



Your Ref: ABP-313277-22

Our Ref: **SHD Centre Pk Road Marina**

(Please quote in all related correspondence)

20 May 2022

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1
D01 V902

Via email to strategichousing@pleanala.ie

Re: Notification under the Planning and Development (Housing) and Residential Tenancies Act 2016; Planning and Development (Strategic Housing Development) Regulations 2017

Proposed Strategic Housing Development (SHD): SHD by Tiznow Property Company Limited (Comer Group Ireland) for the demolition of existing structures and construction of 823 apartments, a crèche & associated site works at the former Tedcastles Yard, Centre Park Road and Marina, Co Cork

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I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated headings co-ordinated by the Development Applications Unit.

Nature Conservation

The proposed development site is within 2km upstream of the Lough Mahon part of Cork Harbour Special Protection Area (SPA) (4030), designated¹ primarily for mudflats used by wintering birds. There are four potential conservation impacts which need to be considered: (a) increased need for future flood relief works affecting the natural tidal dynamics of the mudflats in the SPA; (b) pollution due to release of contaminants during site preparation and construction; (c) increased recreational disturbance due to increased population (in combination with other residential development); (d) the need to ensure proper accounting for the disposal of construction and demolition waste to avoid unauthorised infilling.

Future flood relief works

The proposed development site is within a polder. On pp. 14 & 17 and Figs. 8 & 11 of the *Flood Risk Assessment* accompanying the planning application, it is shown that most of the

¹ Under the European Communities (Conservation of Wild Birds (Cork Harbour Special Protection Area 004030) Regulations 2010 (S.I. No. 237 of 2010)).



development site is within a 1 in 100 year *fluvial* flood event zone, and a 1 in 200 year *tidal* flood event zone, but that it is protected by a polder flood defence to the north between the development site and the River Lee.

Potential flooding impacts are not considered in the Natura Impact Statement (NIS).

However, the *Flood Risk Assessment* (p. 26) states that:

“Given the planned scale of development in Docklands, ... it is clear that Cork City Council ... will have no alternative but to invest in raising the polder defences to ensure that they can continue to act as the primary line of flood defence ..., as sea level rise takes place.”

This appears to be an indirect effect, namely that this development will be dependent on future raising of the polder embankment. The proposed long-term design height is 4.35 m O.D. However, as sea level inevitably will continue to rise, coupled with the risk of increased tidal surge heights (a worst case prediction is for a cumulative height up to 2m by 2120), there will be a time when even this height will be unsustainable, and further flood risk measures will be required. One IPCC forecast is for sea level rise of over 5m by 2300.

On p. 28 of the Flood Risk Assessment, it is accepted that, as sea-level rise exceeds 1m, “it is considered likely that a harbour wide solution such as a tidal barrier or barrage may become necessary and/or viable”,

implying that such a solution would provide the necessary protection for the development as sea level rise continues to increase. Such barrier options have recently been technically assessed by ARUP for the OPW, including one off Carrigrennan, which would affect the Douglas Estuary part of the SPA². With increasing frequency of use, and consequent changes to tidal processes, the operation of such a barrier is likely to have significant adverse effects on mudflat / sandflat ecosystems of Douglas Estuary and Lough Mahon.

While this question might be an issue for assessment at plan level, it has been considered to not require assessment as the draft City Development Plan is not proposing such a barrier (p. 358 if the Chief Executives Report, Vol. 1³).

The following points need to be considered in assessing the implications of long-term flood protection (embankment raising, downstream barrier(s)) for Docklands area development:

- (a) There is an existing extensive stock of high-value property in the more flood-prone City centre, which would already make an over-riding public interest case for a downstream barrier; thus, this project is not a leading project in making the need for a tidal barrier inevitable.
- (b) As fluvial/tidal flooding overtopping the embankment will come from the west, rather than the east (CFRAM flood map), the raising of the embankment on the margin of the SPA cannot be considered necessary to primarily protect the development site.

