Julian Gibson Esq
Clerk to Wretham Parish Council
The Jays
Watton Road
Wretham
Norfolk
IP24 1QS

22 June 2022

Dear Julian

FUL/2021/0072: Larkshall Mill, Thetford

Further to our continuing discussions relating to the above application I promised I would elaborate further on our proposal as they relate to your Council's objection and provide the extracts from the application along with the responses from other statutory consultees that we hope will give you some comfort to the issues you have raised.

I again respond to the points raised in the same order as your objection.

Point 1 – Pingos. As stated in the presentation to you, and in the application, the drainage is not to change on site (see paragraphs 5.32 to 5.35 of the Planning Statement attached at appendix 1). Therefore the status quo would ensure that there is no change to the status of the Pingos. Notwithstanding this, it should also be noted that the Habitats Regulation Assessment Technical Note also refers to the Pingos (paragraph 3.22 and 3.34 attached at appendix 2) so they have been considered as part of the wider ecological setting. Natural England have responded to the application with "no objection" (attached at appendix 3). As you will be aware Natural England are the custodians of the protected habitats and we would have expected an objection from them if any such impact was considered possible, or at least a request for further information, which was not received.

Point 2 – We maintain that the resultant reduction in heavy goods vehicles permitted to use the site is a positive to this application. We note that the Highways Department at Norfolk County Council has not raised any objection (their response attached at appendix 4). The level of vehicle movements, when compared to the number of HGV's that currently use the A1075, is low. You will have noted that in the Transport Statement traffic flows along this road are at around 6,500 (two-way movements) per day with 8% being HGV, equating to some 520 HGV movements north and south (paragraph 4.4 of the Transport Statement, attached at appendix 5). Our proposal is just 44 HGV movements, which is significantly less than the permitted levels as a waste site (paragraph 5.2 and 5.3 of the traffic Statement (attached at appendix 6)) and only a small proportion of those currently using the road.

We anticipate that the majority of our vehicles will arrive from the south and depart to the south (turn left out of the site), as we do not deliver direct to construction sites and the A11 route will be more direct and convenient for both deliveries and offtake of the product – this is set out in table 5-3 of the Transport Statement, shown on the last page at appendix 6. Notwithstanding the above, this can be monitored with the proposed liaison group and if issues are experienced, we can discuss and commit to enforcing a site management plan to direct our HGV vehicles south. This Management Plan, coordinated with the liaison group, may be a better way forward as the "policing" of a condition to control this would be difficult with a shared access.

Point 3 – The application does not propose 24/7 working. The working hours are stated in the Planning Statement at paragraph 3.17 (attached at appendix 7). They are the same as the current hours of operation for the waste site – under the current consent the opening hours are Monday to Saturday 0600 to 2200. We have also undertaken a noise assessment which I understand Norfolk County Council has consulted on. This shows that there will be no impacts on the immediate locality due to our use of the site, and consequently this shows no impact on the wider village. We hope this gives you the comfort that the noise of the conveyor referred to, will not be heard from the village.

With the above in mind, I trust that the Parish Council can reconsider their position and withdraw their objection.

If you do have any further questions, please do let me know.

Kind Regards

Richard Skehens
Chairman

Enc: Appendices

Appendix 1 – Planning Statement para 5.32 – 5.35

Transport

5.24 A Transport Statement (TS) is included at Appendix 9 of the ES that accompanies this planning application.

5.25 Access to the site is taken directly from the A1075 Thetford Road which is a strategic County A-road. The section of the road where the access is located is straight and with good forward visibility. The established access forms a simple priority junction arrangement with large radii and good minor road sightline visibility.

5.26 It is not proposed to physically change this access in any way as the site entrance is considered suitable for the new proposed use.

5.27 Trip generation has been forecast for the additional trucks associated with the O.C.O Technology facility. On a weekday, it is forecast that there will be 22 trucks in and 22 trucks out from the site per day. There will also be 40 cars in, and 40 cars out generated, which is considered to be a worst-case scenario. An analysis of the former use of the site as the Viridor Waste Transfer Station suggests that the proposed development would amount to a significant net reduction in traffic generated by the site. Notwithstanding this, if the gross increase is considered only, then the analysis of the daily movements on the A1075 indicates that this would represent a daily increase of no more than 1.8% of general traffic and 6.8% of HGVs. This is considered to represent a negligible adverse impact compared to the current traffic situation or a benefit compared to the extant situation.

5.28 An assessment of the development traffic movements by hour has been undertaken and included in the TS. This shows that much of the development traffic takes place outside of the peak periods for general traffic. Overall, the development traffic represents a negligible difference to hourly traffic flows, and less than the existing daily variations in general traffic flow.

5.29 The TS concludes that the proposed change in use of the Larkshall Mill site at East Wretham, to a new O.C.O Technology facility will result in no detrimental impacts on the local highway network.

5.30 The proposed development is considered to comply with Policies CM15 and DM10 of the Norfolk Core Strategy.

Flood risk and protection of groundwater and surface water quality

5.31 A Flood Risk Assessment (FRA) has been undertaken by Callidus Transport and Engineering Ltd and is included at Appendix 4 of the accompanying ES.

5.32 The potential for flooding from a wide range of sources have been considered in this FRA, including fluvial, tidal, groundwater, overland, and from canals and reservoirs. These have been considered by the FRA.

5.33 The site is approximately 2.6 hectares in area, is located in Flood zone 1 (with less than 1 in 1,000 or <0.1% annual probability of river or sea flooding).

5.34 The site currently drains to a lagoon within the site where the water infiltrates into the ground. Drainage on the site itself is provide for by a piped drainage system with two spill tanks prior to discharging into the lagoon.

5.35 The proposed development utilises virtually the same buildings and yard as the existing site usage. The only change will be the removal of a low-level corrugated iron shed. Therefore, it is proposed to retain the existing surface water drainage arrangement as far as possible by draining the proposed development areas to the lagoon using the same piped network, which has been surveyed and shown to be in good condition.

