MILLS & REEVE

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13 June 2024

Dear Sirs

**Outer Dowsing Offshore Wind (the trading name of GT R4 Limited) ("ODOW")**

**Proposed Outer Dowsing Offshore Wind Farm Order (the "Project" and "the Order")**

**Relevant Representation (Objection) on behalf of T.H. Clements & Son Limited ("T.H. Clements")**

Mills & Reeve are retained by T.H. Clements and have been instructed to make this Relevant Representation **objecting to the Order** on T.H. Clements' behalf.

**Overview of T.H. Clements business and operations**

T.H. Clements is a leading producer of high-end Brassica vegetables and supplies approximately 20% of the Brassica vegetables sold in the UK.

T.H. Clements has spent decades building its business and has significant contracts with leading retailers, including Tesco plc.

Tesco plc. is a demanding retail customer which expects T.H. Clements to adhere to a service level of 98.5%. This high bar of expectation means that T.H. Clements are required to supply no less than 98.5% of the vegetable produce requested by Tesco on time and to specification. Failure to adhere to that service level would put the contract at significant risk.

As part of the service level requirements, Tesco has exacting standards. These include a product specification ("Product Specification") which details the size, quality, flavour and appearance of each vegetable that Tesco expects from its suppliers. This confirms that all vegetables grown and supplied to them by T.H. Clements must be free from defects and must not be contaminated by foreign bodies (including for example insects, soil, dust). The Product Specification also stipulates the required shelf life of each vegetable type. Furthermore, the Product Specification sets out the required Environmental, Social and Governance (ESG) standards (e.g LEAF, Red Tractor etc.), which T.H. Clements must be and are compliant in

and states that T.H. Clements must not source any products from 3rd parties that are not ESG compliant.

The Product Specification also requires T.H. Clements to be one of the "World's best" growers. Underpinning T.H. Clements ability to achieve this, is the quality of land that it farms (please see below for more detail).

T.H. Clements has an annual turnover of approximately £80 million currently and is expected to achieve an annual turnover of circa £100 million within the next three years.

T.H. Clements farms approximately 10,000 acres of rural land in Lincolnshire, including a significant proportion of the land affected by the proposed Project's onshore cable route, as explained below.

**Quality of land farmed by T.H. Clements**

The land that T.H. Clements farm (through which the proposed Project's onshore cable corridor is routed) comprises part of the Lincolnshire Fens, which are renowned as some of the very best food growing soils in the Country and indeed the World, largely comprising Agricultural Land Classification (ALC) Grade 1 land. To put this into context, only 7% of the land in the UK is Grade 1 ALC land, and over 70% of this Grade 1 land is in Lincolnshire around the Wash.

The very best soils (commonly referred to as 'silts') are located to the south and east of the town of Boston (where T.H. Clements farm) and to the North East through Friskney to Wainfleet.

Being permeable, when in good structural condition, these silts are able to absorb and store a significant amount of water, which makes them excellent soils for growing the very best vegetable crops. Their easy working qualities, including the absence of stone, further supports optimal root and therefore crop growth, with associated high marketable yields. It is because of the silts that T.H. Clements are amongst the "World's best" growers of brassica and root vegetables.

**T.H. Clements interests in the land included in the proposed Order**

T.H. Clements farm a significant amount (approximately 753 acres/304ha) of land over which ODOW seek temporary possession and/or permanent compulsory acquisition powers for the Project ("**Order Land**").

To enable T.H. Clements to confirm exactly which plots of the Order Land it farms as owner-occupier, tenant, or under another agreement with a landowner, T.H. Clements' appointed land agents, Brown & Co, asked ODOW to provide the base mapping/shapefiles for the Order Land Plans (ODOW Application Document 2.5). Unfortunately, ODOW declined that request. The information below is therefore provided on the basis of an eye only comparison of the Land Plans and T.H. Clements land ownership/occupation plans and is as accurate as possible in the circumstances:

<u>Order Land Plots owned by T.H. Clements</u>

T.H. Clements own the freehold interest in the following Order Land Plots:

- *29-009, 29-010, 29-011, 29-012, 29-013, 30-001, 30-002, 30-003, 30-004, 30-005, 30-006, 30-007, 30-008, 30-009, 30-010 and 30-011.*

Order Land Plots owned by a Director of T.H. Clements

Christoper Clements (Director of T.H. Clements) owns the freehold interest in the following Order Land Plots:

- *26-013, 26-015,26-016, and 26-017*.

Order Land Plots occupied and farmed by T.H. Clements on an annual rolling basis

T.H. Clements occupy and farm the following Order Land Plots, the freehold interest in which is owned by third parties:

- *30-012, 30-013, 30-014, 30-015, 30-016, 32-003, 32-004, 32-005, 32-008, 32-009, 32-010, 32-011, 32-020, 32-021, 32-022, 32-023,32-024, 32-025, 32-026, 33-001, 34-017, 34-018, 34-019, 34-020, 34-021, 34-022, 34-024, 35-004, 37-002, 37-003, 37-005, 37-006.*

Order Land Plots farmed by T.H. Clements on a rotational basis

T.H. Clements farm the following Order Land Plots on a rotational basis (i.e. they farm these Plots in rotation with other famers who grow other types of crops, such as cereals), the freehold interest in which is owned by third parties:

- *33-017, 33-018, 33-019, 33-020, 33-021, 33-022, 33-023, 33-024, 33-025, 33-026, 33-027, 33-028, 33-029, 33-030, 33-031, 33-033, 33-034, 33-035, 33-036, 33-037, 34-017, 34-018, 34-019, 34-020, 34-021, 34-022, 34-024, 35-004, 37-002, 37-003, 37-005, 37-006, 37-012, 38-007, 38-008, 38-009, 39-001,39-002, 41-003, 43-005.*

