



**APPLICANT'S COMMENTS ON THE OTHER
PARTIES EXQ2 RESPONSES**

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Comments on North Northamptonshire Council (NNC) response to EXQ2 (REP5-009)

Comments from NNC to EXQ2	Response from the Applicant
<i>Q1.2 Please provide an update on the outstanding matters in the SoCG.</i>	
NNC considers that the SoCG is now in an agreed form.	A final signed version of the SoCG is provided at this deadline (D6). The agreed S106 is submitted at D6. The engrossed signed version of the S106 Agreement will follow.
<i>Q6.1 Draft Development Consent Order Art 10 The version of this Art submitted at D4 now refers to work at the existing access location. Please comment on the terms of this version of the Art.</i>	
NNC considers that the revised wording in Art 10 adequately deals with the concerns previously expressed regarding the location of the access to the site, which will now be limited to the existing access point.	-
<i>Q7.1 Land use, soils and socio-economic effects Requirement 4 of the D3 version of the dDCO requires the provision of public access to the site and aftercare works to be carried out for a minimum period of 20 years in accordance with an approved phasing, landscaping and restoration scheme. The phasing, landscaping and restoration scheme is required to be in accordance with the principles set out in the ecological management, monitoring and aftercare plan (EMMAP [APP-110] DEC Appendix DEC E). Whilst the EMMAP sets out the requirements for management and maintenance of the restored habitats, it says little about the management and maintenance of the elements of the restored site necessary to support public access (for example, the car park, outdoor furniture, physical features of controls necessary for security, litter collection). Should these matters be included in the EMMAP or elsewhere in the dDCO?</i>	
Requirement 4 (3) f, g, and h of the DCO stipulate several physical requirements that are relevant to the public access to the site. The management of these could be controlled as part of the aftercare requirements under the approved phasing, landscaping and restoration plan. There is already a requirement for this to be reviewed at least every two years (Requirement 4 (4)). Requirement 4 (6) requires aftercare to be carried out for a minimum period of 20 years in accordance with the extant phasing, landscaping and restoration scheme in place at the time. Therefore, the management and maintenance of the restored site can be adequately dealt with through the existing restoration and aftercare requirements.	It has been agreed with NNC that requirement 4(3)(a) will be amended for clarity to read: (a) <i>programme for the progressive filling, capping and phased restoration of the land including all landscaping, restoration and aftercare works which are in accordance with the phasing sequence table;</i> (b) <i><u>a programme of review meetings;</u></i> This change to the DCO has been made in V4 submitted at D6.

Comments on National Grid Gas PLC (NGG) response to EXQ2 (REP5-010)

Comments from NGG to EXQ2	Response from the Applicant
<i>Q1.1 Please provide an update on the outstanding matters in the SoCG.</i>	
<p>With regards to the outstanding issues raised in the SoCG published at Deadline 2, the parties continue to discuss the protective provisions but agreement on the drafting has not yet been reached. Discussions have progressed since the SoCG was published and the majority of National Grid's concerns have been addressed. The parties will continue to work together to resolve the outstanding issues.</p>	<p>The protective provisions have been provisionally agreed and incorporated into the latest version of the dDCO (V4). However, the Applicant notes that NGG have reserved their position in relation to the changes proposed as part of the NMC request, so further updates may be required.</p>
<p><i>Q8.6 Please comment on the matters raised in AW's D4 submissions [REP4-013 and REP4-014] and questions Q8.1 to Q8.4 above insofar as they affect your areas of responsibility:</i></p>	
<p>Q8.1 – to the Applicant</p>	
<p><i>What provisions have been made to ensure the integrity and longevity of the Anglian Water (AW) pipelines during the construction and operational phases and following restoration? In your response, please address the issues of bank stability, hydrogeology, ingress of potential contaminants into the pipeline, the proximity of surface water storage lagoons, the potential for corrosion and physical impact from changes to external loadings and crossings.</i></p>	
<p>Q8.2 – to the Applicant</p>	
<p><i>What provisions have been made to enable access for maintenance and repair of the AW pipelines during the construction and operational phases and following restoration?</i></p>	
<p>Q8.3 – to the Applicant</p>	
<p><i>Please comment on the concerns of AW [REP4-013 and REP4-014] regarding the effect of the Proposed Development on its pipelines with regard to:</i></p>	
<p><i>a) the integrity and longevity of the pipelines;</i></p>	
<p><i>b) the potential for contamination of the water supply due to the presence of LLW;</i></p>	
<p><i>c) the potential for contamination of the water supply in the event of a failure of an AW pipeline;</i></p>	
<p><i>d) the potential for contamination of the site and surrounding area in the event of a failure of an AW pipeline due to the mobilization of LLW and other contaminants;</i></p>	
<p><i>e) the effect on other utilities infrastructure, including the proposed undergrounded electricity line and the high-pressure gas pipeline, in the event of a failure of an AW pipeline.</i></p>	
<p>Q8.4 – to AW</p>	
<p><i>Please expand on the concerns set out in AW's D4 submissions [REP4-013 and REP4-014] with particular regard to:</i></p>	
<p><i>a) quantification of the increased risk of failure of an AW pipeline as a result of the Proposed Development;</i></p>	

