

Cory Decarbonisation Project

Closing Submissions on behalf of Landsul Limited and Munster Joinery (U.K.) Limited

Introduction

1. These closing submissions are prepared on behalf of Landsul Limited (“Landsul”) and Munster Joinery (U.K.) Limited (“Munster Joinery”). These submissions are not intended to provide a complete summary of the written and oral case to the examination, but rather to put those submissions in their overarching context.

The legal framework

2. Section 122(3) Planning Act 2008 provides that land may only be acquired where there is a compelling case in the public interest. That reflects the fact that taking of a person's land against his will is a serious invasion of his proprietary rights, which are fundamental constitutional rights. They are also protected under the Human Rights Act 1998, through Article 1 of the First Protocol ECHR.
3. In the context of compulsory acquisition that means:
 - a. The destruction of property rights requires to be most carefully scrutinised;
 - b. Adequate evidence must be provided to justify the interference;
 - c. There must be an effective opportunity to challenge the measure in question through being heard on the objection.
4. The most important factor to consider in the present case is the necessity of the interference. If there is an alternative way of delivering the scheme without the compulsory acquisition of some or all of an objector's land, then it is unlawful to authorise the compulsory acquisition.
5. In respect of EIA, the decision to grant development consent can only be taken based on the full environmental information in respect of the likely significant effects of the proposal. Where information is missing or inadequate, further information must be obtained before development consent is granted.

The process

6. Landsul and Munster Joinery make two fundamental points about the process. Firstly, they have not been afforded a proper opportunity to be heard on their objection. Specifically:
 - a. They have not been afforded the opportunity to cross examine any witnesses from the Applicant in respect of the need for Landsul and Munster Joinery's land. As explained in REP3-045 and AS-084, on the facts of this case there was a compelling reason to allow cross examination to test the evidence to allow the case to proceed fairly. Landsul and Munster Joinery have been denied that opportunity, contrary to the principles set out in those submissions and contrary to the rights under the common law and HRA 1998 to be afforded a full opportunity to challenge compulsory acquisition.
 - b. They have not been heard at all in response to further evidence and submissions provided by the Applicant at or after CAH2, as explained in REP4-042 and AS-089. Landsul and Munster Joinery's right to be heard on their objection necessarily means a right to be heard on all of their objection, rather than just those parts of the case which had emerged before CAH2 was scheduled. None of this is the fault of Landsul and Munster Joinery: as explained in REP1-059 (paragraph 10), the Applicant failed to provide the information required to justify the engineering case for the inclusion of this land until well into the examination. The fact that it continues to adduce new evidence at D6 in support of its compulsory acquisition case is further demonstration that Landsul and Munster Joinery's statutory right to be heard on its objection has not been satisfied. Landsul and Munster Joinery have had three working days to consider the Applicant's D6 submissions, which is plainly inadequate.
7. Since it is now proposed to close the examination without addressing this procedural unfairness, the DCO cannot be made with the inclusion of compulsory acquisition powers in respect of Landsul and Munster Joinery's land.
8. Secondly, the Applicant has provided no properly formulated expert evidence to the Examining Authority to support its compulsory acquisition case. There is not a single expert declaration on any of its reports. In the absence of cross examination, the views have not been tested separately in a way which could satisfy the tribunal that the opinions offered

are given in accordance with the relevant expert duties. This is important because there is a conflict of views.

9. Further, it is important because it is apparent that none of the specialists commissioned by the Applicant has actually answered the right question, namely: is it possible to build a carbon capture plant and related infrastructure without taking Landsul and Munster Joinery's land? Rather, the Applicant's submissions – often wholly unattributed to a particular specialist – have sought to justify the Applicant's design choices. It will be clear from Dr Edgar's submissions that it is not disputed that the indicative material relied upon by the Applicant forms one valid basis for design. That is not the same as answering the question of whether it is the only valid basis for design, such that Landsul and Munster Joinery must be deprived of their property.
10. Dr Edgar's evidence – which is central to Landsul and Munster Joinery's case – *has* been the subject of expert declarations, none of which are challenged. It has not been suggested (and nor could it be) that he is insufficiently expert in the area. He has also answered the right question. His clear and repeated view is that the project *can* be delivered without the Landsul and Munster Joinery land. Expert evidence cannot be rejected unless there are clear reasons for doing so. Given the expert evidence before the Examining Authority points one way – since it is only Dr Edgar's evidence which is confirmed to comply with the relevant duties – there is no lawful basis upon which to reject it.

The overarching conclusions from the evidence

11. The Examining Authority and Secretary of State should draw two overarching conclusions:
 - a. Landsul and Munster Joinery's evidence provides uncontested expert evidence that it is possible to build a carbon capture plant and related infrastructure without taking Landsul and Munster Joinery's land;
 - b. The Applicant provides no expert evidence on this issue, and its evidence shows that it has not considered whether it is possible to build a carbon capture plant and related infrastructure without taking Landsul and Munster Joinery's land.
12. The consequence of these conclusions is that the case for compulsory acquisition is not made out.

(i) Landsul and Munster Joinery's evidence

13. Given the drip-feed of information from the Applicant, the case for compulsory acquisition has been something of a moving target. Landsul and Munster Joinery maintains its position as set out in its earlier submissions. However, as the examination is now closing without a full exploration of the remaining issues, Dr Edgar has issued a further Alternative Layout appended hereto as Appendix A. This layout accommodates the two remaining disputed pieces of plant and equipment namely a 132 kv substation and a heat transfer station.

14. As Dr Edgar explains in the Technical Note submitted with these closing submissions at Appendix A, this leaves two remaining issues.

a. A non-contiguous site. The inclusion of the 132kv substation means that the heat transfer station would need to be accommodated to the south of the Landsul and Munster Joinery land. As is clear from CAH2 and as explained further in Dr Edgar's evidence, there is no technical impediment to this. The fact that heat pipes would have to be constructed is clear, but not an impediment. Indeed, heat transfer is entirely dependent on a far more extensive network of heat pipes being constructed. The practical preference for a single site is precisely that – a preference – and there is no reason why operatives could not access the separate site from Norman Road. The Applicant has provided no case – let alone a compelling case – that a separate site for the heat transfer station is infeasible. Indeed, part of their case is that the heat transfer station may indeed be operated as a separate facility by a third party.

b. Footprint and benchmarking. The Applicant continues to note that there are differences in footprint between their design and the Alternative Layout. This is not surprising: it is the heart of the dispute. The Applicant asserts that the Alternative Layout “does not take full account of all space requirements that are necessary for the proper operation of Carbon Capture Plant, such as access for maintenance, or auxiliary equipment”. The Applicant has produced no expert evidence on this point and Dr Edgar disagrees with the Applicant. Dr Edgar's position is strongly corroborated through his benchmarking exercise.

