

Hearing Transcript

Project:	Cory Decarbonisation Project
Hearing:	Issue Specific Hearing 1 – Part 1
Date:	6 November 2024

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FULL TRANSCRIPT (with timecode)

00:00:05:09 - 00:00:39:08

It's now 10:00 and it's time for this hearing to begin. I'd like to welcome you all to this issue specific hearing covering options and alternatives on an off site, mitigation and compensation, and environmental matters pertaining to the application for a development consent order for the The Quarry Decarbonization Project. Firstly, can I just confirm that everybody can hear me? Thank you. I can also confirm with Mrs. Norris and Mrs. Allen, a live streaming recording of this event has commenced. Thank you. Um, just to just to let everybody know that there are a few, uh, technical issues with, uh, power supply.

00:00:39:18 - 00:01:10:14

Um, uh, as I understand the normal sort of cameras, which you're very focused on, speakers aren't working at this at this point, but there is a camera, uh, providing live stream at the back of the at the back of the room. Um, at some point, hopefully the, uh, the other cameras will, uh, will switch on. It just means that if you're joining us by live stream, you're probably seeing a wide view of the room, I think. One of the monitors wasn't working, but I'm. I'm comfortable. The two behind me are working. I think there's one over there working as well. Oh, I'm just told the other one's working as well.

00:01:10:16 - 00:01:47:12

So that's, that's that's good. So thanks very much for the AV team for getting us up and up and running on time. Um, my name is Mr. Jeff Underwood. I've been appointed by the Secretary of State as the examining inspector to examine this application. You may also hear me referred to as the examining authority. Some of the points I'm going to raise over the next few minutes may be familiar with some of those. If you've some of you if you attended the preliminary meeting or even floor hearing yesterday, however, this is a separate meeting. Uh, the proceedings aren't like some other meetings, perhaps like a public inquiry where, uh, we continue one day to the other.

00:01:47:14 - 00:02:18:00

So this is a meeting by itself. So I will deal with a number of issues, uh, for everyone's everyone's benefit. If you heard me say something similar, uh, before, please bear with me. I'll deal with a few housekeeping matters for those intending in person. Uh, please, can you set all devices, phones and similar to silence so they don't disturb the, uh, the proceedings? Um, if anyone requires the assistance of a hearing loop, there's an area at the back of the room which is demarcated with some white tape, where I understand that technology will work.

00:02:18:02 - 00:02:51:14

Work best. Um, for those of you, if you need the, uh, the toilets there on the other side of the foyer, outside this room, on either side of the corridor, just before the corridor turns around to to lifts. I'm advised that there are no planned, uh, fire alarms, fire drills today. So if we do hear the fire alarm go off, uh, we will need to evacuate. Um, the fire escapes are marked by the green signs you'll be familiar. Familiar with. Um, there's three on that side of the room. There's one on this side of the room. Uh, follow those and follow the other green signs you'll see from leaving there.

00:02:51:16 - 00:03:25:13

And that will take you to the, uh, to the assembly point outside the building. Um, I understand that there are some QR codes which will provide a link to the to the agenda if you if you need to. In the interests of impartiality and fairness, all remarks to myself need to be made during this hearing where everybody can hear the comments. There isn't an opportunity to make private comments to me outside of the hearing. However, my case team colleagues will be available. If you've got any queries, you may see me talking to the case team, but this will only be regarding procedural matters and not the merits of the application.

00:03:25:22 - 00:03:57:00

It's inevitable, given the layout of this particular venue, that I may see you outside of this, uh, this room. Um, I won't be. I'm not being rude, but if I if I do bump into you, I won't be entering into any, uh, conversation. But at the same token, you can be assured that if I'm occasionally in the same spaces as other participants, uh, there'll be no discussion of the application or examination with them, either. For those attending online, I think the case team will have already explained, uh, the arrangements. But as an arranger, Please, if you could keep your microphones muted and camera switched off when not speaking.

00:03:57:14 - 00:04:37:12

Uh, this will avoid background noise and can assist with broad band width. And please note that the chat function is switched off for those of you who are watching the live stream. Uh, when we adjourn, you will need to refresh your browser when we resumed to follow the event. This meeting will follow the agenda published on the National Infrastructure Planning website on the 28th of October, 2024. Um, it has an examination library reference of EV 1002. This is a revised and expanded version of the initial agenda, uh, that I published in what I refer to as the rule six letter, which was the, uh, letter to which uh, announced the arrangements for the examination of 7th of October.

00:04:37:14 - 00:05:08:20

And it also contains a number of, uh, detailed points I'd like to like to cover. It'd be helpful if you had a copy of this, uh, to hand. Uh, and I'd also ask if the applicant can share. Uh, share the agenda at the appropriate junctures so that people can follow the the points that the points were on. And as I mentioned, I think there's a QR code circulating. Um, the agenda is for guidance only, and I may add other consideration, considerations or issues as we progress. Um, uh, also the agenda in some respects is a two levels.

00:05:08:22 - 00:05:39:21

I've asked the applicant to provide some high level, uh, information about their case, given that we're at the very start of the examination, however, I might have some quite detailed points that I also want to explore as well. Um, and hopefully from the notes that I attached to the agenda, you've got some

notice of the sort of the sort of things I'd like to like to look at. I intend to conclude the hearing as soon as all relevant contributions have been made and all questions asked and responded to. Um. However, given the agenda and the number of attendees, the meeting may continue after lunch.

00:05:39:27 - 00:06:16:20

Uh, if so, I'll ensure that it closes at, uh, uh, 5:00 at the very latest, not least because the venue needs to be vacated after for for a different, uh, different event. Um, although at this point I don't anticipate it can continue for that long. If if discussions can't be concluded, uh, by the close of business today, it may be necessary for me to prioritize matters and defer other matters, uh, to further written, written questions. Likewise, if you cannot answer questions being asked or require time to get the information requested. Um, can you please indicate that you need to respond in, uh, in writing? I intend to take a break mid-morning.

00:06:16:28 - 00:06:58:15

Uh, if we're still going to break for lunch and depending on progress, uh, a break mid afternoon. Today's hearing, uh, as you're aware, isn't being undertaken in a hybrid way, which means some of you are present with us in the venue and some of you are joining us virtually on, uh, Microsoft Teams. I'll make sure that however you decide to attend today, you'll be given a fair opportunity to participate. It's important to point out that I can refuse to allow representations to be made at this hearing if I consider that they are irrelevant, vexatious, or frivolous. Relate to merits of policy set out in national policy statements, repeat other representations already already made, or relate to the compensation for compulsory acquisition of land, or an interest in it, or a right over land.

00:06:59:19 - 00:07:36:09

A recording of today's hearing will be made available on the Quarry Decarbonisation Project section of the National Infrastructure Planning website, as soon as practicable after the hearing is finished. With this in mind, please ensure that you speak clearly into the microphone stating your name and who you're representing each time before you speak. I'm conscious that there may be some of you who are making multiple contributions during today's meeting, but it is important to introduce yourself each time because it makes it clear on the recording. And for those following online, who's speaking? Um, but from experience yesterday, I think the the the the microphones work will work quite well.

00:07:36:11 - 00:08:09:18

I just encourage everyone to, uh, not to get perhaps too, too close to them and to speak, uh, speak clearly and slowly, just to make sure that everybody can, can hear you. If you're not at a table with a microphone and you do need to speak, there is a microphone. So please signal for one and wait for it to be brought to you before you speak. Please also note that any recording and any transcript will be the only official recording of this meeting, forming part of the examination documents and any social media posts, blogs, messages or similar forms of communication will not be accepted as evidence into the examination and will not be seen by myself.

00:08:10:23 - 00:08:45:04

I link to the planning Inspectorate's privacy notice was provided in a notification for this hearing in the rule six letter. I'm assuming that everybody here today is familiarize themselves with this document, which establishes how the Planning Inspectorate, uh, deals with personal data of our customers in accordance with principles set out in data protection laws. It makes it clear that today's hearing will be recorded and live streamed. So unless absolutely essential to do so, please do not provide any information, any personal information, either about yourself or about other parties, uh, that you would not want to be, uh, shared on a live stream or obtained on a recording.

00:08:45:12 - 00:09:22:17

Please speak to Mrs. Norris or Mrs. Allen if you've got any questions about this. I'm now going to briefly explain the purposes of this, uh, issue specific hearing. Having read the relevant representations, I consider it to be of benefit to explore some aspects of the application at the earliest stage in the examination. Help, help inform me on a number of matters in these areas and on the options and alternatives, the approach to on and off site mitigation and compensation, and to particular aspects of environmental matters, largely relating to existing proposed management arrangements of particular areas and the interrelationship of those areas to other developments and the application.

00:09:24:01 - 00:09:33:06

Those are the, uh, the the comments I wanted to make about the procedural aspects of this hearing. Can I just ask to see if anybody has any questions about the procedural aspects?

00:09:34:23 - 00:10:38:04

I can't see anybody indicating in the room nor online. So I'll continue. Um, there may be a reference to a number of, uh, a number of different documents. Um, I'd encourage everyone, just to be clear, if they are referring to a document. Uh, what what the title of the document is. Uh, if if you have it to hand, the, uh, examination library reference would be would be helpful, but not not essential if that's going to take some time to, uh, to, to find, um, uh, and although I'm not suggesting that everybody needs to open these, uh, at the moment, I anticipated that, uh, we'd need to refer to to the works plans, the engineering plans, indicative equipment layout, statement of reasons, the draft development consent order, the environmental statement, chapter three, which is consideration of alternatives, the terrestrial site alternatives report, the jetty site alternatives report, the mitigation schedule, the outline landscape, biodiversity access, recreation uh and delivery strategy, which uh, I think is more conveniently referred to to the short end of Lambert's.