Appendix 2 – HRA para 3.22 – 3.34

3.18 The Porton Down study found birds nesting closer to roads (both internal and public) over time suggesting that birds do habituate to moving traffic over time (as consistent with Taylor *et al*, 2007).

Review of research on breeding woodlark and European nightjar

3.19 The woodlark population in Breckland primarily breeds on open grassland and heather heaths or in forestry plantations where they utilise areas of clear-fell and early stage restock sites. Breeding pairs will also occasionally use fallow and set-aside land for breeding.

3.20 Breeding European nightjar are largely found using clear-fell and re-stock sites for breeding in Breckland, although birds will also use heather heaths for breeding. Foraging European nightjar range widely across a range of habitats including forestry plantations, semi-natural woodlands, wetland habitats, heather and grass heaths and arable land.

3.21 Unlike stone curlew, neither woodlark or European nightjar regularly breed on cultivated arable land outside of the SPA boundary. The closest areas of potential habitat for breeding woodlark is the block of Forestry Commission plantation at Roudham Heath (south of the application site) and the grass heaths of East Wretham Heath. The Forestry Commission woodland could also offer suitable breeding habitat for European nightjar. The presence of either species within the woodland will depend on the presence of permanently open ground, clear-fell areas or recent re-stock sites.

Brecklands SAC

3.22 The Brecklands SAC covers 7543.5ha and was designated in April 2005. The area is characterised windblown sands of various depths overlaying a bedrock of cretaceous chalk, resulting in highly variably soils showing marked pH variation within short distances. This has resulted in mosaics of heather-dominated heathland, acidic

grassland and calcareous grassland unlike any other SAC. Aquifer-fed fluctuating meres are a unique feature of the Brecklands with an intrinsic regime of extreme fluctuation in water level with periods of drying out as part of the natural cycle. The SAC also supports a large number of pingos (ponds formed by glacial ice melt).

3.23 The Annex 1 habitats that are the primary reason for the selection of the site are:

- Inland dunes with open *Corynephorus* and *Agrostis* grasslands
- Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*
- European dry heaths
- Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)

3.24 Annex I habitats present as a qualifying feature but not a primary reason for the selection of the site are:

- Alluvial woods with alder (*Alnus glutinosa*) and ash (*Fraxinus excelsior*) (*Alno-Padion, Alnion incanae, Salicion albae*)

3.25 Annex II species present as a qualifying feature but not a primary reason for the selection of the site are:

- Great crested newt (*Triturus cristatus*)

3.26 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features'), and subject to natural change; the conservation objectives seek to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the favourable conservation status of its qualifying features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species

- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Assessment of distribution of Annex 1 habitats and Annex II species within the Brecklands SAC

3.27 The Annex 1 habitat Inland dunes with open *Corynephorus* and *Agrostis* grasslands covers 120.7ha of the SAC. The only occurrence of this habitat type in the UK is on Wangford Warren and adjoining parts of RAF Lakenheath. The site has one of the best-preserved systems of active inland sand dunes in the UK. The habitat type, which is in part characterised by the nationally rare grey hair-grass (*Corynephorus canescens*) occurring here at its only inland station, is associated with open conditions with active sand movement. The site shows the colonisation sequence from open sand to acidic grass-heath.

3.28 The Breckland meres cover 37.72 ha of the SAC representing the Annex 1 habitat natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* in the east of England. They are examples of hollows within glacial outwash deposits and are fed by water from the underlying chalk aquifer. Natural fluctuations in groundwater tables mean that these lakes occasionally dry out. The flora is dominated by stonewort – pondweed (*Characeae – Potamogetonaceae*) associations.

3.29 The dry heaths of Breckland are representative of Annex 1 habitat type: European dry heaths, in eastern England, developed under a semi-continental climate and cover 761.89ha of the SAC. Breckland has an average annual precipitation of only 600 mm, relatively hot summers and cold winters. Frosts can occur in any month of the year. The dry acidic heath of Breckland represents H1 *Calluna vulgaris – Festuca ovina* heath in the SAC network. The sand sedge-dominated *Carex arenaria* sub-community (H1d) is typical of areas of blown sand; a very unusual feature of this location.

3.30 The highly variable soils of Breckland, with underlying chalk being largely covered with wind-blown sands, have resulted in mosaics of heather-dominated heathland, acidic grassland and calcareous grassland that are unlike those of any other site. In many places there is a linear or patterned distribution of heath and grassland, arising from fossilised soil patterns that formed under peri-glacial conditions. Breckland is important for rare plants, such as perennial knawel (*Scleranthus perennis* ssp. *prostrates*) and rare invertebrates.

3.31 The East Anglian Breckland is the most extensive surviving area of the rare grassland type CG7 *Festuca ovina – Hieracium pilosella – Thymus praecox* grassland. The grassland is rich in rare species typical of dry, winter-cold, continental areas, and approaches the features of grassland types in central Europe more than almost any other semi-natural dry grassland found in the UK. The terrain is relatively flat, with few physical variations, but there are mosaics of calcareous grassland and heath/acid grassland, giving rise to patterns of structural variation. This grassland extends over 2125ha of the SAC and represent the Annex 1 habitat semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).

3.32 The alluvial woodlands with *Alnus glutinosa* and *Fraxinus excelsior* are a priority habitat and cover 37.72ha of the SAC. Alder is usually the dominant tree but willows (*Salix*) species, ash, downy birch (*Betula pubescens*) or elder (*Sambucus nigra*) may also be common. This habitat can range from alder stands on the braided channels of fast-flowing rivers, to stands on former peat cuttings along fenland rivers.

3.33 This woodland type largely occurs on the Stanford Training Area where it is found in several large blocks but is also present at the Cavenham-Icklingham Heaths and Thetford Golf Course and Marsh sites.

