AQUIND Limited

AQUIND INTERCONNECTOR

Applicant's Response to Deadline 4 Submissions

Including Winchester City Council comments at Deadline 6 (25 January 2021)

This document has been edited down to contain only those matters relating to Winchester City Council..

The Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010 – Rule 8(1)(c)

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CONTENTS

TABLES

APPENDICES

Appendix F - Converter Station Access Road: Supplementary Noise and Vibration Assessment

Appendix G – Fort Cumberland Car Park Layouts

1. INTRODUCTION

1.1.1.1. The following tables set out the Applicant's responses to other parties' submissions to the Examining Authority (ExA) made at Deadline 4.

1.1.1.2. A response has not be provided for each individual submission or topic raised. The responses have focused on issues thought to be of most assistance to the ExA and the relevant Interested Party. Where points have been raised by various parties, the Applicant has responded once, but the responses are applicable to all parties who have raised the same issue in their responses.

1.1.1.3. The Applicant also does not seek to respond to all responses where the Applicant's response is already contained within other submissions made since the Application was accepted, save where it is thought helpful to repeat or cross refer to the information contained in the previously submitted documentation.

2. LOCAL AUTHORITIES

Table 2.3 – Winchester City Council

Para No.	Summary of Deadline 4 Submission	Applicant's Response at Deadline 6	Winchester City Council comment
5.5 Design and Access Statement			
	WCC have queried who decides the final design of the Converter Building and, therefore, determines the building's height. It is noted that the ground conditions indicates there is little or no tolerance to sink the building into the ground. If there are options in terms of the construction method of the building or choice of equipment when making the decision between a 22m or 26m tall building, how much a factor might cost be against reducing visual impact if the lower design is more expensive? The Council wishes to see the lowest building possible constructed on the site.	The Applicant seeks permission for buildings between 22m and 26m and has undertaken the assessment of the worst case impacts on this basis. These dimensions are based on advice which the Applicant has received from contractors experienced in constructing converter stations. . As is explained in the Applicant's Transcript of Oral Submissions for Issue Specific Hearing 1 on Development Consent Order (REP5-058) in response to question 4.2 and in the Applicant's oral response in relation to the same, taking into the account feedback received from the contractors a reduction in the permissible building height below 26m could decrease an already limited number of potential contractors able to participate in a competitive tender process for the Converter Station. If such height restriction is imposed a situation could occur where the Applicant is left with a single contractor able to deliver the Proposed Development	There are two separate but related points here. Regarding the overall height of the building the applicant has not responded to the core question which is, if faced with two quotes from different contractor and the higher one would result in a taller building, what weight is given to the desire to keep the building as low as possible and how will that decision making process be shared with the LPA to ensure landscape impact has been given its due consideration? Concerning the second point on the applicants desire to run a competitive tendering process, the council recalls the helpful interjection by Richard Turney (who is counsel for HCC) that this is not correct and no breach of law would occur if only one tender was available.

Para No.	Summary of Deadline 4 Submission	Applicant's Response at Deadline 6	
		which in turn may deliver a sub-optimal solution for a project of national significance and undermine the Applicant's ability to achieve value for money for energy consumers. As the proposed site of the converter station sits above an aquifer, whilst fully explored as a means of reducing the visual impact of the building, sinking the building into the ground by several metres is not a viable solution. As the site slopes from north to south the potential flood risk also had to be considered when reviewing the options for excavating the site to reduce the building height.	
7.4.1.3 Comments on Applicants response to the Ex Authority first set of Questions (REP1-091)			
	In discussions with the Applicant, WCC has proposed that outside working hours, the crane booms are lowered to avoid them appearing in the wider landscape and specifically in views from within the national park.	The Applicant can confirm that outside the working hours when the crane is not in use its retracted position is likely to be about 5m high measuring from the site platform level, dependant on the crane manufacturer, as detailed in Para No. LV1.9.25 in REP3-014. This is part of standard construction practice covered under CDM 2015, BS 7121-3:2017+A1:2019 - Code of practice for safe use of crane as well as ICSA N001(ED2). This is secured in paragraph 6.3.2.3 of the Onshore Outline CEMP (REP5-019) and requirement 15 of the dDCO (REP5-008).	Noted and welcomed
	At Deadline 3, the Applicant confirmed that replacement trees will be planted at least 5 m from the edge of the trench used to install the cable circuit within the Order limits. WCC question how replacement trees will be planted when space does not allow a replacement close by. How is this addressed in terms of an alternative location and how is it secured in the DCO?	OOCEMP (REP5-019) paragraph 5.3.4.3 states "*Where features are to be removed, consideration for replanting with like for like species in the locality is required. Hedgerow trees will require repositioning to at least 5 m away from the Onshore Cable Route within the Order Limits. Mitigation may also be achieved by appropriate compensatory tree planting within the locality. Where agreed with the Highway Authority they will replant highway trees in the highway where it is deemed appropriate and though the CAVAT compensation process*". The Applicant has continued to engage with WCC on replacement trees during ongoing discussions on the relevant sections of the dDCO under Part 7 and Schedule 2 (REP5-008). Requirement 9 remains under discussion with WCC and the Applicant is seeking agreement on this matter in the SoCG.	The Council understands the technical limitation on planting within 5m of the trench. However how will the planting within the locality be secured if there is no available position within the Oder Limits?

