudwater Area

<p>Broad Description of Site (including current activities on site, location and neighbouring uses)</p>	<p>Large established business park with mainly undeveloped extension area to the north of the site. The extension area is separated from the developed area by a stream and the land is sloping. The site is a mixture of larger offices and sheds and smaller business units. A significant area of the site is occupied by the Dairy Crest Severnside operation which includes a sizeable stack. Some of the other sites uses include: Springfield Business Centre (a small unit area), Harry Lawson, Norman Precision, Delphi. Reasonably good access from M5. Majority of site is surrounded by rural farmland. There is a large residential area & sports field to the eastern side of the site, which is separated from the site by a railway line. There is some potential for certain areas of the site to be fairly well screened, however the dairy building and stack in particular is currently visible from quite a distance including the Leonard Stanley area and the M5.</p> <p>Additional Sensitive Receptors: Football ground, club, tennis courts, nursery.</p>
---	--


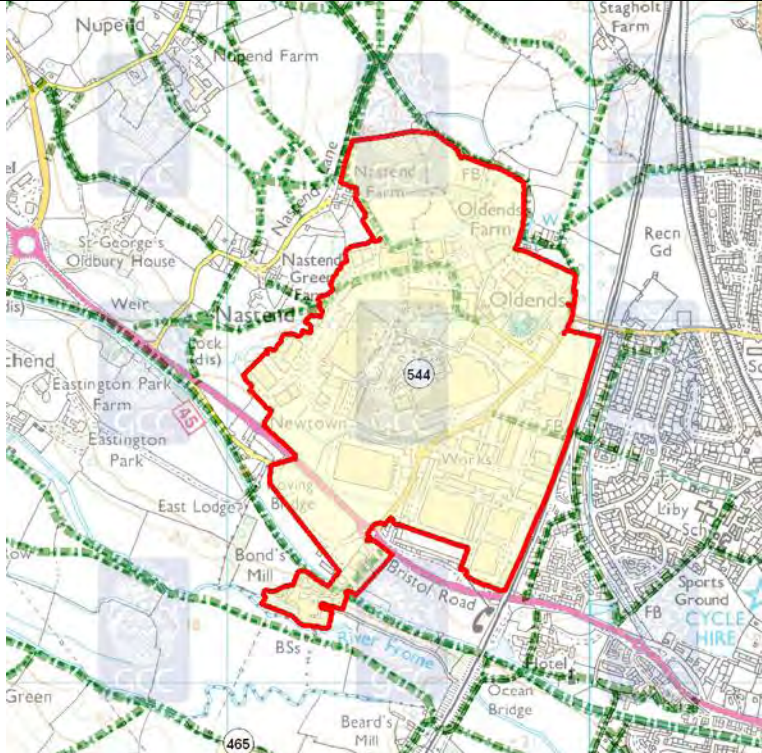
Site Assessment Factors/Criteria for Consideration

Landscape	
Comments	The site is located on land that has been mostly developed and is less than 700m from the Cotswolds AONB.
Landscape Character	Part Vale of Berkeley, Settled Unwooded Vale, Part Stroud Urban.
Green Belt	
Comments	The site is outside of the Gloucester/Cheltenham Green Belt.

