

Planning (Regulatory) Committee

Date: **Friday, 02 September 2016**

Time: **10:00**

Venue: **Edwards Room, County Hall,
Martineau Lane, Norwich, Norfolk, NR1 2DH**

Persons attending the meeting are requested to turn off mobile phones.

Membership

Mr M Sands (Chairman)

Mr S Agnew

Mr S Askew

Mr M Baker

Mr B Bremner

Mr C Foulger (Vice-Chairman)

Mr A Grey

Mr D Harrison

Mr T Jermy

Mr J Law

Mr B Long

Ms E Morgan

Mr W Northam

Mr E Seward

Mr M Storey

Mr J Ward

Mr A White

At meetings of this Committee, members of the public are entitled to speak before decisions are made on planning applications. There is a set order in which the public or local members can speak on items at this Committee, as follows:

- Those objecting to the application
- District/Parish/Town Council representatives
- Those supporting the application (the applicant or their agent.)
- The Local Member for the area.

Anyone wishing to speak regarding one of the items going to the Committee must give written notice to the Committee Officer (committees@norfolk.gov.uk) at least 48 hours before the start of the meeting. The Committee Officer will ask which item you would like to speak about and in what respect you will be speaking. Further information can be found [here](#).

**For further details and general enquiries about this Agenda
please contact the Committee Officer:**

Julie Mortimer on 01603 223055 or email committees@norfolk.gov.uk

Under the Council's protocol on the use of media equipment at meetings held in public, this meeting may be filmed, recorded or photographed. Anyone who wishes to do so must inform the Chairman and ensure that it is done in a manner clearly visible to anyone present. The wishes of any individual not to be recorded or filmed must be appropriately respected.

When the County Council have received letters of objection in respect of any application, these are summarised in the report. If you wish to read them in full, Members can do so either at the meeting itself or beforehand in the Community and Environmental Services Department, County Hall, Martineau Lane, Norwich.

A g e n d a

1. **To receive apologies and details of any substitute members attending**

2. **To confirm the minutes from the Planning Regulatory Committee Meeting held on 15 July 2016.**

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3. **Declarations of Interest**

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is on your Register of Interests you must not speak or vote on the matter.

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is not on your Register of Interests you must declare that interest at the meeting and not speak or vote on the matter

In either case you may remain in the room where the meeting is taking place. If you consider that it would be inappropriate in the circumstances to remain in the room, you may leave the room while the matter is dealt with.

If you do not have a Disclosable Pecuniary Interest you may nevertheless have an **Other Interest** in a matter to be discussed if it affects

- your well being or financial position
- that of your family or close friends
- that of a club or society in which you have a management role
- that of another public body of which you are a member to a greater extent than others in your ward.

If that is the case then you must declare such an interest but can speak and vote on the matter.

4. **Any items of business the Chairman decides should be considered as a matter of urgency**

5. **Nominations to Serve on the Planning (Regulatory) Urgent Business Sub-Committee.**

The Committee is asked to nominate five Members of the Committee to serve on the Planning (Regulatory) Urgent Business Sub-Committee (2 Conservative, 1 Labour, 1 UKIP, 1 Liberal Democrat). The Terms of Reference for the Sub-Committee are "To exercise all the powers of the main Committee where a decision is required urgently (having been agreed as such by the Head of Democratic Services and relevant Chief Officer)".

6. **Y/7/2016/7007: Ashleigh County Infant School, Wymondham.**

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7. **C/7/2016/7008: Morningthorpe Closed Landfill Site, Chestnut Loke, Morningthorpe.**

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Chris Walton
Head of Democratic Services
County Hall
Martineau Lane
Norwich
NR1 2DH

Date Agenda Published: 24 August 2016



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STANDING DUTIES

In assessing the merits of the proposals and reaching the recommendation made for each application, due regard has been given to the following duties and in determining the applications the members of the committee will also have due regard to these duties.

Equality Act 2010

It is unlawful to discriminate against, harass or victimise a person when providing a service or when exercising a public function. Prohibited conduct includes direct discrimination, indirect discrimination, harassment and victimisation and discrimination arising from a disability (treating a person unfavourably as a result of their disability, not because of the disability itself).

Direct discrimination occurs where the reason for a person being treated less favourably than another is because of a protected characteristic.

The act notes the protected characteristics of: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation.

The introduction of the general equality duties under this Act in April 2011 requires that the Council must in the exercise of its functions, have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by this Act.
- Advance equality of opportunity between people who share a relevant protected characteristic and those who do not.
- Foster good relations between people who share a relevant protected characteristic and those who do not.

The relevant protected characteristics are: age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; sexual orientation.

Crime and Disorder Act, 1998 (S17)

Without prejudice to any other obligation imposed on it, it shall be the duty of the County Council to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area.

Human Rights Act 1998

The requirements of the Human Rights Act 1998 must be considered.

The human rights of the adjoining residents under Article 8, the right to respect for private and family life, and Article 1 of the First Protocol, the right of enjoyment of property are engaged. A grant of planning permission may infringe those rights but they are qualified rights, that is that they can be balanced against the economic interests of the community as a whole and the human rights of other individuals. In making that balance it may also be taken into account that the amenity of local residents could be adequately safeguarded by conditions albeit with the exception of visual amenity.

The human rights of the owners of the application site may be engaged under the First Protocol Article 1, that is the right to make use of their land. A refusal of planning permission may infringe that right but the right is a qualified right and may be balanced against the need to protect the environment and the amenity of adjoining residents.

**Planning Regulatory Committee
Minutes of the Meeting Held on Friday 15 July 2016
at 10am in the Edwards Room, County Hall**

Present:

Mr M Sands (Chair)

Mr S Agnew
Mr M Baker
Mrs J Chamberlin
Mr A Dearnley
Mr C Foulger (Vice-Chair)
Mr A Grey

Mr J Law
Mr B Long
Mr W Northam
Mr W Richmond
Mr J Ward

1 Apologies and Substitutions

Apologies for absence were received from Mr S Askew (Mr W Richmond substituted); Mr B Bremner; Mr D Harrison; Mr T Jermy; Ms E Morgan (Mr A Dearnley substituted); Mr E Seward; Mr M Storey (Mrs J Chamberlin substituted) and Mr A White.

2 Minutes from the meeting held on 10 June 2016

- 2.1 The minutes from the Planning (Regulatory) Committee meeting held on Friday 10 June 2016 were agreed as a correct record by the Committee and signed by the Chair.

3 Declarations of Interest

There were no declarations of interest.

4 Urgent Business

There was no urgent business.

Applications referred to the Committee for Determination:

- 5 Breckland District Council: Y/3/2016/3004 : Attleborough: New 630 pupil primary school and associated external works and a standalone 52 place nursery building. Director of Children's Services.**

- 5.1 The Committee received the report by the Executive Director of Community and Environmental Services seeking planning permission for the construction of a new 630 pupil primary school, associated external works and a standalone 52 place nursery building in Attleborough, Norfolk.

- 5.2 The following points were noted during the presentation of the report:
- 5.2.1 Since the publication of the report, a response had been received from the Environment Agency confirming that they had no objection to the application.
- 5.2.2 Mr A Byrne, the Local Member for Attleborough Division which covered the proposed site, had confirmed he was in full support of the application.
- 5.3 In response to questions from the Committee, the following points were noted:
- 5.3.1 Reassurance was given that Conditions 12.20 (Traffic Management Review) and 12.21 (Review of Existing School Travel Plan) had been included to monitor traffic. It was also confirmed that funding had been allocated to carry out the review when required.
- 5.3.2 The site was not within the Internal Drainage Board watercourse area (IDB) as the IDB was located on the opposite side of the A11.
- 5.3.3 The site drainage scheme had not yet been determined and would need to be approved by the Local Planning Authority before any development commenced.
- 5.3.4 The allocation of car parking spaces had been based on the information submitted by the applicant and was consistent with the adopted parking standards. It was confirmed there were sufficient spaces for the proposed number of staff.
- 5.3.5 The details of the solar panels which would be used had not yet been determined. The Committee was advised that at least ten per cent of the energy needed would be attained through renewable sources, in this instance the use of solar panels.
- 5.3.6 Some members expressed disappointed that no provision had been made in the application to collect and reuse rainwater.
- 5.3.7 The application for a new school formed part of a comprehensive development scheme in Attleborough. Permission had been granted by Breckland District Council to build 788 new homes in the town and in order to accommodate the number of new houses and the projected number of school places required, the infant and junior schools had been split to form two new schools.
- 5.3.8 Details of the scheme for provision of a school time 20mph speed limit on London Road together with the details of the pedestrian crossing would need to be agreed with the County Planning Authority in consultation with the Highway Authority.
- As part of the approved housing development, Taylor Wimpey was obliged to narrow the carriageway on part of London Road, near the housing site, install crossing islands and keep clear markings, as well as installing a 30mph speed limit and providing a shared cycle/footway.
- 5.3.9 Pedestrians would be able to access the school via London Road into the main entrance of the school as well as through a pedestrian access from the Taylor Wimpey

housing development.

- 5.3.10 Buff facing bricks would be used to construct the building, with glazing and powder coated aluminum panels and guttering and a metal roofing system. Details of some materials still needed to be agreed and this would be done by the County Planning Authority in consultation with the Chairman and Vice-Chairman of the Committee.
- 5.3.11 Pedestrians would be able to travel between the main school and nursery without having to leave the site.
- 5.4 Ms Lucy Wayman the Headteacher at Attleborough Infant School addressed the Committee in support of the application, particularly about the demand for school places in Attleborough, the inadequacies of existing provision and how important the new school was to future education provision/attainment.
- 5.5 The following points were noted in response to questions from the Committee:
 - 5.5.1 The site would be available for community use when the school was closed and the Committee was reassured that the classrooms would be locked when the school was not being used.
 - 5.5.2 It was hoped that the development would commence in September 2017 with the school opening early 2018.
- 5.6 Upon being put to the vote, the Committee unanimously **RESOLVED** that the Executive Director of Community and Environmental Services should be authorised to:
 - i) Grant planning permission subject to the conditions outlined in section 12 of the report and a Section 106 Legal Agreement in respect of linking this site to the employment application approved by Breckland District Council. The legal agreement will require the employment land to be available and marketed for sale for a one year period following commencement of development of the school site, unless otherwise agreed with Breckland District Council.
 - ii) Discharge conditions (after discussion with the Chairman and Vice-Chairman of the Committee) where those detailed in the report required the submission and implementation of a scheme, or further details, either before development commenced, or within a specified date of planning permission being granted.
 - iii) Delegate powers to officers (after discussion with the Chairman and Vice-Chairman of the Committee) to deal with any non-material amendments to the application that may be submitted.
- 6 **Borough Council of King's Lynn and West Norfolk: Y/2/2016/2001: King's Lynn Fire Station, Kilhams Way, King's Lynn, Norfolk, PE30 2HY: Provision of additional car parking for non-operational staff and visitors to site: Norfolk Fire and Rescue Service.**
- 6.1 The Committee received the report by the Executive Director of Community and

Environmental Services seeking to utilise an area of grassland located off Jeffrey Close, King's Lynn to provide 29 parking spaces for non-operational staff and visitors to the King's Lynn Fire Station.

6.2 During the presentation of the report, the following points were noted:

6.2.1 Condition 12.5 (submission of an Arboricultural Method Statement) would be deleted as a satisfactory Arboricultural Method Statement had now been received.

6.2.2 As details of how the surface water from the development would be disposed of had not yet been determined, condition 12.7 (Full details of the proposed soakaway system for the disposal of surface water from the development) would remain.

6.3 The following points were noted in response to questions from the Committee:

6.3.1 Norfolk County Council owned the area of grassland next to the existing fire station.

6.3.2 There was no information within the planning application to identify how frequently the interceptor would be maintained or cleared.

6.3.3 Non-operational staff and visitors currently parked on the operational drill area, therefore the additional spaces would allow non-operational staff and visitors to park elsewhere on the site, allowing the drill area to be utilised. There would be no provision for public car parking. The use of the car park would be restricted as confirmed in condition 12.3.

6.4 Upon being put to the vote, the Committee unanimously **RESOLVED** that the Executive Director of Community and Environmental Services should be authorised to:

- i) Grant planning permission subject to the conditions outlined in section 12 of the report.
- ii) Discharge conditions (after discussion with the Chairman and Vice-Chairman of the Committee) where those detailed in the report required the submission and implementation of a scheme, or further details, either before development commenced, or within a specified date of planning permission being granted.
- iii) Delegate powers to officers (after discussion with the Chairman and Vice-Chairman of the Committee) to deal with any non-material amendments to the application that may be submitted.

The meeting ended at 11.05am.

CHAIRMAN



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Y/7/2016/7007: Ashleigh County Infant School, Wymondham.

Applications Referred to Committee for Determination:

South Norfolk District Council: Y/7/2016/7007:

**Expansion of the existing infant school to full primary provision by the addition of a new hall, classrooms, additional staff car parking, external lighting, and hard play area. Addition of adjacent field and change of use from public amenity to educational and fencing:
Executive Director of Children's Services**

Report by the Executive Director of Community and Environmental Services

Summary

The proposed development is part of the County Council's Children's Services capital programme; to re-organise Ashleigh Infants School to become an 'all through primary school' with a two form entry (2FE) provision. Consequently, planning permission is sought for the expansion to the school, additional car parking, hard play area, and the change of use of part of the adjoining amenity land to educational use.

7 letters of objections and concerns have been received and primarily relate to highways and amenity issues, loss of amenity land, impact on wildlife and landownership. 5 letters in support have been received. There are no objections from statutory consultees subject to suitably worded conditions should planning permission be granted.

It is considered that the proposed development accords with the development plan and no other material considerations indicate otherwise. Significant weight has been attached to the need for the school place provision and the need to expand the school. On balance the proposed development is considered to be acceptable.

In accordance with the Council's Scheme of Delegation, the application is brought to the Planning (Regulatory) Committee for determination due to the level of objection received.

Recommendation

It is recommended that the Executive Director of Community and Environmental Services be authorised to:

- (i) Grant planning permission subject to the conditions outlined in section 12.
- (ii) Discharge conditions (in discussion with the Chairman and Vice Chairman of the committee) where those detailed above require the submission and implementation of a scheme, or further details, either before development commences, or within a specified date of planning permission being granted.
- (iii) Delegate powers to officers (in discussion with the Chairman and Vice Chairman of the committee) to deal with any non-material amendments to the application that may be submitted.

1. The Proposal

- 1.1 Location : The application site relates to Ashleigh Infants School, Wymondham, a single storey building with the exception of the staff accommodation which is at first floor level. Constructed of red brick and tile roofing materials, roof structures are a mixture of mono and twin pitch and flat roof.
- 1.2 : The school has been remodelled internally and extended over the years to include a nursery, a children's centre and additional classrooms. More recently the school has received temporary planning permission for the provision of modular accommodation.
- 1.3 : Situated within a predominantly residential area north-east of Wymondham town centre, the school is surrounded by a mixture of detached and terraced houses and bungalows. A parade of shops, a community centre and a public house are situated on Lime Tree Avenue to the south. Adjoining the school is an area of amenity land to south-western boundary.
- 1.4 Type of development : Planning permission is sought for an expansion to the school, additional car parking, hard play area, and the change of use of part of the adjoining amenity land to educational use.
- 1.5 : The proposed scheme consists of:
- An extension to the western elevation of the existing school building comprising 9no. classrooms, which will allow for 2no. classrooms per year group, plus 1 no. classroom for the 'bulge' year;
 - External lighting;
 - Change of use of adjoining amenity land to educational use;
 - Improved school entrance;
 - New school hall built adjacent to the existing hall with a connecting door;
 - New kitchen (to the north elevation);
 - Internal alterations to form staff accommodation;
 - Additional parking provision accessed off Sheffield Road;
 - Additional pedestrian access points;

- External hard/soft play learning area
- 1.6 Duration : Full permanent planning permission is sought.
- 1.7 Access : Vehicular and pedestrian access to the school is off Sheffield Road, which also serves residential dwellings.

2. Constraints

- 2.1 The application site lies within the development limits and the Norwich Policy Area. The adjoining amenity land is allocated as existing recreational/amenity land to protect (WYM 12), in the Wymondham Area Action Plan.

3. Planning History

- 3.1 Y/7/2015/7007: Provision of 6-bay modular accommodation for a period of two years; external works to include ramps, steps, paving, external lighting and associated works. Approved August 2015.
- 3.2 Y/7/2014/7007: Provision of 6-bay modular accommodation building for a period of five years; external works to include: ramps, steps, additional car parking spaces and associated works. Approved July 2014.
- 3.3 Y/7/2013/7013: Installation of external canopies adjacent to existing school buildings to improve circulation locally and provide covered play areas. Approved July 2013.
- 3.4 Y/7/2012/7013: Discharge of Conditions 6, 7 & 12 of Planning Permission Y/7/2010/7023. Partly discharged January 2013.
- 3.5 Y/7/2010/7023: Extension to provide Phase 3 Children's Centre, extension of car parking area, replacement play area. Approved October 2010.
- 3.6 Y/7/2010/7007: Formation of single storey flat roofed extension to be used as storage. Approved April 2011.
- 3.7 Y/7/2006/7028: Provision of a modular playgroup building. Approved January 2007.
- 3.8 7/2000/1656: Classbase extension & link to existing school. Approved November 2000.
- 3.9 7/1998/1482: Pitched roof extension to provide additional classroom with flat roofed link to main school. Approved November 1998.

4. Planning Policy

- 4.1 Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014) : 1 Addressing climate change and protecting environmental assets
: 2 Promoting good design
: 3 Energy and water
: 6 Access and transportation
: 7 Supporting communities
: 10 Location for major new or expanded communities in the Norwich Policy Area
- 4.2 South Norfolk Local Plan Development : DM 1.1 Ensuring Development Management Contributes to Achieving Sustainable

Management Policies Document (2015)		:	DM 1.3	Development in South Norfolk
		:	DM 1.4	The Sustainable Location of New Development
		:	DM 1.4	Environmental Quality and Local Distinctiveness
		:	DM 3.8	Design Principles applying to all development
		:	DM 3.10	Promotion of sustainable transport
		:	DM 3.11	Road Safety and the free flow of traffic
		:	DM 3.12	Provision of vehicle parking
		:	DM 3.13	Amenity noise and quality of life
		:	DM 3.15	Outdoor play facilities and recreational space
		:	DM 3.16	Improving the level of community facilities
		:	DM 4.2	Sustainable drainage and water management
		:	DM 4.5	Landscape Character and River Valleys
		:	DM 4.8	Protection of Trees and Hedgerows
		:	DM 4.9	Incorporating landscape into design
4.3	South Norfolk Local Plan Wymondham Area Action Plan (2015)	:	WYM 8	General Green Infrastructure Requirements For New Development Within Wymondham AAP Area
		:	WYM12	Protecting Existing Recreation Or Amenity Land In Wymondham
4.4	South Norfolk Place-Making Guide Supplementary Planning Document (2012)	:	2.5	Wymondham
4.5	The National Planning Policy Framework (2012)	:	4	Promoting sustainable transport
		:	7	Requiring good design
		:	8	Promoting healthy communities
		:	10	Meeting the challenge of climate change, flooding and coastal change
		:	11	Conserving and enhancing the natural environment
4.6	National Policy Statement	:		Planning For Schools Development
5.	Consultations			
5.1	South Norfolk Council	:	Do not wish to raise an objection to the application. Any approval should include suggested conditions relating to demolition/construction site noise, vibration and dust, the installation of generators/air handling plant, lighting, unexpected contaminated land; and construction hours.	

5.2	Wymondham Town Council	: No Objections.
5.3	Norfolk Fire & Rescue Service	: No response received at the time of writing this report.
5.4	Environmental Health Officer (South Norfolk District Council)	: Comments incorporated into the response received from South Norfolk Council.
5.5	Sport England	: No objection subject to conditions requiring the marking out of pitches on the new playing field and a community use agreement for the playing fields.
5.6	Highway Authority (NCC)	: Do not raise an objection. Should planning permission be granted it is requested conditions regarding: provision of access and parking, cycle parking, provision and completion of pedestrian crossing on Lime Tree Avenue and Vehicle Activated Sign (VAS) flashing sign on Sheffield Road, Traffic Regulation Order for yellow lines on Sheffield Road, and travel plan.
5.7	Senior Green Infrastructure Officer	: No objections. Request conditions relating to hard/soft landscaping and boundary treatments are imposed on any grant of planning permission.
5.8	County Ecologist	: Submitted ecological assessment is satisfactory. Will not have any adverse impacts on ecology. Existing pond has a low likelihood of great crested newts being present. Wildlife mitigation and enhancements should be implemented. Majority of extension on land that is amenity grassland with low ecological value.
5.9	Senior Arboricultural Office	: No objections.
5.10	Environment Agency	: No comments to make on the application.
5.11	Lead Local Flood Authority	: Draws attention to potential incidences of flooding in the area and recommends consultation with Anglian Water. <u>Re-consultation on additional drainage information:</u> No comments to make.
5.12	Anglian Water	: Raise the following points: Development will lead to unacceptable risk of flooding downstream; The surface water strategy/flood risk assessment submitted is unacceptable. However, should the Planning Authority be mindful to grant planning permission, conditions relating to the submission of foul water and surface water strategies should

be imposed.

Re-consultation on additional drainage information: The sewerage system has present capacity to accept foul drainage from the extension via a gravity regime. The surface water strategy/flood risk assessment is acceptable at a maximum rate of 5liltre per second (5l/s).

- 5.13 Local residents : 7 letters of representation from local residents have been received. The main issues raised relate to increased traffic, highway and pedestrian safety, loss of view, pollution, de-valuation of property, loss of privacy, impact on wildlife, wider community use of school site and land ownership. All issues raised are fully addressed in the main body of the report.
- 5.14 County Councillor (Mr Joe Mooney) : Supports the application.

6. Assessment

6.1 Proposal

- 6.2 Planning permission is sought for the erection of an extension to the school, comprising 9no. classrooms, improved school entrance; external lighting; new school hall; new kitchen; internal alterations to form staff accommodation; additional parking provision accessed off Sheffield Road; additional pedestrian access points; and external hard/soft play learning area. In addition, it is also proposed to change the use of part of the adjoining amenity land for educational purposes.

6.3 Site

- 6.4 Situated within a predominantly residential area north-east of Wymondham town centre, the application site relates to Ashleigh Infants School, a single storey red brick/tile building with the exception of the staff accommodation which is at first floor level. The school has been remodelled internally and extended over the years to include a nursery, a children's centre and additional classrooms. More recently the school has received temporary planning permission for the provision of modular accommodation, in order to meet the pressure of pupil places.
- 6.5 Vehicular and pedestrian access is off Sheffield Road, with parking and turning provision within the school site.

6.6 Principle of development

- 6.7 A basic principle when assessing planning applications is outlined in Section 38(6) of the Town and Country Planning Compulsory Purchase Act 2004 which states:

“if regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts, the determination must be made in accordance with the plan unless material considerations indicate otherwise”.

- 6.8 In terms of the development plan, the County Planning Authority considers the relevant documents in relation to this application are the Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014), the South Norfolk Local Plan Development Management Policies Document (2015), the South Norfolk Local Plan Wymondham Area Action Plan (2015) and the South Norfolk Place-Making Guide Supplementary Planning Document (2012). Whilst not part of the development plan, policies within the National Planning Policy Framework (NPPF) are also a further material consideration of significant weight.
- 6.9 The application site lies within the development boundary for Wymondham as identified on the Wymondham Area Action Plan (WAAP) Policies Map; an area considered suitable for development, in accordance with Policies DM 1.1 and 1.3 of the South Norfolk Development Management Policies Document (SN DMPD) and the NPPF which guides development to sustainable locations. Policy 7 of the Joint Core Strategy for Broadland, Norwich and South Norfolk (JCS) supports sufficient, appropriate and accessible education opportunities, including new or expansions of schools to serve major growth locations.
- 6.10 Section 8, Para 72 of the NPPF attaches great weight to the need to create, expand or alter schools. Similar principles are also set out in the Department of Communities and Local Government (DCLG) Ministerial Policy Statement planning for schools development (2008), which emphasises the commitment to increasing both the number of school places and choice and diversity in the state funded sector and makes it clear that there should be a presumption in favour of the development of state funded schools.
- 6.11 This project is part of the County Council's Children's Services capital programme; to re-organise 3 no. schools within Wymondham to become 'all through primaries'. This particular project makes provision for four additional year groups in the 7 – 11 age range with a two form entry (2FE) provision.
- 6.12 The proposed development is within the development boundary for Wymondham and partly within the curtilage of an established school site. The principle of development within the existing school grounds is considered acceptable; the principle of the use of the adjoining amenity land is not established. The determination of the application must be in accordance with the development plan, unless material considerations indicate otherwise.
- 6.13 **Amenity (noise, dust, light pollution etc)**
- 6.14 Policy DM 3.13 of the SN DMPD seeks to ensure a high quality of life for existing and future occupiers of land and buildings. Policy 7 of the JCS, Para 17 and Section 11 of the NPPF reiterate this. In terms of amenity, this means avoiding overlooking and overbearing impacts and ensuring existing and potential occupiers are protected from forms of pollution such as noise, odour, dust and light pollution.
- 6.15 The application site is situated within a predominately residential area, and bound by residential property on all sides.
- 6.16 The proposed school extension will extend the built form further west, closer to neighbouring properties on Beech Close, however the building is single storey, the closest part of the extension (relating to a group space area with a door and window) is a minimum of approximately 14m to the rear garden boundaries of properties on Beech Close, which are also separated from the

school site by an existing footpath. The extension of the existing car parking provision will run along the western boundary of the school site, backing onto the rear boundaries of properties on Beech Close. To lessen the amenity impact of this, boundary treatments includes a 1.4m high close boarded fence with a 1.8m high hedge. The new hard play area (south of the extended car park) and new footpaths are considered to be sufficient distance away from neighbouring property. Regarding the inclusion of part of the adjoining amenity land within the school boundary, historically this has been used by members of the wider community; therefore it is not considered that activity will increase in this area.

- 6.17 A Lighting Assessment accompanies the application. Wall mounted lighting will be provided onto the building at approximately 3m in height. Pole mounted lighting to illuminate evacuation points, providing emergency lighting only will be installed at a height of approximately 6 metres. Low level bollard lighting will be provided to the extended car park area and new access paths between Beech Close and Lime Tree Avenue.
- 6.18 The submitted Noise Statement states that extract ventilation is to be provided to sanitary spaces and the kitchen. South Norfolk Council have reviewed the application and do not raise any objection. However due to the limited noise data regarding the ventilation plant and in the interest of amenity, it is recommended that any planning permission should include conditions relating to demolition/construction site noise, vibration and dust, the installation of generators/air handling plant, lighting, unexpected contaminated land; and construction hours.
- 6.19 Given the design and scale of the proposed development, the separation distances to residential properties and boundary treatments, it is considered that the proposed development will not have a detrimental impact on the amenities of occupiers of adjacent residential properties, by reason of overlooking, over shadowing, noise, dust, odour or light pollution or loss of privacy, in accordance with the aforementioned relevant national and local planning policies.
- 6.20 **Design**
- 6.21 Policy DM 3.8 of the SN DMPD, Policy 2 of the JCS and Section 7 of the NPPF all relate to design. The policies encourage development to be of high quality good design and relate well to local surroundings, amongst other criteria, in terms of the use of sustainable materials, design, scale, height, massing and landscaping.
- 6.22 The proposal comprises internal remodelling and the erection of a single storey extension attached to the western elevation of the existing school building. In terms of internal layout, the extension block will provide 9no. classrooms to the north and south of a central circulation corridor, accessible from both the existing school building and outdoors and arranged under back to back mono-pitch roofs with a flat roofed area between for the corridors and classrooms stores/wet areas. Centrally to the school building and adjacent the existing hall, a new hall is proposed with a pitched roof, similar to that of the existing.
- 6.23 Externally the layout works well. Pedestrian access via footpaths will be

available through the site and will be further enhanced by the creation of the 2no. additional access points on Beech Close and Lime Tree Avenue.

- 6.24 In terms of external appearance, materials have been chosen to ensure the proposed development is in keeping (as much as possible) to the existing building, complimenting both the existing school building and the surrounding area. It is intended to construct the classroom extension of red brick to match the existing, the new kitchen and the linked corridor in white render to visually separate the new building from the old and clad the new hall in grey lightweight panelling. Other materials of construction include the following: metal standing seam roofing material, Basalt Grey (RAL 7012) aluminium doors, windows and brise soleil. Fencing is a mixture of close boarded fencing and wire mesh. Should planning permission be granted it is intended to impose a condition requiring a sample of materials to be submitted and approved. In addition, appropriate landscaping to the site will help soften the impact of the proposal.
- 6.25 The design, siting and materials of the proposed development is acceptable and considered to relate well to the existing school building and surroundings, in accordance with the relevant national and local planning policies relating to design.
- 6.26 **Flood Risk**
- 6.27 Policy DM 4.2 of the SN DMPD states that sustainable drainage measures must be fully integrated within design to minimise the risk of flooding on the development site or in the surrounding area. Policy 1 of the JCS and Section 10 of the NPPF also apply. The overall thrust of the policies is to minimise flood risk, locating development in areas at least risk of flooding and to protect ground water sources.
- 6.28 According to the Environment Agency (EA) flood map, the application site lies within Flood Zone 1 - low risk of tidal and fluvial flooding. 'Nurseries and Educational establishments' fall within the 'More Vulnerable' classification as defined within the Planning Practice Guidance (PPG) Flood Risk Vulnerability Classification table. This type of development is generally considered acceptable in line with the Flood Risk Vulnerability and Flood Zone Compatibility table in the PPG.
- 6.29 As a 'major' development as defined in the Town and Country Planning (Development Management Procedure) (England) Order 2015, with a site area in excess of 1 hectare, the application is accompanied by a Flood Risk Assessment. The report concludes that the development is a compatible development for flood zone 1 and will not create any flood risk issues.
- 6.30 In terms of flood risk, the Environment Agency were consulted on the application and do not wish to comment.
- 6.31 In light of the flood risk zone, flood risk vulnerability classification and flood zone compatibility, it is not considered that the proposed development will give rise to tidal or fluvial flooding, in accordance with the relevant aforementioned national and local planning policies relating to flood risk.
- 6.32 **Sustainable Drainage – Foul Drainage / Surface Water**

- 6.33 Policy 4.2 of the SN DMPD requires the use of sustainable drainage systems (SuDS) for all development proposals as an integral part to the strategy to control flooding.
- 6.34 In terms of surface water drainage the submitted flood risk assessment concludes that infiltration methods are unlikely to be a feasible method of surface water disposal due to the poor permeability of the site, therefore it is intended to connect to the public sewer.
- 6.35 In relation to surface water drainage, the Lead Local Flood Authority were consulted and drew the planning authority's attention to incidences of DG5 flooding in the area – internal flooding to properties around Finderne Drive. The development intends to dispose of both foul and surface water to the mains sewer.
- 6.36 Anglian Water in their original consultation response, stated that the submitted surface water strategy/flood risk assessment was unacceptable.
- 6.37 In response, the applicant submitted a revised drainage strategy and additional drainage information in an attempt to demonstrate that the proposed development can be drained so as not to cause on-site flooding issues or exacerbate flooding downstream. In email correspondence between the agent and Anglian Water, supporting evidence included DVD footage from the survey work of the surface water drainage system to prove the existing positive drainage from the site. To demonstrate that the surface water hierarchy has been followed, submitted infiltration test results prove that the infiltration rate at the site is not adequate to support a soakaway solution; the nearest watercourse is approx. 200m away from the site, which is not a viable location to accept surface water run-off from the site; therefore the only available and feasible option is to discharge to a positive sewer system.
- 6.38 To restrict the surface water discharge rate to a greenfield run-off rate, it is intended to install an attenuation tank, to hold the water and discharge at the agreed rate. In email correspondence, the agent confirms that a surface water discharge rate of 5l/s can be achieved and controlled by appropriate attenuation. To secure this, it is intended to impose a suitably worded condition on any grant of planning permission. It is therefore considered that the proposed development can be accommodated on site without giving rise to surface water flooding, in accordance with Policy 4.2 of the SN DMPD.
- 6.39 Turning to foul drainage, Anglian Water in their original consultation response stated that the development would lead to an unacceptable risk of flooding downstream.
- 6.40 In response, the agent confirms the school site is currently served by a separate foul and surface water drainage system and there is an existing pumping station within the school site currently serving the existing modular accommodation. The pumping station is to remain as is one of the existing mobiles. Via email correspondence the agent confirms it is intended to connect the proposed development to the existing foul drainage gravity system, which will be re-routed to accommodate the extension to be connected.
- 6.41 Anglian Water has based their view on a standard formula of each school child producing 90 litres of foul sewage per head per day. Using this formula,

the rate for the proposed extension is calculated at 0.438l/s (average daily foul flow) and 0.680l/s (peak flow). On this basis Anglian Water has removed their objections and are satisfied that the foul flows can be accommodated in the foul network.

- 6.42 To secure the delivery of this method of foul drainage disposal, it is considered necessary to impose a suitable worded pre-commencement condition requiring full details of the foul drainage strategy be imposed should planning permission be granted. Under the Water Industry Act 1991, should the proposed development lead to an unacceptable level of flooding, improvements to the existing foul sewer network will need to be funded by the developer, in this NCC Children's Services.
- 6.43 Anglian Water in their latest consultation response confirm that the foul drainage strategy to discharge to sewer via the gravity regime is acceptable. Providing the applicant proposes to connect via a gravity regime, it is considered that the proposed development will not give rise to on-site flooding or exacerbate flooding downstream, in accordance with Policy 4.2 of the SN DMPD relating to sustainable drainage.
- 6.44 **Sustainability**
- 6.45 Policy DM 3.8 of the SN DMPD relating to design states buildings and spaces should be orientated to gain benefit from sunlight and passive solar energy. Policy 1 of the JCS requires development to be located and designed to use resources efficiently, minimise greenhouse gas emissions and be adapted to a changing climate and more extreme weather, whilst Policy 3 requires development such as this, to include sources of decentralised and renewable or low-carbon energy providing at least 10% of the scheme's expected energy requirements. Section 10 of the NPPF expects new development to take account of local policies in decentralised energy, landform, layout, building orientation, massing and landscaping to minimise energy consumption.
- 6.46 The accompanying Sustainability Statement states a minimum of 10% carbon reduction through renewables is expected. The design incorporates a number of sustainability elements, including due north and south facing classrooms, a brise soleil to south facing classrooms, two sided natural ventilation to classrooms using openable windows, mechanical ventilation, hot/cold water flow control devices (to limit waste), and the provision of a PV array (equating to 12% energy generation) with an area of 100m², located on the south facing roof over the class rooms.
- 6.47 In accordance with national and local planning policy it is a requirement of this scheme to limit its impact on the environment. Given the layout, orientation and constraints of the site, the sustainability measures proposed are considered acceptable, in accordance with the aforementioned national and local planning policies relating to sustainability.
- 6.48 **Highways**
- 6.49 Policy DM 3.11 of the SN DMPD does not permit development that endangers highway safety or the satisfactory functioning of the highway network, whilst policy DM 3.12 seeks appropriate parking provision. Policy 6 of the JCS seeks to enhance the transportation system improving access to areas. Section 4 of the

NPPF and Policy 3.10 of the SN DMPD encourage maximising the use of sustainable transport modes.

- 6.50 Vehicular and pedestrian access is off Sheffield Road linked by an internal access loop road, leading to an extended car park area (providing a total of 72 parking spaces for the school and children's centre) along the western boundary of the site. The existing access/egress is to remain unchanged. The accompanying Design and Access Statement sets out a number of improvements to the vehicular and pedestrian links to the school. 1no. designated disabled parking space is located in the main car park at a point closest to the school and 2no. spaces outside the access ramp for the children's centre. The pedestrian access through the site will remain unchanged. Additional site access points will be provided to relieve pressure on the main entrance. One to the west of the site linking an existing footpath by Beech Close to a new path within the site and a gated access to the southern boundary, providing access to a new path from Lime Tree Avenue.
- 6.51 The Council's Highway Engineer has reviewed the application submission and visited the site; and whilst the proposal will result in an increase in traffic and further activity within the immediate vicinity of the school, this is unlikely to generate a significant highway safety concern. The surrounding roads are residential in character and whilst it is acknowledged that the proposed development will result in further traffic and pedestrian activity, at drop-off and pick-up times, this is typical of most schools. The school site benefits from an internal access loop road with an in/out arrangement, there are 'School Keep Clear' signs and single yellow line waiting restrictions on Sheffield Road; double yellow line restrictions on Lime tree Avenue and both Sheffield Road and Lime Tree Avenue are subject to a 20mph speed limit with an associated VAS flashing sign. To help manage the additional traffic, the Highway Authority recommend off-site highway improvements to include the provision of an additional VAS flashing sign to the east of the school and additional yellow line junction protection on Sheffield Road at its junction with Maple Close, Hawthorn Close and Finderne Drive.
- 6.52 Given the localised catchment area of the school and the comprehensive footway network the opportunity to access the school from the surrounding residential area by more sustainable modes such as by foot / bicycle is good. However, the school will need to review its current travel plan to further promote sustainable modes/alternative methods to access the site. The Highway Authority is satisfied the overall parking provision is acceptable and in line with the Council's adopted parking strategy. The proposed level of cycle parking is not sufficient, therefore it is recommended that further secure cycle / scooter parking be provided on all entrances to the site.
- 6.53 Subject to conditions relating to provision of access and parking, cycle parking, provision and completion of pedestrian crossing on Lime Tree Avenue and Vehicle Activated Sign (VAS) flashing sign on Sheffield Road, Traffic Regulation Order for yellow lines on Sheffield Road, and travel plan, it is considered that the proposed development is not in conflict with Policies DM 3.10, 3.11 and 3.12 of the SN DMPD, Policy 6 of the JCS and Section 4 of the NPPF, relating to highway safety, parking provision and sustainable transport modes.

6.54 Impact on playing field / pitch provision

- 6.55 The proposed development seeks to change the use and include part of the adjoining amenity land for educational purposes. This area of land is covered by WYM 12 of the WAAP and identified as existing recreation/amenity land to protect. Policy DM 3.15 of the SN DMPD also restricts the loss of existing open space.
- 6.56 Section 8, para 74 of the NPPF resists the loss of existing open space, sports and recreational buildings and land including playing fields, unless it is demonstrated that there is surplus provision, the loss resulting from the proposed development would be replaced by equivalent or better provision, or the development is for alternative sports and recreation provision, which outweighs the loss.
- 6.57 The proposal includes the change of use to educational purposes of part of the adjoining amenity land to west of the site, to be marked out with formal pitch provision. The land is within the ownership of the County Council, and is currently used as amenity land for the wider community. Submitted plans show a portion of the amenity land retained for public access, defined by a boundary between it and the school site.
- 6.58 Part of the loss of the existing school playing field is largely restricted by hard play areas and mobile classrooms. Furthermore, as part of this application, there will be the loss of another part of the existing playing field to accommodate the extension to the car park, and there will be the construction of an 800m² hard play area, that will be marked out for sports court use. Sport England comment that the remaining playing field will still be able to accommodate a mini soccer pitch and grass running track; and consider that the loss of the existing playing field will be compensated with the inclusion of the existing amenity land within the school boundary, which will create an additional 1.12 hectares of playing field, capable of accommodating two mini soccer pitches and two rounders pitches (in the summer months).
- 6.59 In 2007 South Norfolk Council undertook an assessment of open space, sport and recreation facilities across the district to identify the local needs and opportunities for improving or replacing current facilities. The document titled 'South Norfolk Council – PPG17 Open Spaces, Indoor Sports and Community Recreation Assessment' shows an over provision of amenity space (informal open space) in Wymondham - 1.08 hectares per 1,000 population against the recommended standard of 0.71 hectares per 1,000 population. In addition, the documents identifies the amenity space at Beech Close (the subject of this application) as a shortfall in provision. It is to be noted that the amenity space in terms of quality was rated 33% against a recommended standard of 46%, and was the only site in that category in Wymondham to score below the 46% quality rating. According to the submitted plans/Planning Statement the total amenity space has an area of 1.49 hectares, with only 1.12 hectares of this to be included within the school grounds, and to be provided to a quality whereby formal pitch provision can be laid out. The remaining 0.37 hectares will be retained for general amenity use by the wider community.
- 6.60 Sport England do not raise an objection subject to conditions requiring the marking out of pitches on the playing field and a community use agreement, to

secure access to the playing fields for community groups/clubs. South Norfolk Council do not raise an objection.

- 6.61 Whilst this part of the proposal is contrary to this policy, it is acknowledged that the amenity land in quality terms is less than the standard quality set out by South Norfolk Council in its open space/recreation assessment, the proposal will not result in total loss of the amenity land, which will be laid out for formal pitch provision, the remainder will be retained for unrestricted public access; and the applicant (NCC Children's Services) has provided written confirmation there is no objection to the preparation/implementation of a Community Use Agreement. It is considered that the inclusion of part of the amenity land for education purposes, increasing the size of the playing field and formally laid for pitch provision, thereby enhancing the current education provisions for the school, outweigh the loss of part of the amenity land.

6.62 **Landscape / Trees**

- 6.63 Policy DM 4.8 of the SN DMPD expects all development proposals to consider the existing trees both on and adjacent to the site and safeguards and promotes the appropriate management of protected and other significant trees and hedgerows, unless there is a need that clearly outweighs the loss. Policy DM 4.9 of the SN DMPD requires the provision of new planted features to form part of developments and respecting the character of the local landscape. Policy 1 of the JCS and Section 11 of the NPPF echoes this and encourages good design to limit the impact on landscape and nature conservation.

- 6.64 The application site comprises amenity grassland and a number of trees within the school site including on the area of the proposed extension and extended car park. The site does not lie within a Conservation Area nor are the trees covered by a Tree Preservation Order (TPO).

- 6.65 The application is accompanied by an Arboricultural Impact Assessment (AIA) which concludes that three category C trees (T33, T34 and T35) and 5 category B trees (G1) will need to be removed. Category C trees are small or in poor condition and category B trees are generally in good condition; the trees are required to be removed to facilitate the development. To mitigate the loss of the trees, it is proposed to provide replacement planting, in the form of a minimum of 8no. trees such as Flowering Crab Apple, Whitebeam, Field Maple, Scot pine and Silver Birch. A small section of scrub and hedging will be removed and replaced with native hedging of a greater length. All trees to be retained within the site will be adequately protected during construction.

- 6.66 The Council's Senior Arboriculture & Woodland Officer does not raise an objection provided the development is carried out strictly in accordance with the submitted AIA. In addition, the Council's Green Infrastructure Officer does not raise an objection, however requires further details relating to the hard/soft landscaping and boundary treatments. The aforementioned comments of the Natural Environment Team can be dealt with by suitably worded conditions should the application be granted.

- 6.67 It is considered that the proposed development can be carried out without having a detrimental impact on the trees within the site, and proposes sufficient mitigation measures, in accordance with Policies DM 4.8 and 4.9 of the SN DMPD, Policy 1 of the JCS and Section 11 of the NPPF.

6.68 **Ecology / Biodiversity**

6.69 Policy 1 of JCS and Section 11 of the NPPF aims to conserve and/or enhance biodiversity. WYM 8 of the AAP states that new development in Wymondham is required to maintain, protect and enhance green infrastructure.

6.70 The site comprises areas of grassland, hardstanding, trees and hedging, consequently the application is accompanied by an Ecological Appraisal. The report concludes that no further surveys for bats are recommended, however if during any works on site bats or bat roosts are encountered then works will cease and a licensed bat worker contacted. No further survey work is recommended for birds and works should commence outside the breeding bird season (March to August). No further survey work is recommended for reptiles as there is no suitable habitat on or adjacent to the site for reptiles. The potential for great crested newts is assessed as neutral therefore no further survey work is recommended. As a precautionary measure mitigation is recommended in the form of bat boxes as a biodiversity measure, bird boxes to mitigate the loss of shrubs and trees and replacement planting.

6.71 The Council's Ecologist has reviewed the application and does not raise any objections and is satisfied with the conclusion in the Ecological appraisal that an assessment of the site found little potential for the proposed development to negatively impact on the protected species or other wildlife. The recommended mitigation and wildlife enhancements are welcomed to lessen the potential for impacts on wildlife.

6.72 It is considered that the proposed development can be undertaken without having an adverse impact on protected species and/or other valued species, in accordance with the relevant planning policies relating to ecology/biodiversity.

6.73 Appropriate Assessment

The application site is within 10km of Norfolk Valley Fens Special Area of Conservation (SAC) which is a European protected habitat. The application has been assessed in accordance with Regulation 61 of the Conservation of Habitats and Species Regulations 2010. It is considered there is no requirement for the CPA to undertake an Appropriate Assessment of the development.

6.74 **The Community Infrastructure Levy**

6.75 The development is CIL liable; such development is zero rated.

6.76 **Responses to the representations received**

6.77 The application was advertised by means of neighbour notification letters, site notices, and an advertisement in the Eastern Daily Press newspaper.

6.78 Neighbour notification letter expiry date: 25 May 2016

Site notice expiry date: 3 June 2016

Press Advert expiry date: 25 May 2016

6.79 5 letters of support have been received and make the following comments:

- Additional entrance is welcomed to alleviate the congestion problems
- The development is backed by on-going improvements in teaching and learning that will benefit children that attend the school
- Creating another access to the school from Lime Tree Avenue would disperse congestion, making it safer on the children's journey
- No further delays to the start of the build
- The school needs the facilities and resources in order to thrive and develop
- The land next to the school originally belonged to the school and has lay un-used by many, described as a dog-walking area...once enveloped by the school the area will become well used for green space and land retained for use of the wider community
- Wymondham is a growing town, future adults should have the best opportunities for a school building to be proud of (not mobile classrooms)
- The plans and designs have been well considered and carefully thought through
- Relived to see a pedestrian entrance on another road
- Ashleigh is committed to working with the community to make the best safe choice for the children
- Fantastic for the school and children of Wymondham
- Pleased the school is utilising land rather than selling it off for housing

6.80 7 letters of objection have been received and make the following comments:

- Concerned about drop off and pick up and how this affects Sheffield Road
- Change in view - from just trees and playing field to gate, entrance, fencing and cars
- Pollution
- Loss of shrubbery which provides privacy and deadens noise
- Loss of privacy
- Impact on wildlife
- De-valuation of property
- Planning Statement states foot path from Limetree Avenue will be some considerable distance from neighbouring properties. Gate to footpath will not be some considerable distance from properties
- Limetree Avenue will become additional drop off/parking area for parents and visitors resulting in negative impact/disturbance to residents on Limetree Avenue, Limetree Close and Willow Close
- Parking issues on surrounding roads - parents do not park safely making

visibility difficult and block driveways

- How will area for public use be maintained, will there be any works to it, will it be drained
- Is the close boarded fencing on western perimeter being installed
- How will wider community use of school site be controlled
- How will people access the amenity area, what parking will there be
- No enhancements to the area apart from the school expanding
- Is there any more planned development in the future
- It is in deeds that the amenity land was for residents of Beech and Ash Close

6.81 In response to the representation received the applicant makes the following comments:

Loss of landscaping

The proposals involve the loss of a small amount of existing landscaping within the site. This loss is not significant, and is not considered to be detrimental in terms of wider landscape impact or detrimental to the amenities of neighbouring properties. The application is accompanied by an Arboriculture Impact Assessment report which addresses this matter, which indicates that new replacement planting will be provided within and around the site to compensate for the loss of any existing landscaping. Some local residents who are concerned about the loss of vegetation between them and the expanded car park should be reassured that a band of vegetation is remaining and is indicated on the proposed drawings.

Impact on ecology

The proposals involve the loss of existing landscaping and works to existing buildings within the site, and therefore the possibility of impact on existing ecological features. The application is accompanied by an Ecological report undertaken by Wild Frontier Ecology. An ecological appraisal of the site has been undertaken which indicated that the school and its grounds have little potential for the proposed development to negatively impact protected species and other wildlife. However as a precaution, some additional mitigation is advised with respect to care taken during any clearance of vegetation, removal of modular classrooms and construction of the new classrooms and car park. It was recommended that with the proposed mitigation in place, no significant impacts on protected species and/or valued species would be expected.

Increase in vehicles/impact on surrounding roads

The proposed development will see the expansion of the existing infant school to a full Primary school with the addition of a new hall, classrooms, additional staff car parking, external lighting, and hard play area. Additionally, part of an adjacent amenity area will be amalgamated within the school site and used for educational purposes. It is acknowledged that there will be an increase in staff numbers, and the proposals address this by the provision of additional staff car parking. It is acknowledged that the provision of new pedestrian gates to aid greater pedestrian permeability to the School site may displace some existing

vehicular traffic to the school. The proposals have been developed following pre-application consultation with the Highway Authority who require a greater degree of permeability be developed to reduce the current and potentially increased impact on Sheffield Road.

The proposals have been reviewed and accepted by the Highway Authority subject to the imposition of a number of conditions. These conditions include new speed signs and restrictions and a new crossing point to the new pedestrian access. A concern was raised that the new access at Lime Tree Avenue is for vehicular access to the new car park, we would like to clarify that this is not the case and it will only accommodate pedestrians.

Access to retained open space/Wider Public Use

To the west of the school lies a public amenity space. The application proposes that the school adopts a proportion of this space to be within the school grounds for educational use. It is also proposed that this space be made available to the wider community outside of school hours. The remaining strip of land will be left as public amenity space and maintained accordingly. Public access to the retained public amenity space will be via a new gate off Ash Close, this new opening will be through the existing hedge row. An access gate will also be provided within the new fence which separates the new school field and public amenity space, this is to allow maintenance teams to access the public space from the school site.

The mechanism to control use of the new school field will be via a community use agreement, which will set out the specific times/use etc. of the amenity space, and will be a condition of any permission granted. There will be no restrictions in terms of use/hours of the remaining western part of public amenity space, other than those which exist at present. Details of the proposed enhancement measures for the open space are clearly outlined in section 3.6 of the Planning Statement. Details of the proposed pitch layouts for the school site, both summer and winter are illustrated on the submitted plans, which will include two rounder's pitches for summer use, and two key stage 2 football pitches for winter use, again submitted as part of the application package.

- 6.82 With regard to the de-valuation of property, this is not a material planning consideration and should not be taken into consideration when determining the application.

7. Resource Implications

- 7.1 **Finance:** The development has no financial implications from the Planning Regulatory perspective.
- 7.2 **Staff:** The development has no staffing implications from the Planning Regulatory perspective.
- 7.3 **Property:** The development has no property implication from the Planning Regulatory perspective.
- 7.4 **IT:** The development has no IT implications from the Planning Regulatory perspective.

8. Other Implications

8.1 **Human rights**

8.2 The requirements of the Human Rights Act 1998 must be considered. Should permission not be granted Human Rights are not likely to apply on behalf of the applicant.

8.3 The human rights of the adjoining residents are engaged under Article 8, the right to respect for private and family life and Article 1 of the First Protocol, the right of enjoyment of property. A grant of planning permission may infringe those rights but they are qualified rights, that is that they can be balanced against the economic interests of the community as a whole and the human rights of other individuals. In making that balance it may also be taken into account that the amenity of local residents could be adequately safeguarded by conditions albeit with the exception of visual amenity. However, in this instance it is not considered that the human rights of adjoining residents would be infringed.

8.4 The human rights of the owners of the application site may be engaged under the First Protocol Article 1, that is the right to make use of their land. An approval of planning permission may infringe that right but the right is a qualified right and may be balanced against the need to protect the environment and the amenity of adjoining residents.

8.5 **Equality Impact Assessment (EqIA)**

8.6 The Council's planning functions are subject to equality impact assessments, including the process for identifying issues such as building accessibility. None have been identified in this case.

8.7 **Legal Implications:** There are no legal implications from the Planning Regulatory perspective.

8.8 **Communications:** There are no communication issues from a planning perspective.

8.9 **Health and Safety Implications:** There are no health and safety implications from a planning perspective.

8.10 **Any other implications:** Officers have considered all the implications which members should be aware of. Apart from those listed in the report (above), there are no other implications to take into account.

9. **Section 17 – Crime and Disorder Act**

9.1 It is not considered that the implementation of the proposal would generate any issues of crime and disorder, and there have been no such matters raised during the consideration of the application.

10. **Risk Implications/Assessment**

10.1 There are no risk issues from a planning perspective.

11. **Conclusion and Reasons for Grant of Planning Permission**

11.1 The application site lies within the development limits for Wymondham. Whilst it is acknowledged the proposed development will result in the loss of part of the adjoining amenity land, this is balanced against the need to expand the school and the benefits, such as an enhanced educational provision for pupils/staff of the school, improved pedestrian access points to the school and improved

playing pitch provision with access available to the community. In addition, the proposed development will result in increased vehicular and pedestrian activity; however this will be limited to pick-up and drop-off times during the school day. No objection has been raised by the Highway Authority. Suitably worded conditions will be imposed on any grant of planning permission to manage the impact and encourage sustainable transport modes. No other statutory consultees have raised any objections.

- 11.2 Under the Education Act the County Council has a statutory duty to provide school place provision. Planning policy at both national and local level attaches great weight to enhancing school provision and the need to create, expand or alter schools. In this case, the proposed development which includes the expansion of the school and the inclusion of part of the adjoining amenity land for educational purposes will enable the school to become an 'all through primary school', providing an enhanced education provision.
- 11.3 It is considered that the proposed development is acceptable and accords with the development plan. Significant weight has been attached to the need for the school place provision and the need to expand the school in response to the pressure on school places to enable the Council as Local Education Authority to meet its statutory duty. Accordingly, full conditional planning permission is recommended.

12. Conditions

- 12.1 The development hereby permitted shall commence within three years of the date of this permission.

Reason: To comply with Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

- 12.2 The development must be carried out in strict accordance with the application form, plans and documents detailed below:
- a) Drainage Strategy; 16-1-1021 NPS-DR 600 Rev P; dated 16.8.15; received 17 August 2016
 - b) Proposed Site Plan; 16-1-1021 NPS-DR-A 062 Rev P4; dated 9.8.16; received 17 August 2016
 - c) Proposed Ground Floor Plan; 16-1-1021 NPS-DR-A 064 Rev P5; dated 9.8.16; received 17 August 2016
 - d) External Lighting; 16-1-1021 NPS-00-00-DR-E-(00)-002 Rev P3; dated 10.8.16; received 17 August 2016
 - e) Electrical Services; 16-1-1021 NPS-00-00-DR-E-(00)-001 Rev P3; dated 18.8.16; received 17 August 2016
 - f) Existing Elevations; 16-1-1021 NPS-DR-A 080 Rev P2; dated 20.4.16
 - g) Proposed Sections Sheet 2; 16-1-1021 NPS-DR-A 071 Rev P1; dated 31.3.16
 - h) Proposed Sections Sheet 1; 16-1-1021 NPS-DR-A 070 Rev P1; dated 31.3.16
 - i) Proposed Roof Plan; 16-1-1021 NPS-DR-A 065 Rev P3; dated 9.8.16; received 17 August 2016
 - j) Proposed Elevations; 16-1-1021 NPS-DR-A 081 Rev P3; dated 28.7.16;

received 29 July 2016

- k) Proposed Open Space and Pitch Provision (Winter); 16-1-1021 NPS-DR-A 069 Rev P4; dated 9.8.16; received 17 August 2016
- l) Proposed Open Space and Pitch Provision (Summer); 16-1-1021 NPS-DR-A 068 Rev P4; dated 9.8.16; received 17 August 2016
- m) Proposed Site Plan; 16-1-1021 NPS-DR-A 062 Rev P2; dated 24.4.16
- n) Existing ground Floor Plan; 16-1-1021 NPS-Dr-A 063 Rev P1; dated 31.3.16
- o) Existing Open Space and Pitch Provision (Summer); 16-1-1021 NPS-DR-A 066 Rev P1; dated 31.3.16
- p) Existing Open Space and Pitch Provision (Winter); 16-1-1021 NPS-DR-A 067 Rev P1; dated 31.3.16
- q) Existing Site Plan; 16-1-1021 NPS-DR-A 061 Rev P2; dated 24.4.16
- r) Lighting Assessment Report prepared by NPS Group; 01-02-16-1-1021; dated 16.12.15
- s) Planning Statement prepared by NPS Group; 16-1-1021; dated April 2016 (v.2)
- t) Flood Risk Assessment prepared by Robson Liddle; 16-1-1021/FRA; dated March 2016
- u) Noise Statement prepared by NPS Group; unreferenced; dated February 2016
- v) Ecological Appraisal prepared by Wild Frontier Ecology; unreferenced; updated March 2016
- w) Site Location Plan; 16-1-1021 NPS-DR-A 060 Rev P1; dated 31.3.16
- x) Arboricultural Impact Assessment prepared by AT Coombes Associated Ltd; unreferenced; dated 15 March 2016
- y) Sustainability Statement prepared by NPS Group; unreferenced; dated 26.4.16
- z) Design Statement prepared by NPS Group; unreferenced; dated 24.4.16
- aa) Addendum to Planning Statement (v1) prepared by NPS Group; 16-1-1021; dated July 2016; received 29 July 2016
- bb) Blockbuster Drain Service – CCTV Report; dated 03/06/16; received 29 July 2016
- cc) Drainage Planning Condition Summary (Version A) prepared by NPS Group/Hamson Barron Smith; dated 28 July 2016; received 29 July 2016

Reason: For the avoidance of doubt and in the interests of proper planning

- 12.3 Prior to the construction of the walls of the extension hereby permitted a sample of the walling and roofing materials shall be submitted to and approved in writing by the County Planning Authority. The development hereby permitted shall be constructed of the approved materials

Reason: To ensure the satisfactory appearance of the development, in accordance with Policy DM 3.8 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.4 Within 3 months of the date of this permission, a scheme of hard/soft landscaping

(including size, species, a detailed specification for replacement tree planting and maintenance) shall be submitted to, and approved in writing by, the County Planning Authority. The scheme shall be implemented within the first planting season (October to March), following the occupation of the development. Any plants which, within a period of five years from the completion of the planting die, are removed or become seriously damaged or diseased, shall be replaced with others of a similar size and species. All planting shall be retained for a period of five years after initial planting has been completed and any trees and shrubs which are substantially damaged, seriously diseased or die, shall be replaced within twelve months of removal or death, with plants of a similar species and size.

Reason: To ensure the satisfactory appearance of the development, in accordance with Policies DM 4.8 and 4.9 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.5 Within 3 months of the date of this permission, details of proposed boundary treatments (including colour and finish) shall be submitted to, and approved in writing by, the County Planning Authority. The scheme shall be implemented in accordance with the approved details.

Reason: To ensure the satisfactory appearance of the development, in accordance with Policies DM 4.8 and 4.9 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.6 Prior to the commencement of the use hereby permitted the proposed access / on-site car (general & disabled bays) and cycle parking (covered) / turning area shall be laid out, demarcated, levelled, surfaced and drained in accordance with the approved plans (drawing number 16-1-1021-NPS-DR-A-062 Rev P4) and retained thereafter available for that specific use.

Reason: To ensure the permanent availability of the parking / manoeuvring area, in the interests of highway safety, in accordance with Policies DM 3.11 and 3.12 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.7 Within 3 months of the date of this permission a scheme for the parking of cycles shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall be fully implemented before the development is first occupied or brought into use and thereafter retained for this purpose.

Reason: To ensure the provision of adequate cycle parking that meets the needs of occupiers of the proposed development and in the interests of encouraging the use of sustainable modes of transport, in accordance with Policy DM 3.10 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.8 Notwithstanding the details indicated on the submitted drawings, within 3 months of the date of this permission a detailed scheme for the **provision of a pedestrian crossing and access on Lime Tree Avenue and a VAS flashing sign on Sheffield Road** have been submitted to and approved in writing by the

County Planning Authority in consultation with the Highway Authority.

Reason: To ensure that the highway improvement works are designed to an appropriate standard in the interest of highway safety and to protect the environment of the local highway corridor, in accordance with Policy DM 3.11 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.9 Prior to the commencement of the use hereby permitted the **provision of a pedestrian crossing and access on Lime Tree Avenue and a VAS flashing sign on Sheffield Road** referred to in Part A (condition above) of this condition shall be completed to the written satisfaction of the County Planning Authority in consultation with the Highway Authority.

Reason: To ensure that the highway network is adequate to cater for the development proposed, in accordance with Policy DM 3.11 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.10 Prior to the commencement of the use hereby permitted a Traffic Regulation Order for the provision of yellow line markings on Sheffield Road (exact extents to be agreed) shall be promoted by the Highway Authority.

Reason: In the interests of highway safety, in accordance with Policy DM 3.11 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.11 Within 6 months of the first occupation of the development hereby permitted a review of the existing school travel plan shall be submitted to and approved in writing by the County planning Authority in consultation with the Highway Authority. The travel plan shall be implemented in accordance with the timetables and targets contained therein and shall continue to be implemented subject to any modifications agreed by the County Planning Authority in writing in consultation with the Highway Authority as part of an annual review. The travel plan reviews shall monitor pupil numbers and provide accordingly for the phased development of the future cycle parking (as agreed with the Highway Authority).

Reason: To ensure that the development offers a wide range of travel choices to reduce the impact of travel and transport on the environment, in accordance with Policy DM 3.10 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.12 Use of the new playing fields shall not commence until a community use agreement prepared in consultation with Sport England has been submitted to and approved in writing by the Local Planning Authority, and a copy of the completed approved agreement has been provided to the Local Planning Authority. The agreement shall apply to the proposed new playing fields and include details of pricing policy, hours of use, access by non-school users, management responsibilities and a mechanism for review, and anything else which the Local Planning Authority in consultation with Sport England considers necessary in order to secure the effective community use of the facilities. The

development shall not be used at any time other than in strict compliance with the approved agreement.

Reason: To secure and retain well managed safe community access to the playing fields, to ensure sufficient benefit to the development of sport and to accord with Policy DM 3.15 of the South Norfolk Local Plan Development Management Policies Document (2015) and Policy WYM 12 of the South Norfolk Local Plan Wymondham Area Action Plan (2015).

- 12.13 The area of new playing fields plans shall be marked out with pitches as indicated on approved plan NPS-DR-A-069-P4 (or in accordance with an alternative scheme submitted to and approved by the local planning authority) prior to the completion of the building works hereby approved.

Reason: In order to provide adequate replacement playing field provision to meet the school and local community requirements, and to comply with Policy DM 3.15 of the South Norfolk Local Plan Development Management Policies Document (2015) and Policy WYM 12 of the South Norfolk Local Plan Wymondham Area Action Plan (2015).

- 12.14 Demolition and construction work shall not begin until a scheme for protecting the nearby sensitive receptors from noise, vibration and dust from the demolition and construction activities has been submitted to and approved by the local planning authority; all works which form part of the approved scheme shall be implemented.

Reason: In the interests of residential amenity, in accordance with Policy DM 3.13 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.15 No generator, compressor, chilling unit or cooling fan shall be installed on the site without the precise details of the equipment being submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the details as approved.

Reason: In the interests of residential amenity, in accordance with Policy DM 3.13 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.16 In the event that contamination that was not previously identified is found at time when carrying out the application development, it must be reported in writing immediately to the local planning authority. All development shall cease and shall not recommence until:

- 1) A report shall be submitted and agreed in writing by the local planning authority which includes results of an investigation and risk assessment together with proposed remediation scheme to deal with risk identified and
- 2) The agreed remediation scheme has been carried out and a validation report demonstrating its effectiveness has been approved in writing by the local planning authority.

Reasons: To protect and prevent the pollution of controlled waters from potential pollutants, in accordance with Policy DM 3.14 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.17 Noisy construction and demolition activities will only be carried out during the following times:
08:00 – 18:00 Monday to Friday
08:00 – 13:00 on Saturdays
No work on Sundays or Bank Holidays

Reason: Reason: In the interests of residential amenity, in accordance with Policy DM 3.13 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.18 Notwithstanding the submitted plans, prior to the construction of the roof of the extension hereby permitted, detail specification of the proposed photo-voltaic panels shall be submitted to and approved in writing by the County Planning Authority. The photo-voltaic panels shall thereafter be installed in accordance with the approved details.

Reason: To ensure the satisfactory appearance of the development, in accordance with Policy DM 3.8 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.19 No development shall commence until a foul water strategy has been submitted to and approved in writing by the County Planning Authority in consultation with Anglian Water. The development shall not be occupied until the works have been carried out in accordance with the foul water strategy so approved unless otherwise approved in writing by the County Planning Authority.

Reason: To prevent environmental and amenity problems arising from flooding, in accordance with Policy 4.2 of the South Norfolk Local Plan Development Management Policies Document (2015).

- 12.20 No drainage works shall commence until a surface water management strategy has been submitted to and approved in writing by the County Planning Authority in consultation with Anglian Water and the Lead Local Flood Authority. No hard-standing areas to be constructed until the works have been carried out in accordance with the surface water strategy so approved unless otherwise agreed in writing by the County Planning Authority.

Reason: To prevent environmental and amenity problems arising from flooding in accordance with Policy DM 4.2 of the South Norfolk Local Plan Development Management Policies Document (2015), Policy 1 of the Joint Core Strategy for Broadland Norwich and South Norfolk (2014) and Section 10 of the National Planning Policy Framework (NPPF) (2012).

Recommendation

It is recommended that the Executive Director of Community and Environmental Services be authorised to:

- (i) Grant planning permission subject to the conditions outline in section 12.
- (ii) Discharge conditions (in discussion with the Chairman and Vice Chairman of the committee) where those detailed above require the submission and

- implementation of a scheme, or further details, either before development commences, or within a specified date of planning permission being granted.
- (iii) Delegate powers to officers (in discussion with the Chairman and Vice Chairman of the committee) to deal with any non-material amendments to the application that may be submitted.

Background Papers

Joint Core Strategy for Broadland Norwich and South Norfolk (2014)

http://www.south-norfolk.gov.uk/planning/media/1_Adopted_Joint_Core_Strategy_January_2014.pdf

South Norfolk Local Plan Development Management Policies Document (2015)

http://www.south-norfolk.gov.uk/planning/media/Development_Management_Policies_Document.pdf

South Norfolk Local Plan Wymondham Area Action Plan (2015)

http://www.south-norfolk.gov.uk/planning/media/Wymondham_Area_Action_Plan.pdf

South Norfolk Place-Making Guide Supplementary Planning Document (2012)

<http://www.south-norfolk.gov.uk/planning/media/SNorfolk-Guide-interactive-full-version.pdf>

The National Planning Policy Framework (NPPF) (2012)

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

DCLG Planning Practice Guidance (2014)

<http://planningguidance.planningportal.gov.uk/blog/guidance/>

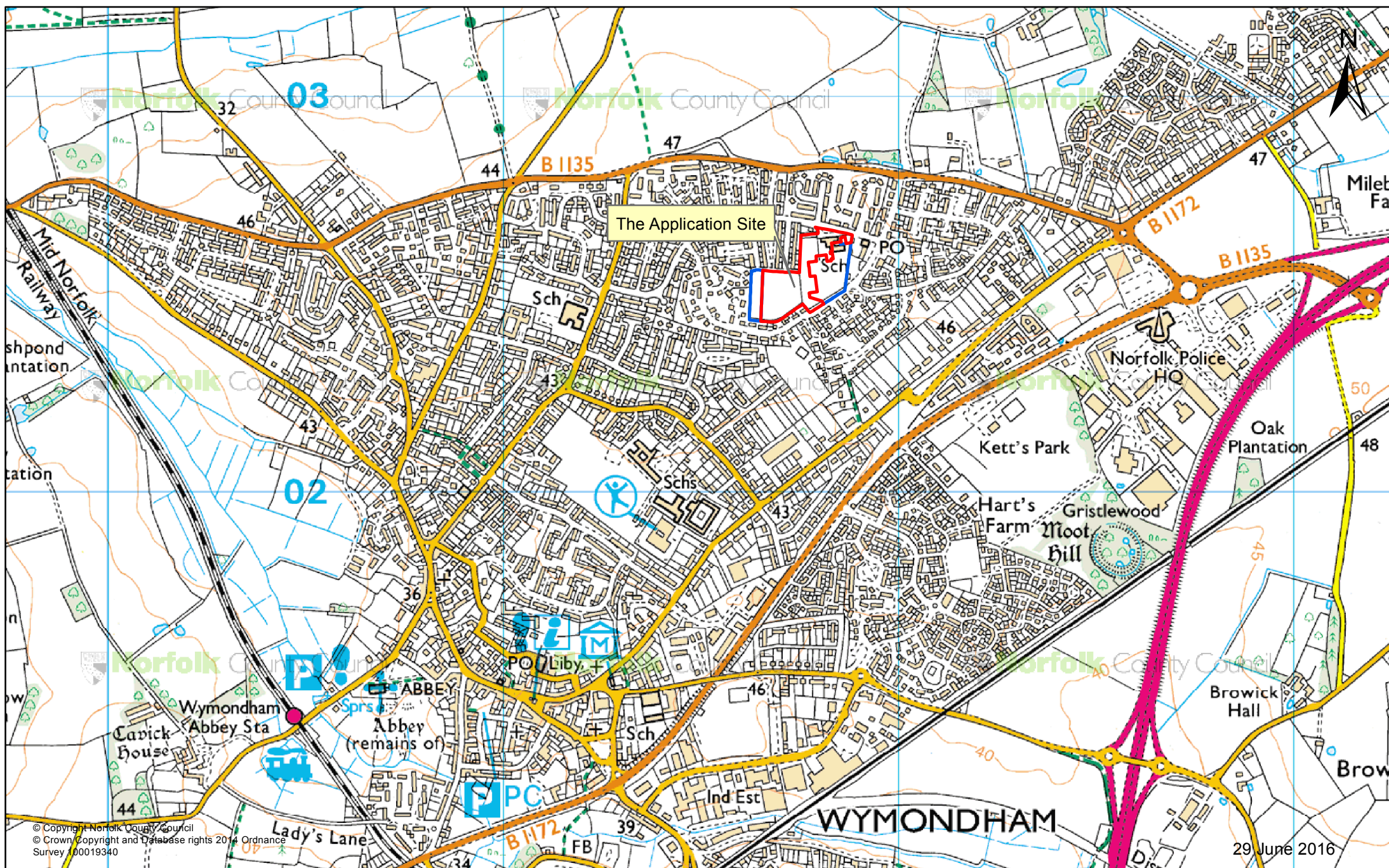
Officer Contact

If you have any questions about matters contained in this paper please get in touch with:

Name	Telephone Number	Email address
Angelina Lambert	01603 223806	angelina.lambert@norfolk.gov.uk



If you need this report in large print, audio, Braille, alternative format or in a different language please contact 0344 800 8020 and ask for Angelina Lambert or textphone 0344 800 8011 and we will do our best to help.

