Norwich Western Link

Environmental Statement

Chapter 7: Noise and Vibration

Appendix 7.7: Assessment of cumulative impacts

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1 Assessment of cumulative impacts

1.1 Introduction

1.1.1 Committed developments have been identified within 2km of the Proposed Scheme. It is appropriate to consider the potential for any of these committed developments to result in cumulative adverse effects in combination with the Proposed Scheme.

2 Operational stage

2.1.1 The operational noise assessment is based on traffic data forecasts which include key larger developments in the area of the Proposed Scheme which have the potential to influence traffic flows. Where the committed developments are not of sufficient magnitude so as to be included within the traffic data, it is considered that these are accounted for in growth factors included in the data. On this basis, it is considered that the operational noise assessment is inherently cumulative in nature and therefore, no additional cumulative significant adverse operational noise effects are anticipated.

2.1.2 Committed development S8 is the only additional development that would result in a new receptor within the operational noise detailed calculation area. This has been included as a receptor within the main assessment in **Environmental Statement: Chapter 7 Noise and Vibration** (Document Reference: 3.07.00). As no other committed development would include new receptors in the detailed calculation area, it is not necessary to consider the potential impacts of the Proposed Scheme on any other committed development.

3 Construction stage

3.1 Construction noise and vibration effects from on-site activities

3.1.1 Cumulative construction noise and vibration effects can occur where works are undertaken at two sites close by simultaneously. Construction noise impacts are more common than vibration, as generally, vibration generating activities occur for less of the time than noise generating activities, and vibration impacts are usually more localised than noise. Cautiously, any committed development with construction works occurring within the Construction Noise Study Area (300m) from the works associated with the Proposed Scheme has been considered.

3.1.2 **Table 3-1** presents a summary of the short-list of committed developments with the potential to result in cumulative adverse effects in combination with the Proposed Scheme. The consideration of potential cumulative construction noise and vibration effects for each of the committed developments is also included. The committed developments which are located at too great a distance for cumulative significant effects to occur, have not been included in the Table.

3.1.3 This table details developments other than the Proposed Scheme, outlines the potential impacts those schemes will have upon the environment, and outlines whether it is likely that in-combination cumulative effects will occur.

Table 3-1 On-site construction effects from committed developments

ID	Application name and reference	Applicant for 'other development' and brief description	Distance from project	Status	Easting	Northing	On-site construction effects
S6	DCO	Broadland District Council and South Norfolk Council. Proposed dual carriageway A47 North Tuddenham to Easton. Also PINS application (row 568) - Dualling of the single carriageway section of the A47 between Norwich and Dereham, linking together two existing sections of dual carriageway. The scheme will provide a new route to the south of Hockering and to the north of Honningham and include two new junctions. The first junction will be at Berry's Lane and Wood Lane, and the second junction will be located at Blind Lane and Norwich Road. Because of these additions to the side roads, the Easton roundabout will be removed.	0m	Granted 12/08/22	Not applicable	Not applicable	There are no sensitive receptors located within the Construction Noise Study Area at the southern end of the Proposed Scheme close to the proposed route of the A47. There are sensitive receptors located to the south of the existing A47 which will likely be adversely impacted by works associated with the A47, given the distance to the works associated with the Proposed Scheme (over 300m) it is considered that in combination cumulative significant adverse construction noise or vibration effects are unlikely.

ID	Application name and reference	Applicant for 'other development' and brief description	Distance from project	Status	Easting	Northing	On-site construction effects
S7	DCO	Hornsea Project Three Offshore Wind Farm	0m	Granted 31/12/20	Not applicable	Not applicable	It is understood, based on publicly available information for this development, that no significant adverse construction noise or vibration effects are anticipated due to the cable route works. Cable route works can usually progress quickly and do not require plant to be stationed in one location for lengthy periods. It is assumed that Significant adverse construction noise effects were not anticipated for this development on account of the duration aspect of the significance criteria not being exceeded. The cable route passes close to the sample receptors identified for the Proposed Scheme of C3 (Field Farm) and C6 (2 Breck Barn Cottage). However, given the brief duration they will be affected by works associated with the cable route development, additional in combination cumulative significant adverse construction effects are unlikely. Given the location of the proposed cable route, and the few significant adverse effects anticipated to result from the Proposed Scheme, cumulative significant adverse effects are considered unlikely.