Document 7.7.1 Statement in Relation to the FOC (fibre optic cable) REP1-127			
	WCC invites the Applicant to quantify the number of lines which could be accommodated within the FOC and, based on an internet search, speculates that the estimated 20% FOC capacity needed for the Project would equate to 1.92ml telephone calls.	For the Project and for Interconnectors the utilisation of the fibre strands requires the transfer of different types of signal as well as for redundancy. It is not appropriate to directly compare the transfer of data for the interconnector with the transfer of data for telephone calls. With telephone calls it is a single type of signal being transferred via the fibre optic cable and therefore a large volume of the same type can be transmitted. The fibre strands for the Interconnector will be used for different type of signals of varying bandwidths as opposed to telephone calls.	WCC notes the information. The reason the Council referenced telephone lines was due to the lack of information being put forward by the applicant. It is noted that even in this detailed response there is still an unwillingness to quantify the FOC capacity in any detail.

Para No.	Summary of Deadline 4 Submission	Applicant's Response at Deadline 6	
	WCC maintains its view that the FOC should not be considered Associated Development and considers that this is an area where the Examining Authority and SoS will have to make a ruling.	The Applicant has confirmed its position on why the commercial use of the spare capacity within the fibre optic cables required for the operation of the Proposed Development is associated development in accordance with Section 115 of the Planning Act 2008 and how such associated development complies with the relevant guidance provided in this regard within the Statement in Relation to FOC (REP1-127).	Noted. Clearly this is not a matter where agreement is going to be reached
7.7.4 Position Statement in relation to the Refinement of the Order Limits REP1-133			
	WCC maintains its concerns over the installation of the cable at Denmead Meadows and these concerns are being discussed separately. WCC are hopeful that those discussion will come to a conclusion shortly. In the event they are successful, it will be the Councils position that any activity associated with the two drilling compounds (north & south) are confined to the two distinct areas allocated as compounds and there is no vehicular or pedestrian access link between them other than simple survey walkover rights to ensure for example there is no breach of drilling fluid onto the surface.	The Applicant can confirm that from construction point of view, the access rights would only be required between the drilling compounds for surveys, to track the drill head (walk over, therefore no disturbance of ground) and for clean-up, if there is a breach of drilling fluid.	At the present time the list of access rights as detailed under the heading Access Rights is too broad and needs refining with regard to this specific section of the site. It is noted the restriction of Rights has been Applied at Milton Allotments which is also a Location where monitoring rights are required as drilling takes place.
7.8.13 ES Addendum Appendix 3 Supplementary Alternatives Chapter REP1-152			

	WCC does not prejudge that a countryside route would be acceptable, however, the Council questions if the countryside route featured in the Applicant's site assessment decision making process. In addition, the Council continue to raise concerns regarding the discounting of the 'Countryside Route'. Including the Applicant's view that seeking to route the cable circuits along the Countryside Route risks sterilisation of land and would have presented a potentially significant consenting risk.	A cross-country option was considered in 2017 and 2018, including following the receipt of feedback from local authorities to further look into non-highway options. A route through the fields, adjacent to the A3 to the west, has been fully considered by the Applicant in a proportionate manner. A review of environmental designations and constraints showed areas of Priority Habitat, Sites of Importance for Nature Conservation (SINCs) and Ancient and Replanted Woodland. As well as environmental constraints, other important factors such as private land, compulsory acquisition requirements, and potential for future development (including strategic housing allocations) were taken into account. The Applicant's reasoned conclusion was that a route across the countryside in this location was not preferable as an alternative to the route selected and should not be pursued. The Applicant identified land sterilisation (putting restrictions on a plot or portion of land to prohibit all/some building/improvements) as a constraint West of Waterlooville as installing underground cables and joint bays would require the exclusion of development (including landscaping) above the cable route and for an area of typically 11m in width for potentially up to 5km to allow future access, where necessary. The land above the cable route would need to be kept clear from development and any significant vegetation. This would apply to the permanent easement of the cable route. This would therefore significantly constrain any proposed development in proximity to the cables.	Please identify the specific sections within chapter 2 of the ES where this consideration in 2017 &2018 is referred to. Please confirm that any consideration did review this specific cross country route from Portsdown Hill up to the Hambledon Road and that this was not a reference to other routes from other landfall points under consideration at the time. To date, despite all the responses from the applicant the timeline of actions does not support their version of events. The issues over sterilisation have been responded to in the past.