The Order Land Plot numbers, rotational arrangements and freehold owners are shown in the table below:

| **Plot Nos.** | **Details of rotational farming arrangement** | **Owner** |
|---|---|---|
| 33-017, 33-018, 33-019, 33-020, 33-021, 33-022, 33-023, 33-024, 33-025, 33-026, 33-027, 33-028, 33-029, 33-030, 33-031 | During each 6 year rotation period, T.H. Clements farm this land for 4 years, and the landowner farms it for 2 years.<br><br>T.H. Clements grow a single crop of brassica vegetables/potatoes on this land during each year that they farm it. The landowner grows wheat on this land during each year that the landowner farms it. | J Woods |
| 33-033, 33-034, 33-035, 33-036, 33-037 | T.H. Clements grow a single crop of brasicca vegetables or potatoes on this land every other year (biannually). Wheat is grown on this land biannually by the landowner (when T.H. Clements are not growing vegetables or potatoes on it). | M Skipworth |

| Plot Nos. | Details of rotational farming arrangement | Owner |
|---|---|---|
| 34-017, 34-018, 34-019, 34-020, 34-021, 34-022, 34-024, 35-004 | T.H. Clements are currently growing brassica vegetables on this land. This year (2024) is the first year that T.H. Clements have grown crops on this land. It is anticipated that going forward, T.H. Clements will farm (grow crops on) this land biannually in rotation with the owner, who will grow wheat. | B Bush |
| 37-005, 37-006 | T.H. Clements are currently growing brassica vegetables on this land. This year (2024) is the first year that T.H. Clements have grown crops on this land. It is anticipated that going forward, T.H. Clements will farm (grow crops on) this land biannually in rotation with the landowner, who will grow wheat. | B Bush |
| 37-002, 37-003 | T.H. Clements are currently growing brassica vegetables on this land. This year (2024) is the first year that T.H. Clements have grown crops on this land. It is anticipated that going forward, T.H. Clements will farm (grow crops on) this land biannually in rotation with the landowner, who will grow wheat. | B Bush |
| 37-012 | During each 6 year rotation period, T.H. Clements farm this land for 4 years, and the landowner farms it for 2 years.<br><br>T.H. Clements grow 3 crops of brassica vegetables on this land during a 2 year period (6 crops in total during the 4 years of the 6 year rotation period that they farm the land). The landowner grows wheat and potatoes on this land during each year the landowner farms it. | J Fowler |
| 38-007, 38-008, 38-009, 39-001, 39-002 | During each 6 year rotation period, T.H. Clements farm this land for 4 years, and the landowner farms it for 2 years.<br><br>T.H. Clements grow 3 crops of brassica vegetables on this land during a 2 year period (6 crops in total during the 4 years of the 6 year rotation period that they farm the land). The landowner grows wheat and potatoes on this land during each year that the landowner farms it. | J Fowler |

| Plot Nos. | Details of rotational farming arrangement | Owner |
|---|---|---|
| 41-003 | During each 5 year rotation period, T.H. Clements farm this land for 2 years, and the landowner farms it for 3 years.<br><br>T.H. Clements grow 3 crops of brassica vegetables on this land during the 2 years of the 5 year rotation period that they farm the land). The landowner grows onions and sugar beet on this land during each year that he farms it. | Robert Oldershaw |
| 43-005 | To date, T.H. Clements have grown a single crop of brassica vegetables on this land once (during 1 year) in every 5 years. | J Ulyatt |

Order Land Plots farmed by T.H. Clements on a contractual basis

T.H. Clements farm the following Order Land Plots under a contract farming arrangement with the third parties who own the freehold interest in them:

- *27-001, 27-002, 27-003, 27-004, 27-005, 27-006, 27-007, 27-008, 27-009, 27-011, 27-013, 27-014, 27-015, 27-016, 27-017, 27-018, 27-019, 27-020, 27-021, 27-022, 27-023, 27-024, 27-025, 27-026, 27-027, 27-028, 27-029, 27-030, 28-001.*

**Presumed ownership of subsoil of part width of highway or drain**

T.H. Clements are the presumed owner of part of the following Order Land Plots on the basis of the 'ad medium filum' rule (the rebuttable presumption that the owner of the land abutting either side of a highway, or a watercourse (drain), owns the subsoil up to the middle of that highway or watercourse):

- *30-004 (part width of highway/access splay) and 30-006 (part width of drain)*

Christoper Clements (Director of T.H. Clements) is the presumed owner of part of the following Order Land Plot (comprising part width of highway) on the basis of the 'ad medium filum' rule:

- *30-008*

Barbara Clements (former Director of T.H. Clements) is the presumed owner of part of the following Order Land Plots (comprising part width of drain) on the basis of the ad medium acuae rule:

- *32-*009 *and 32-010*

**Grounds of objection**

1 Alternatives (routing of onshore Export Cable Corridor ("ECC"))

Paragraph 8 of the Department for Communities and Local Government's *Guidance related to procedures for the compulsory acquisition of land* under the Planning Act 2008 ("the CA Guidance") states that *"the applicant should be able to demonstrate to the satisfaction of the Secretary of State that all reasonable alternatives to compulsory*

*acquisition (including modifications to the scheme) have been explored".* As such, it is necessary for ODOW to be able to demonstrate that alternatives to the use of compulsory acquisition powers, such as negotiating voluntary agreements with landowners, have been fully explored (i.e. that reasonable attempts to reach agreement have been made), but also that the chosen route of the ECC, and location of the Project's onshore substation (ONss)), can be robustly justified when compared to alternative routes/locations and the likely resulting physical, environmental and socio-economic impacts on them.

As explained above, the land that T.H. Clements farms is affected by the ECC. Three main ECC route options are analysed in Chapter 4 of the Environmental Statement (Volume 1 Site Selection and Consideration of Alternatives and Table 4B.1 in Annex A, (ODOW Application Document Reference 6.1.4) and the Volume 2 (Figures) (Application Document Reference 6.2.4.1). Figure 4.20 sets out the three main options and quantitative analysis of them is provided principally in Table 4B.1 of Annex A.