Comments from NGG to EXQ2	Response from the Applicant
<p><i>b) the options for avoiding/mitigating the increased risk of failure of the pipeline (for example, routes for diverting the pipelines or, if the pipelines were retained in their current positions, increased standoff distances and/or enhanced protective measures or changes to the design of the Proposed Development;</i></p> <p><i>c) provisions to allow satisfactory access to maintain and repair the pipelines.</i></p>	
<p>National Grid comments in relation to Q8.3(e).</p> <p>There are a number of potential impacts on National Grid's high pressure gas pipeline (NG Pipeline) that could arise in the event of a failure of the AW pipeline, which could ultimately lead to leakage and/or interruption of service:</p> <p>a) Failure of a AW pipeline is likely to cause soil erosion (the scale of which would depend on the local ground conditions at the time), which may create a void around the NG Pipeline. The loss of support from the soil causes additional loading and stress on the infrastructure which may impact on the integrity of the pipeline leading to leakages.</p> <p>b) Release of stored energy in the event of a rupture of the AW pipeline, as well as the potential for water jetting and debris, could result in damage to the NG Pipeline.</p> <p>c) Fast flowing water against the NG Pipeline could also erode its protective coating. However, should any pipeline be exposed, the coating would be thoroughly examined and any repairs made before the pipeline was reburied.</p> <p>The NG Pipeline complies with the industry standard IGEM/TD/1, covering the design, construction, operation and maintenance of high pressure pipelines, demonstrating compliance with The Pipeline Safety Regulations 1996. However, the extent to which the NG Pipeline could be affected by a failure of the AW Pipeline is dependent on the circumstances of the failure and factors such as local soil conditions, extent of debris, attributes of the AW Pipeline (diameter, material, operating pressure, etc.), direction of the leak/failure and extent of pooling and volume of water.</p>	<p>It is noted that the gas pipeline and the Anglian Water pipeline run parallel to each other only to the south of the existing ENRMF site up to the eastern boundary of the proposed western extension where the route of the pipelines diverge. The water pipes are located to the north of the gas pipeline, between the gas pipeline and the existing ENRMF landfill site.</p> <p>If the water pipes were to be diverted around the proposed western extension, as is preferred by Anglian Water, they would need to cross over or under the gas pipeline in order to be routed to the south of the proposed western extension.</p> <p>The protective provisions have been provisionally agreed and incorporated into the latest version of the dDCO (V4). However, the Applicant notes that NGG have reserved their position in relation to the changes proposed as part of the NMC request, so further updates may be required.</p>

Comments from NGG to EXQ2	Response from the Applicant
National Grid notes that the impact of such a failure would be dealt with by way of the protective provisions being negotiated with the Applicant.	

Comments on Anglian Water Services Ltd (AW) response to EXQ2 (REP5-011)

Comments from AG to Examiners questions 2	Response from the Applicant
<p>Q8.4 Please expand on the concerns set out in your D4 submissions [REP4-013 and REP4-014] with particular regard to: a) quantification of the increased risk of failure of an AW pipeline as a result of the Proposed Development;</p>	
<p>6. Our networks are assessed in accordance with our risk model, the Monte Carlo technique, which is an established mechanism. This is an industry accepted standard which takes account for age, pressure, population served and ground conditions which gives us a risk factor (or likelihood of) failure within a given time period.</p>	<p>6 & 7. The Applicant notes that the results of the analysis presented on the plan provided with the Statement and show that for a main of this type there is a low risk of failure.</p>
<p>7. Using the Monte Carlo technique I have carried out a network analysis around the Mains. A copy of this analysis can be found at pages 1. The analysis, and therefore theoretical position, for a main of this type would suggest that it is low risk. However, the model would have assumed that the Mains are undisturbed and loaded as by occasional agricultural equipment. It does not account for the fact there are two mains there, so the risk is at least doubled (as is the level of potential damage) as well as, crucially, the unique and so far undetermined consequences of Augean’s Proposed Development.</p>	<p>6 & 7. The results of the analysis presented on the plan provided show that for a main of this type there is a low risk of failure. The risks specifically relating to the development have been assessed and the results are presented in the pipeline engineering assessment report [14.6.2.3] and the Pipeline Risk Assessment report [14.6.2.2] submitted with the non material change request on 16 June 2022.</p>
<p>8. As previously noted there has already been a leak recorded in the proceeding section of one of the mains. I understand that this leak was caused by local corrosion to that section which in turn may suggest more aggressive ground conditions in this area than our risk model currently accounts for.</p>	<p>6 & 7. No detail of the incident or of the model are provided to be able to comment directly on this point. The greatest potential type of failure, if there is any failure at all, would be a leak. If a leak is undetected and unresolved, there is the potential, albeit very low, that the weakness in the pipe could increase and that a catastrophic failure could occur. It is understood that due to the method of operation of the pipeline, in which the flow is not pumped but is driven by gravity feed from the Wing Water Treatment Works, any loss in pressure resulting from a leak is compensated for by increased gravity flow therefore a leak would not be necessarily detected by a loss of pressure in the pipeline.</p>
<p>9. Previous studies have concluded that the ground conditions to this region have clays which are prone to both shrinkage and heave (I refer to the <u>Report: The Impact of Environmental Factors on Leakage in the Anglian Water Region</u> in my previous statement). Once excavation loading is removed from adjacent areas which, given the lack of detail in the phasing and excavation local to the corridor, could result in</p>	<p>8. While the probability of a leak is considered low, as explained in the Pipeline Risk Assessment report submitted on 16 June 2022 the risk of significant leaks can be reduced further by the maintenance of the existing cathodic protection and by monitoring for leaks as</p>