3.34 The waterbodies supporting breeding populations of great crested newt in the SAC are confined to key areas within the Stanford Training Area. These are located in a variety of habitats including the meres and pingos, spring lines and low-lying meadows with

natural depressions, whilst others are clearly man made. A programme to restore water bodies on the site has been is ongoing for a number of years and has greatly increased the extent of available breeding habitat.

4.0 Assessment of potential impacts

4.1 An initial screening exercise has been undertaken, see Table 1, to identify those features of the NSN sites that may be affected by the proposals. Where interest features do not occur within a 1km search area around the site or within 200 metres of the A1075 between the junction with the A11 and Great Hockham they have been excluded from further consideration as it is considered no realistic impact pathways will arise from the proposal.

Table 1: Initial screening assessment for SPA and SAC interest features

SPA interest feature	Screened in/out of further assessment	Rationale
Stone curlew	Screened in	Site located within 1500m buffer around Breckland SPA implemented to safeguard breeding stone curlew.
European nightjar	Screened out	Site is located just outside 400m buffer around Breckland SPA implemented to safeguard breeding European nightjar. No suitable habitat for breeding European nightjar in Sails Plantation (part of Roudham Heath Forestry Commission plantation.
Woodlark	Screened in	Site is located just outside 400m buffer around Breckland SPA

Appendix 3 – Natural England Response

Date: 11 March 2022
Our ref: 383616
Your ref: FUL/2021/0072

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

MAWP@NORFOLK.GOV.UK

BY EMAIL ONLY

Dear Mr Annetts

Planning consultation: Change of use of waste transfer station/materials recovery facility to carbon-negative aggregate manufacturing facility with associated works & infrastructure.
Location: Larkshall Mill, Thetford Road, East Wretham, Thetford, Norfolk, IP24 1QY

Thank you for your consultation on the above dated 09 February 2022 which was received by Natural England on the same date.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

SUMMARY OF NATURAL ENGLAND'S ADVICE

NO OBJECTION

Based on the plans submitted, Natural England considers that the proposed development will not have significant impacts on designated sites and has no objection.

Natural England's further advice on designated sites/landscapes and advice on other natural environment issues is set out below.

NATURAL ENGLAND'S ADDITIONAL ADVICE

1) Advice under the Conservation of Habitats & Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended)

Habitats Regulation Assessment
Natural England notes that the Habitats Regulations Assessment (HRA) has not been produced by your authority, but by the applicant. As competent authority, it is your responsibility to produce the HRA and be accountable for its conclusions. We provide the advice enclosed on the assumption that your authority intends to adopt this HRA to fulfil your duty as competent authority.

The HRA Technical Note (December 2021) provided by the applicant concludes that the proposal can be screened out from further stages of assessment because significant effects are unlikely to occur, either alone or in combination. On the basis of the information provided, Natural England concurs with this view.

Sites of Special Scientific Interest (SSSI): Breckland Forest SSSI, East Wretham Heath SSSI, Bridgham and Brettenham Heaths SSSI, Stanford Training Area SSSI, Cranberry Rough Hockham SSSI
Based on the plans submitted, Natural England considers that the proposed development will not damage or destroy the interest features for which the sites have been notified and has no objection.

2) Other advice

In addition, Natural England would advise on the following issues.

Construction Environment Management Plan (CEMP)
There should be no damage to surrounding designated habitats during construction or demolition works. A Construction Environmental Management Plan (CEMP) should be provided detailing how this will be achieved, including the use of heavy machinery, storage of materials, access routes for machinery, and disposal of rubbish and hazardous materials such as oil. Consideration should also be given to reducing impact on protected species such as bats, birds and invertebrates. Natural England would advise that this is secured through a planning condition.

Dust Mitigation
Natural England welcomes the inclusion of the dust mitigation measures set out in section 6 of the Dust Assessment (December 2021). We would advise that these are also subject to a planning condition.

External Lighting
Natural England notes that the applicant intends to keep the current lighting and replace it with more efficient LED lighting as needed. We would advise that any new lighting is PIR sensor activated on a short timer. Consideration should also be given to the direction of lighting, and the type used e.g. LED warm lights. This is to minimise disruption to species such as foraging bats.

Further general advice on consideration of protected species and other natural environment issues is provided at Annex A.

Should the proposal change, please consult us again.

If you have any queries relating to the advice in this letter please contact me on 07471515535.

Yours faithfully
Joanna Parfitt
Norfolk and Suffolk team

Annex A – Additional Advice
Natural England offers the following additional advice:

Landscape
Paragraph 174 of the National Planning Policy Framework (NPPF) highlights the need to protect and enhance valued landscapes through the planning system. This application may present opportunities to protect and enhance locally valued landscapes, including any local landscape designations. You may want to consider whether any local landscape features or characteristics (such as ponds, woodland, or dry-stone walls) could be incorporated into the development to respond to and enhance local landscape character and distinctiveness, in line with any local landscape character assessments. Where the impacts of development are likely to be significant, a Landscape & Visual Impact Assessment should be provided with the proposal to inform decision making. We refer you to the Landscape Institute Guidelines for Landscape and Visual Impact Assessment for further guidance.

Protected Species
Natural England has produced standing advice[1] to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice. Natural England will only provide bespoke advice on protected species where they form part of a Site of Special Scientific Interest or in exceptional circumstances.

Local sites and priority habitats and species
You should consider the impacts of the proposed development on any local wildlife or geodiversity sites, in line with paragraphs 175 and179 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity. Natural England does not hold locally specific information on local sites and recommends further information is obtained from appropriate bodies such as the local records centre, wildlife trust, geoconservation groups or recording societies.

Priority habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. List of priority habitats and species can be found here[2]. Natural England does not routinely hold species data, such data should be collected when impacts on priority habitats or species are considered likely. Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land, further information including links to the open mosaic habitats inventory can be found here.

