



AQUIND Limited

AQUIND INTERCONNECTOR

Environmental Statement – Appendix 2.5 Assessment and Comparison of Environmental Impacts Associated with Converter Station Options A and B

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

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Environmental Statement – Volume 3 –
Appendix 2.5 Assessment and Comparison of
Environmental Impacts Associated with
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APPENDIX 2.5 ASSESSMENT AND COMPARISON OF ENVIRONMENTAL IMPACTS ASSOCIATED WITH CONVERTER STATION OPTIONS A AND B

Table 1 – Assessment and Comparison of Environmental Impacts Associated with Converter Station Options A and B

	Option A	Option B
Landscape and Visual Amenity	<p>Zone of Theoretical Visibility ('ZTV') identified a wider visual extent, impacting a broader range of Visual Receptors including residents and users of Public Rights of Way ('PRoW');</p> <p>Located closer to concentrations of sensitive Receptors;</p> <p>Limited screening from existing topography, woodland or mature vegetation due to position in a predominantly open arable field with low boundary hedgerows; and</p> <p>Potential mitigation measures are anticipated to be less effective, and due to the lag of new planting, considered to have a longer-term impact.</p>	<p>ZTV illustrates a narrower visual extent, impacting less Visual Receptors including residents and users of PRoWs;</p> <p>Located a greater distance from concentrations of sensitive Receptors;</p> <p>Existing screening in the locality including partial screening from Stoneacre Copse, with views from the east screened by mature vegetation surrounding the existing Lovedean Substation;</p> <p>Limited views from Horndean and Catherington due to the immediate context, with more localised screening from boundary hedgerows and trees; and</p> <p>Proposed mitigation measures for Option B would likely strengthen existing planting, providing more effective screening, with a more immediate impact.</p>

	Option A	Option B
	Option B is the preferred option in terms of landscape and visual amenity	
Ecology and Biodiversity	<p>Preferred option;</p> <p>Land is of lower ecological value (an arable field) with fewer protected species and priority habitats likely to be affected; and</p> <p>Lower habitat loss and need for ecological mitigation measures.</p>	<p>Less preferred option;</p> <p>Land is of higher ecological value (a pastoral field) with a greater number of protected species and priority habitats likely to be affected; and</p> <p>Potential to result in more extensive habitat loss (hedgerow and hedgerow trees) with more extensive ecological mitigation measures.</p>
	Option A is the preferred option in terms of ecology and biodiversity	
Ground Conditions	<p>Both options located within the Source Protection Zone 1 ('SPZ1'), which is related to the underlying Principal Aquifer (Chalk) and proximity to the drinking water extraction wells/springs; and</p> <p>Similar risks and SPZ protection would need to be considered during construction.</p>	
	No preferred option in terms of ground conditions	
Noise and Vibration	<p>Greater number and proximity of Noise Sensitive Receptors (including dwellings); and</p> <p>Predicted noise levels on the closest facade of the most exposed.</p>	<p>Lower number and proximity of Noise Sensitive Receptors (including dwellings); and</p> <p>Predicted noise levels on the closest facade of the most exposed Receptors lower than Option A.</p>
	Option B is the preferred option in terms of noise and vibration	
Transport and Access (existing roads)	<p>No preferred option;</p> <p>Option A is located closer to the local highway network and requires the development of a shorter Access Road to serve the Converter Station site during the construction and operational stages;</p>	

	Option A	Option B
	<p>While the volume of earthworks is anticipated to be lower for Option A than Option B, it is anticipated that the majority of earthworks can be utilised on site and the total number of traffic movements during the construction stage are considered to be comparable between the two options. As a result, the potential for harm to the countryside and the rural character of local roads is similar for both options; and</p> <p>In terms of potential impact to the existing highway network during the construction, there was no preferred option.</p>	
	<p>No preferred option in terms of transport and access</p>	
Soils and Agricultural Land Use	<p>Less preferred option;</p> <p>Greater disruption to residual field size and shape; and</p> <p>More suitable for arable farming due to flatter topography.</p>	<p>Preferred option;</p> <p>Lower disruption to residual field size and shape; and</p> <p>Less suitable for arable farming due to steeper topography.</p>
	<p>Option B is the preferred option in terms of soils and agricultural land use</p>	
Heritage and Archaeology	<p>Less preferred option;</p> <p>Closer proximity to, and greater impact on setting of listed buildings; and</p> <p>Both options could potentially affect the setting of Designated Heritage Assets within a 2 km radius, however reduced protection of existing screening from topography and planting.</p>	<p>Preferred option;</p> <p>Greater proximity to, and reduced impact on setting of listed buildings; and</p> <p>Both options could potentially affect the setting of Designated Heritage Assets within a 2 km radius, however Option B is afforded increased protection of existing screening from topography and planting.</p>
	<p>No Scheduled Ancient Monuments or Conservation Areas were identified as being impacted; and</p> <p>No preferred option from an archaeological perspective, on the basis on the baseline data available.</p>	
	<p>Both options have similar constraints for the management of surface water, foul water management, water supply and groundwater.</p>	

	Option A	Option B
Water Resources and Flood Risk	No preferred option from a flood risk perspective	
Waste and Material Resources	<p>Preferred option;</p> <p>Lower surplus volume of material from cut and fill (50% less); and</p> <p>Surplus to be utilised in landscape reprofiling to reduce the need to transport the waste along the highway network.</p>	<p>Less preferred option;</p> <p>Double the surplus volume of cut and fill than Option A; and</p> <p>Limited amount of the cut and fill surplus can be utilised in landscape reprofiling, requiring increased need to transport the waste along the highway network.</p>
	Option A is the preferred option from a waste and material resources perspective	
Air Quality	<p>Neither option being located within an Air Quality Management Area ('AQMA');</p> <p>Similar air quality impact during construction only:</p> <p>HGV movements and dust generation, with effects capable of being mitigated through a Construction Environmental Management Plan ('CEMP').</p>	
	No preferred option from an air quality perspective; both located a sufficient distance from sensitive Receptors	
Socio-economics	<p>Option A has a marginally greater potential to impact on PRow's both during the construction and operational stages.</p>	
	No preferred option on socio-economics, with no private or community assets, aside from agricultural land	
Human Health	<p>Option A is closer to the densely populated residential area via Broadway Lane, with Option B is approximately an additional 400 m from the densely populated area.</p>	
	No preferred option from a human health perspective	