The first option ('Option 1', indicated by a blue line on Figure 4.20) originates at the landfall location at Wolla Bank, south of Anderby Creek, and follows a southerly direction, to the east of Burgh Le Marsh and Wainfleet All Saints, before crossing agricultural land to the south of the A52. The ECC then passes to the south of Boston, crossing the Haven, River Welland and A17. This appears to be the 'Wolla Bank-Weston Marsh' option in Table 4B.1 of Annex A.

The second option ('Option 2', indicated by a purple line on Figure 4.20) originates from the landfall point north of Anderby Creek and takes a more northerly direction to the northwest of Burgh Le Marsh. The ECC then runs parallel to the Boston to Friskney rail line before passing around the north of Boston, and circumnavigating the town in an anticlockwise direction. This option then joins the ECC of Option 1 to the north of Fosdyke. This appears to be the 'Boston Northern Option' in Table 4B.1 of Annex A.

The third option ('Option 3', indicated by a green line on Figure 4.20) follows the same route as Option 2 until it reaches Spilsby, at which point the ECC turns southeast to circumnavigate Boston in a clockwise direction. This option runs to the west of the Hobhole Drain before joining the ECC of Option 1 to the north of Fishtoft. This appears to be the 'Boston Southern Option' in Table 4B.1 of Annex A.

Table 4B.1 (in Annex A) is poorly laid out, which does not assist the reader, and the methodology employed is less than clear. The underlying analysis appears somewhat crude at best, detailing only the number of sensitive assets, or areas that have a sensitivity, without considering what the impacts would be and how serious they might be.

By way of example:

- Flood Risk Zones 2 and 3 are considered together, without taking into account whether or not the cable infrastructure is inappropriate development in such areas.

- There is no weighting at all so that, as regards water resources and flood risk, for example, impacting 1108.6ha of flood zone 2 and 3 is measured the same (i.e. all are rank 2) as impacting 1.3km of river and impacting 19.1ha of waterbodies for Option 2/the purple route.

- It is not clear what is meant by/or what the suggested impacts would be on railways where it is said that 11.0 and 11.1 km of rail is affected by the Purple

Route/Option 2 and the Green Route/Option 3 respectively (as depicted on Figure 4.20) and, further, why the 0.1km difference is sufficient to result in different rankings.

- A similar point arises in relation to the length of Public Rights of Way (PROW) impacted. In addition, there is a separate provision for the England Coast Path Route which suggests that this route has been considered twice i.e. as a PROW and by itself so has been "double counted".

There is no assessment of actual impacts, it is all entirely comparative, so that the best of three objectively unacceptable route options would still come first. In short, the crude nature of the analysis inherently casts doubt as to whether the document shows with any certainty why the selected route (Option 1) is to be preferred.

Of particular note and concern to T.H. Clements, is the fact that ODOW make no distinction in their analysis between different grades of Best and Most Versatile land ("BMV"); the different grades are equally weighted. As such, ODOW's analysis does not properly reflect the likely impacts on agriculture and BMV.

Choosing Option 2 (the purple route) would significantly reduce the amount of Grade 1 ALC land affected by the Project, and the majority of the Grade 1 ALC land that would be affected by this alternative route does not comprise the very top-quality silty soils situated to the east of the A52 public highway.

Much of the land that would be affected by the Option 2 route is within the 'Downholland and Wallasea' soil series which, while sharing some characteristics of the best soils (being deep and stoneless silty clayey soils), are not capable of growing vegetable crops back-to-back in the way that the toft silts affected by Option 1 are. While the soils within the 'Downholland and Wallasea' series can be more difficult to work/farm than the silts, they tend to reinstate well post construction. Such soils also, being less fragile than the ALC Grade 1 silts, can better support machinery and there is therefore less risk of farm machinery sinking through them to deep levels. The Viking Link and Triton Knoll schemes were constructed through similar soils in recent years with the reinstatement being largely successful.

While Option 2 is slightly longer than Option 1, it would affect less Grade 1 ALC land, result in significantly less crop loss, and in doing so would ensure that the highest quality, productive farmland and associated businesses is/are properly protected from adverse impacts (please see below for further detail regarding adverse impacts on soils and, in particular, silts).

For the reasons set out above, it does not appear that the alternative routes for the ECC have been properly considered so as to enable ODOW to robustly justify their decision to proceed with Option 1.

2 <u>Extent of land needed for installation and operation of the onshore electricity cables</u>

Section 122 of the Planning Act 2008 ("2008 Act") sets out two conditions which must be met to the satisfaction of the Secretary of State before compulsory acquisition can be authorised. The first of these is related to the purpose for which compulsory acquisition is sought.

There are three purposes set out in section 122, the first two of which are relevant to the land farmed by T.H. Clements:

1. ***that the land is required for the development to which the development consent relates;***

2. ***that the land is required to facilitate or is incidental to the proposed development;***

3. ***that the land is replacement land which is to be given in exchange under section 131 or 132 of the Planning Act.***

Paragraph 11 of the CA Guidance states that the applicant (in this case ODOW) should be able to demonstrate to the satisfaction of the Secretary of State that ***the land in question is needed for the development for which consent is sought, or to facilitate it, or is incidental to it,*** and that ***the Secretary of State will need to be satisfied that the land to be acquired is no more than is reasonably required*** (our emphasis).

- Justification for 'Working width' during construction

The Cable Statement which comprises part of the application for the Order (ODOW Application Document Ref. 9.2) states at paragraph 46 that:

*"The Project considers that a construction working width of approximately 80m would provide sufficient design flexibility to allow for micro-siting, except for trenchless crossings where the working width would be greater to allow for increased cable spacing. This is based on experience from similar operations on previous projects. The design, spacing, and configuration of this and all trenchless works will be defined in the detailed design phase once a contractor is appointed and crossing methodologies are agreed upon with affected third parties."*

No explanation is given in the Cable Statement as to why a typical 'working width' of approximately 80m (wider at crossings) is required. Paragraph 43 of Chapter 3 (Project Description) of the Environmental Statement ("ES") (ODOW Application Document 6.1.3) summarises the physical infrastructure that will be constructed within the onshore ECC/'working width' and states that:

*"There will be up to four onshore export cable circuits, typically comprised of 12 cables (3 per circuit) plus auxiliary cables (normally fibre optic), housed within up to four trenches connecting to the Project's OnSS. There will then be up to two 400kV cable circuits connecting the OnSS to the NGSS*." ('OnSS' being the Project's onshore substation; 'NGSS' being the new National Grid onshore substation which will connect the Project to the National Grid.)