Appendix C.86: Site 544 - Stroudwater Area

Highways <i>(Based on information provided by Gloucestershire County Council's Highways Development Co-ordination team)</i>			
Routes to access Strategic Network <i>This denotes the assumed roads that would be used in order for vehicles to travel to and from the proposed site and the wider road network.</i>	A419		
Proximity to Strategic Highway Network <i>Assessment of the proximity of the site to different types of road (as specific entrance points are not known have made assumptions about where entrance might be), with reference to the GCC Advisory Freight Route Map (notwithstanding obvious changes arising from new roads etc).</i>	Good	Definition	Direct access onto (or close proximity to) trunk road network or major A roads (roads for long distance journeys).
Sustainable Transport <i>Potential for operational access to the site to be by (or involve) non-road modes of transport, based on broad consideration of distance from water/rail and general location, rather than knowledge that it may or may not be technically practical.</i>	High	Definition	Site has potential for rail and/or water based transport to play a significant role (site will generally back directly on to water/rail).
Employee Accessibility <i>Potential for employees to be able to access the site using non-car modes.</i>	Medium	Definition	Site has some residential areas within close proximity, and/or is reasonably close to a fairly frequent bus route (route of 2-hrly or more frequent, as marked in red on GCC PT map).
Other Transport Issues <i>This column comments on any other relevant transport issues for the site, which will have partly arisen from discussions with area/stakeholder managers.</i>	Good road access, and close to rail		
Recommendation <i>This category provides an overall view of the potential of the site to be used as a strategic waste facility in transport terms.</i>	Take Forward	Definition	The site has reasonable merit in transport terms and should potentially be taken forward for more detailed consideration (subject to views of other disciplines). In general terms the Take Forward category will comprise those sites with a Medium or better answer for Strategic Highway Access/Employee Accessibility and a High score for Sustainable Transport, although the overall view for each site will also depend on other relevant local factors.

Appendix C.86: Site 544 - Stroudwater Area

Public Rights of Way (Based on information provided by Gloucestershire County Council's Public Rights of Way (PRoW) team)	
Score	--
Score Definition	Major adverse impact on the Public Rights of Way Network – potential closure of the route or major deviation / re-route required.
Additional Comments	Diversions may be necessary - No enhancements likely.
Map Legend	 Public Right of Way
PRoW Map	

© Crown copyright. All rights reserved. Gloucestershire County Council 100019134 2008.

Aerodrome Safeguarding (based on safeguarding maps provided by Gloucestershire Airport and the Ministry of Defence (MOD))	
Comments	The site lies outside all safeguarding zones.
NB. Where a site lies across more than one safeguarding zone the entire site has been defaulted to lowest height category for consultation.	

Appendix C.86: Site 544 - Stroudwater Area

Ecology/Biodiversity (Based on information provided by Gloucestershire County Council's Ecologist and the Gloucestershire Centre for Environmental Records (GCER))	
Score	0*
Score Definition	Overall impact on biodiversity could be potentially negative, uncertain or positive. Identified important ecological constraint up to and including 250 metres distant Scores 0* indicate designated aquifer fed/surface water/flood water dependent site(s) over 1km distant which may be affected (where chosen waste technology and development design poses a risk to the water environment)
Additional Comments	Scores with * indicate designated aquifer fed/surface water/flood water dependent site(s) over 1km distant which may be affected, site as named above.
Nearby Internationally & Nationally Designated Sites Recorded	None
Other Internationally & Nationally Designated Sites (wetlands)	Severn Estuary SAC/SPA/Ramsar/SSSI [9,990m]
Ecology Legend	<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: #4CAF50; margin-right: 5px;"></div> <div>SSSI Site of Special Scientific Interest</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; background-color: #FFCDD2; margin-right: 5px;"></div> <div>Key Wildlife Site - area</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; border: 1px solid #FF0000; margin-right: 5px;"></div> <div>SAC Site</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 20px; height: 10px; border: 1px solid #0000FF; margin-right: 5px;"></div> <div>Ramsar Site</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; border: 1px solid #0000FF; margin-right: 5px;"></div> <div>SPA Site</div> </div> </div>
Constraints Map	

© Crown copyright. All rights reserved. Gloucestershire County Council 100019134 2008.