15. The Applicant has also argued that the Alternative Layout does not take account of its design principles, but at D6 that argument narrowed very considerably. The remaining points have been addressed, in full, by Fabrik's note accompanying these closing submissions as

Appendix C. They are not, in any event, points which go to the heart of the carbon capture scheme.

16. In these circumstances, and in light of the principles above, the Examining Authority and Secretary of State:

- a. Have no reason to reject Dr Edgar's expert evidence;
- b. Should accept that it is technically feasible to construct the project without taking Landsul and Munster Joinery's land; and
- c. Accordingly, should not authorise the compulsory acquisition of that land.

17. The further Alternative Layout is submitted without prejudice to the overall case that the Applicant has failed to properly demonstrate a case for both the heat transfer station and the 132kv substation.

18. In respect of the heat transfer station, the Applicant's submissions appear to be focused on whether the inclusion of heat transfer is desirable and supported by others, and whether there is demand for the heat. That is not in dispute. What is in dispute is whether there is a viable and deliverable solution to connect heat demand with the heat source. This faces significant technical and economic challenges, and most importantly a question of viability. In this regard, it is to be noted that no heat network has yet been created to transfer heat from Riverside 1 and 2, despite such networks being required by existing planning controls. The Applicant is rightly seeking to explore how heat can be used, but that is not the same as showing that there is compelling case for the acquisition of Landsul and Munster Joinery's land now to provide heat transfer to a network which does not exist, and which is a long way from existing. In respect of funding, the construction of the heat transfer station may well be capable of being funded by the Applicant, but there is no evidence that funding is available or likely to be available to deliver connections to the heat demand, many miles away and across the River Thames. If that element cannot be shown to be financially viable, then there is no compulsory acquisition case for land for a heat transfer station which can connect to nothing.

19. In respect of the 132kv substation, the Applicant agrees that distribution at 11kv is cheaper and more desirable. It suggests, however, that potential impediments to creating connections at Riverside 1 and Riverside 2 justify the inclusion of a 132kv substation in its

design. The 132kv substation was advanced at CAH2 as being a contingency should those impediments prove too great. Mr Cross explained (emphasis added):

“...in terms of the practicalities of making the connection... obviously, yes, there potentially is a way. But at the moment, from our initial review or not from from a fairly detailed review of the existing infrastructure, we believe that's quite a high risk to assume that we can make a connection, because from what we've seen, it is impractical.

... So maintaining the flexibility within the layout to have a 132 kV supply, with the 132 kV step down infrastructure within the footprint of the CCF, I think is an essential part of making sure that as the design develops and when the RAM study is done at a later stage, there is the flexibility to provide a 132 kV connection if that's required...

And yeah, acknowledging that, yes, the 132 kV option is more expensive and potentially has higher losses. But, you know... it's not a necessarily a cost balance. It's about redundancy and resilience and having the flexibility to make sure that we don't reduce that flexibility by assuming that we can gain a acquire 11 kV connection, and then that, you know, the whole project becomes unfeasible because that connection can't be made.

And we, you know, we haven't got the room for the for the fallback to 132 kV.”

20. It is agreed that those connections are challenging. Nonetheless, the expert evidence provided by Blake Clough demonstrates that it has not been shown that the connections are infeasible. In a compulsory acquisition case, the Applicant cannot take land because future investigation may show that it is needed. It must demonstrate that the land is required for the scheme. As things stand, it has only shown that the land *may* be required.
21. Finally, the Applicant at D6 argues that whilst it could have made provision in Riverside 2 for a future 11kv connection, the construction is now too far advanced to make that provision without causing delay. That is a deeply unattractive point, since the Applicant also contends that it has only included a 132kv substation because of the difficulty of the 11kv connections. The 132kv substation has been included in all iterations of the design seen by Landsul and Munster Joinery. In other words, the Applicant has known for several years (throughout the formulation of the present application for development consent) that it is planning for a significant additional cost (estimated by Blake Clough to be £7.65m (REP4-042)) as well as permanent operational inefficiencies because of the potential challenges of an 11kv connection from Riverside 2. Even if the Applicant's case on this point is taken at face value, the only rational response would be to make provision for that connection. If

through error it has failed to do so, then delay or outage at Riverside 2 is entirely of the Applicant's own making.

(ii) *The Applicant's evidence*

22. As noted above, the evidence from the Applicant does not show that it is not possible to construct the scheme without taking the Landsul and Munster Joinery land. The Applicant's evidence shows that it has never asked that question. The best evidence of the Applicant's position is in Mr Alderson's responses to the Examining Authority's questions at CAH2. The following excerpts are worth setting out in some detail:

"ExA: Can I ask the applicant in terms of... the brief in terms of the site area for the carbon capture facility, were you presented with a geographic extent on which the facility needed to be fitted, or was a particular figure in terms of footprint recommended in terms of a minimum area? I'm just trying to understand that the process of design and how that how that worked.

Mr Alderson: ... we took a bottom up approach and for each of the unit operations and facilities required identified the footprint required for that in some instances, informed by expert input from carbon capture technology providers who designed a number of these projects, including the largest currently operating in the world, so took their input as guidance for the facilities within their remit. And once we determined that the space required for each element, you know, sought to accommodate those in the smallest possible footprint across the site, taking into account the physical limitations and unique constraints that are on the on the site that we're looking at. So it's very much, you know, we sought to minimise footprint as we developed that layout and tried a number of different iterations before landing on the indicative layout that we have, which we believe is an efficient and robust approach to accommodating all of the facilities required for the carbon capture facility".

23. After interventions, the ExA then posed the question in a different way:

"ExA: How did the availability of land inform the footprint and selection of sites?

