To: Norfolk Boreas

**Subject:** Deadline 7 response to applicant"s response.

**Date:** 08 March 2020 08:44:48

2.3.0.33 The Applicant Ivy Todd Campsite: Necton Substation Action Group refer to a campsite owned by Mr Paul King in Ivy Todd [REP4-050]. Has this land / business been identified in the Book or Reference?

The Applicant notes that Mr Paul King is listed in the Book of Reference in relation to historic rights as referred to in the response to question 2.3.0.26, however the campsite business has not been referred to within the Book of Reference as it is not included within the Order limits.

The comments we made referring to Paul King's Campsite, which the applicant refused to accept existed in the first instance, were referring to the visual, lighting and noise affects on the business. We do not understand why the applicant's response seems to say it isn't relevant as it does not lie within the Order limits. It is relevant as they will be damaging a business they refuse to acknowledge is there.

https://www.freedomcampingclub.org/campsite/Norfolk/Swaffham/Mona-Bungalow/6866



Mona Bungalow, Swaffham, Norfolk Campsite - Freedom Caravan and Camping Club, Free campsite search

Mona Bungalow, Swaffham Call for prices Chapel Road Necton Swaffham Norfolk PE37 8JA This is a members only Caravan Club certified location, Members only, join from £51

www.freedomcampingclub.org

To: Norfolk Boreas

**Subject:** Deadline 7 - responses to the applicants response

**Date:** 08 March 2020 09:13:29

To create 10m high bunds, assuming a 1:4 gradient which is the steepest gradient that still allows access and maintenance, an additional 80m width of land take would be required and agricultural functionality in this area would be lost, including the dissection of existing field parcels. Formation of such bunds would also require the importation of significant volumes of material.

2.5.2.2

It may be the case that the applicant has underestimated the amount of land they will need to produce sufficient mitigation, but that is a problem they have created.

The amount they are taking is already going to sever and blight 3 farms, so there will be land available that can no longer be efficiently utilised for farming, so it may as well be used to mitigate the effects on wildlife and the extra tree planting on them would be in line with the government policies on climate change.

These bunds would enhance the area greatly, provide new and important habitats for voles which are the very basis of the food chain for owls and bats and birds of prey. This would in fact create wonderful nature corridors, which would in turn make up somewhat for the loss of habitat and foraging areas taken away by the substations. These bunds, if placed sensibly and exactly on the high contour line could feasibly be only 5m high once the trees have grown.

The UK Government says of earth banks: <a href="https://www.gov.uk/countryside-stewardship-grants/earth-banks-and-soil-bunds-rp9">https://www.gov.uk/countryside-stewardship-grants/earth-banks-and-soil-bunds-rp9</a>

## How this item will benefit the environment

An earth bank or soil bund can be used to:

- slow the movement of water, protecting streams and rivers from pollutants
- slow flows during high rainfall and reduce downstream flooding
- control water levels to aid raised water levels for habitat creation and restoration

To: Norfolk Boreas

**Subject:** Deadline 7 responses to the applicant"s responses

**Date:** 08 March 2020 09:49:06

#### 2.9.1.2

1. The Applicant has never stated that the proposed development would not be visible from Necton or Ivy Todd

The falsehood of this statement has already been proved by our response which gives the times on the ISH recording when Jo Phillips indeed said this.

 To:
 Norfolk Boreas

 Subject:
 Deadline 7

 Date:
 09 March 2020 16:29:56

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010087/EN010087-001786Applicant's%20Comments%20on%20Responses%20to%20the%20Examining%20Authority's%20Further%20Written%20Questions.pdf2.9.2.1
The Applicant HVDC/ HVAC: 1. Is it correct, as stated by Necton Substation Action Group (NSAG) in response to the Interested Parties
Response to Q9.2.4 [REP3025], that the change to HVDC from HVAC has resulted in a proposed substation that would be taller than if
HVAC had been used? 2. If so, what is the worst case increase in height?