Ancient woodland, ancient and veteran trees
You should consider any impacts on ancient woodland and ancient and veteran trees in line with paragraph 180 of the NPPF. Natural England maintains the Ancient Woodland Inventory which can help identify ancient woodland. Natural England and the Forestry Commission have produced standing advice for planning authorities in relation to ancient woodland and ancient and veteran trees. It should be taken into account by planning authorities when determining relevant planning applications. Natural England will only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a Site of Special Scientific Interest or in exceptional circumstances.

Environmental gains
Development should provide net gains for biodiversity in line with the NPPF paragraphs 174(d), 179 and 180. Development also provides opportunities to secure wider environmental gains, as outlined in the NPPF (paragraphs 8, 73, 104, 120,174, 175 and 180). We advise you to follow the mitigation hierarchy as set out in paragraph 180 of the NPPF and firstly consider what existing environmental features on and around the site can be retained or enhanced or what new features could be incorporated into the development proposal. Where onsite measures are not possible, you should consider off site measures. Opportunities for enhancement might include:

[1] https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals
[2] http://webarchive.nationalarchives.gov.uk/20140711133551/http:www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx

- Providing a new footpath through the new development to link into existing rights of way.
- Restoring a neglected hedgerow.
- Creating a new pond as an attractive feature on the site.
- Planting trees characteristic to the local area to make a positive contribution to the local landscape.
- Using native plants in landscaping schemes for better nectar and seed sources for bees and birds.
- Incorporating swift boxes or bat boxes into the design of new buildings.
- Designing lighting to encourage wildlife.
- Adding a green roof to new buildings.

Natural England's Biodiversity Metric 3.0 may be used to calculate biodiversity losses and gains for terrestrial and intertidal habitats and can be used to inform any development project. For small development sites the Small Sites Metric may be used. This is a simplified version of Biodiversity Metric 3.0 and is designed for use where certain criteria are met. It is available as a beta test version.

You could also consider how the proposed development can contribute to the wider environment and help implement elements of any Landscape, Green Infrastructure or Biodiversity Strategy in place in your area. For example:

- Links to existing greenspace and/or opportunities to enhance and improve access.
- Identifying opportunities for new greenspace and managing existing (and new) public spaces to be more wildlife friendly (e.g. by sowing wild flower strips)
- Planting additional street trees.
- Identifying any improvements to the existing public right of way network or using the opportunity of new development to extend the network to create missing links.
- Restoring neglected environmental features (e.g. coppicing a prominent hedge that is in poor condition or clearing away an eyesore).

Natural England's Environmental Benefits from Nature tool may be used to identify opportunities to enhance wider benefits from nature and to avoid and minimise any negative impacts. It is designed to work alongside Biodiversity Metric 3.0 and is available as a beta test version.

Access and Recreation
Natural England encourages any proposal to incorporate measures to help improve people's access to the natural environment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways should be considered. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be delivered where appropriate.

Rights of Way, Access land, Coastal access and National Trails
Paragraphs 100 and 174 of the NPPF highlight the important of public rights of way and access. Development should consider potential impacts on access land, common land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the any nearby National Trails. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts.

Biodiversity duty
Your authority has a duty to have regard to conserving biodiversity as part of your decision making. Conserving biodiversity can also include restoration or enhancement to a population or habitat. Further information is available here.

Appendix 4 – Highways Authority Response

Norfolk County Council

Community and Environmental Services
County Hall
Martineau Lane
Norwich
NR1 2SG
NCC contact number: 0344 800 8020
Text Relay - 18001 0344 800 8020

Kate Lawty
Norfolk County Council
6th Floor
County Hall
Martineau Lane
Norwich
NR1 2DH

Your Ref: FUL/2021/0072
Date: 2 March 2022

My Ref: 0/FUL/21/0072
Tel No.: 01603 223273
Email: jonathan.hanner@norfolk.gov.uk

Dear Kate

Change of use from waste transfer station/materials recovery facility to a facility for the manufacturing of carbon-negative aggregates for use in the construction industry including demolition of existing storage shed, construction of feed hopper and conveyor, curing bay shed, covered aggregate conveyor system, 7 no. silos, CO2 tank and associated site works. Larkshall Mill, Thetford Road, East Wretham, Thetford, Norfolk, IP24 1QY

Thank you for consulting the Highway Authority with regard to the above application.

It is noted that the site currently benefits for planning permission to accept up to 75,000 tonnes of household, commercial and industrial materials per annum. The site is accessed via an existing simple priority junction directly onto the A1075. There are also a number of other existing uses on the wider site which gain access to the highway network via the existing A1075 junction.

Permission is sought for the importation of 30,000 tonnes of APCr, 20,000 tonnes of sand, 8,000 tonnes of cements and 480 tonnes of CO2 per annum. Following on site processing this will result in 80,000 tonnes of aggregated being exported per annum. Whilst no changes to the access are proposed as part of the application, the applicant is proposing to refresh the existing give way junction road markings.

Having considered the information submitted, it is noted that the applicant has provided a likely traffic generation associated with the current proposals and that of the current extant permission (if implemented to 75,000 tonnes per annum).

In light of the above, I can confirm given the existing lawful use of the site coupled with the other existing users of the access that, on balance, I could not substantiate an objection to the proposals.

Should you be minded to approve the proposals, I would suggest the inclusion of a suitably worded condition to limit the throughput of material / aggregate to the levels proposed. In addition, I would also suggest the inclusion of the following standard conditions:

SHC 09

Prior to the commencement of the use hereby permitted the road markings at the existing vehicular access onto the A1075 as outlined on drawing 1460-CAL-DR-ZZ-DR-D-SK002 shall be provided in accordance with details to be agreed in writing by the Local Planning Authority.

Reason:To ensure satisfactory access onto the highway in the interests of highway safety and traffic movement.