Comments from AG to Examiners questions 2	Response from the Applicant
<p>ground movement. Likewise, the subsequent filling and capping could again lead to movement along the corridor length. This could be further exacerbated by construction plant, extremes of rainfall or extended dryspell / temperature rise. I am unaware of any monitoring of stability to support Augean's position that the Mains remain in situ.</p> <p>10. The Mains are operating at approximately 8 bar pressure driven by the topography of Wing Water Treatment Works to the North West. Average peak flows are circa 300 litres per second however in the event of a rupture the instantaneous flow from a pipe of this size would be above 1000 litres per second. After the initial surge, alarms would be prompted within the Control System which would lead to the throttling of flows which would maintain expected flows. We would then seek to understand the nature of the leak. Once we have located the leak, we will then seek to reduce flows further to minimise the leakage rate whilst still maintaining an onward pressure within the downstream pipe (i.e. we will not turn flows off and keep pressure within the downstream to avoid it going "flat"). If the Mains are depressurised this would allow contaminated water into our Mains thus rendering our supply to Peterborough null and void. In tandem we would review our downstream reservoir storage capacity to understand if we can isolate the Mains. Only at this time will isolation be considered, and repair undertaken.</p> <p>11. I would also note that we have had incidents whereby a single circa 600mm main (smaller than the Mains) ruptured and filled a quarry as we were unable to stop flows until repair. Details of this incident can be provided if required and whilst these events are thankfully rare the risk is real.</p> <p>12. In the event of a major burst of one of the Mains a cascade of water would flow towards the very point of access required to remedy it. As outlined previously, Anglian Water would need to maintain flow in the Mains and this would lead to us working within a narrow flowing area,</p>	<p>suggested by the Applicant. The risks of corrosion are not affected by the proposed development.</p> <p>9. The assessments presented with the request for a non material change [14.6.2.2 and 14.6.2.3] demonstrate that the proposed development will not result in any change to the risks to the stability of the pipes. It is also demonstrated that there will be no significant environmental risks as a result of failure of the pipes due to the presence of the proposed development. It is demonstrated in the risk assessments that the presence of the proposed development will not affect the likelihood or consequences of a failure in the pipes compared with their current situation. Similarly, the proposed development will not change any effects on the pipeline as a result of extreme cold or dry weather.</p> <p>10. Notwithstanding the low probability of a leak and the extremely low probability of a catastrophic failure of the pipes, the low risks of serious failure could be reduced further by the provision of monitoring at the site. It is agreed by Anglian Water that monitoring (eg acoustic loggers) could provide for detection at the site of any leaks so that early attention can be paid to carrying out repairs. Early identification of faults would allow repairs to be carried out to reduce further the risk of additional weakening of the structures and consequent catastrophic failure. Augean is prepared to facilitate such monitoring as part of the agreement of the standoff distance.</p> <p>10.The Pipeline Risk Assessment presented with the application for the non-material change submitted on 16 June 2022 [14.6.2.2] demonstrates that there is no significant risk to the stability or integrity of the water pipes as a result of the proposed development.</p> <p>11. The Applicant has no information on the specific circumstances of this incident however calculations are presented in the Pipeline</p>