1. The Applicant's commitment to High Voltage Direct Current (HVDC) technology results in an onshore project substation maximum building height of 19m and maximum external electrical equipment height (lightning protection) of 25m. An High Voltage Alternating Current (HVAC) onshore project substation, as outlined in the Scoping Report, was consulted on as a maximum height of 10.1m for external electrical equipment. 2. The worst case increase in height at the onshore project substation is 14.9m.

This means they are saying HVAC would have been only 10.1m high. (The size of a large agricultural barn) Surely it is outrageous (and incorrect) that we were not consulted on this change, and it was just announced as a fait accompli.

Can the ExA please ask the applicant why they did not consult Necton on changing the substations from HVAC to HVDC. And why is the developer focusing (apparently) on making things better everywhere except Necton. We feel it is because we have stood up to them. Is this true?

2.9.3.4 The Applicant 'Existing ground level': Requirement 16(5) and (8): Considering the more detailed contour information provided [REP4014, Appendix 3], to build the required footprints at 'existing ground level' of 73m AOD for Scenario 1 and 72m AOD for Scenario 2, it appears that fill could need to be imported. The project description refers only to grading and removal of excess material, not bringing in fill [APP-218, para 363]. The Assumed Construction Materials and

1. An indicative cut and fill assessment of the onshore project substation footprints has been conducted to understand the uniform platform level which can be achieved with a neutral cut and fill assessment. I.e. no material is imported or exported from the site and the platform level is achieved by moving higher ground within the footprint to the lower ground level. This cut and fill assessment has informed the 'existing ground level' of the onshore project substation footprints, as secured in the dDCO. This approach has been taken to recognise that the existing land is not currently level across the footprint (as shown in [REP-014, Appendix 3]) and therefore to reflect a uniform ground level based on a neutral cut and fill. 2. Import of fill has not been assessed. There will, however, be an opportunity for some fill to be available within the order limits as a result of the creation of attenuation ponds and other landscaping surrounding the onshore project substation footprint if necessary. 3. Whilst there is currently no formal co-operation with the Norfolk Vanguard project with regards to earthworks and levels for Scenario 1, it is the intention that one will be entered into. Such cooperation agreement will cover a multitude of issues, one such being opportunities during design and construction to minimise impacts such as the reuse of earthworks material on site between projects to minimise export of material.

This is horrendous and shows that the applicant's intention is to raise natural ground levels in order to get a flat surface, instead of lowering them. This means that all their simulations and photomontages are even more inaccurate than we thought. This throws all their mitigation out as far more of the substations will be seen than they had previously disclosed.

Could the ExA please ask the applicant why they are not doing the obviously better things for mitigation and taking the lowest natural level, lowering the rest to match it and using the resultant soil to make earth bunds, just as Dudgeon did? It really seem as if this applicant is doing everything they can to make things worse for the community.

4. The lightning protection design is informed by an industry standard risk assessment of the impacts of a lightning strike on the operational equipment within the onshore project substation and the necessary mitigation from those impacts. The number or design of lightning conductors is not determined by local conditions.

Could the ExA ask the applicant if they are aware that Necton/Ivy Todd area is in a high lightning strike location, and therefore the last sentence in the above should be questioned. We can help them verify this is they are not able to.

1. The Applicant has considered the lowering of buildings into the ground. In terms of landscape and visual considerations, the options of lowering the ground level or lowering buildings into the ground / slope were considered and discounted. In order to ensure a design is responsive to the unique characteristics and attributes of a local landscape, the best approach is generally to work with the landform, in order to minimise the magnitude of change. While the landform is gently undulating, it falls more steeply towards the south-east. In order to cut a level platform of 250m x 300m at a lower ground level or excavate subterranean buildings would require a huge amount of earthworks and would fundamentally alter the character of the local landscape.

Could the ExA please ask the applicant why they keep making inaccurate statements about protecting the 'character of the local landscape' when they are about to plonk 37 acres of monstrosity here that would have trouble fitting in anywhere, in order to go for the cheapest option?