Plate 8.1 (extracted and included below) comprises a cross sectional schematic/drawing of an example 'working width' for four cable circuits.

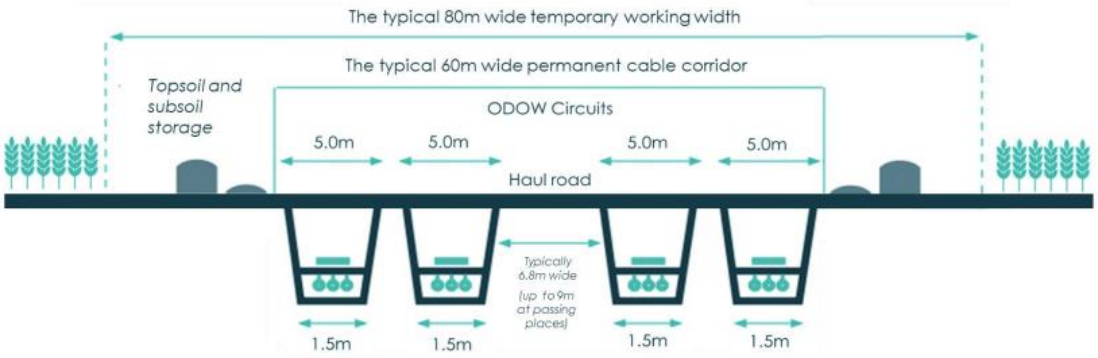



Plate 8.1 Example onshore cable construction corridor cross section for 4 cable circuits (12 cables)

Given that Plate 8.1 is provided as an example, it is not clear if the Project 'working width' will definitely be laid out in this manner. Assuming it were, and based on the ODOW submission, it would comprise the following elements:

- **A haul road which would generally be 6.8m wide but up to 9m at vehicle passing points (including verges and drainage channels).** (Paragraphs 222-228 of Chapter 3 (Project Description) of the ES (ODOW Application Document 6.1.3).) Table 8.4 sets out the parameters for the haul road.

- **A 2m 'separation distance' between the edge of the haul road, and the cable trench to either side of it.** (Whilst not shown on Plate 8.1, paragraph 222 of Chapter 3 (Project Description) of the ES (ODOW Application Document 6.1.3) states that *"A separation of 2m will be maintained from the edge of the temporary haul road and the cable trench for safety and to maintain trench stability."*

- **4x 5m wide cable trenches.** (Paragraph 233 of Chapter 3 (Project Description) of the ES (ODOW Application Document 6.1.3) explains that the dimensions of the cable trenches are presented in Table 8.7 and that the circuits must be spaced out to minimise the mutual heating effect of one cable on another; this enables the cables to effectively carry the large power volumes required without overheating and damaging the cable. It appears that the trenches will only be 1.5m wide underground but a width of 5m is allowed at surface level to ensure sufficient spacing.)

- **Soil storage bunds at either side of the working width.** Based on the above schematic (extract of Plate 8.1), it appears that top soil that is stripped, and sub soil that is excavated, to create the four cable trenches, will be stored at either side of the working width. Paragraph 75 of the Outline Soil Management Plan (ODOW Application Document Ref. 8.1.3) states that stripped topsoil will be stored to the side/s of the working width in a manner that provides sufficient separation from subsoil and vehicles. Paragraph 76 states that topsoil will be stored in bunds that will typically be 2m in height and no more than 3m in height, and subsoil will be stored in bunds no more than 3m to 5m in height (dependent on whether there is space to have a bund either side of the working width/ECC during construction, or whether a single taller bund will be used for storage in narrower working areas) in order to minimise compaction and the impact of storage on biological processes. While bund height details are given, no details appear to have been given of the anticipated volumes of soil to be stored and the 'footprint' (including width/circumference) of the bunds.

Based on the above, it appears that the 'working width' would comprise a central haul road typically 6.8m in width (9m only at passing places- there is no justification for this greater width along the whole of the ECC) with a 2m 'buffer' either side between the outermost edges of the haul road and the nearest cable trench (NB: As noted above, this 2m 'buffer' is not shown on the schematic/diagram comprising Plate 8.1 but is described in the accompanying text).

There would be two 5m wide cable trenches on either side of the haul road.

This would leave a significant distance (circa 23.5m either side of the cable trenches for soil storage (i.e. 47m in total). In reality, we anticipate that the overall 80m width allows for flexibility/micro siting of the cables to avoid unexpected obstacles/ground conditions and will not all be used for soil storage. However, even allowing flexibility for a reasonable worst case scenario associated with unexpected obstacles/ground conditions, an 80m wide working width appears excessive when compared to other similar projects of this type, including for example the Rampion 2 Wind Farm project, which will also involve the installation of four cable circuits, each containing three High Voltage Alternate Current (HVAC) power cables and two fibre optic cables (20 cables in total, which is more than ODOW's 12). The 'standard' Rampion 2 'temporary construction corridor' (working width) is 40m as opposed to ODOW's 80m. (See section 6 of the Rampion 2 Statement of Reasons- ODOW Application Document 4.1). In the circumstances of this Project, ODOW has not demonstrated that the working width proposed as part of the DCO Application is necessary. That is a fundamental failure in the context of compulsory acquisition of land and where the land is used for agriculture, all land loss has a direct impact on the business.