Comments from AG to Examiners questions 2	Response from the Applicant
<p>increasing the easement would allow safer access and vehicular movement, adequate construction zones to facilitate safe access and the ability to move materials and labour safely past construction activity in what is a corridor.</p> <p>13. Diversion of the Mains would avoid the risk of settlement of either the Mains or surrounding embankment in both construction and trafficking activities. Moving the Mains to the periphery of Augean's land would allow the Mains to be re-designed to cope with the potential for any subsequent movement during the lifespan of the Proposed Facility. Further our issues concerning sustained traffic movement and excavation to both sides would also be alleviated and reduced. Moreover not having the Mains in their current location would simplify the phase arrangement and avoid a costly bridging process.</p> <p>14. In conclusion, it is exceptionally difficult to quantify the risk posed by the Proposed Development because I do not believe Augean have considered the full long-term implications of the Proposed Development to our Mains. Due to this omission, my advice must remain that the Mains be diverted (as it was moved previously).</p>	<p>Risk Assessment report presented on 16 June 2022 [14.6.2.2] which demonstrate that in the highly unlikely event that if all the water from two failed pipes entered the adjacent landfill void, there would be no significant unacceptable environmental consequences.</p> <p>12. As demonstrated by the calculations presented in the Pipeline Risk Assessment report [14.6.2.2] the pipe corridor will not form a flooded canal that restricts access and compromises stability and integrity. The ends of the proposed pipe route are open and there is no restriction to flow. The current falls of the ground levels are generally along the line of the pipeline and fall to the north west for the majority of the pipeline route, with the south eastern third falling to the south east. Water is therefore unlikely to pond in the area of the pipelines. In addition, ditches can be installed at the edges of the corridor to provide confidence regarding effective drainage if there remains any justified concern.</p> <p>13. Anglian Water maintain that it is their preference to divert the pipelines around the landfill outer boundary. It is demonstrated in the Pipeline Risk Assessment presented with the application for the non-material change submitted on 16 June 2022 [14.6.2.2] that the development can proceed without resulting in any significant adverse effect on the pipelines including on the ability of Anglian Water to obtain access to repair the pipelines. Accordingly there is no need for the pipelines to be diverted.</p> <p>14. If the pipelines were to be diverted to follow the eastern, southern and western boundaries of the proposed western extension a much longer pipeline route would be required (approximately 1,000m compared with the current route of approximately 350m). This longer route would still be adjacent to the boundaries of landfill phases for the entire length therefore it is unclear what benefit Anglian Water perceive would be achieved. The western boundary of the proposed western extension (approximately 450m) is adjacent to The Assarts</p>

Comments from AG to Examiners questions 2	Response from the Applicant
	<p>woodland and, as established through the ecological surveys and assessments presented in the application documents, the grassland along the woodland boundary is of significant ecological value. A wide strip of land (suggested as 40m by Anglian Water) would need to be established without tree cover and the pipes would need to be placed into a new trench excavated along this boundary. The diverted water pipes also would need to cross over or under the high pressure gas pipeline twice, once at the eastern side of the proposed western extension and once at the western side. The potential impacts and difficulties associated with a diverted route for the water pipes are significant and likely to be greater than the impacts associated with leaving them in place combined with an agreed appropriate stand off distance to allow for access should repairs be necessary.</p>
<p><i>b) the options for avoiding/mitigating the increased risk of failure of the pipeline (for example, routes for diverting the pipelines or, if the pipelines were retained in their current positions, increased stand-off distances and/or enhanced protective measures or changes to the design of the Proposed Development;</i></p>	
<p>15. The Mains are currently located circa 10 meters from Augean's Southern Boundary excluding any buffer zone from phases 3A, 4B, 5B, 6 and 7. Unfortunately I have no details as to the previous easement agreed for the Mains and cannot comment on the assessment for the easement width which was undertaken at that time.</p> <p>16. The current acceptable standard operated by the industry follows a general guidance (pages 2 to 9) ("the Guidance"). The Guidance provides that a pipe of this size (800mm) would require a minimum of 12 meter easement (page 6). However, this measurement assumes that access is generally unfettered and that it is a single main. In this case there are two mains and they are bounded by banked inaccessible ground (either by excavation or capped phase areas) allowing access only from the corridor ends. My understanding is that the corridor will be circa 350 meters long. In the event of a major leak the corridor itself would act to channel the escaping water into the access path. An increased width (if the Mains were to remain in their</p>	<p>15.& 16 The application for the non-material change submitted on 16 June 2022 [14.2] demonstrates that the estimates for the space needed for access to the pipelines range from 8.5m to 20m to the side of each pipe therefore 20m is the maximum that is likely to be necessary. A total easement width of 40m which is suggested as 'ideal' by Anglian Water in paragraph 17, taking into account the distance between the pipes of approximately 5m and the total width of both pipes which is 1.6m, correlates to a standoff distance of 16.7m away from each pipe $[(40-6.6)/2]$ which is well within the standoff of up to 30m from each pipe proposed in the non-material change request. It is therefore clear that the standoff now requested by Anglian Water can be accommodated in the application as now proposed including the standoff of up to 30m which is the subject of the non-material change to the application.</p> <p>17. Discussed in relation to question 13 above.</p>