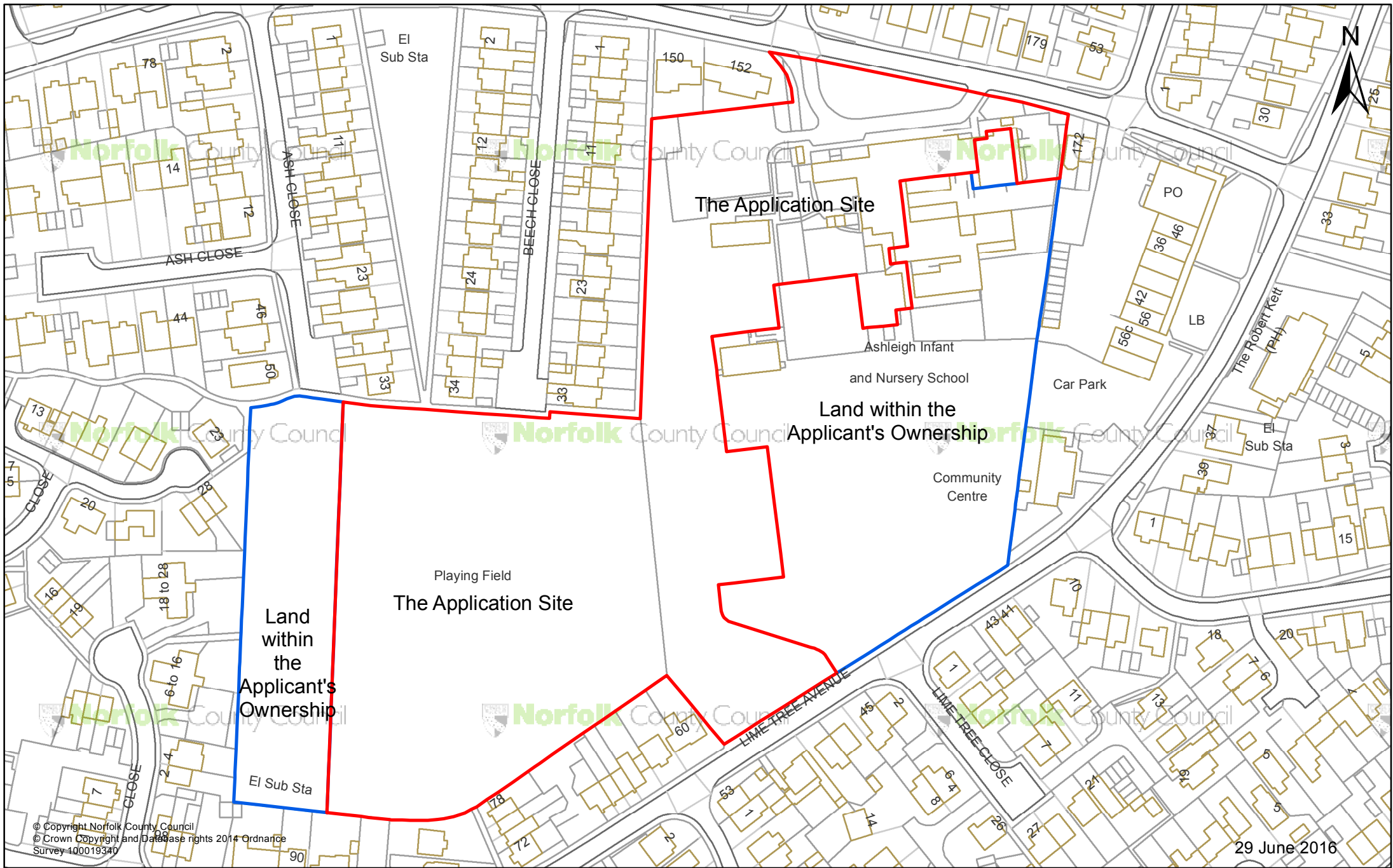


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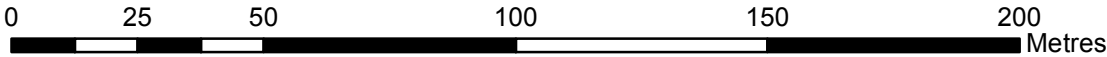
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Wymondham



Norfolk County Council

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C/7/2016/7008: Morningthorpe Closed Landfill Site, Chestnut Loke, Morningthorpe

**Installation and operation of a small scale electricity generation plant:
Executive Director of Community & Environmental Services, Norfolk
County Council**

Report by the Executive Director of Community and Environmental Services

Summary

Planning permission is sought for installation and operation of a small scale electricity generation plant fuelled by landfill gas.

Landfill gas produced at this site is currently managed by burning to atmosphere. The application would enable the recovery of energy in the form of electricity from a non-fossil fuel source.

The environmental impacts of the proposal have been carefully considered. No objections have been received from statutory or non-statutory consultees, or from any other third parties.

The proposal accords with the development plan. It is recommended that temporary conditional planning permission is granted for 20 years.

In accordance with the Council's Constitution, the application is being reported to the Planning (Regulatory) Committee because it has been made on behalf of the Executive Director of Community and Environmental Services.

Recommendation

It is recommended that the Executive Director of Community and Environmental Services be authorised to:

- (i) Grant planning permission subject to the conditions outlined in section 12.
- (ii) To discharge conditions (in discussion with the Chairman and Vice Chairman of the committee) where those detailed above require the submission and implementation of a scheme, or further details, either before development commences, or within a specified date of planning permission being granted.
- (iii) Delegate powers to officers (in discussion with the Chairman and Vice Chairman of the committee) to deal with any non-material amendments to the application that may be submitted.

1. The Proposal

- 1.1 Location : Morningthorpe Closed Landfill Site, Chestnut Loke, Morningthorpe
- 1.2 Type of development :
 - Landraising of some 44m² of the closed landfill to provide a level platform extension of the existing gas management compound, with ramped access;
 - Installation and operation of a small scale electricity generation plant
- 1.3 Site area : Original submission:
0.2323 hectare
- Subsequent extension, (so as to include all land necessary for export of power to adjacent HWRC and inert waste recycling facility):
0.3777 hectare
- 1.4 Duration : 20 years.
- 1.5 Plant / Buildings :
 - Steel ISO Shipping Container (12.2m (l) x 2.89m (h) x 2.44m (w))
 - either: four no. Stirling Engines; or single, small scale spark-ignition engine;
 - Pump to divert gas
- 1.6 Hours of working : Installation and commissioning works
07:30 – 18:00 Monday – Friday
Operation of electricity generation plant
24 hours per day, 365 days per year
Routine maintenance
07:30 – 18:00 Monday – Friday
- 1.7 Vehicle movements and numbers : Delivery of inert materials for proposed landraising operations
Two deliveries by HGV
- Delivery of generation plant
By rigid bodied flat-bed HGV
- Servicing of generation plant
Estimated two to four light vehicle movements per week.

- 1.8 Access : Via existing site access to B1527 (Hempnall Road)
- 1.9 Landscaping :
 - Existing screening vegetation;
 - No landscaping proposed

2. Constraints

- 2.1 The following constraints apply to the application site:
- 2.2 The site is identified in the South Norfolk Local Plan Policies Map 2015 as being located outside any defined development limit and within a River Valley.
- 2.3 A public footpath (Morningthorpe FP2) runs south from opposite the site entrance and a public footpath (Morningthorpe FP 34), a component part of Norfolk Trail Boudicca's Way, runs to the west of the site.
- 2.4 The site is located within Groundwater Protection Zone 3.
- 2.5 The site is located approximately 4km southeast of Flordon Common SSSI being a component part of the Norfolk Valley Fens Special Area of Conservation (SAC).
- 2.6 The site is located approximately 2km northwest of Fritton Common SSSI
- 2.7 Fritton Grange Meadows County Wildlife Site (CWS 100) is located some 0.6km east of the site.

3. Planning History

- 3.1 There have been a number of planning permissions relating to operations on the wider site, namely those concerning the mineral extraction and landfill operations. The landfill site was operational between 1981 and 1990. For the purposes of this proposal, the following planning history is relevant:
- 3.2 **C/1992/7004** – Landfill Gas Environmental Control Scheme – permission granted 22 October 1992

4. Planning Policy

- 4.1 Norfolk Minerals and Waste Local Development Framework Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010-2026 (2011) :

CS13	Climate change and renewable energy generation
CS14	Environmental protection
CS15	Transport
DM1	Nature conservation
DM3	Groundwater and surface water
DM4	Flood risk
DM7	Safeguarding Aerodromes
DM8	Design, local landscape and townscape character
DM10	Transport

			DM11	Sustainable construction and operations
			DM12	Amenity
			DM13	Air Quality
			DM14	Progressive working, restoration and after-use
4.2	Norfolk Minerals and Waste Development Framework Waste Site Specific Allocations DPD (2013)	:		No site specific policies or allocations of direct relevance to the proposed development.
4.3	Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014)	:	Policy 1	Addressing climate change and protecting environmental assets
			Policy 2	Promoting good design
			Policy 3	Energy and water
4.4	South Norfolk Local Plan Development Management Policies DPD (2015)	:		Policy DM 1.1 Ensuring development management contributes to achieving sustainable development in South Norfolk
				Policy DM 1.3 The sustainable location of new development
				Policy DM 1.4 Environmental quality and local distinctiveness
				Policy DM 3.8 Design Principles
				Policy DM 3.11 Road safety and free flow of traffic
				Policy DM 3.13 Amenity, noise and quality of life
				Policy DM 3.14 Pollution, health and safety
				Policy DM 4.1 Renewable Energy
				Policy DM 4.2 Sustainable drainage and water management
				Policy DM 4.5 Landscape Character and River Valleys
4.5	Neighbourhood Development Plan	:		The area in which the planning application is located does not have an adopted Neighbourhood Development Plan.
4.6	The National Planning Policy Framework (2012)	:		Section 7: Requiring good design
				Section 10: Meeting the challenge of climate change, flooding and coastal

change

Section 11: Conserving and enhancing the natural environment

4.7 Planning Practice :
Guidance Suite (2014)

4.8 National Planning Policy :
for Waste (2014)

5. Consultations

5.1 South Norfolk Council : No objection.

5.2 Morningthorpe Parish : No response received
Council

5.3 Environmental Health : Original submission
Officer (South Norfolk Council)
Our reworking of the calculation methodology would suggest the noise level at nearest dwellings is likely to be sufficiently low as to not require a site specific assessment. Do not feel there are sustainable grounds to recommend refusal of this application assuming that:

- The data and information supplied is valid for any electricity generation plant that is constructed on the site (e.g. different plant not being utilised).
- The assumptions on which the calculation is based being valid in this case (e.g. the calculation assumes the noise does not contain any acoustic features that could increase the significance of its impact such as impulses or tones).

Provides advisory comments in relation to installation of external lighting.

Additional noise data (in relation to spark-ignition engine)

Our reworking of the calculation methodology using the data supplied for a spark-ignition engine would suggest the noise level at nearest dwellings could be a cause for concern, exceeding the World Health Organisation “Night noise guidelines for Europe”.

Further noise data (in relation to spark-ignition engine)

Our reworking for this case would suggest the noise level at nearest dwellings is likely to be satisfactory. However, this would appear to be a marginal case with a significant level of uncertainty. Thus, on the basis of the information available we cannot comment with certainty particularly as we do not have any background noise data for the area and no indication as to whether the noise has any component (e.g. a drone) that would increase its annoyance to a level above that indicated by the noise data provided.

In light of the noise data provided I would expect that any noise issues can be practicably addressed. Thus, in the event that installation of a spark-ignition engine is pursued, I would have no objection to the matter of noise being conditioned to require an acoustic assessment to be undertaken to determine the impact of noise from the engine on residents of the area, along with any noise mitigation measures that would be required.

- | | | |
|-----|--|---|
| 5.4 | Environment Agency | : No objection.
Provide advisory comments in relation to the burning of landfill gas as a fuel, to generate electricity, and the Environmental Permitting (England and Wales) Regulations 2010. |
| 5.5 | UK Power Networks | : No response received |
| 5.6 | Highway Authority (NCC) | : No objection |
| 5.7 | County Ecologist | : No adverse effects on ecology.
Provides advisory comments in relation to timing of works and nesting birds. |
| 5.8 | Landscape and Green Infrastructure Officer | : <u>Original submission</u>
Any landscape or visual effects resulting from this proposal are likely to be negligible due to extensive mature screening.
Considers that the container should be finished in a green or grey colour, to suit site context and enable the proposal to comfortably sit within it's surroundings.
<u>Additional information</u>
Recommends approval |
| 5.9 | Public Rights of Way | : No response received |

- | | | |
|------|---|---|
| 5.10 | Natural England | : No objection. |
| 5.11 | Norfolk Fire and Rescue Service | : No response received |
| 5.12 | Lead Local Flood Authority (LLFA) | : Comment that this development is below the LLFA consultation threshold for providing detailed comment. Advise that the CPA should satisfy itself that the application is compliant with: <ul style="list-style-type: none"> • paragraph 103 of the NPPF (flood risk); • Written ministerial statement - HCWS161 – Sustainable drainage systems Further advise that the application should demonstrate how the proposal accords with national standards and relevant guidance. Provides advisory comments in relation to water management. |
| 5.13 | Local residents | : Representation has been received from one local resident in support of the proposal. |
| 5.14 | County Councillor Ms A M Thomas (Long Stratton) | : No response received |

6. Assessment

- 6.1 The application is being reported to the Planning (Regulatory) Committee, in accordance with the County Council's Scheme of Delegation, because it has been made on behalf of the Executive Director of Community and Environmental Services.

6.2 Proposal

- 6.3 Planning permission is sought to modify and extend the existing gas management scheme through installation and operation of a small-scale electricity generation plant which would be powered by the landfill gas. The proposal would involve:
- Landraising of some 44m² of the closed landfill adjacent the north east boundary of the existing gas management compound with imported inert material, in order to provide a level platform extension of the existing gas management compound, with ramped access;
 - Installation of an ISO shipping container on the extended gas management compound to house small pump to divert gas and, either four no. 9kWe electrical output Stirling engines or single, small scale spark-ignition engine;
 - Connection of a new gas pipe from the existing gas pipework to the proposed electricity generation plant;

- Removal of existing gas flare

- 6.4 The applicant states that, a flare stack, gas abstraction wells and delivery pipework were installed at Morningthorpe landfill site in the late 1980's. This system has been variously improved and upgraded over the subsequent years. The existing gas flare is located in the north western area of the former landfill site.
- 6.5 The application advises that consideration has previously been given to using the methane gas produced at the site as a source of heat or energy but proposals have so far been unviable. Recent developments in the reliability and cost of small-scale electricity generators, at a time when Renewable Obligation payments for small scale projects have improved, now brings sites such as Morningthorpe into contention.
- 6.6 The proposed container is rectangular in shape, of steel construction, and measures 12.22 metres (L) x 2.44 metres (W) x 2.9 metres (H). Each of the engines has a separate exhaust which would be attached to the exterior of the container and would extend another 0.3m above the roof of the container.
- 6.7 The application advises that the engines can generate electricity 24 hours a day from the available landfill gas on site, which would power parasitic load for the engines themselves and associated landfill gas pumping infrastructure. The majority of power generated on site will be exported into the national grid, through existing network connections and, if possible, surplus power will also be used to power the equipment in the Household Waste Recycling Centre, to the south west of the site and inert waste recycling facility, to the north.
- 6.8 The applicant states that, the generation plant would divert all of the abstracted gas that is currently combusted in the existing gas flare. Consequently, the gas flare will no longer be required and will be removed from site.
- 6.9 Eventually the site will cease producing landfill gas at a level that needs to be managed. Given the nature of landfill sites, this timescale is very difficult to predict. The applicant has applied to retain the engine(s) on site for 20 years.
- 6.10 As detailed above, it is proposed to install either four Stirling engines or a single spark-ignition engine. The applicant states that the proposed Stirling engines operate by cyclic compression whereas the spark-ignition engine is an internal combustion engine. The application adds that Stirling engines are more efficient at combustion than internal combustion engines but that the choice of technology will be determined by financial and qualitative factors.
- 6.11 **Site**
- 6.12 The application site relates to Morningthorpe Closed Landfill Site, located some 1.5km southeast of the village of Tasburgh, with Hempnall some 1.9km to the east. The site occupies a position on a plateau above the valley of a small tributary of the River Tas, to the north.

- 6.13 The application site comprises of the existing fenced, gas management compound located in the north western area of the closed landfill site, currently accommodating a flare stack and small, electrical controls building, an adjoining area of the closed landfill abutting the north east and south east boundaries of the compound and the existing access road.
- 6.14 The application site is bounded to the south and east by the closed landfill, to the west by a former mineral working and to the north by a former mineral working currently used for inert waste recycling and being progressively restored through landfilling with inert materials. Vehicular access to the application site is gained via an existing part surfaced / part unmade access road leading onto the B1527 (Hempnall Road), some 1.3km east of its junction with the A140. This access also serves a Household Waste Recycling Centre and the inert waste facility.
- 6.15 The nearest residential property is at Hall Farm some 230m to the south east of the gas management compound.
- 6.16 Amended site location
- 6.17 Subsequent to validation of the application, and consultation/notification of the proposal, it came to light that the original application site did not include all land necessary for export of power from the generation plant to the adjacent Household Waste Recycling Centre and inert waste recycling facility. The applicant took the decision to amend the application site boundary so as to include all land necessary to carry out the proposed development. The amended application boundary now includes additional adjoining land to the northwest and southwest of the proposed extended compound.
- 6.18 As to whether the red line boundary of a planning application can be changed, it has been established that Ministerial advice on this subject is that it is sensible and time saving to allow applicants for planning permission to amend details of applications provided the amendments do not materially change the character of the development.
- 6.19 Similarly, Case Law has held that a pragmatic approach was appropriate when a local planning authority were considering amendments to a planning application. The question should be whether the change is so substantial that the application can only be considered fairly and appropriately, bearing in mind both the interest of the applicant and potentially interested members of the public, by requiring a fresh application to be lodged.
- 6.20 Whilst the area of the application site has increased slightly, given that:
- the nature, scope and character of the proposal is not changed in a material way;
 - as will be demonstrated, the impact of the proposal on the locality is not changed in a material way, (the increased area will not increase visual impact, there is no increase in the volume of material to be imported and the amendment does not generate any additional traffic),
- it was concluded that the changes do not materially alter the basis of the proposal as was originally the subject of advertising. To this end, a fresh application was not requested by the CPA. The proposed amendments have

been the subject of further consultation and notification.

6.21 Principle of development

- 6.22 A basic principle when assessing planning applications is outlined in Section 38(6) of the Town and Country Planning Compulsory Purchase Act 2004 which states:

“if regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts, the determination must be made in accordance with the plan unless material considerations indicate otherwise”.

- 6.23 In terms of the development plan, the County Planning Authority considers the relevant documents in relation to this application are the policies in the adopted Norfolk Minerals and Waste LDF: Core Strategy 2010-2026 (2011), the adopted NMWDF Waste Site Specific Allocations DPD (2013), the adopted Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014), and the South Norfolk Local Plan Development Management Policies DPD (2015). Whilst not part of the development plan, policies within the National Planning Policy Framework (NPPF) are also a further material consideration of potentially significant weight as well as the National Planning Policy for Waste (2014).

- 6.24 The proposed site has not been allocated in the NMWDF Waste Site Specific Allocations DPD.

- 6.25 The South Norfolk Local Plan Policies Map identifies the application site as being located outside any defined development limit and within an area designated as *River Valley*.

- 6.26 Policy DM 1.3 of the South Norfolk Local Plan Development Management Policies DPD states that outside of the defined development boundaries of settlements, development proposals will only be permitted where specific Development Management Policies allow for development outside of development boundaries. Policy DM 4.1 of the SNLP Development Management Policies DPD supports proposals for renewable energy generating development other than wind energy, subject to an assessment of its impacts.

- 6.27 Policy CS13 of the NMWLDF states that, *‘All new residual waste treatment plants and any new non-hazardous landfill sites will need to generate electricity and/or capture heat, unless it can be demonstrated that this is not practicable.’*

Whilst this application does not seek permission for a new landfill site, the principle of this policy is to encourage the production of electricity and/or heat capture from sites such as this. Permission for landfilling at this site was granted several years ago when this policy was not in existence. This application and the proposals set out above are considered to be in full accordance with the aims of this policy which supports the production of electricity from landfill gas, which is currently being disposed of by flaring.

- 6.28 The *NPPF* supports sustainable development, which seeks to meet the challenge of climate change, through supporting the delivery of renewable and low carbon

energy and associated infrastructure.

6.29 *National Planning Policy for Waste* supports sustainable waste management in appropriate locations where there is no unacceptable impact upon neighbouring amenities.

6.30 Therefore, subject to an assessment of its impacts, the development proposals are not considered to be contradictory to the provisions of the development plan, the *NPPF* and *National Planning Policy for Waste*, and it is therefore considered that the principle of this use could be acceptable at this location and would not be out of character for the immediate area.

6.31 **Amenity / Air Quality**

6.32 The proposals involve the installation of plant, namely a maximum of four engines and a pump, which would operate continuously. The application is accompanied by a Noise Assessment prepared to assess the noise impact on the amenities of nearest residential properties of a proposed small-scale electricity generating plant, comprising of two Stirling engines and small pump inside a shipping container, at a former landfill site in Suffolk. The assessment concludes that the proposed plant is unlikely to cause disturbance to residential neighbours.

6.33 As regards the Stirling engines, the application is also accompanied by the manufacturer's technical data which details that noise emissions from the engine would be 67dB(A) at a distance of 1m. As regards the spark-ignition engine, the applicant initially advised that noise emissions from the engine would be 75dBA at 7m. During the application process additional details relating to noise emissions from the proposed spark-ignition engine were requested. The applicant has since advised that noise emissions from the engine would be 65dBA at 10m.

6.34 As regards air quality, the application states that Nitrogen Oxide and Carbon Dioxide would be emitted through the combustion process, whilst the manufacturer's technical data for the Stirling engine also detail that Carbon Monoxide would be emitted. The supporting statement adds that, since gas production from the landfill site is ever decreasing, the emissions to air will continue to reduce over time.

6.35 As regards lighting, the proposal includes an additional external floodlight mounted on the container for emergency out-of-hours access.

6.36 Para. 109 of the *NPPF* is clear that the planning system should prevent new development from contributing to unacceptable levels of pollution. Both the *NPPF* (Para 122) and *National Planning Policy for Waste* underline that planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Therefore, the CPA needs to be satisfied planning permission can be granted on land use grounds taking full account of environmental impacts, and that potential releases can be adequately regulated under the

pollution control framework.

- 6.37 The Environment Agency (EA), has been consulted on this application and has raised no objection to the development. The EA comment that burning of landfill gas as a fuel, to generate electricity, is an activity that requires an Environmental Permit unless the operator can comply with low risk waste position LRW 546. It is recommended that the EA's advice be attached as an informative on any grant of planning permission.
- 6.38 The applicant has since advised that the proposal would comply with low risk waste position LRW 546.
- 6.39 The EHO has been consulted on this application and has confirmed that, whilst the noise data supplied for the spark-ignition engine would suggest the noise level at nearest dwellings is likely to be satisfactory, on the basis of the information available, the EHO cannot comment with certainty. In light of the noise data provided, the EHO would expect that any noise issues can be practicably addressed. The EHO recommends a condition be imposed to require an acoustic assessment to be undertaken in the event that the applicant decides to install a spark-ignition engine to determine the impact of noise from the engine on residents of the area, along with any noise mitigation measures that would be required.
- 6.40 Both the EA and EHO are satisfied in principle that an electricity generation plant at the location under consideration could reasonably be expected to meet the noise limits required. Given that an Environmental Permit may not be required for the development and the uncertainty over the noise impact arising from the spark-ignition engine, it is considered reasonable to impose the condition recommended by the EHO on any grant of planning permission.
- 6.41 As regards possible noise mitigation measures, the EHO has advised that if required these could include one or more of the following:
- Sourcing quieter plant;
 - Orientation – e.g. having the ventilation louvres (and any other dominant noise sources) facing away from residential premises;
 - Acoustic enclosures to noisy plant in the container;
 - Acoustic louvres;
 - Acoustic silencers to exhausts and air intakes if required;
 - Acoustic insulation to the container;
 - Acoustic barrier / bund.
- 6.42 In the event that an acoustic barrier / bund is necessary, separate planning permission would be required, on the basis that it would constitute operational development in its own right. It is recommended that this requirement be drawn to the attention of the applicant as an informative on any grant of planning permission.

- 6.43 Given the above, it is considered that the development will not result in unacceptable impact to local amenity and would not impact negatively on air quality. Subject to the aforementioned condition, it is considered therefore that the proposal is in accordance with NMWLDF Policies CS14, DM12, DM13 and DM15, SNLP DM Policies DPD policies DM 3.13 and DM 3.14, and requirements of the NPPF.
- 6.44 **Landscape and Design**
- 6.45 The application site is within the boundary of a Closed Landfill Site in a countryside location, at which landfill gas is currently being abstracted and disposed of by flaring. The site is identified in the South Norfolk Local Plan Policies Map 2015 as being located within an area designated as *River Valley*. The site is also located some 100m east of Norfolk Trail: Boudicca's Way.
- 6.46 The development involves extension of an existing gas management compound and installation of electricity generation plant, enclosed by metal fencing. The proposal provides for the removal of the existing 7m high gas flare stack from the site. No trees will be lost as a result of the proposed development and no new planting will be implemented. The supporting statement submitted with the application concludes that, the proposed development is hidden either by topography or tree screening and will produce no adverse impacts on environmental assets.
- 6.47 The application site benefits from existing established landscaping around the perimeter of the closed landfill. Whilst the proposed development would occupy a larger footprint than the existing flare at the site, it is lower in height than the existing flare and would have little impact upon the appearance of the site from outside of its boundaries. From inspection of the site and having given consideration to the scale and form of the proposed development, it is considered that the findings of the supporting statement are reasonable.
- 6.48 Policy DM8 of the NMWLDF CS requires new development to promote good design. The proposed plant is of a functional design in keeping with its purpose and whilst the development cannot be considered 'good design', the design is considered to be reflective of this form of development. The industrial appearance of the development would also complement the existing buildings within the compound itself, neighbouring HWRC and inert waste recycling facility. Given that the proposed development would be sited at a fairly low level within the closed landfill, the proposal utilises the existing access and, given existing established screening, it is therefore considered that the design of the proposal is acceptable in the context of the site and there will be no material harm caused to the character and quality of the local area. South Norfolk Council raises no objection to the scheme on landscape or design grounds. Therefore it is considered these are material considerations that outweigh the issue with policy DM8.
- 6.49 Whilst not raising objection to the proposal in principle, the Council's Green Infrastructure Officer recommended that the container should be finished in a green or grey colour, to enable the proposal to comfortably sit within its

surroundings. Negotiations have taken place throughout the determination process and the applicant has since confirmed that the container will be coloured green.

6.50 Given that permission is sought to extend the existing gas management compound for a temporary period, it is considered reasonable to impose a planning condition in relation to restoration of the site.

6.51 It is therefore considered, on balance, that subject to the aforementioned condition, the impact on visual amenity and landscape would not be such as to be unacceptable when considered against the requirements of Policies CS14 and DM8 of the NMWLDF, Policy 2 of the JCS, SNLP Development Management Policies DPD policies DM 1.4, DM 3.8 and DM 4.5, and Government's objectives of the NPPF.

6.52 **Biodiversity**

6.53 The proposal is not accompanied by an Ecology Report. The site is located some 4km from Flordon Common SSSI, being a component part of The Norfolk Valley Fens SAC, and one County Wildlife Site is located some 0.6km east of the site. The habitats present within the site comprise of areas of grassland, consolidated aggregates and hardstanding.

6.54 Natural England has been consulted on the application and has raised no objections. The Council's Ecologist has been consulted on the application and has raised no concerns. It is recommended that the Ecologist's advisory comments in relation to protection of nesting birds be attached as an informative on any grant of planning permission.

6.55 The development is therefore considered to be compliant with NMWLDF policies CS14 and DM1, and objectives of the NPPF.

6.56 Appropriate Assessment

The application site is within 5km of The Norfolk Valley Fens SAC, which is a European protected habitat. The application has been assessed in accordance with Regulation 61 of the Conservation of Habitats and Species Regulations 2010 and based on the information submitted to the County Planning Authority (CPA) it is considered that the development does not have a significant impact on the integrity of any protected habitat. Accordingly, there is no requirement for the CPA to undertake an Appropriate Assessment of the development.

6.57 **Transport**

6.58 The site will be accessed via an existing access road leading onto the B1527. The proposals would generate very little additional traffic. The application advises that the landraising operations and installation of the plant would require delivery to the site by HGV. Subsequent operation and maintenance is likely to generate two to four light vehicle movements per week. The Highway Authority has been consulted on the application and raises no objection.

- 6.59 Given the above, the development is considered compliant with the principles of Policies CS15 and DM10 of the NMWLDF Core Strategy, SNLP Development Management Policies DPD Policy DM 3.11, and the government objectives of the NPPF.
- 6.60 **Sustainable construction and operations**
- 6.61 The application involves installation of electricity generation plant which, subject to maintenance, will not be in need of regular replacement. It is therefore considered that there is no conflict with NMWLDF policy DM11 and the NPPF.
- 6.62 **Climate change and renewable energy generation**
- 6.63 Landfill gas produced at this site is currently burned to atmosphere in a flare stack. The sustainability statement states that non-renewable sources of energy are used to power the flare. The application details that, burning reduces the quantity of damaging methane lost to the atmosphere and replaces the methane with less harmful carbon dioxide. However, heat energy released in the combustion process is lost. The proposal would continue to convert methane into less harmful carbon dioxide and would also recover energy in the form of electricity from a non-fossil fuel source. The Sustainability Statement adds that, installation of the plant will enable electricity to be generated 24 hours a day from the available landfill gas on site.
- 6.64 It is therefore considered taking into account the above, that the development is compliant with NMWLDF Policy CS13, JCS Policies 1 and 3, Policy DM 4.1 of the SNLP Development Management Policies DPD, and requirements of the NPPF.
- 6.65 **Flood risk**
- 6.66 The site lies within Flood Zone 1, which is an area at low risk of flooding, and outside the flow path of the Environment Agency Updated Flood Map for Surface Water (1 in 30yr and 1 in 100yr event).
- 6.67 The existing gas management compound contains a concrete hardstanding upon which the existing flare stack and electrical controls building are sited. The proposed operational development includes extension of the existing compound through landraising of some 44sq metres of the closed landfill with inert material and installation of a shipping container. It is proposed that the extended compound would be surfaced with Type 1 aggregate or similar. As regards surface water run-off, the application proposes that this will be managed via natural infiltration.
- 6.68 The Lead Local Flood Authority have been consulted on the application and comment that, the CPA should satisfy itself that the application is compliant with: para 103 of the NPPF, which requires that, when determining planning applications, LPAs should ensure flood risk is not increased elsewhere; and Written ministerial statement - HCWS161, which expects that decisions on planning applications relating to major development ensure that sustainable

drainage systems for the management of run-off are put in place, unless demonstrated to be inappropriate. The LLFA further advises that the applicant should also demonstrate how the proposal accords with national standards and relevant guidance.

Planning Practice Guidance (Flood Risk and Coastal Change – what sort of sustainable drainage system should be considered?, paragraph 080), sets out that, the aim should be to discharge surface run off as high up the hierarchy of drainage options as reasonably practicable, with ‘into the ground (infiltration)’ at the top of the hierarchy.

6.69 Notwithstanding that Type 1 aggregate is an impermeable surface, given the small scale of the proposed extension it is considered, that the development would not materially increase the risk of flooding. Given the above, it is considered that there is no conflict with NMWLDF Policies CS13 and DM4, JCS Policy 1, Policy DM 4.2 of the SNLP Development Management Policies DPD, and the NPPF.

6.70 Groundwater and surface water

6.71 The site is located within Groundwater Protection Zone 3, (defined by the Environment Agency (EA) as, the area around a source within which all groundwater recharge is presumed to be discharged at the source). The EA has been consulted on this application and raises no objection, in relation to groundwater / surface water quality and resources.

6.72 Accordingly, the development is considered to be compliant with Policy DM3 of the NMWLDF Core Strategy, JCS Policy 1, Policy DM 3.14 of the SNLP DM Policies DPD, and the requirements of the NPPF.

6.73 Progressive working, restoration and after-use

6.74 The proposal is for installation and operation of a small scale electricity generation plant within an extended gas management compound at a closed landfill site, for 20 years. If the landfill gas at the site still needs to be managed beyond that timescale, a further planning application would need to be submitted for the chosen technology for a further period of time.

6.75 Planning permission reference C/92/7004 is subject to a restoration condition which requires removal of the gas flaring infrastructure and restoration with imported top soil. Given that permission is sought for an extension to the existing compound and installation of alternative infrastructure it is considered reasonable to impose a condition as part of any consent granted that would require submission of an appropriate restoration scheme that would be implemented after the removal of the infrastructure.

6.76 Subject to the aforementioned condition, it is considered that the proposal complies with NMWLDF CS Policy DM14, and the objectives of the NPPF.

6.77 Responses to the representations received

6.78 The application was advertised by means of neighbour notification letters, site notice, and an advertisement in the Eastern Daily Press newspaper.

6.79 Representation was made by one local resident in support of the application.

7. Resource Implications

7.1 **Finance:** The development has no financial implications from the Planning Regulatory perspective.

7.2 **Staff:** The development has no staffing implications from the Planning Regulatory perspective.

7.3 **Property:** The development has no property implication from the Planning Regulatory perspective.

7.4 **IT:** The development has no IT implications from the Planning Regulatory perspective.

8. Other Implications

8.1 Human rights

8.2 The requirements of the Human Rights Act 1998 must be considered. Should permission not be granted Human Rights are not likely to apply on behalf of the applicant.

8.3 The human rights of the adjoining residents are engaged under Article 8, the right to respect for private and family life and Article 1 of the First Protocol, the right of enjoyment of property. A grant of planning permission may infringe those rights but they are qualified rights, that is that they can be balanced against the economic interests of the community as a whole and the human rights of other individuals. In making that balance it may also be taken into account that the amenity of local residents could be adequately safeguarded by conditions albeit with the exception of visual amenity. However, in this instance it is not considered that the human rights of adjoining residents would be infringed.

8.4 The human rights of the owners of the application site may be engaged under the First Protocol Article 1, that is the right to make use of their land. An approval of planning permission may infringe that right but the right is a qualified right and may be balanced against the need to protect the environment and the amenity of adjoining residents.

8.5 Equality Impact Assessment (EqIA)

8.6 The Council's planning functions are subject to equality impact assessments, including the process for identifying issues such as building accessibility. None have been identified in this case.

- 8.7 **Legal Implications:** There are no legal implications from the Planning Regulatory perspective.
- 8.8 **Communications:** There are no communication issues from a planning perspective.
- 8.9 **Health and Safety Implications:** There are no health and safety implications from a planning perspective.
- 8.10 **Any other implications:** Officers have considered all the implications which members should be aware of. Apart from those listed in the report (above), there are no other implications to take into account.

9. Section 17 – Crime and Disorder Act

- 9.1 It is not considered that the implementation of the proposal would generate any issues of crime and disorder, and there have been no such matters raised during the consideration of the application.

10. Risk Implications/Assessment

- 10.1 There are no risk issues from a planning perspective.

11. Conclusion and Reasons for Grant of Planning Permission

- 11.1 Planning permission is sought for installation and operation of a small scale electricity generation plant powered by landfill gas.
- 11.2 Landfill gas produced at this site is currently managed by burning to atmosphere. The application would enable the recovery of energy in the form of electricity from a non-fossil fuel source.
- 11.3 The environmental impacts of the proposal have been carefully considered. No objections have been received from statutory or non-statutory consultees, or from any other third parties.
- 11.4 The proposed development is therefore considered to be acceptable, accords with the development plan, and there are no other material considerations why it should not be permitted. Accordingly, temporary conditional planning permission is recommended.

12. Conditions

- 12.1 The development hereby permitted shall commence not later than three years from the date of this permission.

Reason:

Imposed in accordance with Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act

2004.

- 12.2 This permission shall expire after a period of 20 years from the date of this permission, or when the maximum concentration of flammable gas in the landfill gas within the waste is below 1% by volume and carbon dioxide is below 0.5% by volume over a 24 month period measured on at least 4 separate occasions spread over that period, whichever is the sooner. Unless on or before that date permission is granted for the retention of the gas control system for a further period:

- a) the engines and associated building, any infrastructure installed for their accommodation, and abstraction wells and pipes shall be removed;
- b) the said land shall be restored in accordance with condition 4 of this planning permission.

Reason:

To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.3 The development must be carried out in strict accordance with the application form, plans and documents as submitted.

Reason: For the avoidance of doubt and in the interests of proper planning

- 12.4 In the event that a spark-ignition engine is to be installed, no development shall take place until an acoustic assessment has been submitted to and approved in writing by the County Planning Authority. The assessment shall include:

- a) prediction of the impact of noise from the development on the residents of the area;
- b) details of any noise mitigation measures that would be required

The assessment shall have been made in accordance with British Standard, BS 4142:2014 "Methods for rating and assessing industrial and commercial sound" and World Health Organisation guidelines.

The development hereby permitted shall be implemented in accordance with the approved details prior to the electricity generation plant becoming operational and shall thereafter be operated in accordance with the approved details.

Reason:

To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.5 Within six months of the date of this permission, a scheme of restoration shall be submitted to and approved in writing by the County Planning Authority. The said scheme shall include details of:

- a) the contours of the restored land shown by plans and sections;

- b) the depth of topsoil and subsoil;
- c) the provision to be made for drainage of the site;
- d) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
- (e) details of seed mix and tree species to be planted;

Reason:

To ensure the proper and expeditious restoration of the site, in accordance with Policy DM14 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.6 No plant or machinery shall be used on the site unless it is maintained in a condition whereby it is efficiently silenced in accordance with the manufacturer's specifications.

Reason:

To protect the amenities of residential properties and the surrounding area, in accordance with Policy DM12 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

- 12.7 Any drums and small containers used for oil and other chemicals on the site shall be stored in bunded areas which do not drain to any watercourse, surface water sewer or soakaways, and all oil or chemical storage tanks, ancillary handling facilities and equipment, including pumps and valves, shall be contained within an impervious bunded area of at least 110% of the total stored capacity.

Reason: To safeguard hydrological interests, in accordance with Policy DM3 of the Norfolk Minerals and Waste Core Strategy DPD 2010-2026.

Recommendation

It is recommended that the Executive Director of Community and Environmental Services be authorised to:

- (i) Grant planning permission subject to the conditions outlined in section 12 above.
- (ii) To discharge conditions (in discussion with the Chairman and Vice Chairman of the committee) where those detailed above require the submission and implementation of a scheme, or further details, either before development commences, or within a specified date of planning permission being granted.
- (iii) Delegate powers to officers (in discussion with the Chairman and Vice Chairman of the committee) to deal with any non-material amendments to the application that may be submitted.

Background Papers

Appendix 1: Morningthorpe Location Plan

Appendix 2: Morningthorpe Site Plan

Appendix 3: Norfolk Minerals and Waste Local Development Framework Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010-2016 (2011)

Appendix 4: Norfolk Minerals and Waste Development Framework Waste Site Specific Allocations DPD (2013)

Joint Core Strategy for Broadland, Norwich and South Norfolk (2011/2014)

http://www.south-norfolk.gov.uk/planning/media/1_Adopted_Joint_Core_Strategy_January_2014.pdf

South Norfolk Local Plan Development Management Policies Document (2015)

http://www.south-norfolk.gov.uk/planning/media/Development_Management_Policies_Document.pdf

The National Planning Policy Framework (2012)

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Planning Practice Guidance Suite (2014)

<http://planningguidance.planningportal.gov.uk/>

National Planning Policy for Waste (2014)

<https://www.gov.uk/government/publications/national-planning-policy-for-waste>

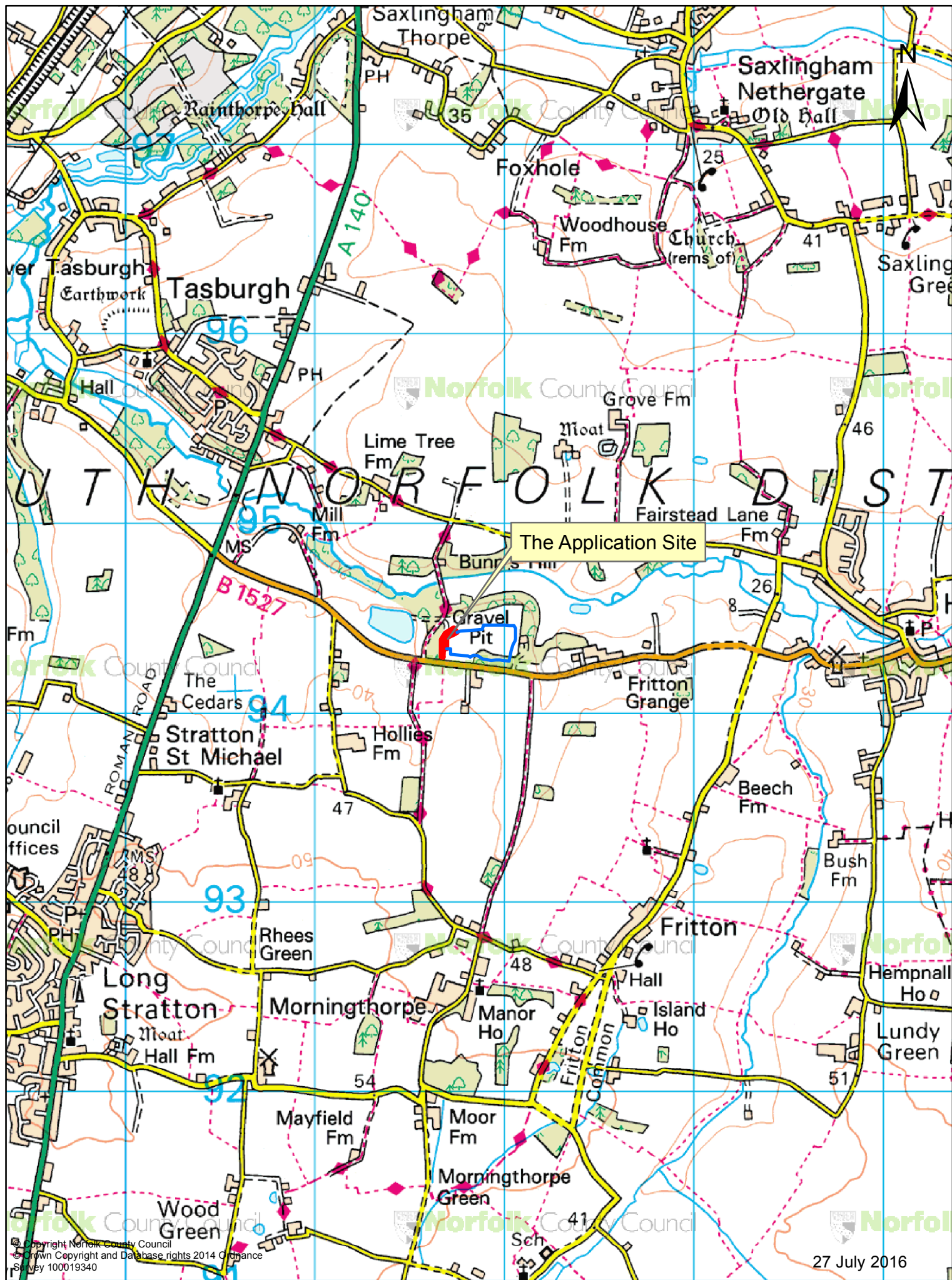
Officer Contact

If you have any questions about matters contained in this paper please get in touch with:

Name	Telephone Number	Email address
Andrew Harriss	01603 224147	andrew.harriss@norfolk.gov.uk



If you need this report in large print, audio, Braille, alternative format or in a different language please contact 0344 800 8020 and ask for Andrew Harriss or textphone 0344 800 8011 and we will do our best to help.



Norfolk Minerals and Waste Development Framework

Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010-2026



Adopted September 2011
Norfolk County Council

Norfolk Minerals and Waste Local Development Framework

Core Strategy and Minerals and Waste Development Management Policies Development Plan Document 2010 - 2026

September 2011

M. Jackson
Director of Environment, Transport and Development
Norfolk County Council
Martineau Lane
Norwich
NR1 2SG

www.norfolk.gov.uk



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EXECUTIVE SUMMARY

0.1 This document, the Norfolk Core Strategy and Minerals and Waste Development Management Policies Development Plan Document (DPD), runs for a 17-year period from 1 January 2010 to 31 December 2026, as required by Planning Policy Statement 12: *Local Spatial Planning* (PPS12), to enable the time period of the Core Strategy to be 15 years from the date of adoption. This document is described throughout as the 'Core Strategy'.

0.2 The Core Strategy, along with the Proposals Map, sets out the spatial vision for future mineral extraction and associated development and waste management facilities in Norfolk. It also contains strategic objectives and policies that make clear where, in broad terms, mineral extraction and associated development and waste management facilities should be located in Norfolk, and conversely where they should not be located. It also sets out Development Management policies that will be used to ensure that the development of mineral extraction and associated development and waste management facilities can happen in a sustainable way at those locations assessed as being appropriate for development. When it is adopted it will become part of the Local Development Framework (LDF) for Norfolk.

0.3 The East of England Plan requires Norfolk to accommodate a minimum of 78,700 new homes and plan for an indicative figure of 55,000 new jobs between 2001 and 2021. Related to this, the population is projected to rise to around 969,700 in 2021 (from 798,600 in 2001). The increasing population and the growth Norfolk needs to accommodate will both have major implications for the development of mineral extraction and associated development and waste management facilities.

0.4 Every person produces waste, and the amount produced has been growing over the years, most of which has been sent to landfill. Whilst waste cannot be eliminated, how much is produced, how it is managed, and what can be done with it can – indeed, must – be altered. Managing waste in a more sustainable way, for example by optimising recycling, as well as limiting production of waste, forms a core part of Government policy to protect the environment. Although waste is often thought of as being mainly produced by households, this actually comprises only a small proportion (approximately nine percent) of the waste produced, with much larger amounts generated by businesses, through construction and demolition, and inert waste generated by mineral extraction and associated development.

0.5 Aggregate minerals are the main raw materials used by the construction industry. Aggregates are used in a variety of ways including the production of concrete, road construction and manufactured building products such as concrete blocks, pipes and kerbs. Primary aggregates comprise naturally occurring materials, such as sand and gravel, which are extracted directly from the earth. Secondary aggregates are waste or by-products from minerals processing or other industrial processes, used with or without processing, whereas recycled aggregates are produced from recycled construction waste such as concrete and planings from tarmac road surfaces. Both secondary and recycled aggregates can be used by the construction industry (e.g. for use as sub-base material) but for some uses only primary aggregates are appropriate.

0.6 The Core Strategy plans for facilities to manage the waste that is expected to arise and also where to extract the minerals that are needed over the Plan period to the end of 2026. The purpose of the Minerals and Waste Development Framework is to plan for mineral extraction and associated development and waste management facilities in the most sustainable way that minimises adverse impacts on amenity and the environment.

0.7 The overall **spatial strategy** sets out the locational principles in the form of broad areas where mineral extraction and associated development and waste management facilities will be preferred. Although minerals can only be extracted where they occur, if there is a choice of potential site allocations then Policies CS2 (minerals) and CS5 (waste) give a locational preference: close and/or well-related to the Norwich Policy Area, Great Yarmouth urban area, King's Lynn or Thetford or the main market towns (Attleborough, Aylsham, Cromer, Dereham, Diss, Downham Market, Fakenham, Hunstanton, North Walsham, Sheringham, Swaffham and Watton), taking into account any significant environmental constraints near these settlements.

0.8 The strategy for **waste management** conforms to the Waste Strategy for England 2007 and the national waste hierarchy. The Minerals & Waste LDF will therefore, where practicable, allocate sufficient sites to provide facilities to deliver increased rates of recycling, composting and energy recovery. The County Council will work closely with Norfolk's district councils to secure an appropriate level of developer contributions towards the provision of improvements to the household waste recycling centre network. For waste resource and energy recovery, Policy CS13 will ensure that new waste management proposals minimise the carbon footprint in their own energy use, and capture energy generated from the thermal treatment of waste.

0.9 Any proposals for new landfill sites for hazardous waste will be limited to providing capacity only for Norfolk's disposal requirements, if suitable sites can be found. Current permitted non-hazardous landfill sites are likely to be sufficient to provide capacity until the end of 2023/24. Planning permission was resolved to be granted, by Norfolk County Council's Planning (Regulatory) Committee in December 2010 for a 1,000,000 m³ extension to Attlebridge landfill site. With this extension, Norfolk's non-hazardous landfill capacity will meet the forecast needs up to the end of 2026/27. Additional inert landfill capacity is also needed for Norfolk, but it will only be permitted where it provides net benefits in terms of restoration.

0.10 For **minerals supply**, the sand and gravel landbank will be maintained at between 7 and 10 years' supply, save for exceptional circumstances, such as borrow pits for major infrastructure needs. The landbank for carstone will be maintained as close to 10 years' supply as is practicable. An initial 15 year landbank for silica sand reserves will be allocated, with a minimum landbank of 10 years maintained. No landbank will be maintained for other minerals.

0.11 There will be minerals and waste **Safeguarding Areas** and **Consultation Areas** to protect existing, permitted and allocated sites from other development. Sand and gravel, silica sand and carstone resources will also be protected, using the British Geological Survey mineral resources map as a guide. Specific civil and military aerodromes and technical sites will also be subject to safeguarding

from mineral extraction and associated development and waste management facilities within specific areas that could inhibit their operation or development.

0.12 In terms of **environmental protection** and Norfolk's natural and cultural heritage, mineral extraction and associated development and waste management facilities will avoid significant adverse impacts on protected and sensitive areas of the county, such as SACs, SPAs, SSSIs, designated local nature conservation and geodiversity sites, listed buildings, Historic Parks and Gardens, archaeological sites, conservation areas and Groundwater Source Protection Zones. The constraints of developing within or near the Breckland SPA (stone curlew habitat) are highlighted particularly. This generally means that allocations for mineral extraction and associated development and waste management facilities will be avoided in or adjacent to such areas, whilst balancing this against the need to provide sufficient allocations to meet the minerals and waste apportionments specified in policies CS1 and CS3. Developers and operators will also be required to show that they will minimise their impact on the environment through appropriate construction and management measures at the planning application stage.

0.13 Mineral extraction and associated development and waste management facilities must preserve or, where possible, enhance the **landscape** and **townscape character**. This will be supplemented with consideration of **good design** principles for new development.

0.14 The impact on **transport and traffic** will be assessed and managed by requiring the submission of a Transport Statement and, where appropriate, a Transport Assessment depending on the scale and impact of the development. Through these, developers will need to show how accessibility and sustainable transport opportunities are being maximised and impacts on congestion, air quality and road safety minimised, the latter supported by road safety audits. To promote a shift from road freight transport to rail and water transport, site allocations near rail freight facilities and wharves will be encouraged. For residual lorry traffic, the use of unsuitable roads will be reduced, primarily by encouraging potential site allocations with good access to roads high up the route hierarchy.

0.15 With regard to **amenity and well being**, clear adverse impacts on human health will be avoided. This means that Core Strategy policy opposes allocating sites in Air Quality Management Areas, where the development would have a detrimental affect on the air quality objectives of the AQMA, and areas also where the impact of a new minerals or waste development could potentially lead to a new AQMA being declared. Consideration will also be given to potential impacts to people in close proximity to site allocations. A development management policy will require developers to minimise individual and cumulative amenity impacts. The cumulative impact of development that is co-located will need to be mitigated, although there is recognition of synergistic benefits for the co-location of facilities.

0.16 Landfill and minerals extraction offer opportunities for beneficial **restoration**, and although these opportunities will be assessed on a case by case basis, priority will be given to restoration that helps develop Norfolk's ecological network (and hence its biodiversity) and the creation of new, high quality, distinctive landscapes. Continuing to preserve good quality **agricultural land** is important and will also be considered.

0.17 In addition to local impacts, mineral extraction and associated development and waste management facilities can have wider scale implications, in particular on the emissions of greenhouse gases, which can lead to **climate change**. Their industrial processes are almost always energy intensive, and the combustion of fossil fuels to produce this energy leads to carbon dioxide (CO₂) emissions. Additionally, transportation of minerals and waste is typically undertaken by heavy goods vehicles, which require a significant amount of fuel. Climate change is integrated within a number of policies in the Core Strategy, with the aim of minimising greenhouse gas emissions from mineral extraction and associated development, waste management facilities and associated activities as much as possible.

0.18 Minerals and waste planning technical terms and concepts used throughout this Core Strategy can be found in the glossary in Appendix F.

1. THE MINERALS AND WASTE DEVELOPMENT FRAMEWORK

1.1 The Norfolk Core Strategy and Minerals and Waste Development Management Policies Development Plan Document, is for a 17 year period from 2010 to the end of 2026, as required by Planning Policy Statement 12: *Local Spatial Planning* (PPS12), to enable the time period of the Core Strategy to be 15 years from the date of adoption. This document will be described throughout as the 'Core Strategy'.

1.2 The Core Strategy, along with the Proposals Map, sets out the spatial vision for future mineral extraction and associated development and waste management facilities in Norfolk. It also contains strategic objectives and policies that make clear where, in broad terms, mineral extraction and associated development and waste management facilities should be located in Norfolk, and conversely where they should not be located. It also sets out Development Management policies that will be used to ensure that the development of mineral extraction and associated development and waste management facilities can happen in a sustainable way at those locations assessed as being appropriate for development. When it is adopted it will become part of the Local Development Framework for Norfolk.

1.3 Planning for mineral extraction and associated development and waste management facilities is carried out through the production of the Minerals and Waste Development Framework, which is required by the Planning and Compulsory Purchase Act 2004. The Core Strategy is required to be accompanied by a Sustainability Appraisal, Appropriate Assessment and Evidence Base to ensure a robust approach. These documents are explained under the appropriate heading below. The Core Strategy, together with national policies contained in Planning Policy Statements, form the overall framework for taking decisions on applications for planning permission for mineral extraction and associated development and waste management facilities.

1.4 As well as the Core Strategy and Minerals and Waste Development Management Policies DPD, the Local Development Framework comprises:

- **Site Specific Allocations DPDs.** The Allocation Sites are suitable, as well as available, for mineral extraction and associated development or waste management facilities as assessed against the Core Strategy policies, the sustainability appraisal, appropriate assessment and consultation feedback. Separate DPDs for Waste Site Specific Allocations and for Minerals Site Specific Allocations are being produced. The Site Specific Allocations will be referred to as 'Allocation Sites' throughout the Core Strategy.
- **The Statement of Community Involvement**, which sets out the ways in which local stakeholders will be consulted in the production of DPDs and in the determination of planning applications.
- **Minerals and Waste Development Scheme.** The various documents within the framework are being prepared at different times through a continuous process, the timing of which is described in the Minerals and Waste Development Scheme.
- **Annual Monitoring Report.** This describes progress in producing the DPDs, implementation of the Core Strategy and the performance of the policies.

Planning and Sustainable Development

1.5 The Core Strategy and supporting documents have been developed to ensure that mineral extraction and associated development and waste management facilities are delivered in a sustainable manner. The Government's sustainable development strategy in Planning Policy Statement 1: *Delivering Sustainable Development* (PPS1) is the core principle underpinning planning, aiming to deliver a sustainable, innovative and productive economy with 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 resources and energy use.

Overall National and Regional Minerals and Waste Policy

1.6 The main thrust of the national minerals policy in Minerals Policy Statement 1: *Planning and Minerals* (MPS1) is to secure adequate and steady supplies of the minerals needed by society and the economy, reducing the demand for primary extraction through increasingly promoting efficient reuse and recycling of suitable materials such as demolition waste.

1.7 There are many European directives which the UK is required to comply with. Most notable, in terms of requirements for waste management facilities, is the *Landfill Directive 1999/31/EC*, which bans the co-disposal of hazardous and non-hazardous waste, requires the treatment of waste (with limited exceptions) prior to landfill, and sets targets for the reduction of biodegradable waste sent to landfill.

1.8 The Waste Strategy for England 2007 aims to reduce the amount of waste produced and to reduce the amount and proportion of waste disposed of to landfill, in accordance with the waste hierarchy, to meet the Landfill Directive targets. The hierarchy gives top priority to waste prevention, followed by preparing for reuse, then recycling, then other recovery, with disposal being the final option. National waste management policy in Planning Policy Statement 10: *Planning for Sustainable Waste Management* (PPS10) also rests on the waste hierarchy, setting out the preferred order in which options for waste management should be considered, with waste being seen as a resource from which value should be recovered.

1.9 The adopted East of England Plan (2008) sets out the amount of mineral extraction and waste management that Norfolk County Council needs to plan for, called 'apportionments', between 2001 and 2021. The Core Strategy uses more up-to-date data and projections than contained in the adopted East of England Plan, however, taking some information from the now abandoned Revision to the East of England Plan (2010), revised national minerals apportionment figures, and the latest municipal waste projections.

Supporting Documents - Sustainability Appraisal, Appropriate Assessment, Evidence Base and Equality Impact Assessment

1.10 Sustainable development is central to the planning system. The purpose of sustainability appraisal, which is mandatory under the Planning and Compulsory Purchase Act 2004, is to promote sustainable development through the integration of social, environmental and economic considerations in the

preparation of new or revised DPDs and Supplementary Planning Documents. Sustainability appraisal is therefore an integral element of the preparation of the Core Strategy, informing in a comprehensive way of the likely impacts of the proposed policies.

1.11 At the Issues and Options stage, every option was assessed in the initial Sustainability Appraisal and the most sustainable option to address each issue was highlighted in the Issues and Options consultation document. The Sustainability Appraisal from the Issues and Options stage was taken into account, along with the public consultation feedback, when the preferred options were selected. At the Preferred Options stage, the preferred policy option for each issue was assessed in the draft Sustainability Appraisal and, where relevant, mitigation measures were suggested for inclusion in the final policy wording.

1.12 The policy wording within this document has taken into account the findings of the Sustainability Appraisal from the Preferred Options Stage and the Pre-submission stage of May-July 2010. A Sustainability Appraisal has also been carried out on the policies within this document. The Draft Sustainability Appraisal states that: *“The assessment of the Core Strategy policies highlighted that the majority will have either no significant effect or a positive effect. The majority of the policies for development management showed either no significant effect or a positive effect. This is most likely due to the nature of development control to mitigate the negative effects of development and enhance the positive effects of development. In developing the policy wording, the Issues and Options and Preferred Options have undergone SA and mitigation has been incorporated in the policy wording, because of this there were very few negative effects. Whilst not every policy scores positively against all the sustainability criteria, taken together, the policies will ensure future minerals and waste sites are allocated in appropriate locations in Norfolk and permitted to operate in the most ‘sustainable’ manner”*. The Sustainability Appraisal forms part of the evidence base for the development of the Core Strategy.

1.13 An Appropriate Assessment has been carried out on the Core Strategy in accordance with the *Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna* (the Habitats Directive). An Appropriate Assessment is undertaken to assess the impacts of a land-use plan against the conservation objectives of a European-designated nature conservation site and to ascertain whether it would adversely affect the integrity of the site and, if so, how to amend the plan to avoid any potential damaging affects. The Appropriate Assessment forms part of the evidence base for the development of the Core Strategy.

1.14 Also forming the evidence base for the development of the Core Strategy are a number of other documents containing relevant technical information that underpins the Core Strategy.

1.15 An Equality Impact Assessment (EqIA) as been carried out on the Core Strategy. The need for an EqIA stems from the general duty placed on public authorities to eliminate unlawful discrimination in carrying out its functions, and promote equality of opportunity between men and women, different racial groups, and other equality groups. The EqIA has been prepared to satisfy all relevant legal and policy requirements for the assessment. It has been completed in line

with best practice guidance published by Central Government¹, and the County Council's own guidance for undertaking EqlAs².

¹ ODPM (2005) Diversity and Equality in planning: A good practice guide

² Norfolk County Council. Equality and Human Rights Impact Assessments

2. NORFOLK SPATIAL PORTRAIT

2.1 Norfolk is a largely rural county. It has 90 miles of coast, 250 miles of waterways, 6,329 miles of roads and 541 parishes. There are over 200 conservation areas, more than 10,000 listed buildings and more than 350 scheduled monuments. The Broads covers 303 square kilometres of Norfolk (and a small part of Suffolk), and has a population of around 6,000.

2.2 The population of Norfolk is estimated to be 853,400 in mid-2009, compared with 796,700 in the 2001 Census. Its area is 549,751 hectares (fifth largest of the 34 non-metropolitan counties in England) and the population density is 1.57 people per hectare (tenth lowest). Norfolk's population has a relatively elderly age profile; compared to England and Wales it has higher proportions of people aged 50-54 and over, and lower proportions in all the younger age groups.

2.3 Around 38 per cent of the county's population live in the three major built up areas of Norwich (207,000), Great Yarmouth (68,400) and King's Lynn (42,800), and a further 19 per cent (158,000) in the market towns. Around 40 per cent live in parishes of more than 300 residents, and the remaining 3 per cent in parishes with fewer than 300 residents.

2.4 Norfolk has a broadly-based economy. Traditional activities such as agriculture, manufacturing and tourism are still very important, but the county also has the Norwich Research Park (one of Europe's largest concentrations of research in health, food and environmental sciences), the cutting-edge motorsport engineering complex based around Snetterton, the new deep-water Outer Harbour at Great Yarmouth (to help bolster the marine and offshore oil and gas industry) and the new £400m Palm Paper plant at King's Lynn.

2.5 The East of England Plan set targets for housing growth in the East of England up to 2021. Between 2001 and 2021 Norfolk as a whole was expected to accommodate a minimum of 78,700 new dwellings. The majority of these were planned to be in the Norwich Policy Area (including Norwich City and parts of Broadland and South Norfolk) where 33,000 dwellings were allocated. King's Lynn and West Norfolk was to provide for 12,000 dwellings and Great Yarmouth for 6,000 dwellings over the same period. Breckland was to provide 15,200 dwellings (of which 6,000 would be at Thetford) and North Norfolk 8,000 dwellings between 2001 and 2021. Whilst the level of these housing numbers might be altered by Norfolk's districts through reviews of their Local Development Frameworks, at the current time there are no public plans to do so.

2.6 Norfolk's district councils are currently preparing their Local Development Frameworks. Of particular significance is the Joint Core Strategy, being prepared by Norwich City, Broadland District and South Norfolk District (with assistance from Norfolk County Council). The Joint Core Strategy was adopted in March 2011. Both North Norfolk and Breckland have adopted Core Strategies. King's Lynn & West Norfolk's Core Strategy has been submitted, and the public examination took place in February 2011. Great Yarmouth's Core Strategy is still at the Issues and Options stage.

2.7 The Norwich Policy Area extends beyond the built-up area of Norwich and encompasses a number of villages as well as the market towns of Wymondham and Long Stratton and the Old Catton-Sprowston-Rackheath-Thorpe St Andrew

'growth triangle' (which is planned for a minimum of 7,000 dwellings). The settlement 'hierarchy' for Norfolk is divided into two classes for the purposes of the Core Strategy, firstly the main settlements of Norwich/Norwich Policy Area, Great Yarmouth urban area, King's Lynn and Thetford (the settlements of Gorleston, Bradwell and Caister-on-Sea are virtually contiguous with Great Yarmouth and therefore are considered to form part of the Great Yarmouth urban area). In addition to the settlements within the Norwich Policy Area, there are a number of market towns in Norfolk that either have a current population of over 7,000 or are expected to reach 7,000 through proposed new housing allocations. These towns, which form the second tier of the hierarchy for the purposes of the Core Strategy, are: Attleborough, Aylsham, Cromer, Dereham, Diss, Downham Market, Fakenham, Hunstanton, North Walsham, Sheringham, Swaffham and Watton.

2.8 As part of the infrastructure requirements for the Joint Core Strategy, the Norwich Northern Distributor Road is planned. The other significant road improvement planned in the county is the dualling of the last single-carriageway stretch of the A11, from Thetford (in Norfolk) to Mildenhall (in Suffolk). In late 2010 it was announced in the Comprehensive Spending Review for the years to 2014/15 that the A11 dualling will take place, and final approval under the Highways Act was granted in March 2011. Construction is expected to start during the financial year 2012-13.

2.9 Norfolk is a county rich in important wildlife and designated landscapes. There are 12 Special Protection Areas (SPAs), seven Special Areas of Conservation (SACs) and 162 Sites of Special Scientific Interest (SSSIs). Significant habitats include the Wash, the Broads, the Brecks and the Fens. The Norfolk Coast Area of Outstanding Natural Beauty (AONB) runs, with a few breaks, from King's Lynn in the west along the coast to Winterton in the east, and covers 450 square km.

MINERAL SPATIAL PORTRAIT AND STRATEGIC FOCUS

2.10 Mineral deposits can only be worked where they occur and so the options for a spatial strategy for mineral extraction and associated development are prescribed to a large extent by the geological distribution of mineral resources within Norfolk. The Norfolk Mineral Resources map, published in 2004 by the British Geological Survey (BGS), includes a breakdown of mineral types and distribution. The Key Diagram shows the broad locations of carstone and silica sand resources, as well as the locations of sand and gravel resources that are well-related to settlements.

Sand and Gravel

2.11 The BGS map demonstrates that sand and gravel is abundant and located throughout large areas of Norfolk. Sand and gravel is used in the construction of roads and buildings and it is a key ingredient in the production of concrete and mortar, asphalt coating for roads, as a drainage medium and in the construction of embankments and foundations. In 2010, there were 33 active sand and gravel mineral workings in Norfolk (see the 2009/10 Annual Monitoring Report). The distribution of existing sand and gravel sites throughout Norfolk is widespread with a relatively large number of small operators. There are, however, particular clusters of sand and gravel workings near to King's Lynn, in the north of the Breckland District and around Norwich.

2.12 Norfolk's sand and gravel apportionment figure, which was agreed by the East of England Aggregates Working Party (EERAWP), refers only to land-won aggregates. Marine aggregate dredging is carried out by companies on behalf of the Crown Estate and the sites are licensed by Defra; therefore, Norfolk County Council does not have any planning involvement in marine aggregates and they do not form part of the county's aggregate apportionment. Aggregates from marine dredging are not currently received at any ports or wharves in Norfolk.

2.13 The main alternative source of aggregates is recycled construction and demolition waste. Whilst MPS1 (paragraph 18) requires Minerals Planning Authorities to reduce the reliance on land won aggregates with increased substitution of recycled and secondary aggregates, the production of secondary and recycled aggregates is in addition to the apportionment figures.

Silica Sand

2.14 Silica sand is an essential raw material for many industrial processes, including the manufacture of glass. Norfolk is one of the most important sources of silica sand in Britain, accounting for over 10 per cent of total output and a much larger proportion of glass sand production. The majority of the resources of silica sand are to the east of King's Lynn from upper Sandringham to the west of Hunstanton, southwards to Ryston (near Downham Market) in south-west Norfolk (see Key Diagram).

2.15 At present, there is only one company (Sibelco) extracting silica sand in Norfolk. This operation is located at a site in Leziate, east of King's Lynn, which includes plant for initial processing and a rail head to export the mineral from the county for advanced processing elsewhere. The site at Leziate has a current production rate of 609,000 tonnes per year, although this is expected to increase to 750,000 tonnes per year from 2011.

Carstone

2.16 Carstone is a type of sandstone that is quarried in west Norfolk. It has traditionally been used as a vernacular building material, although it is no longer used to any significant degree. Although it is classed as a 'hard rock', it is not used as a hard rock (e.g. road dressing) – instead, it is used primarily as fill (to raise the levels of land prior to construction) or hoggin (in embankments and as fill); therefore, it is often used in the construction of roads. In 2010, there were four carstone quarries operating in Norfolk.

Other minerals

2.17 Several other minerals are extracted in Norfolk, including clay (used in the engineering of landfill sites and in flood protection schemes), chalk (used primarily used as a liming agent for farmland) and peat (used in the horticulture industry).

2.18 In 2010 there were three active chalk quarries, located at Hillington, Castle Acre and Caistor St Edmund; one peat working, at Oxborough, and one active clay working, at Middleton.

WASTE SPATIAL PORTRAIT AND STRATEGIC FOCUS

Introduction

2.19 The treatment and disposal of waste in Norfolk was historically based on fairly limited recycling of certain waste types (such as scrap metal), followed by landfilling of most of the remainder, particularly municipal (household) waste. More recent years have seen an increased focus on waste reduction, and the recycling, composting and recovery of value from wastes through the application of the principles of the Waste Hierarchy (prevention – preparing for reuse – recycling – other recovery – disposal). Guided by increases in taxation, the landfilling of all waste types is becoming increasingly expensive and, therefore, undesirable, but it may remain the most cost effective solution for some types of waste.