Mr Alderson: ... prior to this stage of developing a layout, we considered different sort of plots of land and... the relative merits of using those in the context of where we should locate the carbon capture facility and determined the plots that we've utilised for the indicative layout as being those best suited for locating the carbon capture plant on the assumption that there would be available to use all of the plots that we've utilized some

already within, within Cory control or others not to determine an indicative layout based on that, you know, contiguous strip of land to the west of Norman Road as being the preferred location for the facility.

24. Mr Alderson can there be seen to accept that having selected the general location, the design proceeded “on the assumption” that all plots would be available. In other words, whilst overall site selection did consider land availability, the development of the layout did not take account of land availability.

25. A similar question was then posed for a third time, confirming that understanding:

“ExA: So can you say a bit more about that in terms of your bottom up approach, which seem[s] to be sort of looking at the needs of the facility first. Can you say a bit more about how those different plots of land did fit into that?

Mr Alderson: Well, on the basis of those plots of land being those most suited we started at the North and worked our way South, accommodating the equipment and facilities required until we accommodated them all. And as it as it transpired, you know, when you look at the indicative layout, it requires that that full strip of land along the west side of Norman Road to accommodate everything that's required.

ExA: So your process was to look effectively at the current bit of the nature reserve adjacent to the boundary of the riverside campus and work south. Is that what you said, have I understood you correctly?

Mr Alderson: Essentially. Yes.”

26. This was then challenged by Landsul and Munster Joinery:

“Mr Turney KC: I think it's not quite answering the question, because this is when we know how the TSAR is assembled. So they say that they need these sorts of site areas, and they go through a site selection process. And we've understood that. We explored it to some extent in the first ISH. The question here for compulsory acquisition is in choosing the layout of the site, what consideration was given to the availability of individual plots? And I think from what Mr Alderson said is at that point, there wasn't further consideration of the availability of individual plots, but it would be really helpful to clarify that, because I think that will go to the heart of your compulsory acquisition alternatives consideration.

...

ExA: ... Picking up Mr Turney's point there, surely that must have had some influence on your approach?

Mr Alderson: Well, in terms of determining which plots of land were most suited for the location of the capture plant, then, yes, that those plots are currently within the control of Cory. That was one of the factors when we considered, you know, various locations around the existing Riverside 1, Riverside 2 sites. And that was just one of a multi factor consideration in determining which plots of land were best suited. You know, with, with the requirement of a contiguous site. So those plots alone clearly provided ... [in]sufficient footprint for the overall facility."

27. This answer again related to the site selection approach, rather than to the development of a layout, and thus missed the point. The ExA then turned back to the "bottom up" approach to layout:

"ExA: but in terms of the bottom up approach, it was the availability or currently non-availability of land. How did that feature in it, [and] mean that particular configurations were prioritised over others?"

28. The Applicant's legal team then intervened:

"Mr Fox: can we just taking a step back a moment? And I know Mr Turney is focusing on layout rather than site selection. But in undertaking the site selection process, we did consider different configurations of the South zone, and that included different amounts of the brownfield strategic industrial location, land being taken. So that that was a step in our site selection process... [there] was consideration of that in optioneering principle three, when we would then have chosen our chosen South zone, which by definition included land such as Munster and Landsul's land.

We were then as set out in section 3.4 of the alternatives chapter from a layout perspective, specifically asked ourselves the question as to whether the Landsul Munster land could be avoided.

Mr Turney KC: I'm afraid to say that we've got immediately to a real concern about the fairness of a process here where effectively, Mr Fox is substituting answers from the person who can provide the answer to your question. And that's why I expressed the application in the way I did. This is a situation where it's a compulsory acquisition hearing. And we have a right to be heard and we're entitled to challenge..."

29. It is worth noting the terms of section 3.4 of ES Chapter 3 [APP-052], which Mr Fox referred to. At 3.4.3 it is explained that the retention of Munster Joinery would require the development of land beyond the proposed development area and a “fractured” development. There is no indication here that any consideration was given to whether the area of the facility could be reduced – i.e. the exercise undertaken by Dr Edgar. Rather, it was assumed that it was necessary to “maintain the eight hectares operational requirements”.

30. Landsul and Munster Joinery was then invited to pose the question directly:

“Mr Turney KC: ... in deciding the layout - this is not site selection, this is not the TSAR - in deciding the layout at that point in the process, what consideration was given to the availability of particular parcels within the South Zone?

Mr Alderson: By that stage we determined the preferred plots to locate the facility and indicative layout is based on those plots already determined to be those most suited for the facility, which include the Landsul plot of land. And as I described earlier, we took then took a bottom up approach of determining the footprint required for each of the process areas and facilities required to configure the overall carbon capture facility, and fitted those from a north to south basis, minimizing the overall landscape required.

And clearly, when you refer to the indicative layout that overall land take starting from the north of the plots of land to the west of Norman Road extends through and beyond the Landsul land to provide sufficient footprint.”

31. It is therefore clear that having identified its preferred zone, the Applicant did not seek to reduce the land requirements through working on its layout to avoid the Landsul and Munster Joinery land.

32. In conclusion, the Applicant’s evidence shows that it did not ask the question: is it possible to build a carbon capture plant and related infrastructure without taking Landsul and Munster Joinery’s land? Since it has never asked that question, it has not made out the case for compulsory acquisition.

Socio-economic impacts

33. As detailed in the previous reports prepared by Lichfields together with the report appended to this closing submission as Appendix D, the Applicant has not provided sufficient evidence or justification for their approach to assessing socio-economic impacts. There were, and

remain at the end of the examination, a significant number of inconsistencies within the Applicant's assessment. It follows that the Examining Authority (and the Secretary of State) does not have sufficient and precise information as to the likely significant effects of the proposals on which to reach a reasoned conclusion on the proposals. This is justification alone for refusing development consent.

34. The economic impacts of the loss of the Munster Joinery site are significant and very real. It is the sole major distribution centre for the business in London and the South East, benefitting from a strategically situated location. In total Munster Joinery employs 856 people across the UK, and continues to invest to increase job numbers to 1,500 by 2028. A significant proportion of this employment will be dependent on the site at Norman Road continuing to maintain its operation. The loss of the site would therefore critically undermine Munster Joinery's ability to serve its core customer base, jeopardising business viability and resulting in significant revenue loss. This would, in turn, reduce production demand at the Wellesbourne facility, leading to redundancies across the business, in addition to direct job losses at Norman Road. Munster Joinery supplies directly to the housebuilding industry, which is striving to deliver new homes and the associated economic growth in accordance with national policy.
35. The national importance of decarbonisation is not in question, and there may be cases where some negative effects have to be accepted to deliver that. But this is not such a case. Munster Joinery does not need to close its strategic distribution site to decarbonise Cory's operations. There is clear expert evidence that the two can coexist.
36. In those circumstances, there is a compelling case not to authorise the compulsory acquisition, on a simple planning balance.