00:10:38:09 - 00:11:16:26

I think that's correct. So that's probably a document we will hear referred to a number of times this morning. So that is the that's the acronym. And I think given it's got such a long title it will be easier to call it Le Bods. Um the outline sorry, the the applicant's Responses to relevant representations document and the appendices that are attached to those. Um, and in terms of those appendices, there was one illustration that the that was missing from the appendices that the applicant provided relatively recently, which has been shared on the on the website as part of appendix H, I'm now going to ask those of you who are participating in today's meeting to introduce yourselves.

00:11:16:28 - 00:11:47:23

When I seek your organization's name, please could you introduce yourself? State your name and who you represent, uh, and which agenda item you wish to speak on. If you're not representing an organization, please can you confirm your name, summarize your interests in the application and confirm the agenda item which you on which you wish to speak for larger teams? Um, it's probably

not necessary to introduce the whole team. At this stage. If some of you are not intending to to. To speak. Um, but if that changes, please just give your name at the at the time. If it transpires that you do want to make a contribution later on.

00:11:48:05 - 00:12:19:15

I'd be very helpful if everybody, when you introduce yourselves, could, uh, let me know how you wish to be addressed. That is Mrs.. Miss, miss. Doctor. Mr.. Insert and so on. Um, so I'm going to start off by asking people in the room and then our online, uh, participants, however, those organisations who've got uh, members both in the room and online, it would be most effective to introduce themselves all to all at once rather than, uh, waiting. Um, so can I start with the, uh, the applicant and, uh, their advisors? Thank you sir.

00:12:19:17 - 00:12:20:02 Good morning.

00:12:20:04 - 00:12:51:26

Sir. My name is Andrew Tate. Tate. Um, King's council. Um, to my left is Mr. Matt Fox of Pinsent Masons. To my right, Miss Rebecca Clayton Clayton of Council. And then just proceeding down the table. Miss Kirsten Bury, the planning lead. Uh, Mr. Tony Alderson, the technical lead for carbon capture and storage. Mr. aristocrat, the master plan lead. And doctor Paul Joyce, the ecology lead at the end of the table.

00:12:52:25 - 00:12:56:19 Those are the persons we expect to be speaking during the course of the day. Sorry, Mr..

00:12:56:21 - 00:13:01:25

Tate, I wasn't writing quickly enough. Could you? Would you mind introducing the last gentleman? Yes.

00:13:02:11 - 00:13:14:16

So, um, the last two gentlemen, Mr. Aristocrat. Great. Thank you. Who was the master plan? Lead and doctor Paul Joyce GC, who is the ecology lead for the project.

00:13:15:16 - 00:13:16:15 Thank you very much, Mr. Tate.

00:13:19:16 - 00:13:27:21

Now, in terms of, uh, other organisations who've indicated that they are going to participate and are in the room, uh, London Borough of Bexley Council.

00:13:29:08 - 00:13:33:16 Hello, I'm Ian Smith, I'm an acting area manager in the planning department.

00:13:37:19 - 00:13:41:28 Good morning. My name is Ken Chan. I'm the solicitor for the council. 00:13:45:02 - 00:13:59:19

Thank you. Yeah, I did say that. There's other members of your team. If you're not intending to speak, you don't need to introduce yourselves at this time. Um, I've got a note here that National Highways might be present in the in the room or online. Ah.

00:13:59:29 - 00:14:04:27 You're not in the room. Um, Tanzi Galvin, senior lawyer at National highways.

00:14:08:23 - 00:14:09:08 Thank you.

00:14:11:21 - 00:14:17:06 Uh, now, so you've crossed Ness nature reserve. I wasn't sure whether there'd be something. Oh, yes.

00:14:18:05 - 00:14:23:06 Good morning, Laurence Pinturault. For safe cross ness nature reserve.

00:14:30:02 - 00:14:33:02 Oh, and Miss Cockle, Is that correct?

00:14:33:23 - 00:14:35:12 Caitlin Cahoon, Suffolk Law Center.

00:14:35:14 - 00:14:36:21 Sorry, I apologize.

00:14:42:26 - 00:14:43:11 Thank you.

00:14:45:15 - 00:14:49:04 Um. And representing Llandysul and Munster Joinery.

00:14:50:25 - 00:14:57:09 Good morning sir. Uh, my name is Richard Tierney, King's counsel. Uh, I'm a parent for Lancelot Munster Joinery.

00:14:59:04 - 00:15:10:17 Thank you. And, uh, I did have a note that, uh, James Hewitt was here and wanted to to speak. I don't know whether that's the intention to speak, Mr. Hewitt.

00:15:13:12 - 00:15:16:24 So just just. Okay. Just wait for the microphone to be brought to you.

00:15:17:20 - 00:15:21:05 I might be interested to speak, sir. An item 2.1. Thank you. 00:15:21:08 - 00:15:25:07 And could you just, uh, just summarize your interest in the application, and, uh.

00:15:25:12 - 00:15:27:16 My name is James Hewitt. I have no affiliation.

00:15:28:00 - 00:15:28:22 Thank you, Mr. Hewitt.

00:15:33:22 - 00:15:46:22

And just before I move on to asking our online attendees to introduce themselves or those who haven't done already. Uh, can I just, uh, check to see if there's anybody else in the room who was anticipating to speak? But I've missed off my list.

00:15:48:10 - 00:15:59:09

A quick scan around. I can't see any, uh, I can't see any hands. Um. Thank you. So I'll now move on to on online attendees. Um, I've got the the Port of London Authority.

00:16:01:19 - 00:16:21:02

Good morning sir. Yes, my name is Mrs., uh, Vicky Fowler. I'm a solicitor and partner at Gowling Wlg, and I'm joined by Lucy Oing, deputy director of planning and development at the PLA. Um, so whether we need to speak on any of the agenda items will depend on the questions you have, sir. And what is said by others.

00:16:22:03 - 00:16:23:24 Okay. Thank you, Mrs. Fowler.

00:16:26:06 - 00:16:36:13 Um, next on my list, I've got Thames Water Utilities Limited and also Thames Water and Unconscious. There are different, uh, organisations there. Um.

00:16:39:00 - 00:16:41:14 Do we have anyone from either of those organisations?

00:16:44:08 - 00:16:52:02

Honestly, my name is David Wilson. I'm a town planner with Thames Water Utilities. I think we're all representing the same Thames or Utilities Limited.

00:16:52:22 - 00:16:53:07 Thank you.

00:16:54:18 - 00:17:07:21

Good morning sir, it's Mr. Martin Pennington of Eversheds Sutherland, on behalf of Thames, I miss Lister. Um, I think there was an issue with two representations being submitted, but, um, it is all Thames Water Utilities Limited.

00:17:08:17 - 00:17:10:01 Okay. Thank you for clarifying that.

00:17:11:21 - 00:17:26:06

Um, and yeah, the next organisation I had on my list was saved crossing this nature reserve. But you've already introduced yourselves, so thank you. Is there anybody else online, um, who I haven't invited to introduce themselves, who's intending to speak?

00:17:30:27 - 00:17:35:14

I can't see any hands, Rose or anybody popping the camera on, so thank you very much.

00:17:37:07 - 00:17:47:12

Moving on to the main agenda items now. Um, actually, just bear with me. Make sure that I've got the correct, uh, the correct thing in front of me.

00:18:06:10 - 00:18:42:03

Yeah. So I think I mentioned before, as well as, uh, some brief summaries by the applicant that I've, I've invited, there will be some detailed matters I'd like to investigate as well. Um, so please note, the issues I wish to explore today are those which, uh, it would be helpful for me to understand at the outset of the examination and clearly don't reflect all the important and relevant matters I may wish to explore further. And throughout the examination, I've referred to mitigation and conversation in the agenda in order to be inclusive. Um, these have different meanings and importantly, different positions in the mitigation hierarchy are set out in in national policy.

00:18:42:18 - 00:19:18:20

Uh, and uh, uh, I note that the outline, uh, leopards, uh, ascribe some works to uh, and proposals to those approaches, if therefore would be helpful when addressing specific points or roles, if the level in the hierarchy of particular, uh, works or actions was, uh, was, was pointed out. Um, I understand that, uh, the applicant, having seen the agenda, wants to provide a PowerPoint presentation as a way of addressing some of the points. Um, I don't have an objection in principle to that, as long as it aids my understanding of the agenda points and we can progress through the agenda.

00:19:19:00 - 00:19:28:13

Um, including any detailed points I've, uh, I've highlighted. I just wanted to make sure it wasn't going to be a whole morning of PowerPoint, but I'm sure you're taking that into account.

00:19:28:19 - 00:19:31:29

No, and they're existing documents from the library.

00:19:32:09 - 00:19:38:26

In fact, thank you for confirming that as well. But obviously any any illustrations presumably will be extracted from the documents that you have.

00:19:39:03 - 00:19:45:14

I think there might be one Google view in and amongst that, but the remainder are all existing documents.

00:19:45:20 - 00:20:11:02

I think if it's a if it's a publicly available sort of map or image, that's going to help illustrate your point. I don't have any issue with that in in principle. Thank you. Um, so that's covered everything. I think I wanted to, uh, raise on, uh, the first item on the agenda, uh, just before I move on to, uh, agenda item two. Can I just see if there's anything else anybody wants to raise at this point of the hearing?

00:20:15:12 - 00:20:46:20

I can't see anyone raising a hand in the room or online. Um, so I'm going to start off, uh, by inviting the, uh, the applicant to briefly summarize the approach to alternatives with particular reference to, uh, terrestrial zone option assessment and selection process. Um, following which I may have some questions. And I've, I've provided some, some notes to give you an idea of the sort of questions I might be asking where you may pick those up in your, uh, in your explanation or you may not. So, uh, over to you, please.

00:20:48:10 - 00:21:15:03

Thank you. Sir. Um, I'd like it possible to start with, um, uh, Mr. Alderson, who's the technical lead, carbon capture and storage, um, just to identify what the project was looking for in the first instance, but also to pick up, um, the additional note two, one about the technical implications and limitations of flue gas ducting. Uh, uh, routing. So, um, uh, there is a, uh,

00:21:16:18 - 00:21:33:12

image on the screen which is taken from the design approach document, and each one is the source of each of these. Uh slides is identified on on the on the document. So if I can ask Mr. Alderson, please to, um, respond on that.