Para No.	Summary of Deadline 4 Submission	Applicant's Response at Deadline 6	
	The chronological optioneering process as set out in Chapter 2 of the ES does not support the 2018 date put forward by the applicant. Nor is there any indication that the Countryside Route featured in any meaningful way in the decision making process that the applicant followed. The Council cannot find any reference to the countryside option in the optioneering section. The connection point to the grid was offered to the applicant by NGET in February 2016. (2.4.4.3). At that time the landfall had not decided. The number of potential landfall points was gradually reduced from an original figure of 29 (April 2015) During the Onshore Routes Desktop Study Q2 2016 (2.4.6), the UK Cable Route Desk Top Study February 2017 (2.4.11) and the UK Terrestrial Routes & Landfall Workshop June 2017 (2.4.14.1) there is no indication that the countryside route was considered at all. "Section 2.4.14.8 says Eastney and Route 3D where selected. It would therefore appear that before 2018 the road option (3D) had chosen...	A section is included within ES Chapter 2 (Consideration of Alternatives) to illustrate that HBC and WCC's suggestion had been considered, stating that it was considered that the impact associated with the countryside route outweighs temporary short-term impact on traffic, and the countryside route options suggested by WCC and HBC were not considered to be reasonable alternatives to the highway route proposed during the statutory consultation and thus not taken forward. The overall philosophy applied to the consideration of the reasonable alternatives, or the options, for the Proposed Development by the Applicant is explained at paragraph 2.3 of Chapter 2 of the ES. This explains that a process of staged filtering was applied, increasing knowledge of the individual options, so as to proportionately consider them from a technical, cost and environmental perspective. A proportionate multidisciplinary approach was taken to the assessment of the reasonable alternatives, taking into account considerations relevant to and specialist input from experts in the fields of electrical engineering, cable engineering, the environment, planning and civil engineering in respect of both the onshore and marine environments. So as to provide as clear an explanation as is possible, the applicant submitted a supplementary chapter to provide further context behind the iterative process, and how relevant elements were considered. There is inevitably some cross over between the relevant considerations in relation to the individual aspects. Further information in relation to the consideration of the countryside route is provided in response to question 9.2, and further information in relation to the scope and nature of various studies undertaken, in chronological order, is provided in the response to question 9.3, in the Applicant's Transcript of Oral Submissions for Compulsory Acquisition Hearing 1 (REP5-034).	
Part 2	**Principle Powers**		

9	**Defence to proceedings in respect of statutory nuisance**		
	WCC and the Applicant continue to discuss Article 9 of the dDCO, the potential noise impacts and the manner in which they are mitigated/compliance with relevant criteria is secured.	This matter was discussed at the hearings on w/c 7th and 14th December, including in relation to Issue Specific Hearing 3. The Applicant has made clear why this Article is required, and why it is appropriate in relation to both construction and operations in the manner it is proposed. The Applicant has sought to reach agreement on the wording with WCC, and the Applicant has provided an updates to Article 9 in the dDCO submitted at Deadline 6.	This matter is still under consideration by the Council and further representations will be made at deadline 7.
Part 3	**Streets**		
Access to Works			

Para No.	Summary of Deadline 4 Submission	Applicant's Response at Deadline 6	
	WCC maintains its view that the Council should be the recipient of any submission made in relation to Article 14 (Access to Works) of the dDCO and that the relevant planning authority should be provided 40 working days to make a decision on any submission made in relation to Article 14.	The Applicant does not agree. To date the Applicant has discussed all such matters with Hampshire County Council, who as the local highway authority are the appropriate authority to approve such matters.	Highway considerations are just one factor to consider in any submission. The Council considers on balance, that it is in the best position to provide the overall assessment and response having consulted HCC
Part 7	**Miscellaneous and General**		
41	**Felling or lopping of trees and removal of hedgerows**		
	Within the Applicant's Response to Deadline 2 Submissions (REP3-014), the Applicant clarified to WCC that dDCO Articles 41 and 42 are authorising powers, which are otherwise subject to the controls provided for by the DCO as per Article 3. It was further explained by the Applicant that all operations will be required to be approved; as no such works can be carried out until approved in accordance with the relevant requirements. WCC has asked the Applicant to clarify what is meant by the reference to "all operations will be required to be approved"? Whether the DCO Requirement supersedes the Article Powers? And, if so, what is the need for Article?	The Requirements are required to be complied with. Trees will only be removed where their retention is not viable. The exact trees to be retained and lost will be determined at detailed design stage and confirmed within the Arboriculture Method Statement to be produced in consultation with and for the approval of PCC. This is secured via Requirement 15 of the dDCO (REP5-008). The need for the Article is to provide the power to carry out the activities approved in accordance with the Requirements.	Noted

Appendix F – Converter Station Access Road: Supplementary Noise and Vibration Assessment

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Converter Station Access Road – Supplementary Noise and Vibration Assessment – Appendix F

The Planning Act 2008

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CONTENTS

TABLES

1. CONVERTER STATION ACCESS ROAD: SUPPLEMENTARY NOISE AND VIBRATION ASSESSMENT

1.1. INTRODUCTION

1.1.1.1. This technical note confirms the position with respect to noise and vibration assessment associated with the use of proposed Converter Station access road.