If the Order is made as currently drafted, ODOW would be granted powers to compulsorily acquire permanent rights for the purpose of constructing (as well as retaining, operating and maintaining) the onshore electricity cables over an 80m 'working width' between landfall and the OnSS. That would result in the burdening of an up to 80m wide corridor of land with permanent rights, which does not appear to be properly justified, particularly when compared to the 'working widths' that other projects involving installation of very similar infrastructure are proposing. The DCO Application does not therefore appear to meet the test set out in paragraph 11 of the CA Guidance that ***the land in question is needed for the development for which consent is sought, or to facilitate it, or is incidental to it,*** and… ***that the land to be acquired is no more than is reasonably required*** (our emphasis).

In addition, Article 28(1)(a)(ii)(f) of the draft Order (ODOW Application Document Reference 3.1) contains a widely drawn 'general' temporary possession power which would enable ODOW to take temporary possession of Order Land and to construct such works on that land as are described in Part 1 of Schedule 1 (i.e. any of the authorised development, which includes onshore cable installation works), although we note that Section 5 of the Statement of Reasons (ODOW Application Document Reference 4.3) is not express about that.

Constructing the proposed Project onshore would have the same physical and environmental impacts and deprive landowners and occupiers of the same amount of land, regardless of whether it was legally authorised by temporary possession powers or permanent rights. In reality, therefore, the need for temporary possession powers over an 80m wide 'working width' must be justified in the same way as the need for powers to compulsorily acquire rights, and for the reasons explained above, the proposals do not appear to meet that test.

- Justification for permanent cable rights corridor

The typical corridor over which permanent rights and a restrictive covenant will be sought for the retention, operation, protection and maintenance of the ODOW onshore export cables is expected to be 60m according to paragraphs 25 and 75 of the Statement of Reasons (ODOW Application Document 4.3). Based on the schematic/diagram comprising Plate 8.1 above, the cables will be installed within four 5m wide trenches. The land that will be used as a temporary haul road (located in the centre of the 'working width' and up to 9m in width, with a 2m 'buffer' either side) will separate the four trenches (two trenches will be located on one side and two on the other). This would result in a permanent cable corridor of 33m. It is not clear therefore, why ODOW consider that a 60m permanent rights corridor will be required, nor how the compulsory acquisition of, and burdening of land with, rights and restrictive covenants over that width is justified.

By way of comparison, the typical corridor over which permanent rights and a restrictive covenant will be sought for the retention, operation, protection and maintenance of the Rampion 2 onshore cables is likely to be 20m. A maximum width of 25m (excluding HDD crossing locations) has been assessed as a reasonable worst-case scenario. (See section 6 of the Rampion 2 Statement of Reasons- Application Document 4.1).

By way of a further example, The Viking Link Compulsory Purchase Order (The National Grid Viking Limited (Viking Link Interconnector) Compulsory Purchase Order 2019) (which is available online at Viking Link Interconnector (viking-link.com)) – places limits on the width of land over which permanent rights for retention and maintenance of the High Voltage Direct Current (HVDC) and HVAC cables installed in Lincolnshire could be acquired. The rights could be acquired over a maximum width of 50m where Horizontal Directional Drilling (HDD) cable installation techniques had been used to install the HVAC cables beneath obstacles such as roads or rivers, and over a maximum width of 25m in all other cases (i.e. where the cables had been installed in trenches). The rights could be acquired over a maximum width of 25m where HDD cable installation techniques had been used to install the HVAC cables beneath obstacles such as roads or rivers, and over a maximum width of 15m in all other cases (i.e. where the cables had been installed in trenches).

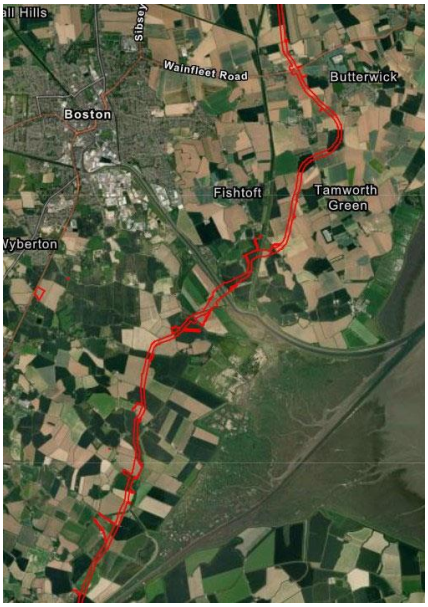
Even if a 60m permanent rights corridor were considered to be justified, there does not appear to be a restriction in the draft Order to ensure that permanent cable rights can only be compulsorily acquired over a width of 60m.

3 Adverse impacts on farming during construction of the proposed Project

As set out above, the need for the proposed 80m 'working width' does not appear to be properly justified by ODOW as required by the CA Guidance. This is of great concern to T.H. Clements given that during the proposed Project's construction period (anticipated to be four years (Plate 11 of Chapter 3 (Project Description) of the ES (ODOW Application Document 6.1.3)), it would not be possible to grow any crops on the significant area of land that is purportedly (but not properly demonstrated to be) needed for installation of the onshore electricity cables, nor the temporary accesses or compounds (please refer to our comments above regarding the robustness of the justification for the 'working width'). Crop losses will also occur on land not directly affected/required for construction of the onshore electricity cables, as a result of severance (as explained in more detail below) and the adverse impacts of the construction activities themselves.

- Nature of the soils comprised in the land that THC farm and proposed to be used for the cable route for the Project

T.H. Clements farms land across Lincolnshire. However, the soils within the proposed stretch of cable for the Project which are shown on the aerial view below are of particular significance.




The soils along this stretch of the proposed cable for the Project are deep, predominantly fragile silty, and coarse silt loam soils. These soils have drainage managed by ditches, pumps, and installed field drainage pipe schemes. The soils are at regular risk of machinery "falling through" (after becoming bogged down-often to significant depth) as a result of normal farming practices employed when growing vegetable crops intended for fresh supermarket sale in the UK. Please see below for further detail.

- Predominant soil types

The predominant soil types affected by the proposed cable route in the following locations (shown on the above map) are as follows:

- WISBECH: The soil in this locality comprises deep stoneless, calcareous, coarse, silty soils and is flat with low ridges and at risk of wind erosion locally. Groundwater levels are usually controlled by ditches or pumps.