What should be done?

37. The Applicant has refused to advance alternative proposals without prejudice to its case on the need to expropriate Landsul and Munster Joinery's land. This is regrettably consistent with the approach taken to Landsul and Munster Joinery throughout, which has been to refuse to contemplate a world in which Munster Joinery continues to operate at Norman Road, alongside decarbonisation of Cory's environmental emissions.
38. However, Landsul and Munster Joinery's case is that if the compulsory acquisition case is rejected, which it must be, development consent can still be granted. Depending on the

eventual configuration of the Applicant's design, this may require it to seek new rights over Landsul and Munster Joinery's land in the future (e.g. to provide new pipe connections for a future heat transfer station to the south), but it can still deliver the carbon capture scheme in accordance with the consent sought, but without building on the Landsul and Munster Joinery site.

39. For all that reason, and the reasons set out above, development consent may be granted but only if the Landsul and Munster Joinery land is excluded from the land to be compulsorily acquired.



Landmark Chambers

2 May 2025

Appendix A

Dr Edgar's Technical Report and Second Alternative Layout

Technical Note

Client	Landsul Ltd and Munster Joinery (U.K.) Ltd
Project	Cory CCS
Project Number	2409
Document Number	2409_TN_006
Prepared By	
Date	2 nd May 2025

1. Purpose of Note

This note has been prepared in order to explain a further alternative layout which incorporates a 132kV switchyard. This note also provides some brief clarifications / responses to points made by the Applicant in their deadline 6 submission^[1].

2. Updated Layout

In my previous submissions, and supported by the work of Blake Clough, I have asserted that it would be preferable to connect the carbon capture facility to the EfW plants at 11kV rather than the 132kV suggested by the Applicant. For clarity, this remains my position. Having reviewed the work from Blake Clough and the most recent submission by the Applicant it is clear that there are some practical challenges in achieving this. However, the Blake Clough report (Annex A of Landsul and Munster Joinery's deadline 5 submission^[3]) gives some sensible suggestions on how these can be overcome. In my view, the Applicant's response re-emphasises that these challenges exist but does not demonstrate that the solutions put forward by Blake Clough could not be achieved. Blake Clough has also reviewed^[2] the Applicant's response and noted that the Applicant has not carried out sufficient study / investigation to be able to robustly discount the options put forward by Blake Clough.

I, therefore, remain of the view that the alternative layout I prepared, and which was submitted by Landsul and Munster Joinery at Deadline 5 with drawing no. 2409_D_001 Rev E^[3], is a reasonable alternative to the Applicant's proposal.

Notwithstanding this, I have prepared a further variation of the layout to demonstrate that inclusion of the 132kV switchyard does not mean that the Munster Joinery Land is required. This layout is presented as drawing 2409_D_003 rev A which is submitted along with this Technical Note. There are a number of key differences to the layout represented in drawing 2409_D_001 rev E (which for the sake of clarity remains my recommendation) as follows:

- It has been necessary to locate the Heat Transfer Station to the south of the Munster Joinery Land.
- The underground water tank has been relocated to the west of the laydown area.
- The cooling towers and CO₂ storage tanks have been rearranged but are still generally in the same part of the site.

3. Non-contiguous site

The most significant impact of accommodating the 132kV switchyard is that it has been necessary to split the site by moving the Heat Transfer Station to the south of the Munster Joinery Land. As I have argued previously (see paragraphs 4.36 to 4.48 of my Deadline 3 Report ^[4]) there is no technical obstacle to achieving this. Heat Transfer Stations are routinely on separate sites to the sources of heat that they rely upon.

In section 2.2.9 of the Applicant's Deadline 6 submission^[1], an argument is put forward that an issue with a non-contiguous site is that buried water pipes pose an unacceptable risk in terms of access in the instance that they were damaged. I disagree with this in principle as again, burying of water pipes is routine and a buried pipe is unlikely to be accidentally damaged in any case. It is important to note that the Heat Transfer Station does not need to be operating in order for the carbon capture plant to operate. Indeed, this is clearly envisaged as a normal operating condition given the Applicant's statement in paragraph 2.2.19 of their response to the Landsul and Munster Joinery Deadline 1 submission^[5] where it is noted that *"there will be periods when there is zero or very low demand from the heat network for heat specifically recovered from the carbon capture facility"*.

As an aside, this envisaged heat demand profile will make the economics of the heat supply proposal more challenging as such schemes are generally predicated on matching up heat supply and demand to create a stable heat load. If peak heat demand is much more significant than average heat demand then this changes the balance between capital investment and revenue which impacts the economic viability.

Regardless, I reiterate my opinion that a non-contiguous site is eminently feasible and, especially in the case of a separate Heat Transfer Station is both in-line with normal industrial practice and does not pose any additional risk to the availability of the carbon capture process.

4. Footprint and benchmarking

In their deadline 6 response^[1], the Applicant suggests that the Alternative Layout (drawing no. 2409_D_001 Rev E) is not a reasonable alternative and in particular that *"the Alternative Layout does not take full account of all space requirements that are necessary for the proper operation of Carbon Capture Plant, such as access for maintenance, or auxiliary equipment"*.

This is, in many ways, the key point of disagreement between myself and the Applicant. The differences in overall footprint are not driven by the requirements of the individual process equipment. This is confirmed by the benchmarking exercise in my Deadline 5 submission^[3] and was the key reason why I undertook that process. The benchmarking supports my argument that it is entirely possible to accommodate a carbon capture facility that achieves the required process duty within a smaller footprint than the Applicant suggests. For ease of reference, the points of comparison for the carbon capture facility are summarised below (full details are in my Deadline 5 submission^[3]):

- BEIS / AECOM benchmark = 6.9 m²/tpd CO₂
- Alternative layout = 8.4 m²/tpd CO₂
- Applicant's layout = 12.2 m²/tpd CO₂

To re-iterate, the BEIS benchmark suggests that it is possible, for a generic project on a site without particular constraints, to accommodate all of the necessary equipment in a manner suitable for appropriate operations and maintenance in an area of 6.9 m²/tpd CO₂.