1.1.1.2. In written submissions provided to Interested Parties' during the Examination process, the Applicant confirmed:

> *"The use of the Converter Station access road has not been included in the noise and vibration assessment. However, based on the quantity of vehicle movements assumed in the transport assessment and the time periods that these vehicle movements are expected to occur, the access road will not result in any significant noise or vibration effects."*

1.1.1.3. This supplementary information is provided to evidence these conclusions and provide reassurance to occupants of sensitive residential receptors located within the vicinity of the proposed access road.

1.1.1.4. This technical note provides additional environmental information and should be read in conjunction with and forms part of the Environmental Statement submitted for the application for the Development Consent Order ('DCO') for the UK Onshore and Marine Components of the AQUIND Interconnector (the 'Proposed Development') (the 'Application').

1.2. METHODOLOGY

1.2.1. DATA SOURCES

1.2.1.1. This assessment is underpinned by traffic data relating to the quantity, composition and timings of vehicle movements along the access road. This information is consistent with the detail provided in Chapter 15 (Traffic and Transport) and Appendix 11 (Supplementary Transport Assessment (REP1-142)) of the ES Addendum (REP1-139). These traffic flows are based on peak construction periods at the Converter Station and, therefore, represent a worst case. These peak construction periods correspond with the substructure and superstructure works at the Converter Station compound.

1.2.1.2. The key information from the transport assessment used to inform these noise predictions are presented in Table 1.1.

Table 1.1 – Quantity, composition and timing of vehicle movements along access road

Construction Activity	Estimated vehicle movements per day		Expected timings of vehicles on access road.
Converter Station Area	HGVs	43 two-way movements (86 in total)	Occurring over an eight-hour window between 09:00-17:00
	Cars	150 car two-way movements (300 in total)	Arrival between 07:00-08:00, and departure between 18:00-19:00
Cable Route (using Converter Station Area as main compound)	HGVs	24 two-way movements (48 in total)	Occurring over a nine hour window between 07:00-17:00 (excluding 08:00-09:00)
	LGVs	12 LGV two-way movements (24 in total)	Departure between 07:00-08:00 and return between 17:00-18:00
	Cars	48 car two-way movements (96 in total)	Arrival between 06:00-07:00, and departure between 17:00-18:00
Landfall and HDD (using Converter Station Area as main compound)	HGVs	4 two-way movements (8 in total)	Occurring over a ten hour window between 07:00-19:00 (excluding 08:00-09:00 and 17:00-18:00).
	LGVs	2 LGV two-way movements (4 in total)	Departure between 07:00-08:00 and return between 19:00-20:00
	Cars	8 car two-way movements (16 in total)	Arrival between 06:00-07:00, and departure between 19:00-20:00

HGVs – Heavy Good Vehicles

LGVs – Light Good Vehicles

These vehicle movements are assumed to occur simultaneously and represent a worst-case during peak construction.

1.2.2. ASSUMPTIONS

1.2.2.1. The locations for the construction compounds, vehicle parking and laydown areas that each vehicle will access will be confirmed during detailed design and approved in accordance with the Requirements included within the draft Development Consent

Order (dDCO). Therefore as a worst case and robust approach, it is assumed that all vehicles will travel the full length of the access road between the junction with Broadway Lane and the Converter Station compound.

1.2.2.2. The vehicle speed of the access road is to be limited to 15 mph, which is consistent with the proposed maximum speed limit on surfaced roads as a dust mitigation measure (Table 5.1 of the Outline Onshore CEMP Rev 004 (REP5-019)).

1.2.2.3. The location of the access road is based on the indicative Converter Station Area layout plans (REP1-018). The distances between the access road and the relevant sensitive receptors are the same for Options B (i) and B (ii).

1.2.3. SENSITIVE RECEPTORS

1.2.3.1. The sensitive residential receptors located closest to the proposed access road and, therefore, included in this assessment are:

- Broadway Farm Cottages
  - This is labelled as R11 in figure 24.1 (APP-335) of the noise and vibration assessment.
  - Broadway Farm Cottages are the closest residential receptors to the access road, being located 45m from proposed access road at the closest point, and are considered to also represent a worst-case assessment for Broadway Farm House (R10 in figure 24.1(APP-335)), which is located a further distance from the access road.
- Little Denmead Farm
  - This is labelled as R5 in figure 24.1 (APP-335) of the noise and vibration assessment.
  - Little Denmead Farm is 65m from the access road at its closest point, which is the static caravan located approximately 100m north-east of the permanent residential building known as Little Denmead Farm. The static caravan has been used as the sensitive receptor location for Little Denmead Farm, which represents a worst case assessment as this is the nearest sensitive receptor to the access road.
  - It is the Applicant's understanding that temporary planning permission (12/02536/FUL) to site this mobile home for an agricultural worker expired on 1 July 2016. Condition 2 of this permission states that after this date, '*the mobile home and any associated residential paraphernalia shall be removed from the site and the land restored to its former condition in accordance with a scheme of work submitted to and approved by the Local Planning Authority*.' Whilst it appears this condition has not been complied with, as it is understood the caravan is occupied, the receptor has been included as a worst case.