Comments from AG to Examiners questions 2	Response from the Applicant
<p>current location) would allow improved access and the ability to move equipment around the rupture and crater zone in a safe manner without compromise or risk to Augean's work area.</p> <p>17. Without prejudice to my position that the Mains ought to be diverted, in terms of potential easement widths, Anglian Water is currently installing a major strategic pipeline and our learning from the Lincoln to Grantham section which is also an 800mm pipe is that our easement assessment (referred to above) is incorrect and ideally for sufficient working it should be 40 meters.</p> <p>18. I would request an extended easement width to allow access following worse case conditions, given our limited corridor and flood potential, as described above. During the construction and fill periods, provision should be allowed for bank stability monitoring, possible hydrophone installation for early leak detection. We would need to be assured that loading of vehicles crossing our lines would in no way impact on them by provision of a suitable independent bridging structure. In summary Anglian Water would need to be provided with:</p> <ul style="list-style-type: none"> a. Stability monitoring of easement bank; b. Plans of how they propose to go over the pipe (their proposal) and location; c. Proving that no external loads will be placed on the Mains; and d. Monitoring of water levels within the existing pipe trench e. Mains' bedding. <p>19. Notwithstanding my comments above in relation to easement width, I would re-emphasises that this is still not a viable solution in view.</p>	<p>In response to the items listed in paragraph 18, the Applicant provides the following response:</p> <p><i>a. Stability monitoring of easement bank;</i> As explained in the Pipeline Risk Assessment report submitted with the non-material change application [14.6.2.2], monitoring of the stability of the excavated, operational and restored landfill site is the subject of the Environmental Permit and will be carried out by Augean as required by the Environment Agency.</p> <p><i>b. Plans of how they propose to go over the pipe (their proposal) and location;</i> Based on the assessments carried out [14.6.2.3], it is concluded that a suitable crossing over the pipelines can be constructed readily, using standard methods that will protect the integrity of the pipelines. Nevertheless, the comments of Mr Frogatt are noted and a specification for design of the crossing will be discussed and agreed with Anglian Water at the appropriate time pursuant to the proposed Protective Provisions for the benefit of Anglian Water. Anglian Water have stated [REP4-014] that they do not require a separate crossing agreement.</p> <p><i>c. Proving that no external loads will be placed on the Mains;</i> It is demonstrated in the assessments carried out and presented in the report at Appendix SES2.2 [14.6.2.2] to the non-material change request that there is no risk of unacceptable adverse effect on the water pipes as a result of external loads.</p> <p>and</p> <p><i>d. Monitoring of water levels within the existing pipe trench mains' bedding.</i> The Applicant has offered to install facilities in order to carry out this monitoring. As a result of the low probability of failure and the lack of evidence based on the risk assessments presented below that the proposals could result in any increased risk of failure of the</p>

Comments from AG to Examiners questions 2	Response from the Applicant
	<p>pipelines, it is considered that any additional monitoring for leaks is not necessary as mitigation as it is not required to control environmental impacts or effects of the proposed development. The option of such monitoring is suggested by the Applicant to provide additional comfort to Anglian Water in order to reach agreement on a sensible standoff distance. Accordingly any commitment relating to monitoring which might be undertaken will be secured through the Protective Provisions with Anglian Water.</p>
<p><i>c) provisions to allow satisfactory access to maintain and repair the pipelines.</i></p>	
<p>20. The bare minimum standard, as per the attached document for this size of pipe is 12 meters (access to twin pipes cannot be across or over the other pipe). However, for reasons outlined above the corridor, especially in the finished condition some years hence when the pipe has advanced in failure risk, will channel any subsequent flows from a rupture directly to the working area and accesses. By diverting the Mains this will allow safe access to the rupture and working zone for further support plant and personnel as required.</p> <p>21. Previously there has been indication that a high voltage cable would be installed near the Mains. If this were to occur we would not be able to safely place mechanical excavation within 3 meters of this, further widening the easement request.</p> <p>22. In terms of an absolute minimum easement width, a theoretical calculation may assume; a 20-tonne tracked excavator allowing 4 meters track extending to 6 meters for slewing, 1 meter minimum for edge of passage, haulage road 6 meter plus a minimum segregated pedestrian walkway of 1.5 meters. This working zone will of course be distanced from the pipeline to avoid loading, and an eruption/excavation crater of a minimum 4 meters (conservative). This would take us to a minimum from edge of pipe of circa 20 meters plus. Whilst it is tempting to assume that in emergency situations, we would compromise these arrangements as an organisation we pride</p>	<p>20 to 22. As stated above, the non-material change request submitted on 16 June 2022 [14.2] demonstrates that the estimates for the space needed for access to the pipelines range from 8.5m to 20m to the side of each pipe therefore 20m is the maximum that is likely to be specified. A total easement width of 40m which is suggested as 'ideal' by Anglian Water in paragraph 17, taking into account the distance between the pipes of 5m and the width of the pipes of 1.6m, correlates to a standoff distance of 16.7m away from each pipe $[(40-6.6)/2]$ which is well within the standoff of up to 30m from each pipe proposed in the non-material change request. It is therefore clear that the standoff now requested by Anglian Water can be accommodated in the application as now proposed including the standoff of up to 30m which is the subject of the non-material change to the application.</p> <p>23. No information was provided on the pipe crossing as it was specifically excluded by Anglian as a matter for consideration at this time [REP4-014]. Based on the assessments carried out [14.6.2.3], it is concluded that a suitable crossing over the pipelines can be constructed readily, using standard methods that will protect the integrity of the pipelines. There will be no need for piling associated with the design of a suitably robust and protective crossing point. A specification for design of the crossing will be discussed and agreed</p>

