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00:00:06:01 - 00:00:22:23

Thank you everyone. It is just gone 4:00. And we will resume the meeting. Under item five. So point B in ecology and biodiversity. Before we do that, can just check that everyone can hear me clearly.

00:00:24:09 - 00:01:11:22

And that the live stream has commenced. Thank you. So item five Environmental matters. Point B Ecology and Biodiversity. We have a have a long list of questions which I'm going to try to merge together and maybe take some of them through the written question process. That doesn't mean that they won't be asked, it just means that they may be taken in written questions, and some of them are probably more appropriate to do it in that manner in any event. But to start with, I'm going to ask the applicant and to provide an overview of the ecological survey work undertaken with just some introduction and background, very succinctly in doing so, and again without without being overly detailed.

00:01:12:14 - 00:01:45:17

The summary of the environmental statement matters. Any indication or identification of best practice and good practice that has been followed and adhered to. In a slightly more detailed subset of these questions. I've noted concerns in relevant reps representations regarding the interface of hunting and wildlife with security fencing and the fragmentation of habitats. It was raised last night and it has been raised in relevant reps about, for example, deer movement between areas.

00:01:46:07 - 00:02:03:21

It will have been used to easy movement between different areas within the application area and how they will be affected. I would like to know how the applicant would like to respond to these and what and how is that fragmentation being taken into account in the survey work? Keep.

00:02:05:04 - 00:02:26:21

Pet project. The applicant will let Mr. Fox answer, introduce himself and answer those questions, and he will try and be as succinct as possible in relation to the first few items, and then spend some time dealing with the matters in relation to planting and security, fencing and impacts on movement of wildlife.

00:02:29:02 - 00:03:04:25

Harry Fox, ecologist for the applicant. I'd like to start with giving that overview of you the assessment to date. A comprehensive suite of ecological surveys be undertaken at the order limits to obtain a robust ecological baseline following a preliminary ecological appraisal appraisal whereby the entire site was inspected to catalogue habitats and their potential to support protected and notable species specific surveys for priority habitats. Foraging and roosting bats, breeding and wintering birds, otters, waterfalls, badgers and great crested newts have been carried out.

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Habitats have been assessed for other notable species groups, including reptiles, invertebrates, and small mammals. Furthermore, a study to examine the presence of third party records of protected species and the whereabouts of local and statutory sites designated designated for nature conservation has been undertaken. This also includes a review of relevant local and national policies and local conservation objectives, including decision making data sets such as the Greater Lincolnshire Nature

Partnership's biodiversity opportunities mapping. The sites generally occupy arable, arable farmland characterized by large open fields where the managed hedgerow and ditch network with narrow, uncultivated margins.

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Small amounts of permanent pasture is present and this is either sheep grazed or managed as silage. Woodland. Another habitats are generally absent within the sites, although a small number of shelter belts and copses are situated adjacent. In terms of wetland habitats, a loose network of ponds is present on site, with further located a short distance away from field boundaries, whilst the river runs adjacent to two of the sites and the River Trent is present within the Cable Route corridor. Larger drains and permanently wet ditches can be found on each site.

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The habitats on the sites are considered to be very much typical of their surroundings in the wider landscape. In general, the agricultural habitats present are considered to be of relatively low ecological importance in their own right. Their main. The main interest within the site is being concentrated within the hedgerow and ditch network. Adjacent arable field margins were present and the corridors of the river's Tilt and Trent. Ecological features assessed as being the most important include the hedgerow, ditch and watercourse network, which has been assessed as being of district importance on network, which has given district importance for the presence of great crested newts.

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The arable field margins in turn of local importance. An assemblage of roosting and forging bats of up to district importance. A water volunteer population of districts and local importance respectively, and a breeding bird assemblage of up to district importance. In addition, six local wildlife sites are present within 100 meter of the limits. Key ecological mitigation measures embedded into the design of the scheme include the use of as many existing agricultural field accesses as possible, leaving only seven new permanent hedgerow gaps being required within the sites.

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The adoption in the majority of the cases to use horizontal directional drilling to cross beneath hedgerows, watercourses and local wildlife sites during cabling operations, and the adoption of a comprehensive buffering scheme whereby valuable boundary features are buffered from developments, typically by between 8 and 20m on both sides, as well as features such as badger sets and ponds supporting great coastal newts. An outline. Ecological mitigation, Ecological Protection and Mitigation Strategy document 326.

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In accordance with requirement eight has been prepared to secure and supplement and implement these ecological protection measures through the construction of the sites and the cable routes. Principal measures include methods to avoid the risk of accidental damage, pollution and contamination of retained features, as well as harmful disturbance or injury to protected species. Sensitive seasonal timing of works where required. And the presence of an ecological clock of works during all habitat clearance and drilling operations.

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And outline landscape and ecological management plan. Document reference app 311 and requirement seven has been prepared to detail all the habitat creation, management and monitoring prescriptions to be adopted through the life of the operational scheme. This will particularly focus on the creation of new hedgerows, diverse grassland types, woodland and wetland habitats, as well as the favourable management of grasslands under and surrounding the arrays so as to maximise their value to biodiversity.

Approximately seven kilometers of native hedgerow will be planted, 13 hectares of woodland and shelter belts and 570 hectares of various different diverse grassland types.

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Five new ponds will also be created. Retained hedgerows, ditches and ponds will benefit from their sensitive management and the cessation of arable practices. In addition, the document contains all prescriptions required to provide mitigation for predicted displacement effects on ground nesting birds, including skylark and lapwing. For instance, the creation of approximately 100 hectares of optimal nesting and wetland habitats within West Burton to. Ecological enhancement measures are also contained in the map, including new roosting habitat for birds and bats, pond enhancement measures for amphibians, and measures required to achieve a biodiversity net gain through the scheme.

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The scheme will result in a net gain for biodiversity exceeding minimum guidance in area based linear and wetland habitat terms. At present, our assessment provides a gain of 86, 54 and 33% for these categories respectively. This will be secured for the long term through a strategy document AP 088 and in pursuant of pursuance of requirement nine. The predominant habitat management to be carried out within the operational scheme will be grassland cutting, with an emphasis on the generation of a mosaic of grassland types being more diverse than the baseline habitat condition.

00:08:58:19 - 00:09:18:04

The bag and lamps. Habitat creation and management priorities have been in part driven by the biodiversity opportunities mapping produced by Greater Lincolnshire Nature and Nature Partnership, and local policies promoting the connection of green infrastructure and nature nature recovery networks such as those associated with the.

00:09:22:05 - 00:09:27:22

In terms of fragmentation. Do remind me the fragmentation concern that you mentioned. Yes.

00:09:27:24 - 00:10:02:02

Okay. So so it's a concern that has been raised by a number of relevant threads. It's really to do with. Existing area and wildlife being able to migrate or wander fairly freely, and what impact the additional level of security fencing will have on that wildlife? There has been mentioned think at the open floor hearing, but there are obviously other other forms of wildlife which use the area, and it would be very useful to just understand how these have been taken into account in the survey work.

00:10:03:25 - 00:10:41:20

Response for the applicants. Um. It's true that security fencing of this kind. Can form a an impediment to dispersal for a small, limited number of species. But I'm aware that there is a conception or perception that, um, it is a barrier to all. And, um, in our experience and in our assessment, it certainly is not. And certainly to small, smaller mammals such as badgers and hare, it says no impediment to movement through the landscape.

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Um, and, and we in our capacity as monitors of extant solar sites have certainly seen evidence of, um, the benefits that erosion from arable to grassland brings to species such as badgers and and hares. Another small mammals, deer being larger, obviously can be impeded in their movement. Um. But we, as has been mentioned by my colleague, the sites in question are, whilst they cover a significant area, are quite.

00:11:23:26 - 00:11:36:05

Dispersed, disparate. They they are in their own right, fragmented parcels of land and we have not.