SHC 17

Prior to the first use of the development hereby permitted visibility splays shall be provided in full accordance with the details indicated on the approved plan.The splay(s) shall thereafter be maintained at all times free from any obstruction exceeding 0.6 metres above the level of the adjacent highway carriageway.

Reason:In the interests of highway safety in accordance with the principles of the NPPF.

SHC 21

Prior to the first use of the development hereby permitted the proposed access/on-site car parking/servicing/loading/unloading/turning/waiting area shall be laid out, demarcated, levelled, surfaced and drained in accordance with the approved plan (1460-CAL-DR-ZZ-DR-D-SK002) and retained thereafter available for that specific use.

Reason:To ensure the permanent availability of the parking/manoeuvring areas, in the interests of satisfactory development and highway safety.

Yours sincerely

Jon Hanner

Principal Engineer - Developer Services
for Executive Director for Community and Environmental Services

Please be aware it is the applicants responsibility to clarify the boundary with the public highway. Private structures such as fences or walls will not be permitted on highway land. The highway boundary may not match the applicants title plan. Please contact the highway research team at highway.boundaries@norfolk.gov.uk for further details.

Appendix 5 – Transport Statement para 44

Figure 4-2: Cycle routes (source: SUSTRANS)

4.3.5 It is likely that most workers to the site will come from Thetford, Norwich or the surrounding rural settlements. Therefore, walking to the site is unlikely to be a realistic option. However, the site is approximately 1km from East Wretham via Cricket Ground Road. The population here is small and mostly related to the RAF base but some workers may be drawn from this area.

4.4 Traffic

4.4.1 Automatic Traffic Counts (ATC) have been undertaken between 14/09/21 and 20/09/21 i.e. covering a seven day period, at the following locations:

- A1075 Thetford Road outside of the site; and
- Site access

4.4.2 The locations of the traffic counts are shown in Appendix A, Figure 4. It should be noted that the site access counter was positioned so as to count traffic from the whole estate. The access to the OCO site was included in this as it splits off from the main access to the agri-business site to the east of where the traffic counter was located. However, the OCO site currently generates virtually no traffic.

4.4.3 The ATC traffic count data has been used to provide baseline traffic flow information used in the TS.

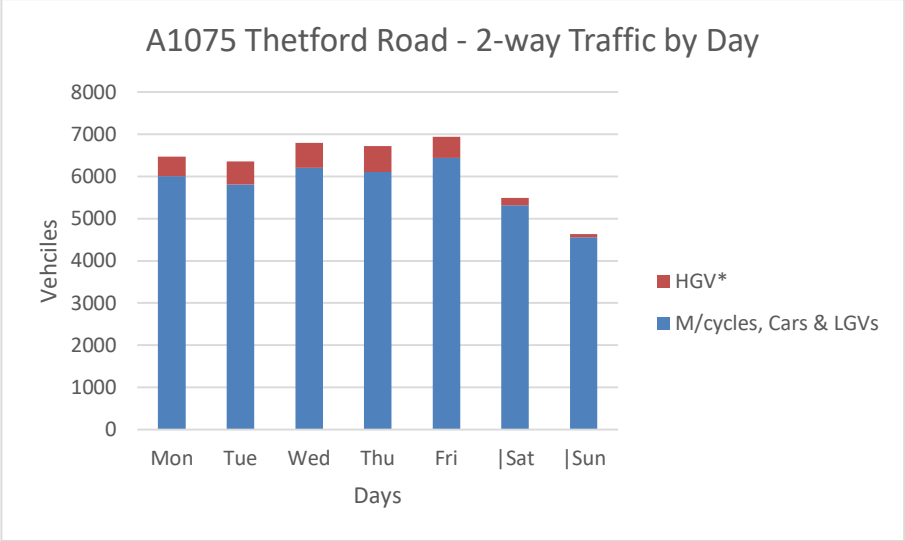

Figure 4-3: A1075 Thetford Road – baseline traffic flow by day

4.4.4 The total daily traffic flows for the A1075 Thetford Road are shown in Figure 4-3. The weekdays have very similar flows with slightly higher flows on Wednesday and Friday.

Traffic flows are typically around 6,500 vehicle two-way. HGV traffic (OGV1 + OGV2 +PSV) represents about 8% of all traffic on a weekday.

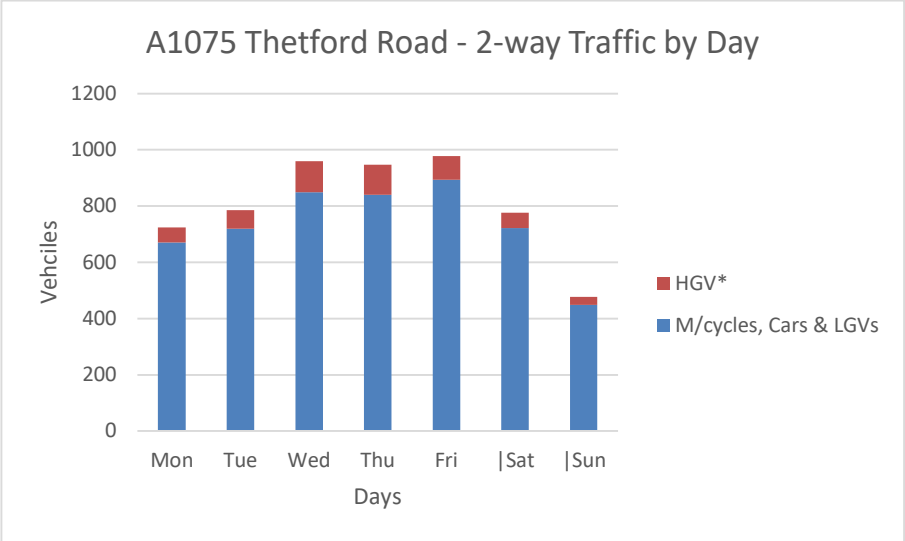

Figure 4-4: Site access – baseline traffic flow by day

4.4.5 The total daily traffic flows for the site access are shown in Figure 4-4. The busiest days are Wednesday through to Friday with in excess of 900 vehicles two-way. For the other days of the week, the flows fall to less than 800 vehicles two-way. HGV traffic represents about 10% of all traffic on the busiest weekdays i.e. a Wednesday, Thursday or Friday.