Comments from AG to Examiners questions 2	Response from the Applicant
<p>ourselves in the fact that nothing we do is so important as not to do it safely, therefore we will not compromise on a safe working zone.</p> <p>23. If the Mains were to remain, the proposed greater easement width would ultimately provide a greater mass stability to the pipe embankment, this is particularly relevant as the information provided to date is silent on the issue of the pipe crossing. Augean intend to cross the pipeline by some form or ramped access or roadway to gain access to the respective phases. I imagine Augean's proposal will include some form of bridged structure, which would most likely be piled, to enable spanning of the Mains and risk of settlement. This position will need to be agreed and undertaken ahead of any excavation to enable temporary works and piling rig access; the additional easement will allow for this potential as it would carry increased risk and cost to try to do this against and excavated areas. To provide piling in this area will itself be a risk to the Mains and would need to be carefully planned.</p>	<p>with Anglian Water at the appropriate time pursuant to the proposed Protective Provisions for the benefit of Anglian Water.</p>
<p><i>d) Q8.5 Please provide an update on discussions following AW's D4 submissions.</i></p>	
<p>25. On 9 May I met with Gene Wilson of Augean and Leslie Heasman the environmental advisor to discuss outstanding issues. In the meeting we discussed the potential of a broader easement and outlined the fact that our stance is usually to remove the Mains from the area, and therefore the risk.</p> <p>26. I would summarise that there is no certainty that if the Mains are left in situ that they will remain in good condition. To the contrary, there is evidence that they will be disturbed to an unknown extent, which in itself may lead to a burst, the result of which will be far reaching and difficult to fix. My concerns are multiple but my main concerns are:</p> <p>a. The nature of the Mains being in a corridor which restricts access for maintenance and repair;</p>	<p>Following the meeting on 9 May, the Applicant has tried on several occasions to obtain feedback and to engage in discussions with Anglian Water on the risk assessments and to discuss and agree the proposed solutions to their concerns. Copies of correspondence with Anglian Water up to 10 May 2022 was provided at Deadline 5 [document reference 12.2.8.5] [REP5-007]. Correspondence since that date and up to 21 June 2022 is provided at this deadline (D6) [document reference 15.2.6.1]. The correspondence shows that despite a number of requests for feedback and responses to the risk assessment proposals and requests for information, no direct response was received until the afternoon of 16 June 2022 which is when the risk assessment reports and the non material change request were submitted. A summary of the information provided by Anglian Water on 16 June and the comments of the Applicant on that information is provided at document reference 15.2.6.2. A GIS plan</p>

Comments from AG to Examiners questions 2	Response from the Applicant
<p>b. In the event of a major failure there is risk of damage/flooding to the Proposed Development which is one we do not currently carry (increased risk to Anglian Water); and</p> <p>c. The amount of trafficking proposed between the phases of the Proposed Development that will need to go over the Mains which is a real source of localised loading which is one of the commonest causes of pipe failure; and</p> <p>d. The duty we have to our customers to provide clean and wholesome water and we may be judged on the perception that we have allowed our mains to run through a low level nuclear waste facility.</p> <p>Summary</p> <p>27. For the reasons mentioned above I am not satisfied in my capacity of Chief Engineer at Anglian Water that Augean have addressed the significant effects of the proposed development on the environment that are likely to arise as a result of the same (The Town and Country Planning (Environmental Impact Assessment) Regulations 2017, Regulation 27).</p> <p>28. In conclusion, I remain steadfast in my advice that the Mains be relocated to ensure their preservation and longevity during and after the construction of the Proposed Development.</p>	<p>and accompanying information was provided by Anglian Water on 21 June 2022 and is currently being reviewed by the Applicant.</p> <p>26.</p> <p>a) The position of the main in a corridor is not unusual as is evidenced by the corridor through the woodland to the east. Access is possible through the landfill site through most of the life of the site if not all of the life of the site.</p> <p>b) The risk assessment shows that major failure can be accommodated in the design with suitable standoffs as proposed in the non material change request.</p> <p>c) Pipe crossing is a common occurrence and there are standard designs to address this issue.</p> <p>d) The risk assessment work demonstrates that there is negligible risk to the mains supply. As shown in the Pipeline Risk Assessment (document reference 14.6.2.2) there are no conceivable pathways for the contamination of water in the pipes based on the designed standoff. As there is no likelihood of contamination any perception of risk should not be given material weight as it would not be based on any substantive evidence.</p>

Comments on Natural England (NE) response to EXQ2 (REP5-012)

Comments from NE to EXQ2	Response from the Applicant
Q1.3 – Please provide an update on outstanding matters in the SoCG.	
Natural England have provided all comments regarding the SoCG, both from our Sustainable Development Team and our Wildlife Licensing Team.	The Letter of No Impediment was issued by Natural England on 21 June 2022 and is submitted at D6 (document reference 15.2.4.1). The SoCG will now be updated and finalised following the issue of the LONI.
Q3.1- Please provide an update on progress towards the issue of a LONI for the Great Crested Newt licence application.	
A Wildlife Adviser has been assigned to assess the draft application and will issue a response within 30 working days, if not sooner. Certainly it will be in advance of the PINS deadline 6 on 22nd June 2022.	The Letter of No Impediment was issued by Natural England on 21 June 2022 and is submitted at D6 (document reference 15.2.4.1).