00:21:34:09 - 00:22:04:11

Thank you. So, so, yeah. So this image, uh, represents a simplified sort of block flow diagram illustrating the main process elements of the carbon capture facility, obviously conscious that not everyone is familiar with the technology and what it includes. So as you can see, the flue gas supplied from side one. Side two, the two of the capture plant first undergoes pretreatment, then is fed to the main absorber column where CO2 is removed from the flue gas with the remaining flue gas discharged to atmosphere.

00:22:04:21 - 00:22:42:07

You know the solvent used in that process. It goes through a heat exchange, so that is then cooled prior to entering the absorber and then reheated before goes to regeneration system um, from which the CO2 is then removed from the solvent through the application of heat. The. There is also storage of fresh makeup solvent to replace any losses from the system or solvent that is degraded and needs to be replaced, and that is then added to the system where the CO2 that is then removed from the solvent at relatively high concentration at that point needs to be compressed and conditioned, which is specifically includes dehydration, removal of water from the CO2.

00:22:42:09 - 00:23:18:08

At that point we then because the CO2 has been exported by ship in liquid form, we have a liquefaction process and then the liquid CO2 is stored temporarily on site prior to being exported through the loading system onto ships. So those are the main sort of process elements. In addition to that, we have supporting plant, which includes back pressure turbines where the steam supplied from Riverside one, Riverside two is at high pressure, but it's only required as low pressure steam to provide the heat for solvent regeneration. Therefore, we pass that high pressure steam through back pressure turbines to generate electricity and make valuable use of the steam available.

00:23:18:13 - 00:23:55:03

We also have water treatment for the supply of processed water and cooling water to the plant. Um, and wastewater treatment of any any wastewater streams from the process prior to discharge. And we have the cooling water system, which provides cooling throughout the plant. In addition to that, we have other supporting facilities such as the control room, welfare facilities, workshop stores, security hoods, visitor sort of briefing rooms, etc. that make up the anti facility. So if we move on to the next slide please, then this illustrates the an indicative layout of how those facilities are accommodated on the site.

00:23:55:05 - 00:24:44:00

And as you can see, the entire sort of eight hectare site is filled with process units and supporting plant. The indicative that we we've put forward is based on a sort of a rational design approach of sort of a flow through of the process from from north to south, self, so that the flue gas supply from Riverside one, Riverside two to the capture plant. Um, as a minimum length of ductwork before before reaching the capture plant, the main sort of capture facilities, as illustrated on the previous slide, sort of flow through from from north to south with the absorber regeneration, CO2 compression, conditioning and liquefaction prior to the to the storage, which is in the the six sort of circular items sort of midway down on the left hand side which represent a storage tanks.

00:24:44:09 - 00:25:21:23

Um, and then we have utility systems and other supporting plant further to the south, including the, the cooling system, um, electrical infrastructure, you know, occupied buildings, um, the maintenance lay down area and provision for, for buffer water storage at the south end of the site. Um, so it's the rational layout of facilities. We we segregated the occupied buildings from the main process area. Um, One important thing to note is we we've tried to minimize the footprint requirements by, by sort of organizing that the plant in a, in a in a compact fashion.

00:25:22:17 - 00:25:54:23

Um, it's important to have a continuity between the process elements and the plants to, again, to, to minimize space requirements and also to facilitate operation and maintenance aspects of the plant and to allow your safe and, um, successful operation of the facility. Um, in terms of the the flue gas duct work, then then as I mentioned, we we, we sought to minimize the length of the duct work by having the, the layout of the plant with the flue gas supplied at the north end to the absorber plant.

00:25:55:03 - 00:26:28:24

Um, the duct work is, is located on, on pipe bridges at elevation. You know, for supply from riverside one riverside to your to the capture plant. You know, the that's the only sort of technically viable way of supplying the flue gas Against inductive work, and the rooks themselves are sort of several meters in diameter. So the 3 to 4 meter diameter duct work because we are dealing with sort of very low pressure flue gas, you know, the exhaust from Riverside one, Riverside two, also it's elevated temperature above 100 degrees C. So the option of sort of burying that ductwork isn't, you know, really valuable.

00:26:29:02 - 00:27:01:25

You know, firstly, you would require your significant excavation to be able to bury such a large diameter duct. And secondly, because of the high temperature, you would be faced with heat leak from the duct into the surrounding soil. And at such high temperature that heat leak, you know, unless you took specific mitigation measures against it, would kill off surrounding flora and fauna for several meters around the duct work with that heat leak at a very high temperature. So we'd have to have specific means of insulation cooling around that, which would add to the complexity and again, sort of further reduces the viability of of a buried solution.

00:27:01:27 - 00:27:10:06

Therefore, the the elevated ductwork is seen as the only technically viable way to, to to get the flu gas from Riverside one Riverside to to the capture plant.

00:27:11:26 - 00:27:12:11 Can I just.

00:27:12:13 - 00:27:42:14

Ask a quick question? Thank you for explaining explaining the approach and that things are run in a north south arrangement. And is there any possibility for any sort of vertical integration? Because I noticed you explained that everything's, um, so sort of set out. I understand your point about the I think the segregation of some occupied buildings from the, from the technical side. But, um, is it is there any sort of ability for vertical integration of any of any of these, uh, uh, functions?

00:27:43:04 - 00:28:16:14

Yes, we do have some, some degree of vertical integration where possible. So where we have, um, pipe racks, they're carrying pipe work and ductwork etc. in some locations we have equipment mounted sort of below that at grade where that's possible to do that and other locations, we have sort of multiple levels of equipment, not one above the other, but you have to sort of take into account the maintainability of that equipment. So you do need free access to, to allow access to, to equipment which, which does limit the opportunities for vertical integration in some places.

00:28:16:21 - 00:28:48:07

Um, occupied buildings can be multiple multiple levels as well. So we can have for example, the controller and building can be so multi-level so that, um, your welfare facilities on one level and the main control controlling itself on another. Um, and, you know, we've sought to minimise the space required, but, you know, from, from the, the sheer amount of equipment and other plant that's required for such a complex process facility, then, you know, the space requirements are taken up by all of that plant.

00:28:48:09 - 00:28:51:03 You're requiring an eight hectares plots to accommodate.

00:28:53:29 - 00:28:56:08 Yeah. Uh, Mr.. Mr.. Tony. Uh.

00:28:57:16 - 00:29:12:03

I don't Richard NFL antler monster. I don't know whether you want, um, as we go along for me to pick up the points that I wanted to raise on on these issues, or whether you want me to wait until the applicants finish their presentation. There's a couple of points on what's just been said.

00:29:12:16 - 00:29:19:16 Yeah, I mean, I realize I jump jumping in there. Um, if at all possible, maybe if you could hold them.

00:29:19:18 - 00:29:20:03 I'm very happy.

00:29:20:26 - 00:29:21:17 And.

00:29:22:05 - 00:29:22:23 Believe.

00:29:23:00 - 00:29:47:09

Me, but I realize I'm perhaps, uh, you know, using my my position of privilege to be able to interrupt and asking you to to to keep keep the questions. Uh, the reason I do that is I think that there is there is potential risk that we actually get we go off down a bit of a tangent. Um, and then we sort of lose where we go. So, uh, if that's okay, Mr. Turney. Thank you. Okay. Thank you, Mr. Olson. I'll let you continue.

00:29:47:21 - 00:30:23:28

I think the final point I just wish to raise was that in terms of the, um, the plot requirements for each of the process elements, then they are made up by information we received from the carbon capture technology providers that we, that we liaise with or men sort of process elements from other equipment suppliers and from in-house engineering design calculations for the balance of plant elements. So it's a it's a combination of sources which have come together, but with all are based on sort of robustness of engineering methodologies and in some cases from previous projects that the technology providers have worked on.

00:30:27:15 - 00:30:29:22 Thank you to to Miss Barry.

00:30:30:19 - 00:30:54:01

Yes, sir. So, um, that I think has dealt with the first part of your additional note of two one um, and then coming back to site selection and the second part of your note on two one, which relates to site

selection for flue gas gas ducting. But more generally, I'm going to ask Miss Barry now to, um, uh, focus on an overview of the, uh, site selection process.

00:30:58:15 - 00:31:31:04

Good morning, sir. Uh, Miss Berry, on behalf of the applicant, um, and I just want to, um, start at the beginning. Um, of the alternatives by referencing National Policy Statement NPS in one obviously, the primary, uh, policy reference for the project. Uh, and within that policy document, it sets out the, um, expectations for alternatives, particularly at paragraph 4.3.22. Um, and then that recognizes consideration of alternatives.

00:31:31:11 - 00:31:59:07

Um should comply with policy requirements that should be carried out in a proportionate manner, but critically, that only those alternatives that can meet the objectives of the proposed development need to be considered. So so I wanted to start with just to set the context for the project, because that's important setting out what are the project objectives. And so what that really presents the framework for the site assessment that was then undertaken to make sure it was proportionate in, in accordance with um, npm one.

00:31:59:09 - 00:32:31:14

Yeah. The only one thing I'm conscious of, uh, what the MPs so the MPs says about alternatives. But of course, um, the consideration of alternatives is also a consideration in any application to compulsorily acquire land. And, uh, you know that there is a, uh, there's perhaps a distinction. Now, obviously, this issue specific hearing is really covering everything. I'm not reserving sort of discussion about that purely for a compulsory acquisition, uh, hearing. Um, so obviously there are different tests that I'll need to, uh, I'll need to consider.

00:32:31:16 - 00:32:43:19

So I just wanted to make that distinction about what the what the M.P.s says about alternatives and other tests that, uh, in my recommendation to the Secretary of State, I'm going to need to take into account. Sorry, sorry. Materiality.