1.2.4. NOISE PREDICTION METHODOLOGY

1.2.4.1. The prediction methodologies set out in CRTN[1] (which was used for the assessment of construction traffic noise on the wider road network) are unreliable when flows are below 50 vehicles per hour. Therefore, this methodology is not appropriate for the majority of the construction working hours as access road vehicle flows are below this threshold. Therefore it is necessary to adopt an alternative methodology that is reliable for low flow roads (see paragraph 1.2.4.2). Whilst CRTN could be used for the traffic noise predictions during the hours at the start and end of the day when flows are expected to be greater than 50 vehicle per hour, it is not considered appropriate or robust to apply two different prediction methodologies for the assessment of the same noise source. It is appropriate, therefore, to identify a methodology that can be robustly applied across all of the construction hours the access road will be in use.

1.2.4.2. The noise levels shown in Table 1.2 have been predicted using Noise Advisory Council[2] guidance, which is an appropriate and robust approach for quantifying noise level on roads with relatively low flows, such as there will be on the access road. The methodology adopted is not considered any less appropriate than CRTN for the assessment of flows greater than 50 vehicles per hour on the access road. This method initially calculates a noise level ($L_{Aeq,T}$) at a distance of 10m from a road. To predict levels at the sensitive receptors listed above, noise levels have been assumed to decrease at a rate of 3dB per doubling of distance (i.e. a line source), which is considered a worst case and robust approach.

1.2.4.3. An approach using the empirical method for haul roads described in British Standard 5228-1:2009+A1:2014[3] is also not appropriate for the assessment of the access road because this method is limited to the prediction of mobile plant. As shown in Table 1.1, a notable proportion of the vehicles using the access road during peak construction will be cars and light good vehicles (LGVs), and it would not be appropriate, therefore, to quantity these using the BS 5228 method.

1.3. RESULTS

1.3.1. NOISE

1.3.1.1. The predicted noise levels from the access road are presented in table 1.2.

[1] Department of Transport (1988) Calculation of Road Traffic Noise. London: HMSO.
[2] The Noise Advisory Council (1978). A Guide to Measurement and Prediction of the Equivalent Continuous Sound Level L_{eq}. London: HMSO
[3] BSI (2014) Code of practice for noise and vibration control on construction and open sites – Part 1: Noise

Table 1.2 – predicted noise levels from vehicles travelling along the access road during peak construction

Time period[1]	Predicted noise level from access road ($L_{Aeq,T}$[2])	
	Broadway Farm Cottages	Little Denmead Farm
06:00-07:00	42	40
07:00-08:00	49	48
08:00-09:00	n/a[3]	n/a[3]
09:00-17:00	50	48
17:00-18:00	42	41
18:00-19:00	47	45
19:00-20:00	35[4]	33[4]

1 – These times periods relate to works on weekdays. Equivalent noise levels are also expected for works on Saturday mornings. Noise levels during core working hours on Saturday morning (0800-1300) would be equivalent to the 0900-1700 period in this table. The start-up and shut down periods on Saturdays would be equivalent to the 0700-0800 and the 1800-1900 periods in this table.

2 – T refers to the duration of the time period i.e. 1 hour for most periods presented, and 8 hours for the 09:00-17:00 period.

3 – No vehicle arrivals or departures expected during this period.

4 – The predicted noise levels from the access road are very low during this period as only 10 vehicles are expected to arrive or depart the Converter Station area. The measured noise levels are likely to be below the existing ambient noise level during this period.

Broadway Farm Cottages

1.3.1.2. At Broadway Farm Cottages, the predicted noise levels from the vehicles travelling along the access road range between 35 and 50 dB $L_{Aeq,T}$, depending on the time period.

1.3.1.3. As explained above, the traffic flows that these noise predictions are based upon correspond to the peak construction period (the substructure and superstructure works at the Converter Station Compound). As Broadway Farm Cottages are located over 300m distance from these works at the Converter Station, following the BS 5228 methodology, it was not necessary or appropriate to provide predicted noise levels for these construction activities at these receptors in Tables 24.22 and 24.23 of the

ES (APP-139). Therefore it is not necessary to combine the predicted noise level from the access road use with noise levels from these construction activities.