The key question is whether or not the specific characteristics of this project and this site are sufficient to increase the required footprint by 77% as the Applicant contends, or by 22% as I contend. To avoid misunderstanding, it should be recalled that some of the assumptions that drive my own estimate of a 22% increase over benchmark are not ones that I necessarily agree with, as I explain in my Deadline 5 submission^[3].

The Applicant in their deadline 6 submission^[1] notes that although I have captured some of the site-specific factors I have not accounted for extra footprint driven by the electrical power consumption and cooling requirements of the cooling and liquefaction equipment (that is, the equipment needed given in this project, the CO₂ will be exported as a liquid). In respect of electrical power, it will be noted that the layout presented in 2409_D_003 rev A includes a 132kV switchyard.

As regards the cooling load, the Applicant has advised the cooling loads^[6] as:

- (i) *Capture Plant Train 1: 155.5 MW*
- (ii) *Capture Plant Train 2: 155.5 MW*
- (iii) *Liquefaction, Refrigeration, Balance of Plant: 51.3 MW*

It can be seen from the above that the proportion of the cooling load not attributable to the carbon capture plant (51.3MW at point (iii) above) is only 14%. The Applicant's suggested footprint for the cooling towers is circa 3,200 m² so 14% of that figure would be less than 500 m². By comparison, the difference in footprint for the 1.5 mtpa CO₂ Cory facility proposed for this scheme between the 8.4 m²/tpd CO₂ (the Alternative Layout) and 12.2 m²/tpd CO₂ (the Applicant's Layout) metrics is 15,616 m². It is very clear that the additional cooling requirements from the liquefaction stage do not account for this difference.

This serves to illustrate my main point of contention in terms of the footprint which is that whilst there are some features of the development that explain why the layout requires more area than would "normally" be the case according to the benchmarks, this does not account for the increased area sought by the Applicant and the Applicant has not adequately evidenced why so much more area is required.

The Applicant has provided a list of parties that have been consulted in the preparation of their layout. Notable amongst these is Shell Cansolv who will be the technology provider and who also provided the technology for one of the very few carbon capture facilities in commercial operation at Boundary Dam in Canada. On that project, it was possible to provide a carbon capture plant that used only 5.2 m²/tpd CO₂ in terms of footprint. The Applicant has not demonstrated why application of the Shell Cansolv technology at Cory requires more than twice the footprint of the Boundary Dam plant which, even allowing for project specific elements, is a very significant difference.

I acknowledge that my own layout is predicated on my professional judgement and the use of extrapolations from available data. I would contend that this is an appropriate methodology given my aim of checking the reasonableness of the Applicant's proposal. I have explained in my reports how I have used that information to reach my conclusions. However, as the Applicant has not shared or evidenced the details of their own assumptions (other than to note that they have been produced by credible and experienced parties) it is not possible for me to take a view on the reasonableness of the assumptions that the Applicant's layout relies upon. In the absence of such information, in addition to presenting my own conclusions based on my professional judgement, I have compared to benchmark figures prepared for the Secretary of State for BIES, and that exercise

supports my assertion that the Applicant's space requirements appear materially higher than would be expected.

This, in my view, is an appropriate way to use a benchmark – to provide a sense check when presented with two different views as to which is more in-line with established practice.

5. Conclusions

A further alternative layout has been prepared that includes a 132kV substation. The key differences between this layout and my (primary and preferred) layout of drawing no 2409_D_001 Rev E have been discussed.

I reiterate that there is no reason why a non-contiguous site is not acceptable and, especially when this relates to the Heat Transfer Station, I would argue that this is normal practice.

In terms of the benchmarking, I remain of the opinion that it is a meaningful exercise and supports my argument that the Applicant's layout uses more land than is necessary.

It follows therefore, that my opinion remains that it would be possible to construct, operate and maintain the proposed carbon capture facility without acquisition of the Munster Joinery Land.

6. Declaration

I confirm that this Technical Note has been prepared in accordance with my Expert Declaration set out in section 1.B of my Deadline 3 report^[4].

7. References

- [1] Applicant's Response to Landsul and Munster Joinery's Deadline 5 Submission:9.32 [REP6-038]
- [2] E-mail from [REDACTED], Blake Clough to [REDACTED], CRE Future Energies 2nd May 2025 @ 0853
- [3] Landsul and Munster Joinery's comments on any other information submitted at Deadline 4 [REP5-051]
- [4] Landsul and Munster Joinery's comments on any other information submitted at Deadline 2 [REP3-045]
- [5] Applicant's Response to Landsul and Munster Joinery's Deadline 1 Submission number: 9.14 [REP2-021]
- [6] Response to Information Request from Landsul, 20th December 2024 (section 1)

Appendix B

Email from Blake Clough to [REDACTED]

From: [REDACTED]@blakeclough.com>
Sent: 02 May 2025 08:53
To: [REDACTED]
Cc: Information, Prodiv
Subject: RE: Cory decarbonisation, Belvedere Ref Tozers:MA:L03102-0002

CAUTION: This email originated from outside Tozers. Do not click links, open attachments or scan QR codes unless you recognise the sender and know the content is safe.

Hi Craig,

Please find below notes after reading the document.

- There are concerns regarding the space requirement for the placement of the containerised switchroom nearby the transformer compound at Riverside 1 and 2, for example relating to other services in the ground. However, further work is necessary, such as surveys and review of documentation, to understand whether there is mitigation for these limitations.
- Regarding the requirement to modify the design and development of Riverside 2, there are concerns that altering the design at this stage would impact the schedule for the development of Riverside 2. However, further work is required to understand whether this could be accommodated into the schedule. Project development is an ongoing activity with many moving parts, and changes often have to be accommodated with the project development process. Therefore, modification of the design and impact on the schedule requires further detailed study.
- Regarding the 2 * 100% 11kV redundancy for N+1 resilience, this point can be accepted as there is only an impact on the cables, and in general this does not have a significant impact on the feasibility of the 11kV option.

Thank you.