00:32:44:06 - 00:33:21:01

Not a problem. Thank you. Sir, that's the clarification. Um, agree with that. That's fine. Uh, so, Mr. Barry, on behalf of the applicant, um, just wanted to set out then the context for the project. So what what is what leads us to the project objectives? Corey. Uh, Corey. Environmental Holdings Limited, uh, reduce that. Relate that to Corey. Uh, is long established on the River Thames. The company was set up in the late 1800s. Um, and it is, is a was a river operating business from the start. It's been established at this site in Belvidere with, uh, the Riverside One energy and waste facility operating in 2011.

00:33:22:04 - 00:34:01:05

Riverside two, a second, uh, energy and waste facility is currently under construction. Uh, and between them, those two facilities would provide approximately 50% of the residual waste management strategy required to manage London's waste. So they are of themselves important strategic infrastructure, and they are appropriately located at a site which is allocated for strategic waste management. Uh, and Middleton Jetty. The existing jetty is a safe guarded wharf. So so the left

hand column of of the slide in front of you, which is taken from the design approach document that sets out sort of current operations.

00:34:01:07 - 00:34:10:00

Residual waste is collected. It's brought by the river using tugs and barges to the energy from waste facilities at the Riverside campus.

00:34:12:07 - 00:35:01:15

The most significant residue from these facilities that is not already being proactively managed is carbon dioxide. Uh, in uh, in 2022, Riverside one represented some 99% of quarries carbon dioxide emissions from the company as a whole. So clearly it's, uh, it's a priority to to address those emissions, other measures being taken across the company. But this is the focus for this project. Decarbonization is a project of critical national priority infrastructure as set out in NPS n one, and the project seeks to capture the carbon dioxide which is generated from the management of residual waste, and then use the river to export it for its sequestration.

00:35:01:17 - 00:35:43:09

So that's the second column you can see on on the graphic there. So this, uh, this concept sets the uh, framework for the project objectives. They are that the carbon capture facility necessarily is supporting part of the energy cities needs to be located in the vicinity of Riverside one and two and two, the River Thames, uh, for the export of carbon dioxide. It clearly needs to be a sufficient size to accommodate the the development, including all the supporting plant and associated infrastructure, and it needs to be deliverable in a timely manner, not least to meet some of the early policy priorities which we're all familiar with.

00:35:44:19 - 00:35:58:06

So reference referencing, uh, MPAC and one again, certainly on the policy side clearly cite options that cannot meet these objectives are not reasonable alternatives, and that's where we have focused the attention.

00:35:59:28 - 00:36:31:02

So the next slide, um, just takes you through, uh, the uh, site assessment process that was applied. Don't intend to go through this in detail. It is all set out in the, uh, submission documents, not least the Terrestrial Site Alternatives Report or star TSR, um, the design approach document and the planning statement. Um, the TSR reference is, uh, AP 125 planning statement.

00:36:31:04 - 00:36:42:24 References App 040 and the uh design Approach document is App 0442046 for those who wish to follow it.

00:36:45:20 - 00:36:47:02 In terms of the um.

00:36:50:08 - 00:37:23:15

So then so we looked at, uh, we applied the option using principles which have been drawn from the project objectives and developed project principles. Uh, and, and one strand of that then was to go and

develop the design principles and apply those through the project. And Mr. Crack will be able to pick up in more detail on those if you have questions on those elements. The project objectives informed the auctioneering principles which were applied to the, uh, development zones. You can see there that are also presented in figure two three.

00:37:26:11 - 00:38:12:03

So the auctioneering principles were drawn, were derived from the need to address the, uh, requirements of someone in terms of undertaking a proportionate, uh, assessment. Also recognising that project does indeed involve third party land. If you, as you've already identified in the tests in terms of compulsory acquisition and ensuring that the policy considerations that were considered were relevant to the terrestrial sites alternatives. So. So in terms of setting the proportionate framework for policy, we haven't considered within the site assessment matters that would be relevant to the Water Framework Directive or the Habitats Regulations Directive, for example, because we have passed those legislative framework to pass the requirements of those, and it wouldn't be relevant.

00:38:12:05 - 00:38:17:22

It wouldn't give us any differentiation across the sites to consider those as part of the site assessment process.

00:38:19:12 - 00:38:54:09

Similarly, in terms of the, um, the protective policies that were considered and recognising the need for the mitigation hierarchy to be followed, we focused on specific, uh, local policies that would be relevant to differentiating those terrestrial sites alternatives. We wholly recognise it's not the full suite of policies available, but they're the ones that are relevant to this location and identifying the right site. So within that suite of policies considered, we picked up metropolitan open land, which is generally true, to be recognized as having the same status as Greenbelt.

00:38:54:11 - 00:39:23:24

And I'll come back to that point later. Uh, accessible open land, uh, which I has has generated some discussion in relevant representations. We included accessible open land being both designated as and used as public open space, which has not been deemed surplus to requirements by the local planning authority. It is recognized separately to Molle considered separately to Molle recognizing the recreational value it has in this location.

00:39:25:17 - 00:39:38:23

Uh, and we also looked obviously at the local nature designations, including the Cross Ness Nature Reserve and the Sites of Importance for Nature Conservation. Cinque, which in this location has metropolitan importance.

00:39:42:15 - 00:40:14:21

Uh, so the you can see on the slide on the right hand side here, we considered, um, all areas looked all all the way all sides of the Riverside campus look to the north to test the, uh, sensitivities in terms of reclaiming land from the river, uh, to the east, which incorporates Belvedere Industrial area. And the area covered by the east designation there incorporates the Iron Mountain Records facility. And then to the right, uh, the little facility which was built a couple of years ago.

00:40:14:23 - 00:40:42:24

It's quite a modern, modern facility to the west. We looked at potential for reusing the disused sewage sludge incinerator, uh, on Thames waters, uh, land. And then in the south, recognizing that there was potential for different outcomes in terms of the designations and allocations that exist in that area, we identified five different locations to consider, which are shown on the next slide.

00:40:45:09 - 00:40:59:15

I don't intend to go through all of the areas in detail, sir. It's, um, in front of you in the teaser addendum. Um, I will be picking up on your specific questions that you have asked and, um, uh, on sort of the highlights of that, that process.

00:41:03:11 - 00:41:34:15

So as I've said, the South area, there was various different zones available of eight hectares. We tried to sort of follow existing fill patterns where we could in identifying those blocks and in testing what the outcomes of of the different of the different areas in terms of the strategic industrial location allocation which follows Norman Road, uh, the zinc and the mall and nature reserve designations, recognizing that the area is crossed by public footpaths.

00:41:34:27 - 00:41:39:03

Um, so the the potential for those, uh, to be impacted.

00:41:40:22 - 00:42:11:02

The assessment very much focused on the eight hectare, the core eight hectares required for the carbon capture facility. What's not shown on, on any of these areas is, uh, sort of potential routes for the ductwork. We did consider those, um, in principle, but they weren't sort of mapped into the, into the zones that were considered. So so I was next going to turn to your questions on the ductwork and its, uh, its implications within the within the site alternatives work.

00:42:12:17 - 00:42:47:24

And uh, it was considered across all of the development zones through the auctioneering principles and particularly opportunity auctioneering principle five, which considered the utility connections are really demonstrated the importance of proximity for the carbon capture facility to the Riverside campus, having identified South Zone one as the preferred location. Uh, we then look more closely at what are the roots, potential roots for the ductwork to follow. And this is this figure is from the environmental statement, chapter three setting out the alternatives and the four different routes.

00:42:48:21 - 00:43:37:24

So the stack for Riverside one is at the southern end of the building. So it's a it's a short, relatively straightforward connection. Um, across to the northern point of South San Juan. But the stack for Riverside two is located at the northern end of the building, and so the flue gas ducting needs to get from that point down to south zone one. We looked at all the routes, uh, around the site. Uh, option B was selected or route B was selected as the shortest route to South Zone one, avoiding infrastructure in the tens and or going over the Thames Path, avoiding the footpaths, uh, and avoiding utilities and the operational movement within the river campus within the Riverside campus.

00:43:39:00 - 00:43:58:07

So I'm aware that within relevant representations, there's been questions posed about why the flue gas ducting can't go through the middle of the site. And the next two slides, which have been submitted with the applicant's response to relevant representations at appendix E. So that's as 044.

00:43:59:24 - 00:44:41:00

These have been drawn up to show just the extent of development that exists or will exist once Riverside two is fully constructed within the site. You can see there there's several tall structures structures throughout throughout the site. There's roadways around the perimeter of the site through the middle, which is used by, uh, vehicles delivering waste. They're quite tall. Large buildings also need to allow maintain access for any emergency vehicles which may need to come in. Some of the roadways are at height, so the ramp leading up into Riverside to the southern end of the site there goes up the height and there's a ramp which leads up into the tipping hall at Riverside one.

00:44:41:02 - 00:45:22:20

It's also at height, uh, and along the northern boundary, which we can see better in the next slide, which shows the view south, there is the, um, flood embankment, which is a protected asset. So so there just simply isn't room within the campus in which to locate the flue gas ducting, which is why route being was chosen. Um, and recognising that it will sit within the Cross Nest nature reserve and the mole and the sink, we have undertaken early design work to see how we can minimise the impact of that ductwork, even at this stage.

00:45:23:13 - 00:45:46:02

So CC in front of you. Figure 512 from the D&D um app 045, which shows an early indicative sketch design for the gas duct work, which, as Mr. Alderson has explained, would be put at height but would enable, um, essentially ditched being dug back in and for habitat to be replaced and enhanced.

00:45:52:10 - 00:46:29:03

I return to the site assessment process and the next slide, uh, presents the rag chart, which is, uh, in the um, in the applicants response to relevant representations. And this the, the, the the approach behind this method behind this rag chart is set out in that report. Uh, but simply to note, it was undertaken as a graphical presentation of the analysis, which is set out in the TSR. So it's not new analysis, it's just meant as a, as an easy sort of way of seeing the outcome of that analysis.