Appendix C.86: Site 544 - Stroudwater Area

Geodiversity

(Based on information provided by the Gloucestershire Geology Trust at the Geological Records Centre)

Comments	There were no recorded geological features on the site or within 250m of its boundary.
----------	--

Archaeology and the Historic Environment

(Based on information provided by Gloucestershire County Council's Archaeology team)

Score	--
Score Definition	The site fulfils one or more of the following:- * Contains a SAM, or non-designated remains of national importance * Contains a Listed Building * Is within a Conservation Area * Is within a Registered Park or Garden of Special Historic Interest * Is within a Registered Battlefield
Additional Comments	Designated as -- as within the Stroud Industrial Heritage Conservation Area - the extent to which this would impeded further industrial development (subject to certain constraints) is not clear. Otherwise this would probably be a 4.

Contaminated Land

(Based on information provided by the appropriate district council)

Comment	The site or adjoining land is not classified as 'contaminated land' under the Environment Act 1995, but Stroud District Council identified the site as a site of potential concern. The following comments have been added "No remediation plans have been considered for the site" and "Re-development would provide an opportunity for investigation and remediation of the site."
---------	--

Flood Risk

(Based on information provided by Halcrow)

Site Description	An unnamed watercourse flows in a westerly direction through the northern extent of the site forming the western boundary of the site for part of its course. Through the centre of the site another unnamed watercourse flows parallel to Oldends Lane and flows in a westerly direction exiting the site at SO 7906 0585. Through the southern extent of the site the Stroudwater Canal and River Frome flow in a westerly direction.
Watercourse(s)	River Frome Unnamed watercourse in north of site. Unnamed watercourse adjacent to Oldends Lane.
Flood Zone	1,2 3a and 3b 1,2 3a and 3b 1
Flood Zone Information (Method used to derive Flood Zones & Confidence in Flood Zone information)	Modelled Flood Zone data exists for Flood Zones 3a and 3b which are based on Flood Zone maps produced as part of the River Frome SFRA and are deemed suitable for FRA. Flood Zone 2 has been used to represent the 100 year climate change scenario which is based on the JFLOW modelled outlines. JFLOW modelled outlines. Low confidence. Misalignments evident in a number of locations. Flood Zone 3a has been used to represent Flood Zone 3b. Flood Zone 2 has been used to represent the 100 year climate change scenario. No Flood Zones have been produced for the Dishes Brook.

Appendix C.86: Site 544 - Stroudwater Area

Fluvial Flood Risk Posed to Site (including climate change)	Fluvial flood risk to the site is low. Flood Zones 2, 3a and 3b affect the southern most extent of the site although this is restricted mainly to the path of the canal. Fluvial flood risk from watercourse in adjacent floodplain. Flood Zones 2, 3a and 3b affect a small part in the northern extent of the site. Site lies fully in Flood Zone 1. While the unnamed watercourse does not show fluvial flood risk, in reality some risk is posed.
Historic Flooding/Flooding From Other Sources	Historic flood outlines for the River Frome demonstrate that the southern extent of the site was marginally affected by fluvial flooding during the summer 2007 flood event. There are no recorded incidents of flooding from other sources such as surface water and groundwater within the site.
Canals (Raised - breach/overlapping)	The Stroudwater Canal is located in the southern extent of the site. The Level 1 SFRA identified that complex interactions exist between the canal and the River Frome for much of its length, which must be considered when assessing flood risk at individual
Flood Defences (Location/Type/SoP/Residual Risk)	Some raised defences are located along the River Frome in the south of the site. Residual risk from these defences should be investigated as part of a FRA.
Culverts (Location/Type/Watercourse/Residual Risk)	Part of the River Frome in the southern extent of the site has been identified as being culverted. The residual risk presented by the culverts should be investigated as part of a FRA.
Score	+
Score Definition	Site is mainly in Flood Zone 1 but affected by Flood Zones 2, 3a and 3b.
Additional Comments	None.
Legend	<div> <div> <p>— Council Boundary</p> <p>— Council Boundary</p> <p>— Watercourse Centre Line</p> <p>— Minor Watercourse</p> <p>— Canal</p> </div> <div> <p>— Environment Agency Flood Defence</p> <p>— Council Owned Flood Defence</p> <p>— Flood Zone 2 (Medium Probability)</p> <p>— Flood Zone 3a (High Probability)</p> <p>— Flood Zone 3b (Functional Floodplain)</p> </div> <div> <p>— Recorded Flooding - Impounded Water Bodies</p> <p>— Recorded Flooding - Artificial Drainage</p> <p>— Recorded Flooding - Surface Water</p> <p>— Recorded Flooding - Fluvial</p> <p>— Recorded Flooding - Unknown</p> </div> </div>
Flood Map	

