

Redevelopment of existing port facilities at Ringaskiddy, Co. Cork,

ABP Ref: 04.PA0035.

Response to Further Information Request Issued by An Bord Pleanála on 8th July 2014

- 1. It is an obligation under the EU Birds Directive to avoid the deterioration of habitats outside of Special Protection Areas (SPAs), especially with regard to Annex I bird species such as the Common Tern. It is also a likely requirement of the detailed conservation objectives for Cork Harbour, that there is no significant decline in the number of breeding terns, or their breeding productivity, within the SPA.**

Page 15-24, paragraph 4 of the environmental impact statement (EIS), states that a plan which includes Common Tern nesting improvement measures, is currently in preparation. The plan aims to outline a series of potential habitat improvement and creation measures to be implemented over a period of 3-5 years to establish sustainable long term nesting habitats to facilitate an increasing population of Common Terns in Cork Harbour.

This plan is required as mitigation for the potential loss of habitat as a result of the proposed development and should be submitted to the Board in order to determine the adequacy of the nest-site recreation proposals. The plan and proposed mitigation measures should be fully assessed in the EIS and the Natura impact statement.

The EIS states at Chapter 15, p23 that .

- Breeding Common Tern is a Special Conservation Interest of Cork Harbour Special Protection Area (SPA) with a mean of 69 pairs for the period 1998-2000 and a maximum of 102 pairs in 1995; and
- In 2012 the total population of Common Terns which nested within Cork Harbour was between 85 and 95 pairs, close to the maximum recorded population of 102 pairs in 199; and that
- This represents c.2.1% of the all-Ireland population estimated during the Seabird 2000 Survey.

Detailed conservation objectives for Cork Harbour SPA have not been published, as acknowledged by the Department of Arts, Heritage and the Gaeltacht (DAHG) in its submission to An Bord Pleanála. The published Natura 2000 Standard Data Form for Cork Harbour SPA lists a population of 69 breeding pairs.

The EIS notes at Chapter 15, Table 15.19 that 45-50 pairs were breeding outside of the SPA in the Deepwater Port at Ringaskiddy in 2012 and 42-48 pairs were breeding there in 2013. The EIS estimates this colony to comprise between 65-72% of the SPA qualifying population at Chapter 15, Section 15.4.3.1 (p32) and Natura Impact Statement, Section 3.2.4.1 (p23). It was in this context of a Common Tern colony existing at Ringaskiddy Deepwater Port that impact assessment was undertaken on the likely significant effects of the proposed redevelopment on that breeding colony at EIS Section 15.4.3 and Natura Impact Statement, Section 3.2.4.

This assessment considered direct habitat loss, indirect habitat loss and deterioration through pollution or dredging, loss of food resource, disturbance and predation; as evidenced by EIS Chapter 15 (pages 31-38) and Natura Impact Statement (pages 22-28). In summary, it concluded in relation to Common Tern that .

- The mooring dolphins will not be lost or structurally affected as a result of the proposed redevelopment;
- Common Tern foraging activity within Cork Harbour is widespread and a large proportion of activity occurs beyond the intertidal and marine areas adjacent to the proposed redevelopment footprint;

- The Common Tern colony is highly tolerant of the existing level of noise disturbance (i.e. loss of attractiveness of the nest site) arising from the activities within the operational port;
- Having reviewed and scrutinised the noise model results with the noise expert and based on three years of observations supported by literature review, it was concluded that background construction noise is unlikely to result in a loss of attractiveness of the mooring dolphins;
- Construction of internal roads and improvements to the existing port entrance have the potential to result in a loss of attractiveness of the mooring dolphins and a visual screen is proposed to screen these works. the predicted residual effect is temporary minor adverse;
- Construction of the remaining elements of Ringaskiddy East is considered to be sufficiently screened from the mooring dolphins by existing infrastructure so as to not result in a significant disturbance effect leading to loss of attractiveness of the nest site;
- Availability of fish prey for Common Terns will not be significantly impacted;
- Operation of the proposed redevelopment including a permanent screen along the shoreline adjacent to the mooring dolphins is unlikely to result in a loss of attractiveness of the nesting location.

It is our assessment, based on scientific information gathered through three years of consecutive survey and observations at the Port and as supplemented by literature review that the construction and operation of the Ringaskiddy Port Redevelopment project will not, either on its own or in combination with the other plans or projects assessed, likely result in a significant decline in the number of breeding Common Tern within the SPA, i.e. the Conservation Objective. The specialist assessments on noise, marine ecology, fisheries and benthos, water quality, dredge plume and sediment transport modelling were incorporated into the scientific assessment on Common Tern. Mitigation has been proposed and incorporated into the design of the project. The residual non-significant effects are predicted with a high degree of certainty.