1.3.1.4. Furthermore, it is not necessary to combine predicted noise levels for the access road use with the noise levels for the enabling works and post-construction works (tables 24.21 and 24.24 of the ES (APP-139)) because these relate to activities before and after the peak construction period, including the construction of the access road itself, the establishment of the laydown and parking areas that vehicles will access, and the reinstatement of the temporary laydown areas after construction.

1.3.1.5. Therefore, in accordance with the methodology described in section 24.4.2 of the ES (APP-139), the noise levels at Broadway Farm Cottages from the access road use represent a negligible magnitude of level and therefore a direct, temporary, medium-term, negligible (not significant) effect.

Little Denmead Farm

1.3.1.6. At Little Denmead Farm, the predicted noise levels from the vehicles travelling along the access road range between 33 and 48 dB $L_{Aeq,T}$, depending on the time period.

1.3.1.7. As explained above, the traffic flows that these noise predictions are based upon correspond to the peak construction period (the substructure and superstructure works at the Converter Station compound). Whilst Little Denmead Farm (the permanent residential building and caravan to the north-east) are located over 300m from these works at the Converter Station compound, these receptors are located within 300m of the substructure and superstructure works at the Telecommunications Building, and hence construction noise level predictions were provided for these activities in Tables 24.22 and 24.23 of the ES (APP-139).

1.3.1.8. If the noise level during substructure works (i.e. the highest and worst case) of 53 dB $L_{Aeq,T}$ (Table 24.22 of the ES (APP-139)), is added to the highest noise level from the access road use during these works (48 dB $L_{Aeq,T}$), this would result in a combined construction noise level at Little Denmead Farm of 54 dB $L_{Aeq,T}$[4] during substructure works.

1.3.1.9. It is not necessary to combine predicted noise levels for the access road use with the enabling works and post-construction works, for the same reason explained for Broadway Farm Cottages.

1.3.1.10. Therefore, in accordance with the methodology described in section 24.4.2 of the ES (APP-139), the noise levels at Little Denmead Farm from substructure activities and simultaneous access road use represent a negligible magnitude of level and therefore a direct, temporary, medium-term, negligible (not significant) effect. This is

[4] Noise levels are logarithmic and therefore noise levels are combined using logarithmic addition rather than arithmetic addition.

the same magnitude of effect presented in Chapter 24 of the ES (APP-139) for all construction activities relevant to Little Denmead Farm.

1.3.2. VIBRATION

1.3.2.1. The two nearest receptors at Broadway Farm Cottages and Little Denmead Farm are located 45m and 65m respectively from the proposed access road. For groundborne vibration from vehicles travelling along the access road to potentially result in adverse effects at these distances, a source of vibration (an irregularity (i.e. a bump or pothole) in the road surface) would be required.

1.3.2.2. As explained in Paragraph 1.4.1.2 below, the Outline Onshore CEMP ensures that the Converter Station access road will be maintained in a good condition (i.e. free from bumps/potholes) to minimise the generation of noise or vibration from vehicles.

1.3.2.3. Therefore, in the absence of an expected source of adverse vibration, it can be robustly concluded that negligible vibration effects will result from vehicles using the access road.