© Crown copyright. All rights reserved. Gloucestershire County Council 100019134 2008.

Appendix C.86: Site 544 - Stroudwater Area

Source Protection Zones (SPZs)

Comments	N/A
----------	-----

Groundwater/Aquifer details

Comments	Site 544 is partially lying over a Minor Aquifer Intermediate 1. The site is also within 250m of a Minor Aquifer High (HU).
----------	---

Land Ownership and General Deliverability Issues (Based on research undertaken in-house)

The site was modified to remove areas of flood risk, incompatible use and too small a size. The landowner of the northern most area (currently undeveloped) has indicated that it is available. Deliverability is still unknown on a large proportion of the southern (currently developed) part of the site.

General Comments

Officer Comments: There are likely to be deliverability issues associated with this site. The site boundary would need modification to remove areas of flood risk.

Safeguarding: Gloucestershire Airport may need to provide comments on safeguarding in relation to this site. This may be difficult for them to do so without knowing a specific technology for the site.

Landscape/PRoW/Ecology/Biodiversity/Archaeology: Further consultation would be required in order to assess any potential impacts upon the above mentioned areas.

Contaminated Land: Further investigative work may be required.

Groundwater/Aquifer: Information would be required from the Environment Agency as to the potential impacts upon the above mentioned areas.

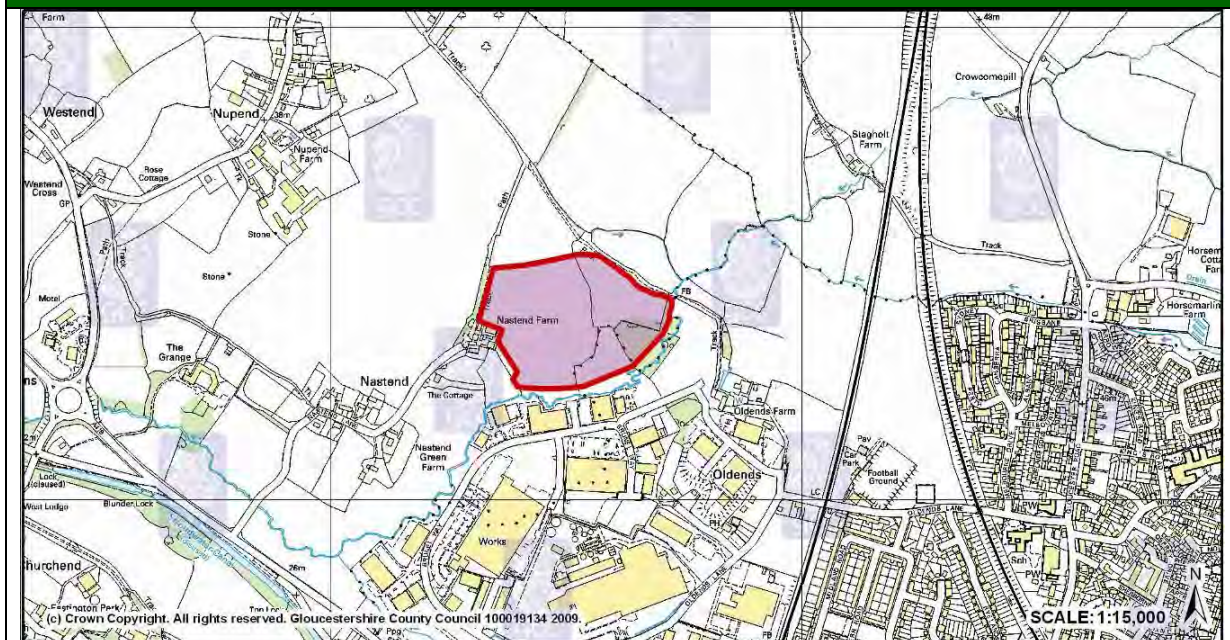
Potential for Further Discussion within the WCS