Regards,

[REDACTED]
Senior Design Engineer

Blake Clough

CONSULTING MIDDLE EAST

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Appendix C

Fabrik's Landscape Report and Landscape Strategies

Client	Landsul Ltd and Munster Joinery (U.K.) Ltd
Document Ref	D3465.R01
Date	01 May 2025
Author	PB

No.	Comment
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1.	Fabrik have been asked to review comments received from the Applicant in respect of the Illustrative Layouts previously provided and their compliance with the Applicant's Design Codes/Design Principles.	
2.	General Note: Our Drawings are Illustrative Strategies, not designs. Their purpose is to illustrate how the layouts designed by CRE Future Energies <u>could be</u> integrated into the wider landscape. They are not to illustrate an alternative approach to the provision of the enhanced Crossness Local Nature Reserve, except where the layouts necessitate change. The Design Principles and Design code were respected when preparing the strategies; we consider that the illustrations could be progressed into a design that meets the Design Principles and Design Codes set out in the Application.	
3.	Comments related to Design Principles or Design Codes	
4.	Design Code/Principle referenced	Response
5.	DP_PE 1.6 Create a new campus workplace and an enhanced visitor experience that is fully inclusive and accessible to the community.	We are not clear where the CRE layouts differ materially from the Cory Layout in the layout's compliance with this Design Principle. There is nothing in the illustrative strategy that would prevent a design being developed that met this Design Principle.
6.	DP_VA 1.4 Support the delivery of a more attractive and useable CLNR through any alteration of area or configuration, support to improved management and provision of improved access, interpretation, and activation recognising the sensitivity of existing habitats.	As above – there is nothing in the illustrative strategy that precludes a design being developed that would meet this Design Principle.
7.	DC_LNR 1.15 Parking and improved access through the MOL/enhanced grazing marsh areas should be provided where practicable. This should create new links to nearby footpath network and all-weather routes including causeways, bridges, and boardwalks.	The updated plans indicate a car park for visitors to the Crossness LNR in the same location as that shown by the applicant. The proposals include a path linking to the proposed path network within CLNR

8.	DC_CCF 1.9 Back-up generators should be distanced from noise sensitive receptors.	The location of back-up generators is indicated on the updated plans.
9.	This report refers to updated illustrative strategies. Drawings Referenced: D3465-FAB-00-XX-DR-L-1000 Landscape Strategy V3 D3465-FAB-00-XX-DR-L-1001 Landscape Strategy_132kv switchyard V2	

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fabrik

Note:
This Illustrative Landscape Strategy has been prepared by Fabrik Landscape Architects on behalf of Munster Joinery UK. It accompanies the application for a Development Consent Order ("the DCO Application") in relation to the Cory Decarbonisation Project in Bexley, London.
Munster Joinery UK is seeking for the Cory Decarbonisation Project proposals to be amended to retain the Munster Joiner site.
As part of the DCO Application, an Outline Landscape Biodiversity, Access and Recreation Delivery Strategy (Outline LaBARDS) has been prepared by LDA Design on behalf of Cory Environmental Holdings Ltd. This drawing demonstrates that the main landscape principles and objectives that have been set out in the LaBARDS remain intact with the retention of the Munster Joinery UK site.



LEGEND

- Grassland / Meadow
- Marginal planting / watercourse buffer
- Marshland planting

- Tree planting / woodland
- Watercourses (ditches, drains, ponds)
- Path (with boardwalks over wetlands)

- Hardstanding around building
- Road
- Built form

- Booster Fan
- Direct Contact Cooler (Column)
- Absorber (Column)
- Scrubber (Column)
- Stack (one stack with two inner flues)

- Stripper (Column)
- Reboiler
- Compressor
- Dehydration
- Liquefaction
- Liquid CO2 storage (spherical)

- Wet dry hybrid cooler
- Steam turbine
- Transformer
- Water Treatment Plant
- Control, Administration and Welfare Building

- Chemical Tanks
- Heat Exchangers
- Heat Transfer Station
- Operational laydown
- Water tank
- Large Welfare Block

- Back-up generators

Project Title			
Cory Decarbonisation Plant			
02	Minor Amendments	LW	02.05.2025
01	For Information	LW	19.04.2025
REV	DESCRIPTION	APP	DATE

Drawing title
Illustrative Landscape Strategy 132kV switchyard

Issued by	London	T: 020 7620 1453	
Date	Apr 2025	Drawn	KLK
Scale @ A0	1:1000	Checked	KLK
Status	For Information	Approved	PB

Notes:
1. This drawing is the property of fabrik ltd. It must not be copied or reproduced without written consent.
2. Only figured dimensions are to be taken from this drawing. All contractors must visit site and be responsible for taking and checking all dimensions related to the works shown on this drawing.
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Dwg. No. D3465-FAB-00-XX-M2-L-1001

Note:
This Illustrative Landscape Strategy has been prepared by Fabrik Landscape Architects on behalf of Munster Joinery UK. It accompanies the application for a Development Consent Order (the DCO Application) in relation to the Cory Decarbonisation Project in Bexley, London.
Munster Joinery UK is seeking for the Cory Decarbonisation Project proposals to be amended to retain the Munster Joinery site.
As part of the DCO Application, an Outline Landscape Biodiversity, Access and Recreation Delivery Strategy (Outline LaBARDS) has been prepared by LDA Design on behalf of Cory Environmental Holdings Ltd. This drawing demonstrates that the main landscape principles and objectives that have been set out in the LaBARDS remain intact with the retention of the Munster Joinery UK site.