2.20 The County Council relies heavily on the annual survey returns from the waste management industry for an up-to-date picture for Norfolk. This is clearly important not just so that it is known how much waste has been recycled, treated or managed, but especially how much landfill capacity remains for the ultimate disposal of non-hazardous waste that cannot be treated any further.

2.21 The Waste Evidence Base document contains details of the principal waste types in Norfolk (principally inert, hazardous, and various types of non-hazardous waste, such as municipal waste) including the amount of waste arising, how and where it is treated (if relevant), and how and where it is disposed of (if relevant). This information is summarised below.

Current Waste Management Infrastructure

2.22 A total of 1,910,000 tonnes of waste was handled in Norfolk during the year 2008/9 (see 2008/9 AMR). This total includes:

- Waste disposal to non-hazardous waste landfill sites: 482,000 tonnes;
- Non-hazardous waste recycled: 684,000 tonnes;
- Inert landfill and quarry restoration: 210,000 tonnes; and
- Inert waste recycling: 512,000 tonnes.

Hazardous wastes

2.23 There are many different types of hazardous waste, ranging from waste electronic equipment and paints, to oily wastes, asbestos and clinical waste. Five main categories of hazardous waste are:

- construction and demolition waste, including asbestos, contaminated soils and treated wood;
- oily wastes, batteries and accumulators, and end-of-life vehicles;
- chemical processing wastes, and marine wastes;
- waste water treatment and water industry wastes; and
- waste electrical and electronic equipment, including televisions and fluorescent tubes.

2.24 Hazardous wastes usually require specialised treatment and disposal facilities, and given the relatively low levels of waste produced, the catchment area of such plants is often wider than a single county. For this reason, given its geographical remoteness, Norfolk is clearly not ideally suited to host regional or national level waste treatment plants, and there is a net outflow of hazardous waste from the county.

2.25 Since the banning of the co-disposal of hazardous wastes with non-hazardous wastes to landfill in July 2004, Norfolk does not now landfill any hazardous waste (with the exception of an engineered asbestos 'cell' in Attlebridge landfill site) and there are therefore no hazardous waste landfills in Norfolk.

2.26 Environment Agency figures from 2009 show that, of the 72,000 tonnes of hazardous waste produced in Norfolk, more than 41,000 tonnes was exported for treatment/disposal outside the county. Examples of hazardous waste exported outside Norfolk include:

- asbestos being transported to King's Cliffe landfill site in Northamptonshire (near Peterborough) for disposal;
- clinical waste being transferred to Ipswich Hospital for incineration; and
- waste batteries (collected at Household Waste Recycling Centres) being sent to the H J Enthoven plant near Matlock in Derbyshire for recycling.

2.27 The total quantities of hazardous waste arising in Norfolk, and received in Norfolk, in the past three years were as follows:

Year	Waste arising in Norfolk (tonnes)	Waste received in Norfolk (tonnes)
2007	95,000	50,000
2008	77,000	61,000
2009	72,000	56,000

Of the total hazardous waste arising in Norfolk, the following quantities were hazardous construction and demolition wastes:

2007: 15,609 tonnes (5,757 tonnes asbestos)
 2008: 8,583 tonnes (5,004 tonnes asbestos)
 2009: 6,115 tonnes (4,960 tonnes asbestos)

Therefore it is assumed that about 5,000 tonnes annual capacity needs to be made available to dispose of asbestos of Norfolk (assuming complete self-sufficiency).

Non-hazardous wastes

2.28 Many types of municipal and commercial & industrial (C&I) waste fall into the category of non-hazardous waste.

2.29 Untreated or unsorted non-hazardous waste streams can contain a wide range of materials, including food waste, plastics, paper, metals and garden wastes. The separate collection of recyclable and compostable fractions of municipal (household and, to some extent, C&I) waste is well-established, and thus most residual non-hazardous waste contains a relatively small fraction of recyclables and compostables.

2.30 Norfolk's district councils all collect recyclables direct from householders, and this waste is taken to the county's main Materials Recycling Facility, which is based at Costessey, for sorting and processing. Those districts which offer a collection service for household garden waste take the material for composting to a number of different composting plants in the county.

2.31 C&I waste is compositionally similar to municipal waste, and can thus be subject to the same type of source-separation of recyclables and compostables, with the residual fraction being treated and disposed of the same ways.

2.32 The 2008/9 Annual Monitoring Report figures show that the Norfolk's five non-hazardous landfills (Blackborough End, Feltwell, Attlebridge, Aldeby and Edgefield) received over 482,000 tonnes of waste during that year, with a remaining permitted voidspace capacity of approximately 8.5 million tonnes (8.5 million m³). The bulk of the remaining capacity in Norfolk's landfills is found in Blackborough End, in the west of the county.

2.33 There are currently no large-scale residual waste treatment plants in the county, although there are a number of smaller-scale operations, such as anaerobic digestion plants.

2.34 No municipal waste from London is currently being treated and/or landfilled in Norfolk, although an annual quantum of this waste is apportioned to Norfolk in Policy WM3 of the East of England Plan.

Inert wastes

2.35 Broadly speaking, inert waste types are materials that will not degrade or decay, such as glass, sub-soils, brick and concrete, although the list of materials which are acceptable for disposal at inert-only landfill sites is more restricted (excluding, for example, topsoil and peat). Almost all inert waste (glass excepted) arises from construction & demolition activities.

2.36 Current recycling levels of inert waste are high, because the material often has value as a sub-base material or for other uses. For this reason, it is not thought likely that there will be a significant increase in recycling over the period of the Core Strategy.

2.37 Only two inert-only landfills in Norfolk accepted waste in 2008/9, totalling about 42,000 tonnes. However, this figure masks the real situation because much inert waste is also used for engineering works, including the capping of non-

hazardous landfill sites and the restoration of mineral workings. In 2008/09 over 168,000 tonnes of inert waste was used in the restoration of quarries and the restoration of two closed non-hazardous landfill sites, whilst over 31,000 tonnes of inert waste was disposed of to non-hazardous landfill sites.

2.38 Although there is annual variability, figures from the years 2004-2009 (see the “Inert waste management addendum to the Revised Waste Data Evidence Base”) show that approximately 60 per cent of inert waste is recycled, 5 per cent is used for engineering purposes on landfills (cap and cover), 25-30 per cent is used to backfill/restore quarries and the remaining 5-10 per cent is sent to inert landfill sites. The six-year average for material sent to inert landfills and used for quarry restoration is approximately 346,000 tonnes.

Other waste management infrastructure capacity

2.39 2008/9 figures show that there was a net import into Norfolk’s waste transfer stations and recovery facilities of about 305,000 tonnes of waste (all waste types, including hazardous and clinical wastes, combined).

2.40 Norfolk currently has 19 Household Waste Recycling Centres, which accept over 73,000 tonnes of waste per annum. In 2008/9 58.5 per cent of the household waste received at these facilities was recycled or recovered at other facilities and the remaining 41.5 per cent of the waste was disposed of to landfill.

2.41 There is one main Materials Recovery Facility (MRF) in the county, at Costessey near Norwich, which sorts kerbside-collected source-separated dry materials for recycling. This facility has a capacity of 90,000 tonnes per annum. Several other, smaller, MRFs deal with C&I waste streams (such as fluorescent light tubes), but Freedom Recycling’s plant at Thetford also handles some of Essex’s kerbside-collected dry materials for recycling.

2.42 Norfolk has six large composting facilities, as well as a few smaller sites, including community composting facilities. The large composting facilities in Norfolk received over 115,000 tonnes of waste in 2008/09, with community composting sites receiving over 100 tonnes.

2.43 There are four large metal recycling facilities, at Costessey, Great Yarmouth, Lenwade and King’s Lynn, and over 50 small sites accepting scrap metal or end-of-life vehicles. The metal recycling facilities in Norfolk received over 236,200 tonnes of waste in 2008/09.

Agricultural waste

2.44 Substantial quantities of agricultural waste are produced in Norfolk, which is a largely rural county. However, the majority of agricultural waste produced does not need to be treated or disposed of at permitted waste management facilities; it is usually dealt with on farms, principally by spreading slurries to land.

2.45 Some quantities of agricultural waste are treated at larger plants, however. A good example is the chicken litter-fuelled power station at Thetford, which consumes 420,000 tonnes of chicken litter per year, producing a high quality fertiliser. There has also been increased interest in, and development of, on-farm waste processing plants in recent years, with anaerobic digestion plants and larger-scale composting plants becoming more common.

Waste water and sewerage

2.46 Large volumes of sewerage and waste water are produced and treated in Norfolk, as in all other counties. There are a significant number of sewage and waste water treatment plants in the county (see the Waste Evidence Base), but the principal wastewater treatment plant is at Whitlingham, just south of Norwich, which treats waste water from Norwich and the surrounding area, and also accepts sewage sludges from other plants in the county.

3 KEY DATA, ASSUMPTIONS AND PROJECTIONS

Minerals

Sand and gravel

3.1 The CLG document *National and regional guidelines for aggregates provision in England 2005-2020* was published in June 2009, and updates the previous guidance, which ran from 2001-2016. The original 2001-2016 figures were apportioned to sub-regional areas by the East of England RAWP (Regional Aggregates Working Party), and apportioned Norfolk 2.98 million tonnes of sand & gravel per year. The revised national guidelines recommend lower levels of provision, and the East of England RAWP used the same methodology to re-apportion the quantity allocated to the East of England. Norfolk's revised apportionment figure is now 2.57 million tonnes per year.

3.2 Sand and gravel production in Norfolk has averaged 2.29 million tonnes per year in the ten years up to and including 2009, compared to the 2.57 million tonnes per annum apportionment figure. At the end of 2009 the permitted reserve of sand and gravel was sufficient to meet the county's needs for 7 years (until the end of 2016). This just meets the minimum 7-year landbank that the County Council seeks to maintain in accordance with paragraph 4.1 of Annex A of MPS1: *Planning & Minerals*. Consequently a minimum of a further 10 years' supply therefore needs to be provided to meet the apportionment figure. Paragraph 4.2 of Annex A of MPS1 advises that where regular reviews and updates would take place – as planned for the Core Strategy – then maintaining a landbank beyond the end of the Plan period is not an issue.

3.3 Given the need to 'roll forward' the annual apportionment figure to 2026, the minimum total to be allocated is shown in Table 3.1.

Table 3.1: Sand and gravel requirement and shortfall

		Million tonnes
A	Norfolk apportionment 2010 to 2019 (10 years x 2.57 million tonnes)	25.7
B	Roll forward from 2020 to 2026 (7 years x 2.57 million tonnes)	17.99
C	Total apportionment requirement	43.69
D	Sand and gravel reserve at 31/12/2009	18.02
E	Total shortfall (C – D) and therefore minimum quantity to be allocated	25.67

Silica sand

3.4 MPG15: *Provision of Silica Sand in England* stresses the national importance of silica sand resources, and the need to ensure that adequate resources are provided for; paragraph 47 says that landbanks of at least 10 years should be aimed for. However, paragraph 48 advises that landbanks significantly in excess of 15 years may be justified where major investment in infrastructure and/or processing facilities is planned or necessary.

3.5 Silica sand resources in Norfolk are therefore considered to be of national strategic importance. Minerals company Sibelco (the only silica sand operator in Norfolk) has indicated that they expect to make further investment in the area, with production expected to increase from the recent (2007-9) average of 609,000 tonnes per year to 750,000 tonnes per year from 2011 (due in part to the impending closure of another Sibelco site elsewhere in the country).

3.6 In assessing the appropriate quantity of silica sand to plan for, the long-term needs of Sibelco's interests are recognised, but the County Council is also mindful of the need to avoid apportioning an excessive quantity of resources, which would reduce certainty for local residents as to the likelihood and timing of individual sites coming forward for planning applications. The Core Strategy will be reviewed by 2016 at the latest, and so ensuring a silica sand landbank that would last far beyond the end of 2026 is not justified (paragraph 4.2, Annex A, MPS1).

Table 3.2: Silica sand requirement and shortfall

	Million tonnes
Requirement: one year x three-year average from 2007 to 2009 (609,000 tonnes production in the year 2010) + 16 years x expected average from 2011-2026 (750,000 tonnes) = 12,000,000 tonnes	12.6
Silica sand reserve estimated at 31/12/2009	6.2
Total shortfall	6.4
The total shortfall of 6.4 million tonnes is equivalent to a need for about 8.5 years' additional supply over the period of the Core Strategy (using the expected production rate from 2011 onwards)	

Carstone

3.7 Crushed rock is also part of the national apportionment exercise. Norfolk's apportioned figure for 2005-2020 for carstone is 0.2 million tonnes per annum (which remains unchanged from the 2001-2016). Carstone production in the period 1990 to 2009 averaged 0.23 million tonnes per year. However, production averaged just 0.16 million tonnes in the period 2000-2009. As at 31 December 2009, the landbank in Norfolk for permitted carstone reserves stood at 9.6 years; sufficient until 2019.

Table 3.3: Carstone requirement and shortfall

	Million tonnes
A Norfolk apportionment 2010 to 2019 (10 years x 0.2 million tonnes)	2
B Roll forward from 2020 to 2026 (7 years x 0.2 million tonnes)	1.4
C Total requirement	3.4
D Carstone reserve at 31/12/2009	1.925
Total shortfall (D – C)	1.475
The total shortfall of 1.475 million tonnes is equivalent to a need for 7.4 years' further supply over the period of the Core Strategy	

Other minerals

3.8 Other minerals, such as chalk, clay and peat, are considered to be abundant in Norfolk relative to demand. There is no requirement to maintain a landbank for any of these minerals and as a result, it is considered that there is no need to allocate additional sites for these minerals over the plan period. Any planning applications coming forward will be considered on their merits.

Waste

3.9 The capacity of Norfolk's waste management facilities is not easy to quantify, due to unreliable, inconsistent or absent annual survey returns, multiple different waste uses on a single site (e.g. a transfer station, inert waste recycling and metals recycling) and the same waste often being handled at more than one facility (for example, the waste segregated at a waste transfer station will then be sent to more specialised facilities, such as compost sites, metal recycling sites and inert waste recycling sites) leading to the same waste being counted at each facility. Therefore, in order to calculate the current capacity for different waste streams, assumptions often need to be made. Key assumptions are set out in the paragraphs below.

Hazardous waste

3.10 Environment Agency figures from 2008 (the most recent available) show that 77,000 tonnes of hazardous waste was produced in Norfolk, although due to considerable uncertainties in the data, with the high potential for 'double-counting' of tonnages (i.e. where hazardous waste passes through more than one waste management facility), it is likely that the actual total is significantly less than this. Nonetheless, it is clear that a significant majority (44,700 tonnes of the 77,000 tonnes mentioned above) was exported for treatment/disposal outside the county. Examples of the destination for some hazardous waste exports are listed in paragraph 2.26.

3.11 Of the remaining 32,300 tonnes, 27,200 tonnes was transferred for subsequent treatment or disposal, probably also out of the county. This is because, in Norfolk, just 30 tonnes of hazardous waste was incinerated, 1,000 tonnes disposed of to landfill, 3,100 tonnes recycled or re-used and 810 tonnes treated.

3.12 All the main types of hazardous waste (with the exception of clinical waste) are sent to more than one facility, so there is a 'fall-back' should one particular facility or landfill stop taking that type of waste.

3.13 Much of Norfolk is hydrogeologically unsuitable to locate a hazardous waste landfill site, and those areas of the county which are hydrogeologically suitable often have other constraints, such as large areas of land in Flood Zone 3, nationally-designated nature conservation or landscape sites, and/or poor access to the major highways routes. There are no hazardous waste landfills in the county. However, the Blackborough End non-hazardous landfill has been proposed (through the Waste Site Specific Allocations DPD) for, amongst other waste uses, hazardous waste landfill. The types of hazardous waste have not

been specified, but the Environment Agency has indicated there may be potential only for a separate 'asbestos-only' landfill cell to be engineered on the site.

3.14 No other potential hazardous-only landfill sites have been proposed through the Waste Site Specific Allocations DPD. Although Core Strategy policy treats any new proposals positively, locations in more hydrogeologically suitable and geographically central locations in the region (such as Cambridgeshire and Bedfordshire) are thought to be more likely to be deliverable.

Non-hazardous waste

Municipal and commercial & industrial waste

3.15 Waste Strategy for England 2007 includes minimum recycling/ composting targets for household waste, rising from 40% in 2010 to 45% in 2015 and 50% in 2020. It also includes recovery targets for municipal waste: 53% by 2010, 67% by 2015 and 75% by 2020. Norfolk had a household waste recycling/ composting/ reuse rate of 43.5% in 2009/10, and it is assumed that this will increase to 47% by 2011/12 (when an expansion of kitchen waste collection by Norfolk's districts is likely to take place) and reach 50% by 2018/19.

3.16 The municipal and commercial & industrial waste projections in the East of England Plan can now be seen to be very much higher than the actual out-turn figures. As a result, it is considered that the most appropriate projection of future municipal waste arising is that made by the County Council's Waste Management team. Norfolk's municipal waste arisings in 2009/10 were 395,412 tonnes. This continues the recent trend of a reduction in annual municipal waste arisings. An assumption of zero growth in municipal waste arisings has been made for 2010/11 and 2011/12, followed by annual growth in line with housing projections.

3.17 Commercial & industrial (C&I) waste is compositionally similar to municipal waste, and can thus be managed in similar ways. The County Council does not have any better or more up-to-date information on projected C&I waste arisings, so will use the information prepared for the Review of the East of England Plan. The Review projects that there will be a year-on-year reduction in C&I waste arisings, rather than the significant (around 3%) annual increase projected in the East of England Plan. Appendix A contains details of the forecast annual C&I waste arisings.

Recovery rates

3.18 Waste Strategy for England 2007 sets the following recovery targets for municipal waste: 53% by 2010, 67% by 2015 and 75% by 2020. It is expected that the target can be met from 2012, with a significant increase in recovery capacity from 2015, when the Waste PFI plant in King's Lynn is planned, if it is granted planning permission and an environmental permit, to be operational.

3.19 The evidence base for the review of the East of England Plan concluded that the recovery rate for C&I waste should be 53% in 2010/11, rising to 84% by 2026/27. In the absence of national recovery targets for C&I waste these targets will be used.

3.20 The evidence base for the review of the East of England Plan included an apportionment of London's residual waste to Norfolk. The quantity of London's residual waste apportioned to Waste Planning Authorities in the East of England

was based on the expectation that London would treat municipal and C&I waste arisings in the most intensive manner practicable and only send the residue to landfill. Therefore Waste Planning Authorities in the East of England were only expected to plan to landfill the residual waste from London and not to recycle/compost or recover any of it.

Recycling and composting

3.21 As over 680,000 tonnes of non-hazardous waste were recycled/ composted in Norfolk in 2008/9, it is assumed that the county has at least this annual capacity. It is likely that the total theoretical capacity is somewhat higher, however, because some operations could handle higher volumes of waste either by operations that are more intensive i.e. longer operating hours, more waste handling equipment or by extending operations within existing site boundaries. Further planning permissions during 2008/9 have added to this capacity, with a new 20,000-tonne compost facility at Bracon Ash. Therefore Norfolk has at least an existing recycling/composting capacity of 700,000 tonnes.

3.22 Further recycling and composting infrastructure will be needed over the period of the Core Strategy in order to meet the recycling and composting targets set out in *Waste Strategy 2007*. The 40 per cent target for 2010 has already been exceeded for household waste as the current (2009/10) rate was over 43%. *Waste Strategy 2007* also sets household waste recycling/composting targets of at least 45% by 2015 and 50% by 2020. Municipal waste recovery targets in *Waste Strategy 2007* are 53% by 2010, 67% by 2015 and 75% by 2020.

3.23 Norfolk's MSW recycling levels are already fairly high, and it is thought likely that there may be 'easier' gains in increasing future composting (e.g. by collecting kitchen waste from more households). It is therefore assumed that the ratio of new composting and recycling facilities over the Core Strategy period will be roughly 50:50.

Landfill and residual waste treatment plants

3.24 At the end of 2008/9, the non-hazardous landfill landbank stood at 8.48 million m³. Using the 1:1 conversion ratio used by the Environment Agency, this equates to capacity to accept 8.48 million tonnes of non-hazardous waste. However, about 11 per cent of the voidspace at non-hazardous landfills, measured over the previous three years, is taken up with inert waste used for engineering fill, cap and cover, so approximately 0.933 million m³ needs to be subtracted from the voidspace figure, leaving a total of approximately 7.549 million m³.

3.25 As noted in paragraph 2.32 above, the bulk of Norfolk's current voidspace is located at Blackborough End, in the borough of King's Lynn & West Norfolk. Two of the current non-hazardous landfill sites – at Aldeby and Edgefield – are expected to be full before 2015. A planning application to provide an additional 1 million m³ of voidspace at Attlebridge was resolved to be granted permission in October 2010, and the signing of the Section 106 agreement - and thus the issuing of the planning permission - is expected to be completed in 2011.

3.26 With the planning application at Attlebridge expected to be-granted permission in 2011, there would be sufficient non-hazardous landfill capacity until the end of the plan period (see Table 3.4).

Table 3.4: Maximum landfill requirement

		tonnes or m³
A	Norfolk forecast of MSW and C&I waste disposal from 2009/10 to 2026/27	8,236,285
B	Non-hazardous landfill capacity at 31/03/2009	8,482,000
C	Void space expected to be used for inert/C&D waste = 11 per cent (based on previous 3 year average)	933,020
D	Voidspace available for MSW and C&I waste (B-C)	7,548,980
E	Additional voidspace available following grant of planning permission at Attlebridge landfill site (1 million tonnes/m ³) minus 11% potentially used for inert waste = 890,000 tonnes	1,000,000 total 890,000 net
	Maximum total <u>surplus</u> (D+E) - A	<u>202,695</u>

3.27 The European Landfill Directive requires the progressive reduction of biodegradable municipal waste (BMW) sent to landfill. All Waste Disposal Authorities have targets under the Landfill Allowance Trading Scheme (LATS) for the years through to 2019/20.

3.28 In order to meet the LATS targets, Norfolk County Council (as the Waste Disposal Authority) is procuring a residual waste treatment Private Finance Initiative contract (the Waste PFI) to secure services that will recover value from residual municipal solid waste (MSW). The Waste PFI is a procurement to secure a service to treat about 170,000 tonnes of residual MSW per annum; it is expected that any facility for the Waste PFI would become fully operational in 2015.

3.29 The Waste PFI is of considerable importance, and in 2008 the County Council identified and purchased a site at the Willows Business Park on the Saddlebow Industrial Estate, to the south of King's Lynn. The site was made available to all bidders to use – if they wished – when they were developing proposals for the Waste PFI. The preferred bidder, Cory Wheelabrator, undertook an assessment of all potential sites in Norfolk, but concluded that the Willows site was the most suitable for their needs. A planning application is being prepared, and is expected to be submitted in May 2011.

3.30 To meet its medium-term requirements (i.e. up until 2015), the County Council is procuring new waste transfer, treatment and disposal services. In December 2010, the County Council's Cabinet agreed to award a total of six contracts, five to WRG (for sites within Norfolk) and one to Donarbon, which runs an MBT plant at Waterbeach, Cambs. Letting these new contracts will enable the County Council to comply with its LATS targets up to 2015.

3.31 To supplement residual waste treatment the County Council is also evaluating (with the other local authority members of the Norfolk Waste Partnership) how it can incentivise the further development of source separated kitchen waste collections, which would divert more biodegradable waste away from landfill. Broadland District Council has commenced a source-segregated kitchen waste collection scheme, and Norwich City Council now also has a kitchen waste collection scheme for householders.

3.32 These activities are all underpinned by a very strong focus on waste reduction, re-use and recycling; the County Council's waste and recycling figures over recent years compare very well with other local authorities and Norfolk has a particularly low rate of residual waste per head of population (see the Evidence Base).

Inert waste

3.33 The *Scoping Review of Waste Management in the Construction & Civil Engineering Sector in the East of England*, prepared for the East of England Regional Assembly in 2007, reports in paragraph 1.6 that a typical new house generates approximately 9.6 tonnes of waste in its construction. New offices will generate slightly waste less per square metre than houses; schools slightly more.

3.34 Non-residential construction and demolition (C&D) waste is by far the most significant source of inert waste in Norfolk, as would be expected given that the annualised quantities of inert waste sent to landfill or used for quarry restoration over the past six years average 346,000 tonnes (see paragraph 2.38).

3.35 Paragraph 1.3 of the *Scoping Review of Waste Management in the Construction & Civil Engineering Sector in the East of England* calculates that the recycling rate for C&D waste in the East of England is approximately 52%, with approximately 21% of inert waste used for either quarry restoration or disposed of to inert landfill.

3.36 Taking into account:

- the absence of any other published information on the quantities of inert waste likely to arise in Norfolk over the period of the Core Strategy;
- the presumption, given the high costs of transporting and disposing of inert wastes, that re-use and recycling levels for inert waste are already close to the maximum; and
- that a 2003 survey by the former Office of the Deputy Prime Minister (now part of the Department of Communities & Local Government) notes that C&D waste is expected to increase by about 40 per cent from 2002/3 to 2021;

it is expected that, by assuming the 40 per cent increase runs from 2010 to 2026), by the end of 2026, the annual inert waste produced (requiring disposal) will have risen from an average of 346,000 tonnes to 485,000 tonnes.

3.37 Aggregated over the 17 years of the Core Strategy, the total quantity of inert material requiring landfill voidspace/quarry restoration space is approximately 7,060,000 tonnes. Using the inert waste conversion factor of 1 tonne:0.67 m³, this equates to approximately 4,730,000 m³. Taking into account the existing

voidspace and the projected rate of increase of inert waste production, an additional 2,059,000 m³ voidspace/quarry restoration space is required.

3.38 Additional inert waste recycling infrastructure is likely to be needed over the period of the Core Strategy, in line with the expected growth in inert waste arisings. However, a substantial – but unknown – fraction of the inert waste arisings is likely to continue to be recycled and re-used on large construction sites using mobile plant (because the quantities of waste processed in this way are commonly not measured).

3.39 The most reliable guide as to the quantitative need for inert waste processing plants is therefore likely to be potential new plant sites submitted by minerals and waste operators. Paragraph 22 of PPS10: *Planning for Sustainable Waste Management* states that: “*When proposals [planning applications] are consistent with an up-to-date development plan, waste planning authorities should not require applicants for new or enhanced waste management facilities to demonstrate a quantitative or market need for their proposal*”, so new proposals for waste recycling plants will be considered in that light.

4 FUTURE WASTE MANAGEMENT CAPACITY NEEDS

Hazardous wastes

4.1 As noted in paragraph 2.24, many hazardous waste facilities often require large catchment areas – bigger than individual counties – to work effectively and economically, and Norfolk is not well located in this regard. Nonetheless, Norfolk should attempt to provide as many facilities as possible to deal with its own hazardous waste arisings.

4.2 The *Hazardous Waste Study for The East of England - Final Study Report* (2007) provides information on current hazardous waste arisings, current waste management capacity, likely future waste arisings and therefore likely waste management infrastructure capacity for the East of England. Paragraph 8.4.3 of the *Hazardous Waste Study* concludes that there is a particular need for the following facilities during the next 10-15 years:

- new hazardous waste landfill capacity;
- additional stable non-reactive hazardous waste landfill capacity (principally for asbestos and gypsum);
- additional clinical waste incineration capacity;
- additional combustion capacity for 'problematic' wastes; and
- additional capacity for the collection and onward transfer of household hazardous waste.

Hazardous Waste Landfill

4.3 It is considered unlikely that any hydrogeologically suitable landfill sites will be proposed for hazardous waste disposal. As noted in paragraph 3.13, Blackborough End is the only landfill proposed for (amongst other waste types) hazardous waste through the Waste Site Specific Allocations DPD to date.

Stable Non-Reactive Hazardous Waste Landfill

4.4 Although it is not thought likely that there will be any new hazardous waste landfills, there may, however, be more potential for developing new 'cells' for asbestos and gypsum in non-hazardous landfills. Attlebridge landfill currently has such a cell, and it is possible that a new cell could be engineered at Blackborough End landfill. However, the Environment Agency has stated that at Blackborough End they would not accept any landfilling of gypsum which, due to high groundwater levels, could lead to a risk of hydrogen sulphide (a toxic gas) being produced.

Clinical Waste Incinerators and Additional Combustion Capacity for 'Problematic' Wastes

4.5 Other than a small number of pet incinerators, some transfer stations, and the incineration of very small quantities of clinical waste (collected from care homes and nursing homes), there is no clinical waste treatment infrastructure in Norfolk. The clinical waste produced in the county's hospitals is transferred to Ipswich Hospital for incineration.

4.6 'Problematic' hazardous waste types are those which historically were landfilled or treated via 'mixing-pits' (now effectively prohibited) and are most likely to consist of contaminated packaging, oil-residues, treated timber and organic-rich filter-cakes. The *Hazardous Waste Study* concludes (at paragraph 8.2.2) that these wastes will need to be treated in future by some form of thermal processing.

4.7 No potential sites for a clinical incinerator have been proposed by the East of England Strategic Health Authority, or either of Norfolk's Primary Care Trusts (NHS Norfolk and Great Yarmouth and Waveney PCT). Neither has a requirement for such a site been brought to the County Council's attention by anyone else. It is not therefore proposed that a site for a clinical waste incinerator be allocated but the policies of the Core Strategy will enable any proposals to be considered favourably if they emerge in the future.

4.8 No specific sites for the thermal treatment of hazardous wastes have been proposed, but the 'technology neutral' requirement of PPS10 means that the criteria-based policies of the Core Strategy will enable appropriate allocated (and unallocated) sites to be considered favourably if they emerge in the future.

Household Hazardous Waste

4.9 Hazardous waste from households in Norfolk comprises a small amount in total, less than 200 tonnes per annum. This waste is varied in type and includes small quantities of oils, domestic/garden chemicals and asbestos (not from demolition of buildings). Householders arrange with their Waste Collection Authority for the waste to be collected, usually by specialist contractors on the District Council's behalf. Due to the small quantity of waste involved it is not considered necessary to plan specifically for additional capacity for the collection and onward transfer of household hazardous waste.

Radioactive Wastes

4.10 The volumes of low and very low level radioactive wastes arising in Norfolk are not considered to be significant. The main sources of such wastes are likely to be the Norfolk and Norwich University Hospital, The Queen Elizabeth Hospital in King's Lynn, the University of East Anglia and various life and food science institutes in and around Norwich. There is no evidence suggesting that there is currently a problem with the management or disposal of radioactive waste arising in Norfolk. Therefore no specific provision will be made for radioactive waste in the Core Strategy.

4.11 Under the Environment Agency's guidance, low volume, very low level radioactive waste (defined as 'dustbin loads' in size) is "radioactive waste which can be safely disposed of to an unspecified destination with municipal, commercial or industrial waste ("dustbin disposal"), each 0.1 m³ of waste containing less than 44 kilobecquerels (kBq) of total activity or single items containing less than 40 kBq of total activity." High-volume, very low level radioactive waste, and low level radioactive waste, must be disposed of to a specified landfill site which holds a Radioactive Substances Act 1993 permit. Should any planning applications be made for the disposal of Low Volume Very Low Level Radioactive Waste or Low Level Radioactive Waste in Norfolk, they

would be considered against the relevant policies of the Core Strategy, particularly policy CS10, and the advice in PPS10.

Non-hazardous wastes

Non-hazardous landfill

4.12 The current permitted and consented non-hazardous landfill voidspace in Norfolk, as at 31 March 2009, is approximately 8.48 million m³ (which, using the 1:1 ratio of tonnes:cubic metres for non-hazardous waste, equates to 8.48 million tonnes). Taking into account the forecast arisings for municipal waste and C&I waste, as well as planning to manage a proportion of waste arising outside the county, this therefore leaves a theoretical landfill shortfall of about 690,000 m³, if the maximum possible disposal levels are reached.

4.13 Norfolk County Council's Planning (Regulatory) Committee resolved to grant planning permission, subject to conditions and the signing of a section 106 legal agreement, for an extension to Attlebridge landfill site. This extension provides an additional 1 million tonnes landfill capacity. The permitting of this additional landfill capacity means that there will be sufficient landfill capacity throughout the plan period.

Recovery facilities

4.14 In order to help drive the management of waste up the waste hierarchy, additional plants to recover value from waste will also be needed. Taking into account:

- the recovery targets in Waste Strategy for England 2007 and the recovery assumptions in the evidence base for the review of the East of England Plan;
- the current recycling & composting infrastructure of a minimum of 700,000 tonnes of non-hazardous waste pa;

there is likely to be a need for a minimum of about 866,000 tonnes annual capacity of new recycling/composting/anaerobic digestion/other recovery (i.e. thermal treatment or similar) waste management infrastructure.

4.15 Given that the County Council intends to procure a waste plant to deal with about 170,000 tonnes of waste per year, the shortfall reduces to about 696,000 tonnes.

4.16 The *Waste Strategy for England 2007* sets out, in section XII of the Executive Summary, minimum national targets for the recycling and composting of household waste: 40 per cent by 2010; 45 per cent by 2015 and 50 per cent by 2020. The Norfolk Joint Municipal Waste Management Strategy (March 2006) supports these targets.

4.17 Table A.2 in Appendix A illustrates the effect of applying recycling/composting targets to the municipal waste arisings forecast by Norfolk County Council and commercial & industrial waste arisings forecast in the evidence base to the draft review of the East of England Plan. For municipal waste, Table A.2

uses the *Waste Strategy 2007* target of 50 per cent recycling/composting, for 2018/19 onwards. Higher recycling/composting targets are used for the commercial & industrial waste stream. Using the current recycling and composting capacity of 700,000 tonnes (2008/9), no additional recycling/composting/ source-segregated-anaerobic digestion facilities will be needed by 2015, but 51,000 tonnes of additional capacity will be needed by 2020, and a further 112,000 tonnes by 2026. As well as new recycling/ composting, source-segregated anaerobic digestion facilities, recovery facilities to treat the residual waste will also be required. Norfolk does not have any facilities providing treatment capacity for the recovery of waste. Forecasts in Table A.2 show the treatment capacity forecast to be required for each year. 370,000 tonnes of treatment capacity will be required between 2010-2015 and a further 330,000 tonnes of treatment capacity will be required between 2015-2020. No additional treatment is expected to be needed after 2020 due to a continuing reduction in waste arisings and a continuing increase in waste recycling and composting.

Inert wastes

Inert landfill

4.18 As noted in paragraph 2.38, approximately 30 per cent of the inert waste stream is disposed of to either inert waste landfills or for quarry restoration, and paragraph 3.37 concludes that approximately 4,730,000 m³ of voidspace capacity will need to be provided.

4.19 The current (2009/10) existing voidspace figure is approximately 2,672,500 m³, which reduces the amount of new voidspace which will need to be provided to approximately 2,059,000 m³.

Inert recycling

4.20 Additional inert recycling facilities are needed, but as noted in paragraph 3.38, the quantity needed is uncertain. Given the high cost of transporting inert wastes, an important factor in the assessment of potential sites will be ensuring there is adequate capacity at a sub-county level as well as Norfolk overall. The evidence base for the review of the East of England Plan stated that in 2008 arisings of construction and demolition waste in Norfolk were 1,065,000 tonnes. Norfolk's 2008/09 Annual Monitoring Report found that 488,000 tonnes of inert and construction and demolition waste arising in Norfolk was received at transfer stations, treatment and recovery facilities in Norfolk. 447,000 tonnes of this waste was recycled or recovered. 210,000 tonnes of inert waste was received at inert landfill sites or for quarry restoration. 24,000 tonnes of inert waste was received at non-hazardous landfill sites. The quantities of inert and construction and demolition waste managed in Norfolk in 2008/09 were lower than in previous years. Based on an estimated increase in C&D waste of 40% over the period of the Core Strategy, the annual quantity of C&D waste recycled or used in engineering projects is forecast to increase from 689,000 tonnes in 2010, to 775,000 tonnes by 2015, 861,000 tonnes by 2020 and 965,000 tonnes by 2026. A large proportion of construction and demolition waste will also be reused on construction sites, for example as hardcore, and therefore will never be received at a waste management facility.

Agricultural waste

4.21 Based on the information available, the County Council does not consider that there is a particular need for large new waste facilities to treat agricultural waste. The criteria based policies in the Core Strategy will enable the location of facilities close to sources of agricultural waste arisings. Best practice for controlled waste will apply.

Waste water

4.22 Correspondence from Anglian Water states that there is no clear need for any new waste water treatment plants in the county during the period of the Core Strategy, although some replacement plants may be required during the later years. However, Water Cycle Studies, prepared to support the districts' LDFs, have concluded that significant investment will be needed to ensure that water quality targets will be met, for instance at Attleborough.

4.23 In particular, the Stage 2b Water Cycle Study (September 2009), prepared to support the Joint Core Strategy, concludes that a strategic wastewater interceptor sewer passing around the southern boundary of Norwich to connect to Whitlingham Waste Water Treatment Plant will be necessary to deliver growth in Norwich City and any larger-scale growth to the south and south-west of Norwich (in South Norfolk district). Significant improvements to the treatment quality at Whitlingham will also be needed (such as reducing ammonia levels).

5 VISION, AIMS AND OBJECTIVES

5.1 The vision, aims and objectives that will guide the development of mineral extraction and associated development and waste management facilities in Norfolk up to 2026 are derived from *Norfolk Ambition - The Sustainable Community Strategy - 2003 to 2023*, the seven district councils' Sustainable Community Strategies Local Area Agreement Outcomes and issues raised during preparation of the Core Strategy and Development Management Policies DPD. The aims and objectives will be achieved through the Core Strategy spatial policies and detailed development management policies. Chapter 8 'Monitoring and Implementation' outlines the implementation and monitoring proposed, covering these objectives in more detail and showing how they relate to particular policies.

Norfolk Ambition 2003-23

5.2 *Norfolk Ambition* is the Sustainable Community Strategy for Norfolk, which was refreshed and updated in 2008. Its Vision comprises three strands, the third of which is particularly relevant to the Core Strategy: *Norfolk is on England's frontline in tackling climatic change and sustainability*. In reaching its Vision by 2023, *Norfolk Ambition* wants Norfolk to be recognised as a county, *inter alia*:

- where all individuals have the opportunity to achieve a good quality of life; and
- where the high quality environment is respected and enhanced for everyone's enjoyment and is matched by a strong reputation for renewable energies.

The Sustainable Community Strategy for Breckland 2008-2011

5.3 The Vision of the Sustainable Community Strategy is: "Breckland is a place in which we take great pride, where our communities, organisations and businesses work in partnership within an outstanding rural environment to bring about sustainable success and wellbeing for all. We want everyone who chooses Breckland as a place to live or work, to meet their aspirations and enjoy an excellent quality of life".

5.4 Priority 6 of the six priorities states: "Achieve environmental sustainability: So that Breckland's outstanding rural environment is respected and that action is taken to enhance and sustainably manage the local environment".

The Broadland Community Strategy 2004-2014: Action Plan 2008-2011

5.5 The Broadland Community Strategy's Action Plan has five Cross Cutting Themes, of which Theme 5: *A Sustainable Broadland* is the most relevant to the Core Strategy. Various objectives within Theme 5 are particularly pertinent:

(1) "to protect, conserve and enhance our natural and built environment and its biodiversity"; and (2) "to improve the environmental performance of all partner organisations, and the wider Broadland community, so that the quality of life of future generations is not compromised".

A Long-Term Vision and a Sustainable Community Strategy for Great Yarmouth for 2008-2011

5.6 The overall vision is: “We want our community to offer a high quality of life and a secure future for all our residents”. Of the four key themes to implement, the most relevant to the Core Strategy is “The Natural Environment”. Aspirations under this theme include:

- Protecting and enhancing wildlife habitats, with designated wildlife sites being maintained to a high standard;
- Carbon reduction targets for Great Yarmouth drawn up by DEFRA will have been achieved and 60% of materials will be recycled as required under the Landfill Directive;
- The principles of the Nottingham Declaration on Climate Change will have been upheld and expanded;
- All sewage generation will be treated to the highest EU standards; and
- Residents and businesses will have a clear understanding of the causes of climate change and will be taking action to mitigate and adapt to its effects. They will be helping to maintain a clean environment and making full use of recycling facilities.

North Norfolk’s Sustainable Community Strategy 2008-2011

5.7 The Vision of North Norfolk’s Sustainable Community Strategy comprises five objectives, with Objective 5 being the most relevant: “North Norfolk is a place...where the environment is protected and where the identity and special character of the area is retained”.

A New Vision for Norwich: The Sustainable Community Strategy 2008-2020

5.8 Norwich’s Sustainable Community Strategy has a Vision “To make Norwich a world-class city in which to live, work, learn and visit” and of the six Themes to implement the Vision, Theme 2, City of Environmental Excellence, is most relevant:

- to become a low-carbon city;
- to minimise our use of global resources; and
- to become a model city for the management of the natural and historic environments.

5.9 South Norfolk's Community Strategy focuses on eight themes. Theme 4, Environmental Sustainability, is the most relevant to the Core Strategy. This theme has a 10-year vision:

- Achieve carbon reduction targets for South Norfolk based on Defra targets for the district of 11.4% by 2020.
- Working to achieve the Landfill Directive of 60% of materials recycled by 2020.
- Continuing to protect and enhance our natural environment and its biodiversity.
- Residents and businesses have a clear understanding of the causes of climate change and the actions they can take to mitigate and adapt to its effects.

5.10 In addition to the 10-year vision, there are three 3-year goals:

- Reduce carbon dioxide emissions in South Norfolk by 2.8% by 2010, from domestic housing, business and transport activities;
- Minimise waste and increase recycling and composting to meet the target for 25% of biodegradable waste diverted from landfill by 2010. Double the number of green garden waste customers from 7,500 to 14,000 by mid-2009; and
- Implement the Norfolk Biodiversity Action Plan with Norfolk Wildlife Trust and the Norfolk Biodiversity Partnership, identifying, protecting and restoring species and habitats in South Norfolk. Develop management plans for all council owned countryside sites.

Transforming West Norfolk: Working Together - Making a Difference 2007-2030

5.11 West Norfolk's Sustainable Community Strategy has six aims, the most relevant of which is *Attractive & Sustainable*. With this aim, there are six objectives, the most relevant of which are: 5. Tackle Climate Change - reduce carbon dioxide emissions in West Norfolk; and 6. Protect and improve biodiversity

Vision

5.12 The spatial vision for the Minerals and Waste Development Framework is:

Norfolk will continue to be self-sufficient in the production of sand & gravel, whilst making an important contribution to the national production of silica sand. In line with the East of England Plan, Norfolk will make a diminishing contribution to the disposal of that fraction of London's waste that is exported to the East of England. Save for this exception, the County Council will aim to manage the equivalent of the amount of waste expected to arise in the county (subject to considerations such as the availability of treatment facilities, distance travelled and mode of transport used).

Over the period to 2026, Norfolk will be a leader in waste prevention and increasing the recycling of resources and recovery of energy from waste. There will be a significant increase of over 160,000 tonnes of additional recycling and composting capacity and over 700,000 tonnes of residual waste treatment capacity, which will ensure a large reduction in the quantity of non-hazardous waste being disposed of to landfill. Norfolk's residents and businesses will have played a full part in achieving these reductions, with a 'culture change' in waste minimisation practices observable.

Norfolk will also be a place where the needs of society and the economy for minerals are met through the county having allocated sufficient sites to meet the annual apportionment of 2,570,000 tonnes of sand and gravel and 200,000 tonnes of carstone rock. However, the county will have also increased the proportion of aggregates needs met through the use of secondary and recycled aggregates. This will have helped to reduce the need for primary extraction of aggregates and also maximised the diversion of waste from inert landfill.

Large and medium-sized facilities for minerals extraction and waste management will be preferentially located close to the Norwich Policy Area, Great Yarmouth urban area, King's Lynn or Thetford. Medium-sized facilities will be preferentially located close to the market towns of Attleborough, Aylsham, Cromer, Diss, Downham Market, Fakenham, Hunstanton, North Walsham, Sheringham, Swaffham or Watton. In particular, the expected development of 32,000 dwellings in the Norwich Policy Area, and the planned development and construction of the Norwich Northern Distributor Road, will, as far as is practicable, be supported through appropriately-located minerals extraction and waste management facilities.

All mineral-workings will be covered by progressive restoration schemes; the enhancement of Norfolk's biodiversity (particularly Norfolk Biodiversity Action Plan habitats and species) and the creation of new, high quality, distinctive landscapes will be strongly supported.

The key actions outlined above will make a valuable contribution to climate change adaptation, whilst also reducing greenhouse gas emissions in Norfolk.

5.13 In planning for mineral extraction and waste management facilities to meet Norfolk's future needs in the most sustainable way, the Core Strategy will:

- Help to reduce emissions of greenhouse gases and thus mitigate climate change and ensure that Norfolk is seen as a leader in this area;
- Protect Norfolk's special and distinctive natural and cultural heritage, especially in areas such as the Broads, the North Norfolk Coast and the Brecks, and help to develop the county's ecological network;
- Minimise adverse impacts on the transport system and promote opportunities for more sustainable transport; and
- Maintain the amenity and well being of people living in close proximity to mineral extraction and associated development and waste management facilities through effective mitigation measures and provide long term benefits through restoration.

- Safeguard important and finite mineral resources from inappropriate development, particularly the nationally-significant deposits of silica sand in the county.

Aims and Objectives

Table 5.1: Aims and Objectives

Aims	Objectives	Local Area Agreement Outcomes
To meet minerals and waste requirements in a sustainable manner and help to deliver sustainable growth	Ensure steady and adequate provision of primary, and increasingly recycled and secondary, minerals to meet requirements	Improving housing Thriving economy Environmental sustainability
	Increase the proportion of waste recycling, composting and energy recovery	Environmental sustainability Thriving economy
	Minimise the amount of waste sent to landfill	Environmental sustainability
To reduce the impact of mineral extraction and associated development and waste management facilities on the transport system	Ensure mineral working takes place as close as reasonably possible to where these resources are used, and that waste is treated as close as reasonably possible to where it is generated	Thriving economy Environmental sustainability
	Increase the use and availability of sustainable transport in accessing waste and minerals facilities	Healthier lifestyles Stronger communities Thriving economy Environmental sustainability
	Mitigate the adverse traffic impacts of mineral extraction and associated development and waste management facilities	Healthier lifestyles Safer communities Thriving economy Environmental sustainability
To protect and enhance the natural, historic and built environment in relation to mineral extraction and associated development and waste management facilities	Minimise the impact of mineral extraction and associated development and waste management facilities on the environment by promoting opportunities to enhance and protect biodiversity, landscape and geodiversity, water supply, the wider countryside, and cultural heritage	Healthier lifestyles Thriving economy Environmental sustainability
	Minimise soil and water contamination and flood risk arising from minerals and waste activities	Healthier lifestyles Environmental sustainability

Aims	Objectives	Local Area Agreement Outcomes
To mitigate climate change	Reduce methane and carbon dioxide emissions from mineral extraction and associated development and waste management facilities	Healthier lifestyles Environmental sustainability
	Contribute to the Renewables Obligation and regional targets for renewable energy by increasing the proportion of energy recovery from waste.	Healthier lifestyles Thriving economy Environmental sustainability
To promote social inclusion, and human health and well being	Improve employment opportunities, particularly for those most in need	Stronger communities Thriving economy
	Ensure that mineral extraction and associated development and waste management facilities and associated transportation do not lead to Air Quality Management Areas and that emissions are reduced	Healthier lifestyles Environmental sustainability
	Mitigate adverse impacts on amenity resulting from mineral extraction and associated development and waste management facilities	Healthier lifestyles Stronger communities

6 SPATIAL STRATEGY

6.1 The main purpose of the Core Strategy is to plan for the timely provision of sufficient mineral extraction and associated development and waste management facilities that meet the needs of the economy and society, whilst not causing significant adverse impacts on environmental assets and amenity. In the first instance, this will be achieved by meeting the minerals apportionments for Norfolk made by the East of England Regional Aggregates Working Party (RAWP) and by planning to meet the expected quantities of municipal waste (assessed by Norfolk County Council's Waste Management division) and commercial & industrial waste (taken from the evidence base that informed the preparation of the Review of the East of England Plan).

Spatial Planning for Mineral Extraction

6.2 Sand and gravel resources are located throughout the county (with the exception of the Fens area in the far west and south-west of Norfolk) and potential new sites have been put forward through the Minerals Site Specific Allocations DPD by a number of different landowners and/or minerals companies. Given that MPS1 (paragraph 4.1, Annex 1) requires that the landbank for sand and gravel resources should be "at least 7 years", and that PPS12 (paragraph 4.46) seeks flexibility in Core Strategies, there is therefore a case for providing some additional flexibility in the allocated landbank, to cover for:

- Unexpectedly low quality and/or quantity of aggregate on an allocated site; or
- Changing economic and/or business circumstances meaning that some minerals companies may either not wish to take up an option to develop an allocated site, or wish to mothball an existing operation part-way through.

6.3 An additional year's apportionment (2.57 million tonnes) will therefore be added to the total allocation for sand and gravel (see Policy CS1). Further flexibility comes from the fact that sand and gravel production over the past 10 years has averaged 2.15 million tonnes per year, 420,000 tonnes below the apportionment figure; the last time the current apportionment figure was exceeded was in 2002. A maximum landbank, of 10 years' supply, is considered necessary to ensure that an excessive reserve of sand and gravel is not permitted for extraction at any one time. This is to provide a satisfactory degree of confidence that there will not be undue delays in the final cessation of extraction and eventual restoration at permitted sites, thereby increasing certainty for local residents. Historically, a number of sites in 'investigation areas' have been permitted, and occasional borrow pits have also been permitted. Although 'investigation areas' will not be carried forward into the LDF, it is realistic to expect that a number of borrow pits in association with major developments are likely to come forward during the Core Strategy period to 2026 (see Development Management Policy DM5).

6.4 Carstone and silica sand deposits are located in very limited areas of Norfolk, with the current and likely future sites under the control of single companies. Given the relatively low apportionment figure for carstone, and large size of the required landbank for both carstone and silica sand, it is not proposed to 'over-

allocate' carstone sites or silica sand sites (for flexibility), because there is a realistic expectation that the sites allocated will be taken up during the lifetime of the Core Strategy (to the end of 2026).

Core Strategy Policy CS1 – Minerals extraction

The strategy for minerals extraction is to allocate sufficient sites to meet the annual apportionment figures agreed by the East of England Regional Aggregates Working Party, rolled forward to 2026, for both sand & gravel and hard rock (carstone).

For **sand and gravel**, a minimum of 25.67 million tonnes of resources needs to be allocated. However, an additional year's apportionment (2.57 million tonnes, approximately 10 per cent) will also be allocated to introduce a degree of flexibility, so sites and/or Areas of Search delivering a total of approximately **28.24 million tonnes** of sand and gravel will be allocated. The sand and gravel landbank will be maintained at between 7 and 10 years' supply (excluding any contribution from borrow pits for major construction projects).

For **silica sand**, given the industry's stated intention to make further investment in infrastructure, sufficient sites and/or Areas of Search to provide a minimum 15-year landbank at the start of the Plan period (based on the average production rate from 2007-2009 and then the expected production rate from 2011) will be allocated. This equates to a site or sites to deliver a minimum of **6.4 million tonnes** of silica sand. Given the commitment to review the Core Strategy regularly, a minimum 10-year landbank thereafter will be maintained.

For **carstone**, a site or sites to deliver a minimum of **1.475 million tonnes** of resources will be allocated. It is likely (from the work undertaken so far on the Minerals Site Specific Allocations DPD) that only one further carstone site will be required. The landbank for carstone will be maintained at 10 years' supply.

Given the size of the existing landbanks and the lack of requirement in national guidance for apportionment figures, no new allocations will be made for **clay, topsoil, chalk, peat and hoggin**.

General locations for mineral extraction and associated facilities

6.5 The distribution of mineral extraction facilities in Norfolk will be aligned as closely as is practicable with the growth and regeneration areas, because there will be an increased need to supply local aggregates for growth-related infrastructure. With the exception of silica sand – most of which is exported out of Norfolk for ceramics and glass production – most of the demand for sand & gravel and related products (such as concrete) will be used in the four largest settlements (Norwich, King's Lynn, Thetford and Great Yarmouth). The market towns with a current population of 7,000 or more, or which are expected to reach 7,000 through proposed new housing allocations, are likely to be the next largest users of minerals.

6.6 The Key Diagram shows that sand and gravel resources are located widely in Norfolk, and also shows the location of current operational sites. Although there is

a spread of current sites, certain settlements are better-served than others (see Evidence Base for Policy CS2). Due to commercial confidentiality it is not possible to set out the expected lifetimes of existing quarries, but as the current sand & gravel landbank is only seven years, it can be assumed that there is a need for new sites in most areas of the county.

6.7 There are a number of environmental constraints in the Norfolk (see paragraphs 6.69-6.75 and Policy CS14), in particular the Broads area and its associated Natura 2000 sites (SACs and SPAs), the Brecks SPA and SAC, the River Wensum SAC and the North Norfolk Area of Outstanding Natural Beauty. Whilst none of these designations necessarily imposes an absolute restriction on minerals development, they need to be considered when the assessment of potential sites is being made, with the Breckland SPA being of particular sensitivity. The key environmental constraints for the main settlements are listed in Policy CS2.

6.8 Policy CS2 states that there is a preference for sites which are “close and/or particularly well-related” to the main settlements of the county. For this purpose, the distance meant as “close” is 10 miles or less. However, this measure is not intended to be applied rigidly in all circumstances, because:

- Sand & gravel can only be extracted where reserves exist;
- The Minerals Planning Authority does not need, or intend, to identify and allocate sites in the Core Strategy (because sufficient have been proposed through the Minerals Site Specific Allocations DPD process); and/or
- Sites nearer than 10 miles may be accessible only by inappropriate rural roads, whereas sites 11 miles distant may lie very close to a Principal Road (e.g. A11 or A140)

Core Strategy Policy CS2 – General locations for mineral extraction and associated facilities

Resource areas for key minerals are shown on the key diagram. Areas of search and/or sites specific allocations will be identified based on these areas.

Sand & gravel production

Sand and gravel resources are located widely throughout the county. However, there will be a clear preference for sites which are close and/or particularly well-related via appropriate transport infrastructure, to the Norwich Policy Area, Great Yarmouth urban area, Thetford or King's Lynn or the main market towns (Attleborough, Aylsham, Cromer, Dereham, Diss, Downham Market, Fakenham, Hunstanton, North Walsham, Sheringham, Swaffham and Watton). Extensions to existing sites will be preferred to new sites.

Carstone and silica sand production

Carstone and silica sand resources are located only in a north/south band in the west of Norfolk. Preference will be given to extensions to existing sites over new sites. Given the national significance of Norfolk's silica sand resources, appropriate weighting will be given in decisions on which sites are to be allocated and permitted, and sites which would be able to access the existing processing plant and railhead at Leziate via conveyor or off-public

highways routes will be preferred.

Significant environmental constraints affecting the major settlements

Whilst every potential minerals site allocation and planning application will be considered on its own merits, significant international ecological and national landscape constraints affecting the four main Norfolk settlements are detailed below:

- *Norwich Policy Area:* The valley of the River Yare falls within the Broads, which has a status equivalent to that of a National Park. On the eastern edge of the NPA, the river valley is also classed as the Broadland SPA and Broads SAC. The River Wensum is classed as a SAC from (broadly) New Costessey westwards. There is therefore a preference for new minerals sites away from the Wensum and Yare valley areas and the Broads area.
- *Great Yarmouth urban area:* Much of the borough surrounding the urban areas is within the Broads, with Breydon Water SPA and Broadland SPA also close by. In addition, Great Yarmouth North Denes SPA is located on the dunes to the north of Great Yarmouth and also at Winterton-on-Sea and Horsey. The coast between Sea Palling and Winterton lies within the Norfolk Coast Area of Outstanding Natural Beauty (AONB). There is therefore a preference for locations for new minerals sites away from these protected areas.
- *King's Lynn:* The Norfolk Coast Area of Outstanding Natural Beauty lies to the north and north-east of King's Lynn. Roydon Common & Dersingham Bog SAC lies a short distance to the east of the town, with East Walton & Adcock's Common SSSI (which forms part of the Norfolk Valley Fen SAC) lying about six miles to the south-east. There is therefore a preference for locations for new minerals sites avoiding these areas (although the very limited extent of silica sand in Norfolk is recognised in this context).
- *Thetford:* Development in or near Thetford is highly constrained by the presence of the Breckland SPA and Breckland SAC, which cover large parts of the surrounding area. Detailed work undertaken for the preparation of the (adopted) Breckland Core Strategy has meant that there is a restrictive approach to development within 1500m of those parts of the Breckland SPA that support stone curlew populations, and within 400m of those parts of the Breckland SPA that support woodlark or nightjar populations (see Policy CS14). Given the noise and disturbance of minerals extraction and processing operations, any new minerals sites close to Thetford are likely to be more acceptable in the area immediately east of Thetford only (areas to the south and west falling largely within Suffolk).

Spatial Planning for Waste Development

6.9 The Waste Evidence Base and Chapters 3 & 4 and Appendix A set out the annual tonnages of municipal and commercial & industrial waste to be managed to the end of 2026. Meeting these targets will ensure that the requirement for a minimum of 10 years' waste management capacity (set out in PPS10) is met.

6.10 Information on the quantities of inert waste and hazardous waste expected to arise during the Core Strategy period is less certain (see Chapters 3 & 4), but reasonable projections can still be made. Norfolk will plan to be self-sufficient in inert waste recycling and disposal capacity and, as far as practicable, in hazardous waste management capacity.

6.11 London has historically exported large quantities of waste to the South-East and East of England regions for landfilling; in the East of England, Thurrock, Essex and Bedfordshire have historically taken the vast majority of such wastes.

6.12 The East of England Plan recognises that, with the declining availability of landfill voidspace in Thurrock, Essex and Bedfordshire, there is an urgent need for London to manage increasing quantities of its own waste. However, it was recognised that improved infrastructure will take some years to develop, and so in the interim it was decided to apportion a quantum of London waste to each East of England Waste Planning Authority.

6.13 In the draft review of the East of England Plan (March 2010) Norfolk was apportioned the lowest figure of all East of England authorities, with 116,000 tonnes of London waste apportioned for 2009/10, falling to 19,000 tonnes in 2026/27 onwards. Data from Defra and the Environment Agency shows that Norfolk has not received any non-hazardous waste from London for landfill in the last five years and there is no evidence that Norfolk is likely to receive any London waste directly in the years ahead either.

6.14 None of the planning permissions for Norfolk's non-hazardous landfills (Edgefield, Attlebridge, Aldeby, Feltwell and Blackborough End) contain any catchment restrictions limiting the distance that waste can travel to reach the site, and they could not realistically be altered to have such a restriction imposed (unless a new planning application was submitted). These sites can therefore legitimately accept waste from anywhere in the country.

6.15 It is therefore considered prudent to plan to accept an amount of additional waste, which could either be waste direct from London, or 'displaced' waste from adjoining counties (see Table A.1). The quantity of London waste detailed in Table A.1 is in accordance with the evidence base for the draft review of the East of England Plan >2031.

Core Strategy Policy CS3 – Waste management capacity to be provided

The strategy for waste management is to provide sufficient waste management capacity to meet the expected arisings of municipal and commercial & industrial waste, and also to ensure that appropriate capacity is provided for inert waste recycling and disposal. Appropriate handling, transfer and management capacity will also be provided for hazardous waste, but it is recognised that the specialised facilities required to treat and/or dispose of different hazardous waste streams may not be practicable to develop in Norfolk.

Provision will be made to manage the quantities of non-hazardous waste set out in Appendix A. As a minimum, the targets for recycling, composting, reuse, recovery and landfill diversion set out in the Waste Strategy for England 2007, and Local Area Agreement targets for municipal waste (and, where relevant, commercial and industrial waste) will be met.

A small allowance will be made for the disposal to landfill of the equivalent of the amount of London's waste that is apportioned to Norfolk.

6.16 A substantial volume of new recycling, composting and residual waste treatment facilities, and inert landfill voidspace, is required over the Core Strategy period. Table A.2, in Appendix A, illustrates the effect of applying both recycling/composting targets and recovery targets to the waste quantities forecast for Norfolk and forms the basis for the new waste management capacity to be provided in Norfolk over the period of the Core Strategy, as detailed in policy CS4. The assumptions used to calculate the additional waste management capacity required in Policy CS4 are as follows:

- Waste from London will only be accepted for landfill disposal, no waste from London is planned to be received for recycling, composting or other treatment.
- The municipal waste recycling rate in 2009/10 was over 42%. This is expected to increase to over 49% from 2018/19 onwards. No residual municipal waste was treated in 2009/10. From 2011/12 up to and including 2013/14, 50,000 tonnes of municipal waste are expected to be treated. All residual municipal waste is planned to be treated from 2014/15 onwards.
- The commercial and industrial waste recycling and composting rate starts at 40% in 2009/10 and is expected to increase by one to two per cent per year, up to a rate of 67% in 2026/27. From 2009/10 up to and including 2014/15 150,000 tonnes of commercial and industrial waste arisings are planned to be treated. From 2015/16 all C&I waste that has not been recycled/composted will be treated.
- The existing recycling and composting capacity in Norfolk is calculated to be 700,000 tonnes per annum. Therefore, from 2017/18 onwards, additional recycling and composting capacity will be required.

6.17 Norfolk does not have any facilities providing treatment capacity for the recovery of waste. Forecasts in Table A.2 show that a maximum of 368,859 tonnes of treatment capacity will be required between 2010 – 2015. This has been rounded to 370,000 tonnes of new treatment capacity in policy CS4. Table

A.2 shows that a maximum of 702,484 tonnes of treatment capacity will be required between 2015-2020. This is 332,484 tonnes more treatment capacity than planned for in the period 2010-2015. Therefore an additional 333,000 tonnes of treatment capacity is planned for the period 2015-2020 in Policy CS4. In the period from 2020-2026/7 less treatment capacity is forecast to be required because the quantity of commercial and industrial waste is forecast to continue to reduce, whilst the quantity of waste recycled and composted continues to increase. Therefore no additional treatment capacity is required between 2020-2026.

6.18 In order to 'convert' the tonnages required to an indicative number of plants, the guidance in the Communities & Local Government publication *Planning for Waste Management Facilities* has been followed. *Planning for Waste Management Facilities* reports that composting plants can generally receive 1,000-40,000 tonnes of biodegradable material per year. An example plant of 25,000 tonnes per year would require a site area of 2-3 hectares. The size of recycling plants can also vary significantly, but an example plant with an annual capacity of 50,000 tonnes would cover 1-2 hectares.

6.19 The capacity of larger residual waste treatment plants (as opposed to smaller, on-site plants) can also vary significantly, from about 50,000 tonnes (1-2 hectares) to 250,000 tonnes or more (5-10 hectares).

Core Strategy Policy CS4 – New waste management capacity to be provided

By the end of 2026, there is a need to provide about 163,000 tonnes of new recycling, composting and source-segregated-anaerobic digestion capacity, about 703,000 tonnes of recovery infrastructure and about 2,060,000 tonnes of new inert landfill/quarry restoration voidspace. This will be delivered as follows:

2010-2015	370,000 tonnes of recovery (residual treatment) facilities (an indicative 3 x 75,000-tonne plants, or 4-5 x 50,000-tonne plants)
2015-2020	51,000 tonnes of recycling and composting facilities (an indicative 1 composting plant and 1 recycling plant); 333,000 tonnes of recovery (residual treatment) facilities (an indicative 3 x 100,000-tonne plants and 1 x 33,000-tonne plants or 6-7 x 50,000-tonne plants) 198,000 m³ inert landfill/quarry restoration voidspace required
2020-2026	112,000 tonnes of recycling and composting facilities (an indicative 1-2 composting plants and 1 recycling plants); 1,861,000 m³ inert landfill / quarry restoration voidspace required.

General locations for waste management facilities

6.20 The production (and therefore, through the proximity principle, the management and disposal) of waste is likely to be concentrated in the county's larger settlements. "Strategic" or "major" waste sites – those which are either of significant size or of significant importance – are listed below with an indicative minimum threshold of 10,000 tonnes annual throughput:

- Materials Recycling Facilities;
- Composting facilities;
- Metal recycling facilities;
- Landfills;
- Residual waste treatment plants (e.g. anaerobic digestion, pyrolysis, energy-from-waste etc); and
- Co-located and synergistic waste facilities (e.g. two or more of the above plants at the same site).

6.21 As noted in Chapters 2 and 3 and the Evidence Base for Policy CS5, the existing "strategic" facilities in Norfolk are limited to the five non-hazardous landfills, the MRF at Costessey, six large composting facilities and four large metal recycling facilities. Most of these are located within, or close to, the four main Norfolk settlements.

6.22 There is only a need for additional non-hazardous landfill voidspace to be allocated towards the end of the plan period (although it is recognised, in paragraph 6.49, that there may be sustainability benefits from new landfill voidspace in the east of the county). The quantitative need for new large-scale treatment facilities is identified in Policy CS4.

6.23 It is currently expected that the County Council's proposed PFI project site at King's Lynn (see paragraph 3.29) would, if granted planning permission and an environmental permit, provide up to 275,000 tonnes of waste treatment capacity. These figures would appear to indicate that there is a particular need for new recovery (residual waste treatment) capacity to serve the Norwich Policy Area, Thetford and Great Yarmouth urban area, although further capacity will also be needed to serve King's Lynn.

6.24 There are no unimplemented permissions or forthcoming planning applications expected for new composting or recycling plants, so there is a need for new sites close to all four main settlements.

6.25 Policy CS5 below states that waste facilities should preferably be "well-related" to the main four settlements and/or the main market towns. In this context, "well-related" is intended to mean: 10 miles or less from the four main settlements (apart from the Norwich Policy Area, which due to its size would not have such a zone), and five miles or less from the main market towns (the location for "non-strategic" sites). However, it is not intended that these distances must be adhered to rigidly in all circumstances, without any potential flexibility. For instance, there may be potential sites which are nine miles away from, say, King's Lynn, but accessible to the town largely or only by minor (and potentially unsuitable) roads, whereas a site 11 miles distant may be linked directly by the A47.

6.26 The specific situation pertaining to Household Waste Recycling Centres is covered by policy DM6.

Core Strategy Policy CS5 – General location of waste management facilities

“Strategic” or “major” waste management facilities (see paragraph 6.20) should be well-related to the Norwich Policy Area, Great Yarmouth urban area, King’s Lynn or Thetford. There is a particular need for recovery (residual waste treatment) capacity to manage the waste arising from these settlements.

“Non-strategic” waste facilities – which will include most of the other types of waste facilities – should be well-related to one of these main settlements or to the main market towns of Attleborough, Aylsham, Cromer, Dereham, Diss, Downham Market, Fakenham, Hunstanton, North Walsham, Sheringham, Swaffham, or Watton.

Notwithstanding the general locational preference above, given the largely rural nature of Norfolk, it is acknowledged that there may also be some potential sites which are less well related to the major centres of population. Proposals in these locations should demonstrate that they would:

- i) be well-related to the major road network; or
- ii) take advantage of cross border opportunities for the efficient management of waste; or
- iii) enable the re-use of brownfield sites unsuitable for other uses.

Agricultural waste treatment plants, windrow (open-air) composting plants, community composting plants, small scale local facilities (including “bring” sites for the collection of recyclables) will, due to their characteristics, be acceptable in locations more distant from the county’s main settlements. Such proposals will still need to be in compliance with other relevant Core Strategy policies.

Waste water treatment sites/pumping stations can normally only be located on or adjacent to watercourses, so they will normally only be acceptable in such locations.

Significant environmental constraints affecting the major settlements

Whilst every potential waste site allocation and planning application will be considered on its own merits, significant international ecological and national landscape constraints affecting the four main Norfolk settlements are detailed below. However, if waste management activity could take place on a permitted or allocated industrial estate (use class B2), particularly if contained within a building, the impacts may be little different to any other general industrial use (even though the waste development may be classed as *sui generis*):

- *Norwich Policy Area:* The valley of the River Yare falls within the Broads, which has a status equivalent to that of a National Park. On the eastern edge of the NPA, the river valley is also classed as the Broadland SPA and Broads SAC. The River Wensum is classed as a

SAC from (broadly) New Costessey westwards. There is therefore a preference for new waste management facilities away from the Wensum and Yare valley areas and the Broads area

- *Great Yarmouth urban area:* Much of the borough surrounding the urban areas is within the Broads, with Breydon Water SPA and Broadland SPA also close by. In addition, Great Yarmouth North Denes SPA is located on the dunes to the north of Great Yarmouth and also at Winterton-on-Sea and Horsey. The coast between Sea Palling and Winterton lies within the Norfolk Coast Area of Outstanding Natural Beauty (AONB). There is therefore a preference for locations for new waste management facilities away from these protected areas
- *King's Lynn:* The Norfolk Coast Area of Outstanding Natural Beauty lies to the north and north-east of King's Lynn. Roydon Common & Dersingham Bog SAC lies a short distance to the east of the town, with East Walton & Adcock's Common SSSI (which forms part of the Norfolk Valley Fen SAC) lying about six miles to the south-east. There is therefore a preference for locations for new waste management facilities avoiding these areas
- *Thetford:* Development in or near Thetford (and also Swaffham and Watton) is highly constrained by the presence of the Breckland SPA and Breckland SAC, which cover large parts of the surrounding area. Detailed work undertaken for the preparation of the (adopted) Breckland Core Strategy has meant that there is a restrictive approach to development within 1500m of those parts of the Breckland SPA that support stone curlew populations, and within 400m of those parts of the Breckland SPA that support woodlark or nightjar populations (see Policy CS14). Given the noise and disturbance of waste management operations, any new waste management facilities close to Thetford are likely to be more acceptable in the area immediately east of Thetford only (areas to the south and west falling largely within Suffolk).