Additional technical assessments should be undertaken on the area that has been promoted by the landowner as being potentially deliverable for residual MSW treatment. As deliverability is a key requirement of PPS10 no further work should be undertaken on any areas where deliverability is uncertain.

HRA Summary

The nearest European site is Rodborough Common SAC and the implication of this and the potential impacts on other European sites are detailed in: SA Reports under Objective 8: Biodiversity, HRA Baseline Reports and the Site Options HRA Report which forms part of this consultation.

Modified Site Map



Landscape and Visual Impact Assessment (Provided by Atkins)

Introduction

The purpose of this Landscape and Visual Impact Assessment is to ascertain the potential effects of the proposals for a built Waste Facility, of two to five hectares within the Nastend Farm site, on the landscape resources and impacts on the visual amenity of the area.

The assessment considered the possible building height and land take for three (3 No.) different facility sizes (2000-6000m², up to 20m height / 3000-7000m², up to 30m height / 4000-9000m², up to 40m height) each with a potential for an emissions stack of 40, 60 or 80m height.

The site is located 9.5 miles south of Gloucester, five miles west of Stroud, on the A419 off the M5 motorway at junction 13. The Nastend Farm site is currently arable farm land located north of Nastend Lane and a small residential community. It is approximately nine hectares in size.

The immediate landscape setting is open arable field pattern adjacent to the urban character of Stroudwater Business Park and Stonehouse.

Assessment Methodology

A desk study was carried out comprising a review of published texts and maps to develop an understanding of the site in terms of general landscape character, special values and interests, local value and its wider landscape context.

Baseline information on the landscape of the area was collected through a preliminary desktop study of maps, plans and documents. Documentation used in the desk study included:

- ☐ Countryside Character Volume 5: West Midlands, Natural England;
- ☐ Gloucestershire Landscape Character Assessment, Gloucestershire County Council;
- ☐ Multi-Agency Geographic Information for the Countryside (Magic) website;
- ☐ 1:50 000 Scale Digital Ordnance Survey Maps; and
- ☐ Aerial Photography.

To identify those elements of the landscape which notably contribute to the character of the landscape, an assessment of existing landscape features was