00:46:30:06 - 00:46:40:02

No weighting has been applied to any of the optioning principles, and that was a deliberate approach to ensure a balanced consideration of all of the criteria.

00:46:41:20 - 00:47:13:26

What I think this chart shows very clearly is that there's no easy win. There's no obvious site anywhere. Uh, around the around Riverside two. There's no site which scores green all the way through. And so this is not an unusual outcome for large scale projects. And it's it's of their nature. They pose challenges. And each of the sites we looked at has some challenges. Critically, I would note South Zone one has got no red score.

00:47:13:28 - 00:47:25:22

So there's kind of no fatal flaw to that to that site. And what is open to us is the opportunity to bring additional enhancements within the project to to mitigate the harm.

00:47:28:17 - 00:47:29:28 The um.

00:47:32:16 - 00:48:03:18

South zone one performs well, um, in terms of recognizing it has the least impact on on metropolitan land within within the South zone. And then the we have some slides that are taken from the figures of the planning statement. And this first one shows the metropolitan open land. So it's the top, uh, the top element of the blue shading, which is identified a stable paddock in East Paddock, that is the land which is designated as Mall Stink and Cross Ness Nature Reserve.

00:48:04:07 - 00:48:13:20

Um, excuse me, which we on which we propose to locate the carbon capture facility. So of all the south zones, that takes the least amount of those designations.

00:48:16:06 - 00:48:41:24

The next slide shows the relationship with, uh, open space and green infrastructure. And again, you'll see that we've got the smallest land stake there. And importantly, we say the east paddock and stable paddock is not publicly accessible. It's not accessible open land. Um, and that we can enhance opportunities for that access to the local community.

00:48:46:11 - 00:48:51:12

And that accessible and non accessible open land is shown on the final figure there. So.

00:48:55:05 - 00:49:12:06

The outcomes of the site assessment process was unvalidated against the design principles and has been subject to further design evolution to further minimise the impact to the extent can and that is set out in the design approach document. And Mr. Crack can pick up further on on questions on that if you have them, sir.

00:49:14:12 - 00:49:18:12 So turning to your questions about the East Zone.

00:49:21:00 - 00:49:59:18

And in response to the relevant representations received. You will see we did the the what we call the Tsar addendum, which provided. Appendix H to the applicant's response to other representations. This is a just for anybody following this. This is annex A. This is the annex which was unfortunately missed off from the appendix in our in our submission in which we we submitted to you last week. Uh, our apologies to you, sir, and everybody else, but this is this is simply the figure that was missing, and it simply sets out the the different zones, uh, that that we considered during the Tsar addendum.

00:49:59:20 - 00:50:04:17

So I'm being reminded of the reference for this document is as zero 62.

00:50:10:02 - 00:50:47:21

The these are addendum was undertaken, as I say, in response to the relevant representations that we received, which asked us to look further at, uh, east and west zones Particularly, and the work presented in that addendum demonstrate that the single representative zones that were originally assessed within the Terrestrial Site Assessment Report, the outcomes of that assessment were correct. These areas are not appropriate for the carbon capture facility, and indeed the additional areas that have been considered, uh, to the north, east and west generally perform worse than in the original terrestrial site assessment report.

00:50:48:24 - 00:51:11:23

So turning to your specific questions about the East Zone. Uh, you'll see that in the addendum. We have considered east zones in a north south axis. Um, and as I've just said, they they did not perform well, particularly in terms of things like, um, uh, utilities connections and failing to have that contiguous site with Riverside with the Riverside campus.

00:51:13:18 - 00:51:42:27

Economic impacts have been assessed across all the sites through a combination of options in principle three, which considered the size and complexity of existing businesses and landowners. Sort of the business type, associated building, set up, floor space, all that kind of thing. Consequent ramifications for relocations, but also option nearing principle six considering construction and any demolition costs at a at a high level. It was a high level, but it was considered across all of the sense.

00:51:45:18 - 00:52:17:13

So the next slide is the one image we have in the pack, which is not a submitted document, but is it is just a snip, a Google aerial image, um, which on taken on the 31st of October. And this was to address your questions about footpath four. So you can see on the slide that the Riverside campus and then um, the Iron Mountain uh, records facility, a sort of rectangular building with lots of little great debts on it.

00:52:18:04 - 00:53:04:23

Uh, so if if the carbon capture facility was to be located in the East zone in that sort of location, utilizing the Iron Mountain and little plots, it would need both there to give enough space to give the eight hectares for the carbon capture facility. Then between the Riverside campus and that area of East zone, there would need to be all of the utilities, all of the flue gas ductwork, steam condensate, pipe work, uh, potentially some CO2 pipe work. Um, utilities may be able to go underground, but certainly those key elements which are moved by pipe would need to be laid out in an east west, uh, direction connecting that development zone with the Riverside campus.

00:53:06:07 - 00:53:36:09

So footpath four travels up between, um, I believe you've walked it so you will know. But for those who are following the footpath wall, is that sort of very angular dogleg, uh, line going up through between, uh, Riverside campus. That's to the east of the Riverside campus and to the west of the Iron Mountain records facility that goes through the middle of those those developments. It's a very constrained space. It's quite narrow, uh, having a series of quite large, particularly the flue gas ductwork.

00:53:36:11 - 00:53:40:09

Pipework overhead would not make it particularly pleasant environment.

00:53:41:28 - 00:54:14:18

Further, if the carbon capture facility was in this location and there was that vehicle movement to and fro footpath would have to be stopped temporarily. You'd have to stop pedestrian access in order to enable vehicular access to move east west direction. I think it's likely, sir, that actually footpath would just have to be lost. Uh, and routes through to the River Thames are really important in this area. They are. They're important in policy terms. Um, and, and you can see it being used by local community.

00:54:19:22 - 00:54:57:21

I said to my final slide, which is really just to rest on, uh, on the, um, master plan, high level master plan we have for the proposed scheme, which shows an indicative layout of the carbon capture facility utilizing the eastern stable paddocks and then the strategic industrial location. Uh, allocated land to the south. That still allocation comprises some 70% of the total carbon capture facility area with the mole, uh, sink and cross ness about 30%.

00:54:58:28 - 00:55:53:25

However, we do recognize that that limited use of long is inappropriate development with reference to policy and, uh, and the application of greenbelt policy to model. This is considered in some detail within the submitted details, particularly within the planning statement. Reference app zero 40 and particularly section five of that document. So there is no other reasonable alternative. Further, we have sought to minimise the application and mitigation hierarchy through application of early design work, to minimise that impact and to optimise the delivery of the scheme overall through its associated benefits such as enhanced habitats, improved access arrangements and also recognising that that sort of scale of master planning, but looking beyond the immediate development area.

00:55:53:27 - 00:56:18:06

But other benefits that can be applied in the near locality is is really only delivered through a scheme of this sort of scale. It's not the sort of outcome that's likely to be delivered by the sort of piecemeal development that has been seen on Norman Road to date, and its achieved through important strategic infrastructure, and that is recognised in NPS one as being of critical national priority.

00:56:20:02 - 00:56:50:21

So the NPS in one recognizes critical national park that recognizes carbon capture infrastructure, such as we're proposing to be that CMP infrastructure, for which the starting point for decision making is that the projects will have met, uh, tests which require clear outweighing of harm, including the very special circumstances test NPS. And one starting point is project is involved.

00:56:50:23 - 00:57:33:05

So it elicits the greenbelt policy, but it meets the test of very special circumstances. So we also put forward very special circumstances. We don't just rest on the NPS in one position. Uh, we also put forward our own various circumstances and in in very short order, they are set out in the planning statement. They are the the capture of around 1.3 million tonnes of carbon dioxide, which will make a material contribution to the climate change policy priorities, particularly those seeking early, early

delivery, so that carbon capture is being taken from sustainable waste management, which is itself delivering.

00:57:33:11 - 00:57:53:08

Mr.. I know you're probably concluding in a in a very good presentation way, but it sounds like this is you're just repeating what you said at the start of the, of your presentation. It's very good practice when doing a presentation to, to tell people what you're going to tell them and then tell them again. But, uh, I think, can we just get to the get, get, get to the point because I've got quite a few questions I'd like to ask.

00:57:54:06 - 00:58:23:13

Thank you. Sir. Uh, Miss Barry, for the applicant. Uh, you are right to pull me up. I was veering into our very special circumstances off of the of the site assessment. So, to wrap up, uh, we believe a very robust site assessment process has been undertaken demonstrating South Zone one is the right site is the only site available for this project. Um, we believe it's the project is one that will contribute to global and national priorities and that is appropriately presented to address local sensitivities.

00:58:24:19 - 00:58:25:27 But thank you. Thank you, Miss Berry.

00:58:27:03 - 00:58:30:20 The final input just on item 2.1 is on.

00:58:30:22 - 00:58:38:14

Sorry, sorry, Mr. Tate. I know, I know, it's, um. Every time you speak, can you just introduce yourself? I know it's awkward, you know, doing it a lot, but thank you.

00:58:38:24 - 00:58:58:03 That's Andrew Tate for the applicant. So the final input on item 2.1 is from Mr. Craft, who's the, um, master plan lead who can explain the application of the design principles on this particular topic about selection and option hearing.

00:58:59:10 - 00:58:59:25 Thank you.

00:59:01:28 - 00:59:02:28 Thank you. Good. Good morning.

00:59:03:00 - 00:59:08:11 Sir. Mr. Kraft for the applicant master plan lead. I have, I think, five.

00:59:08:13 - 00:59:44:19

Slides really just to walk through the design process that's recorded in the design approach document. That document has previously been referred to sir and is in three parts. Um, designers can never stop, uh, producing volumes of information. Um, the the code is AP 044204 6 in 3 parts of the diagram.