00:11:37:28 - 00:11:58:23

Plus what we acknowledged that there is a potential for some impediment. The significance of this is not above threshold levels. It's also important to state that we all have to be in our assessment, very proportionate to the impacts and and identify.

00:12:00:17 - 00:12:18:11

Uh, identify impact pathways on species of conservation concern, primarily um and protected species. They're not being in that category, have not been carried through in our assessment as an important ecological feature.

00:12:21:19 - 00:12:56:00

Thank you. And thank you for the very clear and succinct run through of the survey work. Sticking if made with fencing and. Their further concerns have been raised about the impact of fencing on existing biodiversity, trees and hedgerows, and potentially on the impact that fencing may have on any new planting. Um, and how this may inhibit new growth. Just it obviously will be something that we will return to in written questions.

00:12:56:02 - 00:13:04:00

But whilst we're here and talking about things, I would like to just invite you to comment on any impact that new fencing may have.

00:13:06:22 - 00:13:35:01

Sorry, folks, for the applicant. Um, we actually haven't identified any impact upon new planting or retained habitats from newly implemented security fencing as part of the embedded mitigation in the scheme, and set out in the Ecological Protection and Mitigation Strategy. There is a comprehensive buffering program of um,

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so there is a sufficient and appropriate setback from all of the boundary features. Um. Such as ditches and and woodland edges and hedgerows. And that describes exactly where the fencing, the security fencing, is going to be implemented. And it is that it is that buffer which then becomes or is used as ecological enhancement through the generation creation of diverse grassland such as grassland, pollinator meadow,

00:14:17:08 - 00:14:49:12

and and other diverse habitats. So it is that separation simply by. Implementing the fencing. That gives us a distinction between the grassland beneath the panels, which will be will have to by virtue of not over shading and maintaining access, maintenance access to the panels themselves and the other hardware will have to be maintained more frequently than those within the buffer areas and.

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So we don't see that there is a impediment from implementing the security fence to retained or created habitats.

00:15:02:05 - 00:15:22:06

Yeah. Just to flag that page six of the Concept Design Parameters and Principles document just summarizes those offset distances. Um, in terms of the different features that Mr. Fox mentioned. So ditches, watercourses, hedgerows, tree canopies and so the set of information in that document.

00:15:22:11 - 00:15:26:05

Thank you. That's helpful. Okay. Um.

00:15:30:15 - 00:15:38:29

From now again to invite any comments on the overview of biodiversity and ecology from interested parties.

00:15:41:18 - 00:15:43:21 And that's next, please.

00:15:45:05 - 00:16:12:24

Thank you, sir. Over 7000 acres. And there's a point of clarification. Could we establish the type of security fencing you're referring to? Because we understand there's a need for insurance companies with such schemes like these. We're talking about that defense is not adequate and that or acceptable to them. And that in fact, um, metal

00:16:14:11 - 00:16:29:13

palisade type fencing, taller fencing with narrower sections will be introduced, thereby not allowing badgers or has to pass through. So it's going to be a point of clarification here please. That'll be great. Thank you.

00:16:49:00 - 00:16:55:24

Applicant. Yes. There's two different types of fencing being proposed. This particular scheme. There is the

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deaf what's called the wire mesh fencing which is the wooden post fencing. And then there is the higher security, what's been called security fencing, which is the metal fencing. There are various pictures provided in the chapter four of.

00:17:16:08 - 00:17:17:09 The environmental.

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Statement and.

00:17:21:06 - 00:17:56:01

And so the security fencing, so that higher metal fencing will be at the means of enclosure around work number two, which is the energy storage. And what. Number three, which is the substations on each of West Burton, one and two and westbound three, so that there's that type of fencing around the smaller areas for the footprint of the substation. And those are the areas for each of those substations are and energy storage are again set out in the concept design parameters and principles documents.

00:17:56:03 - 00:18:09:06

So you can that the area of that type of fencing is, is clear. And then the remainder of the fencing is the the deer wooden post fencing, two different types of fencing being proposed.

00:18:12:28 - 00:18:13:18 Thank you.

00:18:15:13 - 00:18:17:13

Um, so we have.

00:18:19:20 - 00:18:52:00

Discussed also. At the level, the biodiversity net gain and figures of 86, 5,433%. There's different items within. And I'd just like to ask about the biodiversity mitigation enhancements and. As the

applicant to the approach to securing these enhancements, he made reference to habitat. New habitat creation should be governed by management plans.

00:18:52:02 - 00:19:00:00

Can you give me a bit more info on some of the measures that will be introduced, and how they will ultimately be secured?

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Temperature of the app, and I will just give the overview of how they'll be secured. And then Mr. Fox can give you some more information about the nature of the measures. And yes, as you as was mentioned before, it's requirement nine of schedule two, which requires a biodiversity net gain strategy to be submitted to the planning authority, and that must be implemented as approved. In addition to that biodiversity net gain strategy, which will set out the calculation and the number of units you need to also take into account the other landscape and ecological management plans that were also referred to you.

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So those are the ones set out in requirement seven, which must substantially accord with the outline landscape and ecological management plan. And then you've also got requirement eight which is the ecological protection and mitigation strategy. And again that must be substantially in accordance with the outline Ecological Protection and Mitigation Strategy. So what we're proposing for this scheme is that we have to produce final versions of those two types of plans, which have set out the actual measures which are going to be delivered.

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However, the actual calculation of how much biodiversity net gain in terms of units will be delivered will be established under requirement nine. So we're committing to doing the measures by requirements seven and eight. But in terms of what percentage that actually brings you out at when you actually do the calculation at that point in time, um, that would be set out in detail in the strategy that's discharged via requirement nine.

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I hand it over to Mr. Fox to explain the actual measures that are being committed to.

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Harry Fox and the applicant. Yes. As mentioned in my overview, the bag is split into three categories of habitats habitat units, that is, area units and linear units, predominantly hedgerows and river units, watercourses and ditches. Um and the again in a particular habitat condition can come about through many ways. Um.

00:21:31:10 - 00:21:49:05

But also the actual amount of habitat being provided factors in significantly to the calculation. So it's a combination between the area of a habitat and its own inherent distinctiveness multiplied by its condition. So

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the raise in biodiversity net gain will come back, come out through an improvement in condition and creation of new habitat. So in the form of area units we are reverting. As mentioned, 570 hectares of land, arable land from cropland to grassland, and that will consist of 5 or 6 different grassland subtypes, the majority of which is relatively low maintenance.

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Grazing or

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solar appropriate meadow grassland mix for location underneath the panels, but the higher distinctiveness habitats will be in those buffer regions that are mentioned between the security fencing and the hedgerows and boundaries. Um.

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And in terms of the linear units, again, it's been mentioned seven kilometers or thereabouts of hedgerow will be created and that's through combination of infill gapping up hedgerows. There are many hedgerows which are have very long sections where they've failed over the years. There are also several locations where they'll be doubled. And so you have an adjacent hedgerow and new hedgerows created in appropriate locations where there may once have been grubbed out and river units benefits.

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Really, we're not creating any new rivers, but the net gain there is predominantly affected through the cessation of arable practices, the reduction in. Chemical applications and and water quality. Knock on benefits that you get from that, and also an improved ditch maintenance regime through clearance periodically that is informed by the management plan.

00:24:01:14 - 00:24:28:15

Thank you. And in addition we are creating, as I mentioned, five new ponds on site. There's 100 hectares of wetland and granting bird mitigation land on West Burton. To that will also include further wetland in form of a chain of scrapes, seasonally inundated habitats which benefit bird species like lapwing.

00:24:31:08 - 00:24:41:12

Thank you, Mr. Fox. I'm going to. See if there are any comments or queries from other interested parties now, either in the room or online.

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No. Okay. Well I think that will take us into item D. In that case thank you.

00:25:01:18 - 00:25:02:03

Three.

00:25:04:02 - 00:25:04:17

Can see.