Appendix C.86: Site 544 - Stroudwater Area

	<p>carried out.</p> <p>The desk study was followed by a field survey carried out by Atkins Consultants Ltd in June 2009, to identify key issues and constraints in respect of the impact of the development on views into the proposed site, effects on the landscape of the site and the relationship between the development and the surrounding landscape to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Validate and qualify the results of the desk study; <input type="checkbox"/> Identify key visual receptors; and <input type="checkbox"/> Record an assessment of the landscape on both an objective and subjective basis.
Baseline Landscape Character and Designations: Desk Survey	<p><i>Countryside Character Volume 5 West Midlands (Natural England):</i></p> <p>Landscape Character Area: 106, Severn and Avon Vales</p> <p><i>Key characteristics:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Diverse range of flat and gently undulating landscapes, united by broad river valley character. <input type="checkbox"/> Riverside landscapes with little woodland, often very open. <input type="checkbox"/> Variety of land uses from small pasture fields and commons in the west to intensive agriculture in the east. <input type="checkbox"/> Distinct and contrasting vales: Evesham, Berkeley, Gloucester, Leadon, Avon. <input type="checkbox"/> Many ancient market towns and large villages along the rivers. <input type="checkbox"/> Nucleated villages with timber frame and brick buildings. <input type="checkbox"/> Prominent views of hills – such as the Cotswolds, Bredon and the Malverns – at the edges of the character area.
Gloucestershire Landscape Character Assessment(Gloucestershire County Council):	<p><i>County Landscape Character Type: Settled Unwooded Vale</i></p> <p><i>County Landscape Character Area: Vale of Berkeley Settled Unwooded Vale</i></p> <p><i>Key characteristics:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Soft, gently undulating to flat landscape, but with intermittent locally elevated areas that project above the otherwise flatter landform; <input type="checkbox"/> Area drained by a series of east west aligned tributaries of the Severn, including the Cam, Frome and Cheltenham, and the Stratford Avon flowing into the Severn from the north; <input type="checkbox"/> Mixed arable and pastoral land use enclosed by hedgerow network, in places forming a strong landscape pattern; <input type="checkbox"/> Limited woodland cover with mature hedgerow trees and occasional orchards; <input type="checkbox"/> Rural areas bordered by large urban and suburban areas and interspersed with commercial and industrial premises; <input type="checkbox"/> Varied mix of buildings materials including brick, timber and stone, and slate and thatch roofing; <input type="checkbox"/> Proliferation of modern 'suburban' buildings styles and materials; <input type="checkbox"/> Major transport corridors pass through the Vale, frequently aligned north south, beyond which is a network of local roads and lanes linking villages and hamlets; and <input type="checkbox"/> Widespread network of pylons and transmission lines.
Designations Relating to Landscape:	<p>Landscape designations are applied to areas of special value at international, national, regional or local level in response to particular qualities or historical or cultural associations. No part of the study area is so designated; however the site is in close proximity to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> An extensive area of land approximately 1km east of the site is designated under the Cotswolds Area of Outstanding Natural Beauty (AONB), a nationally recognised designation. <input type="checkbox"/> A copse of Ancient and Semi-Natural Woodland is approximately 1km North West of the site boundary; this is known as Mole Grove. <input type="checkbox"/> Two public footpaths which run along the east and western boundary of the site then intersecting with each other to the north of the site and then interspersing in various directions in a northern direction.

Appendix C.86: Site 544 - Stroudwater Area

<p>Baseline Landscape Character and Features: Site Survey</p>	<p>Nastend Farm comprises a sloping field, rising to the northwest, currently in use for grazing. The site is enclosed by mature hedgerows with interspersed hedgerow trees to the north, east and west. To the south the site overlooks the adjacent Stroudwater business park which comprises a mix of commercial and manufacturer businesses.</p> <p>The site is enclosed by established hedgerows to the north, east and west; however the Cotswold Escarpment is a prominent feature rising to the east of the site. The topography of the site, rising from approximately 35 to 40m AOD, forms a low hill with its peak to the northwest of the site. This landform screens the site, and Business Park, from the surrounding landscape to the north and west. Dense vegetation screens the site to the east.</p> <p>The small community to Nastend Lane is complete screened from the study area due to the dense vegetation; however there are potentially wintertime glimpses or oblique views of the site.</p>
<p>Landscape Quality, Condition and Capacity to Accommodate Change: Site Survey</p>	<p>The site is an undeveloped greenfield which positively contributes to the wider agricultural landscape and helps to restrict the impact of the adjacent business park. However, due to the topography of the site, existing adjacent uses and potential for mitigation through sensitive site planning and boundary screen planting enhancement the site can be considered to have a medium capacity to accommodate change.</p>
<p>Potential Landscape Impacts</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Permanently alter the site in terms of land use and the pattern and scale of the landscape and as such the landscape character of the site <input type="checkbox"/> Erection of an emissions stack (40 – 80m in height) would create a significant vertical landmark; however this would not be significantly incongruous in the local area due to the existing similar structures within the business park. <input type="checkbox"/> Further encroachment of the adjacent development into undeveloped green field
<p>Potential Landscape Mitigation Measures</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Sensitive site planning of facilities to the lower ground to the south of the site to minimise vertical encroachment. <input type="checkbox"/> Use of native and evergreen woodland planting around site boundaries and off site to screen views. On site screen planting could further benefit the wider area by helping to mitigate the impact of the development on the landscape. Planting should reinforce the hedgerow and field pattern of the local area, link into and make good any gaps in existing hedgerows. <input type="checkbox"/> On site buildings, materials and infrastructure should reflect the local agricultural style of the surrounding area, designed to sit as low in the landscape as possible using neutral, matt colours and avoiding the introduction of reflective materials.