- | | | | | |
|---|------------------------------------|--|---------------------------|------------------------|
| 1. Booster Fan | 6. Stripper (Column) | 12. Wet dry hybrid cooler | 17. Chemical Tanks | 23. 132kV switchyard |
| 2. Direct Contact Cooler (Column) | 7. Reboiler | 13. Steam turbine | 18. Heat Exchangers | 24. Back-up generators |
| 3. Absorber (Column) | 8. Compressor | 14. Electrical Switchgear | 19. Heat Transfer Station | |
| 4. Scrubber (Column) | 9. Dehydration | 15. Water Treatment Plant | 20. Operational laydown | |
| 5. Stack (one stack with two inner flues) | 10. Liquefaction | 16. Control, Administration and Welfare Building | 21. Water tank | |
| | 11. Liquid CO2 storage (spherical) | | 22. Large Welfare Block | |

Appendix D

Lichfield's Socio-Economic Closing Submission

Cory Decarbonisation Project DCO: Socio-economics

Our ref 68581/01/CGJ
Date 30 April 2025
From Lichfields

Closing Submissions

1.0 Introduction

- 1.1 Lichfields, on behalf of Landsul Limited and Munster Joinery (U.K.) Limited, conducted a review and reappraisal of the socio-economic impact of the proposals of the Cory Decarbonisation Project Development Consent Order ('DCO'), with respect to the Munster Joinery site at Norman Road, Belvedere, owned by Landsul Limited, which would be subject to compulsory purchase under the Proposed Scheme.
- 1.2 At Deadline 1 Lichfields, for and on behalf of Landsul Limited and Munster Joinery (U.K.) Limited, submitted a Written Representation [REP1-059 and REP 1-060], to the Cory Decarbonisation Project Development Consent Order (DCO) detailing a review of the Applicant's evidence pertaining to the socio-economic impact of the compulsory purchase, and resultant loss, of Munster Joinery's premises on Norman Road (Plot 1-022 as per Land Plans 2.2 [REP5-003] and the Book of Reference [REP5-007]).
- 1.3 Although the Applicant submitted a response following the Deadline 1 submission, they failed to adequately address the substantive issues raised therein. Landsul Limited and Munster Joinery (U.K.) limited have subsequently sought further clarification at Deadline 3 and again at Deadline 5; however, the Applicant has consistently failed to provide satisfactory or comprehensive responses at each stage. A number of key matters therefore remain unresolved and warrant further consideration. These outstanding issues are set out in this closing submission for the Examination Authority's attention.

2.0 Response to the Applicant's Deadline 6 Submissions

- 2.1 At Deadline 6 the Applicant provided a further response [REP6-038] to Landsul Limited and Munster Joinery (U.K.) Limited's Deadline 5 submissions [REP5-051]. The Applicant's response in relation to socio-economics (addressed in Annex F of REP5-051) covers four matters, each of which are addressed in turn below.

Failure to Accurately Assess Employment and Business Impacts

- 2.2 Section 2.5.1 of the Applicant's Deadline 6 response [REP6-038], states that the roles at Munster Joinery are not location-dependent, and therefore alternative premises "*could offer the same functionality as the Norman Road site, with no change in the ability of [Munster Joinery employees] undertaking their roles.*" The Applicant further states that "*there is nothing to demonstrate that the premises can only function effectively at this location*". However, the Applicant fails to acknowledge several critical matters.

- 2.3 Firstly, the business disruption that would occur were the facility to be relocated, whether in the London Borough of Bexley or elsewhere. Indeed, within Chapter 14: Population, Health and Land Use [APP-063]) the Applicant acknowledges that the loss of the Norman Road facility would have a significant, major adverse impact on the business. However, this is not reflected within their assessment in Chapter 15 Socio-economics [APP-064] or within their Deadline 6 response. As outlined within previous submissions, Munster Joinery (U.K.) Limited have highlighted the business disruption to the organisations wider horizontal and vertical supply chains that would result from compulsory purchase.
- 2.4 The Norman Road site is Munster Joinery (U.K.) Limited's sole major distribution centre for London and the South East. The site benefits from a strategic location, with easy access to the M25 allowing efficiency in the distribution of their products for 'just-in-time' delivery. It is supplied directly from its manufacturing facility in Wellesbourne, and in total Munster Joinery employs 856 people across the UK. Munster Joinery have expanded their operations in Wellesbourne, investing over £25 million to create additional production capacity to meet the growing market demand. The expansion will increase Munster Joinery's employment in the UK to 1,500 by 2028. A significant proportion of this employment will be dependent on the site at Norman Road continuing to maintain its operation. The loss of the site would therefore critically undermine Munster Joinery's ability to serve its core customer base, jeopardising business viability and resulting in significant revenue loss. This would, in turn, reduce production demand at the Wellesbourne facility, leading to redundancies across the business, in addition to direct job losses at Norman Road. The Applicant has failed to recognise or assess the potential short- or long-term impacts of the proposed compulsory purchase on the totality of Munster Joinery's operations.
- 2.5 Further, the Applicant has failed to acknowledge Munster Joinery's ongoing expansion plans for the Norman Road site. As outlined in paragraphs 2.5 to 2.7 of Annex F to the joint submissions by Landsul Limited and Munster Joinery (U.K.) Limited at Deadline 5 [REP5-051], construction is currently underway to enhance the site's operational capacity, with completion expected by the end of 2025. There are currently 67 employees, based at Munster Joinery site on Norman Road, representing 8% of the organisation's workforce. All employees based at the Norman Road site are permanent Full Time Equivalents encompassing a range of roles from warehouse and delivery operatives, highly skilled fitting crews to aftercare service technicians. The on-going expansion will increase on-site employment to 120 staff by the end of 2025. The loss of these roles, should the compulsory purchase proceed, would result in greater adverse socio-economic impact than that assessed by the Applicant in Chapter 15: Socio-economics [APP-064].
- 2.6 Due to the nature of activity undertaken at the Munster Joinery site, i.e., working patterns with early starts, many employees of Munster Joinery live in close proximity (i.e., walking distance) to the Norman Road site. Therefore, the effects of the Proposed Development on the local workforce are not adequately appraised based on the broad study areas adopted within the Applicant's assessment in Chapter 15 of the Environmental Statement [APP-064].

- 2.7 The Applicant asserts at 2.5.2 within the Deadline 6 submission [REP6-038] that the showroom is not “*public facing*” and therefore an alternative site “*could offer the same functionality as the Norman Road site*”. It is the position of Landsul and Munster Joinery that whether the showroom is public facing or by appointment only is not relevant to the broader matter at hand. Munster Joinery’s customer base is comprised of major developers – such as Persimmon Homes, Bellway Homes, Barratt Redrow, Cala Homes and Taylor Wimpey – and the Norman Road site is used to fulfil large-scale orders, rather than principally to serve passing trade from individuals. Nonetheless it is important to business operations to have a showroom on site, and it is natural that given the nature of their clients the showroom is used on a by-appointment basis. This, however, has no bearing on the socio-economic impact of the loss of these jobs at the local and regional level that would result from the proposed compulsory purchase of the Norman Road site.