General waste management considerations

6.27 Waste management provision will be achieved in accordance with the spatial strategy for strategic and non-strategic sites as expressed above. Modern waste management development can require purpose-designed buildings and structures which in most instances are suited to industrial areas. Opportunities for integrated waste management will be encouraged, where various waste management options can be co-located to reduce transport requirements and assist improved levels of waste recovery with the main urban areas.

Core Strategy Policy CS6 – General waste management considerations

Waste sites will need to be developed in accordance with policy CS3 and will be acceptable, provided they would not cause unacceptable environmental impacts, on the following types of land:

- a) land already in waste management use;
- b) existing industrial/employment land or land identified for these uses in a Local Plan or Development Plan Document;
- c) other previously-developed land; and
- d) contaminated or derelict land.

Sites at existing mineral workings and landfill sites will also be acceptable in principle, but will be restricted to a temporary permission(s) lasting until the cessation date for the mineral operation or landfill site.

Unused and under-used agricultural and forestry buildings and their curtilages will also be suitable, in principle, for waste management uses, subject to impacts on the rural environment being acceptable.

Waste reuse, recycling and composting

6.28 After waste prevention, the preferred means of managing waste in the hierarchy is reuse. This involves putting used products or materials, without alteration or processing, to the same use again or for a different purpose. It can result in added value and utility before final disposal. The waste stream where there is the most potential for reuse is construction & demolition waste. Road planings can be reused without further processing and some excavated materials can be directly reused as fill in construction projects or as a site engineering material.

6.29 The next step on the hierarchy is recycling and composting. Recycling involves the separation of waste materials to put them through a process so that they can be used again either for the same or an alternative purpose. Materials commonly recycled include paper, cardboard, glass, cans, some plastics, textiles, wood, metal, brick, stone, concrete, soils.

6.30 Materials Recovery Facilities (MRFs) sort and grade waste either manually or mechanically, usually within a building. The separated materials are then sent elsewhere for re-use or recycling. A large building is usually required with some outdoor storage space.

6.31 The purpose of waste transfer stations is essentially to bulk up wastes and reduce the overall transport requirements of waste collection. However, they increasingly involve an element of sorting to separate materials for recycling, recovery and/or treatment.

6.32 Composting is a natural process that involves the breakdown of organic material in the presence of air (aerobically). It creates a product that can be applied to land to improve soil structure and enrich the nutrient content of soil. There are two forms of composting: open-windrow and in-vessel. With open-windrow, green waste (vegetation) is shredded and placed outdoors in elongated

heaps, which are kept at specific moisture and oxygen levels. The windrows are turned and re-mixed on a regular basis to maintain their aerobic state, until the active composting period is finished and the final product is ready. This form of composting can require a large site, and because of concerns about the effects on health from the generation of bio-aerosols, as well as potential impacts from smell, dust, vermin and birds, it may need to be located away from residential areas and other sensitive land uses. The requirement for a bio-aerosol risk assessment mentioned in Policy CS7 reflects the Environment Agency's formal policy position on composting and potential health effects from bio-aerosols (published in October 2007). The Environment Agency's formal policy position can be downloaded from <http://www.environment-agency.gov.uk/research/library/position/41211.aspx> (autumn 2010).

6.33 In-vessel composting refers to a group of composting systems ranging from closed halls to containers, which aim to achieve a higher degree of control over and accelerate the process. In-vessel composting can take wastes other than green waste, such as food. It often also requires some form of outdoor maturation.

6.34 There is reasonable coverage of waste transfer stations in Norfolk, but a need for a significant expansion in recycling and composting facilities to meet higher recycling/composting/recovery targets set in *Waste Strategy 2007* and other documents.

Anaerobic digestion

6.35 Anaerobic digestion (AD) is essentially an anaerobic equivalent of composting, converting biodegradable materials into a nutrient-rich digestate (which can be used as a fertiliser if produced from source-segregated biodegradable waste) and producing biogas (which can be combusted to produce energy). AD can operate at a range of scales, from the very small to the very large, from a range of feedstocks, and is thus a flexible technology.

6.36 The Government is keen to promote the benefits of AD. Defra's *Anaerobic Digestion – Shared Goals* (published in 2009) has a vision of AD diverting waste away from landfill, producing significant quantities of renewable energy, with the UK being a "world leader" in the technology. Defra's *Accelerating the Uptake of Anaerobic Digestion in England: an Implementation Plan* was published in 2010 and highlighted a series of key actions to deliver major growth in AD provision, including training for planners and councillors to address an apparent lack of expertise.

6.37 Alongside the use of other existing, emerging and yet-to-emerge technologies, the Waste Planning Authority will therefore support the use of AD, and will work closely with the Environment Agency and farmers/landowners/developers to maximise the delivery of new AD plants.

Core Strategy Policy CS7 – Recycling, composting, anaerobic digestion and waste transfer stations

The expansion of, or development of new, recycling, composting and anaerobic digestion facilities, and waste transfer stations to handle all types of waste (inert, hazardous and non-hazardous), will be considered favourably, so long as they would not cause unacceptable environmental, amenity and/or highways impacts.

Proposals for composting plants (both enclosed and open-air) will need to be accompanied by a site-specific risk assessment based on clear evidence which shows that bio-aerosol levels can be maintained throughout the life of the operations, at appropriate levels at dwellings or workplaces within 250m of a facility.

Residual waste treatment facilities

6.38 As outlined in Chapter 2, there is a clear and pressing need to divert non-hazardous waste away from landfill in Norfolk, both to avoid potential LATs fines and also because future new non-hazardous landfill voidspace in Norfolk is likely to be very limited (due to adverse hydrogeological conditions across much of the county).

6.39 For wastes where no (further) treatment is practicable following re-use and initial recovery (i.e. recycling and composting), some form of energy/value recovery is the next preferable solution in waste hierarchy terms. As well as reducing considerably the quantity of waste requiring eventual disposal, energy recovery processes can also generate heat and/or power, for example through a Combined Heat and Power (CHP) plant and/or district heating system.

6.40 There is a range of different energy recovery technologies available, including energy-from waste (EfW, thermal treatment with energy recovery), mechanical biological treatment (MBT, with or without thermal treatment of the fuel produced through the MBT process), mechanical heat treatment (MHT), advanced thermal treatment (ATT) and the production of electricity from the biogas produced during anaerobic digestion. However, PPS 10 advises against over-specific allocations which might stifle innovation in line with the waste hierarchy. For this reason, Policy CS8 does not specify any particular recovery processes, instead keeping the policy generic in consideration.

6.41 The Core Strategy does not express a view on whether the policy for residual waste management facilities should be to centralise larger sites in a small number of locations, or disperse a larger number of smaller sites across Norfolk; these matters will be for 'the market' to determine.

6.42 In line with paragraph 17 of PPS10, Norfolk will plan to manage its own waste management needs (i.e. be as self-sufficient as possible). However, where there could be benefits in land-use and sustainability terms, the importation of wastes might be justified. Whilst there are a number of small-scale waste facilities in locations close to Norfolk (e.g. in Lowestoft and Wisbech), there are only two large sites which could potentially play a future role in recovery of some of Norfolk's waste: land at the Eye Airfield Industrial Estate in Suffolk (allocated in

Suffolk's Waste Core Strategy) and the operational Donarbon MBT plant in Waterbeach, Cambridgeshire. Given Norfolk's boundaries with Suffolk, Lincolnshire and Cambridgeshire, opportunities for cross-border arrangements may exist and are therefore not ruled out.

6.43 Any proposals for hazardous waste treatment facilities will be judged against the locational criteria (both site specific and more general) of policies CS5 and CS8.

Core Strategy Policy CS8 – Residual waste treatment facilities

A number of Residual Waste Treatment Facilities (RWTFs) to serve the needs of the county and with sufficient capacity to cater for the projected amount of residual municipal and commercial & industrial waste will be needed during the period of the Core Strategy (see Policy CS4). When considering planning applications, regard will be had to the need for such facilities by reference to other Core Strategy policies, national planning guidance and the contribution made by existing RWTFs at that time.

RWTFs will be acceptable where the proposed facility is:

- a) In use as a waste management site; or
- b) In existing general industrial use (B2), in storage and distribution use (B8) or identified for these uses in a Local Plan or Development Plan Document; or
- c) On a brownfield site; or
- d) Located in redundant agricultural buildings;

so long as it would not cause unacceptable environmental, amenity and/or highways impacts.

All facilities must provide for the recovery of energy and, where practicable, heat, and the use of combined heat and power and/or district heating systems will be encouraged.

Applications for RWTFs which would result in an over-provision of residual waste treatment capacity (based on the figures in Policy CS4) will not be permitted unless clear sustainability benefits to treating waste arising outside Norfolk can be demonstrated.

Landfill

6.44 The majority of waste generated in Norfolk is currently disposed of to landfill, whether inert (inert landfills or quarry restoration) or non-hazardous (there are no hazardous waste landfills). Although landfill is the least preferred option within the waste hierarchy, it will continue to need to be used throughout the Core Strategy period to dispose of waste for which no other treatment method is practicable.

6.45 Although many inert wastes can be re-used and recycled (e.g. for use as sub-base material), other types, such as sub-soils, cannot practicably be recycled, and disposal to either inert waste landfill, or for quarry restoration, is needed.

6.46 Although quarry restoration will consume significant quantities of inert waste, the existing inert waste landfill voidspace figure is low (less than five years), so this may be indicative of a genuine shortfall in capacity.

Core Strategy Policy CS9 – Inert waste landfill

Proposals for new inert waste landfill voidspace (as distinct from the use of inert material in the restoration of minerals sites, which would normally be conditioned as part of a minerals planning permission) will not be acceptable unless there is a clear need for additional voidspace, based on a lack of genuinely available landfill voidspace and/or a lack of demand for quarry restoration (taken as being less than five years' capacity). These considerations should be assessed at a sub-county level to have regard to any geographic imbalance of voidspace within Norfolk.

Any new proposals will need to demonstrate that they will have advantages (during the operation phase and/or on restoration) for one or (preferably) more of: amenity, landscape, wildlife or similar benefits.

6.47 After applying the targets for waste recovery (including recycling, composting, anaerobic digestion and energy recovery) detailed in Appendix A, there remains a significant volume of non-hazardous waste that will require disposal to landfill. Whilst provision is to be made and proposals encouraged for other recovery waste management facilities, which would reduce the landfilling of non-hazardous wastes, it is likely that it will take a number of years for these installations to become established and start diverting a significant volume of waste.

6.48 Increased levels of recycling, composting and other recovery, as set out in Policy CS3, will reduce the amount of non-hazardous waste requiring disposal to landfill. Based on these figures, there is sufficient voidspace in Norfolk's non-hazardous landfills until the end of the plan period.

6.49 However, the majority of the voidspace, particularly beyond 2020, is concentrated at Blackborough End landfill, which is close to King's Lynn in the west of Norfolk. There would therefore be proximity benefits to providing additional voidspace in the east of the county. The Environment Agency's map of indicative suitability of Norfolk for non-hazardous landfill (reproduced in Appendix E) appears to show severe limitations in Broadland or Great Yarmouth, whereas in much of South Norfolk there may be more potential.

6.50 Given the absence of hazardous waste-only landfills in Norfolk, and the need for landfill capacity for hazardous wastes (including for stable non-reactive wastes such as asbestos), new proposals will be considered favourably where it is demonstrated that they can be operated without unacceptable environmental risks.

Core Strategy Policy CS10 – Non-hazardous and hazardous waste landfill

New non-hazardous landfill voidspace will be only granted permission if:

- i) it is located in the east of Norfolk (ideally in the districts of Broadland, South Norfolk or Great Yarmouth);
- ii) it could be designed, built, operated and restored without unacceptable risk to groundwater quality and air quality;
- iii) it would accept only pre-treated wastes; and
- iv) it would not prejudice the movement of waste up the waste hierarchy by providing excessive landfill capacity.

Proposals for hazardous waste-only landfills (or fully contained cells within a non-hazardous landfill for stable non-reactive wastes) will be granted permission if:

- i) it could be designed, built, operated and restored without unacceptable risk to groundwater quality and air quality;
- ii) it would accept only pre-treated wastes (except where pre-treatment is not feasible or necessary, e.g. for asbestos);
- iii) it would not prejudice the movement of waste up the waste hierarchy by providing excessive landfill capacity.

Waste water and sewage treatment infrastructure

6.51 Waste water treatment plants or works are a vital part of community infrastructure and are necessary to protect human health and water quality. Existing waste water treatment plants will be safeguarded through the application of Policy CS16.

6.52 As a largely rural county, Norfolk's "non-network" sewage load is more significant than many other counties. It is therefore sensible to site new development so as to maximise the potential capacity within the existing waste water treatment infrastructure and so minimise the need for improvements to existing infrastructure or new sewage treatment plants. This is reflected within the emerging Local Development Frameworks within the county, in which major growth is directed to existing major urban centres and key market towns.

6.53 No specific proposals for new or relocated waste water treatment plants have been proposed by Anglian Water as part of the "call for sites" for the Waste Site Specific Allocations DPD, but it is likely that new and/or extended facilities to cater for the proposed levels of growth projected to occur in Norfolk over the life of the Core Strategy will be necessary. Anglian Water has indicated that, for example, the relocation of Downham Market, Wymondham and Thetford treatment works may be necessary during the lifetime of the Core Strategy. However, water cycle studies that have been, or are being, prepared by the Norfolk district councils to inform the development of their DPDs examine the capacity of individual waste water treatment plants in detail.

6.54 The Stage 2b Water Cycle Study Final Report for the Greater Norwich Development Partnership (February 2010) concludes that Whitlingham Waste

Water Treatment Plant “has the largest amount of treatment ‘headroom’ and as such, much of the wastewater generated by the additional housing [in the Greater Norwich area] will need to be transferred [there]”. Large new interceptor sewers running from the west of Norwich to the south and north will also be required to provide additional waste water network capacity.

6.55 The Core Strategy supports the provision of new or improved waste water/sewerage infrastructure, particularly in connection to new housing growth, provided it does not give rise to unacceptable environmental, amenity and highways impacts.

6.56 Anaerobic digestion plants can sometimes be co-located with waste water treatment plants to recover energy from sewage sludges.

Core Strategy Policy CS11 – Waste water/sewage infrastructure and treatment facilities

New or extended waste water/sewage infrastructure and treatment facilities will be acceptable where such proposals aim to:

- 1) treat a greater quantity of wastewater; and/or
- 2) improve the quality of discharged water; and/or
- 3) reduce the environmental impact of operation.

The developer will be required to demonstrate that the proposal can be located and operated without giving rise to unacceptable environmental, amenity and highways impacts.

The co-location of anaerobic digestion plants with waste water/sewage treatment facilities will normally be acceptable, subject to the tests of policy CS7 being met.

Whitlingham Waste Water Treatment Works

6.57 Whitlingham Waste Water & Sewage Treatment Works, located to the south of Norwich (in South Norfolk district) is the largest such plant in Norfolk. It handles the sewage from Norwich and the surrounding rural area and also takes in sewage wastes (such as various cakes and sludges) for treatment from a wider area (including from outside Norfolk). Whitlingham WWTW is therefore a vital piece of infrastructure for the implementation of the growth envisaged in the Joint Core Strategy; of the 32,000 new dwellings proposed for the Norwich Policy Area, almost all will feed in to Whitlingham WWTW. There is room for Whitlingham WWTW to expand to meet any increased future needs, based on Anglian Water’s landholdings, but the bulk of future work is largely thought to be necessary for water quality improvements, rather than volumetric (capacity) increases.

6.58 However, the operation of the site raises frequent concerns from some local residents, particularly on grounds of HGV movements and odour. The site’s location close to the Broads also raises landscape and flood risk concerns. Recent years have seen a series of developments on the site, some of which have been permitted development, and others requiring planning permission, but in the absence of a longer-term masterplan or vision for the future development of

the site, it is not easy to assess the strategic significance of individual proposals, and the cumulative impact of a number of separate (but linked) proposals.

6.59 It is acknowledged that Anglian Water's strategic budget is set by OFWAT through the Assessment Management Planning (AMP) process in five-year tranches, with the next period (AMP 5) running from 2010-2015. Anglian Water has proposed spending £443m to meet the growth in population, and another £440m to fund environmental and drinking water quality improvements during AMP 5 (although these amounts have been reduced by OFWAT in the final decision in November 2009) but the company does not know how much money it will have to spend on improvements during the remainder of the Core Strategy (AMPs 6 and 7). There is no public information as to how much money will be spent at Whitlingham.

6.60 It is proposed that the existing Whitlingham Liaison Group, which debates ongoing operational matters and allows Anglian Water to discuss its future plans for the site, should be expanded. Invited members of the Liaison Group should include local residents, Kirby Bedon and Trowse parish councils, Anglian Water, the Environment Agency, South Norfolk District Council, Norfolk County Council and the Broads Authority, with meetings taking place on a regular basis (perhaps quarterly or six-monthly).

6.61 Anglian Water is encouraged to discuss and agree a longer-term masterplan/vision/implementation strategy for the site with the local authorities of the Greater Norwich Development Partnership and the Environment Agency so that the strategic importance and cumulative impact of individual development proposals at Whitlingham WWTW can be most effectively understood and assessed.

6.62 A more detailed policy setting out the considerations for future development of the site will be included in the Waste Site Specific Allocations DPD, with the aim of minimising the impact on nearby dwellings and the Broads area whilst recognising the strategic significance of Whitlingham WWTW for housing and employment growth in the Norwich Policy Area.

Core Strategy Policy CS12 – Whitlingham Waste Water Treatment Works

Whitlingham Waste Water Treatment Works is one of Anglian Water's strategic works of particular significance for Norfolk in general, and the Greater Norwich area in particular (with a wider sub-regional role also recognised). Future improvements, whether to increase the physical capacity or to increase the treatment standard of waste waters, will be vital to successful delivery of the aims of the Joint Core Strategy and as such are supported in principle.

However, future improvements will need to be planned carefully to minimise adverse environmental and amenity impacts, particularly on the Broads area and nearby residents. Anglian Water is strongly encouraged to:

- develop and agree a longer-term vision for Whitlingham WWTW in collaboration with the constituent authorities of the Greater Norwich Development Partnership and the Environment Agency; and
- extend the existing Local Liaison Group to include the bodies mentioned in paragraph 6.60 above. The Local Liaison Group should continue to meet regularly to discuss operational issues and planned site improvements.

Climate change & renewable energy generation

6.63 The Government's Energy White Paper in 2003 set out a 10 per cent target for electricity generated from renewable energy sources by 2010, with an aspiration to double this to 20 per cent by 2020. The PPS1 Supplement: *Planning and Climate Change* states that Core Strategies "should provide a framework that promotes and encourages renewable and low-carbon energy generation".

6.64 Whilst it is recognised that it may be more difficult to viably locate renewable energy infrastructure on minerals sites than waste sites, all minerals and waste developments may have the potential to generate renewable electricity (e.g. through solar panels, wind turbines, ground source heat pumps etc) which could meet some or all of their electricity needs.

6.65 A 10 per cent minimum figure for renewable energy generation (above a given development threshold) is commonly used in many Core Strategies. Given the rural location of almost all minerals sites, and some waste sites, it is not considered practicable to seek a higher minimum threshold than this.

6.66 The treatment of residual waste can also generate low-carbon electricity and heat so, as set out in Policy CS8, combined heat and power (CHP) plants and/or district heating systems will be encouraged.

6.67 As well as reducing greenhouse gas emissions directly, it is important for minerals and waste developments to also minimise the impacts of climate change. Sand and gravel and silica sand sites are classed as 'water compatible' in PPS25: *Development and Flood Risk*, but carstone extraction sites and waste developments must not be at unacceptable risk of flooding themselves, and all minerals and waste developments must not generate increased risks of flooding 'downstream'.

6.68 Proposals for the new Rackheath Eco-Community to the north-east of Norwich include the objective of incorporating CHP facilities to use locally-produced biodegradable waste to generate power for local consumption. This is consistent with the Planning Policy Statement 1 supplement on Eco-Towns. The development of such facilities at Rackheath, which would have its own, more rigorous, targets for waste production, recycling and landfill diversion, will act as an exemplar for waste management practice in the county.

Core Strategy Policy CS13 – Climate change and renewable energy generation

All opportunities for new minerals and waste developments (both brand new sites and extensions to existing sites) to generate renewable energy on-site will be welcomed and should be explored fully, with a minimum of 10 per cent generated from decentralised and renewable or low-carbon sources, wherever this is practicable. Where it is not considered practicable to meet this 10 per cent minimum – perhaps because of financial reasons, site size, physiographical restraints of a site, and/or other environmental considerations/constraints (e.g. landscape impacts) – appropriate evidence must be provided to the County Planning Authority.

All new residual waste treatment plants and any new non-hazardous landfill sites will need to generate electricity and/or capture heat, unless it can be demonstrated that this is not practicable. An example of where this requirement might not be appropriate would be for a plant producing refuse-derived fuel (through an MBT process), where this fuel was combusted at a different plant elsewhere.

The co-location of large waste plants generating heat and/or electricity with other nearby industrial and/or residential users of the heat and/or energy will be supported. Waste treatment facilities accepting biomass waste will be required to generate renewable energy.

Potential minerals and waste developers will need to demonstrate that, in line with PPS25, the sites can be developed, operated and (where relevant) restored without unacceptable flood risk to the site itself, and also to 'downstream' land uses, taking into account potential climate change impacts (e.g. higher future rainfall rates).

Environmental considerations

6.69 Norfolk is well endowed with designated landscapes and nature conservation sites. The Norfolk Coast Area of Outstanding Natural Beauty (AONB) covers 450km², with the majority of the AONB within King's Lynn & West Norfolk and North Norfolk districts, and only a very small section at Winterton in Great Yarmouth borough. As well as its national importance for landscape quality and character and the national and international importance of its biodiversity and geodiversity, the Norfolk Coast AONB is a critical part of the tourism 'offer' of Norfolk, and the maintenance of its integrity is therefore extremely important. In line with the guidance in PPS7: *Sustainable Development in Rural Areas*, significant new minerals and waste developments will not normally be appropriate in the AONB.

6.70 As noted in Chapter 2, there are 12 Special Protection Areas (SPAs), seven Special Areas of Conservation (SACs) and 162 SSSIs. In addition to the Wash, which is internationally important for its bird life, Norfolk also contains the majority of the area of the Broads, which has a status equivalent to that of a National Park. PPS9: *Biodiversity and geological conservation* sets out the high level of protection given to nature conservation and geological/geomorphological sites of national and international importance.

6.71 As part of the preparation of the Breckland Core Strategy, significant work was undertaken to assess the implications of development within or near the Breckland SPA, which is designated for stone curlew, nightjar and woodlark. The Appropriate Assessment carried out on the Breckland Core Strategy concluded that there should be a buffer zone of 1500m extending from those parts of the SPA which support – or are capable of supporting – stone curlew populations. Policy CP10 of the Breckland Core Strategy and its supporting text set out how development proposals potentially impacting on the SPA will be considered, with the map of the 1500m buffer zone shown as Map 3.1 of the Breckland Core Strategy. The relevant paragraphs of Policy CP10, in the Breckland Core Strategy, have been included within policy CS14 to ensure potential minerals or waste developments within or near the Breckland SPA will not adversely affect the integrity of the SPA.

6.72 One of the priorities of Norfolk's Sustainable Community Strategy is the development of the county's ecological network. The aim of developing the Norfolk Ecological Network is to contribute toward ensuring the long-term protection of wildlife and natural resources in defined areas, with potential benefits beyond these areas. The Norfolk Ecological Network (see Figure 6.1 below) comprises the following elements:

- **Core Areas:** These are the most important existing areas for wildlife in the county, and include the Broads, the Brecks, many river valleys and much of the North Norfolk coast. In these areas, the priority is to protect and manage existing wildlife sites. It will also be important to “buffer” wildlife sites from the impacts of adjacent and often unsympathetic land use, e.g., agricultural spray drift.
- **Heath, Grassland and Woodland Enhancement Areas:** These areas denote a zone where it would be desirable to create a mosaic of heathland, grassland and woodlands.
- **Wetland Creation Areas:** These areas comprise a zone where large-scale wetland creation and enhancement is desired.
- **General Enhancement Areas:** Areas where wildlife is currently impoverished and where there would be a focus on general habitat enhancement and creation (but no particular habitats are recommended).

6.73 Norfolk County Council has long had a policy protecting the special landscape qualities of Norfolk's smaller and more 'upland' river valleys. The county's river valleys were surveyed during the 1990s to identify, in landscape terms, the areas considered to be core to the character of the river valley landscape. The Core River Valleys normally include the floodplains of rivers and their major tributaries but in some cases the core areas also include the lower

valley slopes where these are clearly defined, such as where grazing land extends up to a hedge or tree line on the valley sides.

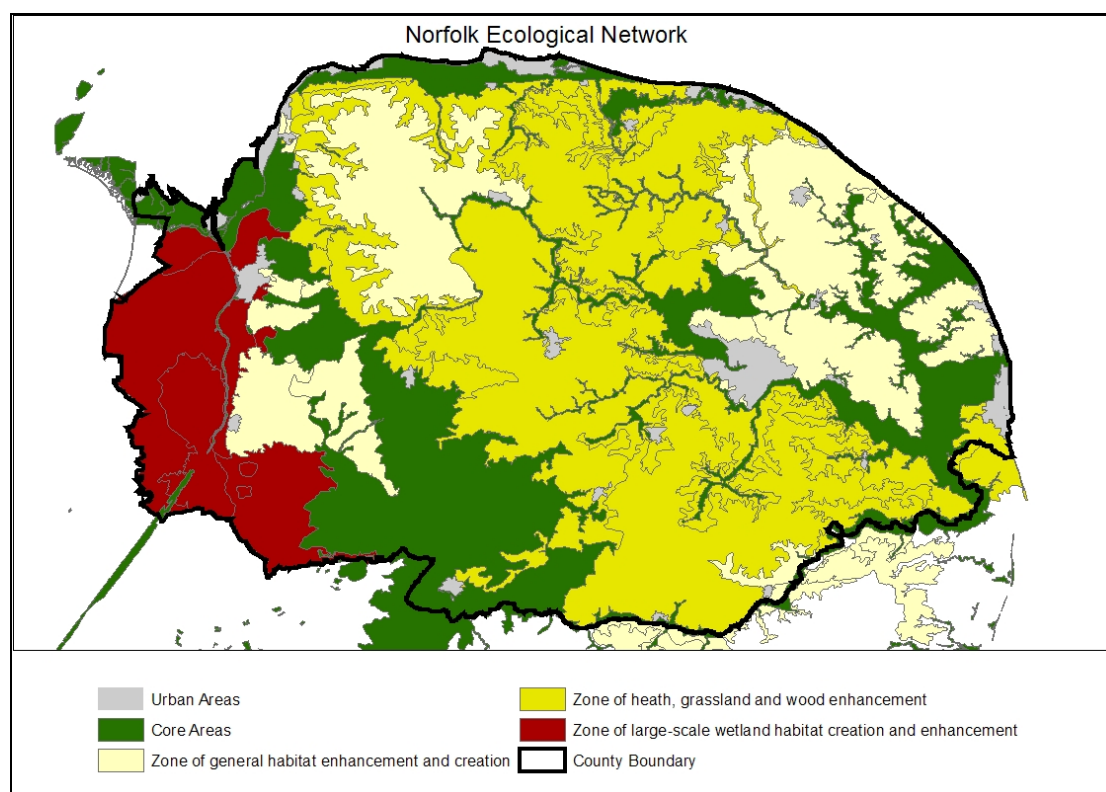


Figure 6.1: Norfolk Ecological Network map

6.74 Many of these river valleys – the upper reaches of the Nar and Wensum are good examples – have historically been attractive locations for sand and gravel extraction, but such extraction can change the local landscape character significantly, for instance by leaving large areas of open water in a more traditionally ‘closed’ landscape. Protecting these Core River Valleys from inappropriate minerals development will help to preserve the unique and rich quality of Norfolk’s landscape and natural heritage.

6.75 Norfolk is also particularly rich in cultural heritage, with many archaeological sites, listed buildings, historic parks & gardens and conservation areas. Ensuring that minerals and waste developments do not adversely affect the county’s cultural heritage is therefore of considerable importance.

Core Strategy Policy CS14 – Environmental protection

The protection and enhancement of Norfolk’s natural and built environments is a vital consideration for future minerals extraction and associated development and waste management facilities in the county. In particular, developments must ensure that there are no unacceptable adverse impacts on, and ideally improvements to:

- Natural resources, including water, air and soil;
- The character and quality of the landscape and townscape, including nationally designated landscapes (the Norfolk Coast Area of Outstanding Natural Beauty and the Norfolk and Suffolk Broads);
- Biodiversity and geodiversity, including nationally and internationally designated sites and species, habitats and sites identified in

- Biodiversity and Geodiversity Action Plans;
- Heritage assets and their setting, and cultural assets; and
- Residential amenity e.g. noise, vibration, dust, lighting, and visual intrusion.

Where any development proposals would potentially have adverse impacts on any of the assets listed above, the adequacy of any proposed mitigation measures will be assessed on a case-by-case basis.

The highest standards of design, operation and (where relevant) restoration and aftercare of sites must be practised.

Breckland SPA

The Council will require suitable information to be provided to enable it to undertake an Appropriate Assessment of all proposals for development that are likely to have a significant effect on the Breckland Special Protection Area (SPA) and will only permit development that will not adversely affect the integrity of the SPA. A buffer zone has been defined (indicated in red hatching on the Proposals Map) that extends 1,500m from the edge of those parts of the SPA that support or are capable of supporting stone curlews, within which:-

- a) Permission may be granted for the re-use of existing buildings and for development which will be completely masked by existing development; alternatively
- b) Permission may be granted for development provided it is demonstrated by an appropriate assessment the development will not adversely affect the integrity of the SPA.

In other locations, indicated in orange hatching on the Proposals Map, the Council will apply the policy set out above to afford protection to other land supporting the qualifying features of the SPA.

Where it can be shown that proposals to mitigate the effects of development would avoid or overcome an adverse impact on the integrity of the SPA or qualifying features, planning permission may be granted provided the County Planning Authority is satisfied those proposals will be implemented.

The Council will consider the need for an appropriate assessment to determine the implications of development on other interest features of the SPA (i.e. nightjar and woodlark) on a case by case basis.

Transport

6.76 A key aim of the Norfolk Local Transport Plan (LTP) is to try to secure 'modal shift' from road transport to greater use of public transport (including railways), walking and cycling. Most current minerals and waste sites are served by Heavy Goods Vehicles (HGVs) using the local road network, although Sibelco's silica sand complex at Leziate exports processed silica sand by rail.

6.77 The movement of HGVs to and from minerals and waste sites can have significant effects on roads, other road users, the natural and built environments and local communities. Alternatives to road freight, such as rail and water-borne freight distribution of minerals and waste, will be strongly encouraged but in

Norfolk the majority of bulk materials are likely to continue being transported by road.

6.78 Much of Norfolk's road network is made up of minor rural roads that are generally unsuitable for large vehicles and heavy traffic flows. The impact of HGV traffic on unsuitable roads can be significant, as much of the damage done to roads is caused by lorries. A large proportion of Norfolk's unclassified road network is of unsuitable construction and alignment to cater for significant HGV traffic and in addition there can be localised amenity and environmental impacts from HGV transport.

6.79 The County Council has, for many years, designated every non-trunk road in Norfolk as one category within the Route Hierarchy. In declining order of appropriateness, the Route Hierarchy is: Principal Roads (generally A roads), Main Distributor Roads (generally B roads), Local Access Roads, HGV Access Roads, Tourist Access Roads (generally C roads) and Other Roads (normally C or unclassified roads). The intention for new minerals and waste sites is to ensure that HGVs take the shortest practicable route (avoiding inappropriate junctions and travel through settlements where appropriate) to the nearest Principal Road or Main Distributor Road.

6.80 The Highways Agency is responsible for managing the trunk roads in Norfolk (the A11, A47 and the A12) and agrees that the tests of Policy CS15 apply equally to trunk roads. However, in relation to minerals and waste transport, the Agency's particular concern is the suitability of junctions on the trunk road network to accommodate increased use by HGVs.

Core Strategy Policy CS15 - Transport

All proposed minerals extraction and waste management facilities must assess and consider positively the potential for non-HGV transportation of materials to and/or from the facilities, principally by rail or water. This assessment must be included within the Transport Statement/Transport Assessment, if one is required (see Policy DM10).

The County Council will consider minerals and waste development proposals to be satisfactory in terms of access where anticipated HGV movements, taking into account any mitigation measures proposed, do not generate:

- a) Unacceptable risks to the safety of road users and pedestrians;
- b) Unacceptable impacts on the capacity and/or efficiency of the highway network (including the trunk road network);
- c) Unacceptable impacts on air quality (particularly in relation to any potential breaches of National Air Quality Objectives and impacts on any Air Quality Management Areas) and residential and rural amenity, including from odour and noise;
- d) Unacceptable impacts on the natural and historic environment; and
- e) Unacceptable physical impacts on the highway network (e.g. road or kerbside damage).

Safeguarding minerals and waste sites

6.81 The limited availability of suitable sites for minerals and waste facilities means that it is essential for the stock of existing and proposed sites to be safeguarded. The safeguarding of mineral sites has a number of benefits, both in terms of protecting sources for construction purposes and maintaining a supply of building stone for conservation purposes. The purpose of safeguarding existing and proposed sites is not necessarily to prevent other forms of development from taking place in proximity to existing or potential mineral extraction and associated development or waste management facilities, but to ensure that issues of compatibility across the differing forms of development are taken into account in the planning process.

6.82 Minerals are a finite natural resource and clearly can only be worked where they exist. Mineral working is becoming increasingly constrained by the need to protect the key environmental, heritage and amenity assets of Norfolk, which limits the amount of resource available in practice. The primary evidence base for Mineral Safeguarding Areas (MSAs) for mineral resources is Norfolk Mineral Resources Map 2004 (as amended) prepared by the British Geological Survey. Chalk, clay and peat are either so extensive in Norfolk or demand for them is so low (relatively) that safeguarding such deposits is not considered necessary. Therefore, only sand and gravel, silica sand and carstone resources are safeguarded. Given the national significance of silica sand (see paragraph 3.4), the safeguarding of silica sand resources will be given particular importance. The broad extent of the MSA is shown on the key diagram in the Core Strategy. The boundaries of MSAs will be delineated on the Proposals Map accompanying the Minerals Site Specific Allocations DPD. In the period prior to the adoption of the Mineral Site Specific Allocations DPD the Mineral Consultation Areas from the Minerals Local Plan (2004) will continue to be used and shown on the Proposals Map. The Mineral Consultation Areas from the Minerals Local Plan (2004) will be superseded by the Mineral Safeguarding Areas and Minerals Consultation Areas in the Mineral Site Specific Allocations DPD on its adoption.

6.83 Where proposals for non-minerals or non-waste development might prejudice the implementation of the Core Strategy, consideration should be given to how they could be amended to make them acceptable or, where this is not practicable, to refusing planning permission. As well as minerals extraction and waste developments themselves, it also includes related infrastructure such as concrete batching, the manufacture of coated materials, sites for the handling, processing and distribution of substitute, recycled and secondary aggregate material and the storage, handling and processing facilities at railheads (Trowse and Leziate) and wharves (Great Yarmouth and King's Lynn). The boundaries of safeguarded mineral and waste sites will be delineated on the Proposals Map accompanying the Core Strategy. The boundaries of safeguarded mineral and waste site specific allocations and areas of search will be delineated on the Proposals Map accompanying the Mineral Site Specific Allocations DPD and the Waste Site Specific Allocations DPD.

6.84 The distance to the boundary of a Consultation Area around key wastewater and sludge treatment facilities may be relaxed, following consultation with Anglian Water, on a case by case basis, depending on the nature of the works and the sensitivity of its location.

6.85 Appendix C sets out advice to the District and Borough planning authorities on the forms of development on which consultation with the County Planning Authority should take place before planning applications are determined. The authorities will be requested to consult the County Planning Authority if the development is within 250 metres of a safeguarded site, with the exception of wastewater treatment facilities where the distance will be 400 metres. Incompatible development will not be supported. Decisions on whether a proposed development would prevent or prejudice the continued use of a safeguarded site and would therefore raise an objection from Norfolk County Council, will be made by on a case by case basis. Each decision would take into account the particular use of the safeguarded site, the nature of the proposed development, their compatibility and, where appropriate, any mitigation which could address any adverse impacts.

6.86 For safeguarding mineral resources, the Minerals Planning Authority has determined that the Minerals Consultation Area (MCA) is the same defined area as the MSA, which requires the District and Borough Councils to consult the County Planning Authority on applications for any form of development received within these areas, which are likely to affect or be affected by mineral working and meet the criteria outlined in Appendix C.

6.87 The inclusion of land in a MSA/MCA does not necessarily mean that planning permission would be granted for mineral extraction and there may be sound planning reasons why proposals would be rejected. Designation of these areas is intended to ensure that mineral interests are taken into account at the appropriate time. For example, circumstances may arise where it may appropriate to undertake mineral extraction in advance of development. MPS1 (paragraph 13) states that planning authorities should encourage the prior extraction of minerals, where practicable, if it is necessary for non-mineral development to take place in MSAs.

Core Strategy Policy CS16 - Safeguarding mineral and waste sites and mineral resources

The County Council will safeguard existing, permitted and allocated mineral extraction and associated development and waste management facilities, within the following categories:

- Waste management facilities with a permitted input of over 20,000 tonnes per annum;
- Key wastewater and sludge treatment facilities (listed in the Waste Site Specific Allocations DPD);
- Waste water pumping stations;
- All mineral extraction sites that are active, and sites with planning permission and allocated sites; and
- Infrastructure located at railheads, wharves and quarries which can transport or handle minerals.

Consultation areas will be delineated on the Proposals Map and extend to 250 metres from each safeguarded site, apart from the key wastewater and sludge treatment facilities, for which the consultation distance will be 400 metres.

In addition, any development proposed within 50 metres of a pumping station (as identified through the planning application) will be subject to consultation with the relevant wastewater management company by the planning authority responsible for determining the application.

The County Council will oppose development proposals which would prevent or prejudice the use of safeguarded sites for those purposes unless suitable alternative provision is made.

Mineral Safeguarding Areas and Mineral Consultation Areas

Silica sand

Given that silica sand is a nationally important but scarce resource, Norfolk's silica sand resources will be safeguarding from inappropriate development proposals. The Mineral Planning Authority should be consulted on all development proposals within Mineral Consultation Areas, except for the 12 excluded development types set out in Appendix C. In line with advice in MPG15 (paragraph 2), the Mineral Planning Authority will object to development which would lead to the sterilisation of the mineral resource and it would be for the relevant district council to decide whether there are compelling planning reasons for over-riding this safeguarding.

Carstone and sand & gravel

Carstone and sand & gravel resources are not as nationally important and scarce as silica sand, but MPS1 (paragraph 13) cautions against proven mineral resources being "needlessly" sterilised by non-mineral development. The conservation benefits of carstone will be a consideration in safeguarding resources.

The Mineral Planning Authority should be consulted on all development proposals within Mineral Consultation Areas, except for the 12 excluded development types set out in Appendix C. For other development types within Mineral Consultation Areas (i.e. non-minor development outside settlement boundaries), the Mineral Planning Authority will expect to see appropriate investigations carried out to assess whether any mineral resource there is of economic value, and if so, whether the material could be economically extracted prior to the development taking place.

Secondary and recycled aggregates

6.88 The revised Government *National and regional guidelines for aggregates provision in England 2005-2020* assumes that the East of England will produce a total of 117 million tonnes of 'alternative materials' (essentially recycled and secondary aggregates), a 9% increase on the previous figure. The use of secondary and recycled aggregates (such as by-products from quarrying, planings from tarmac road surfacing and crushed concrete from construction waste) helps to reduce the demand for primary mineral extraction and should have less adverse impact on the environment and amenity. The County Council will therefore encourage an increase in the production and use of secondary and recycled aggregates.

6.89 It is not easy to monitor accurately the production and use of recycled and secondary aggregates. Whilst it is possible to measure the production of some sources of recycled and secondary aggregates, particularly where this occurs at

mineral extraction sites (e.g. concrete crushing), other sources are much more difficult to quantify. These would include output from mobile crushing plants at building and road development sites, where material is processed, recycled and sometimes re-used on site (e.g. as sub-base material), and inert waste material which passes through waste transfer stations.

6.90 Levels of recycled and secondary aggregate were reported in Norfolk County Council's 2008/9 AMR at 512,000 tonnes, compared to 638,000 tonnes in 2007/8. Over the last six years, a maximum of 70% of the inert and construction and demolition waste managed in Norfolk has been recycled. The majority of this waste is understood to be recycled for use as aggregates. It is expected that the levels will increase again once the current economic recession ends and the construction industry regains some strength.

6.91 In terms of promoting the use of secondary and recycled aggregate, the County Council only has direct influence through its own development (such as schools, libraries and road schemes), and as a planning authority through planning for mineral extraction and associated development and waste management facilities. Planning for residential, industrial and commercial developments is the responsibility of the district, borough and city councils. The use of recycled and secondary aggregates in the development of new minerals sites and waste management facilities, and associated transport infrastructure, is promoted in Policy DM11. However, restricting this approach just to mineral extraction and waste management facilities would miss significant opportunities to influence the sustainability of mainstream development.

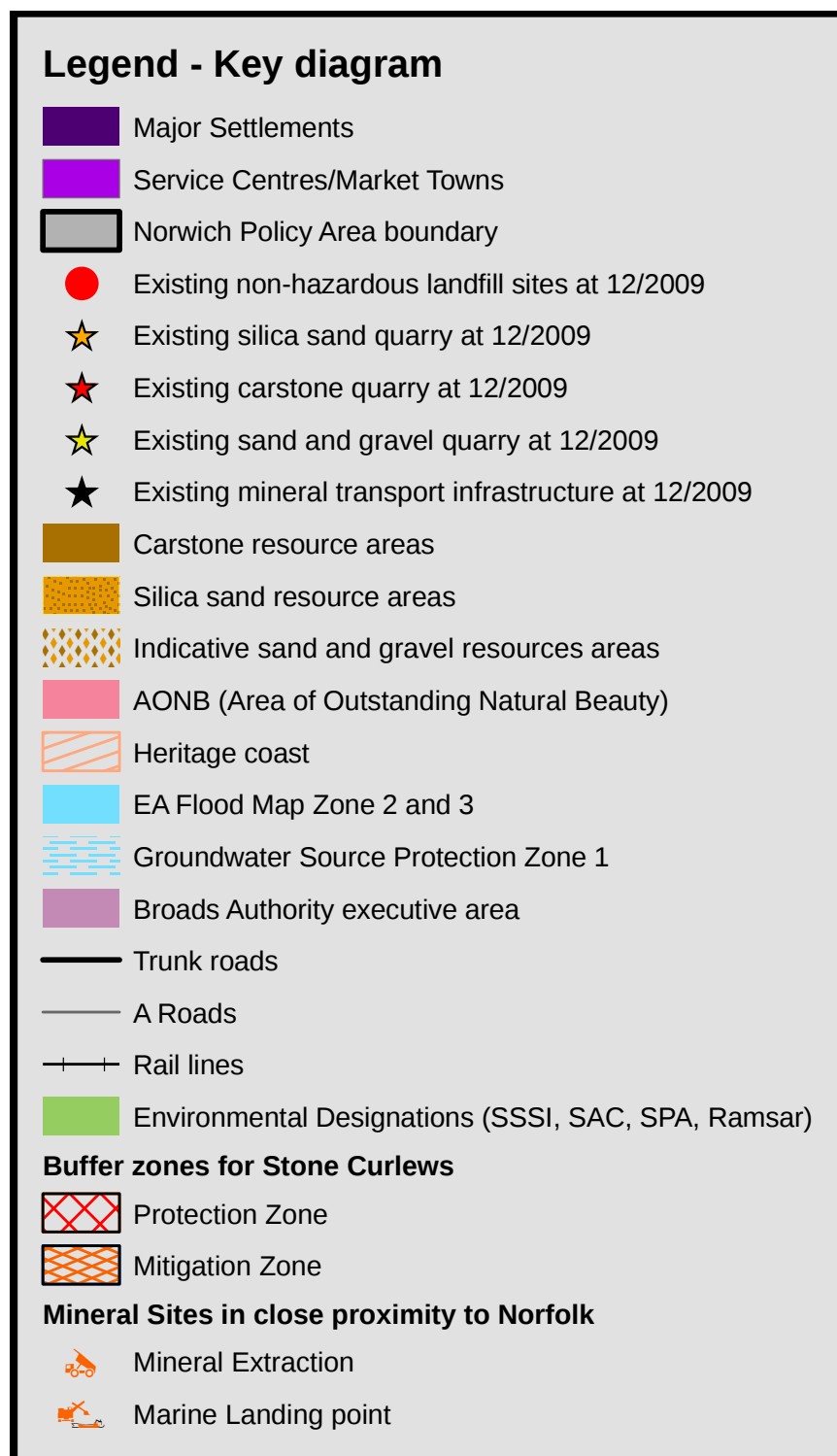
Core Strategy Policy CS17 – Use of secondary and recycled aggregates

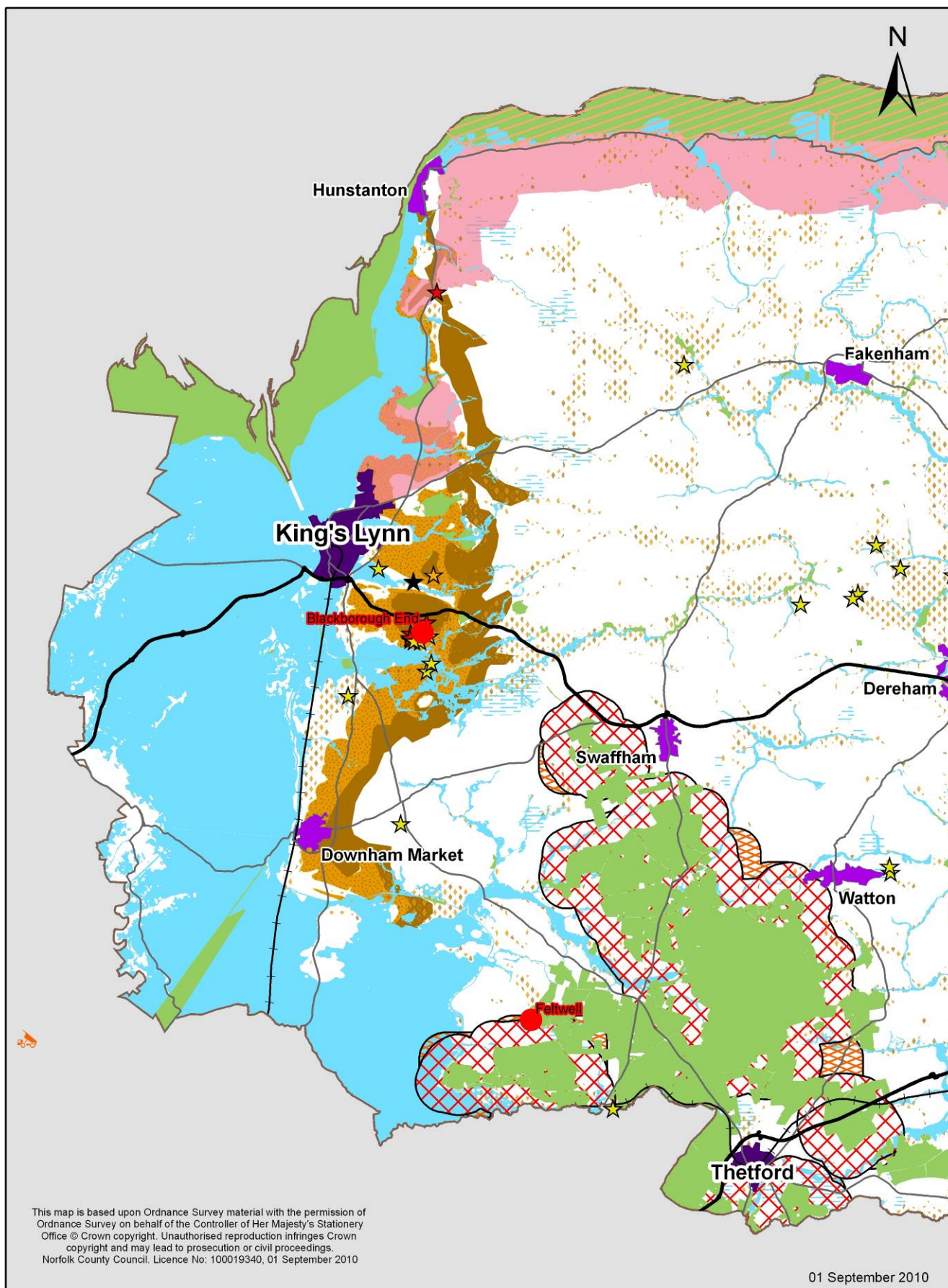
The County Council will promote the use of secondary and recycled aggregates in all developments and encourages all local authorities within Norfolk to require, as part of their own Local Development Frameworks, the use of recycled and secondary aggregates in development (where practicable). Applicants will be required to demonstrate the consideration of the use, where practicable, of secondary and recycled aggregates.

Although a 'target' figure cannot be set for the production of secondary and recycled aggregates, the County Council will aim to achieve a year-on-year increase in the percentage of inert and construction and demolition waste managed in Norfolk that is recycled, starting with the baseline of 70%.

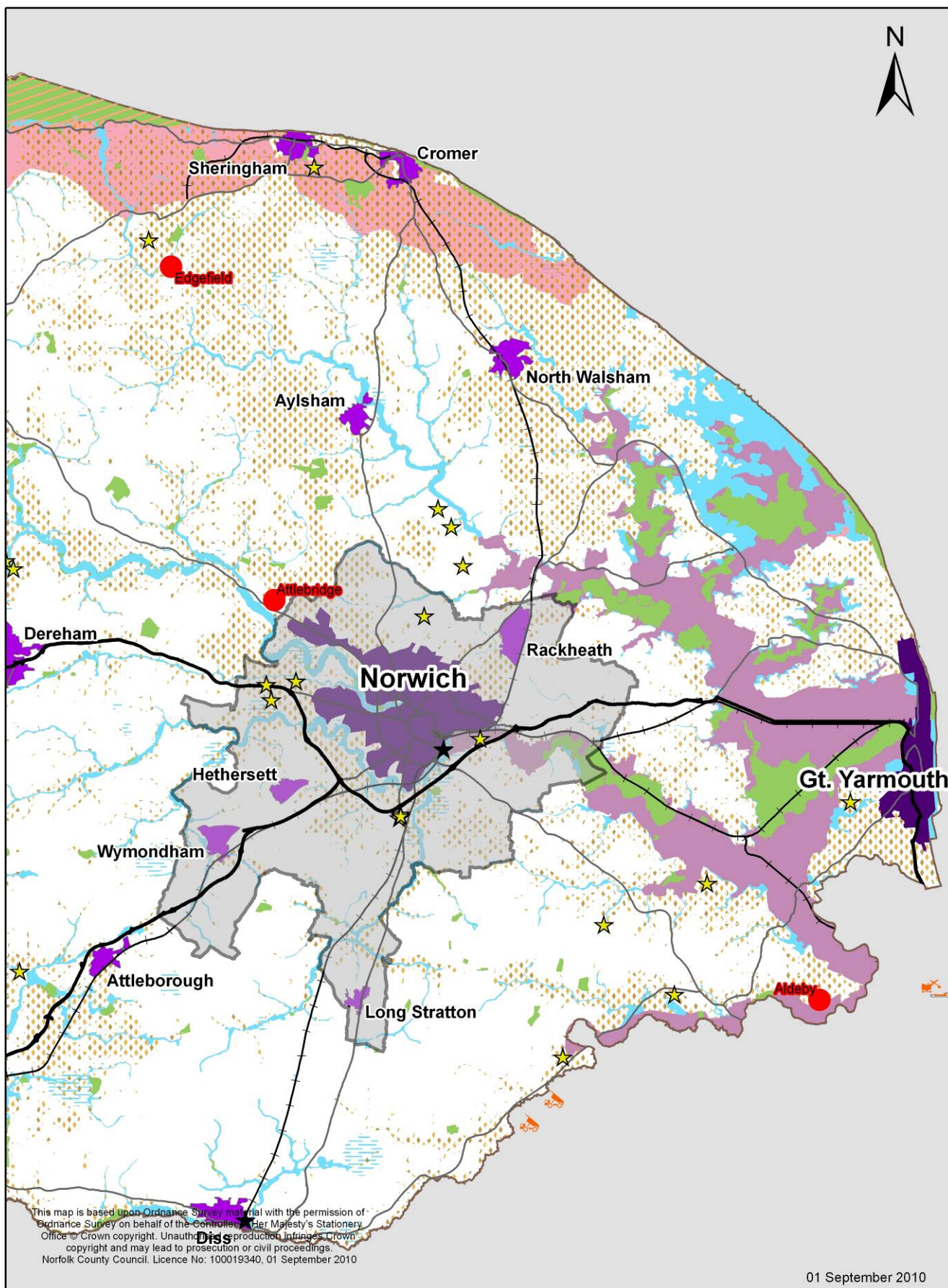
Key diagram

6.92 The key diagram overleaf shows the four largest settlements and Market Towns in Norfolk, highlighting sand and gravel resources and areas for waste management facilities which are well-related to these settlements,. The diagram also illustrates the silica sand and carstone resources, key landscape and environmental constraints, trunk roads, A-roads, railway lines and the location of existing quarries and current non-hazardous landfill sites.





Key diagram



Key diagram

7 DEVELOPMENT MANAGEMENT POLICIES

Nature conservation

7.1 The County Council is committed to protecting and, wherever possible, enhancing biodiversity and geodiversity throughout the county. Norfolk is home to a significant number of areas statutorily designated as sites of international, national, regional and local nature conservation importance, to protect important species, habitats and geological features.

7.2 Paragraph 8 of PPS9 describes how development within, or potentially affecting, SACs, SPAs, Ramsar sites and SSSIs should be considered, and the County Council does not believe there are specific local circumstances that would justify a modification of this policy (with the exception of the Breckland SPA, which is addressed in Policy CS14 and paragraph 6.71). As all National Nature Reserves are also SSSIs, no separate policy is required in the Core Strategy.

7.3 Local Nature Reserves (LNRs) are statutory designations made under section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities for the benefit of both people and wildlife. They are places with wildlife and/or geological features that are of particular interest locally and they offer people special opportunities to study or learn about nature or simply to enjoy nature. In 2008 there were 28 LNRs in Norfolk.

7.4 County Wildlife Sites (CWS) are locally designated areas of land rich in wildlife and can be found throughout Norfolk. Outside the internationally and nationally protected areas, these sites are the best areas for wildlife in the county and often support both locally and nationally threatened species and habitats. In 2008 there were 1,256 CWS in Norfolk and they form a critically important part of Norfolk's ecological network.

7.5 LNRs and CWSs are thus a valuable nature conservation resource which requires protection, not only for their own sake, but also as part of the wider ecological network, sometimes as a 'buffer' to national and international nature conservation sites.

7.6 Outside these locally designated sites, Norfolk also supports a wide array of habitats and species, many of which are recognised by the UK and Norfolk Biodiversity Action Plans. Policy CS14 seeks to ensure that biodiversity in these non-designated areas is protected and enhanced, and that habitat fragmentation is avoided. In addition to avoiding habitat fragmentation, opportunities should be sought to create greater habitat connectivity to facilitate a more robust and healthy natural environment.

7.7 In 2008 there were four Regionally Important Geological and Geomorphological Sites (RIGS) in Norfolk. RIGS are selected on a local or regional basis using four criteria:

- The value of a site for educational purposes in life-long learning;
- The value of a site for study by both professional and amateur earth scientists;
- The historical value of a site in terms of important advances in earth science knowledge, events or human exploitation;

- The aesthetic value of a site in the landscape, particularly in relation to promoting public awareness and appreciation of earth sciences.

7.8 In addition to RIGS, other areas of importance for geodiversity conservation are also found throughout Norfolk. These include tracts of attractive and/or geomorphologically-important landscape that may be recognised through landscape characterisation or as part of designated landscapes, such as Areas of Outstanding Natural Beauty. The Norfolk Geodiversity Partnership is developing a comprehensive audit of geodiversity features in the county, the Norfolk Geodiversity Action Plan.

Development Management Policy DM1 – Nature conservation

Development that would harm:

- Locally designated nature conservation and geodiversity sites; and/or
- Habitats, species or features identified in UK and Norfolk biodiversity and geodiversity action plans;

will only be permitted if it can be demonstrated that sufficient measures to mitigate harm to the site, habitat(s) and/or species can be put in place, preferably in advance of development. If appropriate mitigation measures cannot practicably be implemented, compensatory habits or geological exposure of at least an equivalent standard at a suitable alternative location should be provided. Potential adverse impacts off-site, caused by water contamination, changes to hydrology and/or air pollution, will also need to be considered.

In cases where permission is granted on the basis that restoration will provide enhancement to local nature conservation efforts in the longer-term, any adverse impacts on local nature conservation during the construction and operational phases must be mitigated and fully compensated for. Ongoing management of the restored areas and compensatory habitat(s) will be required to prevent succession away from the chosen habitat(s) type unless this would be unnecessary or inappropriate.

Core River Valleys

7.9 Norfolk's river valleys constitute a very important and valued element of Norfolk's landscape character, ranging from the fast-flowing chalk streams of the north-west of the county feeding to the Wash (such as the River Babingley), slow-flowing rivers draining to the north Norfolk coast (such as the River Glaven) and the larger rivers of the Broads area (such as the rivers Bure, Yare, Wensum and Waveney). The county's river valleys were surveyed by Norfolk County Council during the 1990s to identify, in landscape terms, the areas considered to be core to the character of the river valley landscape. The Core River Valleys normally include the floodplains of rivers and their major tributaries but in some cases the core areas also include the lower valley slopes where these are clearly defined, such as where grazing land extends up to a hedge or tree line on the valley sides.

7.10 The Core River Valleys in Norfolk and their associated grazing pastures, offer a marked landscape contrast to the more common, intensively cultivated

farmland and are vital ecological habitats and corridors, supporting a variety of biodiversity habitats and species. In this respect, Core River Valleys are a key component in the development of the Norfolk Ecological Network. Although they are not formally designated, safeguarding the Core River Valleys will help preserve the unique and rich quality of Norfolk's landscape and natural heritage.

Development Management Policy DM2 – Core River Valleys

Development will only be permitted in Core River Valleys (as shown on the Proposals Map) where it can be demonstrated to enhance the local landscape and/or biodiversity (either immediately or on restoration) and not impede floodplain functionality.

Applicants will be expected to demonstrate that proposals will enhance the form, local character and distinctiveness of the landscape and natural environment of a river valley. In the particular case of mineral extraction proposals, an assessment of any impacts will include:

- consideration of the potential impacts or enhancement of the landscape and natural environment, both during and after working;
- the duration of any adverse impacts, and mitigation and/or compensatory measures to replace losses; and
- the provision of any long term asset enhancement through restoration proposals.

Groundwater and surface water

7.11 The biological and chemical water quality of Norfolk's rivers is important for the ecological quality and biodiversity of the environment and for public amenity and enjoyment. The quality of rivers also affects the degree and extent of treatment required to enable the water to meet drinking water standards. Groundwater is also an important asset to Norfolk as it supplies over 60 per cent of the county's water supply (compared to around 35 per cent nationally). The threat to groundwater supplies and possible reduction in quantity as a result of climate change makes its protection essential.

7.12 Mineral extraction activities in Norfolk, particularly where they do not penetrate the water table, are unlikely to have a significant impact on groundwater quality and/or resources. However, they can have more of an impact on surface water quality and/or resources through discharges to watercourses and the creation of new surface water bodies.

7.13 Waste management facilities, particularly when handling, storing or processing non-inert wastes, can potentially pose a greater risk to groundwater and surface waters. It is therefore very important that such facilities are planned, located and operated appropriately to minimise pollution risks.

7.14 The Environment Agency is the statutory body responsible for the protection and management of groundwater resources in England and Wales. They have set out a framework for the regulation and management of this resource in a set of documents known as 'Groundwater Protection: Policy and Practice (GP3)'. Part 4 of the document contains detailed policies for different sectors and activities

which the Council will give due regard to when determining applications that may affect groundwater.

7.15 Groundwater Source Protection Zone (SPZ) 1 is a minimum 50-metre protection area surrounding groundwater sources such as wells, boreholes and springs used for public drinking water supply, and covers the area where pollution would travel within a 50-day period. SPZ2 covers a 400-day travel period for pollutants and SPZ3 the total catchment area for a borehole.

7.16 Minerals and waste developers must therefore satisfy the County Planning Authority, through planning applications, that site activities will not adversely impact upon groundwater quality or resources, or surface water quality or resources. This will be assessed during the planning application process through consultation with the Environment Agency, Natural England, the appropriate water utility company and (where relevant) the appropriate Internal Drainage Board.

Development Management Policy DM3 – Groundwater and surface water

Applicants will need to give due regard to the policies within the Environment Agency's document 'Groundwater Protection: Policy and Practice (GP3)' and demonstrate that proposed developments would not adversely impact upon groundwater quality or resources and surface water quality or resources. A hydrological/hydrogeological risk assessment must be submitted, where applicable, to demonstrate this to the satisfaction of the County Planning Authority as advised by the Environment Agency.

In line with the Environment Agency's policy, sites for mineral extraction and associated development will be acceptable in Groundwater Protection Zone 1 provided they are above the water table. Sites for mineral extraction into the water table in Zones 2 & 3, and outside Groundwater Protection Zones, will be acceptable in principle, although proposals in Zones 2 & 3 will need to be accompanied by a hydrogeological risk assessment which demonstrates that the extraction can take place safely. Sites for waste management facilities will not be permitted in Groundwater Protection Zone 1.

Flood risk

7.17 With the risk of flooding likely to be exacerbated by climate change in future years, flood risk is a significant development constraint in Norfolk. However, the vulnerability of different types of minerals and waste development to flooding varies, as listed in Table D2 of PPS25: *Development and Flood Risk*.

7.18 Sand and gravel extraction is classed as 'water-compatible' development in PPS25. All other types of minerals extraction and the processing of minerals are classed as 'less vulnerable' development. Waste and water treatment facilities are also classed as 'less vulnerable' development. However, landfills and other waste management facilities handling hazardous waste are classed as 'more vulnerable' development.

7.19 Norfolk's seven districts have all prepared, or are preparing/reviewing/ updating, Strategic Flood Risk Assessments to support their LDFs and, as such, the County Council has not prepared its own SFRA. Although not all SFRAs provide complete spatial coverage (they tend to concentrate on urban areas and exclude many rural areas), they do cover the main existing and potential new employment areas (e.g. Whitehouse Farm, land south of the A47 at King's Lynn). The County Council has, however, prepared a Combined Strategic Flood Risk Assessment (April 2010), which takes account of the information contained with the districts' SFRAs.

7.20 In line with PPS 25, the Sequential Test must be applied to all proposals. Table D.3 of PPS 25 should be referred to, to establish if the vulnerability of the proposed development is appropriate in the Flood Zone and for instances where the Exception Test is also required. Applications in areas of flood risk should also demonstrate that the Sequential Approach has been considered within the site, directing the highest risk elements of the proposal to areas of the site at least risk of flooding.

7.21 A Flood Risk Assessment (FRA) must support all applications in areas of flood risk, and on sites greater than one hectare. The FRA should recognise the unique characteristics of minerals and waste sites which may adversely impact the water environment. These include, but are not limited to, the following:

- * consideration of the impacts on surface water and groundwater throughout the various phases of development;
- * consideration of the impact on surface water and groundwater of all ancillary features such as bunds, stockpiles and roads;
- * demonstration that adequate compensatory storage or drainage works have been provided at all stages of development;
- * demonstration that mineral workings will not increase flood risk elsewhere, for example by adversely impacting on flood flows or storage capacity;
- * details of how the site has been designed to reduce flood risk, for example with flood storage and attenuation areas;
- * demonstration of how the risk of pollution will be minimised should the site flood;
- * demonstration that the effectiveness of the floodplain will not be compromised, and, where possible, to reduce flood risk through appropriate design, operation and restoration;
- * demonstration that the physical integrity of watercourses has been safeguarded by ensuring adequate margins between a river bank and an excavation.

7.22 When considering development proposals, PPS25 will therefore be applied in accordance with the method prescribed in Policy DM4 below.

Development Management Policy DM4 – Flood risk

The Norfolk district councils' Strategic Flood Risk Assessments will be used to inform decisions for mineral extraction and associated development and waste management facilities where appropriate. In accordance with PPS 25, the Sequential Test and, where necessary, the Exception Test must be applied to all proposals. If it is demonstrated that there are no reasonably available sites in areas with a lower probability of flooding that would be appropriate to the type of development or land use proposed, the applicants must demonstrate that they have applied the Sequential Approach on the site itself. In particular, ancillary uses and access roads should preferably be sited in areas at lowest risk of flooding.

A Flood Risk Assessment is required for all development in Flood Zones 2 and 3, and for sites greater than 1 hectare. Through consultation with the Environment Agency, the County Planning Authority will expect developers, through site layout, design and access, to ensure flood risk is not increased as a result of all mineral extraction and waste management sites.

Borrow pits

7.23 Major construction projects, especially road schemes, can demand considerable quantities of aggregate, particularly low grade fill material. In some cases this can be sourced near to major construction projects, which can have advantages over established sites by reducing the impact of concentrated flows of heavy goods traffic on the public highway. A proposal of this nature must be able to demonstrate that it represents the most appropriate source of mineral to meet the additional demand.

7.24 Proposals for new or extensions to reservoirs and incidental mineral extraction, involving removal of mineral off-site, will need to demonstrate that there is a proven need for the proposal. Such need could be demonstrated by, for instance, the Environment Agency agreeing that a proposal for a winter-fill agricultural reservoir or potable water reservoir is justifiable and acceptable.

Development Management Policy DM5 – Borrow pits and agricultural or potable water reservoirs

Borrow pits will be permitted so long as it is demonstrated that:

- The pit will only be used in connection with a major construction project with which it is associated; and
- The pit is the most appropriate source of mineral to meet the additional demand; and
- The pit can be accessed from the construction project site either directly or via a short length of suitable highway; and
- It will be worked and be restored within the same timescale as the related construction project; and
- Extraction from the site causes less environmental damage than would result from using material from an established source of supply.

Proposals for agricultural reservoirs, potable water reservoirs and incidental mineral extraction involving off-site removal of minerals will be permitted, subject to applicants demonstrating that there is a proven need for the proposal and it complies with the other policies of the Core Strategy.

Household Waste Recycling Centres

7.25 The County Council has a statutory duty, as Waste Disposal Authority, to provide Household Waste Recycling Centres (HWRCs or Civic Amenity sites) for householders within Norfolk to dispose of their waste. There are 19 HWRCs in the county.

7.26 A number of the HWRCs can at times suffer from constraints such as size restrictions and peak-time queues. Modern sites, such as that opened in King's Lynn in 2008, offer an improved recycling service, and the County Council would wish to consider the potential for upgrading more of its current sites, or construct new replacement sites, to these higher standards whenever opportunities emerge.

7.27 Major housing and employment growth is planned for Norfolk over the next few decades. Although the exact locations of major new housing developments have not yet been confirmed in adopted district DPDs and the Joint Core Strategy, there is reasonable certainty that substantial new growth will take place to the north-east of Norwich (the Rackheath Eco-Community and in the Catton/Sprowston area), and at Wymondham, Attleborough, Thetford, Great Yarmouth and King's Lynn.

7.28 In the light of future housing growth and the desire to improve some existing sites, the County Council will continually be reviewing the current distribution, adequacy and number of HWRCs in the county. Improvements to existing sites and/or new sites may, by necessity, be required as the major housing growth planned for Norfolk is delivered.

7.29 It is important to note that the upgrading of current HWRC sites, and the construction of new sites, is dependent on both the County Council finding suitable sites, and securing necessary finance to purchase or lease the land, and construct/improve the site. However, as relatively little capital funding is currently available for major HWRC improvement works, all potential opportunities to

secure suitable sites and/or section 106 planning gain through the planning system will be explored.

7.30 Although most potential HWRC improvements or new HWRC locations will be able to meet the tests of policies CS5 and CS6, there may be cases where there is a demand for a HWRC in a certain area, but no suitable sites. In these cases, Policy DM6 will allow an appropriate proposal to be determined positively.

Development Management Policy DM6 – Household Waste Recycling Centres

Where there is a demand for a new or improved Household Waste Recycling Centre in a specific area of Norfolk, but a suitable site in line with Policies CS5 and CS6 cannot be found, they will be acceptable within purpose designed or suitably adapted facilities on other sites, including greenfield sites.

Where justifiable, an appropriate level of developer contributions from new developments will be sought towards the provision of improvements to the Household Waste Recycling Centre network. This will normally be in the form of financial contributions, but in certain locations – particularly the major growth locations identified in adopted district DPDs – suitable sites for new Household Waste Recycling Centres could be requested.

Safeguarding aerodromes

7.31 Advice Notes on the safeguarding of aerodromes have been produced by the Airport Operators' Association and General Aviation Awareness Council. The purpose of safeguarding is to ensure that the operation and development of civil and military airfields is not inhibited by development that has the potential to increase the number of birds and the 'birdstrike' risk. The safeguarding area regarding potential bird hazards is generally a 13km radius from the centre point of civil and military aerodromes (MPS1, paragraph 19). Other potential risks to aerodromes include buildings and lighting affecting telecommunications and visibility, and tall structures affecting flightpaths.