That's, uh, up on the screen at the moment, um, indicates the the approach we've taken to design process.

00:59:45:06 - 01:00:45:08

Um, as you'll be aware, sir. And for those, um, listening um, policy and one and particularly policy um text reference 4.7124.7.15 uh focus is not on the only on the outturn of the process, namely the the design as submitted, but also on the process itself. My colleague, Cousin Berry, has outlined some of the early stages in relation to the structuring of the approach we've taken in relation to, um, preferred, uh, and alternative sites and the process that we put in place as a project team, uh, both looking at environmental considerations, planning policy, as well as actually how we wish to um, present, um, acceptable levels of flexibility was a very important part of understanding the structure of how we put the project design process together.

01:00:45:21 - 01:01:28:09

So the diagram that's in front of us now, um, shows that cascade of, uh, hierarchy of thinking, uh, commencing with project vision and objectives and then cascading through the auctioneering process that my colleague Kirsten Berry has referred to, and having then identified the preferred development zone, in this case Development Zone South one. How we then drilled into detail, working with my colleague from the engineering team, um, and others, um, for the wider environmental impact assessment team, uh, to narrow down on the nature of the, uh, the proposal.

01:01:29:13 - 01:02:12:25

The other part of this obviously relates to engagement with stakeholders, um, and an understanding of land interests as part of that process. So what was very important was to make sure that by the time the receiving authority and namely, Bexley, were in position, uh, should consent be granted, was that there were adequate levels of design control demonstrated pre-application up to the development consent order, but then also following through to make sure that whatever design came forward, uh, would be capable of being, uh, adequately controlled and would come forward, uh, with, uh, good design to meet, uh, policy.

01:02:14:10 - 01:02:44:15

So in summary, uh, the design process, I'll just refer to, uh, four key points. Uh, commenced with the consideration of development zones, which my colleague, um, Kirsten Berry, has already run through, and the importance there of clear auctioneering principles that could be applied consistently. Uh, we then explored the identification of the preferred development zone, um, and tested that. And within that, we explored layout considerations within that zone.

01:02:44:17 - 01:03:15:19

Uh, which I'll come on to in a minute. And I referred to, uh, variously, um, as three options. We then um, Uh, in settling that, uh, preferred development zone and the preferred layout to the extent it has definition. Uh, that then formed the basis of the environmental impact assessment. So there's a clear correlation between the cascade of design evolution to the actual schema submitted and how that's then presented.

01:03:15:21 - 01:03:47:16

And within the development consent order as a set of project parameters for approval and then informed and controlled by design principles in the design code. So if I can go on to the next slide, uh, briefly, this indicates, uh, three options that were explored for South Zone one. Uh, and for those, uh, perhaps who are watching on screen, uh, I'll refer to the blue area, yellow area and pink area.

01:03:49:09 - 01:03:57:25

The layout options considered the merits of the expanded layout, which is option one, which is the blue area.

01:03:59:10 - 01:04:39:07

Uh, the compressed layout, which is option two, the yellow area. And then the pink option, which was, um, the consideration of the retention of monster joinery. Um, in the consideration of uh, layout options, one of the fundamental operational requirements from the client was to retain a contiguous layout. And by that we mean, uh, to avoid interruption in the, uh, complete access to all elements of the project within a secure boundary where that boundary, um, control is breached.

01:04:39:12 - 01:05:17:06

And in this case, with consideration of the maintenance of their terms, water access, track, uh, that, um, access, uh, under controlled circumstances, uh, with a recognized operator, uh, capable of maintaining, uh, reasonable standards that would be agreed operationally. So the principle at the start of of the pink option to the right hand side of retention of Munster joinery not only placed pressure on the ability to deliver the infrastructure layout that my colleague, uh, referred to earlier operationally.

01:05:17:24 - 01:05:51:20

Um, but also, um, the concept of breaking the sequence of flow and access from uh, operational people based, um, activity to the south of the site from the operational area to the north. So the result of the auctioneering process, we focused on the consideration of the expanded layout, the blue zone, and the comparison of the compressed layout, the yellow, the difference between the two.

01:05:52:27 - 01:06:41:12

Really considered the potential for the integration of existing green infrastructure within South Zone one, namely the existing ditch network and the associated habitats associated with them, and the merits or otherwise of maintaining those connections and subdivisions within the site. That in and of itself presented both opportunities for integration, but obviously placed some constraints on operation. Um, and when one compares it to the compressed layout, the compressed layout look to um, achieve a smaller operational footprint within the zone and the opportunity to provide more strategically located buffering, uh, to support the integration of the project in the wider area.

01:06:41:18 - 01:07:20:09

And it was the compressed layout that formed the basis of the scheme evolution. Uh, namely that we sought to compress the operational footprint. And when that released land area, that land was provided to allow for the mitigation and the buffering of the the scheme, principally to the West, but also to the south, which I'll now describe in these four diagrams briefly. So within the design approach document, uh, the this set of diagrams appears on page 88 which looks at the key layout influences.

01:07:20:22 - 01:07:24:19

I'll not briefly describe those, uh, given the scale of those images on the screen.

01:07:24:21 - 01:07:27:00 Yeah, I think briefly if you if you don't mind. Sorry.

01:07:27:02 - 01:08:00:21

Yeah, absolutely. So very briefly, the importance of carbon connections, which we've also already referred to, and the importance of the proximity that has the added advantage of making sure that the height the tallest structures are seated with the proposal are also associated with the taller elements of the existing facilities. Secondly, the importance of access and edges and the importance of how we actually control the approach to integration, but also how we access the site.

01:08:00:23 - 01:08:38:06

And utilizing Norman Road, uh, provides the opportunity to minimize the amount of internal road layout associated with the scheme. I've already referred to buffering. And then finally, uh, the concept of a generous point of arrival to the south. The bottom right hand corner. So as the scheme develops over time with the technical partner, uh, the concept would be to maximise the potential to alleviate development pressure on the southern end of the site, uh, to allow for, um, a generous point of arrival into the proposed expanded Cross Ness Nature reserve.

01:08:40:14 - 01:08:41:15 Next slide, if I may.

01:08:44:06 - 01:09:10:00

So so these, um, simply illustrates some of the work undertaken in exploring the compress scheme and the expanded scheme with it's the compressed scheme to the right hand side, demonstrating where those green buffer opportunities to the west and the south are, um, secured, um, as opposed to the integration of, of ditch network within the site itself.

01:09:11:22 - 01:09:12:25 Next slide please.

01:09:14:17 - 01:10:04:16

And so uh, this slide again, an extract from the design approach document. Figure 4.2 is the illustrative master plan. Uh, for clarity, the illustrative master plan illustrates one way that the operational layout using the compressed scheme could be proposed. Uh, the scheme itself is presented as a series of parameters for necessary reason to allow for this scheme designed to be evolved. Um, but the principles identified here illustrate the benefits of the compact compressed layout and how that allows for the integration with the Cross Nest Nature Reserve, and also supports the mitigation associated with the integration with the Metropolitan Open Land and the amenity benefits arising from that.

01:10:05:20 - 01:10:42:03

The other point, just briefly, before I step in briefly into the design code, is the final sequence of design control is really just to briefly talk about the cascade of built height. Um, essentially north to south. And my apologies that the plan is Rio orientated now north south, um, running from left to

right. But essentially the taller elements of the scheme, uh, are associated with the northern area associated with Riverside one and two and then Cascade south, heading towards Belvidere as a community.

01:10:42:09 - 01:11:33:00

The advantage of that is that the lower structures associated with the people and administrative functions of the facility are lower level, easier to integrate, and are associated with developing that more welcoming access into the expanded nature reserve. Finally, the final slide is an extract from the Dad Design Approach document. Part of the approval um or information submitted for approval uh as part of the scheme not only comprises uh parameters uh, which upon which the environmental impact assessment has been made, but also a set of design principles that are defined in accordance with good practice as defined by the National Infrastructure Commission and elsewhere.

01:11:33:20 - 01:12:15:21

Um, but also further detail. Um again provided um for approval in design code and these, in conjunction with the design principles, is applied to support the receiving authority in securing good quality design standards on key components of the scheme proposal, um uh, in accordance with the requirements discharge. So whilst the scheme seeks, um, an appropriate level of flexibility at this stage, um, the promoter is very keen to make sure that, uh, proper design standards are secured, uh, to deliver, uh, both a good quality master plan but also a good quality design, hopefully.

01:12:15:23 - 01:12:27:21

So that, um, provides a conclusion to the approach we've taken to alternatives and the rigor of the process we've gone through to, um, hopefully secure a design that's acceptable and good quality. Thank you.

01:12:28:18 - 01:12:36:08

Thank you. Um, I've I've got some, some, some questions. So, Mr. Tate, did you want to say something? No, sir.

01:12:36:26 - 01:12:39:22

The applicant. Not only that, that's the response to two one.

01:12:40:01 - 01:13:10:06

Thank you. Um, I think I'm conscious that, uh, there will be some other people who might want to make, uh, make points, but I think, uh, it's probably going to be easier if I ask my questions first and then, uh, other parties who want to, uh, to make any points to me, uh, can can do that afterwards. Now. Uh, I'm consciously giving quite, quite a comprehensive, um, presentation there. Um, uh, so this my questions are sort of in the order that they've, uh, they've come to me and, uh, I'll just, uh, allow whoever in your team Mr..

01:13:10:08 - 01:13:40:21

Takes the most appropriate to to respond rather than asking anyone individual. Um, so just going back to, um, uh, the technical implications and limitations of, uh, flue gas ducting routing and the effect on on site solution. I mean, is there was a reference to to distance and I think the convenience of citing

the, uh, the ducting, uh, in a, in a sort of logical way with where the riverside one and Riverside two flues are at home. But it is.

01:13:40:23 - 01:13:54:13

What are the limits on how far things could be ducted, just in terms of what the influence that would be on alternative, alternative sites? Is there a distance limit. Is there is there a technical technical limit?