Inadequate and Inconsistent Socio-economic Impact Assessment

- 2.8 In relation to item 2.5.3 within the Applicant’s Deadline 6 submission [REP6-038], it is not the contention of Landsul Limited and Munster Joinery (U.K.) Limited that Chapters 14 and 15 of the Environmental Statement are inconsistent with each other, and it is acknowledged that these chapters address different topic areas. The concern of Landsul Limited and Munster Joinery (U.K.) Limited is rather that Chapter 15 [APP-064] is not consistent with Chapter 4: EIA Methodology [APP-053], in particular inconsistencies arising from a lack of clear approach to establishing the sensitivity of receptors and magnitude of impacts that would be expected for an assessment within an Environmental Statement.
- 2.9 The Applicant has made no effort to provide reasonable justification for the exclusion of sensitivity or magnitude definitions other than industry best practice, when the methodology section in Chapter 15 states that “*significance reflects the relationship between the scale of impact (magnitude) and the sensitivity (or value) or the affected resource or receptor*”. The Applicant has failed to provide the framework used to determine magnitude or sensitivity, including the definition of magnitude and sensitivity therefore failing to provide a robust evidence base for their assessment of the loss of jobs at the Norman Road Site. The Applicant has failed to offer any credible justification for the omission of clear definitions for sensitivity and magnitude, relying solely on general references to “industry best practice.” This omission directly contradicts the stated methodology in Chapter 15, which asserts that significance is determined by “*the relationship between the scale of impact (magnitude) and the sensitivity (or value) of the affected resource or receptor.*” Despite this, the Applicant has not provided the underlying framework or criteria used to assess either magnitude or sensitivity. As a result, the assessment lacks transparency and rigour, rendering the assessment of job losses at the Norman Road site unsupported by a robust methodology.
- 2.10 It is also an outstanding concern, which has not been suitably addressed by the Applicant, that the jobs lost at the Norman Road site are considered within the operational assessment, when the point at which the effect occurs on the site is during construction. The approach adopted by the Applicant has enabled them to consider net additional employment in its assessment of operational effects, irrespective of the different

timeframes and lack of labour substitutability between the two uses. This is not a best practice nor industry-standard approach. By adopting this approach, the Applicant has effectively masked the full adverse impact resulting from the compulsory acquisition of the site at Norman Road

- 2.11 A key unresolved concern is the Applicant's misclassification of job losses at the Norman Road site as part of the operational phase assessment, despite the fact that these losses will occur during the construction phase (as a result of compulsory purchase). This methodological error has not been adequately addressed. By conflating distinct phases of the development and disregarding the lack of labour substitutability between construction and operational roles, the Applicant has inappropriately offset permanent job losses with unrelated employment gains. As a result, the Applicant has obscured the full scale of the adverse socio-economic impact arising from the compulsory acquisition of the Norman Road site.

Consideration within the Compelling Case

- 2.12 Finally, item 2.5.4 within the Applicant's Deadline 6 response [REP6-038], concerns the compelling case. To reiterate the Landsul Limited and Munster Joinery (U.K.) Limited's position (as outlined within the Deadline 5 submission [REP5-051], the focus of the assessment undertaken by Lichfields, was not to make a judgement or consider the wider planning balance. In relation to socio-economics, throughout the Examination, Landsul Limited and Munster Joinery (U.K.) Limited have sought only to ensure that the socio-economic impacts of the loss of their Norman Road facility are fully reflected within the Applicant's assessment. The concern raised was to highlight that the Applicant has not given due consideration to the significant adverse effects resulting from the compulsory purchase of the Norman Road site within their Environmental Statement and the associated mitigation measures.

3.0 Closing Statement

- 3.1 Within this representation, a series of issues were identified within Environmental Statement Chapter 15: Socio-economics [APP-064]. The following remain unresolved at the close of the Examination:
- a The Applicant underestimates the adverse effects on employment and business disruption resulting from the compulsory acquisition of the Norman Road site by disregarding the nature of Munster Joinery's business and its direct reliance to its Wellesbourne facility and the current expansion of the Norman Road site.
 - b The Applicant has assessed the loss of Munster Joinery's facility as an operational phase impact, when the impact would occur during the construction phase (at the point of demolition). While the Applicant states that this approach was taken as the loss of Munster Joinery would be a permanent impact, this is not in accordance with industry best practice and is not established as part of the assessment methodology within Chapter 4: EIA Methodology [APP-053].

- c Landsul and Munster Joinery maintain that the approach within Chapter 15 [APP-064] of assessing the loss at the operational phase masks the full impact of the Proposed Scheme on employment in the local area, disregarding the fact that the workforce at Norman Road largely live within the local area (e.g. within walking distance).
- d The Applicant, by assessing net operational employment effects, implicitly assumes substitutability between the jobs at Munster Joinery and those at the Proposed Scheme. However, employment at Munster Joinery requires a highly specialist skillset due to the nature of its operations and is therefore not interchangeable with the employment opportunities generated from the Proposed Scheme. As such, the overall impact of the Proposed Scheme – in terms of both job creation and losses – would affect different segments of the local and regional labour markets.

- 3.2 The Applicant's responses to Landsul Limited's and Munster Joinery (U.K.) Limited's submissions at Deadline 1, 3 and 5 have failed to sufficiently address the queries and issues raised relating to the significant adverse socio-economic effects resulting from the compulsory purchase of the site on Norman Road.
- 3.3 The Applicant has not provided sufficient evidence or justification for their assessment approach, particularly within Chapter 15: Socio-Economics [APP-064]. As outlined within this submission, there remain a significant number of inconsistencies within the Applicant's assessment. Accordingly, Landsul Limited and Munster Joinery (U.K.) Limited maintain that the Applicant has not fully assessed the socio-economic effects from the Proposed Scheme on Munster Joinery, and fails to provide a precise, well-supported, and justifiable assessment.
- 3.4 Landsul Limited and Munster Joinery (U.K.) Limited therefore request that any decision on the Cory Decarbonisation Project Development Consent Order, should not be granted until the Applicant has fully reviewed and revised their assessment to address the identified deficiencies and has proposed appropriate and proportionate mitigation measures. This includes the reconsideration of the design and footprint of the Proposed Scheme to avoid the compulsory purchase of the Munster Joinery site on Norman Road, and the resulting employment loss and disruption to wider Munster Joinery business operations.