7.32 A number of aerodromes and technical sites are located within Norfolk, or have consultation areas within Norfolk. Officially safeguarded areas have been established for aerodromes at Norwich International Airport, RAF Marham, RAF Swanton Morley, RAF Honington, RAF Lakenheath and RAF Mildenhall and for other MoD sites at Neatishead, Old Buckenham, Trimingham and Weybourne. The boundary of the safeguarded area for each site is shown on the Proposals Map. The location and boundary of a safeguarded area is determined by the consultee and is not a matter of discretion for the County Council.

Development Management Policy DM7 - Safeguarding aerodromes

Minerals and waste planning applications that are within safeguarded areas will be the subject of consultation with the operator of the aerodrome or technical site.

Proposed developments within 13 km of the centre point of safeguarded aerodromes that have the potential to attract birds, due to landscaping or waste management operations, must be subject to a bird hazard assessment. Where significant risk is identified, developers will be expected to modify their proposals to mitigate this risk and as part of the mitigation it may be necessary to produce and implement a Bird Hazard Management Plan acceptable to the aerodrome concerned.

Restrictions on the height or detailed design of buildings, or on development which might create a bird hazard, may be imposed, and in particular cases where the risk cannot be mitigated satisfactorily, planning permission will be refused.

Landscape and design

7.33 Norfolk is predominantly rural in nature and the integrity and attractiveness of the landscape and the countryside is an important aspect of the quality of life for Norfolk residents and a draw for tourists. As such, it is important that the value of the landscape is protected from unsympathetic and inappropriate minerals and waste developments and, where practicable, that restoration of minerals sites contributes to an improvement in local landscapes.

7.34 Norfolk is home to the Norfolk Coast Area of Outstanding Natural Beauty (AONB) and The Broads, which is a national asset with the status equivalent to a National Park. Protecting these areas will help preserve the unique and rich quality of Norfolk's landscape and natural heritage, as well as contribute to the local economy. The Broads and the Norfolk Coast AONB have the highest status of protection in relation to landscape and scenic beauty (as stated in Planning Policy Statement 7: *Sustainable Development in Rural Areas* (PPS7)). Large mineral extraction and associated development and waste management facilities, within or close to the boundaries of the AONB or The Broads, can have a detrimental impact on the character, economic and social well-being of those areas, and will be acceptable only in exceptional circumstances.

7.35 A landscape unit is a geographically distinct portion of an area that has a particular visual character. Some parts of Norfolk have undergone marked changes that have been inconsistent with the local landscape character and the importance of the local landscape obviously varies; for example, the character of parts of the Wensum and Nar valleys have been changed by extensive mineral extraction and the creation of lakes.

7.36 Outside the nationally designated areas, Norfolk contains diverse landscapes and townscape which reflect the local variation in physical factors such as geology, soils, building materials, relief and climate, together with other factors such as local land tenure and settlement patterns. These factors give many areas, of both the countryside and the built environment, a distinctive character and contribute to a strong sense of place.

7.37 To help development proposals reflect the distinctive character, the landscape of Norfolk has been described, at a detailed level, in a series of landscape character assessments covering the seven district council areas together with the Broads Authority executive area. These assessments have drawn upon the draft Norfolk Historic Landscape Characterisation, and their purpose is not only to ensure that change and development does not undermine whatever is characteristic or valued about a particular place, but also to consider ways of improving local landscape character.

7.38 The impact of most waste management facilities on the landscape and townscape is not likely to be significantly different to other industrial proposals. By contrast, the nature of landfill and of mineral extraction is that they will almost inevitably have to take place within the open countryside, beyond the existing and planned limits of built-up settlements. The effects of mineral extraction and associated development and waste management facilities on the land therefore normally need to be mitigated, and whilst their operations are temporary, they can have a long term effect on the landscape. As mineral working can only take place where mineral exists, this further reinforces the need to protect the key characteristics of non-designated landscapes to help preserve the unique and rich quality of Norfolk's natural heritage.

7.39 The quality of the built environment and the presence of historic assets contribute to the appeal of Norfolk and as such these assets – including Conservation Areas and listed buildings – should be preserved and enhanced and new development within such areas should be of high quality design that complements the area. The desirability of preserving or enhancing Conservation Areas is therefore to be a material consideration in the handling of development proposals which are outside Conservation Areas but would affect their setting, or views into or out of Conservation Areas.

7.40 Mineral extraction and associated development and waste management facilities proposed within Conservation Areas, or where such development would affect the view or setting of a Conservation Area and/or listed buildings, will be subject to the relevant policies on Conservation Areas and listed buildings in the district councils' Local Plans or LDFs.

7.41 No statutory controls follow from the inclusion of a site in English Heritage's Register of Parks and Gardens of Special Historic Interest. They are, however, an integral part of Norfolk's cultural heritage, local landscape and green infrastructure network. They are also a key component of the tourism industry and provide an important habitat for local biodiversity. As such, these sites are considered to be essential local assets that must be protected from damaging development. In 2008 Norfolk had 52 Historic Parks and Gardens, a large number compared to other counties in the region. Historic Parks and Gardens are an important visitor attraction within the county, with Sandringham, Felbrigg, Oxburgh, Blickling and Holkham Halls amongst the best-known.

Development Management Policy DM8 – Design, local landscape and townscape character

Development will be permitted if it will not harm the conservation of, or prevent the enhancement of, key characteristics of its surroundings with regard to the character of the landscape and townscape, including consideration of its historic character and settlement pattern, taking into account any appropriate mitigation measures.

In line with PPS1, new development, including ancillary landscaping and car parking areas, must promote good design which is compatible with the existing or planned built form of the local area and the surrounding landscape.

Applicants will be expected to show how their proposals will address impacts on landscape and townscape. This would normally be undertaken through a study and evaluation of local landscape and townscape character and an assessment of how the proposal will impact on it, with reference to any relevant landscape character assessment or design guide. Alternatively it could be carried out through a local assessment using a suitable methodology, appropriate to the scale of the development proposed. In particular the potential individual and cumulative effects on the following issues must be addressed:

- landscape and townscape character, e.g. visual intrusion, the layout and scale of buildings and designated spaces, the built fabric, public access; and
- landscape and townscape sensitivity and capacity, e.g. local distinctiveness, condition, historic patterns of development, semi-natural habitats, remoteness and tranquillity, and noise and light pollution.

Development will only be permitted where it would be within, or could affect the setting of, nationally or locally registered Historic Parks or Gardens, registered battlefields, conservation areas, listed buildings or the North Norfolk Heritage Coast, where the applicant can demonstrate that the development would not adversely impact on the historic form, character and/or setting of these locations, taking into account any mitigation measures.

Scheduled monuments and archaeological sites

7.42 Planning applications in areas with high potential for archaeological interest, such as sites larger than one hectare and smaller sites adjacent to areas of known archaeological interest, must be accompanied by an archaeological assessment. Norfolk County Council's Historic Environment Service will provide advice on the archaeological potential of proposed development sites.

7.43 Norfolk has a particularly rich archaeological heritage, with more than 50,000 known archaeological sites spanning half a million years of human activity. The county's wide variety of monuments and artefacts ranges from prehistoric burial mounds and flint tools to twentieth-century industrial buildings and World War II defensive structures. In 2008 Norfolk contained 438 Scheduled Monuments, and many more non-scheduled sites.

7.44 The County Planning Authority will avoid allocating sites for mineral extraction and associated development and waste management facilities that would adversely impact on known archaeological sites. Prospective developers

are advised to familiarise themselves with PPS5: *Planning for the Historic Environment* and consult with planning officers and Norfolk Historic Environment Service before planning permission is applied for, so that issues relating to the historic environment may be addressed at the pre-application stage.

7.45 It may be necessary to carry out archaeological investigations, including excavations and recording, prior to development on certain sites and in cases of sites of known archaeological interest or potential, the results of a field evaluation will be required to be submitted with planning applications. The costs of any investigations must be met by the applicant. This, together with the scheme of archaeological excavation, recording and publication, may be arranged and achieved through a legal (S106) agreement. Where recording is not a formal requirement, but there is archaeological potential, a planning condition may be imposed to ensure an appropriate programme of archaeological work is undertaken.

7.46 Where the physical preservation of archaeological features *in situ* is not considered to be justified, the County Planning Authority will need to be satisfied that the operator has made proper provision for the excavation, recording, publication and archiving of the remains. Archaeological excavation and recording should be undertaken before development starts, in accordance with a scheme agreed with the County Planning Authority in consultation with the Council's archaeological advisers, the Norfolk Historic Environment Service.

Development Management Policy DM9 – Archaeological sites

Applicants whose proposals could potentially affect heritage assets, or which are in areas with high potential for archaeological interest, will be required to prepare and submit an appropriate desk-based assessment and, where necessary, a field evaluation with their application to the County Council.

Development will only be permitted where it would not adversely affect the significance of heritage assets (and their settings) of national and/or regional importance, whether scheduled or not. Where proposals for mineral extraction or waste management facilities would affect Scheduled Monuments and/or other assets of national and/or regional importance (including their settings), there will be a presumption in favour of their preservation *in situ*.

Following the results of a site evaluation, development which would potentially affect other heritage assets (not of national or regional importance) could be acceptable if subject to appropriate mitigation measures – such as physical preservation of the archaeology *in situ*, or preservation by record (including appropriate publication and archiving).

Transport

7.47 An assessment of the impacts of the transporting of minerals and associated products to and from quarries, and the movement of waste is a key consideration in determining the acceptability of development proposals.

7.48 The requirement for transport-related assessments will depend on the scale, nature and impact of the development proposed. The first step in producing a Transport Assessment/ or Statement is to agree the scope of the document with the Highway Authority. If a trunk road is likely to be affected by the proposed development, the Highways Agency will also need to agree the scope of the

Transport Assessment/ or Statement. Whilst some planning applications (e.g. a new site office) may have few transport implications, other seemingly minor applications (e.g. a new aggregate bagging plant) may be more significant. Decisions on whether a Transport Assessment/ or Statement is required can therefore only be made on a case-by-case basis.

7.49 A Transport Statement will be required if the impacts of a development are thought to be relatively minor. A Transport Assessment, defined as “an assessment of the effects upon the surrounding area by traffic as a result of a development, such as increased traffic flows, that may require highway and/or safety improvements”, will be required if there are significant highway issues, or if the size of the development and the amount of traffic generated warrants it. Further guidance is included in the County Council’s *Aims and Guidance Notes for Local Highway Authority requirements in Development Management* (December 2010) document and Department for Communities and Local Government/Department for Transport document *Guidance on Transport Assessment* (March 2007).

7.50 Road improvements by, or on behalf of a developer, may be required to mitigate any potential adverse transport impacts. Any improvements must be in accordance with the standard for HGV routes in Norfolk County Council’s latest guidance on the Route Hierarchy. In cases where a highways improvement scheme has been identified by the County Highway Authority or the Highways Agency, developers will be required to make an appropriate financial contribution to the scheme.

7.51 Where a development could introduce environmental and highway impacts from increased traffic over more than one alternative highway route, a proposal could be made acceptable if the most suitable route (in highways and amenity terms) could be agreed and adopted by the site operator. When determining planning applications for minerals and waste development, section 106 Agreements will therefore be used to secure acceptable routing of HGVs when a routing agreement is necessary.

7.52 Notwithstanding any routing agreements, it is accepted that, in order to allow local deliveries of material, a certain (small) proportion of HGV trips from a minerals or waste site may need to use routes and roads otherwise unacceptable. Although each case will need to be assessed on its merits, the limit for local deliveries will normally be a 5-mile radius.

7.53 Requiring a formal Travel Plan for the majority of minerals and waste sites, many of which will be located in rural areas poorly served by public transport, would be inappropriate. However, sites located within, or adjacent to, settlements may offer more realistic alternatives for non-car transportation to the site. For such sites, a Travel Plan may therefore be desirable. Any requirements for Travel Plans will need to be assessed and then prepared in accordance with the County Council’s latest guidance on the submission of Travel Plans.

Development Management Policy DM10 – Transport

Planning applications for new minerals and/or waste sites, or proposals that generate an increase in traffic movements or traffic impact, must be accompanied by a Transport Statement that demonstrates:

- Suitable highway access and egress in accordance with published highway design guidance;
- A suitable route to the nearest major road (trunk road or principal road or main distributor road), which may need to be incorporated in a formal Routing Agreement;
- Consideration of other road users, including cyclists, horse riders and pedestrians;
- Consideration of sustainable drainage and pollution control measures; and
- Measures to reduce car travel to the site by workers and visitors and encourage walking, cycling and use of public transport.

In addition:

- If, in the opinion of the Highway Authority and/or Highways Agency, development raises significant transport issues, particularly if highway improvements are required, a more detailed Transport Assessment will be necessary. Appropriate details will be required of any highway improvements necessary to mitigate the transport impacts of the development.
- If appropriate, formal measures to promote travel-reduction measures will be secured by a Traffic Management Plan and/or Travel Plan.

Sustainable construction and operations

7.54 Various PPSs (such as the PPS1 supplement on climate change) and other guidance documents support local authorities to promote resource-efficient and energy-efficient buildings, community heating schemes, the use of combined heat and power, small scale renewable and low carbon energy schemes in developments, the sustainable use of water resources and the use of sustainable drainage systems (SuDS) in the management of run-off.

7.55 Although secondary and recycled aggregates are used in Norfolk and help to reduce the demand for primary extraction, there is strong potential for increasing the proportion of minerals supply met by secondary and recycled aggregates.

7.56 The East of England is the driest region in England and water resource availability is limited. As such, water is likely to become increasingly scarce as a result of significant growth pressures coupled to climate change. Water resources and the provision of water abstraction are likely to be significant constraints on development and, as such, the County Council will, where justifiable, require water conservation measures for new development.

7.57 The number of mineral workings and waste management facilities that use robust and auditable Environmental Management Systems, such as ISO 14001,

is low, and this could mean that the highest standards of environmental performance and protection are not being achieved in Norfolk. Environmental Management Systems are a sound way for industry to ensure that the environmental impacts of their processes are considered, minimised as much as possible and subject to year-on-year improvements.

7.58 Mineral extraction and associated development, and waste management facilities can have serious implications for greenhouse gas emissions. The processes involved are almost always energy intensive, and the combustion of fossil fuels to produce this energy leads to CO₂ emissions. Some waste disposal operations, such as landfill, produce significant amounts of methane, which has, molecule for molecule, the highest global warming potential of all major greenhouse gases.

7.59 Reducing the amount of waste landfilled as a result of demolition and construction activities is also a key aim. The Waste & Resources Action Programme's (WRAP) initiative called *The Construction Commitments: Halving Waste to Landfill*, which was launched in 2008, encourages the construction industry to commit to halve the amount of construction waste sent to landfill by 2012, and is strongly supported by the County Council.

Development Management Policy DM11 – Sustainable construction and operations

Sustainable development will be promoted by requiring proposals for mineral extraction and associated development and waste management facilities to demonstrate consideration of:

- Design standards: good design and layout including the BREEAM “Very Good” or “Excellent” standard (or similar where no BREEAM standard exists) in the design of new buildings or plant;
- Sustainable materials: the use of recycled and secondary materials (including aggregates) in the construction of the facility and associated transport infrastructure should be maximised; and
- Water efficient design, including water recycling and sustainable drainage measures.

Operators will be encouraged to adopt an environmental management system (EMS), such as ISO 14001, to minimise the environmental impacts from operations.

Evidence as to how the sustainable demolition, construction and operation of a proposal will be implemented must accompany the planning application. Applicants shall provide information appropriate to the planning application on the following matters:

- a. the type and volume of waste that the development will generate (both through the construction and operational phases);
- b. on-site waste recycling facilities to be provided (both through the construction and operational phases);
- c. the steps to be taken to minimise the use of raw materials (including hazardous materials) in the construction phase through sustainable design and the use of recycled or reprocessed materials;
- d. the steps to be taken to reduce, reuse and recycle waste (including hazardous wastes)

- e. If waste generated during construction is to be disposed of elsewhere, the distance it will be transported and the method of transportation; and
- f. The steps to be taken to ensure the maximum diversion of waste from landfill (through recycling, composting and recovery) once the development is operational.

The use of Site Waste Management Plans for development proposals below the legal threshold of £300,000 is encouraged, as is the usage of the SMARTWaste project tool. Any measures required will be secured through planning conditions and/or planning obligations.

Amenity

7.60 In accordance with the objectives of MPS1, appropriate measures to minimise effects of noise, dust, and light pollution at minerals sites should be addressed. This may include further opportunities to use “white noise” reversing alarms, conveyor transport as an alternative to dump trucks, dust suppression measures (including Dust Action Plans where appropriate), and speed restrictions. Similar concerns can apply to waste management activities, with odour, bird flocks, pests, litter, noise, dust and light pollution common concerns. In addition, any potential impact on health can be a material consideration where emissions to air would occur.

7.61 Many localised and specific impacts associated with mineral extraction and associated development and waste management facilities can be contained to an acceptable level provided that mitigation measures comprising appropriate design, controls and safeguards are incorporated - MPS2 has guidance. In implementing the above policy, proposals will need to be accompanied by information identifying and addressing the impacts that may arise. Developers should contact the County Planning Authority at an early stage in project design to determine the scope of any assessments that may be required.

Development Management Policy DM12 – Amenity

The protection of amenity for people in close proximity to potential minerals extraction and associated developments and waste management facilities will be a key consideration. Where appropriate, buffer zones, advanced planting and/or screening and other mitigation measures, such as restriction on hours of working and dust suppression measures, will be required.

Development will be permitted only where it can be demonstrated that the scale, siting and design of a proposal is appropriate and that unacceptable impact to local amenity will not arise from the construction and/or operation of a facility.

Air quality

7.62 The National Air Quality Strategy requires the concentration of certain key pollutants (such as fine particulates (PM₁₀) and oxides of nitrogen (NO_x)) to be limited to a safe standard for human health. Norfolk County Council therefore has

a statutory obligation to ensure air quality is maintained at an acceptable level for human health.

7.63 A priority within Norfolk's Sustainable Community Strategy is the promotion of vibrant communities. It is recognised that human health is an integral component of community vibrancy, therefore to deliver the Sustainable Community Strategy it is important for the Core Strategy to protect health, especially where there is a known problem, such as in Air Quality Management Areas (AQMA's).

7.64 In 2010 Norfolk had six AQMA's. Five of the AQMA's have been declared due to nitrogen dioxide (NO₂), caused principally by road traffic; three of these AQMA's are located in Norwich and two are in King's Lynn. One AQMA has been declared near East Wretham due to elevated levels of particulate matter (PM₁₀); investigation by Breckland District Council has demonstrated that the most likely cause of this is wind-blown soil.

Development Management Policy DM13 – Air quality

Applicants for planning permission will be required to submit information to demonstrate that proposals effectively minimise harmful emissions to air and would not impact negatively on existing Air Quality Management Areas, nor lead to the declaration of a new AQMA. Development will be permitted if adequate measures can be agreed through planning conditions to mitigate potentially harmful air quality impacts to human health.

Planning permission will only be granted in areas nearing AQMA threshold limits if an Air Quality Impact Assessment shows that the development in question and its associated activities would not increase air pollution to unacceptable levels, as defined in the National Air Quality Strategy.

Progressive working and restoration

7.65 Proposals for new mineral working areas can be extensive, reflecting the industry's need to be able to plan a number of years in advance. It is normal practice to work medium and larger sites in phases and to progressively restore each phase. Progressive working and restoration can lessen the overall impact of mineral working on the environment and minimise loss of agricultural production. The direction of working can be particularly relevant to the impact on residential and local amenity, and working arrangements that significantly impact on a restored phase or prevent restoration of a worked-out phase should be avoided.

7.66 Suitable restoration and after-use must therefore be considered for minerals sites, and for waste facilities of a temporary nature. Once a phase of operation is complete, or use of a whole site has ceased, there are often different opportunities for restoration and after-use of sites. Norfolk's Sustainable Community Strategy aims to improve biodiversity and enhance local landscape character in the county and this will be emphasised in the consideration of restoration and after-use plans.

7.67 Where possible, restoration should be focused on providing multiple benefits of landscape, geodiversity and biodiversity enhancement through restoration with public amenity value. However, it may be decided that a site, wholly or partly, would be better suited to being restored to agriculture, to leisure and recreational development, or to water storage, which could provide benefits for flood alleviation or water supply.

7.68 Planning obligations and/or conditions will be used to ensure that progressive restoration and commencement of after-use takes place within an appropriate time-frame during the site's operations or after completion of working phases. Any site restored to "public amenity" must provide appropriate access to the general public. Planning conditions and/or obligations may be used to determine the required duration of aftercare of restored sites and an agreement for management of such sites in the long term, where appropriate.

7.69 Upon cessation of working and restoration of a minerals or waste site, the removal of some local road improvements may be required to meet the provisions outlined in Policy DM14. This will mainly relate to the lower designated, rural routes in the route hierarchy, securing for example the removal of kerbed site accesses and visibility splays, in the interests of landscape and local amenity.

Development Management Policy DM14 – Progressive working, restoration and after-use

Proposals for new mineral workings must be accompanied by a scheme for the phased and progressive working and restoration of the site throughout its life.

Restoration and after-use of mineral extraction sites and associated development, and temporary waste management facilities, will be determined on a case-by-case basis, prioritising the most appropriate after-use(s) for each site. This will include consideration of restoration to enhance biodiversity, geodiversity and landscape; support for green infrastructure; potential to restore and/or improve agricultural soil quality, and to facilitate leisure and recreational development (including footpaths).

Preference will be given to after-uses and restoration that support the aims of Norfolk's Sustainable Community Strategy, with particular emphasis on:

- Enhancement to the Norfolk Ecological Network; and
- The creation of new, high-quality, distinctive landscapes.

The after-use and restoration proposal must demonstrate that:

- The appropriate restoration and after-use is both feasible and achievable in the proposed time scales.
- Due consideration has been given to opportunities to improve public access, particularly to implement the County Council's Rights of Way Improvement Plan.
- Due consideration has been given to supporting the aims of the Green Infrastructure Strategy.
- Any important geology or geomorphology on the site will be retained in sample exposures for study purposes.

Cumulative impacts

7.70 Minerals and waste development can, by virtue of the nature and scale of their operations, generate significant environmental and amenity impacts. In particular, noise, dust, HGV movements, air quality, landscape and ecology impacts can all raise concerns.

7.71 It is therefore important to ensure that, where there are a number of potential sites close together, and/or new sites close to existing operations, the potential cumulative impacts are considered fully. Unacceptable cumulative impacts could lead to the requirement to phase developments, and/or impose additional controls over the routing of HGVs.

Development Management Policy DM15 – Cumulative impacts

Where a proposed mineral extraction site, or waste management facility, is considered acceptable (in its own right) but the cumulative impact of a proposal in conjunction with other existing, permitted or allocated minerals extraction sites and/or waste management facilities, in the proximity is considered unacceptable, the proposal may be considered acceptable if phased so that one site follows the completion of the other or it can be demonstrated that the adverse cumulative impacts can be adequately mitigated.

Planning applications must therefore be supported by information demonstrating how proposals relate to other development nearby and details of how any cumulative effects are proposed to be mitigated satisfactorily.

Agricultural land

7.72 Norfolk is predominately rural in nature and agriculture plays a significant role in the local economy and heritage. Continuing to preserve good quality agricultural land is important as it will benefit the economy as well as Norfolk's landscape. Agricultural land is divided into five grades (grade 1 being the highest quality land) with grade 3 subdivided into two subgrades, 3a and 3b.

7.73 Planning Policy Statement 7: *Sustainable Development in Rural Areas* (PPS7) refers to the protection of best and most versatile agricultural land (BMV, Grades 1, 2 and 3a) from irreversible development. However, minerals development is, in almost all cases, a temporary use of land, followed by restoration. It is therefore normally possible to remove and store topsoils and subsoils during an operational phase, and then to replace them afterwards to bring a site back into agricultural use, if desired. PPS7 (paragraph 28) also makes clear that, when determining planning applications, the presence of BMV agricultural land should be considered alongside other sustainability considerations (biodiversity, landscape etc).

7.74 Grade 1 soils are a vital national resource and Norfolk contains some significant areas of Grade 1 land, particularly in the peaty soils of the Fenland area and the Broads. Grade 2 soils are distributed more widely across the county, albeit in smaller patches, but Grade 3 soils make up the majority of Norfolk's

agricultural land, with smaller areas of Grade 4 (“poor quality”) land, located mainly in the drier and more free-draining Brecks.

7.75 Given their nature, most waste management facilities will tend to be suitably located on previously developed land and industrial locations and it is not expected that there will be a great need to locate such uses on agricultural land. However, some waste developments, particularly composting, may be more appropriate on agricultural land as opposed to in industrial areas. Where a waste management facility is proposed on BMV agricultural land, policy DM16 will still apply.

Development Management Policy DM16 – Soils

Where development is proposed on agricultural land, the County Council has a clear preference for locating new mineral extraction and associated activities, and composting facilities, on land of agricultural grades 3b, 4 and 5.

Development proposals affecting Grade 1 agricultural land will only be permitted in exceptional circumstances, where it is demonstrated that there are no alternative locations for the development.

In addition to the above, when minerals development, particularly extraction, is proposed on agricultural land of grades 1, 2 or 3a it will only be permitted where:

- Provision is made for high standards of soil management that would enable restoration to a condition at least as good as its previous agricultural quality. To demonstrate this, the County Planning Authority will expect soil and land quality surveys and soil handling and replacement strategies to be submitted (the latter based upon Defra’s ‘Good Practice Guide for Handling Soils’); or
- The benefit of restoring the land to another after-use can be shown to outweigh the loss of the agricultural use of the land.

8 MONITORING AND IMPLEMENTATION

8.1 The implementation of the Norfolk Minerals and Waste Development Plan Documents must be monitored and reported in order to continue to appraise progress against objectives and indicators. This is a key aspect of the new planning system and is important for the successful delivery of the Spatial Vision and the aims of the Core Strategy.

8.2 By identifying appropriate indicators, the effectiveness of policies and implementation mechanisms can be monitored. This will be carried out through the Annual Monitoring Reports (AMRs), which are compiled in December each year, the production of which is required by the Planning and Compulsory Purchase Act 2004. If, as a result of monitoring, it is concluded that policies in the Core Strategy are not working as intended, a review may be required.

8.3 The AMR will describe any changes to the indicators arising from the implementation of the Minerals and Waste Development Plan Documents, and how the County Council will work to mitigate any adverse effects identified, improve performance, and manage any identified risks. The monitoring process will incorporate the following:

- Geographic Information Systems (GIS);
- Comparison of the current state against baseline indicators;
- Analysis of changes to indicators (positive or negative); and
- Analysis of performance against objectives.

8.4 Table 8 describes the monitoring and implementation regime. It describes which indicators will be reviewed and when this information will be collected. The indicators have been chosen with a view to providing a consistent basis for monitoring the performance of the Core Strategy and Development Management policies against the aims and objectives.

Delivery through Flexibility

8.5 The minimum need for mineral extraction and associated development and waste management facilities will be provided in accordance with the policies in this Core Strategy.

8.6 The Core Strategy recognises the need for flexibility for minor waste facilities, such as small waste transfer stations, and minor mineral operations that can be subject to changing market forces and operations required to meet local needs. These 'minor development' proposals (as identified in Appendix B) will need to satisfy the policies of the Core Strategy, although they will not need to be specifically allocated in the Minerals Site Specific Allocations DPD and the Waste Site Specific Allocations DPD.

8.7 To plan the required infrastructure for sewage and sludge treatment facilities, the waste water management companies are reliant on the outcomes of the district and borough councils' Local Development Frameworks (LDFs) for the location and scale of allocated growth. The LDFs will include detailed Growth Infrastructure Studies and Integrated Water Cycle Strategies that identify

infrastructure needs. As specific locations for growth have yet to be confirmed, a flexible policy is required to ensure that sufficient sewage and sludge infrastructure requirements can be implemented at a later date.

Delivery through Review

8.8 Circumstances may change during the lifetime of the LDF. The monitoring indicators outlined in Table 8 will be reviewed annually in the Annual Monitoring Report to ensure a constant review of policy and site delivery. A full review of the Minerals Site Specific Allocations DPD and Waste Site Specific Allocations DPD will be undertaken five years after adoption of these documents, to reflect market changes and ensure an adequate landbank exists in the county.

Table 8: Monitoring and Implementation Regime

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
Ensure steady and adequate provision of primary, and increasingly recycled and secondary, minerals to meet requirements	CS1 – Minerals extraction	Landbank for sand and gravel, carstone and silica sand Annual production of sand and gravel, carstone and silica sand (tonnes)	Norfolk County Council	Site specific allocations decisions as part of M&WLDF (CS4 and CS5) Development management decisions as part of the M&WDF	Adoption of Allocations DPD On-going throughout time period of Strategy
	CS16 - Safeguarding Minerals and waste Sites and mineral resources	Number of non-minerals and waste planning applications granted by local planning authorities within safeguarded areas unless they would fall within the exclusions set out in Appendix C	Norfolk County Council	Mapping safeguarded and mineral safeguarded areas in M&WLDF	Adoption of Proposals Map
			All Local Planning Authorities	Consultation process on planning applications within the safeguarded areas	On-going throughout time period of Strategy
	CS17 – Use of secondary and Recycled Aggregates	Number of district council local development frameworks containing a policy in accordance with Core Strategy Policy CS17	Norfolk County Council All Local Planning Authorities	District councils' LDFs and procurement practice Norfolk County Council's procurement practice	On adoption of relevant LDFs On-going through procurement practice
Increase the proportion of waste recycling, composting and energy recovery	CS4- New waste management capacity to be provided	New waste management capacity	All Local Planning Authorities	Education and promotion of waste minimisation, recycling and recovery.	On-going throughout time period of Strategy
	CS7 – Recycling, composting, anaerobic digestion and waste	% of municipal waste: ▪ recycled ▪ composted	Norfolk County Council	District Councils through planning obligations	

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
	transfer stations	▪ energy recovery	Waste management companies	Development management decisions as part of M&WLDF	
	CS8 – Residual waste treatment facilities	% of waste received at waste management facilities in Norfolk that is recycled/recovered			
	CS9 - Inert waste landfill	Renewable energy generation capacity at waste management facilities (MW)			
	CS10 – Non-hazardous and hazardous waste landfill				
	CS13 – Climate change and renewable energy generation	Quantity of recycled and secondary aggregate produced in Norfolk			
	CS17 – Use of secondary and recycled Aggregates				
	DM11 – Sustainable Construction and Operations				
Minimise the amount of waste sent to landfill	CS4 – new waste management capacity to be provided	% of municipal waste landfilled	Norfolk County Council	Education and promotion of waste minimisation, recycling and recovery	On-going throughout time period of Strategy
	CS7 – Recycling, composting, anaerobic digestion and waste transfer stations	Waste input to non-hazardous landfill (tonnes)	Waste collection authorities	Development management decisions as part of M&WLDF	
	CS8 – Residual waste treatment facilities	Waste input to hazardous landfill (tonnes)	Waste management companies	Monitoring and enforcement	
		Waste input to inert landfill			

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
	CS9 – inert waste landfill	(tonnes) Inert, non-hazardous and hazardous landfill capacity (cubic metres and years)	Environment Agency		
	CS10 – Non-hazardous and hazardous waste landfill	Quantity of London waste disposed of in Norfolk (tonnes)			
Ensure mineral extraction and associated development and waste management facilities takes place as close as reasonably possible to where these resources are used, and that waste is treated as close as reasonably possible to where it is generated	CS2 – General locations for mineral extraction and associated activities	Location of allocation sites and distance from main settlements and markets towns. Distance of mineral extraction and associated development and waste management facilities from main settlements and market towns for which planning permission is granted	Norfolk County Council Landowners and mineral and waste developers	Site specific allocations decisions as part of M&WLDF Encouragement of landowners/ developers to submit sites in preferred areas of the county	Adoption of Allocations DPD
	CS5 – General location of waste management facilities			Development management decisions as part of M&WLDF	On-going throughout time period of Strategy
	CS9 – Inert waste landfill				
	CS10 – Non-hazardous and hazardous waste landfill				

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
Increase the use and availability of sustainable transport in accessing waste and/or minerals facilities	CS15 – Transport	Number of minerals and waste planning applications approved to utilise transport methods via road/rail/or water	Norfolk County Council	Site specific allocations decisions as part of M&WLDF	Adoption of allocations DPD
	DM10 –Transport		Network Rail Broads Authority Highways Agency Other relevant transport authorities	Development management decisions as part of M&WLDF Monitoring and enforcement Gain support of non-road transport modes from relevant authorities	On-going throughout time period of Strategy
Mitigate the adverse traffic impacts of mineral extraction and associated development and	CS15 - Transport	Number of reported accidents involving HGVs	Norfolk County Council	Development management decisions as part of M&WLDF	Adoption of Allocations DPD
		Number of mineral and/or waste planning	Highways Agency	Site specific allocations decisions as part of M&WLDF	On-going throughout time

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
waste management facilities	DM10 - Transport	applications granted that include direct access to corridors of movement and/or involve highway infrastructure upgrades/improvements. Number of substantiated complaints concerning lorry traffic		Monitoring and enforcement Cooperation and support of Highways Agency in its development management decisions	period of Strategy
Minimise the impact of mineral extraction and associated development and waste management facilities on the environment by promoting innovative opportunities to enhance and protect biodiversity, landscape and geodiversity, water supply, the wider countryside, and cultural heritage	DM1 – Nature conservation	Number of minerals and waste sites within 5km of a: - SAC - SPA - Ramsar site Number of minerals and waste sites within 2km of: - a SSSI - a National Nature Reserve Number of minerals and waste sites adjacent to: - a Local Nature Reserve - County Wildlife Site - RIGS. Number of minerals and	Norfolk County Council Environment Agency	Site specific allocations decisions as part of M&WLDF Development management decisions as part of M&WLDF	Adoption of Allocations DPDs On-going throughout time period of Strategy
	CS14 – Environmental protection				

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time Scale
		waste sites within the AONB Number of minerals and waste sites within the Heritage Coast area Number of minerals and waste sites within the Broads Authority Area			
	DM2 – Core river valleys	Number of minerals and waste sites within a core river valley		Development management decisions as part of M&WLDF	On-going throughout time period of Strategy
	DM* - Design, local landscape and townscape character	Number of minerals and waste planning applications refused on grounds of design or landscape Number of minerals and waste sites in or adjacent to a historic park or garden Number of minerals and waste sites within or adjacent to Conservation Areas Number of minerals and waste sites adjacent to		Development management decisions as part of M&WLDF Monitoring and enforcement	

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
		listed buildings			
	DM9 – Archaeological sites	Number of archaeological sites adversely affected by mineral extraction and associated development or waste management facilities		Development management decisions as part of M&WLDF	
	DM14 – Progressive working, restoration and after-use	Area of BAP habitat lost to or created by minerals extraction and associated development and waste management facilities % of minerals workings covered by progressive restoration schemes		Development management decisions as part of M&WLDF Monitoring and enforcement	
	DM11 – Sustainable construction and operations	Number of applications demonstrating a good standard of design, use of sustainable materials and water efficient design			
Minimise soil and water contamination and flood risk arising from minerals and waste activities	CS14– Environmental protection	Number of minerals and waste sites within Groundwater Source Protection Zone 1	Norfolk County Council Minerals and waste	Site specific allocations decisions as part of M&WLDF	Adoption of Allocations DPDs.

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
	DM3 – Groundwater and Surface Water	Groundwater and surface water quality	management companies Environment Agency	Development management decisions as part of M&WLDF	On-going throughout time period of Strategy
	DM4 - Flood Risk	Number of minerals and waste planning permissions granted contrary to the advice of the Environment Agency on flood risk grounds	Norfolk County Council	Site specific allocations decisions as part of M&WLDF	Adoption of Allocations DPDs
	CS13 – Climate change and renewable energy generation		Environment Agency	Development management decisions as part of M&WLDF Advice from Environment Agency	On-going throughout time period of Strategy
Reduce methane and carbon dioxide emissions from mineral extraction and associated development and waste management facilities Contribute to the renewables obligation and regional targets for renewable energy by	CS13 – Climate change and renewable energy generation	% of methane Emissions from landfill sites escaping into the atmosphere	Norfolk County Council	Development management decisions as part of M&WLDF	On-going throughout time period of Strategy
	CS8 – Residual waste treatment facilities	Percentage of methane Emissions from landfill sites used in power generation	Environment Agency	Monitoring and enforcement	
	DM11 - Sustainable construction and operations	Renewable energy generation capacity at waste management facilities (MW)	Waste management companies Minerals operators		

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale	
increasing the proportion of energy recovery from waste		Quantity of waste managed through processes generating renewable energy Number of minerals and waste operations securing at least 10% of their energy on site from renewable or low-carbon sources				
Ensure that minerals and waste facilities and transportation do not lead to AQMAs and that emissions are reduced.	CS15 – Transport	Number of minerals and waste sites within an AQMA	Norfolk County Council	Site specific allocations decisions as part of M&WLDF	On-going throughout time period of Strategy	
	DM13 – Air quality	Number of AQMAs within Norfolk	Environmental Health	Development management decisions as part of M&WLDF		
Mitigate adverse impacts on amenity resulting from mineral extraction and associated development and waste management facilities	CS14 – Environmental protection	Number of substantiated complaints about amenity impacts from minerals and waste	Norfolk County Council	Site specific allocations decisions as part of M&WLDF	Adoption of Allocations DPDs.	
	DM12 - Amenity		Environmental Health	Development management decisions as part of M&WLDF	On-going throughout time period of Strategy	
	DM10 - Transport					
	CS15 - Transport		Environment Agency	Monitoring and enforcement		
	DM8 – Design, local landscape and townscape character					
	DM15 – Cumulative impacts					

Objective	Policy	Indicator(s)	Agencies responsible	Implementation mechanism	Time-Scale
	CS7 – Recycling, composting, anaerobic digestion and waste transfer stations				
	CS12 – Whitlingham WWTW				
	CS11- Waste water / sewage infrastructure and treatment facilities				
	CS16 – Safeguarding minerals and waste Sites and mineral resources	Number of non-minerals and waste planning applications granted by local planning authorities within safeguarded areas	Norfolk County Council All Norfolk Local Planning Authorities	Consultation process on planning applications within the safeguarded areas Mapping safeguarded sites and mineral consultation areas in M&W LDF and in District Council LDFs	Adoption of proposals map

APPENDIX A: FORECAST WASTE QUANTITIES FOR NORFOLK

Annual tonnages of waste requiring management, based on forecast arisings figures for C&I and London waste in the evidence base for the proposed revision to the East of England Plan and Norfolk County Council's own MSW arisings forecasts

Table A.1

Year	MSW	C&I	London waste	Total waste
2009/10	395,412	1,000,000	116,000	1,511,412
2010/11	395,412	988,000	105,000	1,488,412
2011/12	395,412	983,000	94,000	1,472,412
2012/13	400,355	978,000	83,000	1,461,355
2013/14	405,359	976,000	73,000	1,454,359
2014/15	410,426	973,000	62,000	1,445,426
2015/16	415,556	970,000	51,000	1,436,556
2016/17	420,750	966,000	48,000	1,434,750
2017/18	426,009	962,000	45,000	1,433,009
2018/19	431,334	958,000	42,000	1,431,334
2019/20	436,726	954,000	40,000	1,430,726
2020/21	440,875	951,000	37,000	1,428,875
2021/22	445,063	949,000	34,000	1,428,063
2022/23	449,291	947,000	31,000	1,427,291
2023/24	453,559	945,000	28,000	1,426,559
2024/25	457,868	944,000	25,000	1,426,868
2025/26	462,218	943,000	22,000	1,427,218
2026/27	466,609	942,000	19,000	1,427,609
TOTAL	7,708,234	17,329,000	955,000	25,992,234

RECOVERY, RECYCLING AND LANDFILL REQUIREMENTS

Table A.2

Year	MSW & C&I recycling/ composting	MSW & C&I treatment capacity	MSW & C&I recovery	MSW & C&I & imported London waste to landfill	Remaining non-hazardous landfill capacity
2009/10	569,028	150,000	113,000	829,384	6,719,596
2010/11	584,028	150,000	106,000	798,384	5,921,212
2011/12	607,559	200,000	153,000	711,853	6,099,359
2012/13	626,866	200,000	151,000	683,489	5,415,870
2013/14	638,202	200,000	160,000	656,157	4,759,713
2014/15	658,567	368,859	293,087	493,772	4,265,941
2015/16	683,082	702,484	290,987	462,487	3,803,454
2016/17	693,558	693,192	301,154	440,038	3,363,416
2017/18	713,065	674,944	302,355	417,589	2,945,827
2018/19	730,993	658,341	306,873	393,468	2,552,359
2019/20	750,668	640,058	308,046	372,012	2,180,347
2020/21	770,726	621,147	308,718	349,131	1,831,216
2021/22	780,804	613,259	319,407	327,852	1,503,364
2022/23	800,902	595,389	321,111	305,278	1,198,086
2023/24	811,019	587,540	332,832	282,708	915,378
2024/25	831,156	570,712	335,570	260,142	655,236
2025/26	842,314	562,904	347,323	237,518	417,718
2026/27	862,492	546,117	350,094	215,023	202,695
TOTAL	12,955,029	8,734,946	4,800,557	8,236,285	

A.3 Recycling/compost assumptions

Norfolk's household waste recycling rate was 43.48% in 2009/10 and is planned to increase to 46.98% (a 2.5% increase) in 2011/12 when kitchen waste collection services (for composting/AD) are expected to be expanded by the district councils. The recycling/composting rate is expected to increase to 48% in 2015/16 and to increase to 50% in 2018/19. The recycling/composting rate is then assumed to remain at 50% for the rest of the Core Strategy period.

Recycling/composting/source-segregated-AD target for C&I starting at 40% in 2009/10 increasing up to 67% in 2026/27 in line with the calculations used for the review of the East of England Plan.

No recycling/composting of imported London waste is expected.

A.4 Treatment assumptions

In 2009/10 and 2010/11 no additional treatment of MSW will be expected as Norfolk will not have the facilities in place for additional treatment. From 2011/12 up to and including 2013/14, 50,000 tonnes of the MSW arisings that are not recycled/ composted/ source-segregated-AD are projected to be treated. From 2014/15 all MSW that has not been recycled/ composted /source-segregated-AD will be treated because the Landfill Directive requires waste to be pre-treated prior to landfill.

From 2009/10, up to and including 2014/15 150,000 tonnes of the C&I waste arisings that are not recycled/composted/source-segregated-AD will be treated. This is based on the minimum quantity of C&I waste that will need to be recovered based on the evidence for the revised East of England Plan. Prior to 2015/16 is considered too early for Norfolk to have the facilities to pre-treat all waste at central facilities, in addition to pre-treatment at the source of waste production. From 2015/16 all C&I waste that has not been recycled/composted/source-segregated-AD will be treated

No imported London waste will be treated.

A.5 Recovery assumptions

80% of the MSW treated will be recovered and diverted from landfill

The evidence for the revision to the East of England Plan included maximum quantities of C&I waste to be landfilled. Therefore all waste that is not recycled/composted/source-segregated-AD or landfilled will be recovered. 11% of waste will be recovered in 2009/10 increasing to 17% in 2025/26. The percentage of waste recovered does not increase significantly over the plan period because the main increase is in recycling/composting/source-segregated-AD.

No recovery of imported London waste is expected.

A.6 Landfill assumptions

All imported London waste is assumed to be landfilled. All MSW that is not recycled or recovered is landfilled. All C&I waste that is not recycled or recovered is landfilled.

Non-hazardous landfill capacity at 31/03/2009 is 8,482,000m³. 11% of non-hazardous landfill capacity will be taken up by inert waste, leaving 7,548,980m³ voidspace for non-hazardous waste. Norfolk County Council's Planning (Regulatory) Committee resolved to grant planning permission in October 2010, (subject to conditions and the signing of a section 106 legal agreement) for an extension to Attlebridge landfill site with 1,000,000 tonnes capacity. Therefore, taking into account 11% of the capacity potentially being taken up with inert waste, this provides 890,000 cubic metres additional capacity in 2011/2012. When the Attlebridge extension capacity is added to the existing landfill capacity (as at 31/03/2009) the total landfill capacity in Norfolk for non-hazardous waste is 8,438,980 tonnes/cubic metres.

APPENDIX B: NON-STRATEGIC DEVELOPMENT AND SEWAGE/SLUDGE FACILITIES

B.1 'Non-strategic development' means that the site for a proposed development does not need to be allocated in the relevant allocations document, but will be assessed as part of the development management process at the planning application stage.

B.2 An application for 'Non-strategic development' will demonstrate that the proposal meets the following criteria:

- Demonstrates a local need for the facility in the area without compromising the viability of large or medium sized development serving a wider area
- Located in close proximity to the local market it serves
- Meet the policies in this plan

B.3 The criteria for 'Non-strategic development' are as follows:-

Waste Management Facilities

The following waste management facilities with less than 10,000 tonnes per annum throughput capacity

- Household waste recycling centres
- Outdoor composting
- Inert recycling
- Inert landfill
- Thermal, physical, chemical or biological treatment, including transfer

Sewage and Sludge Facilities

Development for sewage and sludge treatment facilities as identified in the relevant Growth Infrastructure Studies and Integrated Water Cycle Strategies (that identify infrastructure needs for the area).

Minerals Extraction and Associated Development

Proposals for 'Other Minerals' including peat, clay and chalk will be permitted in accordance with the implementation provisions outlined in Chapter 5.

- Exploratory drilling and testing that is not covered by permitted development.
- Mineral extraction and associated developments that involve the processing of recycled and secondary aggregates, including ancillary facilities on existing mineral workings and waste disposal sites where the proposal:
 - would not substantially prolong the life of the mineral working or landfill operations; or
 - would not involve permanent built facilities;

Provided that the plant and ancillary development will be removed on cessation of associated workings and the import of materials for processing or sale will not prolong the life of the site operation or add to the environmental disturbance.

APPENDIX C: SAFEGUARDING CONSULTATION PROCEDURE

C.1 In accordance with Core Strategy Policy CS16 the district and borough councils are requested to consult the County Planning Authority on planning applications that may prejudice the future use of the Mineral Safeguarding Areas and the existing or proposed minerals and waste facilities shown on the Proposals Map. In order to minimise the number of consultations, it is proposed to restrict the type of developments requiring consultation to those with significant potential for affecting the future use of areas and sites referred to above.

C.2 The following developments will be excluded from the consultation process:-

1.	Infilling in towns and villages.
2.	Householder applications.
3.	Advertisement applications.
4.	Reserved matters applications.
5.	Applications for new or improved accesses.
6.	Applications for listed building consent.
7.	'Minor' extensions/alterations to existing uses/buildings.
8.	'Temporary' development (for up to five years).
9.	Agricultural buildings adjacent to existing farmsteads.
10.	'Minor' works such as fences and bus shelters.
11.	Amendments to current permissions.
12.	Extensions to existing settlements of no greater than 1 hectare

APPENDIX D: REPLACEMENT OF 'SAVED' LOCAL PLAN POLICIES

The following table sets out the policies in this Development Plan Document which are intended to supersede the existing saved Minerals Local Plan and Waste Local Plan policies.

Table D.1

Norfolk Minerals Local Plan 2004 Policy Reference	Equivalent policy or policies in the Core Strategy
MIN 1 Landscape	Policy not saved
MIN 2 Landscape	Replaced by Policies: CS14 – Environmental protection DM2 – Core river valleys, DM8 - Design, local landscape and townscape character.
MIN 3 Landscape	Replaced by Policy DM8 – Design, local landscape and townscape character.
MIN 4A Nature conservation	Replaced by Policies: CS2 – General locations for mineral extraction and associated facilities CS14 – Environmental Protection
MIN 4B Nature conservation	No policy being taken forward to avoid duplication of PPS9
MIN 5 Nature conservation	Replaced by Policies CS14 – Environmental protection DM1 – Nature conservation
MIN 6 Amenity	Replaced by Policies CS14 – Environmental protection DM12 – Amenity
MIN 7 Archaeology and history	Replaced by Policies CS14 – Environmental protection DM9 – Archaeological sites.
MIN 8 Archaeology and history	Replaced by Policies CS14 – Environmental protection DM9 – Archaeological sites
MIN 9 Traffic	Replaced by Policies CS15 – Transport, DM10 – Transport.
MIN 10 Water Resources	Replaced by Policies: CS14 – Environmental protection DM6 - Groundwater and surface water. DM4 – Flood risk
MIN 11 Agriculture	Replaced by Policies CS14 – Environmental protection DM16 - Soils

Norfolk Minerals Local Plan 2004 Policy Reference	Equivalent policy or policies in the Core Strategy
MIN 12 Over concentration	Replaced by Policy DM15 – Cumulative impacts
MIN 13 Record of the operator	No policy being taken forward because this is not a material planning consideration due to planning permission relating to the land and not the operator.
MIN 14 Aggregate landbank	Replaced by Policy CS1 – Minerals extraction.
MIN 15 Phasing	Replaced by Policy CS1 – Minerals extraction.
MIN 16 Silica sand landbank	Replaced by policy CS1 – Minerals extraction.
MIN 17 Investigation areas	Replaced by Policy CS16 – Safeguarding mineral and waste sites and mineral resources. Also replaced by the Mineral Site Allocations DPD.
MIN 18 Safeguarding mineral resources	Replaced by Policy CS16 - Safeguarding mineral and waste sites and mineral resources.
MIN 19A Recycled/secondary aggregate	Replaced by Policies CS6 – General waste management considerations. CS7 – Recycling, composting and waste transfer stations
MIN 19B Recycled/secondary aggregate	Replaced by Policy CS6 – General waste management considerations.
MIN 20 Marine dredged aggregates	No policy being taken forward because Norfolk County Council is not the planning authority for marine dredged aggregates.
MIN 21 Imported material	Policy not saved
MIN 22 Rail depots	Replaced by Policy CS16 – Safeguarding mineral and waste sites and mineral resources.
MIN 23 Alternative transport	Replaced by Policy CS15 – Transport
MIN 24 Industrial plant	No policy being taken forward. Planning applications for this type of operation will be assessed against all the relevant policies in the Strategy.
MIN 25 Borrow pits	Replaced by Policy DM5 – Borrow pits and agricultural or potable water reservoirs
MIN 26 Mineral exploration	No policy being taken forward. Exploratory testing is often permitted development. Where planning permission is required for this activity, planning applications will be assessed against the all the relevant policies in the Strategy.
MIN 27 Oil and gas	Policy not saved
MIN 28 Pentney area policy	Policy not saved
MIN 29 Blackborough End area policy	Policy not saved
MIN 30 Leziate area policy	Policy not saved
MIN 31 Bittering/ Bilney/ Beeston area policy	Policy not saved
MIN 32 Costessey area policy	Policy not saved
MIN 33 Planning applications	Policy not saved

Norfolk Minerals Local Plan 2004 Policy Reference	Equivalent policy or policies in the Core Strategy
MIN 34 Environmental Assessment	Policy not saved
MIN 35 Planning considerations	No specific policy being taken forward. Planning applications will be determined against the relevant policies within the Strategy, as well as national policies.
MIN 36 Planning control	Replaced by Policies CS14 – Environmental protection DM14 – Progressive working, restoration and after-use.
MIN 37 Restoration	Replaced by Policy DM14 – Progressive working, restoration and after-use.
MIN 38 Nature conservation restoration	Replaced by Policies: DM14 – progressive working, restoration and after-use. DM1 – Nature conservation CS14 –Environmental protection
MIN 39 Conditions	No policy being taken forward. Guidance is contained in Minerals Policy Statement 2 and Minerals Planning Guidance 2 on planning conditions.
MIN 40 Enforcement	No specific policy being taken forward, reliance being placed on Planning Policy Guidance 18.
MIN 41 Mineral damaged land	Policy not saved
MIN 42 Mineral review	Policy not saved
MIN 43 Interim development orders	Policy not saved
MIN 44 Implementation	Policy not saved

Norfolk Waste Local Plan 2000 Policy Reference	Equivalent policy or policies in the Core Strategy
WAS 1 Hierarchy framework	Replaced by Policies: CS8 – Residual waste treatment facilities CS10 – Non-hazardous and hazardous landfill CS13 – Climate change and renewable energy generation
WAS 2 Resource recovery	Replaced by Policies: CS8 – Residual waste treatment facilities CS13 – Climate change and renewable energy generation
WAS 3 Industrial Land and brownfield sites	Replaced by Policy CS6 – General waste management considerations
WAS 4 Countryside protection	Replaced by Policies: CS6 – General waste management considerations CS14 – Environmental protection DM8 – Design, local landscape and townscape character
WAS 5 Incineration	Replaced by Policies: CS8 – Residual waste treatment facilities CS13 – Climate change and renewable energy generation
WAS 6 Landfill	Replaced by Policies: CS9 – Inert waste landfill, CS10 – Non-hazardous and hazardous waste landfill
WAS 7 Safeguarding sites	Replaced by Policy CS16 – Safeguarding mineral and waste sites and mineral resources
WAS 8 Landscape	Policy not saved
WAS 9 Landscape	Replaced by Policies: CS14 – Environmental protection, DM2 – Core river valleys, DM8 – Design, local landscape and townscape character.
WAS 10 Landscape	Replaced by Policies CS14 – Environmental protection DM8 – Design, local landscape and townscape character.
WAS 11 Nature conservation	Replaced by Policies: CS14 – Environmental Protection CS5 – General location of waste management facilities
WAS 12 Nature conservation	Replaced by Policies CS14 – Environmental protection DM1 – Nature conservation
WAS 13 Amenity	Replaced by Policies CS14 - Environmental protection DM10 – Amenity
WAS 14 Archaeology	Replaced by Policies: CS14 – Environmental protection DM9 – Archaeological sites
WAS 15 Archaeology	Replaced by Policies: CS14 – Environmental protection DM9 – Archaeological sites
WAS 16 Traffic	Replaced by Policies: CS15 – Transport DM10 – Transport
WAS 17 Airport	Replaced by Policy DM7 – Safeguarding aerodromes.

Norfolk Waste Local Plan 2000 Policy Reference	Equivalent policy or policies in the Core Strategy
Safeguarding	
WAS 18 Water resources	Replaced by Policies: CS14 – Environmental protection DM3 – Groundwater and surface water
WAS 19 Water resources	Replaced by Policy DM4 – Flood risk.
WAS 20 Agriculture	Replaced by Policies: CS14 – Environmental protection DM16 – Soils
WAS 21 Record of the operator	No policy being taken forward because this is not a material planning consideration due to planning permission relating to the land and not the operator.
WAS 22 Public waste recycling centres	Replaced by policy DM6 - Household waste recycling centres
WAS 23 Scrapyards	Replaced by Policies: CS6 – General waste management considerations CS7 – Recycling, composting, anaerobic digestion and waste transfer stations
WAS 24 Sewage and sludge	Replaced by Policy CS11 – Waste water / sewage infrastructure and treatment facilities
WAS 25 Safeguarding	Replaced by Policy CS16 – Safeguarding mineral and waste sites and mineral resources.
WAS 26 Clinical waste	Replaced by Policies CS6 – General waste management considerations CS7 – Recycling, composting, anaerobic digestion and waste transfer stations
WAS 27 Nuclear and radioactive waste	No policy being taken forward because proposals for this type of waste, that fall under the planning remit of Norfolk County Council, will be assessed against all the relevant policies in the Strategy and appropriate national policies.
WAS 28 Inert waste: major projects	Replaced by Policy CS9 – Inert waste landfill.
WAS 29 Mining of waste	No specific policy being taken forward, proposals for this type of operation will be assessed against all the relevant policies in the Strategy
WAS 30 Transport	Replaced by Policy CS15 – Transport
WAS 31 Information required	Policy not saved
WAS 32 Environmental assessments	Policy not saved
WAS 33 Planning considerations	No specific policy being taken forward. Planning applications will be determined against the relevant policies within the Strategy, as well as national policies.
WAS 34 Planning control	Replaced by Policies: CS14 – Environmental protection DM14 – Progressive working, restoration and after-use.
WAS 35 Planning control	Replaced by Policies CS14 – Environmental protection DM14 – Progressive working, restoration and after-use.
WAS 36 Conditions and legal agreements	No policy being taken forward. Guidance is contained in Planning Policy Statement 10 on planning

Norfolk Waste Local Plan 2000 Policy Reference	Equivalent policy or policies in the Core Strategy
	conditions.
WAS 37 Site monitoring and enforcement	No specific policy being taken forward, reliance being placed on Planning Policy Guidance 18.
WAS 38 Plan review	Policy not saved
WAS 39 Plan review	Policy not saved

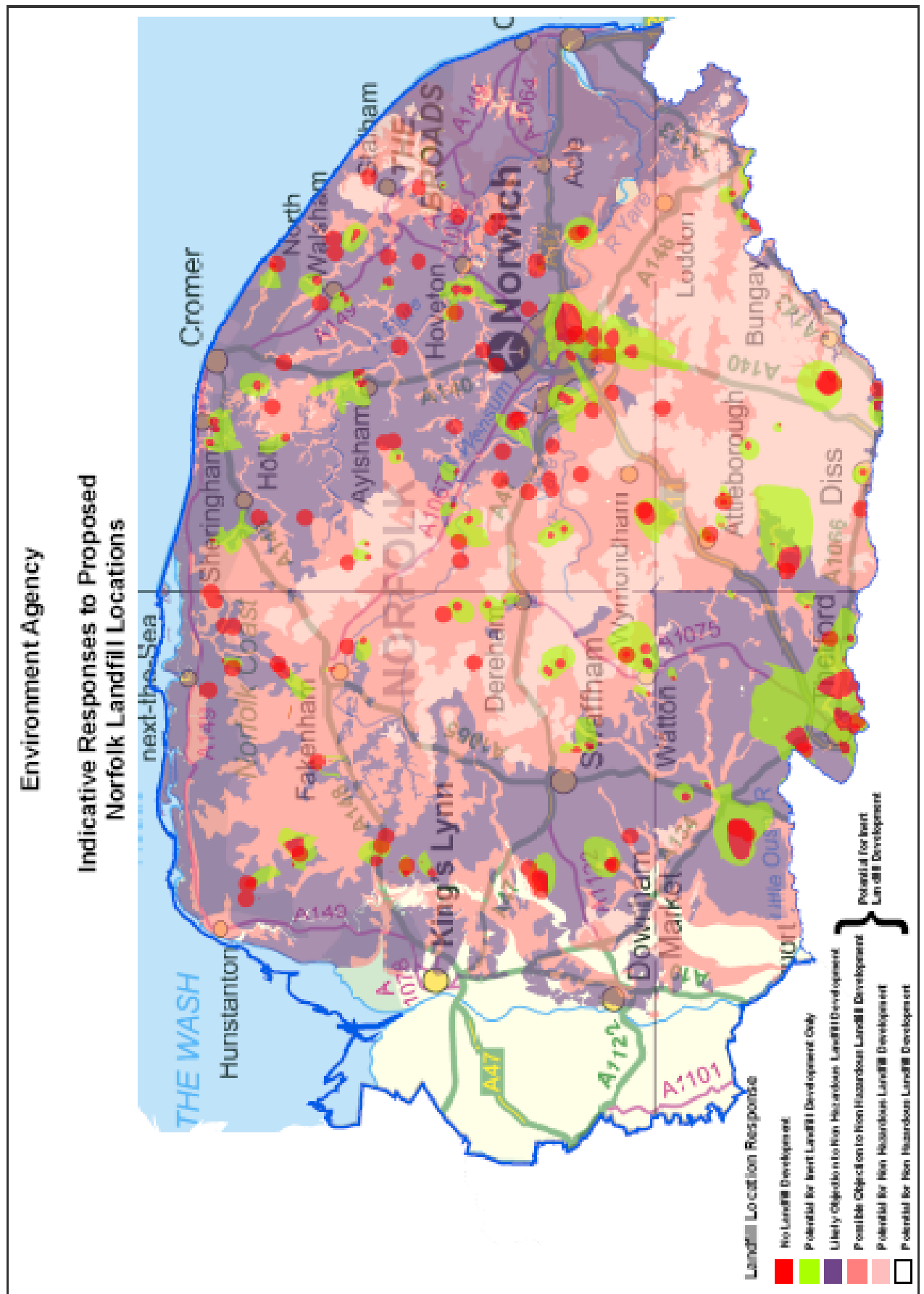
Appendix E: ENVIRONMENT AGENCY INDICATIVE RESPONSES TO POTENTIAL NORFOLK LANDFILL LOCATIONS

E.1 The map depicted on the following page, as supplied by the Environment Agency, shows indicative areas for landfill or landraise development. The following information applies to the map:

1. No inert or non-hazardous landfill/landraise within a SPZ1. This area is indicated red on the map.
2. Potential inert landfill/landraise within SPZ2. No non-hazardous landfill/landraise. This area is indicated green on the map.
3. The area shaded purple is Major Aquifer – High Vulnerability and Minor Aquifer- High Vulnerability. The Environment Agency is making a local decision that the minor aquifer status for Crag needs to be adjusted to reflect its local importance to water resources. This is in line with RGN 3. This area defines the potential inert landfill/landraise and areas where the Environment Agency would most likely object to a non hazardous landfill/landraise. A level 3 Hydrogeological Risk Assessment would be required for any non-hazardous site allocation before the Environment Agency could consider removing an objection.
4. The area shaded in dark pink is Major Aquifer – Intermediate vulnerability and Minor Aquifer- Intermediate vulnerability using the same resource logic for point three. This area defines the potential inert landfill/landraise and areas where the Environment Agency could object to a non-hazardous landfill/landraise. Any non-hazardous site allocation would need to be accompanied by a quantitative risk assessment supported by minor intrusive investigations to confirm the presence of a natural geological boundary.
5. The area shaded in light pink is Major Aquifer – Low Vulnerability and Minor Aquifer – low vulnerability using the same logic for point three. Also this area includes white or missing area that equates to non-aquifers. This area defines the potential inert landfill/landraise and areas where the Environment Agency could see potential for non hazardous landfill/landraise. Any non hazardous site allocation would need to be accompanied by a quantitative risk assessment to describe the presence of a natural geological boundary.

Map D has been identified as a coarse screening tool in which the Environment Agency has confidence that their position on this matter can be interpreted. The Environment Agency has concerns regarding the effectiveness of the Aquifer Vulnerability mapping in context with solid and drift geology, but on a large scale map these errors are generally small. The Environment Agency cannot differentiate the Minor Aquifer into Crag and Alluvial deposits. This means that there is a slightly increased area to the indicative map where the Environment Agency would or could object to the site allocation. However, the alluvial areas are likely to be associated with high water tables and this in itself could be a valid reason for refusal. Therefore, the bulk description of Minor aquifer is acceptable.

It should be noted that this is an indicative map and that the Environment Agency reserves the right to object to a planning application irrespective of allocations made at the Waste Sites Allocation Development Plan document stage.



APPENDIX F: GLOSSARY

Aftercare The treatment of land for a period (usually five years) following restoration to bring the land to the required standard so that it is fit for its agreed after-use.

After-use The use (usually for agriculture, forestry or amenity) that land is put to once restored following waste disposal or mineral working.

Aggregates Materials such as sand and gravel and crushed rock, used in the construction industry for purposes such as concrete, mortar or roadstone.

Air Quality Management Areas An Air Quality Management Area is declared by a local authority where the air quality objective for one or more of nine specified pollutants is unlikely to be met by the specified date as determined by assessment. Part IV of the Environment Act 1995 places a statutory duty on local authorities to periodically review and assess the air quality within their area. This involves consideration of present and likely future air quality against air quality standards and objectives. The latest Air Quality Strategy for England, Scotland, Wales and Northern Ireland was published by the UK Government and devolved administrations in July 2007.

Amenity Amenity is any tangible or intangible benefits of or relating to a property, especially those which increase the attractiveness or value of the property or which contributes to its comfort or convenience. This could include tangible benefits such as a park, or intangible such as a 'nice view'.

Ancient Woodland An area of woodland which has had a continuous history of tree cover since at least 1600.

Annual Monitoring Report Records progress in implementing the Local Development Scheme and the performance of policies against targets in Development Plan Documents. Indicates what action an authority needs to take if it is not on track or policies needs to be revised/ replaced.

Apportionment Norfolk's share of the waste management capacity to be provided and Norfolk's share of the aggregate provision; apportioned through the East of England Aggregates Working Party.

Appropriate Assessment *Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora* requires an Appropriate Assessment to be undertaken to assess the impacts of a land-use plan against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity of that site.

Area of Outstanding Natural Beauty Area of Outstanding Natural Beauty designated under the National Parks and Access to the Countryside Act 1949 for the purposes of preserving and enhancing their natural beauty.

Biodegradable waste Any waste that is capable of undergoing natural decomposition, such as food and garden waste, paper and cardboard.

Biodiversity The variety of all life on earth (mammals, birds, fish, invertebrates, plants etc)

Biodiversity Action Plan A framework for conserving, enhancing and restoring, biological diversity. Biodiversity is defined in Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9) as "the variety of life in all its forms."

Brownfield land Also known as “previously-developed land” and defined in Annex B to PPS3 (Planning Policy Statement 3: Housing). It is land which is or was occupied by a permanent structure, including the curtilage of the developed land and associated fixed surface infrastructure. The definition includes defence buildings, but excludes:

- Land that is or has been occupied by agricultural or forestry buildings.
- Land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures.
- Land in built-up areas such as parks, recreation grounds and allotments, which, although it may feature paths, pavilions and other buildings, has not been previously developed.
- Land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time (to the extent that it can reasonably be considered as part of the natural surroundings).

Carbon footprint Carbon footprint is a measure of the amount of carbon dioxide or CO₂ emitted through the combustion of fuels; in the case of an organisation, business or enterprise, as part of their everyday operations; in the case of an individual or household, as part of their daily lives; or a product or commodity in reaching market.

Carstone Carstone is a ferruginous brown sandstone quarried in West Norfolk. It is used primarily as fill or hoggin. When the iron content is high it can meet higher specifications. Traditionally in West Norfolk it was used as a building material.

Climate change A change of climate caused by the greenhouse gas effect whereby pollutants, predominantly carbon dioxide but also methane and others, trap the heat from the sun. Generally accepted now to be caused by human activity. Considered to be in addition to natural climate change variations.

Community Strategy or Sustainable Community Strategy Wide ranging strategy for a geographical area (e.g. Norfolk) introduced by the Local Government Act 2000. Aim is to improve social, economic and environmental well-being. Focuses on the needs and aspirations of the area's community and is developed, adopted and delivered by a range of agencies and organisations (in the public, private and voluntary sectors) in a partnership approach with a view to achieving synergistic working towards common goals. The partnership is formally known as the Local Strategic Partnership. Modified in the 2006 Government White Paper to focus on 'sustainability'. Development Plans should aim to give spatial expression to the strategy. Local Area Agreements comprise the action plan for the strategy. Overseen by the Local Strategy Partnership, or, in the case of Norfolk Ambition, the County Strategic Partnership.

Composting A process where organic wastes (such as garden and kitchen waste) are broken down aerobically (in the presence of air) to create a product that can be applied to land to improve soil structure and enrich the nutrient content of soil.

Conservation Area An area designated by the Local Planning Authority under the Planning (Listed Buildings and Conservation Areas) Act 1990 as possessing special architectural or historical interest.

Contaminated land Land that may retain residual polluting substances by virtue of its previous usage and presents a potential risk to the water environment, especially if redevelopment takes place.

County Wildlife Site A site of local importance for wildlife. Outside SSSIs, County Wildlife Sites are the best sites for wildlife in Norfolk. Sites are designated using stringent criteria, by a committee composed of the Norfolk Wildlife Trust, Norfolk County Council, Natural England, the Norfolk Biological Records Centre, and the Norfolk Biodiversity Partnership.

Criteria based policy Rather than a policy which is a general statement of intent, these policies will specify criteria against which potential locations for mineral extraction and associated development and waste management facilities will be assessed. They also aim to define the criteria against which planning applications will be considered to ensure that all development contributes to meeting the aims and objectives of the Core Strategy.

Cumulative impact The combined impacts of a number of developments on the environment, amenity, health, traffic etc.

Development Management The process through which the Council determines whether a proposal for development should be granted planning permission, taking into account the development plan and any other material considerations. Formerly called Development Control

Development Plan Documents or DPDs A term brought in by the Planning and Compulsory Purchase Act 2004. These are the spatial planning documents contained in the Local Development Framework. These set out spatial planning policies and proposals for an area or topic. They replace the former Local Plan and include the core strategy, detailed development management policies, site specific allocations of land, area action plans (where needed) and a proposals map.

Disposal Waste disposal operations include: deposit into or onto land (e.g. landfill), incineration, permanent storage, treatment operations where the final compound or mixture will be disposed of.

East of England Plan (Regional Spatial Strategy, RSS) The East of England Plan was the Regional Spatial Strategy, prepared and delivered by the East of England Regional Assembly. The DPDs needed to be in conformity with it. RSS's were revoked by ministerial statement on the 6 July 2010. Some evidence gathering had taken place for the review to the East of England Plan which, has provided more up-to-date information on mineral and waste need.

East of England Regional Assembly A body that comprises representatives from local authorities and other economic, environmental and social organisations from the East of England Region. One of its functions was to prepare the Regional Spatial Strategy – the East of England Plan. EERA was replaced by the East of England Local Government Association and the East of England Development Agency on 1 April 2010.

Ecological network Areas of semi-natural habitat that are linked by corridors or stepping stones, and thus enable wildlife to move through the wider landscape.

Energy-from-Waste (EfW) The process of creating energy in the form of electricity and/or heat from the thermal treatment of waste.

Energy recovery The generation of heat and power from burning waste, the production of fuels from other forms of treatment, and the combustion of landfill gas and gas from anaerobic digestion to create electricity.

Environmental Management System A management approach which enables an organisation to identify, monitor, control and improve its environmental performance.

Examination (or Hearing or Inquiry) All Development Plan Documents will be subject to examination before an independent planning inspector. The Inspector's report is binding on the local authority.

Fill material Material which is used to fill former or existing quarries.