As noted above, potential effects on the Conservation Objectives of Cork Harbour SPA including the population of breeding Common Terns were considered and assessed in relation to direct habitat loss, indirect habitat loss and deterioration through pollution or dredging, loss of food resource, disturbance and predation. Likely significant effects were then considered and assessed and reported in the EIS and Natura Impact Statement.

The EIS states at Section 15.3 that the proposed redevelopment works are located in and adjacent to an operational Port. The existing Common Tern colony currently co-exists alongside the Port's operations including daily human and shipping presence on the quayside, periodic maintenance dredging, and the amenity and commercial use of the shoreline, basin and channel.

The proposed Redevelopment project includes screening at construction and operation incorporating predator perching deterrents, and a timing restriction on dredging as mitigation. In our view, this mitigation is appropriate and sufficient to avoid any deterioration of habitat or any loss of habitat outside of Cork Harbour SPA.

Distinct from these mitigation measures associated with the project, Port of Cork envisage delivering new Common Tern nesting opportunities both within the Port itself and beyond the operational Port area in conjunction with NPWS and Third Parties on lands outside the control of Port of Cork.

A report making recommendations on Common Tern nesting habitat improvement measures has been enclosed with this response. The following assessment relates to recommendations in areas within the ownership and/or control of Port of Cork.

Assessment of Nesting Improvement Recommendations

Works within the Deepwater Port involve installation of habitat improvement measures to the existing mooring dolphin and terminal dolphin of the ADM Jetty, fitted out in a manner to encourage the terns to establish nests, as follows: -

A flat platform will be constructed and attached to the side of the mooring and terminal dolphins. The platform will be fitted with a wooden or metal perimeter edge (c.30cm height) to create a secure bund. A series of internal wooden baffles and built-in chick shelters will be constructed and the floor will be covered with a layer of suitable coarse aggregate and mussel shells as nesting substrate.

Construction works are estimated to last no longer than one week and can thus be fitted between breeding and wintering seasons to avoid construction disturbance affecting the target species and overwintering populations. Works at both locations will take place from a barge and from the dolphin.

Greater nest capacity will be created at the existing colony location. Predation has not been a problem at the existing mooring dolphin site until July 2014 when a Grey Heron was observed predating on unfledged chicks on the central dolphin. The provision of chick shelters as part of the recommendations will reduce this predation risk. The works will not result in an ecological trap due to increased nest predation because they include shelters to provide cover for chicks, something which is absent under the existing scenario.

Monitoring of the works in the breeding season following installation will determine if predation at the improved mooring dolphin or new ADM Jetty location is a problem. If so, the improvement works may be reconfigured prior to the subsequent breeding season.

Conclusion

The DAHG submission notes that relocation, in itself, of the tern breeding site is not at issue and the requirement is not the preservation of the current Common Tern nesting site within the port area, but the conservation of sufficient safe breeding habitat in the western part of the Lower Harbour to maintain their population. The recommendations report formalises a set of biodiversity enhancement measures for the benefit of Common Tern in Cork Harbour, specifically designed to create additional safe breeding habitat in the western part of the Lower Harbour to maintain and enhance the Common Tern population.

Our assessment of the recommendations outlined above concludes that there is no reasonable scientific doubt as to any new or enhanced existing site resulting in an ecological trap due to nest predation or other adverse effects. Predation is currently a threat to fledging chicks and chick shelters do not currently exist and are proposed as part of the intended works under the recommendations to combat the predation risk.

The design of the project and the mitigation associated with the proposed Ringaskiddy Port Redevelopment project does not result in the loss or deterioration of nesting habitat. These measures are not nest site recreation proposals, they are new nesting opportunities. No significant adverse effects are predicted and overall, the breeding habitat capacity will be increased.

2. You should confirm the estimated duration of piling activities at Ringaskiddy West and Ringaskiddy East.

The environmental impact assessment has been based on estimated overall construction programmes of the following durations;

- Ringaskiddy West (DWB extension) 11 months
- Ringaskiddy East 24 months

The following piling durations have been estimated for Ringaskiddy East.

	MONTH																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Quay Walls																								
Quay Wall Piling																								
Anchor Wall piling																								
Crane Foundations piling																								
Deck Slab Piling																								
RTG Foundations																								
Piling																								

Overall piling activities on the site are anticipated to extend over a period of approximately 16 months, with marine piling having duration of approximately 12 months.

Piling activities at Ringaskiddy West are likely to be undertaken over a period of approximately 7 months with marine piling having duration of approx 4 months.

It should be noted that pile driving will be an intermittent activity within these periods with a substantial period of the overall piling activity comprising moving and setting up of equipment during which pile driving is not undertaken.

- 3. Page 15-25 of the Natura impact statement refers to the continued use of Ballybricken breakwater as a roost site after disturbance due to the construction of a grain store at the edge of the Deep Water Berth in 2013.**

You are requested to provide details, if available, on the duration of the disturbance which occurred during the grain-store construction, and where the disturbed birds are likely to have roosted during this construction period.