It has already been proven that consultees at meetings have said nothing about bunds not fitting in with the landscape (as the applicant had claimed) and how can the applicant possibly state that a subterranean substation would not fit in with the landscape, when that is precisely what subterranean substations are designed to do?

The soil created by the digging out to lower the subterranean building is then used to cover it, and it is then planted with trees.

To say that they don't want use a subterranean substation because they want to 'minimise the magnitude of change' is such a transparently stupid statement that we are becoming terrified what might befall us if this applicant should be let loose with their plans. We say again this is nonsensical when they are about to plonk 37 acres of monstrosity in Necton. What bigger magnitude of change could there possibly be? They are deliberately misinterpreting and manipulating this statement, "the best approach is generally to work with the landform, in order to minimise the magnitude of change" to enable them to go for the cheapest option.

Could the ExA please ask the applicant to provide costings comparisons for above ground substations compared with subterranean ones?

The lower the elevation of the platform level, the greater the extent of land around the platform that will require remodelling to ensure the proposed levels tie up with the existing levels, unless large concrete retaining walls are used to overcome the difference in height. This remodelling could potentially lead to an additional loss of existing hedgerows and trees in the surrounding area, with an approximate 4m minimum strip of land lost for every metre lower the platform goes (assuming a maximum 1:4 gradient to still allow access and maintenance),

although potentially greater in sections of greater level difference. In addition, to create 15m high bunds, assuming a 1:4 gradient, an additional 120m strip around the onshore project substation would be required and all existing vegetation in this area would be lost. The Applicant does not propose any communications masts as referenced in the response. The onshore project substation will include the lightning protection masts however these have always been a requirement of the onshore project substation and considered in the EIA and the application. The height of which must not exceed 25m above existing ground level as secured by dDCO Requirement 16 (5).

Can the ExA please ask the applicant why they did not propose buying enough land to create efficient mitigation?

Could the ExA please ask the applicant to prove what they are saying is correct about the ground lost when creating a bank? Where is their evidence for this?

We keep coming up against the applicant's inability to perform innovative engineering. There is a huge gap between their proposals of a few 2m banks and ours of 15m banks and yet no in-between solution is ever suggested by the applicant. As usual they will not compromise.

This company can and do build high banks: http://www.tenaxind.com/en/geosynthetics/case-history/earth-bunds-reinforcement.htm

#### Construction of geogrid reinforced earth bunds for noise protection

Problem. The construction of a cargo railway at Marchwood Military Port in Southampton, UK, required the establishment of two barriers to act as noise bunds and also as a curtain to shield unsightly unloading operations.

www.tenaxind.com

As you can see these bunds would also mitigate noise. Can the ExA please ask the applicant why have they not been considered?

Why is no money spent on mitigating things for Necton?

Raising or lowering the land levels will both need the soil to be retained.

If no communication masts are planned they why do plans show them? We assume this was yet another error?

Thank you NSAG

To: Norfolk Boreas
Subject: Deadline 7

**Date:** 08 March 2020 10:27:58

2.12.2.3 NSAG Ivy Todd Farm: Respond to the request [REP3-030] to include Ivy Todd Farm as an NSR.

We note that in the ExA have asked the Applicant to "respond to the request [REP3-030] to include Ivy Todd Farm as an NSR". First NSAG would like to thank the ExA for asking this question, and remind the Applicant that the residents of Ivy Todd Farm have been promised many things, including hedge mitigation close to their land, which have fallen by the wayside. [Redacted name] in the farm, and the noise levels and stress of the situation, which is ruining her lifetime, peaceful home, would certainly in our eyes make her a NSR. Earth banks are very good sound insulators, and those requested in the wording above would help the noise levels considerably, so that is another very good reason for using them.

The Applicant refers to the response provided to Q2.12.2.3 on the inclusion of Ivy Todd Farm as a NSR.

2

But at which point on the farm does the sensitivity start? At which point will it be considered a 'nuisance'?