Comments on Cecil Estate Family Trust (CEFT) response to EXQ2 (REP5-013)

Comments from CEFT to EXQ2	Response from the Applicant
Q1.6 Please provide up update on the preparation of the SoCG.	
<p>A draft SoCG has now been received from the Applicant but it has not been responded to yet. The Trust had the swallow hole land registry boundary professionally surveyed on 28 April. The final report is still awaited, although the surveyor who carried out the survey stated verbally to the Trust's agent that the Applicant had plotted the boundary incorrectly on their plans. On receipt of the final report, which is expected imminently, it will be possible to provide comments on the SoCG.</p>	<p>It is understood that a survey has been carried out on behalf of the Trust to confirm the location of the land ownership boundary in the area of the swallow hole. It is understood that the Trust's surveyors installed flags along their interpretation of the boundary. The Applicant has inspected the boundary tape installed by the Applicant's surveyors and the flags installed by the Trust's surveyors. While there is a marginal difference between the two survey markers of between 0.5m and 1m, the discharge point in the swallow hole is at least 2m from that boundary (as observed at the Accompanied Site Visit) and lies within the land under option by the Applicant. The two rows of survey markers are shown on the photograph at Annex A to the Applicants ExQ2 response (REP5-004) with the tape to the right installed by the Applicant's surveyors and the black line showing the boundary marker posts to the left installed by the Trust's surveyors. Given the scale of the land registry plan it is entirely possible that the difference between the two surveyed boundaries reflects the thickness of the boundary line as marked on the land registry plan.</p> <p>The approximate location of the discharge point to the swallow hole is also shown. The photograph is presented at Annex A to this document for completeness.</p> <p>Comments on the draft SoCG were provided by the Trust to the Applicant on 7 June 2022. Their comments are being reviewed and a further annotated version of the SoCG will be provided to CEFT. The Applicant is seeking to achieve a finalised position before D7.</p>
Q5.1 Please provide any further evidence in support of your concerns regarding the effects of noise and odour from the Proposed Development on the proposed commercial storage facility on the land Trust land to the north of the existing site.	
<p>The EHO has stated that there have been no complaints regarding noise or odour from the existing site. That is hardly surprising given the relatively isolated nature of the site.</p>	<p>The Applicant notes that while the site is relatively isolated, the closest residents are located approximately 25m to the east of the site boundary which is closer to the development boundary than any development in the</p>

Comments from CEFT to EXQ2	Response from the Applicant
<p>The Trust has had no cause to complain about noise previously as any noise generated on the site did not adversely affect its land, but it remains concerned that the use of plant and vehicles on the extended site (particularly noise from reversing vehicles) will have adverse noise impacts on the proposed employment use of the former bomb store.</p> <p>As regards odours the Trust has noted these in the past but again they did not adversely impact its operations, so it saw no reason to complain. It should also be noted that the Applicant's evidence at ISH2 did not dispute that odours have occurred: they simply explained how they attempt to deal with them quickly. The Trust remains concerned that odours from the extended site will have adverse impacts on the proposed employment use of the former bomb store.</p> <p>These issues remain a concern.</p>	<p>former bombsite would be. In addition Westhay Farm which includes a haulage yard and farm together with commercial and agricultural buildings is located approximately 75m to the east of the application boundary.</p> <p>No complaints regarding odour have been received at the site in last 5 years.</p>
<p>Q9.1 Please respond to the Applicant's submission [AS-006] and ISH2 contributions [REP4-007] (ISH2 agenda item 7(a)) insofar as they indicate that the majority of the swallow hole, including the surface water discharge point, is on land over which it has an option to purchase.</p>	
<p>See reply to Q1.6.</p>	<p>As identified above, the survey carried out by the surveyors for the Trust confirms that the discharge point in the swallow hole is at least 2m within the land under option by the Applicant.</p>
<p>Q9.2 If necessary, please expand on your concerns regarding the surface and ground water catchments in the vicinity of the proposed extension.</p>	
<p>The following comments are subject to the receipt of the report referred to at Q1.6.</p> <p>As regards surface water flows the Trust has not been provided with sufficient information to allay its concerns. The applicant has stated that the design of their ditches will be subject to detailed design. This is an extremely important element of the proposal and this work should be undertaken ahead of the determination of the application.</p>	<p>The detailed design of the ditches is the subject of Requirement 3(4) and must be completed and approved prior to development of the new works.</p>