ID	Application name and reference	Applicant for 'other development' and brief description	Distance from project	Status	Easting	Northing	On-site construction effects
S8	20190021	The Kennels, Ringland Lane. Part Change of Use from C3 to D2 for the Use of the Site as a Wedding Venue for up to 20 Weddings per Year and Use of Buildings and Marquee in Association with Wedding Venue (Retrospective)	800m	Approved 21/03/19	609476	309832	As this application is retrospective, it is assumed that no further construction works are required for this development. Therefore, in combination cumulative significant adverse construction noise or vibration effects are unlikely.

ID	Application name and reference	Applicant for 'other development' and brief description	Distance from project	Status	Easting	Northing	On-site construction effects
S11	DCO	Sheringham and Dudgeon Extension Projects.	0m	Not yet Approved	Not applicable	Not applicable	It is understood based on publicly available information for this development, that no significant adverse construction noise or vibration effects are anticipated due to the cable route works. Cable route works can usually progress quickly and do not require plant to be stationed in one location for lengthy periods. It is assumed that significant adverse construction noise effects were not anticipated for this development on account of the duration aspect of the significance criteria not being exceeded. The cable route passes close to the sample receptors identified for the Proposed Scheme of C2 (Pump Farm), C6 (2 Breck Barn) and C7 (Norwood). However, given the brief duration they will be affected by works associated with the cable route development, additional in combination cumulative significant adverse construction effects are unlikely. Given the location of the proposed cable route, and the few significant adverse effects anticipated to result from the Proposed Scheme, cumulative significant adverse effects are considered unlikely.

ID	Application name and reference	Applicant for 'other development' and brief description	Distance from project	Status	Easting	Northing	On-site construction effects
S15	2023/2200	Excavation of soils to construct an irrigation reservoir at Wensum Valley Golf and Country Club.	150m	Decided	615320	314395	Whilst the construction works associated with the Proposed Scheme and this application could occur simultaneously, there are no noise sensitive receptors in proximity to both the proposed reservoir and the Proposed Scheme that are likely to be adversely affected by construction works. Therefore. cumulative significant adverse effects are considered unlikely.

ID	Application name and reference	Applicant for 'other development' and brief description	Distance from project	Status	Easting	Northing	On-site construction effects
S16	2023/2575	Installation of pre construction field drainage to support the operation of the Hornsea Project Three onshore export cable route (EIA Development)	0m	Pending Consideration	Not applicable	Not applicable	As this application is associated with the Hornsea DCO application (S7 above) and the project location is understood to cover the same area, the anticipated cumulative impacts are the same as those set out above. It is understood, based on publicly available information for this development, that no significant adverse construction noise or vibration effects are anticipated due to this application works. It is assumed that Significant adverse construction noise effects were not anticipated for this development on account of the duration aspect of the significance criteria not being exceeded. The application route passes close to the sample receptors identified for the Proposed Scheme of C3 (Field Farm) and C6 (2 Breck Barn Cottage). However, given the brief duration they will be affected by works associated with the development, additional in combination cumulative significant adverse construction effects are unlikely. Given the location of the proposed application route, and the few significant adverse effects anticipated to result from the Proposed Scheme, cumulative significant adverse effects are considered unlikely.

3.2 Construction traffic noise

3.2.1 In order to assess the impacts of construction traffic from the Proposed Scheme on nearby receptors, traffic flows along the key routes to the Site have been considered. The noise level changes predicted based on the additional construction traffic are provided in the Noise and Vibration Chapter, and no significant adverse construction traffic noise effects were anticipated.

3.2.2 The two cable route applications which cross the Proposed Scheme (S9 and S13) would potentially use some of the same routes as vehicles associated with the Proposed Scheme. Traffic data have been provided for key road links based on construction vehicles associated with the Proposed Scheme and the Equinor Scheme (S11) which are considered most likely to overlap. The noise level changes as a result of the Proposed Scheme and the Equinor Scheme have been calculated adopting the same methodology as that outlined in the Noise and Vibration Chapter. Negligible and minor impacts (non-significant) are predicted for all links except for Marl Hill Road and Wood Lane – Paddy's Lane where major adverse impacts were predicted (noise level changes of +7.5dB and +5.6 dB respectively).

3.2.3 As set out in the Noise and Vibration Chapter, given the proximity to the A1067 which will likely dominate noise levels at the properties close to Marl Hill Road, a significant adverse effect is not considered to occur in this case. For Wood Lane – Paddy's Lane it is anticipated that cumulative significant adverse construction traffic noise effects could occur at receptors within 50m of this route (although significant effects are anticipated resulting from the Proposed Scheme only should construction traffic use this route to access the Site). In reality, it is unlikely that these scenarios would occur at the same time, meaning that the noise level changes could be less than predicted.