- TANVATS: The soil in this locality comprises deep stoneless, fine and coarse silty and clayey soils and is flat. Groundwater levels are usually controlled by ditches or pumps.

- ROCKCLIFFE: The soil in this locality comprises deep stoneless silty and sandy soils and is flat. It is variably affected by groundwater depending on the artificial underground drainage systems in place.

As explained above, the predominant soils in this area of Lincolnshire are deep, stoneless with unsupportive, fragile and deep silt based characteristics. Where the silt is also combined with a coarser, fine sand, which is the case in Rockcliffe, for example, this increases the risk of 'running'/movement of the soils, hence their

being referred to colloquially as 'running silts'. All the soils in this area of Lincolnshire are deep, which results in an increased risk of machinery 'sinking' into/ dropping through, the profile until 'grounded' by the chassis being in contact with the ground surface, as explained in further detail below.

Fields being farmed for vegetable crops intended for supermarket fresh produce sale need to be accessed at various times including when the soil condition is wet, and consequently very vulnerable to damage. Such soils are also prone to surface waterlogging at wetter times of year. To avoid significant crop loss (and mitigate against the yield, quality, and delivery penalties imposed by retailers), surface waterlogging is addressed by digging deep channels to move such water off the surface and into surrounding watercourses. Such channels can often exceed depths of 1m below the ground surface.

It is noteworthy that the proposed depth of the Project's proposed onshore cables (1.2m below ground surface level, with a safe maximum depth of remediation above these of less than 0.75m) is shallower than the depths of potential damage caused by routine farming practices (please see below for further detail). Additionally, the intervention which would be needed for soil repair does not appear to have been considered as part of the proposed mitigation for the Project.

- <u>Potential contamination and degradation of high quality, highly fertile top soil within T.H. Clements farmed plots during construction of the Project</u>

  As explained above, the silty soils within T.H. Clements farmed plots (through which the Project's onshore cable corridor is routed) are largely unique to this particular area of Lincolnshire. They are deep, predominantly fragile silty and coarse loam silts. They are highly fertile and productive for agricultural farming, comprising a shallow layer (approximately 300-600mm deep) of highly fertile 'top soil', below which is a 'sub soil' or relatively sterile 'running silt' which has reduced fertility, but provides a reserve of water. These soils are delicate, and susceptible to structural change, particularly in the event of heavy rainfall. Effective, and unrestricted drainage of these soils is therefore of paramount importance.

  During the proposed construction phase for the Project, ODOW proposes to strip the top soil in this location to enable installation of the underground electricity cables and store it in soil bunds. The storage bunds will be susceptible to weed growth and contamination, and, during the stripping phase, there is a high risk of the top soil and sub soil being mixed. This risk would be particularly acute should the appointed contractors not to be cognisant of the unique nature of the soils. Any mixing of the soils would have a negative impact on soil quality and thus crop growth and yield in the future.

  Soil quality may also be compromised as a result of field conditions during cable installation. The soils on land used to construct haul roads and construction compounds may also be compromised by compaction, and crop consistency (quality) issues may occur as a result.

  Notably, the Outline Soil Management Plan submitted with the DCO application (ODOW Application Document 8.1.3) is a high level document. T.H. Clements does not currently have any confidence that the special nature of the silts (soils) in this location of Lincolnshire have been properly understood and assessed by ODOW such that the mitigation measures are sufficient to prevent soil quality from being compromised.

- Potential contamination of high quality, highly fertile top soil with stones

  As explained above, the Lincolnshire Fens are renowned as some of the very best food growing soils in the Country and indeed the World, being characterised by a number of factors including the complete absence of naturally occurring stone.

  Stoneless soils are of significant benefit to farmers growing vegetable crops, as they allow uniform growing throughout the soil profile, and minimise the amount of crop rejection by retailers, who are often unwilling to purchase (or will only purchase at a significant discount), vegetable crops that have been distorted by stone-on-root contact. Stoneless soils therefore give growers confidence that they will be able to produce the quality of crop that their consumers require.

  A number of underground electricity cables have been installed across Lincolnshire in recent years, such as the onshore export cables comprising part of the Viking Link Interconnector, and the cables connecting the Triton Knoll Offshore Wind Farm to the National Grid. T.H. Clements appointed land agents, Brown & Co, have been involved with all of those projects (acting for affected landowners) and have advised that in every case, without exception, there has been residual stone contamination resulting from the construction process, such as the laying and use of gravel haul roads in particular.

  Section 8.1.5.6 (paragraphs 222- 228) of Chapter 3 (Project Description) of the ES (ODOW Application Document 6.1.3) discusses the haul road. Paragraph 222 states that *"the haul road, typically 6.8m wide (Plate 8.1)* (see above) *(and up to 9m at passing places) including verges and drainage channels (where required)* ***will extend the entire length of the Project onshore ECC and 400kV cable corridor (except where the Project has committed to not construct a haul road, such as in locations where trenchless techniques will be adopted)….****It will be utilised throughout the installation of the export cables and 400kV cables and for the duration of the onshore ECC construction activities."* We note that paragraph 190 of Chapter 3 of the ES states that *"Installing the onshore cable ducts and export cables is anticipated to take up to 42 months.")*

  Paragraphs 226 to 228 of Chapter 3 state that:

  *"The haul road will comprise a maximum thickness of 1m (average 0.6m) of suitable aggregate placed on top of a heavy-duty terram membrane or similar where required. The exact specification of the road will be determined upon the appointment of a principal contractor at detailed design stage.*

  *Depending upon the ground conditions, it may not be necessary to undertake works to construct the designated haul road. Where the ground is sufficiently firm enough it may be acceptable to use significantly less granular sub-base material. Consideration will also be given to alternatives such as a specialist trackway if appropriate. The final decision will depend upon ground conditions and the contractor's preferred construction strategy and will not be confirmed until the detailed design stage.*

  *Any aggregate and/or geotextile membrane installed will be removed, and the land reinstated upon completion of the construction phase."*

  It is notable that reference is made to "suitable aggregate material" but there is no assessment of the impacts attributable to the types of aggregates which may be

used. Type 2 aggregate for example is typically made from crushed rock and has a higher dust content than Type 1 aggregate.