Comments from CEFT to EXQ2	Response from the Applicant
<p>The Applicant has stated that the ground water catchment is such that existing ground water from the application site flows in a southerly direction and does not flow under the Trust's land. The Trust has no evidence to dispute this, but the clear implication, if the Applicant is correct, is that the Applicant has no rights to discharge ground water beneath the Trust's land. If the development is permitted the Trust will carefully monitor ground water flows and if any are identified as passing from the application site and beneath the Trust's land then the Trust will take whatever action is necessary to prevent such unlawful discharges.</p>	
<p>Q9.3 Please expand on your concerns regarding how / whether the water features and surface water drainage arrangements present close the northern boundary of the existing site have implications for the impact of the Proposed Development on Trust land.</p>	
<p>The features and arrangements close to the northern boundary of the existing site are what caused the recent pollution incident. These will not have implications for the impact of the Proposed Development on the Trust land. However the Trust is keen to ensure that these issues are not replicated along the boundary of the extension. As above, the Trust has not been provided with sufficient information on the design of the ditches and water management infrastructure in order to allay these concerns.</p>	<p>The detailed design of the ditches is the subject of Requirement 3(4) and must be completed and approved prior to development of the new works.</p>

Comments on Environment Agency (EA) response to EXQ2 (REP5-014)

Comments from EA to EXQ2	Response from the Applicant
<p>Environmental controls - Question 2.1</p> <p>Treatment facility application</p> <p><u>Scope</u> This is an application to add a new treatment process for the neutralisation of hazardous and non-hazardous waste. This involves the mixing of ashy wastes such as Air Pollution Control Residues with liquid acid or alkali to adjust the pH and then mix these outputs with granular materials (hazardous and non-hazardous soils and soil like materials) to produce a waste suitable for land recovery or disposal.</p> <p>The operator also proposes to increase aggregated treatment capacity at the site to 250,000 tonnes per annum and increase the storage capacity of the dredging lagoon to 12,000m³.</p> <p><u>Issues</u> Neutralisation could be used to change the waste pH but the addition of the granular materials could lead to dilution of other contaminants and create a larger volumes of hazardous waste. The applicant responded to a Schedule 5 request on these issues on 29 April 2022 which is currently in consideration. We don't anticipate further information requests will be necessary.</p> <p><u>Control mechanisms</u> Site infrastructure and management plans have been recently updated. Control measures are currently being reviewed considering the treatment increase proposed. It is not anticipated that permit conditions or monitoring requirements will change as a result of the permit variation.</p>	<p>Discussions are continuing with the Environment Agency during their review of the application documents and the Applicant is providing responses to the requests from the Environment Agency for further detail as they arise.</p> <p>Public consultation on the treatment facility application was carried out by the Environment Agency through their Citizen Space system from 5 May 2022.</p> <p>Public consultation on the hazardous waste landfill site application was carried out by the Environment Agency through their Citizen Space system from 17 May 2022.</p>

Comments from EA to EXQ2	Response from the Applicant
<p><u>Timetable</u> The application is currently under consideration, but we cannot comment on the timetable as it is dependent on a number of variables. The permit variation will be determined as soon as we have sufficient information to do so.</p> <p>Hazardous waste landfill application <u>Scope</u></p> <ul style="list-style-type: none"> ▪ Extend the site running north to south on the west side of the current landfill (to include an area slightly smaller than the current landfill, in the form of 9 additional phases (12 to 21)); ▪ To request an extension of time for the leachate level limit of 5m from 2025 to 2046 for phases 1 to 11 in the current landfill, the operator has requested a limit of 1m in the extension phases; ▪ The infilling will continue with the same waste types, same approach to engineering and design, but we need to consider pipelines, overhead cables, culvert/drains and the potential geological issues such as the swallow hole; ▪ Increase in the annual tonnage from 250,00 to 300,000 tonnes per annum; ▪ Extend monitoring infrastructure. <p><u>Issues</u> <i>Risk assessments</i> We are requesting a number of revisions to the risk assessments (Hydrogeological Risk Assessment Review and the Stability Risk Assessment). We are due to have a meeting next week to discuss the additional information that we may need for the risk assessments. We are about to serve a notice requesting further information on the operator.</p>	

Comments from EA to EXQ2	Response from the Applicant
<p><i>Monitoring infrastructure</i> We are asking for additional monitoring boreholes and will be requesting additional information regarding particulate and asbestos monitoring.</p> <p><i>Surface Water management</i> The operator has proposed a management plan, and this is in the process of being assessed. Further information will be required, and a revised plan submitted.</p> <p><u>Control mechanisms</u> Management plans and operating techniques have been or are being updated, however the permit conditions are anticipated to be largely the same as they are currently, however operating techniques (including management plans) and monitoring requirements for all media will be updated in the permit.</p> <p><u>Timetable</u> We are unable to commit to a timetable as this will depend on the additional information we receive, the amount of assessment required and discussions with the operator. We are uncertain on the time it will take for the operator to produce the additional information once requested.</p>	
<p>Infrastructure - Question 8.6</p> <p>We have read the Deadline 4 submissions from Anglian Water. We would only comment on the risk to controlled waters should further information be forthcoming in terms of where the water would go in the event of a breach to the mains pipeline.</p> <p>The Environmental Permit will agree final location and detailed design of each phase of the landfill prior to its use, therefore any further comments on standoff distances are likely to be made through permitting.</p>	-

ANNEX A

PHOTOGRAPH SHOWING A COMPARISON OF THE AUGEAN MARKED LAND OWNERSHIP BOUNDARY AND THE CEFT MARKED LAND OWNERSHIP BOUNDARY