00:25:06:10 - 00:25:11:05

We just have a changeover of all means. Thank you very much.

00:25:40:12 - 00:26:00:29

I'll just start with a few sort of opening words then. And in terms of this agenda item. I have this reference on the agenda itself to consideration of national policy. I think we've looked at national policy in relation to quite and quite a lot in the session so far. So don't intend to to revisit that. And

00:26:02:20 - 00:26:37:28

just wanted to follow up on some specific points, if I may. And the first of those is that the the applicant suggests that the impact on soil properties of an extended period would be a significant effect of the proposed element in terms of being moderately beneficial. And wanted to ask specifically about the evidence to back that up, noting that the comments that Natural England have made about the uncertainties around the impacts of solar panel on soil properties.

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But as a response, please.

00:26:41:10 - 00:26:48:23

Claire Kent will hand over to Mr. Burchill, introduce himself and then answer which you've raised. Thank you.

00:26:51:09 - 00:26:55:27

Hello. My name is Daniel Baird and I'm the sales and agriculture consultant for the applicant.

00:26:59:06 - 00:27:03:21

So going straight then to the benefits of fallow land.

00:27:05:21 - 00:27:17:28

In our chapter 19 paragraphs 19 .9. 13 to 15. The solar farm land management will differ from arable management by avoiding a bare soil surface

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through cultivation. Arable crops. It improves rainfall in infiltration, maintains a year round living roots in the soil, and enables a recovery of soil organic matter needed through cultivation. When we cultivate agricultural land, no matter of. Oh, sorry.

00:27:40:15 - 00:27:43:20

Sorry. You are quite faint. I'm quite faint. Could you.

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I did a bit of that.

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It's not better.

00:27:47:27 - 00:27:49:22

Think so? Yes. I'm talking.

00:27:54:27 - 00:28:28:02

When we cultivate arable land, no matter what the returns of organic matter, we're adding to that arable land. There is an extreme aeration of that land which allows the soil biota to population to explode in response to that substrate, that food they're being given. So whatever the additions of soil organic matter, there'll be a constant return towards a low equilibrium of soil organic matter. When we revert arable land to permanent grassland.

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We eliminate that extreme aeration that we get through cultivation each and every year through the plowing and seabed preparation. So even if your terms of organic matter are lower in that low input grassland, the land is able to return back towards a higher equilibrium. This is well understood. There's a different research project that we note in the environmental statement. It's references ESP 08016, and it describes a range of management activities that you can take on upland and lowland soils in this country to recover soil health and soil organic matter.

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The most. The best one of those was reversion of arable land to low input grassland, and this is also recognised in cross-compliance measures that are offered to farmers, such as arable reversion, where a

farmer must have looked, can be offered £311 per hectare per year to take an arable field and put it into low input pasture, and that payment is received to provide the environmental benefits of that recovery as well organic matter, recovery of soil health and the wider environmental benefits that stem from both of those.

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So, for instance, if you're providing a permanent green cover, you're having reduced erosion of sediment from that field. That sediment carries nutrients, that high surface waters. It carries the sediment, which increases flood risk. The runoff itself, the water is

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increases flood risk, harms water quality, and the sediment can also contain pesticides and fecal pathogens, which water companies then have to address and can also damage fisheries downstream.

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Recovery of soil organic matter is also beneficial to the soil health, in terms of it being a productive resource for agricultural use in the future. The greater percentage of soil organic matter in the topsoil makes soil aggregates more stable, less likely to smear in response to future cultivation, and are more able to allow rainfall to infiltrate. This is better for rainfall capture in the soil and down into the aquifer, rather than running off the surface and into local watercourses, and it also provides a greater nutrient content in that topsoil.

00:31:25:00 - 00:31:25:18 So.

00:31:27:08 - 00:32:00:14

Not. Benefit to soil health is not something which is recognised in the agricultural land classification system. Agricultural land classification is specifically for planning, and to avoid any perverse incentive for a landowner or farmer to deliberately manage their land badly in the attempt to secure planning permission. The survey land as if it has a good level of agricultural management.

00:32:01:03 - 00:32:40:21

That also means that if you provide a level of agricultural management which is exceedingly good, that is also not recognized in the system, we survey land based on the physical characteristics which are present and on the assumption of a good level of management. Now, we have a problem in this country that all arable land, in response to agricultural pressure is experiencing a long term decline in soil health, which is bad for agriculture and also has knock on environmental problems such as the ones I outlined earlier.

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The recovery of soil organic matter through the long term follow up would be achieved with the solar farm, is well understood from Defra research and is recognised through cross-compliance payments made to farmers.

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Thank you. Just just on the specific point then about. The effects of the presence of solar panels during that period. I don't think that this isn't something that the different research looked at specifically, was it? It was that was more about the benefits of grassland per se, rather than the specific point that's been raised by Natural England that elements.

00:33:32:02 - 00:33:58:12

You can look at existing solar farms, and we see that we do not have areas of bare land below the panels. They have vegetation which indeed has to be managed below the panels, and this can be

grazed by sheep, maintaining an agricultural use of the lands. Of a secondary benefit from having a solar farm is that the land can also be used for fattening sheep.

00:34:01:20 - 00:34:18:15

I guess I'm going back to the particular point about about the evidence to back that up in terms of the you've heard to existing solar farms and there isn't bear land, but is there any specific research and specific evidence in terms of the impacts of, of, of solar panels on soil qualities?

00:34:19:26 - 00:34:51:10

I'm not aware of any long term research platforms which are actually on solar farms, which have delivered any which have been running long enough to provide that evidence, but also am not aware of any conceivable mechanism where a solar farm not deliver those long term benefits of remember, and it's a low input pasture. So you know, you're not fertilizing the grass, but the grass is still growing just based on what it can scavenge from the natural environment.

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And

00:34:53:17 - 00:35:03:28

solar farms are not going to be the limiting factor for a sward grass growth. In and around the solar panels.

00:35:11:04 - 00:35:18:00

Sorry. Does anyone want to follow up on the effects on soil qualities before you move on? Yes, Miss Garbutt.

00:35:20:23 - 00:35:35:21

I saw this ASI at 7000 acres. Sorry, didn't catch the gentleman's name, but you alluded to existing solar farms. Wellesley, you're looking at the assessment in terms of soil quality and grassland. But what?

00:35:35:25 - 00:35:36:12

Asked what.

00:35:36:14 - 00:35:45:27

Scale? What of the solar farms these are your found because obviously we're looking at large scale solar. So those small scale solar farms examples you alluded to.

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I'm happy that you generally the questions drew me, but I'm happy to.

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Answer.

00:35:51:09 - 00:35:54:18

In a long day. So don't understand. So I'm happy that you answer that Mr.. Bed.

00:35:55:06 - 00:36:11:02

Small or large, the solar farms, all the ones that I've been working on from 20 hectare solar farms several years ago to these publications, are taking complete fields at a time. So no difference.

00:36:15:06 - 00:36:29:02

And this is maybe a point that we can we can come back to this. I'm just keen to get through as many questions as we can do right now. So, Mr. Thomas, you're looking perplexed. Do you want to make a particular point here or. Yeah. Don't you put your microphone on.

00:36:31:10 - 00:36:34:02

Thank you. Ma'am. Jeff. Jeff summers.

00:36:34:28 - 00:36:42:00

7000 acres. Um, I think that the best thing I can do is sort of at the beginning, but, uh.

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And I broadly give you a brief understanding and an agricultural system and food production. And how so soils are so flexible.

00:36:55:20 - 00:37:33:00

Word be good. Three b soils contain a lower percentage, of course, sand particles and a higher percentage of clay and organic particles. Which means they are tougher to tell. The heavy, heavy clay soils are tougher to tell but retain higher levels of organic material and considerably higher levels of moisture in a dry period. Dry periods, which we are experiencing now and it is forecast, will continue for a long time to come.