Geodiversity Geodiversity is the variety of rocks, minerals, fossils, soils and landforms, together with the natural processes which shape the landscape.

Geomorphology The study of landforms and the formative processes that shape the physical landscape.

Greenhouse gas Gases such as carbon dioxide and methane which when their atmospheric concentrations exceed certain levels can contribute to climate change by forming a barrier in the earth's atmosphere that traps the sun's heat.

Groundwater Water within soil, sediments or rocks below the ground surface. Water contained within underground strata is referred to as an aquifer.

Groundwater Source Protection Zones The Environment Agency divides groundwater source catchments into four zones. Zone 1 - Any pollution that can travel to the borehole within 50 days from any point within the zone is classified as being inside zone 1. This applies at and below the water table. This zone also has a minimum 50 metre protection radius around the borehole. These criteria are designed to protect against the transmission of toxic chemicals and water-borne disease.

Hazardous waste All hazardous waste as defined by the List of Wastes Regulations 2005, e.g. asbestos, acids, oils and petroleum products.

Heritage Assets Those parts of the historic environment that have significance because of their-archaeological interest.

Heritage Coast A Heritage Coast is a strip of coastline designated by the Countryside Agency in England and the Countryside Council for Wales in Wales as having notable natural beauty or scientific significance.

Historic Parks and Gardens Sites included in the *Register of Parks and Gardens of special historic interest in England*, compiled by English Heritage via the Historic Buildings and Ancient Monuments Act 1953. The main purpose of this register is to help ensure that the features and qualities which make the landscapes listed to be of national importance are safeguarded during ongoing management or if any change is being considered which could affect them.

Hoggin Hoggin is an aggregate material suitable as a consolidating layer often without processing. It normally consists of a mixture of sand and gravel in a range of grain sizes held together naturally by clay. It is often used for embankment and general filling.

Household waste Household waste includes all mixed waste that is collected from households; all materials taken to local bring banks or collected at the doorstep or kerbside for recycling and composting; all waste (apart from rubble) that is taken to the County Council operated Recycling Centres; litter and street sweepings.

Inert waste Waste that does not undergo any significant physical, chemical or biological, transformations; does not dissolve, burn or otherwise physically or

chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and, in particular, does not endanger the quality of any surface water or groundwater.

Issues and Options A stage of the Development Plan Document preparation process where community engagement is sought on an informal basis from interested organisations to inform the identification of key issues and the potential options for addressing them.

Landbank A stock of mineral reserves with planning permission for their winning and working.

Landfill A waste disposal site where waste is deposited onto or into land. This includes sites that:

- receive waste from external sources
- are used by waste producers to dispose of their own waste on-site.

It does **not** normally include sites where waste is:

- intended for disposal, and is stored for less than one year
- intended for recovery or treatment, and is stored for less than three years
- prepared for transport for recovery, treatment or disposal elsewhere.

Landfill gas A by-product from the decomposition of biodegradable wastes. The gas is a mixture of up to 65% methane and 35% carbon dioxide plus trace gases and vapours.

Landscape character A distinct and consistent pattern of elements in the landscape that makes one landscape different to another.

Leachate Water containing contaminants which leaks from a disposal site such as a landfill.

Listed building In the United Kingdom the term listed building refers to a building or other structure officially designated as being of special architectural, historical or cultural significance. A listed building may not be demolished, extended or altered without special permission being granted by the Local Planning Authority.

Local Area Agreement Local Area Agreements set out the priorities (primarily from the Community Strategy) for a local area agreed between central government and a local area (the local authority and Local Strategic Partnership) and other key partners at the local level. They simplify some central funding, helping to join up public services more effectively and allow greater flexibility for local solutions to local circumstances. Effectively also a delivery plan for the Community Strategy.

Local Development Framework The collective term for the suite of Development Plan Documents produced by a planning authority. In addition to the Core Strategy and Site Allocations DPDs, it includes the Local Development Scheme, the Statement of Community Involvement, Annual Monitoring Report, and any supplementary planning documents.

Local Development Scheme Describes the Local Development Documents which the authority intends to prepare and the timetable for their preparation.

Local Planning Authority An organisation with statutory planning powers, in most areas the relevant County, District or Unitary Council.

Local Nature Reserve (LNR) Locally important wildlife site designated for protection by the local authority.

Local Transport Plan A document produced by Local Highway Authorities that describes its transport policies and its broad implementation programme.

Materials Recovery Facility A specialised building for separating, processing and storing recyclable materials from waste collected either separately or mixed.

Mechanical Biological Treatment (MBT) A form of waste processing facility that combines a sorting facility (the 'mechanical' element) with a form of biological treatment such as composting or anaerobic digestion.

Methane A colourless, odourless, flammable gas, formed during the decomposition of biodegradable waste.

Mineral Consultation Area An area identified in order to ensure consultation between the relevant Local Planning Authority and the Mineral Planning Authority before certain non-mineral planning applications made within the area are determined. MCAs are therefore simply a mechanism to ensure consultation takes place. The level of safeguarding that MCAs can provide on their own is not comparable to that which can be afforded through a Mineral Safeguarding Area (MSA) based system (see below).

Mineral Planning Authority An organisation with statutory planning powers relating to mineral extraction and associated development, the County Councils and Unitary Councils.

Mineral Policy Guidance (MPG) Note These set out Government planning guidance on specific topics.

Mineral Policy Statement (MPS) This is the new system of Government planning policy statements, which will replace MPGs over time.

Mineral Reserve A proven (and usually permitted) area of mineral. That part of a mineral resource which can be economically extracted.

Mineral Resource A wider area of mineral identified only on a geological map.

Mineral Safeguarding Area MSAs are known areas of mineral resources that are of sufficient economic value to warrant protection for generations to come. There is no presumption that any areas within a MSA will ultimately be environmentally acceptable for mineral extraction. The purpose of MSAs is not to automatically preclude other forms of development, but to make sure that mineral reserves are considered in land-use planning decisions.

Minerals and Waste Development Framework This is a portfolio of documents which together will provide the spatial planning strategy for mineral extraction and associated development and waste management facilities within Norfolk. It will replace the Norfolk Minerals Local Plan and the Norfolk Waste Local Plan.

Mines and quarries waste Waste generated by mineral extraction and the processing of minerals into saleable products.

Mitigation Measures to reduce, avoid or remedy any adverse impacts caused by development.

Modal shift A transfer from the use of one means of transport to a more sustainable means of transport, usually from the car to walking, cycling or public transport.

Municipal waste Household waste and other wastes collected by a waste collection authority or its contractors, such as municipal parks and gardens waste, beach cleansing waste, fly-tipped waste and trade waste.

Non-hazardous waste: All non-hazardous waste as defined by the List of Wastes Regulations 2005. This includes municipal and commercial & industrial wastes.

Non-strategic facilities: As defined in Appendix B3.

Norfolk Ambition The Community Strategy for Norfolk (see Community Strategy above).

Norfolk Biodiversity Action Plan The Norfolk BAP is the county's response to the UK Biodiversity Action Plan. It currently contains over 60 habitat and species action plans, and seeks to conserve and enhance biodiversity of national importance found in Norfolk.

Norfolk Geodiversity Action Plan The Norfolk GAP sets out a management framework for the conservation and enhancement of Norfolk's geology, landforms, soils and associated Earth heritage features.

Norfolk Minerals Local Plan 2004 This is the current local plan and contains detailed policies and guidance for making decisions on planning applications for mineral extraction and associated development in Norfolk.

Norfolk Waste Local Plan 2000 This is the current local plan and contains detailed policies and guidance for making decisions on planning applications for waste management facilities in Norfolk.

Norwich Policy Area Reflecting the city's influence and catchment, the policy area is used for planning purposes, extending beyond the urban area and encompassing many smaller towns and settlements. The broad extent of the Norwich Policy Area, based on that of the previous Norfolk County Council Structure Plan, should be established in Local Development Documents produced by the Local Planning Authority.

Permitted mineral reserves Saleable minerals in the ground with planning permission for winning and working. Usually expressed in million tonnes.

Planning Conditions Conditions attached to a planning permission for the purpose of regulating and controlling the development.

Planning Policy Guidance Note (PPG) This sets out Government planning guidance on specific topics.

Planning Policy Statement (PPS) This is the new system of Government planning advice which will replace PPGs over time.

Preferred Options A stage of the Development Plan Document preparation process where the authority's preferred options for addressing key issues are published for a six week consultation period. This stage was deleted in the revision to PPS12, published in 2008.

Primary aggregates Naturally occurring sand, gravel and crushed rock used for construction purposes.

Proximity principle The idea that mineral extraction and associated development and waste management facilities should be located as close as reasonably possible to, in the case of minerals, where the minerals are needed, and, in the case of waste, where it is generated, at least partly to reduce the need

to travel but also to encourage communities to take responsibility for the waste they produce.

Rail depot The reception (or exporting) point for minerals being moved by train.

Ramsar Site A Site of Special Scientific Interest considered to be of international importance as waterfowl habitat designated under the Ramsar International Convention on Wetlands (1971).

Reclamation of mineral workings The combined processes of Restoration and Aftercare following completion of mineral working.

Recovery The principle objective of a recovery operation is to ensure that the waste serves a useful purpose by replacing other substances which would have had to be used for that purpose and thereby conserving natural resources. Recovery includes recycling and composting.

Recycled Aggregates Aggregates produced from recycled construction waste such as crushed concrete, planings from road surfacing etc.

Recycling The process by which materials are collected and used as 'raw' materials for new products.

Regionally Important Geological/ Geomorphological Sites (RIGS) These are non-statutory geological / geomorphological sites designated for their value to Earth heritage, including educational, research, historical or aesthetic importance.

Regional Spatial Strategy (RSS) See 'East of England Plan' definition.

Regional Transport Strategy Part of the East of England Plan, it describes the policies for transport that should be applied across the region as part of the regional spatial strategy.

Renewable energy Renewable energy is energy derived from resources that are regenerative or for all practical purposes cannot be depleted.

Renewables Obligation The Renewables Obligation was introduced on 1st April 2002. It places an obligation on all licensed electricity suppliers to produce evidence that they have sourced a specified proportion of their electricity supplies from renewable energy sources.

Residual waste The elements of the waste streams that remain following recovery, recycling or composting operations.

Resource recovery The extraction of useful materials or energy from solid waste.

Restoration Operations designed to return an area to an acceptable environmental state, whether for the resumption of the former land use or for a new use following mineral working or waste disposal. Involves the reinstatement of land by contouring, the spreading of soils or soil making materials etc.

Route hierarchy Norfolk County Council's route hierarchy categorises roads by use, or desired use, and is an important influence on the asset management plan in terms of signage, improvement programmes, and maintenance priorities.

Safeguarding Protecting sites that have potential for mineral extraction and associated development or waste management facilities from other incompatible development.

Scheduled Monuments Nationally important monuments and archaeological areas that are protected under the Ancient Monuments and Archaeological Areas Act.

Secondary aggregates By-product wastes e.g. power station ash and colliery spoil that can be used for industrial and low-grade aggregate purposes, either solely or mixed when mixed with primary aggregates.

Sequential test A planning principle whereby certain preferred locations for development are considered first before considering other locations (such as preferring brownfield development over Greenfield, or areas at low risk of flooding over high risk of flooding).

Service centres Service centres are those places where day to day retail, employment and professional services can provide for the needs of the people of the town and the surrounding villages and rural hinterland.

Site (Specific) Allocations Sites which are generally well defined and where there is a presumption in favour of their being developed during the plan period.

Sites of Special Scientific Interest (SSSIs) Sites that are notified and protected under the Wildlife and Countryside Act 1981 on account of their flora, fauna, geological or physiographical features.

Spatial planning Concerned with the physical aspects of places, but not restricted to land use decisions managed through the planning process. Includes physical aspects about how a place functions and develops.

Special Area of Conservation (SAC) An SSSI considered to be of international importance designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.

Special Protection Area (SPA) An SSSI considered to be of international importance designated under the EC Directive on the Conservation of Wild Birds.

Specific Sites defined in MPS1 as 'where mineral resources are known to exist, where landowners are supportive of mineral development taking place and where Mineral Planning Authorities consider that any planning applications made are likely to be acceptable in planning terms'.

Statement of Community Involvement A document that sets out a LPA's intended consultation strategy for different elements of the planning process. This is a requirement brought in by the Planning and Compulsory Purchase Act 2004.

Sterilisation When a change of use or the development of land prevents possible mineral exploitation in the foreseeable future.

Strategic Environmental Assessment An evaluation process for assessing the environmental impacts of plans and programmes. This is a statutory requirement, and is incorporated into Sustainability Appraisal.

Strategic facilities: Waste sites with a minimum threshold of 10,000 tonnes annual throughput as listed in paragraph 6.20.

Strategic Road Network and Regional Road Network The strategic and regional road networks are defined in the Regional Transport Strategy as routes on the inter-urban road network of economic importance for the region and its future development. They are defined mainly by their function. For example, the regional road network is the lowest tier that should need to accommodate significant amounts of lorry traffic, except for access purposes.

Submission A stage of the Development Plan Document preparation process where the document is 'submitted' to the Secretary of State for independent examination by a planning inspector.

Surface water All lakes, rivers, streams, springs, ponds, impounding reservoirs, wetlands, marshes, water sources, drainage systems on the Earth's surface.

Sustainability Appraisal An evaluation process for assessing the environmental, social, economic and other sustainability effects of plans and programmes. This is a statutory requirement.

Sustainable development The most widely-used definition is "Development which meets the needs of the present without compromising the ability of future generations to meet their own needs".

Sustainable transport Sustainable transport is a phrase which was coined in the late 20th century to describe all forms of transport which minimise emissions of carbon dioxide and pollutants. Sustainable transport can mean public transport, car sharing, walking and cycling as well as technology such as electric and hybrid cars and alternative fuels.

Thermal Treatment Can include incineration, gasification and pyrolysis.

Transfer The deposition and separation or bulking up of waste before it is removed for recovery or disposal.

Transport assessment: This is a process which considers total travel demand; patterns of public transport in the area; how development impacts upon them; and if required how infrastructure or services could be improved to address the impacts (of a development).

Transport statement: Where transport issues are such that a full Transport Assessment is not required, a Transport Statement may be acceptable.

Treatment Involves the physical, chemical or biological processing of waste to reduce their volume or harmfulness.

UK Biodiversity Action Plan The government's response to the United Nations Convention on Biological Diversity. The BAP includes a description of the UK's biological resources and a suite of habitat and species action plans.

Waste arisings The amount of waste generated in a given locality over a given period of time.

Waste Collection Authority A local authority with a statutory responsibility to provide a waste collection service to each household in its area, and on request, to local businesses. In Norfolk, this is the relevant district council.

Waste Disposal Authority A local authority that is legally responsible for the safe disposal of household waste collected by the WCAs and the provision of Household Waste and Recycling Sites. In Norfolk, this is the County Council.

Waste hierarchy The ranking of waste management options in order of sustainability.

Waste management The means of dealing with waste, including waste disposal, transfer, processing, recovery/recycling operations, incineration and other technologies.

Waste Planning Authority A local authority that is responsible for the preparation of minerals and waste planning documents, and the determination of minerals and waste planning applications. In Norfolk, this is the County Council.

Norfolk Minerals and Waste Development Framework

Waste Site Specific Allocations Development Plan Document



Adopted October 2013
Norfolk County Council
Environment, Transport and Development Department

Norfolk Minerals and Waste Development Framework

Waste Site Specific Allocations Development Plan Document

September 2013

M. Jackson
Director of Environment, Transport and Development
Norfolk County Council
Martineau Lane
Norwich
NR1 2SG

www.norfolk.gov.uk



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1 Executive summary

1.1 As part of its preparation of the Minerals and Waste Development Framework (MWDF), in accordance with the Planning and Compulsory Purchase Act 2004, the County Council has produced this Waste Site Specific Allocations Development Plan Document (DPD). Its purpose is to set out specific, allocated sites where waste management facilities are considered acceptable in principle over the next 15 years.

1.2 The MWDF Core Strategy and Minerals and Waste Development Management Policies DPD was adopted by the County Council on 26 September 2011. The period of the MWDF runs to the end of 2026. The Core Strategy sets the context for the site allocations for minerals extraction and waste management facilities.

1.3 The following sites are allocated in the Waste Site Specific Allocations DPD:

Parish	Site reference	Allocated for
Breckland		
Beetley	WAS 01	inert waste recycling, inert fill
Carbrooke	WAS 06	inert waste recycling, reworking, removal and re-use of foundry sand
Ashill	WAS 14	composting, inert waste recycling, extension to adjacent household waste recycling centre
Snetterton	WAS 19	composting, anaerobic digestion, processing of recyclables, mixed waste processing, household waste recycling centre, inert waste recycling, thermal treatment, energy from waste
Thetford	WAS 32	processing of recyclables, mixed waste processing, inert waste recycling, household waste recycling centre
Attleborough	WAS 47	inert waste recycling, waste transfer
Snetterton	WAS 79	inert landfill and secondary aggregate recycling
Beetley	WAS 87	inert waste recycling and inert fill
Broadland		
Frettenham, Horstead	WAS 17	household waste recycling centre
Attlebridge	WAS 24	composting, landfill of inert and/or non-hazardous waste
Buxton with Lammas, Frettenham	WAS 68	inert landfilling

Parish	Site reference	Allocated for
Morton-on-the-Hill	WAS 76	extension to scrap metal facility
Morton-on-the-Hill	WAS 78	mixed waste processing, metal recycling, inert waste recycling, windrow composting, in-vessel composting, physical, chemical, and/or mechanical/biological treatment of household waste, waste transfer, and

		other forms of residual waste treatment excluding thermal treatment
Great Yarmouth		
Great Yarmouth	WAS 49	processing of recyclables, mixed waste processing, inert waste recycling, household waste recycling centre, waste transfer
Great Yarmouth	WAS 66	processing of recyclables, mixed waste processing, inert waste recycling, household waste recycling centre, waste transfer
Great Yarmouth	WAS 70	processing of recyclables, storage & shredding of wood
King's Lynn and West Norfolk		
King's Lynn	WAS 05	processing of recyclables, mixed waste processing, thermal treatment and other forms of residual waste treatment
Middleton	WAS 25	inert landfill
Middleton	WAS 36	composting, processing of recyclables (materials recovery facility), inert waste recycling, and waste transfer
Feltwell	WAS 37	composting
Middleton	WAS 40	inert landfill and inert waste recycling
Docking	WAS 45	composting
King's Lynn	WAS 65	composting, anaerobic digestion, processing of recyclables, mixed waste processing, thermal treatment, and other forms of residual waste treatment
North Norfolk		
North Walsham	WAS 30	composting, processing of recyclables, mixed waste processing, waste transfer
North Walsham	WAS 94	composting, anaerobic digestion
Norwich		
Norwich	WAS 90	recycling centre
South Norfolk		
Costessey	WAS 31	residual waste treatment
Tivetshall St Margaret	WAS 33	household waste recycling centre
Costessey	WAS 58	processing of recyclables, inert waste recycling

2 Background

2.1 The Waste Site Specific Allocations Development Plan Document (DPD) covers the period until the end of 2026 and allocates specific sites considered suitable in principle and available for development as waste management facilities.

2.2 The Waste Site Specific Allocations DPD is one of the documents within the Minerals and Waste Development Framework (MWDF), being prepared by Norfolk County Council in accordance with the Planning and Compulsory Purchase Act 2004. The MWDF comprises of a number of documents:

2.3 The Statement of Community Involvement (March 2007), which sets out the ways in which local stakeholders will be consulted in the production of the DPDs and in the determination of planning applications

Minerals and Waste Development Scheme (January 2012) The various documents within the framework are being prepared at different times through a continuous process, the timing of which is described in the Minerals and Waste Development Scheme.

Annual Monitoring Report This document describes the progress in producing the DPDs and implementation and performance of the policies within the DPDs. The most recent AMR was produced for the 2010/11 AMR.

Core Strategy and Minerals and Waste Development Management Policies DPD (the 'Core Strategy'), which contains policies for use in making decisions on planning applications for mineral extraction and associated development and for waste management development, and in the selection of site-specific allocations in Norfolk. The Core Strategy was adopted by the County Council on 26 September 2011.

Waste Site Specific Allocations DPD allocates specific sites which are available and acceptable in principle for waste management facilities, to meet the requirements of Core Strategy policy CS4, until the end of 2026.

Minerals Site Specific Allocations DPD allocates specific sites which are available and acceptable in principle for mineral extraction and associated development, to meet the requirements of Core Strategy policy CS1 until the end of 2026.

Policies Map (previously referred to as a Proposals Map) accompanies the adopted DPDs and is designed to act as a visual aid in interpreting the policies in the adopted DPDs. The Policies Map will be revised as each new DPD is adopted and will reflect the up-to-date minerals and waste planning strategy for Norfolk.

Need for waste management capacity

2.4 The background to the need for and the strategy for provision of sufficient waste management capacity in Norfolk is set out in the adopted Core Strategy and Minerals and Waste Development Management Policies DPD.

2.5 Policy CS3 of the Minerals and Waste Core Strategy states that the strategy for waste management in Norfolk is to provide sufficient waste management capacity to meet the expected arisings of municipal and commercial and industrial waste, and also to ensure that appropriate capacity is provided for inert waste recycling and disposal. Appropriate handling, transfer and management capacity will also be provided for hazardous waste, but it is recognised that the specialised facilities required to treat and/or dispose of different hazardous waste streams may not be practicable to develop in Norfolk.

2.6 Policy CS4 sets out the quantity of additional waste management capacity required. By the end of 2026, there is a need to provide an additional 163,000 tonnes of new recycling, composting and source-segregated-anaerobic digestion capacity, about 703,000 tonnes of recovery infrastructure and about 2,060,000 m³ (equivalent to 3,090,000 tonnes) of new inert landfill/quarry restoration voidspace.

2.7 The following extract from Appendix A of the Core Strategy shows forecast tonnages of municipal solid waste and commercial and industrial waste to be managed in Norfolk:

2011/12	2015/16	2020/21	2026/27
1,472,412	1,436,556	1,428,875	1,427,609

Estimated Site Capacity

2.8 The capacities of the allocated sites are estimates, based on the proposed uses and the site sizes. The operational capacity has been estimated using government guidance on 'typical' site areas for different types and sizes of waste management facility. The following estimated waste management capacity is proposed to be allocated, based on cumulative totals from all the sites proposed to be allocated for that operation:

- 75,000 tonnes of non-hazardous landfill capacity at one site,
- 3,375,000 tonnes of inert landfill/quarry restoration capacity at five sites which are existing or proposed quarries,
- 800,000 tonnes annual recovery capacity (excluding recycling and composting) at five sites,
- 260,000 tonnes annual inert recycling capacity at seven sites (six of these would be temporary and five of these linked to existing or proposed quarries),
- 603,000 tonnes annual composting and/or recycling capacity at 17 sites (four of these would be temporary).

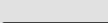
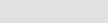
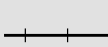
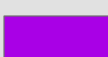
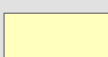
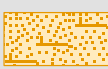
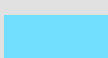
2.9 The total estimated capacities of the allocated sites are in excess of the quantities required by Core Strategy Policy CS4. However, a number of the sites are likely to be temporary in nature, due to their operations being linked to the operational timescales of mineral workings or landfill sites. In addition, waste is often managed through more than one facility. For example, green waste segregated at one facility will then be composted at another.

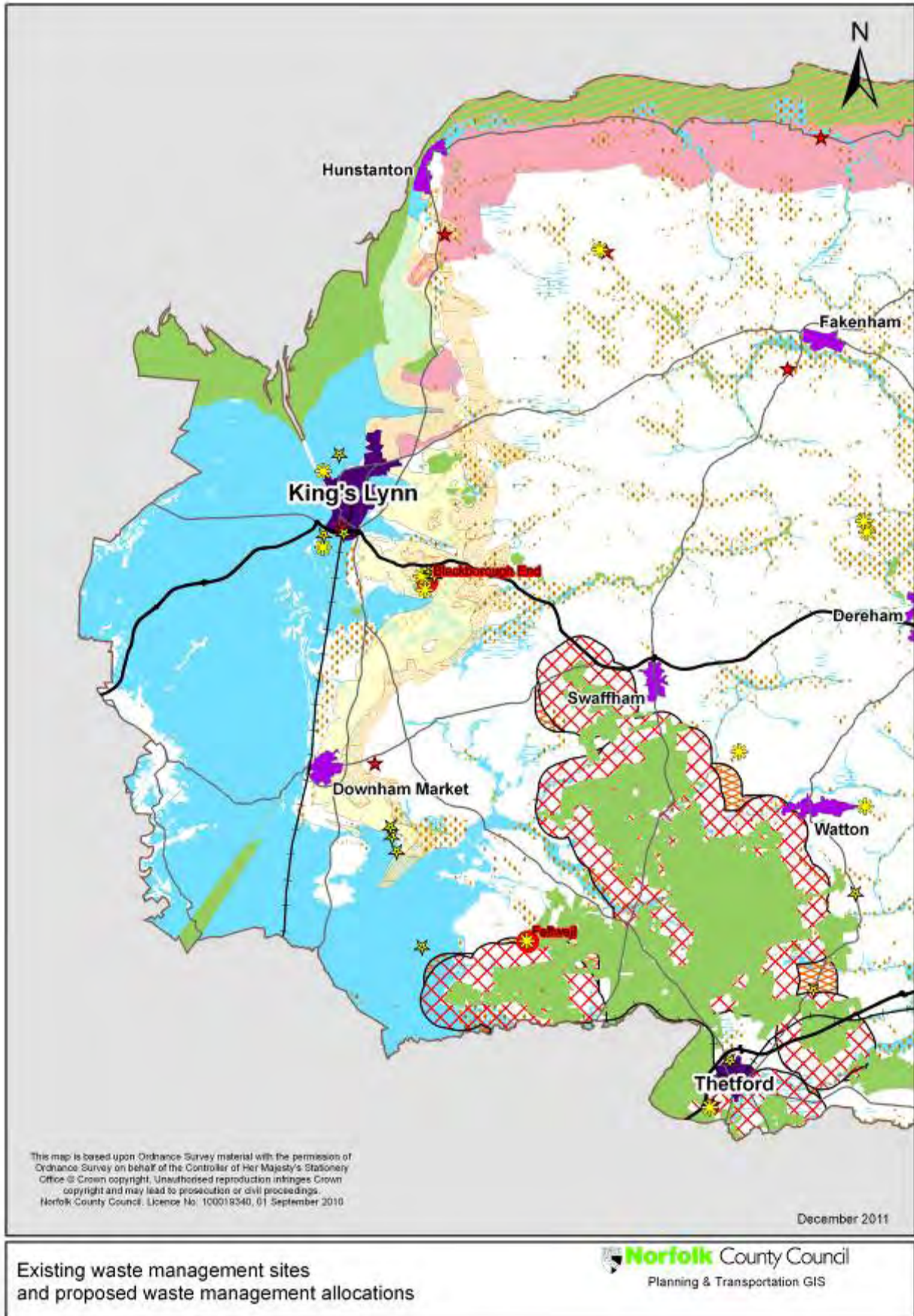
2.10 The illustrative diagram overleaf shows the spatial distribution of all the Waste Site Specific Allocations, along with the locations of the existing waste management facilities safeguarded under Policy CS16 of the adopted Minerals and Waste Core Strategy. These sites are shown in the context of the four largest settlements and Market Towns in Norfolk, as detailed in Policy CS5 of the adopted Minerals and Waste Core Strategy. The diagram also illustrates the key landscape and environmental constraints, trunk roads, A-roads and railway lines.

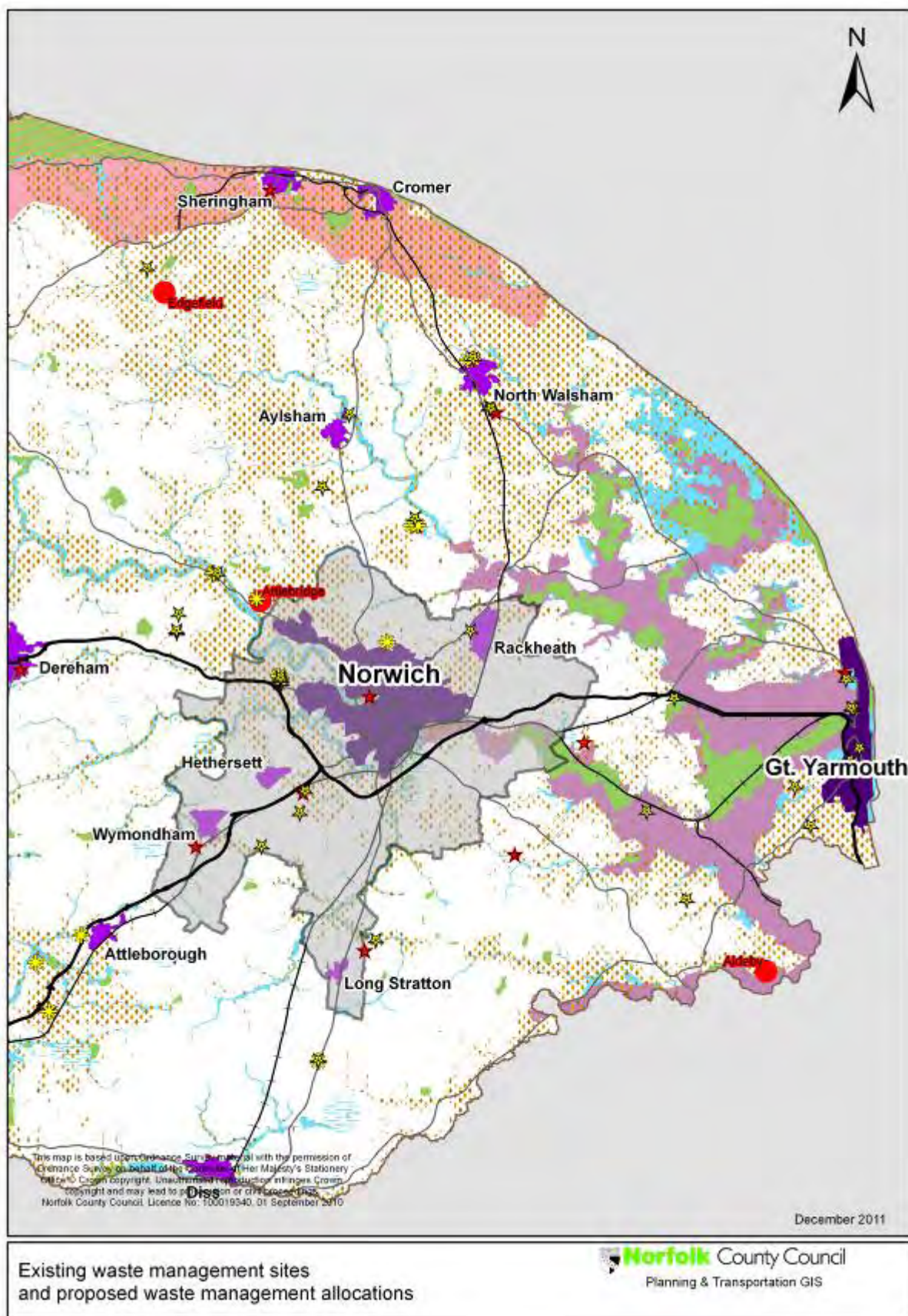
2.11 'The Policies Map' which accompanies this DPD is considered to be the most appropriate place to view information such as Mineral Safeguarding Areas, and safeguarded sites. The hardcopy of the Policies Map is at a scale suitable for the majority of uses, however if details of the site boundaries of safeguarded sites

are required it is considered that use of the interactive version of the Policies Map is the most appropriate method. The interactive version of the Policies Map allows the user to view areas at greater levels of detail, and allows information such as environmental designations to be customised by turning these on or off. The Interactive version of the Policies Map can be found by following the link www.norfolk.gov.uk/nmwdf

Legend

-  Proposed waste sites allocation
-  Existing Waste management facilities over 20,000 tpa
-  Existing non-hazardous landfill sites at 12/2011
-  Household Waste Recycling Centre
-  Trunk roads
-  A Roads
-  Rail lines
-  Heritage coast
-  Norwich Policy Area boundary
-  Major Settlements
-  Service Centres/Market Towns
-  Environmental Designations (SSSI, SAC, SPA, Ramsar)
-  Mineral Safeguarding Area (Silica Sand)
-  Mineral Safeguarding Area (Sand and Gravel)
-  Mineral Safeguarding Area (Carstone)
-  Broads Authority executive area
-  AONB (Area of Outstanding Natural Beauty)
-  Environment Agency Flood Zone 2 and 3
-  Groundwater Source Protection Zone 1
- Buffer zones for Stone Curlews**
-  Protection Zone
-  Mitigation Zone





Supporting documents

2.12 Sustainability Appraisal is central to the planning system. The purpose of Sustainability Appraisal, which is mandatory under the Planning and Compulsory Purchase Act of 2004, is to promote sustainable development through the integration of social, environmental and economic considerations in the preparation of new or revised DPDs. Sustainability appraisal is therefore an integral element of the preparation of the Waste Site Specific Allocations DPD, informing in a comprehensive way of the likely impacts of the proposed site specific allocations policies.

2.13 At the Issues and Options stage in 2008, every proposed site was assessed in the initial Sustainability Appraisal. The initial Sustainability Appraisal was reviewed and updated in 2009 and the Sustainability Appraisal, along with the public consultation feedback, was taken into account when the preferred options were selected in 2009.

2.14 The Sustainability Appraisal was reviewed again in 2011 and the Sustainability Appraisal, along with the public consultation feedback, was taken into account in the conclusions of each site to be allocated or not allocated in the Revised Further Issues and Options document in 2011.

2.15 The site specific allocations and associated policy wording in this document have taken into account the findings of the Sustainability Appraisal. The Sustainability Appraisal forms part of the evidence base for the development of the Waste Site Specific Allocations DPD. In accordance with Core Strategy Policy DM4 (flood risk) and the Technical Guidance to the NPPF, for all development over 1 hectare in size in flood zone 1, and all development within flood zones 2 and 3, a site specific Flood Risk Assessment (FRA) will be required at the planning stage. The Site Specific FRA must identify and assess the risks of all forms of flooding to and from the development to demonstrate how these flood risks will be managed so that the development remains safe throughout its lifetime, taking climate change into account. The scale, nature and location of the proposed development will inform the scope of the FRA required.

2.16 Flood Risk: Sequential and Exception Tests. In accordance with "Table 2 of the Technical Guidance to the National Planning policy Framework" a sequential test has been carried out on the Waste Site Specific Allocations. The County Council has concluded that the site selection process satisfies the Sequential Test and that no site has been identified for allocation where there would be a suitable alternative in an area in a lower category of risk of flooding. All of the proposals which are considered to be suitable comprise "less vulnerable" development in the context of "Paragraph 100 of the National Planning Policy Framework, and table 2 of the Technical Guidance to the NPPF", and do not fall to be considered under the "exception test".

2.17 An Equality Impact Assessment (EqIA) has been carried out on the Waste Site Specific Allocations DPD. The need for an EqIA stems from the general duty placed on public authorities to eliminate unlawful discrimination in carrying out its functions, and promote equality of opportunity between men and women, different racial groups, and other equality groups. The EqIA has been prepared to satisfy all relevant legal and policy requirements for the assessment and has been completed in line with relevant guidance.

2.18 A Habitats Regulations Assessment has been carried out on the Waste Site Specific Allocations DPD in accordance with the *Conservation of Habitats and Species Regulations 2010*. A Habitats Regulations Assessment is undertaken to assess the impacts of a land-use plan against the conservation objectives of a European - designated nature conservation sites and to ascertain where it would adversely affect the integrity of the site and, if so how to amend the plan to avoid any potential damaging effects. The Habitats Regulations Assessment forms part of the evidence base for the development of the Waste Site Specific Allocations DPD.

2.19 Evidence Base An appraisal of each site was carried out by Norfolk County Council's landscape architects, ecologists, archaeologists and highways officers. The results of their site assessments have been collated as an evidence base for the Waste Site Specific Allocations DPD. An evidence base update has been published for this pre-submission stage and this should be read in conjunction with the original evidence base document and all previous updates.

3 The Process So Far

3.1 This Pre-Submission Waste Site Specific Allocations DPD was preceded by an original 'call for sites' and three public consultation stages, as follows:

3.2 The County Council made a 'Call for Sites' to land owners, developers and their agents to submit sites for waste management development, which resulted in 64 proposed waste allocation sites being submitted. As part of this process, those who proposed waste allocation sites also proposed waste management uses for those sites, such as anaerobic digestion, or recycling.

3.3 The "Issues and Options" consultation took place over ten weeks from 15 February to 25 April 2008. This was a process to identify potential issues on the submitted site allocations (the options) to assist in identifying preferred sites at the next stage. 1389 people and organisations responded to this consultation. A parallel consultation was undertaken on the Mineral Site Specific Allocations DPD.

3.4 The "Further Issues and Options (Preferred Options)" consultation took place over eight weeks from 19 October to 11 December 2009. The potential waste management sites were categorised in one of three ways. Those sites that based on the evidence available and planning officer's recommendation were deemed to be acceptable for allocation; those that might be potentially acceptable dependent on a modification to the scheme in some way or additional evidence, and those which were considered to be unacceptable for allocation. Over 560 people and organisations responded to this consultation. A parallel consultation was undertaken on the Mineral Site Specific Allocations DPD.

3.5 The "Revised Further Issues and Options" consultation took place over eight weeks from 20 June to 15 August 2011. The potential sites were categorised as being either suitable or unsuitable for allocation. 460 people and organisations responded to this consultation. A parallel consultation was undertaken on the Minerals Site Specific Allocations DPD.

3.6 The County Council has assessed all the submitted sites, having regard to:

- landscape, ecological, archaeological, highways and amenity implications of development at each site
- the responses received during all three Issues and Options consultations
- relevant planning policies, including those in the adopted Core Strategy and Minerals and Waste Development Management Policies DPD
- Sustainability Appraisal
- Habitats Regulations Assessment
- Sequential and Exception Test of Flood Risk
- Equalities Impact Assessment

3.7 This DPD contains policies for 29 allocated sites. Only sites suitable for allocation are listed; unallocated sites are excluded from this document.

When assessing the suitability of the allocated sites, the County Council had particular regard when dealing with landscape, ecology, highways and archaeology to the following matters:

3.8 Landscape

- a description of the site in its landscape context;
- any known landscape constraints (e.g. designated landscape areas);
- the presence of any landscape detractors (e.g. overhead power lines);
- comments on how existing landscape features or viewpoints might be affected by the proposed development;
- the landscape impact of the development (on residents, travellers/visitors, enjoyment of the countryside, light pollution etc and whether any potential screening would itself be intrusive); and
- consideration of whether a potential restoration scheme could be proposed which is feasible, suitable and offers opportunities for longer-term landscape gains.

3.9. Ecology

- details of any designated nature conservation sites nearby;
- whether the site could affect the drainage of any designated sites;
- details of any protected or BAP species and/or habitats which could be affected;
- details of whether a suitable restoration scheme could be proposed; and
- whether there is any potential to create any target habitats (e.g. heathland).

3.10 It is important to note that the site summaries do not include details of any protected species found in or around the local area. New waste management proposals on rural sites are likely to need a biodiversity survey and report as required by Norfolk County Council's Local List for Validation of Planning Applications, or as part of an Environmental Statement accompanying a planning application. The results of a biodiversity survey and report may impact on the scheme of working, indicate a need for potential mitigation measures and a requirement for planning conditions to be attached to any permission granted. However, if certain key species, especially bats or great-crested newts are thought to be present on a site, a full survey with details of mitigation will be needed in advance of a planning application being submitted.

3.11 Proposals which might impact on a European-designated nature conservation site (SAC, SPA and/or Ramsar site) have been subject to a Habitats Regulations Assessment (HRA) carried out by Norfolk County Council.

3.12 Highways

- the hierarchy level of the road used to access the site (e.g. HGV Access Route);
- if not on an HGV Access Route or better, the distance to the nearest suitable road;
- details of any significant access difficulties to the site; and
- details of any improvements required to make the site acceptable in highways terms (e.g. road widening, junction improvements etc) and whether such improvements are already planned.

3.13 The assessments of the sites and the conclusions in this document were made without the benefit of detailed information on potential traffic generation and routes which would be associated with specific proposals for individual sites, and it is likely that a Transport Statement or (a more detailed) Transport Assessment will be required to accompany a planning application for each site.

3.14 Archaeology

Waste development on undeveloped land will require a site investigation prior to the submission of a planning application, influencing the mitigation strategy. Archaeology comments on each site were not included in the site conclusions in the consultation documents; they are, however, available to view in the Evidence Base.

3.15 Site capacities

The allocated sites are detailed in section 6, ordered by District/Borough Council Area including maps showing site location and environmental constraints. Included in each case is an estimate of the annual waste management capacity of the site in tonnes. Notwithstanding the estimated figures quoted, the annual capacity of a waste site would be dependent on a number of factors, including commercial considerations; the type of technology which might be used; how land-intensive a use would be, and whether separate waste activities and processes could be operated concurrently. The estimates of site capacity have been made on a site-by-site basis, using figures where they have been quoted by those proposing the sites, data from existing waste facilities and in previous planning applications, and guidance in the Communities & Local Government publication "Planning for Waste Management Facilities".

The Site Specific Allocations

3.16 The site allocations and their supporting text in this DPD describe the characteristics of each site and the particular requirements that will need to be addressed in addition to the relevant national and local policies.

3.17 Amenity issues will also need to be addressed in planning applications for the development of each site. Policies CS14 and DM12 of the Adopted Norfolk Core Strategy and Minerals and Waste Development Management Policies DPD cover amenity issues generally, with policy DM13 covering air quality, DM15 Cumulative impacts, and CS7 bioaerosol risk assessments for composting facilities. Particular attention will also need to be paid to air quality, dust, noise and lighting issues

3.18 Air Quality and Dust

Development Management policy DM13 ensures that all planning applications for waste operations must ensure that they minimise harmful emissions to air, and would not impact negatively on existing Air Quality Management Areas, not lead to the declaration of a new AQMA. Together with the site policies, Policies CS14, DM12, DM13, DM15 and CS7 form a set of criteria against which future developments will be considered in respect of air quality and dust. Norfolk County Council's Local List for Validation of Planning Applications details when a dust assessment and bioaerosol assessment would be required to be submitted as part of a planning application and what they should contain.

3.19 Environmental Permitting

Any waste management proposal which would also require an Environmental Permit to operate (determined and granted by the Environment Agency) will have any amenity elements (such as noise, dust, odour, litter, pests etc) monitored and controlled through the Permit, rather than through planning conditions. This follows the advice of paragraph 122 of the National Planning Policy Framework, which says that local planning authorities should not duplicate the control of processes or emissions where these are subject to approval under pollution control regimes.

3.20 Noise

Policies CS14 and DM12 of the adopted Norfolk Core Strategy and Minerals and Waste Development Management Policies DPD cover amenity issues generally. Development Management Policy DM12 – Amenity ensures that all planning applications for waste management operations must consider the impacts of noise on the amenity for people in close proximity. Together with the site policies, Policies CS14 and DM12 form a set of criteria against which future developments will be considered in respect of noise. Norfolk County Council's Local List for Validation of Planning Applications details when a noise assessment would be required to be submitted as part of a planning application and what it should contain.

3.21 Lighting

Policies CS14 and DM12 of the adopted Norfolk Core Strategy and Minerals and Waste Development Management Policies DPD cover amenity issues generally (including lighting) and the NPPF contains a policy (paragraph 125) encouraging good design to limit the impact of light pollution from artificial light on local

amenity. Together with the site policies, Policies CS14, DM12 and paragraph 125 of the NPPF form a set of criteria against which future developments will be considered in respect of lighting/light pollution. Norfolk County Council's Local List for Validation of Planning Applications details when a lighting assessment would be required to be submitted as part of a planning application and what it should contain.

4 The presumption in favour of sustainable development

4.1 Paragraph 15 of the National Planning Policy Framework states that Local Plans should be based upon and reflect the presumption in favour of sustainable development with clear policies that will guide how the presumption should be applied locally.

Policy SD1. The Presumption in Favour of Sustainable Development

When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants and statutory consultees jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions of the area.

Planning applications that accord with the policies in this Local Plan (and, wherever relevant, with policies in neighbourhood plans) will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision, then the Council will grant planning permission unless material considerations indicate otherwise - taking into account whether:

- Any adverse impacts of granting planning permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework as a whole; or
- Specific policies in that Framework indicate that development should be restricted.

5 Safeguarding Existing and Potential Waste Management Sites

Reasons for safeguarding

5.1 The operation of waste management sites could be threatened should new non-waste developments be permitted in the vicinity. This might occur for example if new housing development is proposed and permitted nearby, which could affect the ability of a waste management site to increase its capacity, to take new waste streams, or to employ new technologies. Those waste management sites are therefore subject to safeguarding through Core Strategy policy CS16, which sets out how appropriate consultation between District Councils and the County Planning Authority will be achieved. In essence this requests District Councils to consult the County Planning Authority on defined categories of proposed development within 250 metres of a waste management facility of 20,000 tonnes per annum capacity or over. The safeguarded sites are shown on the Policies Map, but are not listed in this DPD, since over the period of the LDF the use of sites will change, and others will be developed.

5.2 Waste Water Treatment Works (WWTW) are also safeguarded through Core Strategy policy CS16, and to ensure that future use and development of key wastewater and sludge treatment facilities is not prejudiced by other developments nearby, consultation areas extend to 400 metres around these sites. Since these facilities are more permanent in nature, they are listed in this DPD as safeguarded sites, as follows.

List of Safeguarded Sewage Treatment Works Sites		
Operator: Anglian Water Services Ltd	Grid Reference	
	X	Y
Breckland		
Attleborough	602842	295144
Bylaugh	603698	318261
Dereham	597699	313735
Little Cressingham	588596	300095
Mattishall	602577	312086
Old Buckenham	606143	290517
Quidenham	601057	288208
Sporle with Palgrave	586203	309232
Swaffham	583566	306547
Thetford	585519	283614
Broadland		
Acle	640782	309837
Aylsham	620638	326813
Belaugh	629347	318445
Reepham	610446	322659
Great Yarmouth		

West Caister	651961	311047
King's Lynn and West Norfolk		
Burnham Thorpe	584471	342257
Downham Market	560627	304200
Feltwell	570060	290820
Grimston	571232	321016
Heacham	566747	336313
Ingoldisthorpe	569827	332625
King's Lynn	560349	322174
Watlington	560328	311875
West Walton	545974	314296
North Norfolk		
Briston	607318	331430
Cley	604671	342381
Holt and Letheringsett with Glandford	606882	338946
Horning	635585	317868
Knapton	631045	335582
Ludham	638947	319480
North Walsham	629626	330752
Pudding Norton	591942	328913
Runton	620566	341990
Stalham	635874	325186
Wells-next-the-Sea	591217	344053
South Norfolk		
Kirby Bedon	627670	307311
Morningthorpe	623212	294598
Poringland	628334	300894
Redenhall with Harleston	625002	284119
Saxlingham Nethergate	621900	272644
Sisland	634301	299303
Swardeston	619647	302736
Tharston and Hapton	619301	293594
Wymondham	609572	302834

Whitlingham Waste Water Treatment Works

5.3 As detailed in paragraphs 6.57-6.62 and Policy CS12 of the Core Strategy, Whitlingham Waste Water Treatment Works is a strategically significant piece of infrastructure for future housing and employment growth in Norfolk in general, and Greater Norwich in particular. Future growth and improvements on the site will be necessary to better treat waste waters, but these will need to be carried out sensitively, taking into account the amenity impacts on nearby residents, and landscape and flood risk impacts caused by its proximity to the Broads area.

Policy WWTW 1

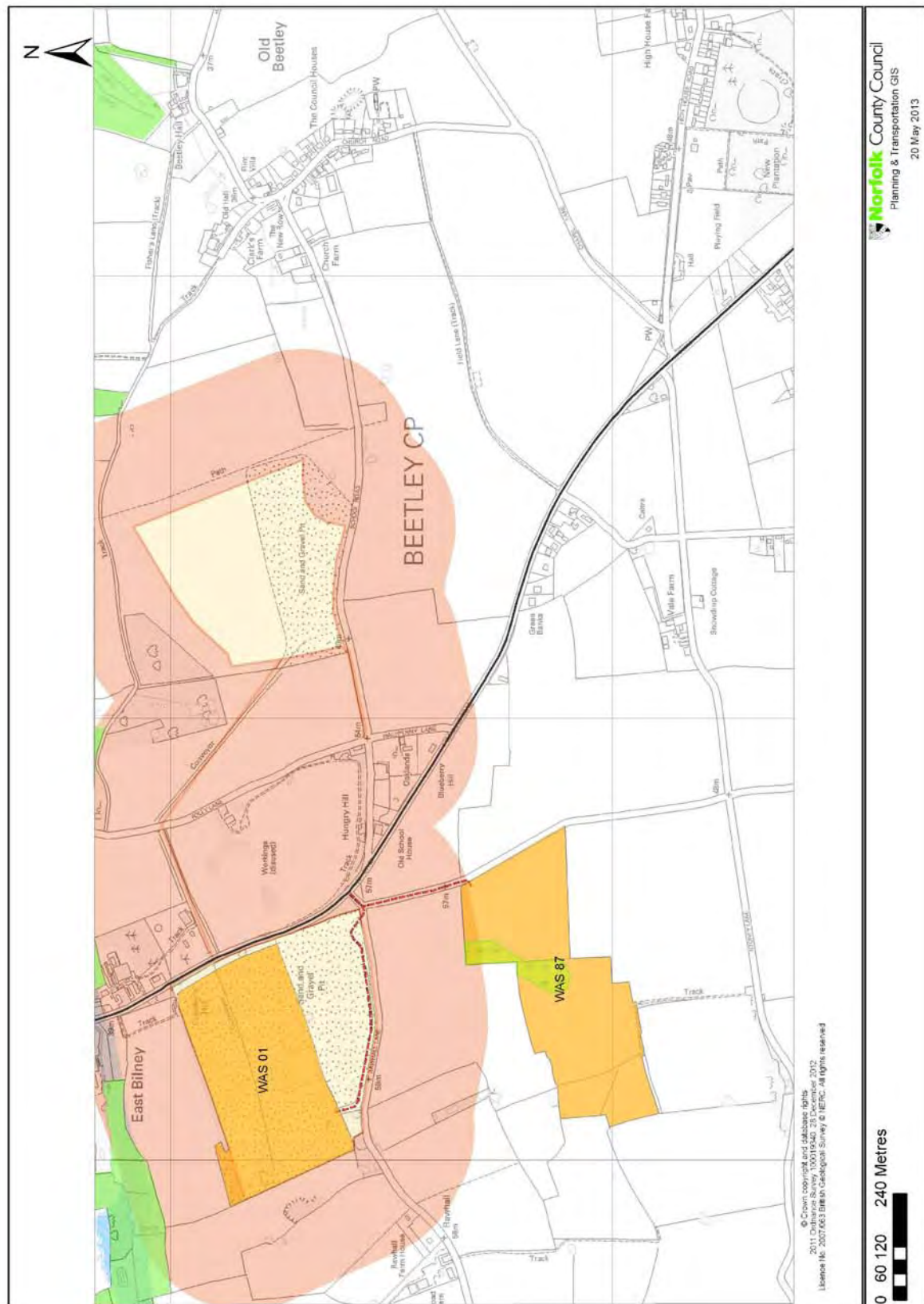
The County Council will work closely with Anglian Water, the Environment Agency, South Norfolk Council and the Broads Authority to ensure that development proposals at Whitlingham will:

- a) Minimise the effect on the amenity of local residents, with particular emphasis on noise and odour;
- b) Route all HGV movements to and from the site via the C202 Kirby Road and the A146 Loddon Road, with the routing and timing of HGV movements to be controlled through planning conditions or Section 106 Legal Agreement as appropriate;
- c) Not affect adversely the landscape setting of the Broads by insensitively locating and/or designing equipment or buildings on the site; and
- d) In line with the requirements of section 10 of the NPPF and the Technical Guidance to the National Planning Policy Framework, choose preferentially locations within Flood Zone 1, and where locations in Flood Zone 2 or 3 are proposed, adequate measures to control pollution and manage sewage during flooding events are put in place, to be controlled by either a Section 106 Legal Agreement or planning condition(s).

6 The Waste Site Specific Allocations



Map of allocated sites in the parish of Beetley – WAS 01 and WAS 87



WAS 01 – Land at Beck Farm, East Bilney, East Dereham

6.1.1 Site Characteristics

- The 13.5 hectare site is within the parish of Beetley
- The site is estimated to have capacities in tonnes per annum for; inert waste recycling 50,000; and inert fill 45,000
- The site is a mineral working, partly restored, with processing plant, and inert waste recycling. The sand and gravel processing plant receives mineral by conveyor from a quarry to the east
- Access would continue to be off the U35090 Rawhall Lane, 150 metres from its junction with the B1146, via which all traffic would be routed
- The site is over 6km from Dereham
- The village of East Bilney is within 250 metres of the site boundary, the nearest residential property is approximately 60 metres from the site boundary
- The site is in Flood Zone 1
- The site is above a major aquifer
- The site is within 150 metres of County Wildlife Site CWS 2137 'Beck Farm Meadows', 220 metres of CWS 1023 'Blockpightle Plantation', 440 metres of CWS 2068 'Rawhall Wood' 510 metres of CWS 1037 'Folly Lane Meadow' and 860 metres from CWS 1022 'Land adjacent to East Bilney Hall'
- The site is approximately 4.8 km of the River Wensum SSSI and SAC

6.1.2 The site is appropriate only for small-scale operations, and which would be justified in a rural location. Temporary inert waste operations would be appropriate; but permanent development of an industrial nature would conflict with the adopted Minerals and Waste Core Strategy landscape and amenity policies, and be unacceptable. Any extension of the life of the site beyond that of permitted temporary mineral extraction and processing would not be consistent with the approved restoration.

6.1.3 Due to the distance of the site from the River Wensum SAC and SSSI, no likely significant effects are expected.

Policy WAS 01

The site is allocated for inert waste recycling and inert fill, within the quarry, for a temporary period. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Development not prejudicing the timing and implementation of final restoration of the existing quarry;
- Protection of the landscape, with particular reference to views from the north;
- Protection of ecological interests, particularly 'Beck Farm Meadows' County Wildlife Site, through control of water run-off from the site;
- Protection of the aquifer through appropriate site design and engineering, including an artificial geological barrier for the landfill;
- Protection of local amenity through the control and mitigation of dust, noise, and lighting; and
- Provision of acceptable highway access via the B1146 and Rawhall Lane.

WAS 87 – Land west of Bilney Road, Beetley

6.87.1 Site Characteristics

- The 14.1 hectare site is located in the parish of Beetley, south of the village of East Bilney
- The site has an estimated capacity of 50,000 tonnes per annum for inert waste recycling, for the duration of mineral extraction
- The site is currently in agricultural use and is on Grade 3 land.
- The site is in Flood Zone 1
- Access would be from the C225 Bilney Road
- The site is 7km by road from Dereham and 6.5km to the A47
- The site is approximately 220 metres from the nearest residential property, Old School House, to the north-east
- Rawhall Wood, designated as County Wildlife Site 2068, is approximately 550 metres to the north-west of the site. CWS 1023 'Blockpightle Plantation' and CWS 2137 'Beck Farm Meadows' are less than a kilometre to the north of the site
- The site is approximately 2.2km from Dillington Carr SSSI, approximately 2.5 km from Horse Wood Mileham SSSI, 2.5km from Beetley and Hoe Meadows SSSI
- The site is 4.8km from the River Wensum SAC

6.87.2 The waste development proposed would be within a mineral working (Minerals Site Allocation MIN 51), and is suitable for temporary and ancillary operations comprising inert waste recycling and inert fill, to assist restoration. The site's relative isolation and location on a plateau would result in minimal visual intrusion or other amenity impact.

6.87.3 The Task 1 Habitats Regulations Assessment concluded that there would be no likely significant effects on the River Wensum SAC.

6.87.4 The closest dwellings to the site are about 250m to the north-west, with a farmhouse about 400m to the north-west. Subject to hedge-thickening on the site boundaries, the amenity impacts are likely to be acceptable. The working and restoration scheme will need to take this planting into account, alongside the protection of two small areas of woodland which exist on the site. It is not likely that working the site would have any adverse impacts on nearby designated nature conservation sites.

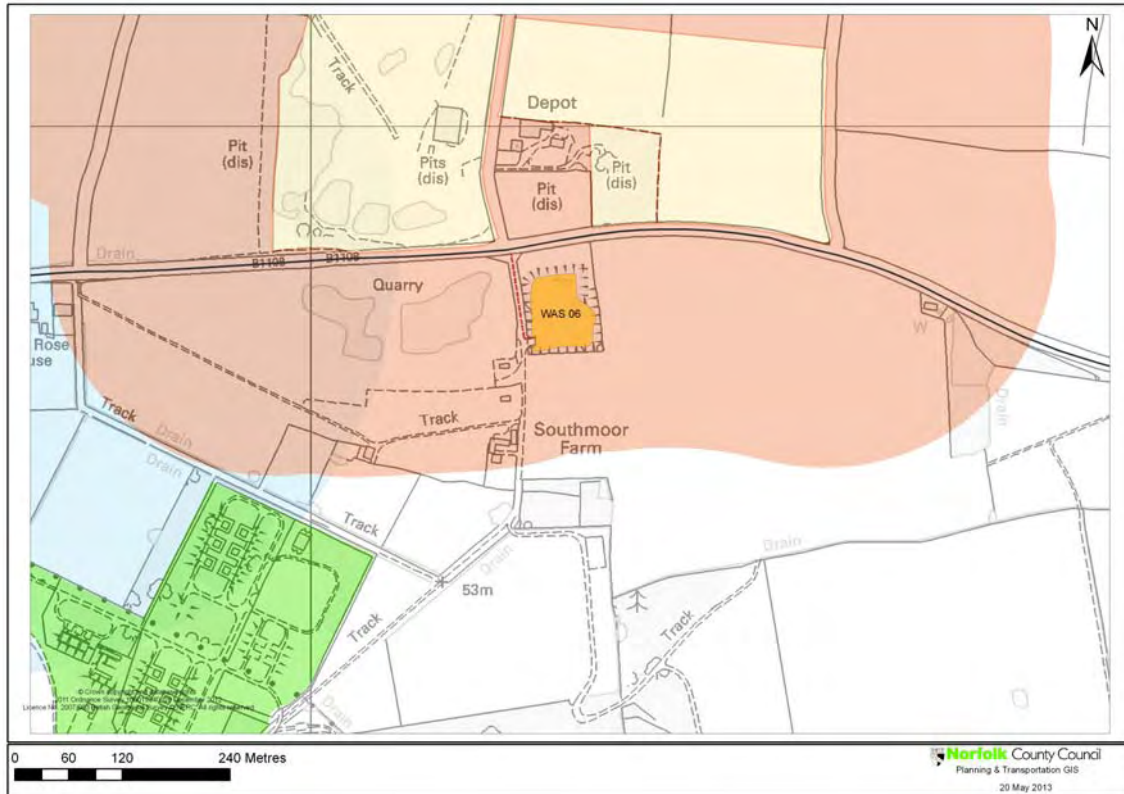
6.87.5 Highways access will need to be to Bilney Road, and then, via Rawhall Lane, to Fakenham Road (B1146). Bilney Road is narrow, and road widening or passing bays will be required, along with a financial contribution to highways improvements at the Rawhall Lane/Fakenham Road junction.

Policy WAS 87

The site is allocated for inert waste recycling and inert fill, as an operation ancillary to mineral extraction. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Operations to take place ancillary to mineral extraction, to assist restoration, for no longer than the duration of mineral extraction;
- Mitigation of landscape impacts by safeguarding the two small areas of woodland on the site, operating at post-extraction ground level and by appropriate landscaping;
- Protection of local amenity, including by control and mitigation of dust and noise, and the restriction of hours of operation;
- Ensure appropriate scientific study of an features of potential geodiversity interest is permitted during the operational stage;
- Provision of acceptable highway access, including satisfactory road-widening or passing bays on Bilney Road, as would be required for mineral extraction;
- Appropriate financial contributions to B1146 Fakenham Road/Rawhall Road junction improvements must be made; and
- Appropriate site design and engineering to protect groundwater and surface water. This is expected to include impermeable surfacing with sealed drainage.

WAS 06 - Land off B1108 Norwich Road, Carbrooke



6.6.1 Site Characteristics

- The 0.5 hectare site is within the parish of Carbrooke
- The site is estimated to have capacity of 20,000 tonnes per annum for inert recycling, and the reworking, removal and reuse of previously deposited foundry sand
- The site is a former quarry, partly infilled
- Access would continue to be off the U33104 Carbrooke Road, approximately 100 metres south of its junction with the B1108
- The site is located 3km to the east of Watton, the nearest market town
- The nearest residential property is within 100 metres, at Southmoor Farm
- The site is in Flood Zone 1
- The site is above an Upper Chalk major aquifer
- The site is within 300 metres of County Wildlife Site CWS 2091 'Watton Airfield'
- The site is 4.2km from Thompson Water, Carr and Common SSSI which is part of the Norfolk Valley Fens SAC

6.6.2 The site is a partly infilled former quarry, and is an appropriate location in principle for the recycling of the waste as proposed. Due to the distance from the Norfolk Valley Fens SAC, no likely significant effects are anticipated. It is considered that constraints could be dealt with through the planning application process.

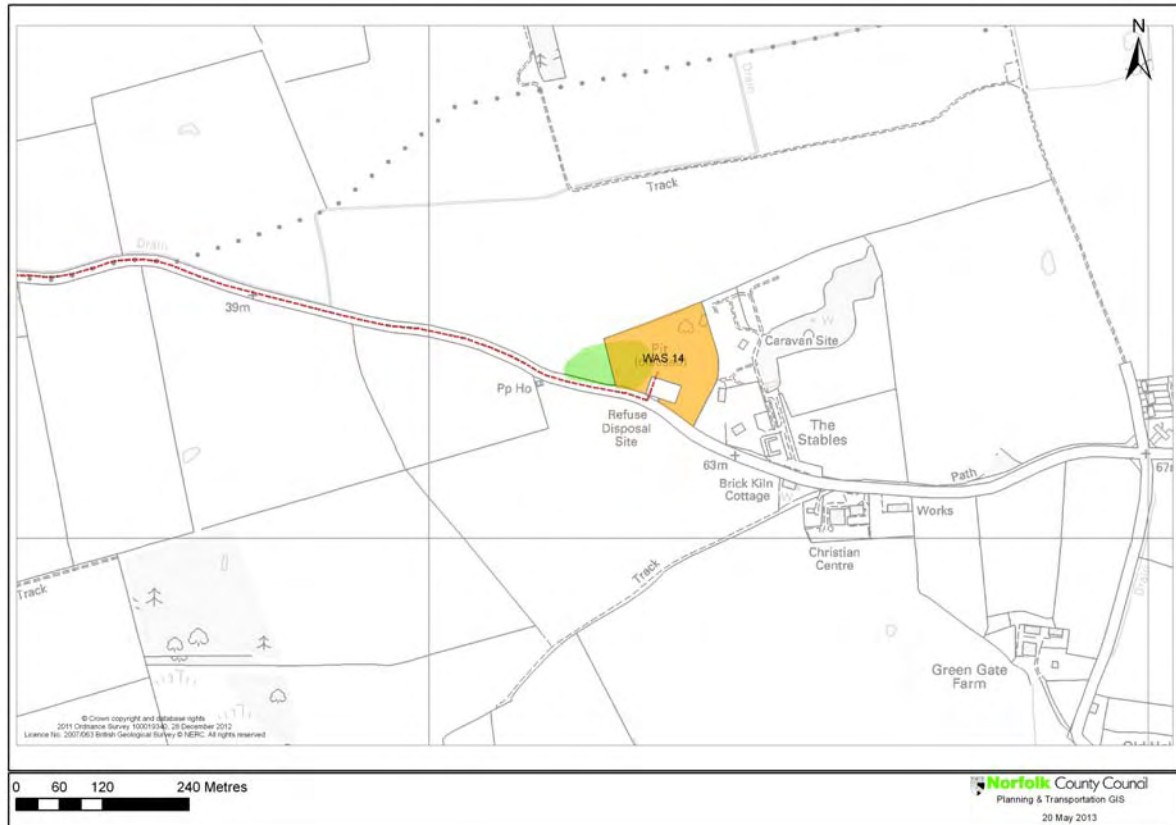
6.6.3 The site is part of the claylands plateau landform of central Norfolk, and is likely to impact on extensive category resources including Cretaceous Chalk and Pleistocene glacial sediments of the Lowestoft Formation. The site is significant and would give access to under-researched geological resources. A reference section or sections should therefore be retained for scientific study.

Policy WAS 06

The site is allocated for inert waste recycling and reworking, removal and reuse of deposited foundry sand, for a temporary period. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- A hydrogeological risk assessment to be provided, and mitigation measures undertaken as appropriate, to protect the chalk aquifer;
- Protection of the landscape and mitigation of any views into the site, by screening the site, including protection and retention of existing trees on site boundaries, with buffer zones where appropriate;
- Provision of acceptable highway access, including visibility improvements at the B1108 junction with the U33104 Carbrooke Road;
- Protection of local amenity through the control and mitigation of noise and dust; and
- Restoration of the site, to include woodland planting and the retention of geological sections for scientific study.

WAS 14 – Land at Ashill Recycling Centre, Swaffham Road, Ashill



6.14.1 Site Characteristics

- The 1.6 hectare site is within the parish of Ashill
- The site is estimated to have a capacity of 2,500 tonnes for an extension to the existing household waste recycling centre, and either 10,000 tonnes per annum for composting or 10,000 tonnes for inert waste recycling,.
- The site is in Flood Zone 1
- The site is a former pit, now well vegetated, except for an area on the frontage occupied by an existing Household Waste Recycling Site
- Access would be off the C768 Swaffham Road, which has no status in the Highway Authority's route hierarchy
- The site is over 5km from Watton, the nearest market town, but more than 8km via a suitable highway route
- The site is in a rural location, but with residential properties and a caravan site to the east, the nearest residential property is approximately 55 metres from the site boundary
- Part of the western area of the site is within County Wildlife Site 914 called 'County Council Tip', comprising mixed woodland and grassland
- The site is 3 km from Great Cressingham Fen SSSI, part of the Norfolk Valley Fens SAC. The site is approximately 3.2km from Breckland Farmland SSSI, and approximately 4km from Breckland Forest SSSI, both part of the Breckland SPA

6.14.2 The site is a former chalk pit surrounding the existing household waste recycling centre. Additional development within part of the site would be acceptable subject to the retention of existing trees and shrubs to screen the site, buildings and structures, and to protect the County Wildlife Site. Due to the distance between the site and the Breckland SPA and Norfolk Valley Fens SAC, no likely significant effects are expected.

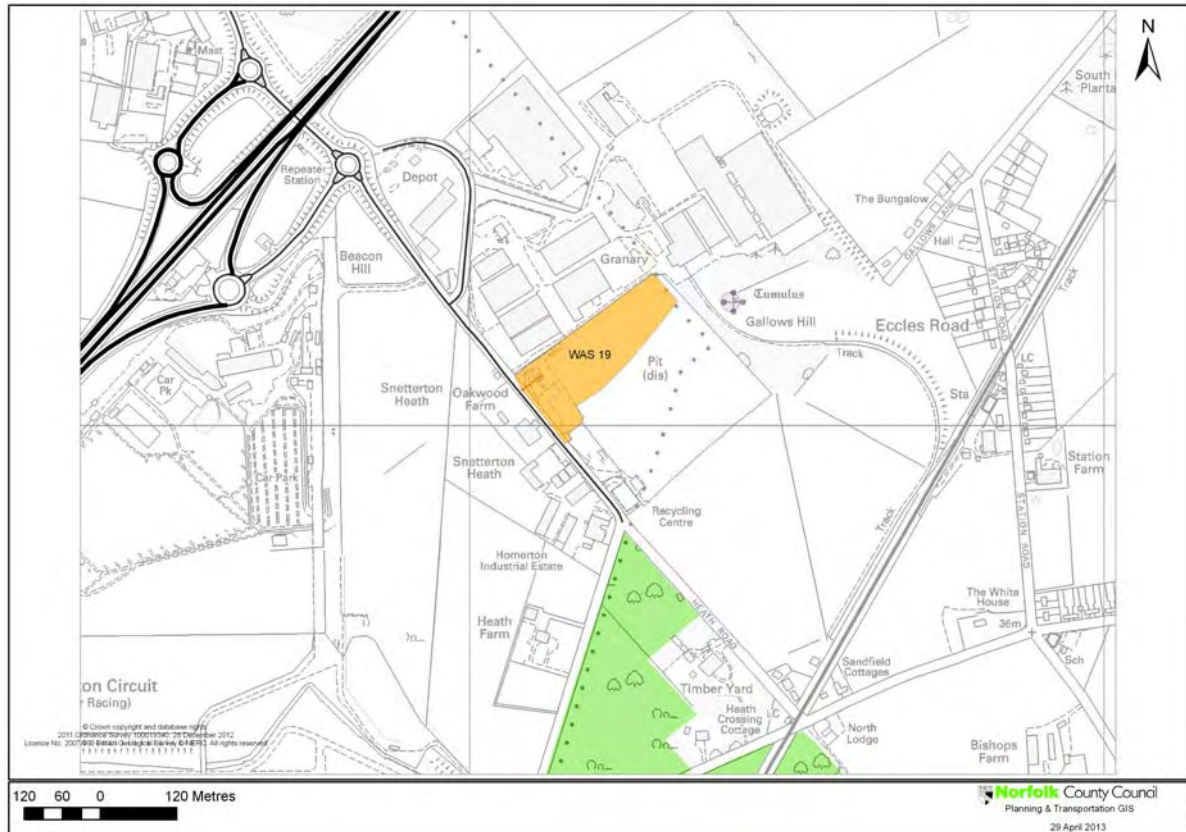
6.14.3 As the site is located less than 250 metres from dwellings and workplaces, a Site Specific Bioaerosol Risk Assessment (SSBRA) would need to be submitted at the planning application stage for a composting facility. This is in accordance with Core Strategy policy CS7. The Environment Agency would also require a SSBRA to be submitted at the environmental permitting stage, in accordance with their position statement: 'Composting and potential health effects from bioaerosols'.