4.4.6 For the purposes of further analysis, a Wednesday has been selected. Wednesdays and Fridays are the busiest days and very similar in terms of total numbers of vehicles, with Friday very slightly higher. However, Wednesday has the higher HGV traffic flows for both the site access and A1075 Thetford Road.

4.4.7 Based on the busiest day, which is a Wednesday, the baseline traffic flows on the A1075 Thetford Road are summarised in Table 4-1. This shows a distinctive tidal flow with more traffic southbound in the morning peak hour and more traffic northbound in the evening peak hour.

	Northbound		↑	↓	Southbound	
	All Vehicles*	HGVs**			All Vehicles*	HGVs**
0700-0800	210	25			339	22
1700-1800	355	15			223	16
24hr	3553	345			3282	287

Notes: * Inc m/cycle ** OGV1, OGV2 and PSV

Table 4-1: A1075 Thetford Road - ATC summary traffic flows

4.4.8 These traffic flows are show graphically below in Figure 4-5. This shows that there are distinctive traffic peaks in the morning between 0700-0800 and in the evening between

1700-1800. Throughout the rest of the day there is steady traffic but at about two thirds the peak periods.

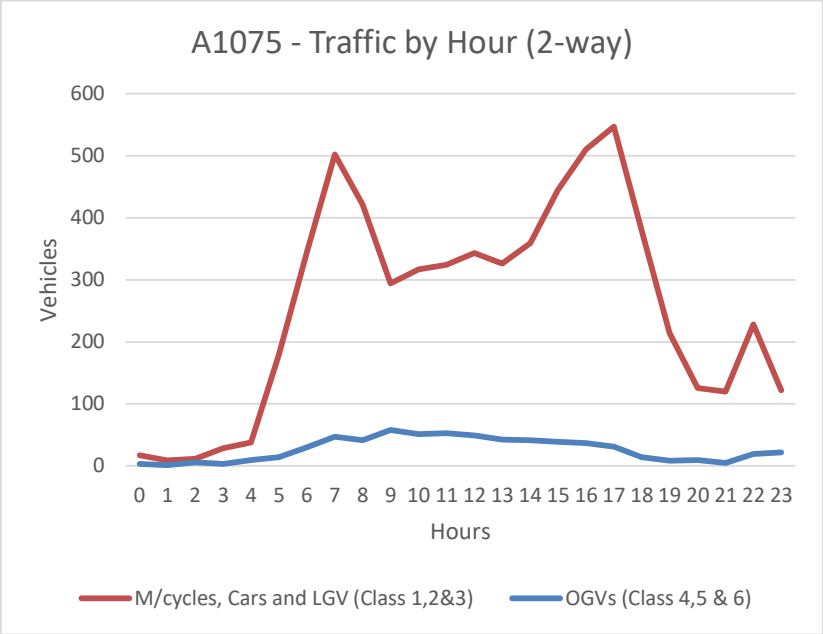

Figure 4-5: A1075 Thetford Road – baseline traffic flow by hour

4.4.9 Based on the busiest day, which is a Wednesday, the baseline traffic flows for the site access are summarised in Table 4-2. This shows a less distinctive tidal flow.

	Eastbound (IN)				Westbound (OUT)	
	All Vehicles*	HGVs**			All Vehicles*	HGVs**
0600-0700	25	1	→	←	31	4
1400-1500	31	5			47	6
24hr	431	52			534	64

Table 4-2: Site access - ATC summary traffic flows

4.4.10 These traffic flows are show graphically below in Figure 4-6. This shows that there are distinctive traffic peaks in the morning between 0600-0700. In the afternoon though, the traffic flows remains roughly even from 1300-1900. Traffic flows appears to be higher in the afternoon than in the morning.

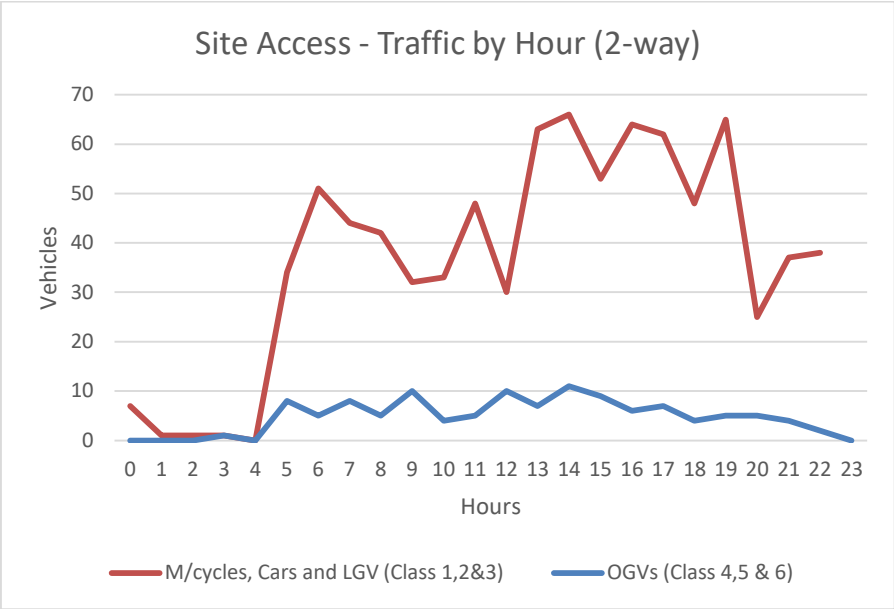

Figure 4-6: Site Access – baseline traffic flow by hour

4.4.11 Data for the A11 has been obtained from the DfT. The traffic count information taken from a count immediately to the west of the roundabout junction of the A11 with A1075 (count no. 28741) is shown in Figure 4-7. Only Average Annual Daily Traffic (AADT) is available and this covers the period 2002 to 2020 (the last two years having been estimated by the DfT).