00:37:33:16 - 00:37:36:14

Otherwise, climate change is a fast.

00:37:38:04 - 00:37:38:19

Huh?

00:37:40:03 - 00:37:49:14

Artificial and organic natural fertilizers. Are stored more efficiently in the heaviest oils.

00:37:51:01 - 00:37:56:13

Thus exhibiting higher levels of productivity than lower grade soils.

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In the past, prior to the development of sophisticated machinery for soil cultivation and tillage, farmers grew crops most suitable to the soil type because they did not have the physical and technical tools to do the job that we have today.

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With horses that created mixed farms where crops and livestock livestock were produced, which most suited their soil type. Mixed farming as it was known. Rotational farming. A very profitable style of farming, which helped establish the very productive soils that we have today. This this technique is still the best way to farm. To give you an example of flexibility in agriculture today.

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Years ago, some soils produced very little because they contained low nutrient levels and were very prone to drought and crop failure simply because it was sand. And the water just basically fell through the profile. And along with the rainfall away, when many of the nutrients at the same time, it did not have the organic matter at cetera to retain those nutrients.

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Today. Due to modern fertilizers and irrigation, they produce vast amounts of superior quality crops, i.e. carrots and potatoes, especially for potatoes for the crisping market,

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plus significant amounts of bacon through outdoor pig production. And of course, the land is warmer and drier, much more suitable suitable for the pigs throughout the winter months because its naturally free draining soils.

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And this, of course, is a sustainable farming system where you create a rotation just like you do any of the soil types.

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So composition is a physical factor determined by the relative amounts of sand, silt, and clay, as well as the proportion of organic matter.

00:40:18:19 - 00:40:49:03

Go sand and fine sand. These are very low in nutrients. They need constant irrigation to produce a realistic, viable crop. In most seasons and high levels of artificial fertilizer and crop productivity is very low and very susceptible to drought. So just mentioned, outdoor pigs do well in this situation. Of course. Sandy loam find sandy loam and loam.

00:40:50:06 - 00:40:59:00

And what we describe as medium soils, broadly speaking, which will grow most and grow to some degree.

00:41:00:15 - 00:41:35:00

Now some of the clay loam, silty clay loam, organic clay loam, silt, silty clay, organic clay and clay real clay. These soils are very drought tolerant in comparison and require no irrigation under normal or even some quite extreme circumstances. They are very fertile because nutrient retention is higher than other soils. The varied range of crops can be grown here, and but good drainage is essential.

00:41:36:28 - 00:41:48:12

You know who understands. Soil management will ensure that cultivations only take place when conditions are right. Both ditches and drainage schemes must be operating efficiently.

00:41:51:06 - 00:41:58:08

Okay, I admit clay soils are more difficult to cultivate. They're more difficult to manage.

00:41:59:29 - 00:42:02:06

And it needs a dedicated farmer.

00:42:03:21 - 00:42:34:05

But glaciers produce the heaviest crops. Very often of the finest quality. They hold more moisture in dry seasons. And they leach far less nitrates and phosphates into rivers and drinking drinking water. Most important point to make under the circumstances where legislation around this type of thing is becoming more and more serious.

00:42:34:07 - 00:42:39:22

So if we consider the national policy reference best and most versatile soil.

00:42:41:20 - 00:42:48:25

All soils are versatile in terms of crops grown within each textural category.

00:42:50:27 - 00:43:26:07

The difference is that growers grow the crops most suitable to the soil classifications which they are farming. And that varies from field to field, even on. See on individual farms. It varies from field to field. And all soils have a viable agricultural use. If I was to pick one, then I would say Sands, because there's nothing worse than paying 8 or £10,000 an acre for for a farm field

00:43:27:23 - 00:43:46:06

containing sand soils. And then one day in April, when the wind gets up, you've got a 200 foot cloud of sand disappearing across the county into someone else's farm. And it also was already mentioned that it has serious drought implications.

00:43:48:08 - 00:44:20:27

So both soils are a viable agricultural use. The low soil's not suited to growing crops. From my perspective, not suited to growing crops. Would be very suited to solar arrays. And I do not agree with this classification scoring, but more understanding and detail should be observed as regards the flexibility of all soils and what they can produce.

00:44:21:14 - 00:44:25:14

It's not just growing one crop everywhere. All right. Thank you, thank you.

00:44:25:26 - 00:44:41:13

Thank you for that. And you've presented quite a lot of detailed information there. So again if you could let us have that as part of your written submission following the hearing, that will be helpful. I'm not sure whether Mr. Bradley wants to come back underneath that. If you can. Quickly, quickly. Yes, please. Thank you.

00:44:41:22 - 00:45:23:12

Um, yes. Grade three land grades are on a number of different factors for land. So you could have three B land, which is classified according to its gradient, its climatic limitation, if it was very dry land, limited by drought, or is it much of the case here? If it's heavy land limited by soil wetness and workability limitations, it's better at retaining moisture during the summer, yes, but through all of the climate change projections that we have, we're also going to be facing wetter autumn, spring and winter.

00:45:23:29 - 00:46:07:29

The soil wetness limitation is about getting onto the land with your equipment to prepare a seed bed and to harvest a crop, and you can't do that in the middle of summer. So soil wetness limitations and soil drought in its limitations occur at different times of the growing season. And you can have one piece of land which is limited to the same grade by both limitations. Um, so the problems that a farmer faces with the limited opportunity to get onto heavy land in the autumn to to prepare a seed bed for an autumn sown crop are greater in with increased rainfall during the winter.

00:46:08:05 - 00:46:37:15

If you go onto land when it's too wet and it's heavy, then there's also the risk is that you incur damage to your soil structure, which is time consuming, difficult and very expensive to remediate, and further enhances that a workability problem of the land. Everybody's seeing a muddy field gateway which never gets dry. You start doing that to your whole field.

00:46:39:01 - 00:47:16:10

Um, nutrients. A a clay soil will hold on to a lot of nutrients more tightly. But the most important nutrient is nitrogen. If you have wetland and you have excess nitrogen in that land that is lost as nitrogen oxide, that's a loss to the crop of nitrogen that you've paid to apply to that land. And it's also a very potent greenhouse gas, and it's a serious contributor to poor air quality.

00:47:16:12 - 00:47:56:25

So wetland such as this is a serious issues with nitrous oxide emissions. And part of the when we talk about grades and best and most versatile land three B land is it can grow in good years a good yield. But it is not versatile. It can't grow it every single year. Um, and then if we look at Defra food security statistics, they highlight that in 2020 we had a 40% drop in UK wheat yield, and that was due to high rainfall.

00:47:57:12 - 00:48:04:21

And then at sensitive periods of land management combined with drought in the summer.

00:48:06:17 - 00:48:29:13

Thank you, Mr. Bad. I'm very, very conscious of the time and its and the fact that parties have been very, very patient today and also that the applicant has other members of the team that haven't spoken yet and we do need to give them. So I'm going to draw that to. Very, very quick final comment. And this is something that we will return to have no doubt later on in the examination. But if you've got any quick final points to make now.

00:48:29:25 - 00:49:01:17

Thank you ma'am. Very quickly. Jefferson has 7000 acres. This autumn obviously is being a very wet autumn. I'm a countryman. I enjoy my day shooting. I've been on numerous fields over the last 2 or 3 weeks. And we have soils which are medium soils of excellent quality, which have been sown with autumn crops. And you can see now already the crops are dead because they're waterlogged.

00:49:01:19 - 00:49:21:07

And as you walk across them you're sinking in six inches deep. The heavier soils, which were never fit to sell at the time, are lying bare now and will sit there until the drought in the spring. And we'll be selling with a spring crop. So it's all down to individual farm management. As to the success of the product. Thank you.