Policy WAS 14

The site is allocated for a small-scale local facility comprising composting or inert waste recycling and/or an extension to the existing household waste recycling centre. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Retention and protection of existing trees and shrubs, with buffer zones where necessary;
- No plant, structures or buildings to be visible outside the site boundaries;
- Safeguarding of County Wildlife Site 914;
- The scale and detail of development being acceptable in terms of protection of local amenity and highway safety;
- Provision of acceptable highway access;
- Protection of local amenity to include the control and mitigation of dust and bioaerosols. The control of emissions of bioaerosols is likely to require composting operations to take place in-vessel; and
- Appropriate site design and engineering to protect groundwater and surface water. This is expected to include impermeable surfacing with sealed drainage.

WAS 19 – Land at Harling Road, Snetterton



6.19.1 Site Characteristics

- The 2.6 hectare site is in part of a former mineral working, and adjacent to a closed landfill, a landfill gas-to-electricity generator, a HWRC and a concrete plant.
- The site is estimated to have a capacity of 2,500 for a Household Waste Recycling Site and either 100,000 tonnes per annum for residual waste treatment, or 40,000 for composting
- The site is in Flood Zone 1
- The site is above an Upper Chalk major aquifer
- The site is within a “General Employment Area” in the Breckland Core Strategy
- Access would be off Heath Road, which joins the A11(T) 400 metres to the north-west of the site
- The site is 15km from Thetford and 6km from Attleborough
- There are residential properties at Eccles Road 400 metres to the east, and on Heath Road, 400 metres to the south-east. The nearest property, Oakwood Farm, which is approximately 50 metres from the site boundary, is on Heath Road opposite the site
- The site itself is not of wildlife significance. The nearest County Wildlife Sites are CWS 620 ‘Eccles Wood (North)’ approximately 20 metres away, CWS 621 ‘Eccles Wood (Middle)’ at 420 metres away and CWS 622 ‘Eccles Wood (South)’ approximately 470 metres to the south
- The site is approximately 2km from East Harling Common SSSI
- The site is 2.5km from Swangey Fen SSSI, part of the Norfolk Valley Fens SAC

6.19.2 Snetterton Heath is being considered as part of Breckland Council's ‘Attleborough and Snetterton Heath Area Action Plan’. Breckland Council's spatial vision for the Snetterton area is for high-tech motorsport and engineering development centring on the racing circuit and the Motorsport Vision proposal.

6.19.3 The site, being on employment land and within an area of commercial and industrial uses, is suitable in principle for waste management development. New development would need to be designed and conditioned so as to be compatible with its surroundings. As the site is located less than 250 metres from dwellings or workplaces, a Site Specific Bioaerosol Risk Assessment (SSBRA) would need to be submitted at the planning application stage for a composting facility. This is in accordance with Core Strategy policy CS7. The Environment Agency would also require a SSBRA to be submitted at the environmental permitting stage, in accordance with their position statement: 'Composting and potential health effects from bioaerosols'.

6.19.4 The site is part of a quarry in Pleistocene glacial till and outwash deposits of the Anglian Lowestoft Formation. It would therefore be beneficial for development at the site to be designed to retain open geological faces for geological study.

6.19.5 The site is proposed for a range of waste management uses, but the actual waste management operation(s) that will be developed and their scale are not known at the site allocation stage. Some of the proposed operations (such as thermal treatment) would produce ammonia and nitrogen emissions. These emissions could lead to acidification and nutrient enrichment of habitats, but the effects would depend on the concentration of the emissions, the existing condition of the habitats and their distance from the site.

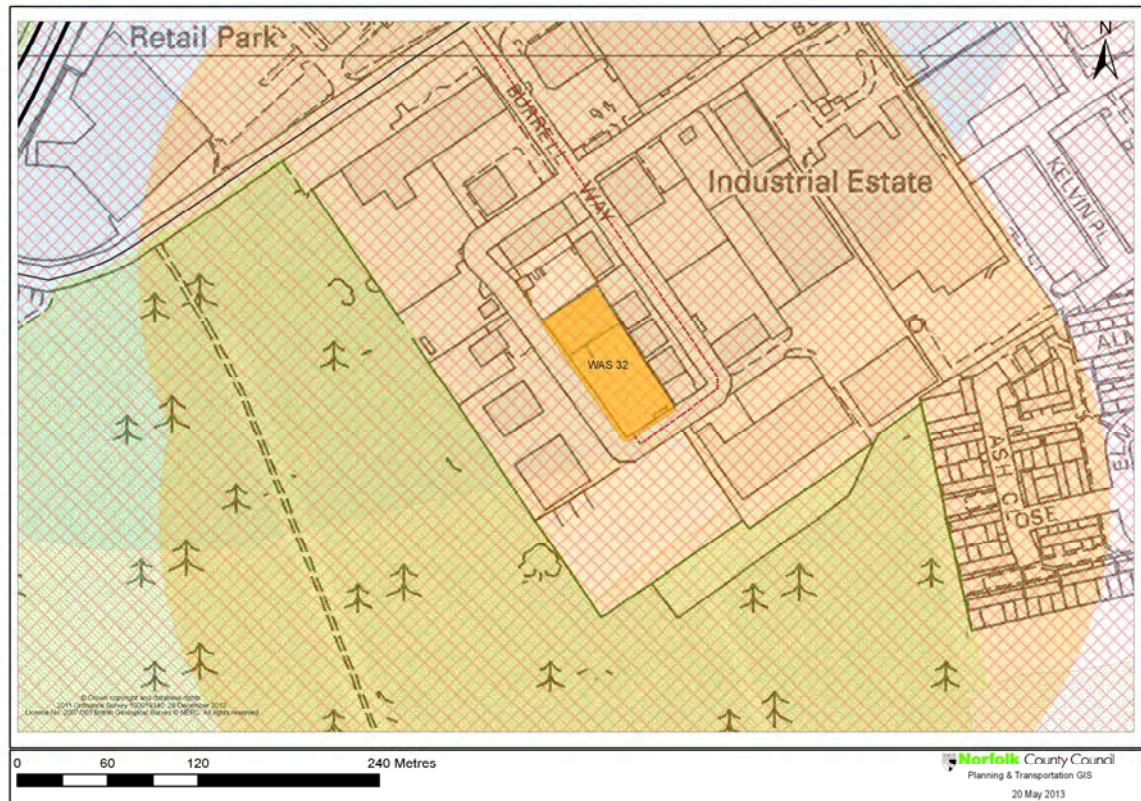
6.19.6 The site is approximately 2.5km from Norfolk Valley Fens SAC, less than 7km from the Breckland SPA and less than 9km from the Breckland SAC. The Habitats Regulations Assessment concluded that with appropriate mitigation and control measures no likely significant effects are anticipated on the European designated sites.

Policy WAS 19

The site is allocated for a range of activities comprising composting, anaerobic digestion, processing of recyclables, inert waste recycling, HWRC and/or residual waste treatment processes, including energy-from-waste, thermal treatment and/or mixed waste processing. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Protection of the amenities of residents and businesses through the control and mitigation of noise, odour, dust and bioaerosols. The control of bioaerosols is likely to require composting operations to take place in-vessel.
- Development proposals should have regard to the spatial strategy within Breckland District Council's adopted Core Strategy (Policy SS1) as it relates to Snetterton Heath Employment Area and be compatible with surrounding uses;
- Enclosure of operations other than a HWRC within buildings, and consideration of scale, design, processes and visual impacts in the context of both the developing role of the Snetterton Heath Employment Area, and the wider landscape;
- A hydrogeological risk assessment must be prepared to determine the potential for any impacts on the aquifer, with particular reference to the adjacent landfill site, and mitigation measures, including appropriate site design and engineering, undertaken as necessary;
- Appropriate abatement and control techniques to be implemented to ensure no adverse effect on the integrity of Norfolk Valley Fens SAC, Breckland Forest SAC, Breckland Forest SPA and other protected habitats in the vicinity of the site, due to emissions to air;
- Protection of geodiversity interests by the retention of geological exposure(s) for study; and
- Provision of acceptable highway access, including adequate visibility at site access.

WAS 32 – Land at Thetford transfer station, Burrell Way, Thetford



6.32.1 Site Characteristics

- The 0.4 hectare site is located within Thetford
- The site has an estimated capacity of 5,000 tonnes per annum for a HWRC, and 50,000 tonnes for other recycling.
- The site is occupied by an existing waste transfer station and HWRC.
- The site is in Flood Zone 1
- The site is above an Upper Chalk major aquifer
- The site is on a Groundwater Source Protection Zone 1
- The site is on the London Road industrial estate in the southern part of Thetford, within 700 metres (via Burrell Way and London Road) of a roundabout junction with the A11(T)
- A residential area to the east adjoins the industrial estate, within 200 metres of the site, the nearest residential property is approximately 170 metres from the site boundary
- The site itself is of no ecological significance
- The site is less than 500 metres from County Wildlife Site CWS 2093 'Thetford Rifle Range'
- The site is also less than 300 metres from Elm Road Field SSSI
- The site is less than 100 metres from Breckland Forest SSSI (part of the Breckland SPA) and within the mitigation zone around the Breckland SPA for protection of stone curlew. The site is also 700 metres from Barnham Cross Common SSSI (part of Breckland SAC and Breckland SPA) and less than 900 metres from Thetford Heath SSSI (part of the Breckland SPA and Breckland SAC)

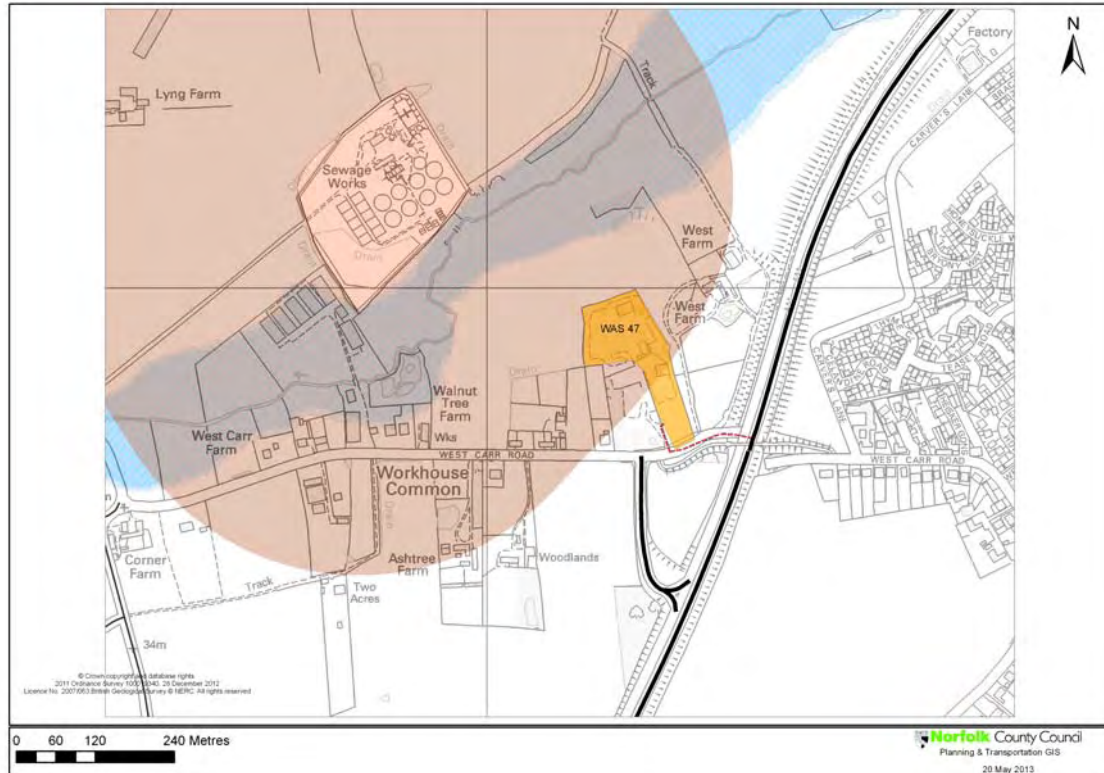
6.32.2 The site is on an industrial estate, with good accessibility by road, and is suitable for waste management development in principle. Constraints on processes are posed however by the close proximity of other businesses, a residential area, and by the need to ensure no adverse effects on the integrity of the Breckland SAC and Breckland SPA.

Policy WAS 32

The site is allocated for processing of recyclables, mixed waste processing, inert waste recycling and/or household waste recycling centre. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Protection of local amenity by control and mitigation of noise, dust and odour, including consideration of which waste operations should be totally enclosed;
- A Transport Assessment must be prepared to determine the potential for any impacts on the A11 junction and mitigation and control measures undertaken as appropriate, including the provision of acceptable highway access;
- A hydrogeological risk assessment must be prepared to determine the potential for any impacts on the aquifer and Groundwater Source Protection Zone, and mitigation measures, including appropriate site design and engineering, undertaken as appropriate; and
- Ensure no adverse effects on the integrity of the Breckland SPA and Breckland SAC by effective control and mitigation of lighting, dust and noise.

WAS 47 – Land at West Carr Road, Attleborough



6.47.1 Site Characteristics

- The 1.7 hectare site is located within the parish of Attleborough, west of the A11(T) Attleborough bypass
- The site has an estimated capacity of 10,000 tonnes per annum for waste recycling and transfer
- The site is occupied by a demolition business, having previously been a haulage depot
- The site is in Flood Zone 1
- Access is off the C137 West Carr Road, 100 metres west of its junction with the A11(T)
- There are residential properties on West Carr Road, the nearest being to the west, within 75 metres
- The site is of no ecological significance
- The site is 2km from Swangey Fen SSSI which is part of the Norfolk Valley Fens SAC

6.47.2 The site is on developed land close to the A11 and is suitable for waste management development. The C173 West Carr Road has a left in/left out junction with the A11(T) and vehicles heading south on the A11 need first to travel north and then leave at the next junction and re-enter the A11 heading south. A weight restriction prevents HGVs taking a shorter, but unsuitable route, heading west.

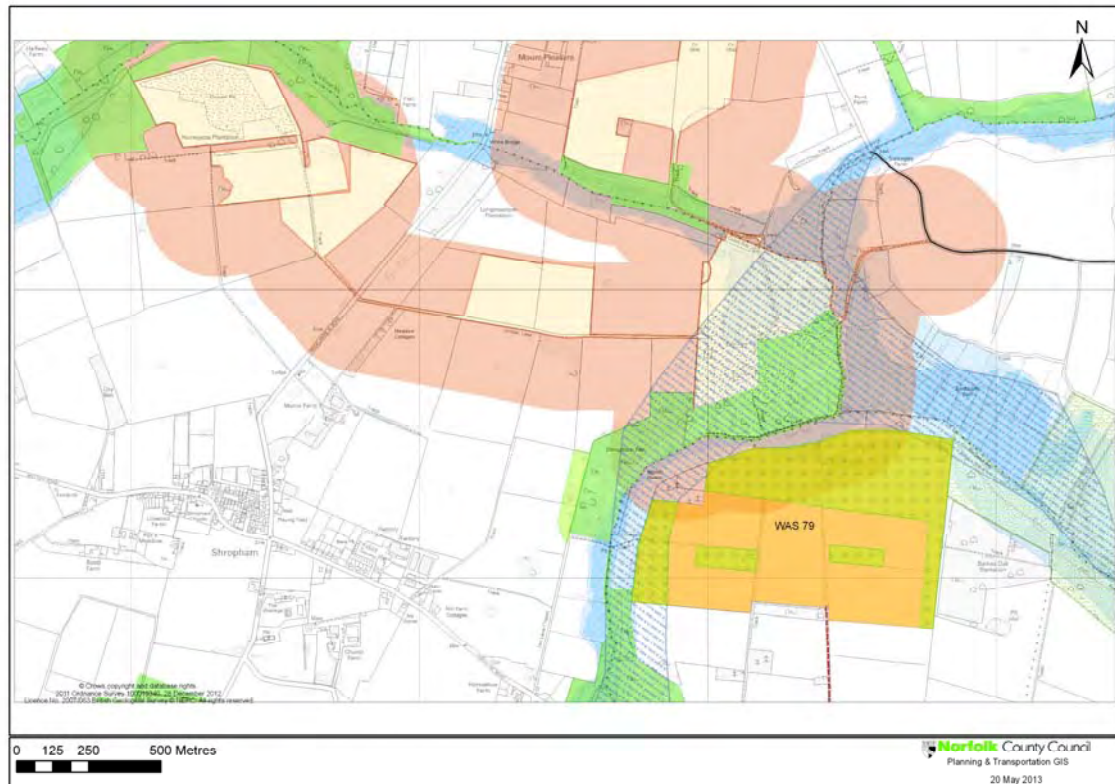
6.47.3 The site is largely screened from view by trees and bunding; therefore visual intrusion would be limited. The type and scale of development would be constrained by proximity of residential properties; this could be addressed and impacts controlled through the planning application process.

Policy WAS 47

The site is allocated for inert waste recycling and/or waste transfer. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Enclosure of waste management activities within buildings;
- Protection of local amenity by control and mitigation of dust, noise, odour, lighting and the restriction of hours of operation;
- Landscaping to mitigate any impacts on visual intrusion, particularly on nearby residents, by site operations;
- Protection of water resources through appropriate site design and engineering;
- A Transport Assessment must be prepared to determine the suitability of the junction between the C137 West Carr Road and the A11 and mitigation and control measures undertaken as appropriate; and
- Vehicle routing to be to and from the west, via the A11.

WAS 79 – Land at North Farm, Snetterton



6.79.1 Site Characteristics

- The 58.2 hectare site is within the parish of Snetterton
- The site has an estimated capacity of 45,000 tonnes per annum for inert landfill and 30,000 tonnes for secondary aggregate recycling, for the duration of mineral extraction
- The site is currently in agricultural use and is on Grade 4 and 5 land
- The site is almost all in Flood Zone 1, with only small parts in Flood Zones 2 & 3 (close to the River Thet), which are not being allocated
- The River Thet (designated a Core River Valley) borders the northern and western boundaries of the site
- Access to the site would be via a haul road from the south, off the C138 Hargham Road
- The site is approximately 6km by road from Attleborough, the nearest market town, and 2km from the A11
- The nearest residential property is approximately 460 metres from the site boundary, North Farm, which is 500 metres to the south, contains land on which horses are trained.
- Swangey Fen SSSI (part of Norfolk Valley Fens SAC) is adjacent to the site
- Areas north of the River Thet are designated as County Wildlife Sites, including CWS 645 'Old Gravel Works' and CWS 809 'Shropham Fen' which are less than 200 metres from the site boundary
- CSW 804 'North of Red Bridge' is adjacent to the site, CWS 639 'Fen Plantation' is less than 1km from the site, CWS 814 'South of Mount Pleasant' is less than 1km from the site and CWS 800 'Lakes and Rivers in Shropham' is less than 650 metres from the site
- Part of the site is located within groundwater Source Protection Zones 2 and 3.

6.79.2 This site is an 'extension' to the current Shropham Quarry operations. The current site being worked is Honeypots quarry, which is being worked and restored in phases. In December 2011, planning permission was granted for an extension to the Honeypots quarry and a site to the north of Spong Lane.

6.79.3 The waste development proposed would be within a mineral working (Minerals Site Specific Allocation MIN 102), and is suitable for temporary and ancillary operations comprising inert waste recycling and inert fill, to assist with restoration of the allocated mineral extraction operations.

6.79.4 Swangey Fen SSSI (which is part of the Norfolk Valley Fens SAC) is currently in an 'unfavourable recovering' condition. The Habitats Regulations Assessment concluded that if hydrogeological changes, dust deposition and nitrogen deposition from quarrying and inert waste management operations were properly mitigated/controlled, there would be no adverse effects on the integrity of the SAC.

6.79.5 In the absence of clear evidence to the contrary, a further (new) road crossing of the River Thet could not be permitted and a haul road to the south to Hargham Road would therefore be needed. A hydrogeological risk assessment will be necessary to determine the exact workable areas and any required mitigation measures.

6.79.6 The landscape setting of WAS 79 is sensitive, with the River Thet classed as a Core River Valley. A buffer zone is therefore judged necessary to protect that area within the Core River Valley from extraction and subsequent waste management operations, and this buffer zone would also help protect against adverse impacts on the designated nature conservation sites surrounding the allocation site. A further buffer zone would also be needed to protect the integrity of the adjacent Barnes Oak woodland.

6.79.7 The site has high potential for archaeological remains – finds have been made in the local area from a number of different periods. Archaeological assessment would primarily be expected to take place as part of the prior mineral extraction planning application.

6.79.8 Previous excavations at minerals sites in Shropham have revealed features of national geodiversity importance (glacial and interglacial deposits, including buried terrace sediments and animal bones), and similar structures could also be present in the site.

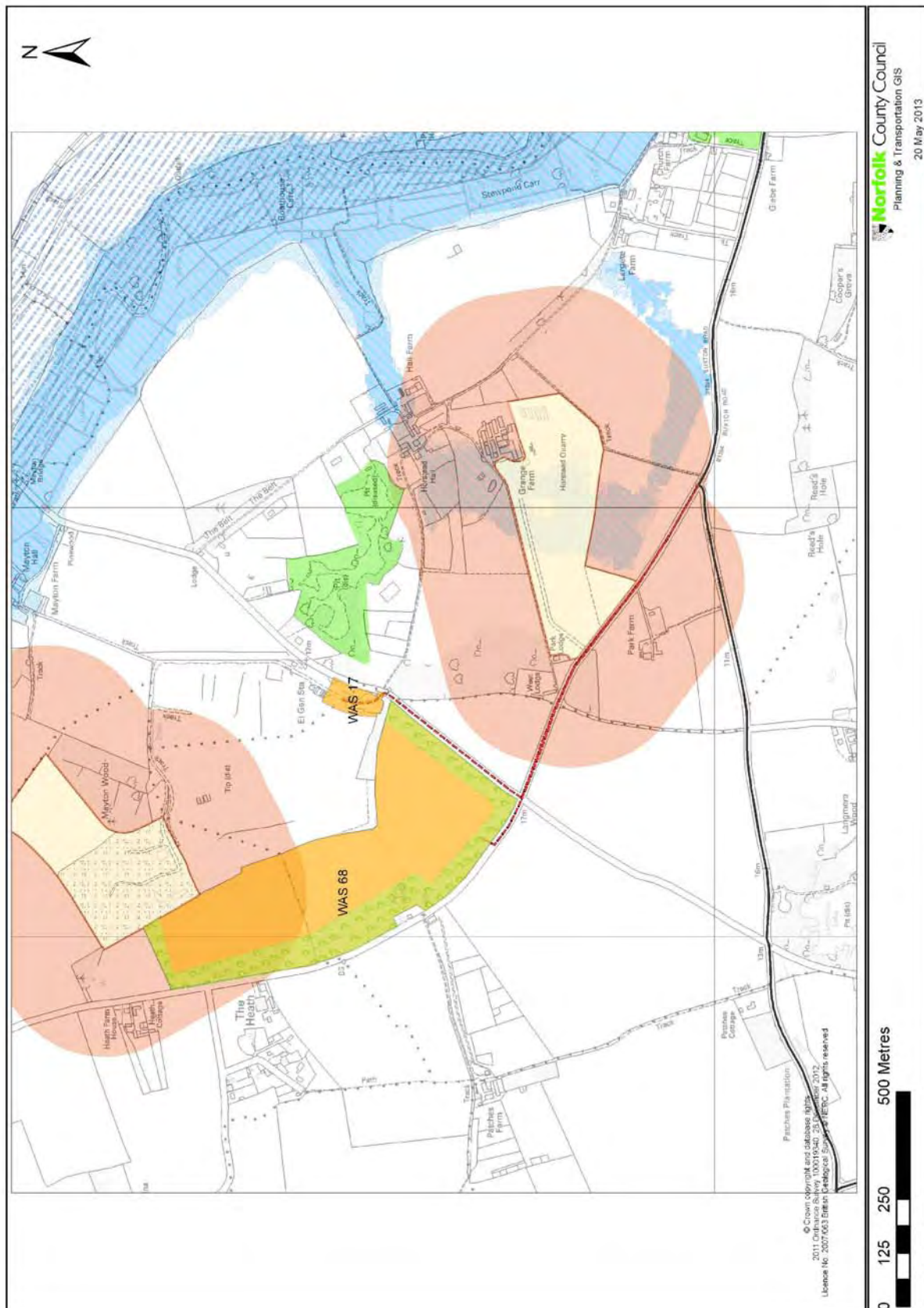
Policy WAS 79

The site is allocated for inert landfill and secondary aggregate recycling. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Operations to take place ancillary to mineral extraction, to assist with progressive phased restoration, for no longer than the duration of mineral extraction;
- A desk-based archaeological assessment must be prepared, followed by field surveys and trial-trenching, with the results to be submitted with any planning application;
- Some open faces must be retained for geological study during the operational stages;
- Protection of local amenity by control and mitigation of noise and dust, including by consideration of siting and design of recycling equipment;
- It must be demonstrated that levels of dust deposition and/or nitrogen deposition on Swangey Fen SSSI/Norfolk Valley Fens SAC would not have an adverse effect on the integrity of the SAC;
- A buffer zone is needed along the north-east, northern and western boundary to protect existing areas of woodland as shown on the Policies Map, Swangey Fen SSSI, Shropham Fen CWS and the Core River Valley of the River Thet;
- A buffer zone to the east is necessary to protect the integrity of Barnes Oak Wood;
- A hydrogeological risk assessment must be prepared to correctly determine the potential for any impacts on the Swangey Fen SSSI/Norfolk Valley Fens SAC and to help inform the exact workable boundary. Only those parts of the site above the water table could be used for inert landfill and recycling, and an artificial geological barrier will be required for the landfill;
- Drainage from the waste treatment area must be sealed to prevent pollution of groundwater and surface water. Only clean, uncontaminated water should be discharged to the River Thet;
- Appropriate screening and/or bunding will be necessary to protect the amenity of the residents of North Farm (to the south), with the location of recycling equipment considered carefully. The impact on racehorse 'gallops' will also need to be considered carefully;
- A haul road will need to run south of the site to Hargham Road (with an acceptable junction arrangement) and then to the A11 (no HGVs will be permitted to travel north-westwards along Hargham Road, save for occasional local deliveries) as for the prior mineral working at the site, unless it is demonstrated at the planning application stage that any vehicular bridge crossing proposed would not adversely affect the integrity of the Norfolk Valley Fens SAC; and
- A comprehensive restoration scheme will need to be developed to take into account the points above, with wide field margins, hedgerows and woodland included.

Broadland Sites

Map of allocated sites WAS 17 (Frettenham, and Horstead with Stanninghall) and WAS 68 (Frettenham Buxton with Lammas)



WAS 17 – Land at Mayton Wood landfill site, Little Hautbois Road

6.17.1 Site Characteristics

- The 0.8 hectare site is located in the parishes of Frettenham, and Horstead with Stanninghall
- The site has an estimated capacity as a Household Waste Recycling Centre of 5,000 tonnes per annum
- Part of the site is in use as a Household Waste Recycling Centre (HWRC), near the entrance to the former Mayton Wood landfill
- The site is in Flood Zone 1
- The site is above a major aquifer
- Access is off the C532 Frettenham Road, with HGVs routed to and from the south via the C494 Coltishall Road/Buxton Road and the B1354.
- The site is 8km from the edge of Norwich
- The site is in a rural setting but with isolated houses, the nearest residential property being approximately 110 metres from the site boundary
- A public right of way, Frettenham FP2, joins Frettenham Road close to the southern end of the site frontage
- Croswick Marsh SSSI, part of the Broads SAC, Broadland SPA and Broadland Ramsar is approximately 4.3km from the site
- County Wildlife Site CWS 1411 'Disused Gravel Pit' is less than 100m from the site

6.17.2 The site includes a HWRC established when the adjoining landfill site was active. The site is suitable for allocation for its continued operation and expansion, subject in particular to landscape and amenity considerations.

6.17.3 The Task 1 Habitats Regulations Assessment concluded that there would be no likely significant effects on the Broads SAC, Broadland SPA or Broadland Ramsar, subject to the site having an impermeable surface and sealed drainage system.

Policy WAS 17

The site of the existing HWRC, and an additional area, is allocated for its continued operation and expansion. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Impermeable site surfacing and a sealed drainage system to protect groundwater and surface water;
- Protection of the amenities of local residents and users of PROW FP2 through control and mitigation of noise, dust, odour and lighting;
- Appropriate site design and layout, including maintenance and enhancement of landscaping/ screening to minimise landscape impact, and to protect the setting of the Hautbois Hall and Mayton Bridge;
- Provision of acceptable highway access; and
- Routing of HGVs to and from the south only, via the C494 Coltishall Road/Buxton Road and the B1354.

WAS 68 – Land near Mayton Wood landfill site, Little Hautbois Road,

6.68.1 Site Characteristics

- The 23.5 hectare site is located in the parishes of Buxton with Lammas and Frettenham
- The site has an estimated capacity for inert landfilling of 45,000 tonnes per annum, for the duration of mineral extraction
- The site is currently agricultural land and is on Grade 3 land.
- The site is in Flood Zone 1
- The site is above a major aquifer
- Access would be off the C494 Coltishall Road
- The nearest residential property on the Buxton Road is approximately 15 metres from the site boundary
- Public right of way Frettenham FP2 crosses the southern part of the site
- The site is 8km from the edge of Norwich
- Croswick Marsh SSSI, part of The Broads SAC, Broadland SPA and Broadland Ramsar is approximately 4.5 km from the site
- County Wildlife Site CWS 1411 'Disused Gravel Pit' is less than 150m from the site

6.68.2 The site is also allocated for mineral extraction (Minerals Site Allocation MIN 37) subject to a substantial unworked buffer to the Coltishall Road, and the area to be worked for mineral is also suitable for temporary and ancillary use for inert fill, to assist restoration.

6.68.3 The site is located between the closed landfill site at Mayton Wood and the B1354. The site is open and the landscape value of the area is reduced by the domed form of the landfill. The screening that is proposed to surround the site will provide long-term landscape gains if it is retained, which will help to mitigate and screen the differences in landform between the closed landfill and the site specific allocation.

6.68.4 The amenity impacts on the properties closest to the site have been subject to an initial screening assessment by the proposer of the site and this has informed the depth of the screening surrounding them (as shown on the Policies Map).

6.68.5 The site is within the River Bure catchment area and approximately 1km from the river. However, the site is 4.5km from Crostwick Marsh SSSI, which is the closest part of the the Broads SAC, Broadland SPA/Ramsar and 7.8km from the Bure Broads and Marshes SSSI, which the River Bure flows into. No likely significant effects are expected on the Broadland SPA due to the distance of the allocation from the SPA. No likely significant effects are expected on the Broadland SAC or Ramsar as long as the operations take place above the water table.

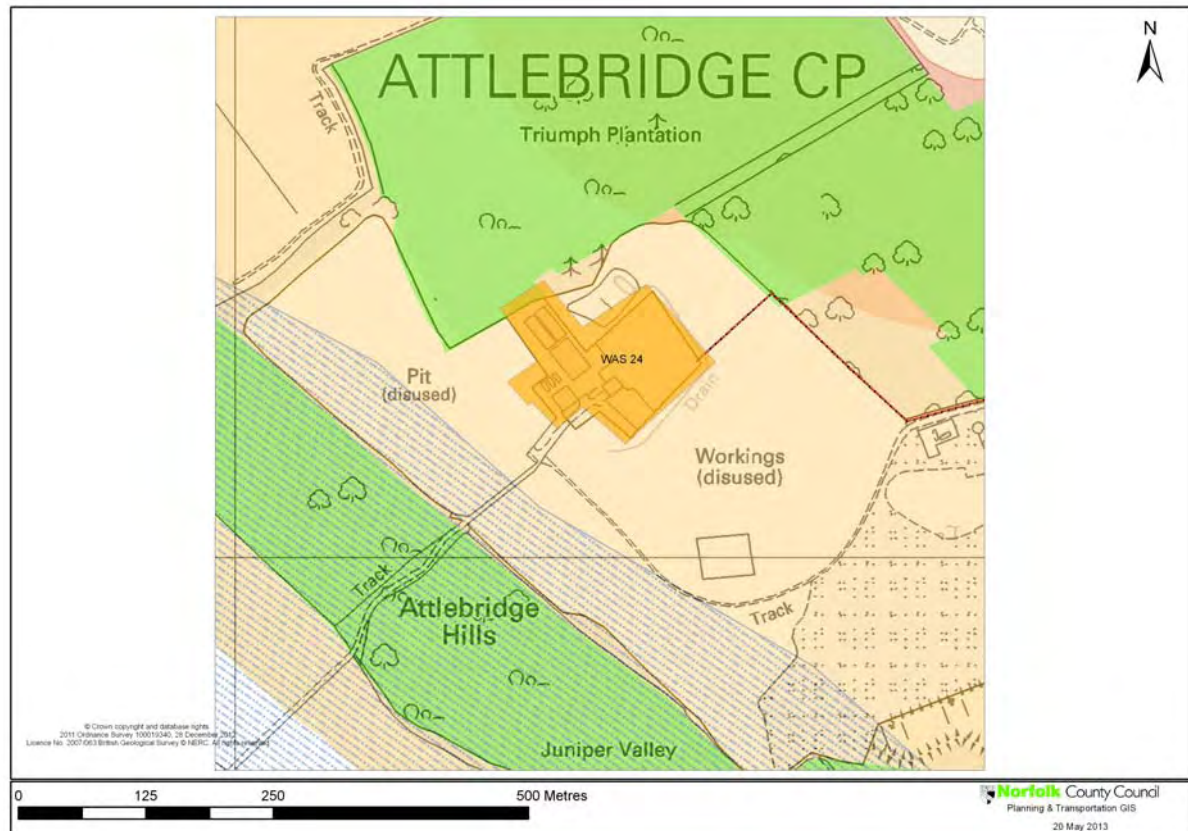
6.68.6 Prior extraction operations at this site may reveal local Pleistocene extensive geological resources including the Wroxham and Happisburgh Formations. It would therefore be useful to retain some open faces for scientific study after restoration.

Policy WAS 68

The site is allocated for inert landfill. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Inert landfill to be part of a scheme for the phased working and low level restoration of a sand and gravel quarry at the site;
- Protection of amenities of residents, and of users of PROW FP2 by mitigation and control of noise, vibration and dust;
- A screening scheme and the design and layout of the site to minimise landscape impact, and include mitigation of the views from the five properties along the Buxton Road, users of PROW FP2, surrounding roads and protection of the setting of nearby listed buildings - Hautbois Hall and Mayton Bridge;
- No operations below the water table, to protect hydrogeological and nature conservation interests, including the Broads SAC and Broadland Ramsar;
- Restoration to a landform compatible with the adjacent restored landfill, and to add ecological interest, preferably including mixed species hedgerow and woodland;
- If compatible with the landscape and ecology objectives, protection of geodiversity by retention of geological exposure(s) for study to be included within an restoration scheme; and
- Provision of acceptable highway access, including routing of traffic to and from the south only via the C494 Coltishall Road/Buxton Road and the B1354 Buxton Road, and developer financial contribution towards improvement works along that route as required by the Highway Authority to ensure highway safety.

WAS 24 – Land at Keeper’s Cottage, Attlebridge



6.24.1 Site Characteristics

- The 1.9 hectare site is located in the parish of Attlebridge
- The site has an estimated capacity of 20,000 tonnes per annum for temporary composting. The site is a small area adjoined on three sides by previously landfilled areas, and the total landfill capacity at this site is estimated at 75,000 tonnes
- The site is currently occupied by Keeper’s Cottage and its curtilage; the nearest other residential property is approximately 490 metres from the site boundary
- The site is in Flood Zone 1
- The site is above a major aquifer
- Access would be via an existing haul road to the landfill, off the C261 Reepham Road
- The site is 8km from the edge of Norwich
- A public right of way, Attlebridge RB3 passes within 50 metres of the south-west boundary of the site, where it is joined by RB4
- County Wildlife Site 1344 ‘Triumph and Foxburrow Plantations’ adjoins the site, CWS 1343 ‘Attlebridge Hills’ is less than 150m from the site, CWS 2070 ‘Wensum Pastures’ is less than 1km from the site, CWS 2176 ‘Marriott’s Way’ is less than 1km from the site
- Swannington Update Common SSSI is approximately 1.6km from the site and Alderford Common SSSI is approximately 2.2km from the site.
- The River Wensum SSSI/SAC is 700 metres to the south-west

6.24.2 The site comprises an isolated dwelling and its curtilage surrounded by previously quarried and infilled land. The site is also allocated for mineral extraction (Minerals Site Allocation MIN 55) and its infilling, following mineral extraction, would enable restoration to be completed. The site could be used for temporary composting in the mean time, as long as the existing dwelling is uninhabited or removed prior to composting operations taking place.

6.24.3 The site is within the 'bird strike' consultation zone for Norwich International Airport, and has the potential to attract birds. Therefore a bird hazard assessment is likely to be required at the planning application stage and if significant risk is identified the proposals will need to be modified to mitigate the risk.

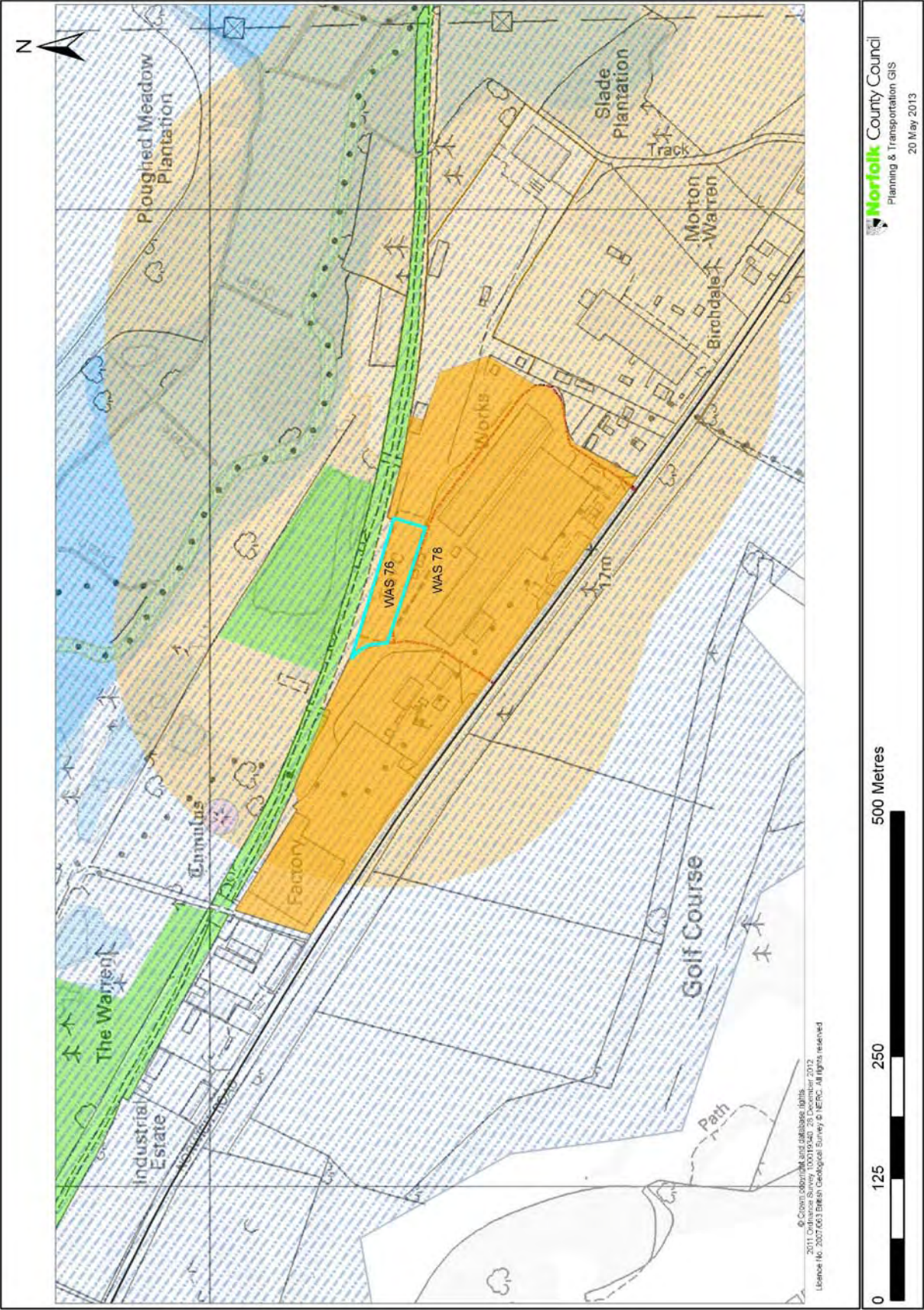
6.24.4 The Habitats Regulations Assessment concluded that there would be no adverse effects on the integrity of the River Wensum SAC subject to control of dust generation from the site, use of the existing road access to the site, an impermeable surface and sealed drainage system for composting operations and the compliance with Environmental Permit requirements, particularly engineering, for landfilling operations. In addition, groundwater monitoring already takes place in the vicinity of the site, due to the presence of an existing landfill site.

Policy WAS 24

The site is allocated for temporary composting, and for landfill of inert and/or non-hazardous waste following mineral extraction. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Protection of amenities of users of the public rights of way through appropriate mitigation measures;
- Operations to only take place above the maximum water table, in order to protect the River Wensum SAC and the aquifer;
- Impermeable site surfacing and a sealed drainage system and the control of emissions to air from the composting operations, to ensure no adverse effects on the integrity of the River Wensum SAC, other protected habitats in the vicinity of the site and the aquifer;
- Landfill site engineering and control of dust emissions to ensure no adverse effects on the integrity of the River Wensum SAC, other protected habitats in the vicinity of the site and the aquifer;
- Restoration, including timescales for completion, consistent with the adjoining previously worked and restored areas;
- The submission of evidence of a substantial, natural low permeability geological barrier will need to be provided, and approved by Norfolk County Council, in consultation with the Environment Agency, if a non-hazardous landfill is to be developed;
- The submission of a bird hazard assessment and implementation of mitigation measures if required to safeguard Norwich International Airport traffic from the risk of 'bird strike'; and
- Highway access as existing to the landfill via the C261 Reepham Road.

Map of allocated sites in Morton-on-the-Hill and Weston Longville parishes: WAS 76 and WAS 78



WAS 76 – Land at SPC Atlas Works, Lenwade

6.76.1 Site Characteristics

- The 0.4 hectare site is located in the parish of Morton-on-the-Hill
- The site has an estimated capacity for scrap metal recycling of 50,000 tonnes per annum
- The site is previously developed land, adjacent to a metal processing facility, and within a larger area of industrial land
- The site is in Flood Zone 1
- Access to the site would be off the A1067 Norwich Road
- The site is approximately 10km from the edge of Norwich
- The nearest residential property is approximately 235 metres from the site boundary
- The site is adjacent to County Wildlife Site 2176 'Marriott's Way' and within 25 metres of County Wildlife Site 1346 'Lake adjacent to Concrete Plant'. The site is approximately 300 metres from CWS 1349 'Lenwade Pits (East)' and 550 metres from CWS 1347 'Bush Meadow Plantation'
- The site is 1km from Alderford Common SSSI
- The site is within 150 metres of the River Wensum SAC and SSSI

6.76.2 The site is within an employment area, adjacent to an existing metal recycling site. Due to the location of the site, in proximity to Marriott's Way footpath, County Wildlife Sites and residential dwellings, mitigation measures will be required for potential amenity, landscape, highways and ecology impacts.

6.76.3 The Habitats Regulations Assessment concluded that, providing drainage water from the site is via a sealed drainage system, there would be no adverse effects on the integrity of the River Wensum SAC.

6.76.4 The site is accessed from the A1076 Norwich Road, which is a Principal Route in the County Council's Route Hierarchy. Access proposals for the site indicate that it would be served via a new/improved access with the A1067 with a dedicated right-turn lane. The existing points of access should be rationalised, to retain only one access to the A1067 with appropriate visibility standards.

6.76.5 It is considered that the constraints could be dealt with through a planning application, with particular reference to amenity impacts, site drainage, and highway access.

Policy WAS 76

The site is allocated for an extension to the existing scrap metal recycling facility. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Screening and landscaping along the boundary with Marriott's Way to protect landscape and local amenity;
- Protection of the amenities of residents, other businesses, and users of Marriott's Way through the siting and design of buildings, plant and equipment, including consideration of cumulative impacts with existing metal recycling on adjoining land, and mitigation and control of visual intrusion, noise, vibration, dust, litter and lighting;
- Appropriate site design, engineering and operations, including a Surface Water Management Strategy, impermeable site surfacing and a sealed drainage system, to ensure no adverse effects on the integrity of the River Wensum SAC and other protected habitats in the vicinity of the site;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A1067 and on accesses to the A47 and provide appropriate mitigation if necessary; and
- Provision of acceptable highway access, including improvements to and rationalisation of existing site highway accesses off the A1067.

WAS 78 – Land at SPC Atlas Works, Lenwade

6.78.1 Site Characteristics

- The 8.7 hectare site is located in the parishes of Morton-on-the-Hill and Weston Longville
- The site has an estimated capacity of 150,000 tonnes per annum for mixed waste processing, metal recycling, inert waste recycling, in-vessel composting, physical, chemical, and/or mechanical/biological treatment of household waste, waste transfer, and other forms of residual waste treatment excluding thermal treatment.
- The site is previously developed industrial land, some in use, between the A1067 and a former railway line which is now the route of Marriott's Way footpath
- The site is in Flood Zone 1
- Access to the site would be off the A1067 Norwich Road
- The site is approximately 10km from the edge of Norwich
- The nearest residential property is approximately 30 metres from the site boundary
- The site is adjacent to County Wildlife Site 2176 'Marriott's Way' and within 25 metres of CWS 1346 'Lake adjacent to Concrete Plant'. The site is approximately 300 metres from CWS 1349 'Lenwade Pits (East)' and 30 metres from CWS 1347 'Bush Meadow Plantation'
- The site is approximately 1km from Alderford Common SSSI
- The site is within 150 metres of the River Wensum SAC and SSSI

6.78.2 The site is extensive, within an employment area with other existing commercial and industrial uses, including an existing metal recycling site. Due to the location of the site, in proximity to Marriott's Way footpath, County Wildlife Sites and residential dwellings, mitigation measures will be required for potential amenity, landscape, highways and ecology impacts. As the majority of the site is located less than 250 metres from dwellings and workplaces, a Site Specific Bioaerosol Risk Assessment (SSBRA) would need to be submitted at the planning application stage for a composting facility. This is in accordance with Core strategy policy CS7. The Environment Agency would also require a SSBRA to be submitted at the environmental permitting stage, in accordance with their position statement: 'Composting and potential health effects from bioaerosols'.

6.78.3 The Habitats Regulations Assessment concluded that drainage from the site must be via a sealed drainage system, site operations which could cause emissions to air (such as dust and bioaerosols) should be carried out within a building and waste management operations should exclude those which could lead to nitrogen emissions. If these measures are undertaken then no adverse effects on the integrity of the River Wensum SAC should be achievable.

6.78.4 The site is accessed from the A1076 Norwich Road, which is a Principal Route in the County Council's Route Hierarchy. Access proposals for the site indicate that it would be served via a new/improved access with the A1067 with a dedicated right-turn lane. The existing points of access should be rationalised, to retain only one access to the A1067 with appropriate visibility standards.

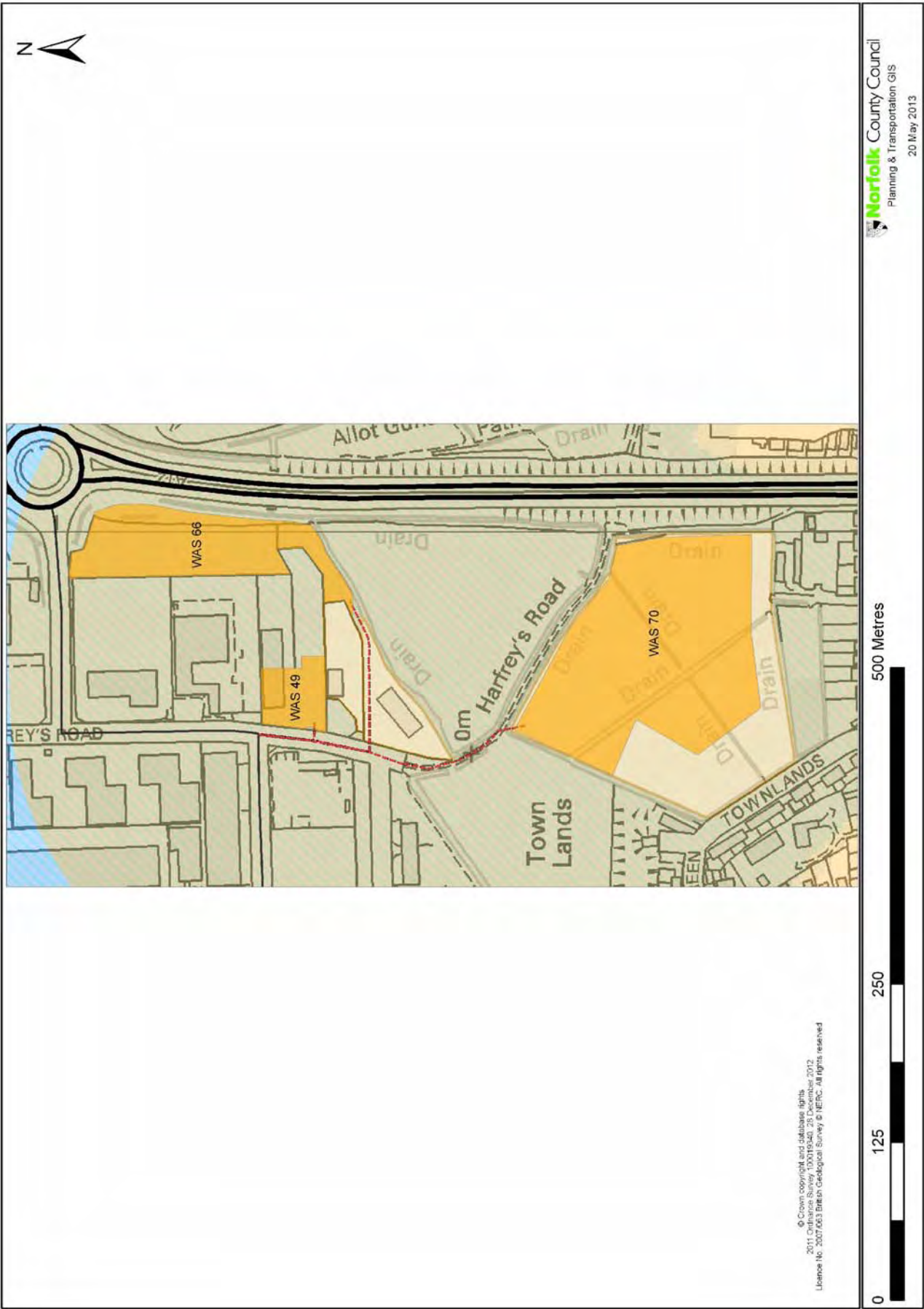
6.78.5 It is considered that the constraints could be dealt with through a planning application, with particular reference to amenity impacts, site drainage, emissions to air and highway access.

Policy WAS 78

The site is allocated for mixed waste processing, metal recycling, inert waste recycling, in-vessel composting, physical, chemical, and/or mechanical/biological treatment of household waste, waste transfer, and other forms of residual waste treatment excluding thermal treatment. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- The scale and bulk of new buildings and structures being compatible with the landscape in this location on the edge of the Wensum Valley;
- Screening and landscaping along the boundary with Marriott's Way to protect landscape and local amenity;
- Protection of the amenities of residents, other businesses, and users of Marriott's Way through the siting and design of buildings, plant and equipment, and mitigation and control of visual intrusion, noise, vibration, dust, bioaerosols, litter odour, and lighting;
- Appropriate site design, engineering and operations, including a Surface Water Management Strategy, impermeable site surfacing and a sealed drainage system, to ensure no adverse effects on the integrity of the River Wensum SAC and other protected habitats in the vicinity of the site, particularly from water run-off and emissions to air;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A1067 and on accesses to the A47 and provide appropriate mitigation if necessary; and
- Provision of acceptable highway access, including improvements to and rationalisation of existing highway accesses off the A1067.

Great Yarmouth Sites – WAS 49, WAS 66 & WAS 70



WAS 49 – Land at Old Lindgreat Site, Harfreys Road, Great Yarmouth

6.49.1 Site Characteristics

- The 0.3 hectare site is located in Great Yarmouth
- The site has an estimated capacity of 5,000 tonnes per annum as a household waste recycling centre, or 25,000 tonnes for recycling/processing/transfer of waste
- The site is previously developed land, on the Harfrey's Industrial Estate
- The site is in Flood Zone 3, albeit protected by flood defences
- Access to the site is off the C631 Harfrey's Road, within 380 metres of the roundabout junction with the A12(T)
- The site is within the Great Yarmouth built-up area, 2km from the town centre, the nearest residential property is approximately 275 metres from the site boundary
- The nearest area designated as of nature conservation value is Breydon Water which is designated as a SSSI, SPA and Ramsar site, 2km to the north-west.
- The site is also 4km from the Great Yarmouth North Denes SSSI and SPA

6.49.2 The site is on industrial land, and waste management development would be appropriate and consistent with adopted Minerals and Waste Core Strategy policies, subject in particular to consideration of design, and mitigation of amenity impacts, to ensure compatibility with other commercial uses in the area.

6.49.3 There is a need for Harfrey's Road Industrial Estate to maintain an appropriate visual appearance, to assist with retaining existing businesses and employment, and bring inward investment. Therefore new waste management development would need to safeguard the amenities of existing and potential new businesses through purpose-designed buildings, site layout and mitigation measures appropriate for the area.

6.49.4 The Habitats Regulations Assessment concluded that no likely significant effects were expected on the Great Yarmouth North Denes SPA, Breydon Water SPA and Ramsar sites, due to the distance of the allocated site from the SPAs and Ramsar and its location within an urban industrial area.

6.49.5 Site WAS 49 is located within Flood Zone 3 as defined by Table 1 of the Technical Guidance to the National Planning Policy Framework. The site is not located in the functional floodplain (Flood Zone 3b). Great Yarmouth Borough Council's Strategic Flood Risk Assessment (SFRA) (2009) shows that the site is protected by defences during 1 in 100 and 1 in 200 year flood events. The Environment Agency's 2D modelling undertaken for Great Yarmouth in 2011 confirms that the site is currently protected from flooding. Rising sea and river levels associated with climate change are expected to overtop the defences in this location in the future. The site is therefore likely to flood during a future 1 in 200 year event, even if the defences are maintained. The site is allocated for non-hazardous waste management uses within the 'less vulnerable' flood risk classification defined in Table 2 of the Technical Guidance to the National Planning Policy Framework, and therefore an Exception Test is not required.

6.49.6 A Sequential Test has been carried out by the County Planning Authority, for all sites proposed for allocation. The Sequential Test demonstrates that, considering those “strategic” sites well-related to Great Yarmouth (Core Strategy Policy CS5), there are no reasonably available sites in areas with a lower probability of flooding which would be appropriate to allocate for development instead of site WAS 49. The other two sites (WAS 66 and WAS 70) allocated in Great Yarmouth also fall within the same flood risk zones. A Site Specific Flood Risk Assessment will therefore need to be submitted at the planning application stage.

Policy WAS 49

The site is allocated for processing of recyclables, mixed waste processing, inert waste recycling, household waste recycling centre, waste transfer. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- The submission of a site specific Flood Risk Assessment, demonstrating to the satisfaction of the County Planning Authority that, taking into account any necessary flood risk management measures, the development is safe and will not increase flood risk elsewhere;
- Enclosure of waste management operations within a building(s);
- Protection of amenity through mitigation and control of noise, dust, odour, litter and visual intrusion;
- Appropriate building design, site layout and landscaping in keeping with the local area;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A12 junction and provide appropriate mitigation if necessary; and
- Provision of acceptable highway access.

WAS 66 – Land at Harfreys Road, Harfreys Industrial Estate, Great Yarmouth

6.66.1 Site Characteristics

- The 1.0 hectare site is located in Great Yarmouth
- The site has an estimated capacity of 5,000 tonnes per annum as a household waste recycling centre, or 50,000 tonnes for recycling/processing/transfer of waste
- The site is an area of undeveloped land behind frontage development, on the Harfrey's Industrial Estate, and alongside the A12
- The site is in Flood Zone 3, albeit protected by flood defences
- Access to the site is off the C631 Harfrey's Road, within 420 metres of the roundabout junction with the A12(T)
- The site is within the Great Yarmouth built-up area, 2km from the town centre, the nearest residential property is approximately 195 metres from the site boundary
- The nearest area designated as of nature conservation value is Breydon Water which is designated as a SSSI, SPA and Ramsar site, 2km to the north-west
- The site is also 3.5km from the Great Yarmouth North Denes SSSI and SPA

6.66.2 The site is partly on industrial land, and waste management development would be appropriate and consistent with adopted Minerals and Waste Core Strategy policies. This is subject in particular to ensuring an effective landscaped screen along the eastern boundary with the A12, and consideration of design, and mitigation of amenity impacts, to ensure compatibility with other commercial uses in the area.

6.66.3 The site is adjacent to the A12, therefore a suitable landscape buffer and screening will be required along the eastern edge of the site to ensure no detrimental visual impact on views from the A12. In addition, there is a need for Harfrey's Road Industrial Estate to maintain an appropriate visual appearance, to assist with retaining existing businesses and employment, and bring inward investment. Therefore new waste management development would need to safeguard the amenities of existing and potential new businesses through purpose-designed buildings, site layout and mitigation measures appropriate for the area.

6.66.4 The Habitats Regulations Assessment concluded that no likely significant effects were expected on the Great Yarmouth North Denes SPA, Breydon Water SPA and Ramsar sites, due to the distance of the allocated site from the SPAs and Ramsar and its location within an urban industrial area.

6.66.5 Site WAS 66 is located within Flood Zone 3, as defined in Table 1 of the Technical Guidance to the National Planning Policy Framework. The site is not located in the functional floodplain (Flood Zone 3b). Great Yarmouth Borough Council's Strategic Flood Risk Assessment (SFRA) (2009) shows that the site is protected by flood defences during 1 in 100 and 1 in 200 year flood events. The Environment Agency's 2D modelling undertaken for Great Yarmouth in 2011 confirms that the site is currently protected from flooding. Rising sea and river levels associated with climate change are expected to overtop defences in this

location in the future. The site is therefore likely to flood during a future 1 in 200 year event, even if defences are maintained. The site is allocated for non-hazardous waste management uses with the 'less vulnerable' flood risk classification defined in Table 2 of the Technical Guidance to the National Planning Policy Framework, and therefore an Exception Test is not required.

6.66.6 Site WAS 66 is located within Flood Zone 3, as defined by Table 1 of the Technical Guidance to the National Planning Policy Framework. The site is not located in the functional floodplain (Flood Zone 3b). Great Yarmouth Borough Council's Strategic Flood Risk Assessment (SFRA) (2009) shows that the site is protected by defences during 1 in 100 and 1 in 200 year flood events. The Environment Agency's 2D modelling undertaken for Great Yarmouth in 2011 confirms that the site is currently protected from flooding. Rising sea and river levels associated with climate change are expected to overtop the defences in this location in the future. The site is therefore likely to flood during a future 1 in 200 year event, even if the defences are maintained. The site is allocated for non-hazardous waste management uses within the 'less vulnerable' flood risk classification defined in Table 2 of the Technical Guidance to the National Planning Policy Framework, and therefore an Exception Test is not required.

Policy WAS 66

The site is allocated for a household waste recycling centre, or for processing of recyclables, mixed waste processing, inert waste recycling, waste transfer. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- The submission of a site specific Flood Risk Assessment, demonstrating to the satisfaction of the County Planning Authority that, taking into account any necessary flood risk management measures, the development is safe and will not increase flood risk elsewhere;
- Enclosure of waste management operations within a building(s);
- Protection of amenity through mitigation and control of noise, dust, odour, litter and visual intrusion;
- Appropriate building design, site layout and landscaping in keeping with the industrial area, including in particular screening along the boundary with the A12;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A12 junction and provide appropriate mitigation if necessary; and
- Provision of acceptable highway access.

WAS 70 – Land at Town Lands, Harfrey's Industrial Estate, Great Yarmouth

6.70.1 Site Characteristics

- The 2.4 hectare site is located in Great Yarmouth
- The site has an estimated capacity of 50,000 tonnes per annum for recycling/ processing, and 10,000 tonnes per annum for wood shredding.
- The site is currently used for recycling inert waste
- The site is in Flood Zone 3, albeit protected by flood defences
- Access to the site is off the C631 Harfrey's Road, within 550 metres of the roundabout junction with the A12(T).
- A Public Right of Way, Great Yarmouth FP3, also a cycle way, adjoins the northern and eastern boundaries
- The site is in the Great Yarmouth built-up area, 2km from the town centre. Residential property at Townlands and Burgh Road lies close to the south-western and southern boundaries of the site. The nearest residential property is approximately 50 metres from the site boundary
- The nearest area designated as of nature conservation value is Breydon Water which is designated as a SSSI, SPA and Ramsar site, 2km to the north-west
- The site is also 4km from the Great Yarmouth North Denes SSSI and SPA

6.70.2 The site is on industrial land, and waste management development would be appropriate and consistent with adopted Minerals and Waste Core Strategy policies, subject in particular to consideration of design, and mitigation of amenity impacts in relation to impacts on residents, and on users of the Public Right of Way.

6.70.3 Parts of the site can be seen from residential properties, a PROW and from the A12. Therefore landscaping and screening will be required to ensure no detrimental visual impact on views from these locations, including a restriction on the height of stockpiles.

6.70.4 There is a need for Harfrey's Road Industrial Estate to maintain an appropriate visual appearance, to assist with retaining existing businesses and employment, and bring inward investment. Therefore new waste management development would need to safeguard the amenities of existing and potential new businesses through purpose-designed buildings, site layout and mitigation measures appropriate for the area.

6.70.5 The Habitats Regulations Assessment concluded that no likely significant effects were expected on the Great Yarmouth North Denes SPA, Breydon Water SPA and Ramsar sites, due to the distance of the allocated site from the SPAs and Ramsar and its location within an urban industrial area.

6.70.6 Site WAS 70 is located with Flood Zone 3, as defined by Table 1 of the Technical Guidance to the National Planning Policy Framework. The site is not located in the functional floodplain (Flood Zone 3b). Great Yarmouth Borough Council's Strategic Flood Risk Assessment (SFRA) (2009) shows that the site is protected by defences during 1 in 100 and 1 in 200 year flood events. The Environment Agency's 2D modelling undertaken for Great Yarmouth in 2011

confirms that the site is currently protected from flooding. Rising sea and river levels associated with climate change are expected to overtop the defences in this location in the future. The site is therefore likely to flood during a future 1 in 200 year event, even if the defences are maintained. The site is allocated for non-hazardous waste management uses within the 'less vulnerable' flood risk classification in Table 2 of the Technical Guidance to the National Planning Policy Framework, and therefore an Exception Test is not required.

6.70.7 A Sequential Test has been carried out by the County Planning Authority, for all sites proposed for allocation. The Sequential Test demonstrates that, considering those "strategic" sites well-related to Great Yarmouth (Core Strategy Policy CS5), there are no reasonably available sites in areas with a lower probability of flooding which would be appropriate to allocate for development instead of site WAS 70. The other two sites (WAS 66 and WAS 49) allocated in Great Yarmouth also fall within the same flood risk zones. A Site Specific Flood Risk Assessment will therefore be required to be submitted at the planning application stage.

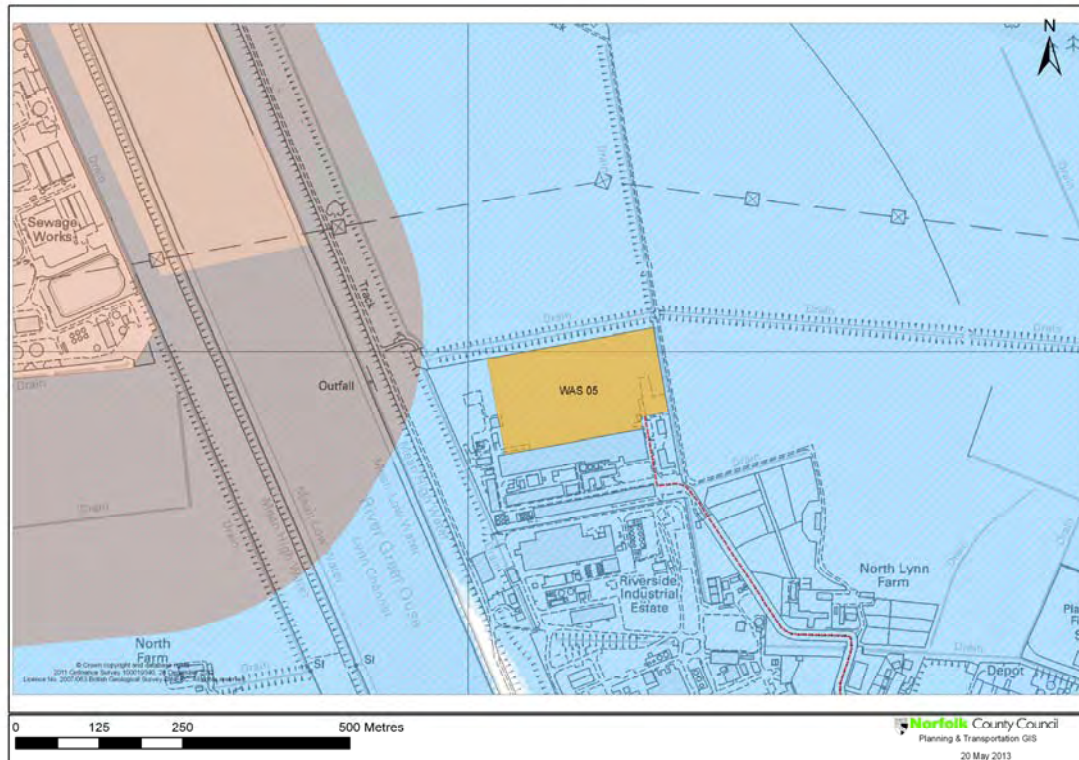
Policy WAS 70

The site is allocated for waste recycling and processing, and wood shredding. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- The submission of a site specific Flood Risk Assessment, demonstrating to the satisfaction of the County Planning Authority that, taking into account any necessary flood risk management measures, the development is safe and will not increase flood risk elsewhere;
- Enclosure of waste management operations within buildings, except for storage of inert material;
- Protection of amenity through mitigation and control of noise, dust, odour, litter and visual intrusion;
- Appropriate building design, site layout and landscaping in keeping with the local area;
- Landscaping and screening, with particular regard to views from the A12, from PROW FP3, and from residential areas to the south and west;
- Stockpiles to be no higher than screening on site boundaries;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A12 junction and provide appropriate mitigation if necessary; and
- Provision of acceptable highway access off Harfrey's Road to the north.

King's Lynn & West Norfolk Sites

WAS 05 – Land at Estuary Road, King's Lynn



6.5.1 Site Characteristics

- The 3.6 hectare site is located in King's Lynn
- The site has an estimated capacity of 150,000 tonnes per annum for processing of recyclables, mixed waste processing, thermal treatment or other forms of residual waste treatment
- The site currently hosts a solar array, and is adjacent to industrial development.
- The site is in Flood Zone 3, albeit protected by flood defences
- Access is via Estuary Road, which has a junction with the A1078 Edward Benefer Way approximately 1 kilometre from the site
- A Public Right of Way, King's Lynn BOAT1, follows the east bank of the River Great Ouse, to the west of the site
- The site is on the edge of King's Lynn, approximately 2km north of the town centre, the nearest residential property is approximately 275 metres from the site boundary
- The site is approximately 2km from The Wash Ramsar, The Wash & North Norfolk Coast SAC, and The Wash SPA, NNR and SSSI
- Roydon Common Ramsar, NNR and SSSI and Roydon Common & Dersingham Bog SAC lies approximately 6.4km to the east
- An internal drainage board maintained watercourse (North Lynn Drain) is adjacent to the northern boundary

6.5.2 The site is close to the River Great Ouse at the northern margin of the industrial area north of King's Lynn docks. Key issues are the proximity of protected habitats, visual impact on landscape including the setting of King's Lynn, and impact on amenities of nearby businesses, residents, and users of

the PROW. The constraints relating to this site could be addressed in the context of a planning application and its accompanying Environmental Impact Assessment.

6.5.3 The site is proposed for a range of waste management uses, but the actual waste management operation(s) that will be developed and their scale are not known at the site allocation stage. Some of the proposed operations (such as thermal treatment) would produce ammonia and nitrogen emissions. These emissions could lead to acidification and nutrient enrichment of habitats, but the effects would depend on the concentration of the emissions, the existing condition of the habitats and their distance from the site.

6.5.4 The site is approximately 2km from The Wash Ramsar, The Wash & North Norfolk Coast SAC, and The Wash SPA. Roydon Common Ramsar and Roydon Common & Dersingham Bog SAC lies approximately 6.4km to the east. The Habitats Regulations Assessment concluded that, with appropriate mitigation and control measures, an outcome where no adverse effects on the integrity of the European or internationally designated sites would occur is achievable.