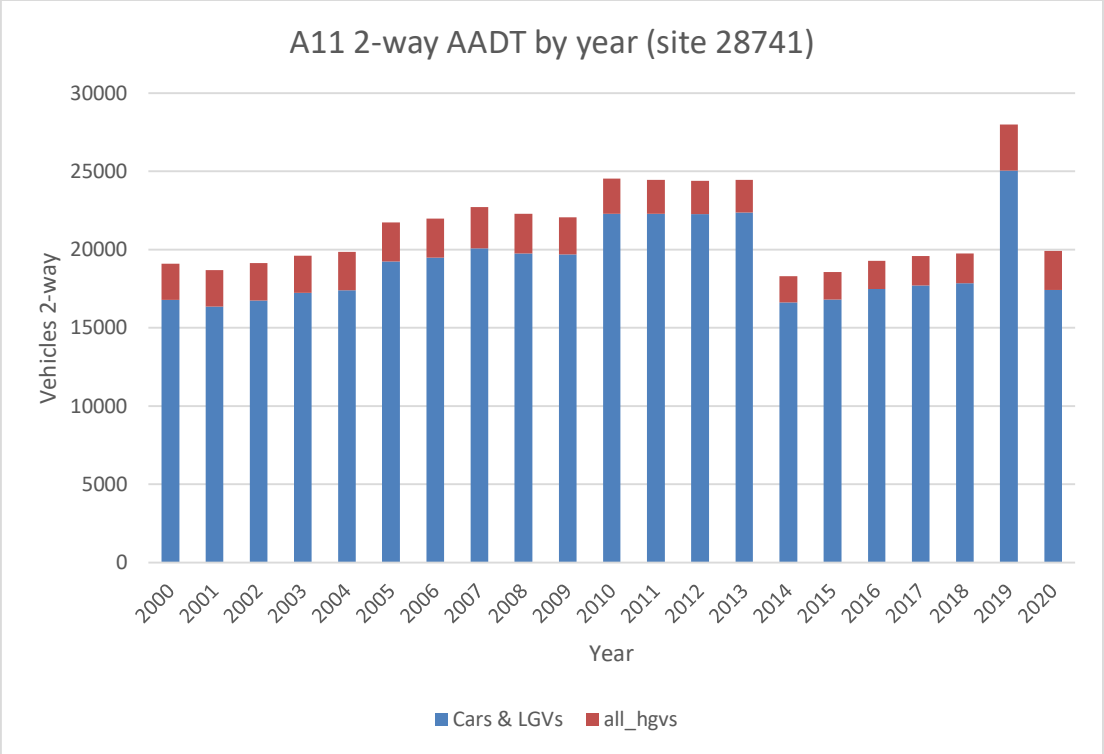

Figure 4-7: A11 traffic count – traffic flow by year

4.4.12 The data for the A11 shows that the road typically carries in excess of 20,000 vehicles two-way every day. A recent peak in 2019 showed that the road carried around 28,000 vehicles two-way per day. Since 2019, these flows have dropped back to around 20,000 per day (as estimated by the DfT) and reflecting the impacts of COVID.

4.4.13 HGV traffic makes up over 2,200 HGVs per day, or about 11% of the total. HGV traffic has remained similar in spite of COVID.

4.4.14 The A11 is a strategic route and is key to the economic prosperity of the region. It is therefore intended that it accommodates large amounts of freight movements and is a suitable strategic route for taking trucks from this development proposal.

4.5 Accident Analysis

4.5.1 Personal injury accident data has been obtained from NCC Road Safety Department for the most recent five year period (12/03/17 to 05/04/21). The area of search for the accident data is shown in Appendix A, Figure 5.

4.5.2 The data received has been analysed and the locations of the accidents plotted. A plot of the data is shown in Appendix D and a summary of the data can be found in Table 4-3.

4.5.3 Within the area of search, there have been a total of 23 recorded accidents resulting in 40 casualties. The severity of the accidents has been classified as 23 'slight', 13 'serious' and 4 'fatal'.

4.5.4 Of the fatal accident reference 240759, 1 casualty was fatally injured, 1 casualty was seriously injured and 1 casualty was slightly injured. The accident resulted from a head on collision between two cars near to the junction with the A11.

4.5.5 Of the fatal accident reference 833205, 1 casualty was fatally injured. The accident resulted from the casualty's motorcycle leaving the road and colliding with a sign on the section of the A1075 north of Stonebridge.

4.5.6 Of the fatal accident reference 872354, 2 casualties were fatally injured, one casualty was seriously injured and one casualty was slightly injured. The accident resulted from a head on collision between two cars on the section of the A1075 north of Stonebridge.

4.5.7 Pedestrians, cyclists and motorcyclists can be considered to be vulnerable road users. There were no accidents involving a pedestrian, no accidents involving cyclists and 1 accident involving a motorcyclists.

Appendix 6 – Transport Statement para 5.2 – 5.3

5 TRIP GENERATION AND ANALYSIS

5.1 Methodology

5.1.1 The approach taken to trip generation from the site has been to use the following method:

- To estimate the trips to/ from the site under the proposed development (i.e. the OCO Technology plant) based on the proposed annual inputs and output from the OCO process and the profile of truck and staff arrivals and departures based on shift working and other similar sites;
- To estimate the trips to the extant use (i.e. as a WTS) based on the licensed annual tonnages that the site could process, which was 75,000 tpa; and
- To compare the estimated trips for the extant use and proposed development. This has been undertaken to consider the impacts on the immediate road network. The trip generation for existing, proposed and the difference between them is considered below.