00:49:21:27 - 00:49:53:01

Okay. Thank you, Mr. Thomas. And thank you, Mr. Bird. I'm going I'm going to move on now because I'd say we've got two topics that we haven't looked at yet and it's now. Oh 53 so we're not going to finish at 5:00, but I assure you we will finish by 530. That's, that's that's the absolute cutoff today because we had a a long evening as well. So moving on to cultural heritage matters, there are a couple of things that I did want to to, to bring up here. Do we have another swift change okay.

00:49:53:28 - 00:50:02:27

Yes, we do have a changeover. We also have two different experts depending on which type of

00:50:04:23 - 00:50:14:06

cultural heritage assets you want to particularly focus on. So we've obviously got archaeological matters and then we've got other other types of cultural heritage. So there was an.

00:50:14:08 - 00:50:25:05

Archaeological specific yes, we need we need to think in terms of managing the time. We'll stick to the point on the agenda, which is about and the archaeological field investigations. So.

00:50:31:00 - 00:51:13:00

Just just we'll just follow your settling. So we obviously did note the applicant's previous request for specific was looking. Separately, the mass relating to the medieval Bishop's Palace and deer park at Stowe Park. So we're considering how best to manage that particular request alongside the site visit arrangements that we'll need to make prior to looking that in detail. And. So in terms of archaeological investigations, and we want to understand the approach of investigations as a basis for

identifying areas of archaeological sensitivity and noting the comments that particularly Lincolnshire County Council have made so far.

00:51:13:02 - 00:51:17:10

So, first of all, an overview of that process, please.

00:51:18:16 - 00:51:33:05

Collaborate with the applicant. Yes. I will hand over to Ms.. James and Mr. Hollington, who will just both introduce themselves, and then they'll provide that overview of the approach, hopefully succinctly. Thank you.

00:51:37:20 - 00:52:18:19

And hello, Alice James for Lambrew on behalf of the applicant. Um. So, um, in order to establish the archaeologically sensitive areas within the scheme. A comprehensive field investigation was completed, which is in line, which is considered to be in line with national and local guidance. So, for example, it's in line with the M1, M3 and the Central Lincolnshire Local Plan. Um, and it's believed that our planning application for the scheme is accompanied by an appropriate and proportionate assessment, which has enabled us to understand the potential for and significance of archaeological remains and the impact of the development upon them.

00:52:19:10 - 00:52:58:13

So desk based assessments, the results of which can be found in appendix 13.1. So this is app 105 to app 108 and Geo archaeological based assessment, which is in appendix 13.3, which is app 115, were undertaken to understand the archaeological potential of the sites with consideration to the various historic environment based information sources. I won't list them all now, but I can do if that's useful. In the first instance. The field investigation, also called an archaeological evaluation, comprised a programme of non-intrusive techniques which covered all accessible areas within the Red line boundary.

00:52:58:29 - 00:53:31:03

So these included a geophysical survey, the results of which are in appendix 13.2. So that's app 109 to app 114 and an air photo and LiDAR analysis, the results of which are in appendix 13.4, which is app 116. In particular, geophysical survey proved to be particularly effective at identifying buried archaeological deposits. So the physical survey comprised of magnetometer survey, which is a magnetic survey technique.

00:53:32:03 - 00:54:04:12

And magnetometer surveys are a nationally recognized evaluation technique for identifying a wide range of archaeological features. They can cover up to 100% sample of a site, and they're regularly used to evaluate large areas. And this is kind of in line with Historic England guidance. And also the that's the European archaeological Concilium guidance. And there are lots of the non-intrusive assessments we used holistically to then identify areas where there was potential for archaeological remains to be present.

00:54:05:06 - 00:54:28:16

And then a programme of informed evaluation trial trenching was undertaken to test the results of the non-intrusive valuation techniques, as well as providing further information regarding their their extent, their character preservation and archaeological significance. The results of the evaluation trial trenching can be found in appendix 13.6, which is app 1202, app 121.

00:54:30:01 - 00:55:22:20

With regards to the solar sites. The evaluation trial trenching targeted areas where archaeological deposits had been identified by the non-intrusive evaluation techniques, as well as some blank areas

where a low potential for archaeological remains had been identified by the non-intrusive evaluation techniques. So we had a written scheme of investigation, also known as the WSI, which was agreed in July 2022. We have Lincolnshire Historic Places team who are the advisers to Lancashire County Council and Bassetlaw in Nottinghamshire, and trenched plans for the individual areas were signed off by a Lincolnshire Historic Crisis team between July and September 2022, and these comprised a sample of 2% plus a 2% contingency of targeted fields where an archaeological potential had been identified, as well as some blank areas.

00:55:24:10 - 00:56:12:27

Numerous site visits were undertaken between Lincolnshire Historic Place team and the applicant between July and October 2020, and during these site visits, all parties agreed that the standards of works were undertaken to an appropriate level and in line with the appropriate professional standards and guidance in terms of the shared cable route. So this is proposed to be used for the West Burton Solar project, the the Cottam Solar Project, and the Burton Energy Park. The applicant worked closely with the Cottam and Burton schemes to deliver a comprehensive evaluation programme and then subsequently formulate an effective mitigation strategy so the evaluation trial trenching targeted areas where there were archaeological remains had been identified through the non-intrusive survey techniques, the evaluation techniques, as well as a blanket sample or blank areas.

00:56:13:15 - 00:56:44:15

We've estimated that the total sample across the shared cable route for the West Burton scheme totalled about 0.65%, and this slight difference in approach is is a result of the fact that there's a high level of impact that because the archaeological record, as a result of the proposed development, as well as the sensitivity of archaeological remains in land adjacent to the Trent Valley, with particular consideration to paleo environmental and geological deposits that could be located in that area.

00:56:45:27 - 00:57:36:21

In a meeting in January 2023, the extent of the evaluation for the shared cable route was agreed between all parties to be sufficient to identify both the potential for archaeological remains and then inform an appropriate mitigation strategy, and this agreement was reconfirmed in a following meeting in March 2023. Um. We place the solar sites and the shared cable corridor. The evaluation of trenching was demonstrated to have a high correlation with the results of the geophysical survey, so it was considered to verify the effectiveness of geophysical survey for identifying the presence or absence, as well as the extent of archaeological sites, and so it can therefore be infill inferred that the soils and the type of the archaeological features within the scheme are conducive to a magnetic survey technique, and that we can have a high level of confidence with the results of the geophysical survey.

00:57:38:03 - 00:58:17:03

So it's considered that the sufficient evaluation has been undertaken proportionate to the stage at which the scheme is at, to inform the DCO application, as well as any archaeological mitigation works that would be required for consent. And it's also considered that this approach is meets the kind of the definition of an archaeological field for evaluation, as defined by the Chartered Institute of for archaeologists. I won't quote that now, but again, I can do if you'd like me to. As well as section 5.9, which is entitled Intrusive Field Work Redetermination of the Lincolnshire County Council Archaeological Handbook.

00:58:17:14 - 00:58:52:24

Again, that's on page 39. I won't quote it now, but I can do if that's useful, and details of the mitigation strategy, with consideration to the information that's been derived from our evaluation, is provided in an Archaeological Mitigation Scheme of investigation, which is in appendix 13.7. That's app 131 and as detailed in section five of this WSI. The mitigation strategy has been drafted in line with national and local guidance. So this is Historic England, the Chartered Institute for archaeologists, as well as the Lincolnshire Handbook for archaeology.

00:58:53:09 - 00:59:30:11

Um and the WSI, provides a detailed methodology for the mitigation of direct archaeological impacts through preservation in situ. So these are areas of no development, as well as areas of concrete feet as well as mitigation by record. So this would include informative trenching, strip mapping, record, um, excavation and watching, brief monitoring, um, details of these different erm methodologies that we would employ can be found in section six and seven of the again that's at one, three, one.

00:59:31:11 - 01:00:01:26

Um. Based on the results of our evaluation, we considered that the likelihood of unexpected archaeology is going to be low. But if in the off chance that we did encounter unexpected archaeological remains, the WSI does provide scope for them to then be appropriately mitigated with consideration to their significance and the level of impact that would be caused by the scheme. But again, I would reiterate that based on the baseline information we have and the evaluation that's been undertaken, we do consider that to be low.