To: Norfolk Boreas
Subject: Deadline 7

**Date:** 08 March 2020 10:23:18

2.13.4.3 The Applicant Fire Hazard: Respond to [REP4-056] regarding the need for further assessment of the probability and potential impacts arising from accidental, engineering (equipment / system failure) or terrorism related incidents, and any related mitigation measures.

The Applicant addressed the concerns raised in REP4-056 in REP3-007, Table 1.7 and 2.6. National Grid have 342 substations across the UK like that proposed at Necton, and because these substations are Nationally Significant Infrastructure Projects, they have very high levels of electrical systems protection and security. The very low fire risk most associated with higher voltage substations, like the one proposed at Necton, is on transformers. Within this development, unlike most urban distribution substations, the transformers are protected by blast wall design features which have been proven to effectively mitigate the risk. Furthermore, any potentially flammable assets are not located near the perimeter of the infrastructure, and the ground materials and other physical barriers included in the design (such as blast walls) will contain any fire to within the compound. *Potential fires would not be able to travel along any cables as they are not oil filled*.

Were the below examples then of oil-filled cables, or was it the plastic that burnt?

Businesses and homes in the Hainton Avenue area of Grimsby have been left without power after an underground cable caught fire which burnt through to the pavement above. <a href="https://www.grimsbytelegraph.co.uk/news/underground-electrical-cable-fire-burns-959809">https://www.grimsbytelegraph.co.uk/news/underground-electrical-cable-fire-burns-959809</a>



### https://www.telegraph.co.uk/news/uknews/law-and-order/11509473/Holborn-fire-live.html



# Holborn fire: Witnesses 'struggle to breathe' - as it happened

Witnesses report 'chaos' as smoke seeps through drains after electrical blaze under pavement in Kingsway, central London, causes widespread evacuation - latest updates

www.telegraph.co.uk

#### https://allsaveduk.com/news/fire-risk-in-electricity-substations

## Protecting against fire risk in electricity substations

There are over 400,000 substations of varying sizes in the UK, ranging from National Grid substations where electricity is transformed down to 132kV, to 'final distribution' substations which changes electricity from 11kV to the 230V that we use in homes and offices

allsaveduk com

All these sources quote fire spreading along cables.

To: Norfolk Boreas

**Subject:** Deadline 7 further on fire risk. **Date:** 08 March 2020 15:17:06

2.13.4.3 The Applicant Fire Hazard: Respond to [REP4-056] regarding the need for further assessment of the probability and potential impacts arising from accidental, engineering (equipment / system failure) or terrorism related incidents, and any related mitigation measures.

The Applicant addressed the concerns raised in REP4-056 in REP3-007, Table 1.7 and 2.6. National Grid have 342 substations across the UK like that proposed at Necton, and because these substations are Nationally Significant Infrastructure Projects, they have very high levels of electrical systems protection and security. The very low fire risk most associated with higher voltage substations, like the one proposed at Necton, is on transformers. Within this development, unlike most urban distribution substations, the transformers are protected by blast wall design features which have been proven to effectively mitigate the risk. Furthermore, any potentially flammable assets are not located near the perimeter of the infrastructure, and the ground materials and other physical barriers included in the design (such as blast walls) will contain any fire to within the compound. Potential fires would not be able to travel along any cables as they are not oil filled.

The risk may be 'low' but the possible consequences are very, very high. Please ask the applicant the following questions.

- 1. A 'low' risk is not 'no risk' if you live nearby, so what assurances can they give us that is a fire DID break out, how we would be protected from the toxic smoke?
- 2. Will there we a siren if a fire broke out?
- 3. Will we be told which direction it's blowing in so that we know which of the villages on each of the four sides of the substations should evacuate? It does not take long for smoke to travel the few hundred metres it would take for it to reach habitations.

It really does seem to the residents of Necton that this applicant is determined to deliberately not give them a single inch. Not in alternative siting, not in mitigation, not when it comes to our safety, not when we ask for bunds/banks, not when we ask mitigation close to properties, not when we attend meetings run by our MP which the applicant failed to attend, and questions on compensation which led to the comment, 'we do not have to give you anything', by the applicant, do nothing to abuse this theory.