1.4. CONCLUSIONS

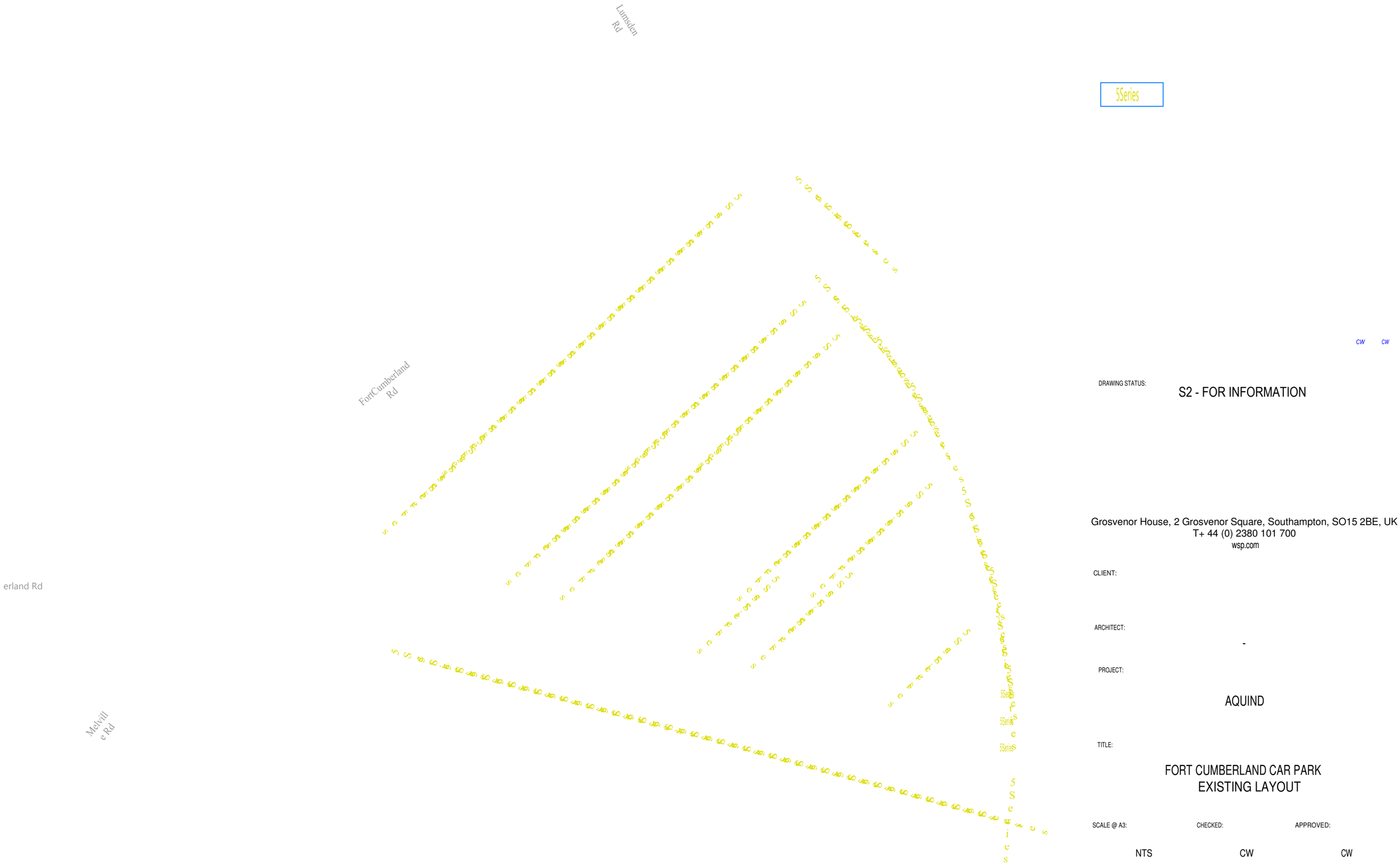
1.4.1.1. In summary, the noise and vibration effects from the use of the access road combined with the substructure and superstructure works during the construction period will be negligible at all receptors, as concluded in Chapter 24 of the ES.

1.4.1.2. Furthermore, the following best practice noise and vibration mitigation measures specific to the access road and Converter Station Area are secured through section 6.3.8 of the Outline Onshore CEMP (REP5-019):

- Throughout the construction stage, the Converter Station access road will be maintained in a good condition (i.e. free from bumps/potholes) to minimise the generation of noise or vibration from vehicles.
- The layout and form of the laydown areas, vehicle parking and works compounds at the Converter Station will be planned carefully to minimise noise at nearby sensitive receptors as far as practicably possible through best practice measures including the following:
  - The noisiest activities will be planned to take place as far as practicably possible from nearby sensitive receptors.
  - Careful positioning of site cabins and other equipment to provide screening between site activities and nearby sensitive receptors. Where appropriate, this could be supplemented by localised noise barriers in the areas adjacent to sensitive receptors.

Appendix G – Fort Cumberland Car Park Layouts

DO NOT SCALE



CW CW

DRAWING STATUS:

S2 - FOR INFORMATION

Grosvenor House, 2 Grosvenor Square, Southampton, SO15 2BE, UK
T+ 44 (0) 2380 101 700
wsp.com

CLIENT:

ARCHITECT:

-

PROJECT:

AQUIND

TITLE:

FORT CUMBERLAND CAR PARK
EXISTING LAYOUT

SCALE @ A3:	CHECKED:	APPROVED:
NTS	CW	CW

PROJECT No:	DESIGNED:	DRAWN:	DATE:
62100616	-	AVI	December 20

DRAWING No: AQ-UK-DCO-TR-LAY-006

REV: 01

NOTES:

1. A 7.5M WIDTH HAS BEEN ASSUMED BETWEEN PARKED CARS TO ACCOUNT FOR THE INFORMAL NATURE OF PARKING AT FORT CUMBERLAND CAR PARK

KEY:

APPROXIMATE LOCATION OF INFORMAL PARKING SPACES

APPROXIMATE LOCATION OF SITE ACCESS

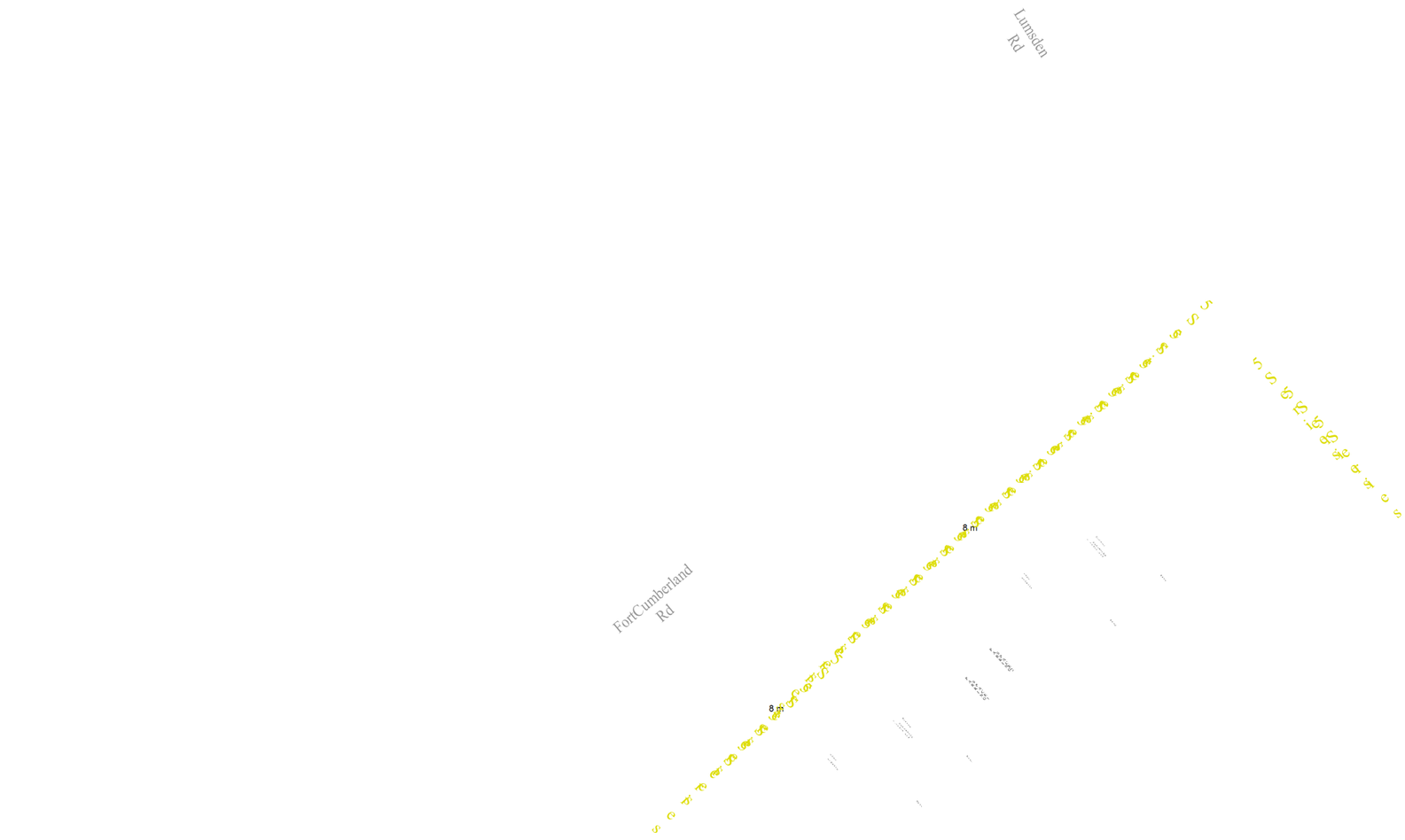
TOTAL CAPACITY ESTIMATED AT 106 SPACES

REV	DATE	BY	DESCRIPTION	CHK	APP
01	22/12/2020	AM	FIRST ISSUE		

wsp

AQUIND

DO NOT SCALE



5Series

CW CW

DRAWING STATUS:

S2 - FOR INFORMATION

Grosvenor House, 2 Grosvenor Square, Southampton, SO15 2BE, UK
T+ 44 (0) 2380 101 700
wsp.com

CLIENT:

ARCHITECT:

-

PROJECT:

AQUIND

TITLE:

FORT CUMBERLAND CAR PARK
PROPOSED CAR PARK LAYOUT WITH
FORMAL PARKING BAYS

SCALE @ A3:	CHECKED:	APPROVED:
NTS	CW	CW

PROJECT No:	DESIGNED:	DRAWN:	DATE:
62100616	-	AVI	December 20

DRAWING No: AQ-UK-DCO-TR-LAY-007

REV: 01

NOTES:

1. A 7.5M WIDTH HAS BEEN ASSUMED BETWEEN PARKED CARS TO ACCOUNT FOR THE INFORMAL NATURE OF PARKING AT FORT CUMBERLAND CAR PARK
2. ALL FORMAL PARKING SPACES USE DIMENSIONS OF 2.4m by 4.8m

KEY:

PROPOSED LANDSCAPE AREA

ESTIMATED LOCATION OF LOST INFORMAL PARKING

APPROXIMATE LOCATION OF SITE ACCESS

TOTAL CAPACITY 185 SPACES

REV	DATE	BY	DESCRIPTION	CHK	APP
01	22/12/2020	AM	FIRST ISSUE		

wsp

AQUIND