Constant use of a haul road constructed from "suitable aggregate" by large vehicles and equipment, particularly in wet conditions, could lead to crushed limestone, stones and rock being washed onto the adjacent land (outside of the 'working width') contaminating the top soil of adjacent fields.

Stone contamination is a very significant concern to T.H. Clements as, for the reasons set out above, it would have a direct adverse impact on their ability to grow top quality vegetables on the Plots of land affected, which in turn would be likely to result in a higher percentage of crop rejections by retailer customers, associated financial losses and unnecessary food waste.

We note that paragraph 227 states that, "*Consideration will also be given to alternatives such as a specialist trackway if appropriate."* The use of aluminium trackway would remove the requirement to use aggregate (stone) at all, ensuring that there is no residual stone left on the land post construction. The use of aluminium trackway (or equivalent) should at least be secured in replacement of aggregate in the Code of Construction Practice.

- Contamination of and damage to growing crops by dust from construction activities

As explained above, during the construction of the onshore electrical cables, subsoil and topsoil will be excavated and stored in bunds, which will typically be 2m in height and no more than 3m in height in the case of topsoil, and no more than 3m to 5m in height in the case of subsoil, and located at either side of the 'working width'. The soil stored in these bunds will gradually dry out, particularly during the warmer Spring and Summer months. Due to the fine, silty nature, of the top-soils that will be excavated, the fact that the raised storage bunds will have little, if any, vegetation cover (making them susceptible to wind erosion); and that the surrounding land is generally flat, means that the soils will be highly susceptible to air borne dispersion.

The soil description (Cranfield University 2024. *The Soils Guide.* Available: www.landis.org.uk. Cranfield University) of the Wisbech Association soils farmed by TH Clements, for example, specifically refers to these being "at risk of wind erosion locally". This is when in their natural state, not in raised bunds which will dry out and be at even greater levels of risk as a result.

While the above example relates to the Wisbech Association soils, the other predominant soil types referred in the 'Predominant soil types' section above are also extremely susceptible to wind erosion when stored in bunds and driven over by vehicles.

Haulage roads will also be created along the entirety of the onshore cable route and used extensively by heavy machinery and vehicles, which will also create air borne dust, particularly in drier Spring and Summer months. Factors such as wind direction, will affect the direction in, and distance over which the soil particles will be dispersed. The number (frequency of trips) and nature of machinery and vehicles using the haul road will also affect the amount of air borne dust.

Whilst T.H. Clements are in the process of carrying out more detailed analysis in relation to dust dispersion, it is clear that there is potential for air borne dust (soil particles) to be dispersed in multiple directions and over significant distances

(which could extend up to or beyond 100m) and to contaminate growing crops far beyond the working width assessed as part of the EIA of the Project.

As explained above, T.H. Clements customers have very exacting quality standards and will not accept vegetable produce contaminated by dust. It would not be possible for T.H. Clements to try to remove the dust contamination as washing vegetables impacts their shelf life, as well as their appearance, contravening service level requirements meaning they will not be accepted by retailers.

There is therefore a significant risk that, as a direct result of the Project construction activities, T.H. Clements will not be able to fulfil its retailer contracts and could incur significant penalties and potentially lose these strategically important contracts, which it would struggle to regain once lost.

- Severance

During construction of the proposed Project it would not be possible to farm the land occupied/being utilised for that purpose by ODOW (i.e. the 'working width', construction compound areas and temporary accesses). T.H. Clements are concerned that, as a result of the occupation/use of the 'working width', compound areas and temporary accesses, parts of fields that they farm that are not directly affected by the working width, compounds and accesses (i.e. land out with the Order land) may become inaccessible or be too small to farm by itself.

Order Land Plots 27-015/27-019; 27-021; 27-027; 27-030; and 29-013/30-002) will result in severance and it would be impractical to farm the retained areas of land during the Project's construction phase due to their small size, shape and high headland percentage (i.e. the parts of fields where farm machinery turns/changes direction whilst undertaking cultivation, harvesting etc.).

While shapefiles for the Land Plans have not been made available to T.H. Clements, they estimate that the amount of growing land sterilised will be in the region of 85 acres.

4 Adverse impacts on farming during operation of the proposed Project

- Insufficient cable burial depth

The 'standard' depth at which ODOW intends to install the majority of the onshore cable (1.2m to the protective tile above the cables, save where trenchless construction techniques are used to 'cross' obstacles such as roads and water courses at a greater depth) is insufficient to enable normal farming practices to safely resume post construction, for the following reasons:

- Location (depth) of field drainage systems - As explained above, the soils along the stretch of the cable route that T.H. Clements farm are deep, predominantly fragile silty, and coarse silt loam soils. Being permeable, these soils are able to absorb and store a significant amount of water, which makes them excellent soils for growing the very best vegetable crops. While these soils are highly permeable, drainage of excess surface water is managed by way of underground field drainage systems comprising networks of pipes, and associated pumps feeding into ditches/watercourses.

- Field drainage systems are often installed in excess of 1.2m deep (depth from ground surface to installed pipes). Silty soils are also particularly susceptible to structural change, and have a tendency to move/shift, especially during periods of heavy rainfall (hence their often being colloquially being referred to as 'running silts' as noted above). As such, the depth of burial cover of underground features, including potentially underground electricity cables, can change.

- If the proposed ODOW cable burial depth is only 1.2m from the surface of the land, the cables would very likely cut through, or potentially even pass above, existing underground drainage systems. This would seriously compromise the existing field drainage systems installed at these depths, and likely result in serious technical and health and safety challenges for ODOW to manage.