Appendix C.86: Site 544 - Stroudwater Area

Visual Receptors	Sensitivity of Receptor	Potential Impact on Receptor	Potential Visual Mitigation Measures
Nastend Residences	High	Negligible – Slight Adverse due to existing screening and oblique angle of view	<div><input type="checkbox"/> Restriction of building height and associated emissions stack</div> <div><input type="checkbox"/> Location of taller site structures to the southern portion of site</div> <div><input type="checkbox"/> Minimal lighting and use of lower columns</div> <div><input type="checkbox"/> Use of matt, neutral colours and avoidance of shinny or reflective materials</div>
Stroudwater Business Park	Medium	Slight – Moderate Adverse due to the degree of exposure to the view	
Stonehouse Residences	High	Negligible – Slight Adverse due to the distance from site and intervening existing business park development	
Public Bridal Way Users	Medium	Substantial adverse due to the proximity to site and good quality of the existing landscape	
Summary: Residual Landscape and Visual Impacts	Through boundary enhancement planting works and sensitively planning the site and facility to limit the height of vertical structures, the site would experience slight adverse impacts due to the development of any size facility providing care was taken in the planning of any larger structures. Due to the presence of existing structures of a similar nature, including tall (approx. 80m +) emissions stacks in the adjacent business park development on the site would have a negligible impact, with very few potential receptors. As such, the Nastend Farm site can be said to be of High landscape suitability for consideration as a potential strategic waste site.		

Appendix C.86: Site 544 - Stroudwater Area

Further Highways Assessments (Provided by Gloucestershire County Council's Highways Development Co-ordination team)	
Existing Site Usage	Currently an undeveloped site but allocated in Local Plan for employment use, although does not have any consents
Predicted Net Traffic effect of new Strategic Waste facility	Net increase in traffic
Strategic Road Network Access	Reasonably good strategic access; vehicles would need to travel south to the A419 (through the existing commercial area) and then a short distance west to M5 Junction 13, or east on the A419 towards Stroud.
Environmental and residential impacts	The site is within an existing commercial/residential area and thus residential impacts should be relatively minor, although there would be some on the A419
Potential Junction Impacts	The A419 within the vicinity is a congested road and improvement proposals (resulting from a feasibility study) have been identified between the Horsetroughs roundabout and Junction 13 of M5, thus also including the Bonds Mill roundabout, Chipmans Platt r/bout and Upper Mills signals, for which a contribution is likely to be required
Sustainable Transport potential (rail/water)	The site is around 0.5km from the mainline railway and thus would require construction of a branch line. The optimal location would be governed by signalling equipment and other infrastructure. The provision of rail is likely to be prohibitively expensive, and there could also be land ownership issues. Liaison would be necessary with Network Rail if this was to be progressed any further, and there could be issues relating to available freight paths
Employee Accessibility by Sustainable Modes	The site enjoys reasonable access for pedestrians and cyclists from Stonehouse, and there are bus services allowing some access from further afield

Conclusion
This site is identified in the WCS Site Options Consultation document as Site 8, Nastend Farm, Stroudwater Business Park, Stonehouse, Stroud District.