01:00:03:09 - 01:00:14:20

Um. And the archaeological mitigation detailed in the database would then be secured by requirement 12 schedule in the Draft Development Consent Order, which is App 017.

01:00:17:09 - 01:00:39:12

Thank you, Miss James. Very comprehensive and Pacey run through. That's that's that's helpful. Thank you. So I'm very conscious of Lincolnshire County Council's representation of representation. And without opening a detailed discussion at this time. This time. Sorry. Um, still got the problem of the cameras in the middle and.

01:00:41:02 - 01:00:56:08

In terms of the points they can show have raised in their representation. All those points being addressed, have they been considered what what's what's the point? Where are we up to in terms of that, that the concerns that were raised there.

01:00:58:21 - 01:01:40:04

Uh, so we're currently in the middle of agreeing a statement of common ground, which will hopefully highlight both areas where we are agreed. And I'm hoping that we will be able to identify areas in which we can agree on. Um, as well as it will probably identify areas where we are still under discussion. Um, the main point that we're probably going to be under discussion is the extent of the evaluation to our trenching, specifically the blank areas. And by blank areas, I mean areas where, um, baseline information or the non-intrusive evaluation techniques haven't identified any potential for archaeological remains to be located.

01:01:41:17 - 01:01:46:16

That's helpful. Thank you. Um, Mr. McBride, do you want to add anything further at this point?

01:01:47:19 - 01:01:59:26

Okay. All right. Lincoln County Council. What I would say is, I don't think we've probably met with much further than are relevant representations which were made in March. I mean, could read.

01:02:00:06 - 01:02:02:23

Two pages of local impact report, and I can see.

01:02:02:25 - 01:02:03:16

That that's not really.

01:02:03:18 - 01:02:32:27

Going to be obviously a particularly good use of time. So there is still quite a bit between us, I think, in terms of the statement of common ground, the one that was being referenced, it was probably more for cotton. We haven't really moved very far on the on the state of the common ground for West Burton, although accept that the issues are quite common to both in terms of the approach that's been taken and our sort of.

01:02:34:16 - 01:02:52:17

Assessment of that approach isn't sufficient to meet the needs of the archaeologists or archaeologists in terms of getting what they think is necessary to undertake that assessment. So that's where we are really. We haven't moved very much further. Okay. Thank you.

01:02:52:22 - 01:02:53:09 All right.

01:02:53:11 - 01:03:08:06

So so understand that and think at this point in time it if we could encourage more work in this area through the statement of common ground so that we can see where that's progressing and then perhaps return to this at future sessions or.

01:03:08:08 - 01:03:08:24 Through through.

01:03:08:26 - 01:03:20:07

Written questions. And I think we'll leave that that there for now, unless there are any final points the applicant wanted to make in terms of that, that work. I am keen to move on.

01:03:21:06 - 01:04:00:04

For the applicant. Now, just to add, that obviously will be responding. You obviously haven't got the benefit of our responses to the relevant representations at this point in time. So we will address both those comments in the deadline one submission, and that will obviously be providing a detailed response to the points raised in the Local impact report and which we've obviously we've had sight of. But you'll see deadline one and then we'll be responding to that in detail at deadline. But you will have the benefit of all of that information before the next set of hearings, should you wish to look at the extent of trial trenching in detail in all solutions at that point.

01:04:00:10 - 01:04:00:28 Thank you.

01:04:01:00 - 01:04:12:20

So just we're going to move on to, to to deal with the last item under general item. Fine. Just just in terms of the items following that and a statement of common ground.

01:04:12:22 - 01:04:13:13 Which is obviously relevant.

01:04:13:15 - 01:04:36:22

To what we've just been talking about and cumulative assessments, I'm going to assume that those things are in hand for the purpose of the session today, and so that we can use the remainder of the time to look at traffic and transport and access matters. And then we'll sum up briefly at the end with, with action points arising. So.

01:04:38:11 - 01:04:38:29 Would you?

01:04:40:07 - 01:04:50:25

That table to the applicant. We just need to swap teams again just so that we've got the transport and transport expert here. But just whilst we're doing that

01:04:52:11 - 01:05:03:11

changeover in respective statements of common ground, it is correct that these are progressing. Will provide an update at deadline. One for you on that. Thank you.

01:05:26:22 - 01:05:27:10 Thank you.

01:05:28:05 - 01:05:41:15

So we are moving on now to. Subcategory. Transport and access. Consideration of road infrastructure and compatibility with increased road use during construction, operation and decommissioning. My first.

01:05:43:01 - 01:06:22:05

Query really is to seek from the applicant just a very quick run through of method. Methodology associated with the assessment and at a very high level. Related concerns that have been raised through relevant reps. These relate to road infrastructure and the impact on road use. During those three phases construction, operation and eventual decommissioning. It'd be very useful if, in giving a very brief summary of the of that methodology, you're able to address concerns or comments on the timing of some of that survey work.

01:06:22:29 - 01:06:52:13

Some analyses were conducted over months, which would have been expected to have been altered in travel patterns in terms of Covid 19, and it would be useful to hear comments on how any uncertainty within those time periods has been taken into account in the survey. Whether or not necessary guidance has been followed in addressing the uncertainty and extrapolating conclusions from the survey work that was undertaken during that time.

01:06:53:28 - 01:06:54:14 Thank you.

01:06:57:00 - 01:07:26:06

And before hand over and drop them on to deal with that wonder whether, given we've got limited time available, whether perhaps we focus on that specific point that you raised in terms of the how we take into account Covid issues, in terms of the methodology, rather than simply spending the time going through an because it necessarily takes a fair amount of time to give an overview of the complete assessment.

01:07:26:08 - 01:07:38:09

It does. Yeah. I wasn't intending for anything like more than 2 or 3 minutes, really. If that's not possible and not capable, please do focus on on the more specific role in the general. Thank you.

01:07:38:25 - 01:08:10:10

Yeah. Good evening. I've Brown from TPA Transport Planning Associates sent in the applicant. Just specifically on your first point before I go into an overview, um, traffic surveys were undertaken in November 2021, which were outside of Covid restrictions, and Covid restrictions ended in July 2021. Um, we do apply growth factors to get to a reasonable baseline, which for when construction starts. So that was anticipated to be 2025. So we apply in industry.

01:08:10:19 - 01:08:41:02

Excuse me, industry standard growth factors for that which take from a software called temporary which takes into account, um, various things such as local plan development, but that also considers what could happen in terms of travel patterns associated with Covid 19 pandemic. So that's all considered as part of that. So yes, those were surveyed outside of the pandemic and then the growth factors then account for. The implications of the pandemic.

01:08:43:12 - 01:08:53:18

Thank you for that. Yes. It's not so much that they were undertaken during Covid restrictions, but the impact of Covid restrictions and changes in travel patterns on that. And you're saying that that is factored in.

01:08:54:17 - 01:09:26:13

That's correct. Um. In terms of just a very quick general overview of our assessment work, um, in the environmental statement, chapter 14 focused on transport and access to App 052. This considers the likely effects of the scheme on transport and access during the construction, operational and decommissioning phases, so solar farm developments do not generate significant traffic movements once they're operational. You're talking a few vehicle trips per week for maintenance purposes undertaken by or by fours, LG vs, etcetera.

01:09:27:00 - 01:10:10:20

Um, so the chapters focus generally on the construction phase in terms of decommissioning. That was generally seen as similar effects to the construction phase. So the construction period will include the use of to bring equipment to the site. And this will be strictly managed to ensure that vehicle movement is controlled and kept to a minimum. On a day to day basis. The largest vehicle that will visit the site is 16.5m articulated vehicle, although a significant proportion of movements will be by smaller vehicles. And it's also acknowledged that there will be a small number of abnormal load movements to transport the transformers and the cable drums, and the applicant appointed winds, who are in a specialist haulage company to manage the abnormal load strategy and the movements of these loads.