5.2 Extant Use

5.2.1 The extant use of the site was as a WTS but is now surplus to requirements. Figure 5-1 shows that the site was once intensively used with many skips and lorries apparent in the aerial photograph. A very few deliveries are still taking place and materials are being bulked. However, the site has planning permission to process 75,000 tpa of waste. When fully operational, the waste was delivered to the site by a mixture of refuse collection vehicles (RCVs) and RoRo/ skip lorries. Articulated 'bulker' trucks were then used to transport the processed and bulked material away.

5.2.2 Traffic data is not available for the site when it was fully operational. However, it has been possible to calculate the likely trip generation using the allowable annual tonnage and the payloads of the different types of vehicles. The payloads are based on weighbridge data that Callidus' has evidenced from other WTS sites.

5.2.3 The resulting trip generation is shown in Appendix E and is summarised in Table 5-1 below.

Extant	IN	OUT	TOTAL
Daily (Trucks)	82	82	164
Daily (Cars)	30	30	60
Daily TOTAL	112	112	224

Table 5-1: Extant trip generation

5.2.4 The car trips shown are based on operatives working on the site. The site is also known to have operated as a depot and therefore the truck drivers' cars would be additional to this. We don't currently have information on the number of truck drivers but as the site was licensed for 50 vehicles and 10 trailers, the additional cars due to drivers is likely to have been quite substantial.

Figure 5-1: Extant use of the site

5.3 Proposed use

5.3.1 Forecast truck data has been based on the known tonnages of different materials being imported to the site as well as the forecast tonnages being exported from the site. The information has been supplied by the client. The HGV movements are expected to take place steadily throughout the day.

5.3.2 The forecast trip generation is shown in Appendix E and is summarised in Table 5-2 below.

Proposed	IN	OUT	TOTAL
Daily (Trucks)	22	22	44
Daily (Cars)	40	40	80
Daily TOTAL	62	62	124

Table 5-2: Development traffic trip generation

5.3.3 The car trips represent a worst-case scenario and assume all staff arrive by single-occupancy car. A reduction on this might be observed if staff are dropped off, share a trip or travel

by other modes. This also assumes all staff attend site every day whilst in reality some may be away for a variety of reasons. Typically, operatives of the proposed site will work on two shifts, either 0600-1400 or 1400-2200, with approximately 10-14 operatives per shift.

5.3.4 The forecast car trip generation associated with the operatives and other staff on the site is shown in Appendix E.

5.3.5 Overall, the traffic generated by the proposed development represents a net reduction compared to the extant use.

5.4 Trip Distribution

5.4.1 OCO has existing contracts in place for receipt of APCr. This would mean that the trucks delivering this material would arrive at the site from the A11 direction. This will also be the case for CO2 and cement. Some of the sand, estimated to be about 50%, is expected to be supplied locally from Watton. The rest of the sand will come from the A11 direction. Aggregates are mostly supplied to destinations served by the A11.

5.4.2 Employees are expected to come from the local area. Most are likely to be from Thetford and the surrounding areas. Typically, it can be expected that 50% will arrive from the south and 50% from the north.

5.4.3 The distribution of trips can be summarised as follows:

		To / From	
Trip Type	Vehicle Type	North	South
ACPr	Tanker		100%
Sand	Tanker	50%	50%
Cement	Tanker		100%
CO2	Tanker		100%
Aggregates	Truck	15%	85%
Staff	Car	50%	50%

Table 5-3: Summary of trip distribution

5.4.4 Traffic growth rates have been applied to the collected base traffic data and are as follows (derived from DfT TEMPRO database adjusted by NTM):

	0700-1000	1600-1900	Avg Daily
2021 - 2023*	1.0225	1.0240	1.0263

Notes: Growth based on 'Breckland - road type = Principal'
*2023 is the assumed to be the year of opening

Table 5-4: TEMPRO Growth rates

Appendix 7 – Planning Statement para 3.17

allowed to cure in the bays before it is taken to the aggregate storage building using a loading shovel. The curing bay building consists of 3 bays constructed from in situ reinforced concrete covered by a steel pent structure and cladding finished in agate grey.

3.15 If necessary, the aggregate may go through a further stage of processing such as screening before being stored, depending on the specification required. This additional processing would take place internally.

3.16 Once the aggregate is due to be exported off site, it is loaded into bulk tippers. Loaded HGVs use the weighbridge and are sheeted before exiting the site.

Hours of Operation

3.17 The following hours of operation are proposed:

- Monday – Saturday: 0600 – 2200
- Sunday and Bank Holidays: closed

Employment

3.18 It is proposed to employ 40 staff on the site consisting of 28 operatives and 12 support staff and administrative staff. The operative staff will be split across two shifts.

Proposed Vehicular Movements

HGV movements

3.19 The process requires the importation of the following:

- APCr: circa 30,000 tpa by HGV
- Sand: circa 20,000 tpa by HGV
- Cement: circa 8,000 tpa by HGV
- CO_2: circa 480 tpa by HGV

3.20 This equates to 44 (22 in, 22 out) average daily HGV movements spread throughout the working day. HGVs used are typically articulated tankers or tipper trailers.

Staff vehicle movements

3.21 Proposed staff vehicle movements, based on all staff driving to work, are 80 car movements (40 in, 40 out) spread across the working day, owing to operative staff working two shifts. Owing to the location of the site, opportunities for use of public transport are limited. However, where possible, car sharing between employees will be encouraged.

3.22 Owing to the shift patterns proposed at the site, employees would arrive at the site for work at different times of the day.

HGV circulation

3.23 HGVs entering the site will report to the weighbridge office and follow a clockwise vehicle circulation route around the site.

HGV parking

3.24 5 no. parking spaces for HGVs are proposed to ensure that HGV drivers can park up safely on site if necessary.