- Where existing drains are cut through (severed) in order to install cables, reinstatement must ensure the functioning of the drain system is restored. If this were not possible, water table depths would be affected, and as a direct result, the soil strength and support capability (for all future field operations) would be compromised. Clearly, where existing drainage systems are cut through (severed) by cables running at similar depth, such restoration to maintain drain grades and drain spacings (which determine water table depth) cannot be achieved.

o <u>Waterlogging of land and 'sinking' of farm machinery</u>

- As noted above, while the soils along the stretch of the cable route that T.H. Clements farm are able to absorb and store a significant amount of water, and a certain amount of excess water can be successfully managed by way of underground field drainage systems, during periods of heavy rainfall (which are increasingly frequent), the fields comprising of silty soils can become waterlogged and surface waterlogging must be promptly addressed by T.H. Clements to ensure the preservation of crops.

- Digging deep channels/trenches (1-1.5 metres in depth from the original surface of the land) to allow the standing water to run off into surrounding watercourses/ditches is the accepted method of mitigating the effects of water logging on growing crops.

- It is vital to T.H. Clements' business that trenching and other deep soil interventions are made as soon as waterlogging occurs to avoid damage/deterioration, and ultimately loss of, growing crops.

- Should the ODOW cable be installed at a depth of only 1.2m, the trenching operations could not be safely completed by T.H. Clements, which would result in damage/deterioration, and ultimately loss of, growing crops.

- Furthermore, it is not uncommon for farming machinery to 'sink' into (become bogged down in), and have to be retrieved from, silty soils, particularly during periods of heavy rainfall. In those circumstances, deep, intensive soil movement is required to extract the machinery and repair the damage incurred. The depth of the soil affected is often well in excess of 1m below the surface of the ground when machinery becomes bogged down, sinking down to the axles and loads imposed by sunken farming machinery can exceed 6 tonnes per axle at depth. The spraying machinery operated by T.H. Clements, for example, has a high potential to sink through the soil (under wet

conditions) to depths (from the ground surface to the wheels) in excess of 1.3m. Furthermore, these sprayers have a "high ride" capability to increase their ground clearance (and therefore potential sinkage depth) up to 2m. This is because they are used to farm potato and Brussel sprout crops usually between August through to January, at which times, ground is at, or beyond, its water absorption capacity and therefore most vulnerable to sinkage risk.

- Consequently, the proposed cable burial depth of 1.2m below ground surface level, will be far shallower than the depths of routine farming practices which would put the installed cables at high risk of damage and farmers at high risk of physical harm.

- The potential for movement of silty soils, due to natural erosion and ground shrinkage, and consequent risk of reduced depth of cover over the cables, would exacerbate an already significant health and safety risk to T.H. Clements, especially as monitoring ground levels/changes in levels is difficult.

- In order to retain the ability for T.H. Clements to safely farm these highly productive fields post construction of the proposed Project, the cables would need to be buried at appropriate depths which the appointed cable installation contractor is confident will allow usual farming practices, including those described above, to be safely carried out.

o <u>Adverse impact of electromagnetic radiation and heat from the cables on the soil and its microorganisms</u>

T.H. Clements has heavily invested in soil management to ensure that its soil/the soil it farms is of the highest quality, which includes creating a healthy environment for soil microorganisms. T.H. Clements are particularly concerned about the adverse impact that electromagnetic radiation and heat emanating from buried cables could have on the quality and productivity of the soils on the land it farms.

- Heat emanating from underground cables could also cause some crops (those planted in the vicinity of the cables) to develop more quickly than others.

- It would not be feasible to harvest crops within the same field at different times, meaning that crops that matured early would have to be discarded upon harvesting as they would be over-ripe and unsaleable.

5 <u>Funding</u>

Paragraph 17 of the CA Guidance, states that any application for a development consent order authorising compulsory acquisition must be accompanied by a statement explaining how it will be funded. Such statement should provide as much information as possible about the resource implications of both acquiring the land and implementing the project for which the land is required. If a project is not intended to be independently financially viable, or financing details cannot be finalised until there is certainty about the assembly of the necessary land, the applicant (in this case ODOW) should provide an indication of how any potential shortfalls are intended to be met, including the degree to which other bodies (public or private sector) have agreed to make financial contributions or to underwrite the scheme, and on what basis such contributions or underwriting is to be made.

As explained above, the construction of the Project would result in the loss of a vast amount of highly productive farming land, including a significant amount of the land currently being farmed by T.H. Clements.

The loss of that land would have such a detrimental impact on T.H. Clements farming operations including production capacity and service level requirements for retailers, that it would be near impossible for T.H. Clements to fulfil its supply contracts with its customers (retailers). The loss of supply contracts with key retailers, including Tesco Plc, (which, if lost, would be very difficult to regain in the foreseeable future) could be so significant that the business could be extinguished as a result.

T.H. Clements current annual turnover is £80 million and it is anticipated that this will increase to circa £100 million within the next three years. Notably, the proposed Project's Property Cost Estimate (ODOW Application Document Reference 4.2.4) is only just over £51 million.

Compensation for the extinguishment of a circa £100m/year business would be significant and of such order of magnitude that it could comfortably exceed the Project's Property Cost Estimate on its own. While Article 44 of the Order, as currently drafted, would require ODOW to put in place a guarantee or other form of security in respect of its liability to pay compensation under the Order, before exercising any compulsory acquisition or temporary possession powers, ODOW would at present appear to fail to meet one of the key considerations which must be demonstrated to the satisfaction of the Secretary of State in order to meet the overriding test for making of the Order including compulsory acquisition powers in the first place (i.e. that there is a compelling case in the public interest to justify interference with the private rights of those who have interests in the land included in the Order).

**Conclusion**

T.H. Clements will continue to engage constructively with ODOW in an effort to resolve the above outlined issues of concern during Examination. However, given that the proposed Project has the potential to devastate T.H. Clements' business, pending satisfactory resolution of its concerns, T.H. Clements must strongly **object** to the Order and reserves its right to make further representations during the course of the Examination should that be necessary.

Should the Examining Authority require any additional information in relation to this representation, please contact Fiona Barker or Melanie Grimshaw of Mills & Reeve at [redacted] or [redacted]