01:13:56:23 - 01:14:27:02

Alison, on behalf of the applicant, the the issue with the the distance is pressure drop in the in the ductwork that the the flue gas is emitted from riverside one riverside to low pressure. And as you increase the distance, you would get to the point where the pressure drop was excessive and you would need to install sort of booster fans to sort of provide additional sort of pressure to, to traverse that, that length of ductwork. So it is technically doable, but requires additional equipment which would have additional power consumption associated with that.

01:14:27:06 - 01:14:38:18

So, so sorry to interrupt you. So on on the sort of the the indicative layout you've got at the moment that, that wouldn't require booster funds or would would would some of the longer stretches require that.

01:14:39:17 - 01:15:32:05

It requires booster funds to be located within the capture plant itself, to allow the flue gas to, to go through the process plant? But in terms of the ductwork itself, then we anticipate that the existing funds within Riverside one, Riverside two would have sufficient discharge pressure to allow the flue gas to reach the capture plant as located in the southern location as defined at the moment. So as you increase the distance, then that there may get to the point where additional booster funds will be required local to Riverside one and or Riverside two to overcome that additional pressure drop the other element as well as that as you as you increase that distance, then the the ductwork, your elevated ductwork has a visual impact and you would be increasing the visual impact from, from, uh, longer lengths of ductwork, which would be traversing areas which were otherwise wouldn't be developed.

01:15:32:07 - 01:15:50:00

So if we moved the whole plant further south. That ductwork would help to sort of reach that more southerly location by some means, most likely by going through the the northern end of the of the proposed site as is. So that site wouldn't be left unoccupied entirely. You would have ductwork, you know, passing through that to reach a more southerly location.

01:15:50:19 - 01:16:05:26

Yeah, I was more interested in that. The technical limitations. So you mentioned that there's a point. What is that? What is that point? What is that measurable? Um, how how far you could go with a, with a booster within either plant and then adopt leading off from that.

01:16:06:01 - 01:16:35:25

Some of that would be you subject to design calculations to determine. And there's a there's a trade off between the diameter of the ductwork and pressure drop. If you if you increase the diameter then the

pressure drop is lower. But again the the size becomes more, more impactful. Um, and so you'd have to do a design calculation to determine at what point, you know, additional funds were required, or if you could avoid that by increasing the diameter to reduce pressure drop. So there's a technical balance between those different parameters.

01:16:36:15 - 01:16:58:12

Uh, just just unclear. Um, uh, with particular reference to the, uh, to, to, to the East zone, which is something that's been mentioned by a number of in the number of relevant representations. I mean, is there a technical would there be a technical issue in taking the ducting there, but putting aside issues of visual, visual impact? Um, and was that was that actually investigated.

01:16:59:26 - 01:17:28:15

To the extent that the, the length of ductwork would be greater. So that was seen as a, as a negative from your technical and, you know, visual under the parameters perspective. So, so one of the considerations from all of the sites was does it minimize length of ductwork or does it require additional length of ductwork. And we assessed on that basis, we didn't go to the point of doing any form of more detailed calculation to determine, you know, have we reached the break point where booster compression would be required.

01:17:28:23 - 01:17:31:28 So it's just you said you didn't do that.

01:17:32:00 - 01:17:32:27 We did not. Yeah.

01:17:33:08 - 01:17:47:29

Okay. And in terms of your your your assessment again with particular reference to the, the yeast the yeast zone, I mean was it your was it your view that that would be reached or was it just something you, you weren't able to to calculate on the information you had.

01:17:48:15 - 01:17:52:12 The original yeast on that we, that we considered of a mountain,

01:17:53:27 - 01:18:19:08

the, the distance there would probably be acceptable without having done any calculations. It's sort of at a distance where it would be likely that you could get there without with the compression. However, the additional distance considered later, which are more to the south, that length of work would be considerably longer. So I suspect you'd be at the point where additional sort of booster compression of the fluid gas would be required that.

01:18:20:18 - 01:18:24:25

Okay. Thank you. I understand the caveat you put in there as well. Um.

01:18:26:27 - 01:18:45:14

Just, just on on the issue of ducting. I mean, I think it's very you you mentioned about, um, uh, some of the issues with putting ducting over, over other of other routes. Um, but does does that, uh, having elevated ductwork, does that actually preclude any routes that it can go over?

01:18:48:26 - 01:18:54:06

Uh, I'm not sure. I totally understand your question, sir, in terms of specific footpaths or. Yeah.

01:18:54:08 - 01:19:17:06

I just, you know, if in if you have a duct in an elevated, uh, configuration, as I think illustrated on the, in the design approach document, um, does that actually does that. Can that go over anything, uh, or is there anything that sort of precluded I think some of the reasons you explained were more to do with the amount of duct work and other, uh, other issues?

01:19:18:13 - 01:19:49:01

Uh, yes, sir. So within within the a lot, Mr. Hobson, better place to respond to the technical aspect of your question about actually what what sort of terrain, um, elevated ductwork could cross. Uh, but in terms of the site assessment, it was a question of thinking, you know, if if you were to use the the East Zone then to you'd need pipework between Riverside campus, the existing facilities and the carbon capture facility to cover the flue gas ductwork, steam condensate.

01:19:49:06 - 01:19:55:12

Uh, you need utilities, uh, the liquid cups. So there would be there would be a multitude of pipework, I guess.

01:19:55:17 - 01:19:58:17 So what? What's the problem with that? Why couldn't you do that?

01:19:58:25 - 01:20:05:00

Well, there would be large pipework, and I think it'd be quite unattractive to somebody using the footpath and footpath.

01:20:05:02 - 01:20:10:19

Was it purely a visual consideration that you didn't pursue that, or was there a technical consideration?

01:20:11:05 - 01:20:35:04

It was focused on the, uh, it was focused on the, the, um, I guess user experience of, of the footpath. Um, and the particularly with the footpath for you're in quite an enclosed space already. Um, so it was. Yeah, it was very much focused on primarily on the sort of the physical relationship that the use of the footpath would have.

01:20:37:04 - 01:21:09:24

Okay. Thank thank you. I think just, just on, uh, just on flue flue gas, uh, uh, pipelines, I mean, you there was reference to the sort of 3D sketch of the, the Riverside campus, and I think that was provided in response to a relevant representation about why things couldn't be put within, within the campus. I mean, just another question is, given that the proposal, I think, as it stands, requires taking a land sort of outside to the to the west and east of Riverside to, to provide a route for the, for ducting.

01:21:09:26 - 01:21:15:14

What why couldn't that if it's elevated, why couldn't it go within the site sort of above the the access road.

01:21:17:19 - 01:21:55:15

On behalf of the applicant. We we looked at a range of options to get the duct work from Riverside. Two in particular to the carbon capture facility started starting by looking through internally within the site, because that was that was the preference. But because of the the existing facilities, the the complex layout of the site, the size of the ductwork that has to be routed, the requirement for maintenance, access to existing facilities in the site. We couldn't find a route within the site boundary that would that would allow us to route the ductwork that way, and therefore we were, you know, had to look outside of the site boundary and immediately to the to the west.

01:21:55:17 - 01:22:12:05

The seamlessly is the most convenient and and and and least problematic way to get the flue gas from riverside to to the capture plant. You know, our preference would have been to keep it within the site boundary. But but there wasn't a practical route to do that, unfortunately.

01:22:12:19 - 01:22:23:19

So what what are the practical what were the practical issues that it couldn't just follow the route of the the access road which it effectively, I think, loops around in a similar, uh, similar location.

01:22:24:08 - 01:22:53:12

If we follow the access route, it would obstruct use of the access road. It would also obstruct maintenance access to the facilities immediately to the east of the access road. That requires sort of Cranach to sort of use the access road to sort of reach in into facilities for, for maintenance access. So it wouldn't allow the the existing ongoing operation of the site if the ductwork was sort of within the site boundary along that access road. So hence having to move it further to the to the west outside of the the boundary to the west of the access road. Okay.

01:22:53:18 - 01:23:06:09

So as I understand it, from what you said there, I mean, I can't see how it would prevent use of the access road. It was elevated. But you mentioned there's a need for Cranach. Is that Cranach that would actually be located on the access road when it's in operation?

01:23:07:19 - 01:23:36:25

The the while the, the ductwork is elevated, it's on a series of pipe supports and they have to be rested at grade so that so they, they would sort of take a part of the space to the west of the facility where the access road is. So you'd have constrained sort of space available as a result of that. The drainage during maintenance operations would be would be parked up on the access road to, to reach across into the buildings. And any ductwork there would interfere with that, with that operation of temporary maintenance, um, use of drainage.

01:23:37:25 - 01:23:38:20 Okay. Thank you.

01:23:39:00 - 01:24:29:18

Sir, if I could just, just, uh, refer you to, uh, section 2.4 of the applicant's response to relevant representations, uh, as zero 43. Uh, and in that section of the report, uh, we set out, uh, further consideration of the existing campus, um, and explain the various reasons why we believe the ductwork can't be located within that area. You've got aboveground buildings and utilities and need for use of airspace and below ground utilities so that that section of the reports, along with the figures at appendix E, um, demonstrate the the complexity that's already going on within that campus area and the limitations for additional pipework, particularly such as substantial pipework like the duct work.

01:24:30:19 - 01:25:02:11

Thank you. Yeah. And I should have said if, um, you know, if a reference to a particular, uh, particular documents that answer my question would be helpful to, to illustrate something. But just on that, again, going back to that, and I think actually that section that you referred to, uh, that refers to again, I think those, uh, the sketches of the, the Riverside campus, um, there is actually mention on there of a of a gap between, I think, the main plant and other things, which, uh, I think it's given for the reason where there's a gap is maintenance and light to, uh, to to the facilities.

01:25:02:17 - 01:25:08:14

Um, is does that actually prevent any flues going through that, that part of the site?