6.5.5 Site WAS 05 is located within Flood Zone 3, as defined by Table 1 of the Technical Guidance to the National Planning Policy Framework. In the Borough Council of King's Lynn and West Norfolk's Strategic Flood Risk Assessment (SFRA) the site is shown to be protected by flood defences at present but within a designated hazard zone for flood defence breaches. Under the climate change scenario, the site is shown to be within Tidal Flood Risk Category 3 (which indicates a high risk (>0.5%) of flooding) The site is allocated for non-hazardous waste management uses within the 'less vulnerable' flood risk classification defined in Table 2 of the Technical Guidance to the National Planning Policy Framework, and therefore an Exception Test is not required.

6.5.6 A Sequential Test has been carried out by the County Planning Authority, for all sites proposed for allocation. There are four other allocated sites which are comparable to site WAS 05 in terms of the site size and allocated waste management uses (sites WAS 65, WAS 19, WAS 78 and WAS 31). Three of these sites are located in flood zone 1 and one site (WAS 65) is located in Flood Zone 3. In order to allocate sufficient sites to meet the capacity need for recovery (residual treatment) facilities, detailed in Core Strategy Policy CS4, all of the suitable sites in Flood Zone 1 need to be allocated, as well as the sites at flood risk in King's Lynn (WAS 05 and WAS65). Therefore, the Sequential Test demonstrates that there are no reasonably available alternative sites in areas with a lower probability of flooding which would be appropriate to allocate for development instead of site WAS 05, because all suitable sites for recovery (residual treatment) facilities need to be allocated. A Site Specific Flood Risk Assessment will therefore be required to be submitted at the planning application stage.

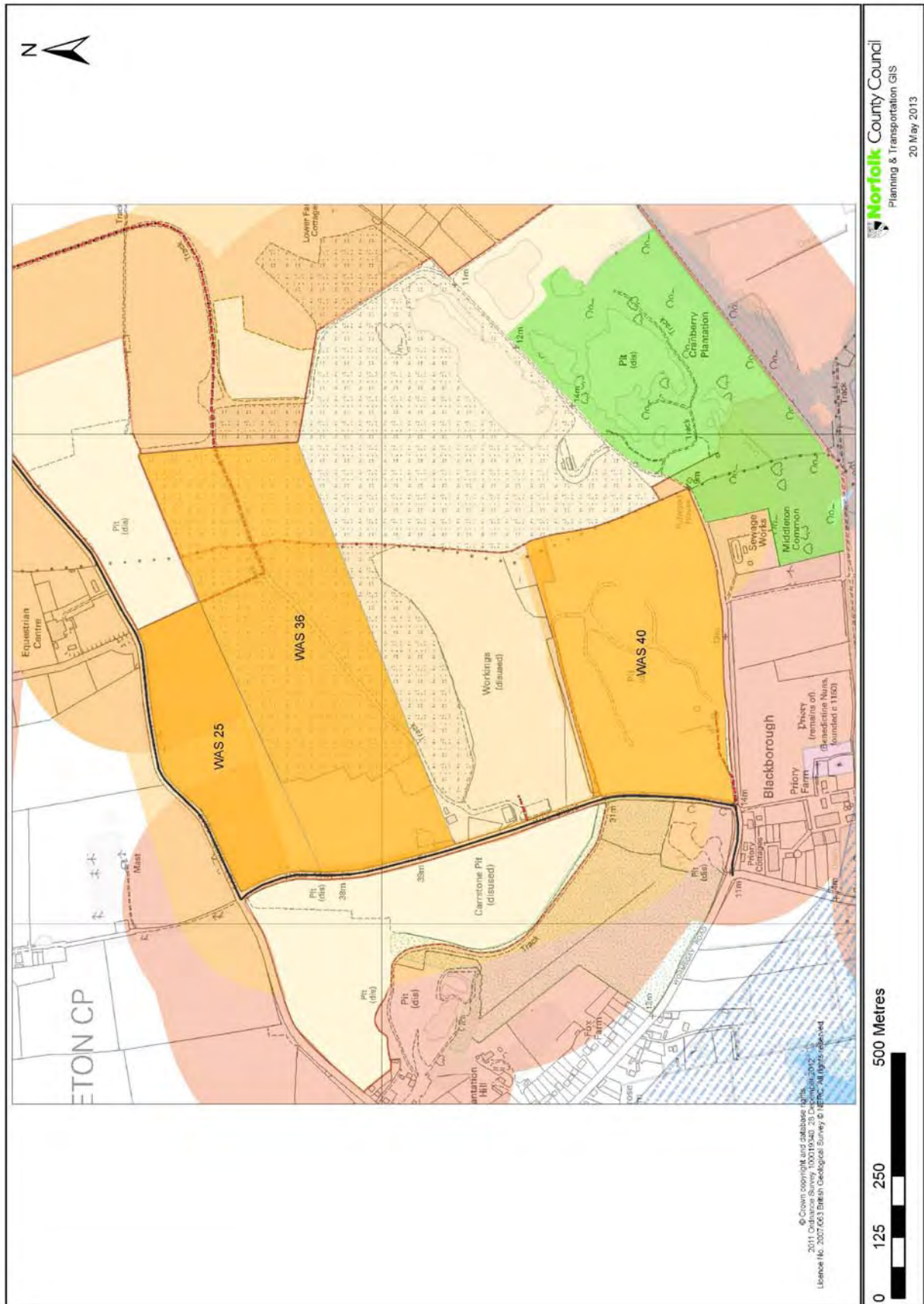
6.5.7 There are two Air Quality Management Areas within King's Lynn, which have been declared for exceeding limits of nitrogen dioxide from traffic sources. Therefore the proposed development must not impact negatively on the existing AQMA, nor lead to the declaration of a new AQMA.

Policy WAS 05

The site is allocated for processing of recyclables, mixed waste processing, thermal treatment and other forms of residual waste treatment. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Protection of amenity through mitigation and control of noise, dust, odour and lighting;
- Through the submission of an Air Quality Impact Assessment, demonstrate that proposals will not impact negatively on the existing Air Quality Management Areas in King's Lynn, nor lead to the declaration of a new AQMA;
- Appropriate site design and landscaping, including a landscape buffer with the adjoining open countryside, and consideration of the bulk and scale of development, with particular regard to the impact of large buildings and structures on both local and wider landscape settings;
- Appropriate site design, engineering and operations, including a Surface Water Management Strategy, impermeable site surfacing and a sealed drainage system, to ensure no adverse effects on the integrity of The Wash and North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar and other protected habitats in the vicinity of the site, due to emissions to water;
- Appropriate abatement and control techniques to be implemented to ensure no adverse effect on the integrity of Roydon Common and Dersingham Bog SAC, Roydon Common Ramsar, The Wash & North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar and other protected habitats in the vicinity of the site, due to emissions to air;
- Submission of a Transport Assessment to include evaluation of the highway access from the site to Edward Benefer Way and provide appropriate mitigation if necessary; and
- The submission of a site specific Flood Risk Assessment, demonstrating to the satisfaction of the County Planning Authority that, taking into account any necessary flood risk management measures, the development is safe and will not increase flood risk elsewhere.

Map of allocated sites in Middleton parish - WAS 25, WAS 36 & WAS 40



WAS 25 – Land off East Winch Road / Mill Drove, Middleton

6.25.1 Site Characteristics

- The 10.2 hectare site is located in the parish of Middleton
- The site has an estimated capacity for inert landfill of 45,000 tonnes per annum for the duration of mineral extraction
- The site is currently in agricultural use and is on Grades 4-5 land
- The site is in Flood Zone 1
- The site is on Lower Greensand, a highly vulnerable major aquifer
- Access is via an existing haul road which joins the C57A East Winch Road 800 metres to the north-east of the site
- The villages of Middleton and Blackborough End are approximately 500 metres to the west and south-west. The nearest residential property is approximately 120 metres from the site boundary, this property has equestrian facilities and is to the north-east of the site
- King's Lynn is approximately 7km to the north-west
- A water main runs along part of the site boundary
- The site is approximately 140 metres from Blackborough End Pit geological SSSI, 1.6km from the River Nar SSSI and 2.3km from East Winch Common SSSI
- The site is approximately 1km from CWS 433 'Middleton Common' and CWS 434 'Disused Pit'
- The site is more than 5km from any European designated environment site

6.25.2 The site is a field south of East Winch Road, adjoined on its southern and eastern boundaries by mineral working and landfill activities. The site is allocated for mineral extraction (carstone - Minerals Site Allocation MIN 6).

6.25.3 The site is located on plateau land above the River Nar, and is a fairly flat agricultural field with a tree belt along its northern edge and some hedgerow trees along its southern edge, and any operations would therefore be screened from public view. Inert landfill would have limited impact locally, and would assist in restoration of the allocated carstone extraction.

6.25.4 The site is on extensive Pleistocene glacial till and glacio-fluvial gravel deposits, including two till faces with high research potential. Therefore the site proposals should include the retention of geological section(s) for scientific study.

6.25.5 The site would make use of an internal haul route to the adjacent existing quarry entrance on the East Winch Road, which is a short distance from the A47, however, limited traffic may travel along the East Winch Road and Mill Drove as this is where the workshop and storage facilities are located.

Policy WAS 25

The site is allocated for inert landfill, subject to prior mineral extraction. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Inert material only to be deposited for a temporary period consistent with the phased working and restoration of the mineral working;
- A scheme of working which mitigates landscape impacts and with final restoration to add ecological interest to the site, such as acid grassland, heathland or a return to arable with wide field margins;
- If compatible with the landscape and ecology objectives, an open geological face to be included within any restoration scheme for scientific study;
- Protection of amenity by mitigation and control of noise and dust, with particular reference to the residential property north-east of the site, also taking into account cumulative impacts with other minerals and waste sites in the area;
- Safeguarding of the gas transmission pipeline and the water main to the satisfaction of the statutory undertaker;
- A Hydrogeological Risk Assessment to identify any existing groundwater pollution at the site, potential impacts of the proposed development and propose appropriate mitigation/remediation;
- The construction of an artificial geological barrier for the protection of groundwater and surface water resources;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A47 junction and provide appropriate mitigation if necessary;
- Highway access to be via an internal haul road to the adjacent existing quarry entrance on the East Winch Road, and traffic routing via East Winch Road to the A47; and
- Contributions by the developer of the site to any highway improvements deemed necessary by the Highway Authority in order to form a safe access to the site.

WAS 36 – Land at Blackborough End landfill site, Mill Drove, Middleton

6.36.1 Site Characteristics

- The 27 hectare site adjoins a large landfill, in the parishes of Middleton and East Winch. The site has permission for non-hazardous landfill until the end of 2026
- The site includes active mineral workings
- Prior to landfilling taking place the site has an estimated capacity of 40,000 tonnes per annum for composting, 50,000 tpa for inert waste recycling and 50,000 tpa for other recycling/transfer
- The site is in Flood Zone 1
- The site is above a major aquifer
- The site is accessed from the C822 Mill Drove
- The nearest residential property is on East Winch Road, approximately 185 metres to the north
- The village of Blackborough End is approximately 500 metres to the west; King's Lynn is approximately 7km to the north-west
- County Wildlife Site CWS 433 'Middleton Common' is 700m south of the site, CWS 434 'Disused Pit' is less than 500m south of the site
- The River Nar SSSI is 1.3km to the south, Blackborough End Pit geological SSSI is less than 150m from the site and East Winch Common SSSI is less than 2km to the east
- The site is 5km from East Walton and Adcock's Common SSSI which is part of the Norfolk Valley Fens SAC

6.36.2 This allocation excludes areas to the south already landfilled, since for engineering and landscape reasons they are not suitable for additional development. The area yet to be filled is suitable for temporary uses which would not prejudice the continuation of the permitted landfilling and restoration.

6.36.3 The Habitats Regulations Assessment concluded that due to the distance of the site from the Norfolk Valley Fens SAC, no likely significant effects were anticipated.

6.36.4 The site is located on Lower Greensand, a highly vulnerable major aquifer, close to groundwater that is providing significant base flow to the River Nar and its tributaries.

6.36.5 As the site is located less than 250 metres from dwellings or workplaces, a Site Specific Bioaerosol Risk Assessment (SSBRA) would need to be submitted at the planning application stage for a composting facility. This is in accordance with Core Strategy policy CS7. The Environment Agency would also require a SSBRA to be submitted at the environmental permitting stage, in accordance with their position statement: 'Composting and potential health effects from bioaerosols'.

Policy WAS 36

The site is allocated for temporary uses comprising composting, processing of recyclables (materials recovery facility), inert waste recycling and/or waste transfer. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Operations to be temporary and to take place ancillary to and without prejudicing the permitted phased mineral extraction and landfilling;
- Control of emissions of bioaerosols by enclosure of composting;
- Protection of amenity by mitigation and control of noise, dust, odour, bioaerosols and lighting, including impacts from traffic, with particular reference to the residential property north of the site, on East Winch Road;
- Appropriate building design, scale, site layout and landscaping to protect the local landscape and mitigate visual intrusion;
- Appropriate site design, engineering and operations, to prevent adverse effects on the River Nar SSSI and other protected habitats in the vicinity of the site, particularly from silt ingress and water run-off;
- A Hydrogeological Risk Assessment to identify any potential impacts to groundwater and appropriate mitigation;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A47 junction and provide appropriate mitigation if necessary;
- Highway access as existing to Mill Drove, and traffic routing via East Winch Road to the A47; and
- Contributions by the developer of the site to any highway improvements deemed necessary by the Highway Authority in order to form a safe access to the site.

WAS 40 – Land off Mill Drove, Blackborough End

6.40.1 Site Characteristics

- The 19.1 hectare site is located in the parishes of Middleton and East Winch
- The site has an estimated capacity of 50,000 tonnes per annum for inert waste recycling, and 45,000 tonnes per annum for inert waste landfill, for a limited period pending restoration of the quarry in phases
- The site is an old but still active sand and gravel quarry, with some areas subject to ancillary waste recycling and infilling with inert waste
- The site is in Flood Zone 1
- The site is above a major aquifer
- Access is from Foster's End Lane, off the southern end of Mill Drove.
- The village of Blackborough End is approximately 500m to the north-west
- King's Lynn is approximately 7km to the north-west
- The nearest residential properties are within 25 metres of south-eastern boundary of the site and approximately 50 metres from the south-western boundary
- The remains of Blackborough Priory, a scheduled monument and Grade II listed structure, are less than 200m south of the site
- The River Nar SSSI is 800 metres to the south, Blackborough End Pit geological SSSI is adjacent to the site and East Winch Common SSSI is 2.2km to the east
- County Wildlife Site CWS 433 'Middleton Common' is adjacent to the southern boundary of the site, CWS 434 'Disused Pit' is adjacent to the south-east corner of the site and CWS 430 'Decoy Wood' is 700m to the south
- The site is more than 5km from any European designated environment site

6.40.2 The site is an existing mineral working and is suitable for temporary inert waste recycling and inert fill where this would facilitate the restoration of the quarry. Restoration to heathland habitat or acid grassland would greatly increase the biodiversity value.

6.40.3 The site is located on Lower Greensand highly vulnerable major aquifer close to groundwater that is providing significant base flow to the River Nar and its tributaries. Therefore a Hydrogeological Risk Assessment will be required in support of any future planning application.

6.40.4 The site is adjacent to Blackborough End geological SSSI, designated for its exposures in the Sandringham Formation and Carstone; one or more geological sections should therefore be retained for study.

Policy WAS 40

The site is allocated for temporary inert landfill and inert waste recycling. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Operations should be temporary, to facilitate low level quarry restoration only;
- Inert waste fill to be undertaken only in defined phases in accordance with an approved phased restoration scheme;
- Location of recycling activities to minimise impacts on residential amenity and on the amenities of users of Foster's End Lane;
- Protection of amenity by mitigation and control of noise, lighting, dust, and emissions to air, also taking into account cumulative impacts with other minerals and waste sites in the area;
- A scheme of working which prevents silt ingress to the River Nar SSSI and protects the landscape, including the setting of Blackborough Priory;
- Final restoration to include enhancement of biodiversity, such as acid grassland or healthland habitat and enhancement of the landscape;
- A Hydrogeological Risk Assessment to identify any existing groundwater pollution at the site, potential impact to groundwater from the proposed development and appropriate mitigation. Protection of the aquifer through appropriate site design and engineering, including an artificial geological barrier for the landfill.
- If compatible with the landscape and ecology objectives, an open geological face to be included within any restoration scheme for scientific study;
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A47 junction and provide appropriate mitigation if necessary;
- Provision of acceptable highway access, and traffic routing via East Winch Road and the A47; and
- Contributions by the developer of the site to any highway improvements deemed necessary by the Highway Authority in order to form a safe access to the site.

WAS 37 – Land at Feltwell landfill site, The Oakery, Lodge Road, Feltwell



6.37.1 Site Characteristics

- The 26.5 hectare site is located in the parish of Feltwell
- The site has an estimated capacity of 40,000 tonnes per annum for composting, for the duration of mineral extraction
- The site is an active sand and gravel quarry, undergoing phased restoration by non-hazardous landfill in accordance with a long-standing planning permission
- The site is in Flood Zone 1
- The site is above a major aquifer and groundwater Source Protection Zone 2
- Access is from the U21389 Warren Road, a “soft road”, which joins the B1112 Lodge Road
- There are several residential properties to the south/south-east, the nearest residential property is within 25 metres of the site boundary. Apart from the village of Feltwell 2km to the west, the site is distant from population centres.
- Thetford and Downham Market are 16km to the south-east and north-west respectively
- The site is adjacent to Breckland Forest SSSI, part of the Breckland SPA. The site is less than 1.3km from Breckland Farmland SSSI, part of the Breckland SPA. The site is 2.5km from Weeting Heath SSSI, part of the Breckland SAC and SPA. The site is 3.5km from Cranwich Camp SSSI, part of the Breckland SAC and SPA.

6.37.2 The site is suitable for temporary composting in areas which have yet to be landfilled. Particular issues to be addressed in a planning application are protection of the nearby Breckland SPA, and impacts on local amenity. Due to proximity of potentially sensitive receptors, a Site Specific Bioaerosol Risk Assessment (SSBRA) would need to be submitted at the planning application stage for a composting facility. This is in accordance with Core Strategy policy CS7. The Environment Agency would also require a SSBRA to be submitted at the environmental permitting stage, in accordance with their position statement: 'Composting and potential health effects from bioaerosols'.

6.37.3 The Habitats Regulations Assessment concluded that mitigation measures regarding disturbance, dust, vermin and contamination of the SAC by seeds etc can all be suitably controlled by appropriate location of the composting operations and by operating in-vessel. If these measures are taken then no adverse effects are expected on the integrity of the Breckland SPA and Breckland SAC.

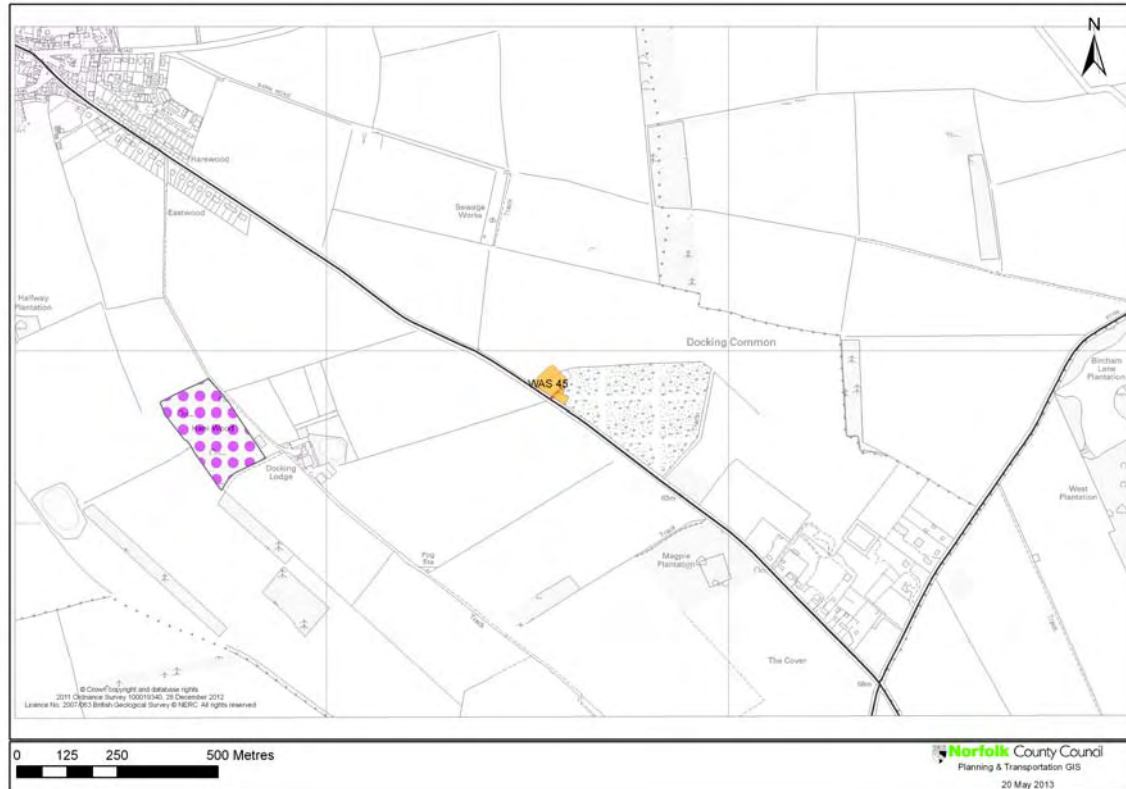
6.37.4 The site is accessed via Warren Road which is classed as a soft road in Norfolk's Route Hierarchy. It is approximately 650m south from the existing quarry access to the B1112 Lodge Road, a Main Distributor in the Route Hierarchy. Warren Road is not suitable for intensified use and significant improvements would be needed to bring the required section to an appropriate standard for adoption.

Policy WAS 37

The site is allocated for temporary composting. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Composting operations to be temporary, consistent with existing phased working and restoration of the mineral site;
- Control of emissions of bioaerosols by enclosure of composting operations;
- Siting on non-landfilled areas only, and design of composting infrastructure to minimise visual impact outside site boundaries;
- Composting operations to be located a minimum of 20 metres from the boundary of the Breckland SPA;
- Mitigation and control of pests, vermin, noise, dust and lighting to protect the amenity of residents, recreational and other users of Warren Road, and to ensure no adverse effect on the integrity of the Breckland SPA;
- Control of wind-blown material to prevent contamination of Breckland SAC by nutrients or wind-blown alien seed;
- Submission and implementation of an odour management plan;
- Appropriate site design, engineering and operations, including impermeable site surfacing and a sealed drainage system, to protect the source protection zone and aquifer; and
- Provision of acceptable highway access, including improvements to Warren Road, to the satisfaction of the Highway Authority.

WAS 45 – Land off the B1454, Docking Common, Docking



6.45.1 Site Characteristics

- The 0.47 hectare site is located in the parish of Docking
- The site has an estimated capacity for composting of 3,000 tonnes per annum
- The site includes a household waste recycling centre, adjacent to a restored landfill
- The site is in the countryside; the nearest residential property is 630 metres south-east of the HWRC
- The site is in Flood Zone 1
- Access would be as existing off the B1454 Fakenham Road
- The site is 1.5km from Docking, and 13km from Fakenham
- The site is more than 5km from any European designated environment site

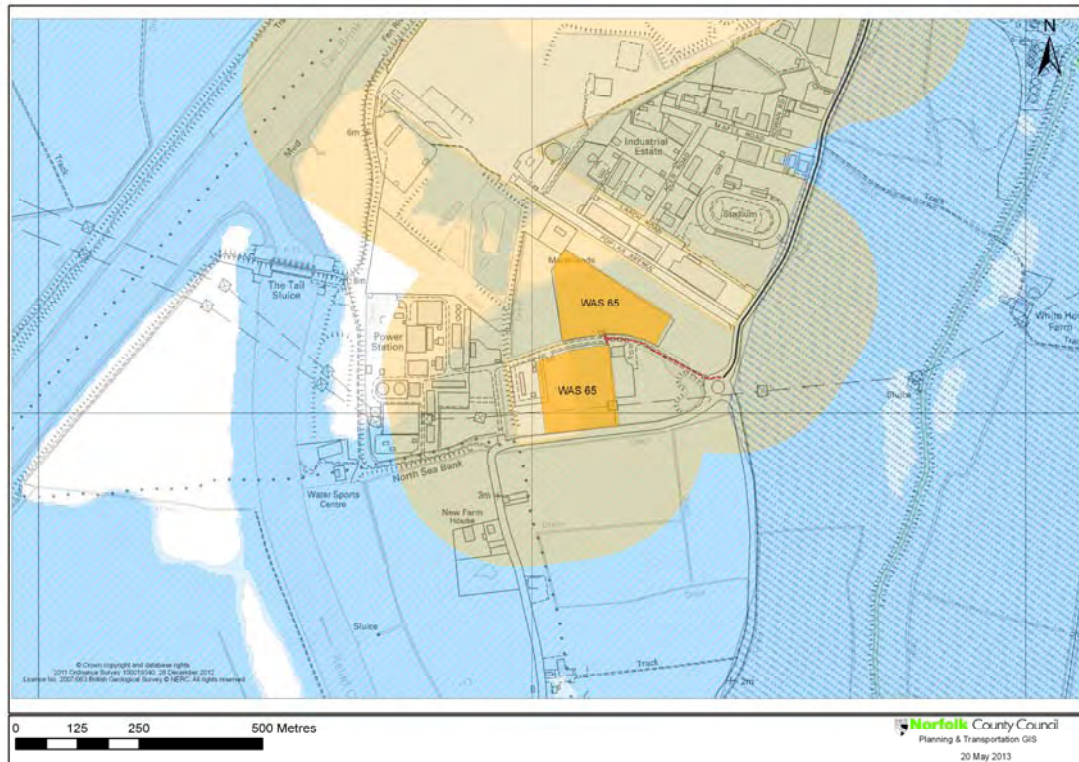
6.45.2 The site is in a rural location, and in the context of adopted Mineral and Waste Core Strategy and Development Management policies, composting would be appropriate, on a temporary basis only. The area currently used for a HWRC would also be suitable for composting, should that facility close.

Policy WAS 45

The site is allocated for temporary composting. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Composting operations to be temporary;
- No permanent buildings or structures to be erected;
- Protection of amenity by mitigation and control of noise, lighting, dust, odour and bioaerosol emissions;
- Protection of landscape by tree planting, and retention of existing trees and hedges subject to highway requirements;
- A Hydrogeological Risk Assessment to identify any potential impacts to groundwater and appropriate mitigation; and
- Provision of acceptable highway access, including improvements to visibility at the site access.

WAS 65 – Land at the Willows Business Park, King's Lynn



6.65.1 Site Characteristics

- The 5.1 hectare site is located in King's Lynn, adjoining the parish of Wighenham St Germans
- The site has an estimated capacity for composting of 40,000 tonnes per annum, or 50,000 tpa for recycling/processing, or 250,000 tpa for anaerobic digestion, thermal treatment or other forms of residual waste treatment
- The site is unused land on the Willows Business Park
- The site is in Flood Zone 3, albeit protected by flood defences
- Access is via Willow Road, off the C8 High Road, one kilometre south of the junction with the A47(T)
- The site is on the southern edge of King's Lynn, approximately 3km from the town centre, the nearest residential property is approximately 155 metres from the site boundary
- County Wildlife Site CWS 402 'Adjacent River Nar' is less than 1km to the east and CWS 404 'Saddlebow Reedbeds' is approximately 700m to the north
- The River Nar SSSI lies approximately 500 metres to the east.
- The Wash Ramsar, The Wash & North Norfolk Coast SAC, and The Wash SPA, NNR and SSSI are about 6.5km to the north
- Roydon Common Ramsar, NNR and SSSI and Roydon Common & Dersingham Bog SAC lie 8km to the north-east

6.65.2 The site is on the Willows Business Park, close to King's Lynn and with accessibility to the A47 trunk road. In the context of adopted Minerals and Waste Core Strategy policies, it is an appropriate location in principle for waste management development. Key issues are the protection of designated habitats, visual impact on landscape and townscape, including the setting of King's Lynn, and impact on amenity. The constraints relating to this site could

be addressed in a planning application and its accompanying Environmental Impact Assessment.

6.65.3 The site is proposed for a range of waste management uses, but the actual waste management operation(s) that will be developed and their scale are not known at the site allocation stage. Some of the proposed operations (such as thermal treatment) would produce ammonia and nitrogen emissions. These emissions could lead to acidification and nutrient enrichment of habitats, but the effects would depend on the concentration of the emissions, the existing condition of the habitats and their distance from the site.

6.65.4 The Wash Ramsar, The Wash & North Norfolk Coast SAC, and The Wash SPA are about 6.5km to the north. Roydon Common Ramsar, and Roydon Common & Dersingham Bog SAC lie 8km to the north-east. The Habitats Regulations Assessment concluded that, with appropriate mitigation and control measures, an outcome where no adverse effects on the integrity of the European or internationally designated sites would occur is achievable.

6.65.5 Site WAS65 is located within Flood Zone 3, as defined by Table 1 of the Technical Guidance to the National Planning Policy Framework. In the Borough Council of King's Lynn and West Norfolk's Strategic Flood Risk Assessment (SFRA) the site is shown to be protected by flood defences at present and outside of the designated hazard zone for flood defence breaches. Under the climate change scenario in the Borough Council of King's Lynn and West Norfolk's SFRA the site is shown to be within Tidal Flood Risk Category 3 (which indicates a high risk (>0.5%) of flooding). The site is allocated for non-hazardous waste management uses within the 'less vulnerable' flood risk classification defined in Table 2 of the Technical Guidance to the National Planning Policy Framework, and therefore an exception Test is not required.

6.65.6 A Sequential Test has been carried out by the County Planning Authority, for all sites proposed for allocation. There are four other allocated sites which are comparable to site WAS 65 in terms of the site size and allocated waste management uses (sites WAS 05, WAS 19, WAS 78 and WAS 31). Three of these sites are located in flood zone 1 and one site (WAS 05) is located in Flood Zone 3. In order to allocate sufficient sites to meet the capacity need for recovery (residual treatment) facilities, detailed in Core Strategy Policy CS4, all of the suitable sites in Flood Zone 1 need to be allocated, as well as the sites at flood risk in King's Lynn (WAS 05 and WAS65). Therefore, the Sequential Test demonstrates that there are no reasonably available alternative sites in areas with a lower probability of flooding which would be appropriate to allocate for development instead of site WAS 65, because all suitable sites for recovery (residual treatment) facilities need to be allocated. A Site Specific Flood Risk Assessment will therefore be required to be submitted at the planning application stage.

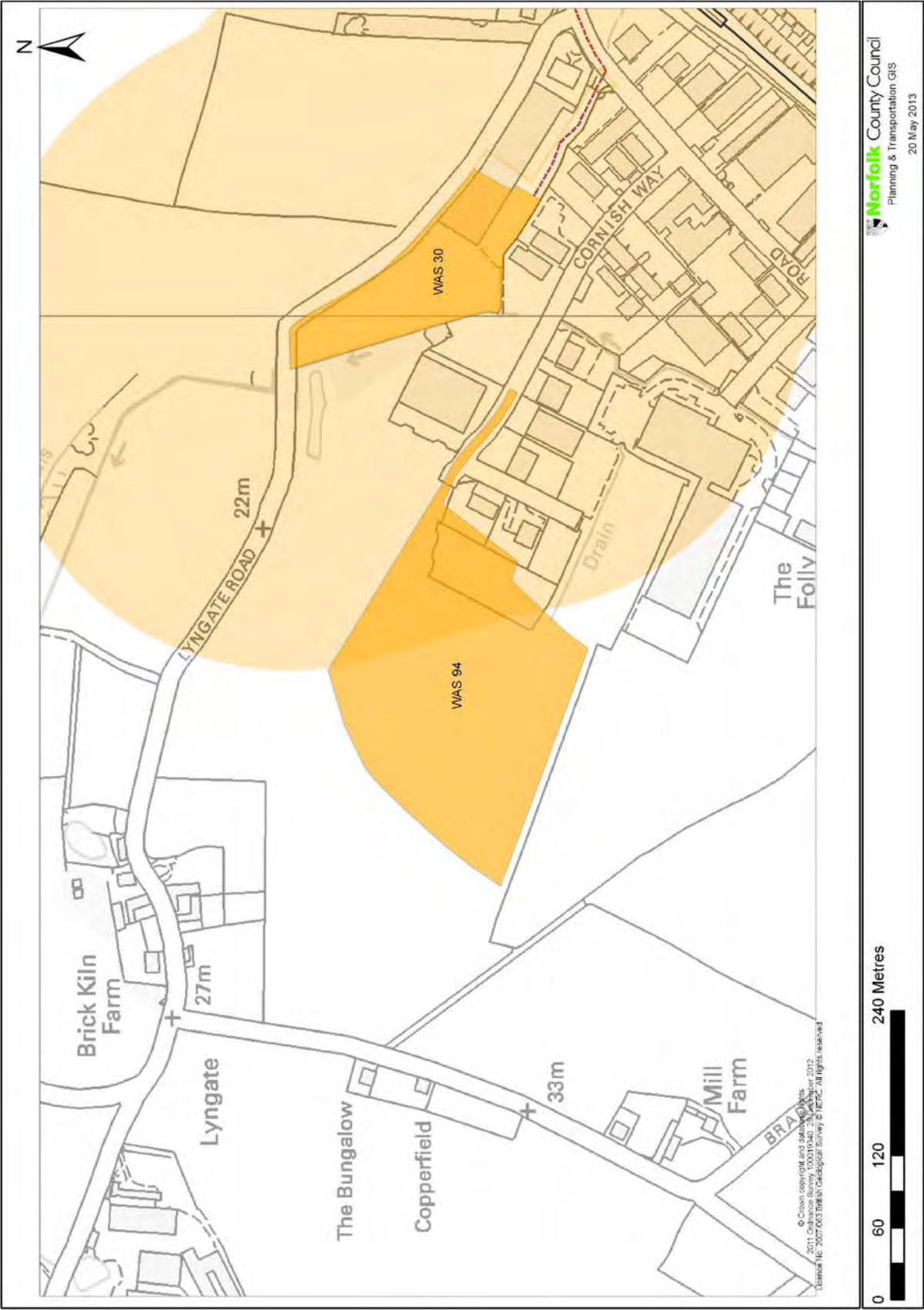
6.65.7 There are two Air Quality Management Areas within King's Lynn, which have been declared for exceeding limits of Nitrogen dioxide from traffic sources. Therefore the proposed development must not impact negatively on the existing AQMA, nor lead to the declaration of a new AQMA.

Policy WAS 65

The site is allocated for composting, recycling/processing, anaerobic digestion, thermal treatment and other forms of residual waste treatment. Development will be subject to consideration in the context of adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Protection of amenity through mitigation and control of noise, dust, odour and lighting;
- Through the submission of an Air Quality Impact Assessment, demonstrate that proposals will not impact negatively on the existing Air Quality Management Areas in King's Lynn, nor lead to the declaration of a new AQMA;
- Appropriate site design and landscaping, including a landscape buffer with adjoining open countryside and consideration of the impact of large buildings/structures on a wider landscape setting;
- Appropriate site design, engineering and operations, including a Surface Water Management Strategy, impermeable site surfacing and a sealed drainage system, to ensure no adverse effects on the integrity of The Wash and North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar and other protected habitats in the vicinity of the site, due to emissions to water;
- Appropriate abatement and control techniques to be implemented to ensure no adverse effect on the integrity of Roydon Common and Dersingham Bog SAC, Roydon Common Ramsar, The Wash and North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar and other protected habitats in the vicinity of the site, due to emissions to air;
- The submission of a site specific Flood Risk Assessment, demonstrating to the satisfaction of the County Planning Authority that, taking into account any necessary flood risk management measures, the development is safe and will not increase flood risk elsewhere; and
- Submission of a Transport Assessment to include evaluation of the impacts of the development on the A47 junction and provide appropriate mitigation if necessary.

North Norfolk Sites – WAS 30 and WAS 94



WAS 30 – Land at Folgate Road, Lyngate Industrial Estate, North Walsham

6.30.1 Site Characteristics

- The 1.9 hectare site is located in North Walsham
- The site has an estimated capacity of 25,000 tonnes per annum for composting, or 50,000 tpa for processing of recyclables, mixed waste processing or waste transfer
- The site, which includes a building, is in use for waste transfer and treatment
- The site is in Flood Zone 1
- Access is as existing, via the U14480 Folgate Road, off the B1145 North Walsham Bypass, 250 metres from the site
- The site is on the edge of North Walsham, approximately 1km from the town centre. It is within 150 metres of the closest residential properties, and adjacent to other business uses
- County Wildlife Site CWS 1175 'Paston Way and Knapton Cutting' is 500m from the site
- The site is 3.9km from Southrepps Common SSSI, part of Norfolk Valley Fens SAC.

6.30.2 The site is permitted for and established as a partly enclosed waste transfer operation, the open area of which extends northwards beyond the boundary of the employment area on the North Norfolk Core Strategy Policies Map. In the context of adopted Minerals and Waste LDF Core Strategy policy this is an appropriate location for waste management activities, but development on the site would be constrained in particular by the need to limit impacts on local amenity. As the site is located less than 250 metres from dwellings and workplaces, a Site Specific Bioaerosol Risk Assessment (SSBRA) would need to be submitted at the planning application stage for a composting facility. This is in accordance with Core Strategy policy CS7. The Environment Agency would also require a SSBRA to be submitted at the environmental permitting stage, in accordance with their position statement: 'Composting and potential health effects from bioaerosols'

6.30.3 The Habitats Regulations Assessment concluded that due to the distance of the site from the Norfolk Valley Fens SAC, no likely significant effects were anticipated.

Policy WAS 30

The site is allocated for composting, processing of recyclables, mixed waste processing and/or waste transfer. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Enclosure of all waste management operations within buildings, except for storage of inert materials;
- Effective landscaping and screening to include a landscaped buffer along the Lyngate Road boundary;
- Protection and maintenance of the adjacent woodland subject to a tree preservation order (TPO);
- Protection of landscape and visual amenity through appropriate site design and layout;
- Appropriate site design and engineering, including a sealed drainage system;
- Protection of local amenity through mitigation and control of noise, dust, bioaerosols, lighting and litter; and
- Provision of acceptable highway access.

WAS 94 – Land off Folgate Road and Cornish Way, North Walsham

6.94.1 Site Characteristics

- The 2.76 hectare site is located in the town of North Walsham
- Development would be an extension of the Industrial Estate onto agricultural land allocated for employment uses
- The site has an estimated capacity of 20,000 tonnes per annum for composting or anaerobic digestion
- The site is in Flood Zone 1
- Access is via Cornish Way and the U14480 Folgate Road, off the B1145 North Walsham Bypass, 400 metres from the site
- The site is on the edge of North Walsham, around 1km from the town centre.
- The site is approximately 175 metres from the nearest residential property, and within 80 metres of a public right of way, North Walsham FP5
- County Wildlife Site CWS 1175 'Paston Way and Knapton Cutting' is 700m from the site
- The site is 3.8km from Southrepps Common SSSI, part of the Norfolk Valley Fens SAC.

6.94.2 Site WAS 94 as allocated is limited to land which falls within the employment area defined on the North Norfolk Core Strategy Policies Map. In the context of adopted Minerals and Waste LDF Core Strategy policies, the site is an appropriate location in principle for waste management activities, subject in particular to consideration of impacts on local amenity. As the site is located less than 250 metres from dwellings and workplaces, a Site Specific Bioaerosol Risk Assessment (SSBRA) would need to be submitted at the planning application stage for a composting facility. This is in accordance with Core Strategy policy CS7. The Environment Agency would also require a SSBRA to be submitted at the environmental permitting stage, in accordance with their position statement: 'Composting and potential health effects from bioaerosols'.

6.94.3 The Habitats Regulations Assessment concluded that due to the distance of the site from the Norfolk Valley Fens SAC, no likely significant effects were anticipated.

6.94.4 The site is bounded by built development to the east and open countryside to the south. The North Norfolk Site Allocations DPD allocated further land for employment development to the west of the site boundary. The site is overlooked by elevated views from the surrounding Bradfield Road and Lyngate Road. Any development would therefore need to be sensitively designed to reduce its impact on the adjoining rural landscape to an acceptable level. This would require landscaping and/or screening and may preclude the erection of tall buildings and structures.

Policy WAS 94

The site is allocated for composting or anaerobic digestion. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Enclosure of all waste management activity within buildings;
- Landscaping, screening and appropriate design, in the interests of the protection of landscape and visual amenity, including when seen from Bradfield Road and Lyngate Road;
- Appropriate site design and engineering, including a sealed drainage system;
- Protection of local amenity through mitigation and control of noise, dust, bioaerosols, lighting, visual intrusion and litter; and
- Provision of acceptable highway access.

Norwich Site

WAS 90 – Land at 49 Hurricane Way, Norwich



6.90.1 Site Characteristics

- The 0.87 hectare site is located in Norwich
- The site has an estimated capacity of 25,000 tonnes per annum as a recycling centre (for doorstep-collected recyclable waste)
- The site is occupied by a large industrial building, within an employment allocation on an industrial estate close to Norwich Airport
- The site is in Flood Zone 1
- Access is via Hurricane Way, an industrial estate road
- The site is on the edge of Norwich, approximately 4km from the city centre, the nearest residential property is approximately 250 metres from the site boundary
- The site is 4.4km from Crostwick Marsh SSSI, which forms part of the Broadland SPA, The Broads SAC and Broadland Ramsar
- The site is 3.6km from the River Wensum SSSI and SAC.

6.90.2 The site is on industrial land, and waste management development in this location would be consistent with adopted Minerals and Waste LDF Core Strategy policies, subject in particular to consideration of design and amenity impacts.

6.90.3 The Habitats Regulations Assessment concluded that due to the distance of the allocation site from the European designated sites and its location within an existing industrial estate, no likely significant effects are expected on the Broadland Ramsar, Broadland SPA, The Broads SAC or River Wensum SAC.

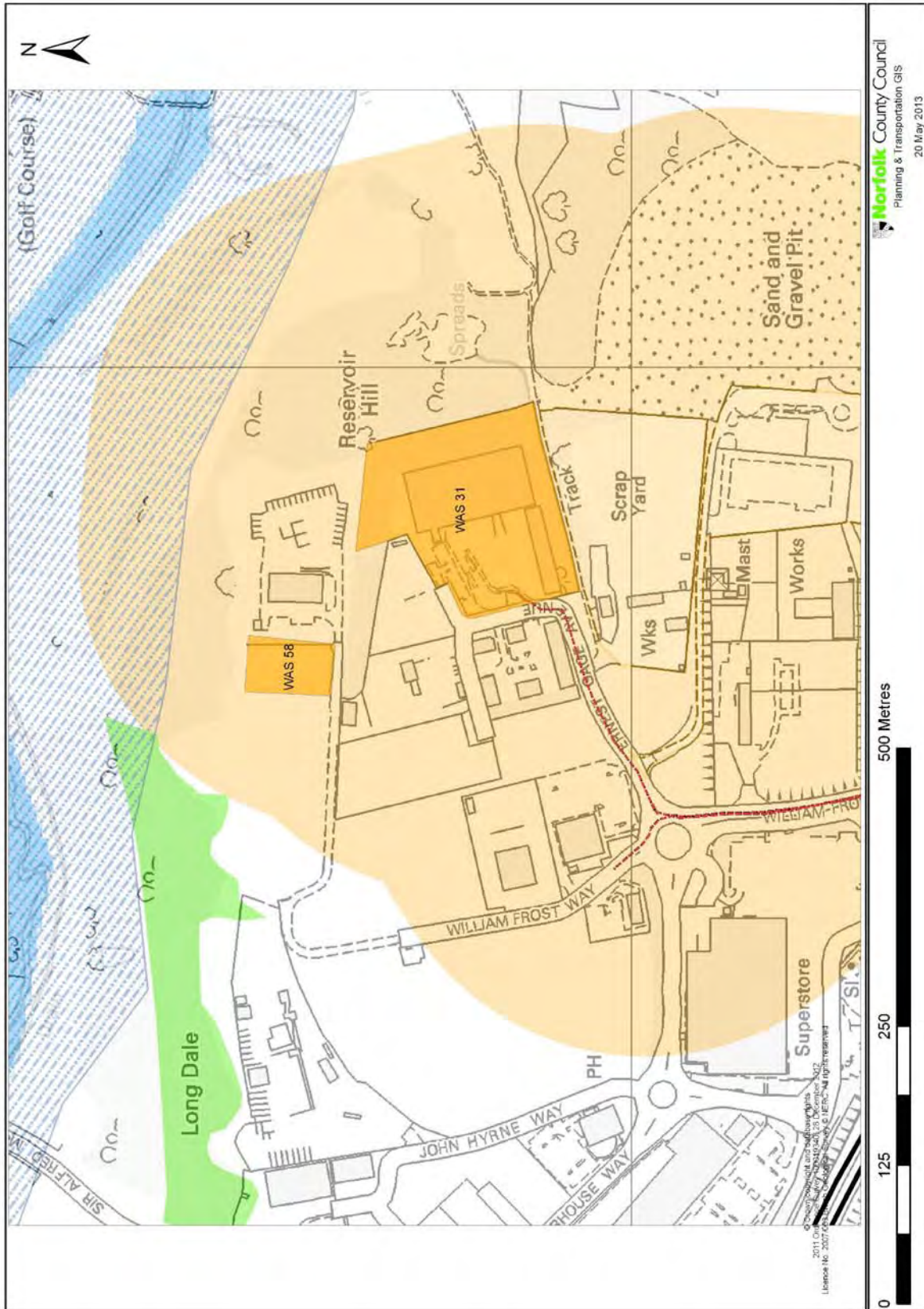
Policy WAS 90

The site is allocated for a recycling centre. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Enclosure of all waste management activity within buildings;
- Appropriate building design, site layout and landscaping in keeping with the industrial area;
- Appropriate site engineering, including a sealed drainage system;
- Protection of local amenity through the control and mitigation of dust, noise, odour and lighting; and
- Provision of vehicle parking and circulation areas.

South Norfolk Sites

Map of allocated sites in the parish of Costessey – WAS 31 and WAS 58



WAS 31 – Land at Costessey Transfer Station, Longwater Business Park, Costessey

6.31.1 Site Characteristics

- The 2.6 hectare site is located on employment land on the Longwater Industrial Estate, in the parish of Costessey
- The site has an estimated capacity of 150,000 tonnes per annum for residual waste treatment (excluding thermal treatment)
- The site is an existing waste transfer operation, enclosed in a building
- The site is in Flood Zone 1
- The site is above a major aquifer
- The site is accessed via Ernest Gage Avenue and William Frost Way, approximately 500 metres from the Longwater interchange on the A47(T).
- The site is approximately 7km west of the centre of Norwich, the nearest residential property is approximately 545 metres from the site boundary
- The site lies within 1km of the River Wensum SAC and SSSI
- County Wildlife Site CWS 247 'Long Dale' lies to the north, within 300 metres of the site. North of the River Tud CWS 248 'Snakes Hills' is approximately 600m from the site, CWS 252 'Brickfield Farm' is 800m from the site and CWS 257 'Lord's Hill and Easton Reeds and Blackhill Wood' is less than 1km from the site

6.31.2 The site is an existing waste transfer station on the Longwater Industrial Estate with access off the A47(T), and in the context of adopted Core Strategy policies this is an appropriate location in principle for waste management development. The specific waste management operations that may be developed at the site will be assessed through the Environmental Permitting process, carried out by the Environment Agency, as well as the planning application process. Due to the proximity of the site to dwellings and workplaces the Environment Agency has stated that this could limit the specific waste management activities that could be carried out at the site.

6.31.3 The Habitats Regulations Assessment concluded that drainage from the site must be via a sealed drainage system, site operations which could cause emissions to air (such as dust and bioaerosols) should be carried out within a building and waste management operations should exclude those which could lead to nitrogen emissions. If these measures are undertaken then operating the site should not have any adverse effects on the integrity of the River Wensum SAC.

Policy WAS 31

The site is allocated for residual waste treatment (excluding thermal treatment). Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Design and landscaping to address visual impact on the Tud valley and on views from the north;
- Protection of amenity by mitigation and control of noise, dust, odour and lighting;
- Appropriate site design, engineering and operations - including the containment of waste management operations which could cause emissions to air within a building, impermeable site surfacing and a sealed drainage system - to ensure no adverse effects on the integrity of the River Wensum SAC and other protected habitats in the vicinity of the site, particularly from water run-off and emissions to air; and
- Contributions by the developer of the site to improvements to the Longwater Interchange.

WAS 58 – Land at Longwater Industrial Estate, Costessey

6.58.1 Site Characteristics

- The 0.4 hectare site is located on the Longwater Industrial Estate, in the parish of Costessey
- The site has an estimated capacity of 10,000 tonnes per annum for processing of recyclables and/or inert waste recycling
- The site is part of a larger area of land comprising restored sand and gravel workings
- The site is in Flood Zone 1
- The site is above a major aquifer
- The site is accessed via William Frost Way, approximately 800 metres from the Longwater interchange on the A47(T)
- The site is approximately 7km west of the centre of Norwich, the nearest residential property is approximately 480 metres from the site boundary.
- The site lies within 1km of the River Wensum SAC and SSSI
- County Wildlife Site CWS 247 'Long Dale' to the north lies within 100m of the site. North of the River Tud CWS 248 'Snakes Hills' is around 500m from the site, CWS 252 'Brickfield Farm' is 700m from the site and CWS 257 'Lord's Hill and Easton Reeds and Blackhill Wood' is 800m from the site

6.58.2 The site is on the Longwater Industrial Estate with access off the A47(T), and in the context of adopted Minerals and Waste Core Strategy policies is an appropriate location in principle for waste management development.

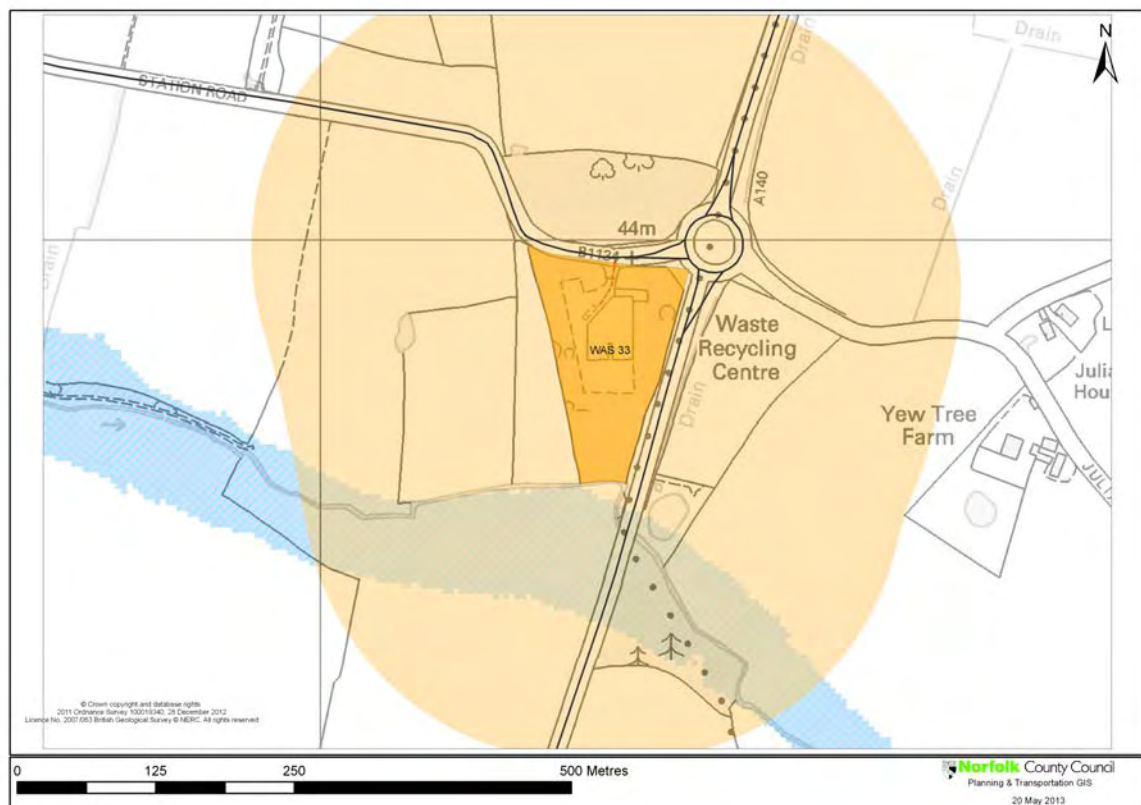
6.58.3 The Habitats Regulations Assessment concluded that, providing drainage water from the site is contained and dust and traffic are suitably controlled there should be no adverse effects on the integrity of the River Wensum SAC.

Policy WAS 58

The site is allocated for processing of recyclables and/or inert waste recycling. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- The operations being limited to sorting, shredding, baling, storage and transfer only;
- Design and landscaping to minimise visual impact on the Tud valley and on views from the north;
- Incorporation of a buffer zone to safeguard the existing woodland to the north from new development;
- Protection of amenity by mitigation and control of noise, dust, odour and lighting;
- Appropriate site design, engineering and operations, including impermeable site surfacing and a sealed drainage system, to ensure no adverse effects on the integrity of the River Wensum SAC and other protected habitats in the vicinity of the site, particularly from water run-off and emissions to air; and
- Contributions by the developer of the site to improvements to the Longwater Interchange.

WAS 33 – Land at Pulham Market transfer station, Station Road, Tivetshall St Margaret



6.33.1 Site Characteristics

- The 1.8 hectare site is located in the parish of Tivetshall St Margaret
- The site has an estimated capacity of 3,000 tonnes per annum as a Household Waste Recycling Centre
- The site is an existing waste transfer station, which also has limited facilities for the public to bring DIY and garden waste
- The site is in Flood Zone 1
- The site is above a major aquifer, and is located in Groundwater Source Protection Zone 3
- Access is off the B1134 Station Road within 80 metres of the roundabout junction with the A140
- The site is 11km from Diss, the nearest residential property is approximately 325 metres from the site boundary
- The site is more than 5km from any European designated environment site.

6.33.2 The site is an existing waste transfer facility located at the junction of the A140 and B1134. The site is in a rural location but is well screened, and is accessible by road from surrounding villages. In the context of adopted Minerals and Waste Core Strategy policies, given that it is an existing waste management site, this is an appropriate location in principle for a HWRC to serve surrounding villages.

Policy WAS 33

The site is allocated for a household waste recycling centre. Development will be subject to compliance with adopted Core Strategy and Development Management policies, and will require any planning application to address, in particular, the requirements below:

- Landscaping to maintain screening, with particular regard to any new structures, lighting, or vehicle access and circulation arrangements which may be required;
- Protection of local amenity by mitigation and control of noise, dust, odour and lighting; and
- Protection of the aquifer through appropriate site design and engineering.

7 Glossary

Air Quality Management Areas (AQMAs) An Air Quality Management Area is declared by a local authority where the air quality objective for one or more of nine specified pollutants is unlikely to be met by the specified date as determined by assessment. Part IV of the Environment Act 1995 places a statutory duty on local authorities to periodically review and assess the air quality within their area. This involves consideration of present and likely future air quality against air quality standards and objectives. The latest Air Quality Strategy for England, Scotland, Wales and Northern Ireland was published by the UK Government and devolved administrations in July 2007.

Amenity Amenity is any tangible or intangible benefits of or relating to a property, especially those which increase the attractiveness or value of the property or which contribute to its comfort or convenience. This could include tangible benefits such as a park, or intangible such as a 'nice view'.

Anaerobic Digestion Anaerobic digestion is the biological treatment of biodegradable organic waste in the absence of oxygen, utilising microbial activity to break down the waste in a controlled environment.

Anaerobic digestion results in the generation of:

- Biogas, which is rich in methane and can be used to generate heat and/or electricity;
- Fibre, (or digestate) which is nutrient rich and can potentially be used as a soil conditioner; and
- Liquor, which can potentially be used as a liquid fertiliser.

Annual Monitoring Report Records progress in implementing the Local Development Scheme and the performance of policies against targets in Development Plan Documents. Indicates what action an authority needs to take if it is not on track or policies need to be revised/ replaced.

Biodegradable waste Any waste that is capable of undergoing natural decomposition, such as food and garden waste, paper and cardboard.

Biodiversity The variety of all life on earth (mammals, birds, fish, invertebrates, plants etc).

Buffer Buffers are areas of land within the allocation which would remain undeveloped for waste management to mitigate potential impacts (for example, on amenity, landscape or ecology). Where a buffer is included in a site allocations policy or map it is 'indicative' and is intended only to illustrate where assessment at this stage has indicated that there may be impacts which, in principle, are likely to require buffers to mitigate them. The exact distances and coverage of any buffer, if required, would be determined following assessment of the detail of potential impacts as part of any future planning application.

Climate change A change of climate caused by the greenhouse gas effect whereby pollutants, predominantly carbon dioxide but also methane and others, trap the heat from the sun. Generally accepted now to be caused by human activity. Considered to be in addition to natural climate change variations.

Community Strategy or Sustainable Community Strategy Wide ranging strategy for a geographical area (eg Norfolk) introduced by the Local Government Act 2000. Aim is to improve social, economic and environmental well-being. Focuses on the needs and aspirations of the area's community and is developed, adopted and

delivered by a range of agencies and organisations (in the public, private and voluntary sectors) in a partnership approach with a view to achieving synergistic working towards common goals. The partnership is formally known as the Local Strategic Partnership. Modified in the 2006 Government White Paper to focus on 'sustainability'. Development Plans should aim to give spatial expression to the strategy. Local Area Agreements comprise the action plan for the strategy. Overseen by the Local Strategy Partnership, or, in the case of Norfolk Ambition, the County Strategic Partnership.

Composting A process where organic wastes (such as garden and kitchen waste) are broken down aerobically (in the presence of air) to create a product that can be applied to land to improve soil structure and enrich the nutrient content of the soil.

Conservation Area An area designated by the Local Planning Authority under the Planning (Listed Buildings and Conservation Areas) Act 1990 as possessing special architectural or historical interest.

County Wildlife Site A site of local importance for wildlife. Outside SSSIs, County Wildlife Sites are the best sites for wildlife in Norfolk. Sites are designated using stringent criteria, by a committee composed of the Norfolk Wildlife Trust, Norfolk County Council, Natural England, the Norfolk Biological Records Centre, and the Norfolk Biodiversity Partnership.

Cumulative Impact The combined impacts of a number of developments on the environment, amenity, health, traffic etc.

Development Management The process through which the Council determines whether a proposal for development should be granted planning permission, taking into account the development plan and any other material considerations. Formerly called Development Control.

Development Plan Statutory documents described under Section 38 of the Planning and Compulsory Purchase Act 2004 that set out the planning policies and proposals for the development and use of land. Decisions on planning applications must conform to the Development Plan, unless material considerations indicate otherwise. The Development Plan for an area will include Development Plan Documents in Local Development Frameworks.

Development Plan Documents A term brought in by the Planning and Compulsory Purchase Act 2004. These are the spatial planning documents contained in the Local Development Framework. These set out spatial planning policies and proposals for an area or topic. They include the core strategy, detailed development management policies, site specific allocations of land and area action plans (where needed). Development plans are also referred to as Local Plans.

Development Framework Collective term for the Development Plan Documents, the Local Development Scheme, the Statement of Community Involvement, Annual Monitoring Report, and any supplementary planning documents.

Disposal Waste disposal operations include: deposit into or onto land (e.g. landfill), incineration, permanent storage, treatment operations where the final compound or mixture will be disposed of.

Energy from Waste (EfW) Utilising the embodied energy of waste materials to generate electricity and heat through direct combustion or indirect combustion of biogas.

Examination The Local Plan will be subject to an independent examination by an independent planning inspector. The recommendations in the Inspector report will inform the final adopted version, but are no longer legally-binding.

Geodiversity The variety of rocks, minerals, fossils, soils and landforms, together with the natural processes which shape the landscape.

Gasification A process whereby carbon based wastes are heated in the presence of air or steam to produce fuel-rich gases.

Groundwater Water within soil, sediments or rocks below the ground surface. Water contained within underground strata is referred to as an aquifer.

Groundwater Source Protection Zone 1 The Environment Agency divides groundwater source catchments into four zones. These are based on the number of days taken by any pollutant to flow to the borehole. Source Protection Zone 1 is defined as a zone within which any contamination would reach the borehole within 50 days. This applies to groundwater at and below the water table. This zone also has a minimum 50 metre protection radius around the borehole. These zones are designed to provide control over activities taking place near boreholes which could result in contamination reaching the public water supply.

Hazardous waste As defined by The List of Wastes Regulations 2005, eg asbestos, acids, oils, petroleum products, paint, mercury, solvents, un-depolluted end of life vehicles.

Household waste recycling centres Provided by Waste Disposal Authorities as places where the public can deliver their household waste for recycling or disposal. These sites usually incorporate skips, collection areas for waste refrigeration and metal appliances, and recycling banks. Some sites have containers for materials such as waste batteries, paint, oil and wood. These facilities do not generally accept trade waste.

Incineration plant Any stationary or mobile technical unit and equipment dedicated to the thermal treatment of wastes with or without recovery of the combustion heat generated. This includes the incineration by oxidation of waste as well as other thermal treatment processes such as pyrolysis, gasification or plasma processes in so far as the substances resulting from the treatment are subsequently incinerated.

Inert waste Waste that does not undergo any significant physical, chemical or biological, transformations; does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and, in particular, does not endanger the quality of any surface water or groundwater.

Inert waste recycling Includes the recycling of secondary aggregates at centralised processing facilities or where the material arises. Material is delivered by skip or bulk vehicle for crushing, screening and grading for re-use. Unusable residues may be used in landfill engineering. Hardstanding is required for stockpiles of material, and for locating crushing, screening and grading machinery. Some elements of the operation and storage may be enclosed, but it is mostly undertaken in the open air.

Issues and options A stage of the Development Plan Document preparation process where community engagement is sought from individuals and organisations to inform the identification of key issues and the potential options for addressing them.

In-Vessel Composting The aerobic decomposition of shredded and mixed organic waste within an enclosed container, where the control systems for material degradation are fully automated. Moisture, temperature and odour can be regulated, and a stable compost can be produced much more quickly than outdoor windrow composting.

Landfill The term landfill relates to waste disposal mainly below ground level whereas landraise, also generically referred to as landfill, refers to waste disposal mainly above pre-existing ground levels. Modern landfill practice requires a significant degree of engineering in order to contain the waste, control emissions and minimise potential environmental effects. The primary by-products of landfilling, where biodegradable materials are disposed of, are:

- landfill gas;
- leachate (a liquor resulting from water passing through, the waste mass),

and much landfill engineering is geared towards dealing with these substances. As such, landfill sites require containment lining systems and abstraction systems for both landfill gas and leachate.

Landfill gas A by-product from the decomposition of biodegradable wastes. The gas is a mixture of up to 65% methane and 35% carbon dioxide plus trace gases and vapours.

Leachate A liquor resulting from water passing through the waste mass and therefore containing contaminants.

Local Development Scheme Describes the Local Development Documents which the authority intends to prepare and the timetable for their preparation.

Local Planning Authority An organisation with statutory planning powers, ie the relevant County, District, Borough or Unitary Council.

Mitigation Measures to reduce, avoid or remedy any adverse impacts caused by development.

Non-hazardous waste All non-hazardous waste as defined by The List of Wastes Regulations 2005. Included are for example municipal (household), commercial and industrial wastes.

Materials Recovery Facility A specialised building for separating, processing and storing recyclable materials from waste collected either separately or mixed.

Methane A colourless, odourless, flammable gas, formed during the decomposition of biodegradable waste.

Minerals and Waste Development Framework This is a portfolio of documents which together will provide the spatial planning strategy for minerals and waste development within Norfolk. It will replace the Norfolk Minerals Local Plan and the Norfolk Waste Local Plan.

Mixed waste processing Operations, primarily of a mechanical and/or biological nature, to process unsorted 'black bag' waste; residual household waste following doorstep separation of recyclables/green waste; or residual waste following centralised separation of recyclables / organics. The nature of mixed waste processing operations is dictated by the needs of downstream waste management practices. For example, in the case of a system which includes thermal treatment, refuse derived fuel (RDF) can be produced from mixed waste. Alternatively organic

fractions can be separated for biological treatment. Various physical separation and waste reduction techniques can be used, sometimes in combination. Such processes include: trommel screen (typically a tilted rotating drum used to screen waste according to size and density), shredders, RDF plant and pelletisers; hand picking stations; biological stabilisation; ball mills; other mechanical reduction techniques (crushing, pulverising etc.) The term 'mechanical biological treatment' (MBT) describes a hybrid process combining mechanical and biological techniques to sort and separate mixed household waste. Mixed waste processing can also be undertaken within an integrated facility which may also include composting and thermal treatment.

Municipal Waste (often referred to as municipal solid waste) Waste from households as well as other waste which because of its nature or composition is similar to waste from households. It is effectively under the control of local authorities or agents acting on their behalf, and includes waste collected directly from households or via civic amenity sites, waste from street cleansing, and some trade waste.

Norfolk Ambition The Community Strategy for Norfolk (see community strategy above).

Planning Conditions Conditions attached to a planning permission for the purpose of regulating and controlling the development.

Preferred options A stage of the Development Plan Document preparation process where the authority's preferred options for addressing key issues are published for a six week consultation period. This stage was deleted in the revision to PPS12, published in 2008.

Processing of Recyclables Processing of recyclables will include all those operations that are designed to accept source-separated recyclate for processing and bulking-up prior to transport to downstream specialist re-processors. The recyclate is likely to originate from kerbside collection of materials that have been separated by individual householders and businesses, and also material from centralised recycling facilities (bottle banks, CA sites etc).

Pyrolysis During pyrolysis organic waste is heated in the absence of air to produce a mixture of gaseous and liquid fuels and a solid inert residue (mainly carbon). Pyrolysis generally requires a consistent waste stream to produce a usable fuel product.

Ramsar Site A Site of Special Scientific Interest of international importance as waterfowl habitat designated under the Ramsar International Convention on Wetlands (1971).

Recycling The process by which materials are collected and used as 'raw' materials for new products.

Residual waste The elements of the waste streams that remain following recovery, recycling or composting operations.

Restoration Operations designed to return an area to an acceptable environmental state, whether for the resumption of the former land use or for a new use following mineral working or waste disposal. Involves the reinstatement of land by contouring, the spreading of soils or soil making materials etc.

Route hierarchy Norfolk County Council's route hierarchy categorises roads by use, or desired use, influencing signage, improvement programmes, and maintenance priorities. At the top of the hierarchy are the:

- Principal Roads (generally A roads); followed by
- Distributor Roads (generally B roads); followed by
- Local Access
- HGV (heavy goods vehicle) access
- Tourist accesses (generally class C roads)
- Other roads (normally unclassified or C roads)

Safeguarding Protecting existing, permitted and allocated sites that have potential for relevant development (waste and minerals) from other incompatible development.

Screening Screening may take a number of forms, which may include bunds, or planting, or a combination of these and may in some circumstances incorporate a standoff to ensure that the screening is not itself intrusive. Where screening is included in a site allocations policy or map it is 'indicative' and is intended only to illustrate where assessment at this stage has indicated that there may be impacts (for example on amenity or landscape) which, in principle, could require some form of screening to mitigate them. The form of screening which would be appropriate, if required, along with the distances and coverage of any screening would be determined following assessment of the detail of potential impacts, as part of any future planning application.

Site Specific Allocations Sites which are generally well defined and where there is a presumption in favour of their being developed during the LDF (plan) period.

Sites of Special Scientific Interest (SSSIs) Sites notified and protected under the Wildlife and Countryside Act 1981 on account of their flora, fauna, geological or physiographical features.

Special Area of Conservation An SSSI of international importance designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.

Special Protection Area An SSSI of international importance designated under the EC Directive on the Conservation of Wild Birds.

Submission A stage of the Development Plan Document preparation process where the document is 'submitted' to the Secretary of State for independent examination by a planning inspector.

Sustainable Development Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

Thermal treatment Can include incineration, gasification and pyrolysis. Small scale thermal treatment plants include moving grate systems of less than 100,000 tonnes of waste per annum and rotating/oscillating kilns, as well as other proprietary combustion processes. These will be suitable for small scale urban applications. Large scale thermal treatment plants include large, centralised urban facilities, typically receiving between 150,000–400,000 tonnes of waste per annum. Techniques used include various moving grate systems and fluidised bed processes.

Transport assessment This is a process which considers total travel demand; patterns of public transport in the area; how development impacts upon them; and if

required how infrastructure or services could be improved to address the impacts (of a development).

Transport statement Where transport issues are such that a full Transport Assessment is not required, a Transport Statement may be acceptable

Waste management The means of dealing with waste, including waste disposal, transfer, processing, recovery/recycling operations, incineration and other technologies.

Waste transfer Waste transfer is the process by which waste is taken from waste producers for treatment, recycling and/or disposal. Then, to minimise the cost of transport and to reduce environmental impacts, transfer stations are used to sort waste and to transfer it to larger vehicles for onward transport. The waste is usually sorted into wastes that can be recycled (such as metal, wood, soil and rubble) and the remaining waste that will be landfilled.

Windrow Composting The aerobic decomposition of shredded and mixed organic waste using open linear heaps known as 'windrows', which are approximately three metres high and four to six metres across. The process involves mechanical turning of the waste until the desired temperature and residence times are achieved to enable effective degradation. This results in a bulk-reduced, stabilised residue known as compost. Windrow composting can take place outdoors or within a large building and the process takes around three months.