The contractor responsible for the works has confirmed to Port of Cork that works commenced on site on the 17th November 2011 and were completed on the 12th June 2012. To clarify, this is the duration of construction and not disturbance. By reference to the totality of the third paragraph of page 25 of the NIS, the disturbance identified was the potential loss of attractiveness of the ADM Training Wall as a roost site, principally for gulls and cormorants. However, with reference to Section 3.3 of EIS Volume 3a, Appendix 15.7 the detailed surveys established that the birds continued to arrive at the ADM Training wall and ADM Liquids Jetty and that there was no observed loss of attractiveness of these sites to the roosting cormorants as a result of these works. In summary, they did not change behaviour and did not seek out an alternative roost site.

You should also clarify whether impact or hammer-piling can be restricted in order to avoid high tide during the period of use of the breakwater by wintering birds, i.e. mid-September to mid-April.

The avoidance of piling at high tide would present an impractical restriction on piling operations and would have the effect of extending the overall period in which piling would be undertaken.

- 4. You are requested to confirm the presence or absence of freshwater in the vicinity of the potential otter couch/holt near the ADM jetty, in order to confirm that this will not be used as a breeding site. If no freshwater is present, then mitigation for the timing of piling in relation to this receptor will not be required.**

There are no freshwater sources within lands in control of the Port in the vicinity of the ADM Liquids Jetty. As a result of further monitoring undertaken in July 2014 using an infrared motion-activated camera located under the ADM Liquids Jetty for 18 consecutive nights, indicates that there is not likely to be a holt, much less a breeding holt under or near the Jetty.

In conclusion, no freshwater is present and it is our assessment that a holt is not located at the ADM Jetty. Mitigation for the timing of piling in relation to a potential breeding site for otter is not required.

- 5. The application site is located adjacent to Monkstown Creek proposed Natural Heritage Area (pNHA). The Site Synopsis for the pNHA includes reference to the conservation value of semi-natural woodland within the designated site (including the woodlot at Ballybricken). The EIS should be supplemented with an assessment of the effects of construction and operational dust deposition on the woodland part of the pNHA.**

Chapter 10 of the EIS notes in Section 10.2.1 that construction dusts have the potential to cause local impacts to sensitive ecosystems, and in Section 10.3.2 that sources of nuisance dust in the area include bulk cargo unloading operations at the existing DWB and bulk grain storage facilities at Ringaskiddy West.

Section 10.1 notes that existing operations at Ringaskiddy West involve the handling of bulk grains (existing operations involve up to five cranes and three hoppers) and the environment is already prone to fugitive dust release. Aerial dust deposition from the proposed development must therefore be considered in context alongside the existing scenario at Ringaskiddy West.

As part of the Port Of Cork Environmental Management System dust monitoring was carried out at three site boundary locations as part of an on-going monitoring programme. In 2013, the dust value measured at the closest location to the pNHA was 84 mg/m²/day in the March/April monitoring period and 55 mg/m²/day in the August/September monitoring period. This is monitoring location 1 at the existing deepwater berth - refer to EIS Volume 2, Figure 10.1 for a location map. Values across the site ranged between 27 mg/m²/day and 254 mg/m²/day across these monitoring periods. The maximum recorded value was in the March/April period at monitoring location 3 (Ringaskiddy East, adjacent to the N28). This is a measure of the existing baseline, and is noted in Appendix 10.1 of Volume 3a of the EIS.

Detailed potential impacts at construction stage are set out in 10.4.1 of the EIS. This is applicable to all construction areas of the proposed redevelopment. Measures of control of fugitive dust are described in EIS Section 10.6.1 noting that BRE Guidance on the Control of Dust from Construction and Demolition Activities will be followed and that a site dust monitoring programme will be put in place during the construction phase to manage dust deposition.

Section 10.6.2 of the EIS describes how at operational stage, bulk grain cargo unloading will be undertaken in a manner that minimises cargo spillage; how all loading/unloading will be subject to operation specific control and containment protocols as currently adhered to by Port of Cork; and how the current method of handling cargoes will be continued and extended to service the proposed berth extension and dust monitoring at site peripheries will be continued.

Section 10.3.2 of Chapter 10 describes the range of measures Port of Cork has implemented to control dust, and Section 10.5.4 confirms that Port of Cork will continue to adopt best practice and will actively review with the receiving companies what other measures might be implemented to control release of dust during unloading operations. The existing comprehensive mitigation measures adopted by Port of Cork will be used on the area of operation of the new extended Deepwater Berth.

The existing regime of dust deposition at Ringaskiddy is not predicted to change to any significant degree. The predicted magnitude of change regarding the effect of dust deposition upon woodland vegetation within the pNHA at construction and operational phase is not significant, and the predicted residual effect is negligible and with reference to EIS Chapter 15, Table 15.4 where the range of ecological impacts are presented.