01:25:11:20 - 01:25:27:26

It might be helpful. It's too small for me to read, but I think on the. No, I can't read the numbers. Uh, I'm sure there's one which which talks about, uh, the gap which is between Riverside two and the adjoining buildings.

01:25:29:07 - 01:26:01:28

Okay, so. So you mean to the east of Riverside two? Um, so that north view there, you can see. You can see Riverside two is labeled, uh, and the main energy from waste facility, uh, is, is on the left hand side. So it's on the west of the site and you've got the main, the main chunks of the stacks at the north coming down to the tipping hall at the bottom, to the right of that, you've got to, uh, lower level buildings, which are the um, echo condensers and, um, wellfield buildings and other electrical connection gets too small for me to see as well.

01:26:02:00 - 01:26:38:05

So there is a space in between them. But that's, uh, that's primarily is, uh, where the crane is used to, uh, pull out the um when personally to be made into the typical and the and the grab hooks and things. So that's, that's that's a fairly key area for maintenance. Um, because the pipework can't go over the top of Riverside to the, the, the roofing area of Riverside to is is intended for um solar panel, uh, sp pv panels for for solar energy.

01:26:38:07 - 01:26:52:18

But also I mean the roof the roof structures does not been designed, um, to take ductwork. Um, so yeah, it's it's a very busy site. So we've got quite a lot going on in there already.

01:26:53:16 - 01:26:55:22 Okay. Thank. Thank you. Um.

01:27:01:10 - 01:27:02:08 Yeah. So, so.

01:27:02:10 - 01:27:37:09

Just, uh, just going back to the, the, uh, the the options and, uh, moving away from, uh, questions about flue gas, uh, ducts. Um, can I just clarify that the the area is shown in appendix H to the response to relevant representations? Um, I there was obviously some, some indication of areas on there which didn't appear to be in the terrestrial sites. Alternative report. Uh, I think the terrestrial sites alternative reports had a North zone, which was sort of set, um, separate uh, from that, from that below.

01:27:37:18 - 01:27:40:16 Um, and I just, I just want to look at.

01:27:42:16 - 01:28:12:09

If I remember rightly, the, the Terrestrial Science Alternatives report identified three blocks, uh, prior to you identifying any stone. And also, if I recall correctly, I think, uh, one block was on the Iron Mountain site, one block was on the little site, and I think one block was in the, uh, in the vicinity of the river. Uh, can you explain, I mean, has that illustration been prepared to sort of build on your, uh, on your argument, or was that actually part of the consideration at the, uh, at the time.

01:28:13:12 - 01:28:42:19

Mr. Perry, on behalf of the applicant? No, sir. This the image on the screen now. So annex A to appendix H of the relevant representation report. So it's document as zero 62, uh, was prepared solely for the Terrestrial Site Assessment Report addendum. So this shows the seven development zones that were separately and additionally considered through the site assessment process.

01:28:43:05 - 01:28:52:26

So, uh, when was that? I mean, so it was this in response to relevant representations, right. Okay. So thank you. Um that's helpful. Um,

01:28:54:24 - 01:29:23:28

and I think, um, there was a I did just have a query about, I think in the Terrestrial Site Alternatives report, the zone was shown in a sort of a, uh, an elongated form, sort of following the river rather than going going south. I just wondered why, out of your options, that was the one that you decided to investigate, as opposed to one that sort of extended, uh, perhaps from Iron Mountain and going down to Asda rather than across the little.

01:29:24:24 - 01:30:01:09

Sure. Uh, Miss Berry, on behalf of the applicant. So the original East Zone was reflective of, uh. So you'll be aware, having read the T cell that, uh, we it's been through a few, been through a few iterations in terms of the site assessment process. Uh, so the East Zone was really an amalgamation of the original, um, smaller areas that had been considered but were then found to be too small. Uh, it

was utilizing the river frontage. Uh, it's closest to Riverside Campus. Uh, and it was using land within the Belvedere Industrial area and, and sort of a combination of those factors which, which led us to use it as a representative zone for the east area.

01:30:03:02 - 01:30:43:28

Okay. Thank you. Um, I'm glad you mentioned that, uh, economic impacts were assessed and compared. Um, I mean, what? I mean, what were the, uh, the considerations? I mean, just conscious the fact that obviously there are existing buildings and existing businesses, uh, on on that site. Um, well, I just want to understand what level of investigation was carried out into considering that because the terrestrial options report, um, although it talks about, uh, uh, did you know the effect on the on on the businesses? Uh, it doesn't seem to talk about actually the, you know, the cost, how much it would cost to acquire, acquire those sites.

01:30:44:00 - 01:30:45:14 Was that a consideration?

01:30:47:28 - 01:31:28:09

At a very high level, sir. Um, it was really a question of looking at. So as I said, it was across, uh, options. Options and principles. Sorry. Three and six And it was really a consideration of scale and complexity of existing businesses. Um, and the, uh, the landowners, third party landowners, that in relation to the land that we'd be looking to acquire. So for example, um, the West Zone, uh, particularly the additional West zones we considered, uh, in the addendum, uh, largely lying within the, uh, the operating area of the sewage treatment works.

01:31:28:11 - 01:31:38:12

So it's clearly a significant impact in terms of, uh, a third party landowner. But we it was admittedly a high level, but a consistent.

01:31:38:23 - 01:31:56:24

So and so when I say high level, I mean, was there actually an investigation or was it an assessment, for example? Oh, there's a, there's an existing business there that we're not going to look into. We're not looking to look into that because it's going to be too expensive or it was something in between. What was what was your high level assessment.

01:31:56:26 - 01:32:28:26

Sure. So we understood we we have a we have a general understanding of what the existing businesses are from, uh, from land agents. We can understand the building type, uh, what's going on inside of them sort of floorspace. They have but a number of employees. Uh, and we through, uh, conversations with, uh, engineering colleagues, we can get a high level understanding of what the rebuild or deconstruction and then reconstruction costs would be. So it's an amalgamation of all those all those elements across those auctioneering principles.

01:32:31:11 - 01:32:56:17

Okay. And so if I understand correctly used in in and I don't want to put words in your mouth. So please correct me if I, if I summarize this in the wrong, uh, or an inaccurate way. So use your internal

expertise to take a view to take a view on on it. Um, but didn't actually go into any sort of very detailed sort of cost evaluations of what it would, uh, uh, cost to, to do that.

01:32:58:15 - 01:33:16:15

No, there's no detailed cost analysis. But we did take advice from ardent, who are the, uh, the land advisors on the scheme. And they've had a long they've been involved with the quarry. They worked on the Riverside two project. So they're very familiar with this area and with the businesses that are operating in the area.

01:33:17:05 - 01:33:19:22 Okay. Thank you. Um, just, uh.

01:33:20:23 - 01:33:22:08 Spoken about that, and I would, I would, I would.

01:33:22:15 - 01:33:24:15 Sorry, sorry. You're talking quickly there.

01:33:24:17 - 01:33:50:12

Can you just say, Mr. Fox, on behalf of the applicant, just just to add to that the discussion, I just didn't want to make the point that we had also been seeking to engage with parties. Um, not just such a station, but actual engagement, including specifically. Um. Um, I'm by that I mean Munster, Munster joinery. So we had sought and asked questions to try and find out some of that information directly. Um, and um,

01:33:51:28 - 01:33:59:29

so that's why I want to say it's not just kind of an educated guess. It was also, we had sought to engage with the parties with with monster to find out information.

01:34:00:19 - 01:34:37:18

Okay. Thank you, Mr. Fox. Just move on to, uh, a slightly more detailed, um, uh, question. And, um, in terms of, again, I think this is again raised in the option of the, the East option and, uh, talking about, uh, the extensive pipework crossing, uh, footpath for, uh, you also referred to the incompatibility of vehicles crossing. Now, um, can you explain a bit more about that? Because, um, you know, it's not unusual for a footpath to have a road going across it, but I think you indicated that it would become, uh, so impractical you'd actually have to close the footpath.

01:34:37:20 - 01:34:50:11

Can you give me an idea of as to how much traffic and what the implications would be? Uh, were there to be a public footpath separating any carbon capture, uh, plant from the the two riverside power stations.

01:34:52:04 - 01:35:28:01

Mr. Barry, on behalf of the applicant. So I think it's combination of the vehicle movements and the and the ductwork, the pipework going over the top of footpath form. So it's you have an unpleasant environment within foot path forward or the pipework is going over the top. And then if it has to be

closed regularly with the vehicle movement, um, it could make it uh, in a, in a practical route use. But we can I don't I don't know sir, offhand the number of vehicle movements it would be today or each week, but I can certainly seek to find that out and come back with some more detail.

01:35:28:06 - 01:35:29:04 That would be helpful.

01:35:29:08 - 01:35:56:27

Yeah, I, I think I understand the point about the, the effect that, uh, either vehicles or ductwork might have on the experience of users of the, the footpath. I think, I think you've explained that it was more on the technical side as to whether, as to what the implications are, but I mean, if that's something that you need to to go out, but I'd be happy to hear sort of in written submissions that the first deadline on that uh, on that particular one. Um,

01:35:58:15 - 01:36:31:04

I think I think that's all my detailed questions. Now, I'm conscious of two things. I'm conscious that there's other parties who want to make a number of points, but I'm also conscious that, uh, it's it's past half 11 and, uh, not only for people in the room, but also people online. It can be quite tiring. So I'm going to propose that we take a take a short, a short break. Um, and then afterwards I'll ask, uh, if there's any other points that people want to, uh, uh, want, want to make on that. So it's a, it's 1136. I suggest we take about a quarter, an hour's, uh, uh, break.

01:36:31:06 - 01:36:43:16

So if we were to end at 11, uh, 1150, um, then hopefully that gives people time to, uh, to, to have a comfortable break and get any getting refreshments. So I'll see you all at a at 1150. Thank you

01:36:45:02 - 01:36:45:26 for including.