01:10:11:16 - 01:10:25:02

The Transport and Access chapter. The conclusion of the scheme will not likely result in any significant transport and access effects during the construction, operational and decommissioning phase, and it should be noted that the effects during the construction and decommissioning phase will be temporary.

01:10:26:28 - 01:11:11:24

Um. The environmental statement chapter 14 was supported by three technical appendices. Appendix 14.1 The Transport Assessment at App one, two, six, and this sets out a detailed effects of the transport movements and then importantly to management strategies or management plans are put forward. Appendix 14.2 The Construction Traffic Management Plan at app 127, and this provides a framework for the management of construction vehicle movements to inform the scheme to ensure that the effects of temporary the effects of the temporary construction phase on the local highway network are minimised, and this will be secured through requirement 15 of the Consent Order and then the final management plan was the Outline Public Rights of Way Management Plan app 128.

01:11:12:21 - 01:11:22:12

Similarly, this provides a framework for the management of public rights of way during the construction, operational and decommissioning phase and this will be secured through requirement 18 of the.

01:11:24:15 - 01:12:02:22

Um, just before I end my overview, um. Um, we've had dialogue with Lincolnshire County Council as the highway authority throughout the process. That position in that relevant reps was that the assessment was appropriate and provides a reasonable estimate of and car traffic associated with the development. They did have one comment in relation to West Burton one and how and access that in particular how parts by bays would be delivered. We've been going back. We've had meetings and had some dialogue, and we've got a position now where they're happy with our response, and that will probably come out of their motion that their next deadline, relevant representations, I believe.

01:12:03:19 - 01:12:08:21

So yeah, I'm happy to respond to any additional questions, but that's a general overview of our assessment.

01:12:10:21 - 01:12:28:11

Thank you for that. You may have hit it off. Two of my following questions, very helpfully, I suppose I would like to just bring in Lincolnshire County Council. Um, if there's anything you would wish to add at this point. Otherwise we will obviously have sight of that in due course.

01:12:29:25 - 01:13:08:21

External links. County council. Um, think perhaps that might be a little bit optimistic, saying that we're in agreement with that particular access point. So just to give some background to it, it's the, um, access point to West Burton Wong, which involves around about 1.2km of unclassified road. Um, we have got some concerns about the suitability of that erm, highway for the traffic that's proposed for those construction works.

01:13:09:10 - 01:13:14:00

And whilst this week we've received, um, some.

01:13:16:05 - 01:13:51:09

Details about a potential pass in places to potentially overcome that concern, I think we still got some, some issues about the mechanism that's being proposed to deliver those pass in places. So the applicant is suggesting that that can be achieved through the process or through the approver itself. We've got some concerns about whether that's an appropriate mechanism. And we would normally see that through a section two some agreement.

01:13:51:11 - 01:14:20:00

And I think there's that's perhaps where the tension is between whilst we we've seen the solution to provide the pass in places, I'm not sure that we're in agreement as to how that can be secured at this time. We've also got some other issues around public rights of way, but that's the main issue, I think, at this time because obviously aware of, um, wanted to bring this to a close.

01:14:20:13 - 01:14:48:07

That's fine. Thank you. And thank you for that. Yes. Um, is familiar with that access route to West Burton one. So that will be work in progress. Maybe if we could receive an update on that with. With that, but also to continue that dialogue directly with the applicant outside of our hearings. And we would receive an update on that. Would the applicant like to comment on LLC's position on that specific point?

01:14:49:20 - 01:15:20:17

A check for the applicant. Yes. Just to comment on the matter of how it's secured, which was protective of what we understand to be the position, which is that the technical detail and there was agreement on the technical detail. It's how we secure those measures in the in the documentation at the moment, the draft requires details of access and to be submitted and approved by the relevant planning authority under requirement five.

01:15:20:19 - 01:15:53:24

And then there was also the requirement for the construction traffic management plan to be submitted for approval as part of requirement 15. And we had some discussions about the level of detail being provided in the construction traffic management plan. So at the moment, plans are within the transport assessment rather than within the management plan. And as we've done for the Cottam solar project, we're going to bring those plan or copy those plans and put them in the construction traffic management plan.

01:15:53:26 - 01:16:30:10

So that level of detail is secured by way of the. Outline document, so that there is comfort that the solutions that have been agreed will be delivered and those also that sign off in any event. The DC itself also does provide for power agreements entered into if required. So article 14 of the enables agreements, such as the 2017 agreement to be entered into if it was considered necessary to deal with matters that can't be dealt with in the discharge of the management plan.

01:16:33:05 - 01:16:35:13 Thank you. Okay.

01:16:37:15 - 01:16:38:10 Did any other.

01:16:39:28 - 01:16:40:13 I'm.

01:16:42:20 - 01:16:47:24

Just looking around for interested parties. Mr. Poynter online for Nottinghamshire County Council.

01:16:49:13 - 01:17:14:20

Yeah. Thank you sir. Just to say that the Nottinghamshire is satisfied that the construction, traffic and the need for highways works to facilitate the connection. Grid connection can be managed through the construction traffic management plan. So we have a few detailed comments but there will be in our local impact report. So. But just the principle is accepted. Thank you.

01:17:15:09 - 01:17:17:06

Thank you for confirming that, Mr. Pointer.

01:17:17:29 - 01:17:18:14 Okay.

01:17:19:07 - 01:17:32:01

Before we move on to. Further question for me, is there anything any other would like to? Explore on the points covered so far. Methodological implications. Mascara.

01:17:33:24 - 01:17:34:09 Thank you, sir.

01:17:34:11 - 01:17:36:11

It's just a minor point. Just a reminder.

01:17:36:13 - 01:17:37:16

Really, that the.

01:17:37:18 - 01:17:49:07

Roads that we're referring to obviously our use, our rural roads that are used by locals as footpaths, rights of way, bridleways. So therefore we're talking.

01:17:49:09 - 01:17:49:24 About.

01:17:50:25 - 01:17:52:03 Allowing for passing.

01:17:52:05 - 01:17:53:16

Vehicles and.

01:17:54:05 - 01:18:08:28

And abnormal loads. But these are roads that are used by people on foot and on horseback. So their use is needs to be catered for on a safe basis. Thank you.

01:18:11:08 - 01:18:11:27 Thank you.

01:18:12:05 - 01:18:31:08

Yes. I'd like to just finally really explore that issue about non-motorized road users pedestrians, cyclists, etcetera. Could you just set out how you consider the non car users will be impacted and how they've been taken into account through the survey work?

01:18:33:29 - 01:19:05:10

I've got around the applicants. So the main construction vehicle routes where possible. We always try and bring the vehicles in from appropriate roads. So a-roads where possible. So the West Burton one, we're using A15 hundred and then the local road to access the site. And as we've spoken about what we're looking at, passed by bays to provide the extra width. When vehicles using that should acknowledge that the number of HGVs using that road on a day to day basis will be.

01:19:05:18 - 01:19:38:29

So um, I think we're talking about maximum of five a day down that road. Um. Four West button two will be accessing via. Um, the A57 and the B1 two for one. And then for West Burton, three will be directly from the A15 hundred, um, so through to TMP and also to pull it right away. Management plan. There are a number of measures in there to try and make people aware of the the presence of HGVs through signage.

01:19:39:14 - 01:19:55:02

We provide banks access points and along public rights of way so that when a vehicle is turning into the site. Um. They can be made aware of as any non-motorized user using this non-motorized user in the vicinity.

01:19:57:12 - 01:20:05:25

And other measures such as signage and road condition service, to make sure public rights of way are returned to their original condition.

01:20:07:15 - 01:20:17:16

So if, if any damage is, is made by the construction vehicles. So yeah, be heavily managed through the two management plans. That will be a requirement of the DCO.

01:20:22:21 - 01:20:23:11

Thank you.

01:20:24:08 - 01:20:29:24

Any comments on that from, I suppose from local authorities from.

01:20:31:25 - 01:20:32:21

West Lindsey.

01:20:35:15 - 01:20:50:14

External links. County council. Think in terms of the public rights of way. Again, this might be we get around to discussing the draft development consent order. We have got some concerns about

01:20:51:29 - 01:20:58:27

the way certain parts of that are drafted, and it might be changed to reflect the.

01:21:01:01 - 01:21:13:25

Progress has been made with other projects that we've been in discussion with over the last 2 or 3 months, but as it's written at the moment, we do have some concerns with some of the way the articles are written.

01:21:15:18 - 01:21:20:03

Katko said as the battle around public rights of way.

01:21:22:11 - 01:21:24:04

Thank you. Okay.

01:21:25:09 - 01:21:37:14

I similarly will have some questions on the public rights management plan, but I think some of those are going to be held even after written questions, which we've discussed the timetable for yesterday.

01:21:39:13 - 01:21:40:09

So looking around the room.

01:21:40:11 - 01:21:41:00

For any more.

01:21:41:27 - 01:21:46:18

Comments on transport and access for online.

01:21:50:22 - 01:21:51:07

Okay.

01:21:51:29 - 01:21:52:23

So think that's it.

01:21:52:25 - 01:21:53:11

From.

01:21:53:13 - 01:21:54:27

Me on that item.

01:21:57:01 - 01:22:26:07

Okay. So. That brings us to the end of matters in relation to our. Substantive agenda and before we want to move on to. So just to just to just to confirm then that tens of. Cumulative assessments and statements of common ground were referred to those already. And before we go on to look at the action points, is there any any final points anybody wanted to to raise?

01:22:31:22 - 01:22:32:15

Yeah. Picture already.

01:22:32:17 - 01:22:37:17

7000 acres. We kind of came to a rather hurried stop.

01:22:38:00 - 01:22:46:11

That's that's me. So we're going to finish by 530 because it's been a long day. And I did want to wrap things up by that time. We could.

01:22:47:06 - 01:22:47:22

Okay.

01:22:49:11 - 01:22:52:02

Understood. Will tend to quick. They.

01:22:53:19 - 01:23:07:25

We wrapped up at lunch very quickly and just wanted to draw attention to a, a document that we didn't discuss. Um, but I think it's important that you, you meet and that's called power system fundamentals.

01:23:08:22 - 01:23:09:09

Uh, it.

01:23:09:11 - 01:23:23:15

Describes the operation of the energy system, and it particularly explains the difficulties created by intermittent renewable generation about its variability, uncertainty and a thing called specificity. Um.

01:23:25:08 - 01:24:02:13

Which describes that, you know, north western Europe has potential for wind generation but has low solar generation potential. I think that's an important document. It's actually written by the applicants, technically. Um, and you need access to that. I can follow that on in terms of the. Concluding points from us on today's material. I think it is very difficult for us to assess exactly what the scheme is that we're considering, given the fact that we've shifted from 40 to 60 years within the day.

01:24:03:12 - 01:24:36:11

And that there's no there is no capacity cap. Um, and that means it's difficult to understand the benefits that the scheme will attract. How many panels are involved? The resource resources therefore required to create the scheme, the CO2 footprint the scheme has as it's currently presented. Um Rochdale envelopes being used and quoted to effectively maximise development scope. We've talked about the height of 4.5m panels.

01:24:37:13 - 01:25:10:19

Um, but as a result, it's not been adequately explored. What could be done to mitigate the impacts of the development, for instance, through reducing panel heights? Um. Clearly, the applicant relishes the detail and draws the process through into technical machinery. And it really does feel like something

like an Alice in Wonderland world where we we follow the applicant down a rabbit hole of technical detail, and after convoluted assessments, black becomes white.

01:25:11:01 - 01:25:43:23

And, you know, we talk about three versus three bland and miss the point therefore about overall land use. We talk about enhancing landscape. And yet somehow we're covering thousands of acres with 4.5m panels. And ultimately we create a proposition where it's logical somehow to cover one of the areas with the lowest solar gain in the world with solar panels. When actually we'd end up with more solar panels here than possibly anywhere else on Earth.

01:25:44:20 - 01:26:06:26

And. And we talk about the technical detail of things like soil quality, when that's only ever relevant if if the land is ever restored, which I don't think anyone's got any faith in. And so just along the way, it is incredibly easy to lose perspective. Uh, and how we explain the outcome of this.

01:26:08:12 - 01:26:14:15

Uh, and the legacy we leave to our next generation. And I'll leave you that. Thank you.

01:26:16:09 - 01:26:53:23

Mr. O'Grady, and I apologize if it seems that we're rushing things or finishing things abruptly. And obviously the additions to the people on the table, or a lot of other people behind the scenes who are making this happen, like we've got a duty of care to them as well. And just to just reiterate, this is the start of the examination. And so we will be returning to these matters and looking at them in detail. And just in terms of the action points, I've noted a particular action for 7000 acres in terms of the level of detail that you've presented to us today, the references you've referred to, it'd be really helpful to have that in written form.

01:26:55:09 - 01:27:26:20

Four for deadline one, please. And just just note that the applicant asked for the details of your background. Mr. O'Grady, hope you don't mind providing a brief summary of that. That that was one of the requests that was made. So that's moved seamlessly into action points, you say. So just so that was 7000 acres for the applicant. I've got a series of points. Um, first of all, the assessment and relating to the 60 year scheme in terms of the environmental statement, and I understand that that's underway and.

01:27:28:17 - 01:27:41:03

There's a suggestion you could look at the relationship between neighbour planting and the relevant load factor that this morning, and update of the statement of need. We should go to

01:27:42:18 - 01:27:43:22 a summary of the

01:27:45:18 - 01:28:13:03

information in terms of between terms of summary tables, and it was also referred to a review of the points for which we've got photo montage and material would be helpful. Um, we also talked about a comparative assessment of the landscape and visual effects of fixed, as opposed to tracker panels, or at least and an indication of whether or not that assessment was. Feasible by deadline one.

01:28:14:21 - 01:28:43:25

And then throughout today we've talked with various and references have been made to updates to documents, particularly the the draft sorry, the concept design parameters document the planning statement. So I'm assuming that the applicant has got got those things in hand. And similarly reference

has been made to statements of common ground and the need to progress matters, including in relation to archaeology and and transport.

01:28:45:18 - 01:28:50:15

Um, that's my quick rattle through action points. I don't know whether you've got any further.

01:28:52:16 - 01:28:53:11

So.

01:28:55:00 - 01:29:08:24

A note of those actions will be published on the recipient and console page of the National Infrastructure Planning website. As I've mentioned, it would be helpful to have those documents by deadline one if possible.

01:29:10:17 - 01:29:24:13

A recording of this hearing will be published on the project web page as soon as practicable after this meeting. And so unless there are any very final comments for anybody noting it's 533.

01:29:26:26 - 01:29:38:26

Just in terms of recording the actions, just yes, we will do an addendum to the statement of need for deadline one. So it will just be to update rather than a bite of it that would be more.

01:29:38:28 - 01:29:39:19

Helpful, would be most.

01:29:39:21 - 01:29:40:17

Helpful to see what's.

01:29:40:19 - 01:29:41:04

Changed. Yes.

01:29:41:06 - 01:30:01:01

And then just in terms of the photo montage, we will provide our thoughts on it by deadline one rather than there was there wasn't a commitment to provide any. It was a photo of you. So just in terms of how you phrase the action, it was a review by deadline one, and that was just to clarify that. Thank you. That's fine.

01:30:02:14 - 01:30:14:08

So all it remains is me to thank everyone very much for their participation in this hearing today, and to say that at 533, this issue specific hearing one is now closed. Thank you.