² ARUP (2017) *Lower Lee (Cork City) Flood Relief Scheme. Supplementary Report – Option of Tidal Barrier*. Report to Office of Public Works.

³ <https://www.corkcity.ie/en/proposed-cork-city-development-plan-2022-2028/draft-plan-documents/phase-2-draft-development-plan-2022-2028/chief-executives-report-on-the-draft-plan-consultation/>



- (c) As the lands in the development area are downstream of the City centre, they cannot be considered as having value for fluvial flood storage; also, as they are still along the river channel, rather than in the wider estuary, their value as lands for tidal retreat is low.
- (d) If a tidal barrier is only considered necessary at sea level rise of >1.7m, then the Lough Mahon and Douglas Estuary intertidal mudflats will themselves be much more prone to drowning⁴, and may not be as suitable a habitat for wintering shorebirds as they are at present.

Pollution risk due to drainage from exposed contaminated soil/subsoil

The proposed development is in an area with a history of industrial use, including oil and coal depots (EIAR, p. 493), and there is evidence of hydrocarbon, PFAS⁵ and heavy metal contamination of the soil and subsoil (EIAR, p. 509-510; 526). The EIAR states (p. 522) that an unspecified volume of contaminated soil/subsoil will be excavated as part of the development, and either disposed of off-site or remediated for re-use as fill on-site. The EIAR (pp. 526 & 524) states:

“The dredging of the southern open channels could potentially mobilise PFAS that is present in the channel sediment therefore increasing the concentration of it in the surface water down stream and in the Lee Estuary Lower and potentially part of the northern open channel.”

“The open channels discharge into the Lee Estuary Lower via a one-way valve.

The contaminants would be diluted within the Lee Estuary Lower hence any impact would be limited to a small area close to the outfall. Consequently this effect could have a temporary reversible small adverse impact in the River. The Lee Estuary Lower is of high importance hence the significance of the impact is likely to be moderate/slight.”

The main concern regarding pollution from the site is that the excavation and/or treatment of contaminated soil/subsoil will result in discharges which significantly increase hydrocarbon or heavy metal levels in the downstream wetlands or SPA mudflats. There is insufficient reasoning in the NIS regarding the risk and mitigation for this potential impact, and reference must be made to the EIAR (e.g. p. 525) for this information. It is argued that the large dilution in the Lower Lee Estuary (EIAR p. 348), which is the pathway both between the outflow and Lee Gravels, and the bird feeding zone in the Lough Mahon mudflats, means it is unlikely to have adverse effects on Cork Harbour SPA. It is recommended that the Board ensure that there are sufficient measures in place for control of contaminant release during site excavation, and for avoidance of groundwater contamination, and sufficient environmental monitoring by an environmental clerk-of-works.

⁴ See, e.g. van der Wegen, M., Jaffe, B., Foxgrover, A. and Roelvink, D. (2017) Mudflat morphodynamics and impact of sea level rise in south San Francisco Bay. *Estuaries and Coasts* **40**: 37-49.

⁵ Polyfluoroalkyl Substances; they are persistent, mobile in sediments and can bioaccumulate (<https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas>).



Increased recreation disturbance from residents

The existing walkway from Blackrock Castle to Passage West, which is adjacent to the boundary of Cork Harbour SPA, is for the most part currently unlit. The proposed residential development, in combination with other residential developments, is likely to increase the pressure for both lighting and nocturnal walking along this route. Because of potential impacts on feeding, and possibly roosting, birds, this should be assessed before the decision is made to introduce lighting. It is recommended that the Board considers if this is an in-combination indirect effect for this development.

Construction and demolition waste management plan

The proposed development is within haulage distance of Cork Harbour SPA and Great Island Channel Special Area of Conservation (SAC no. 1058). It is recommended that the Construction and Demolition Waste Management Plan (see EIAR Appendix 5.2) is revised prior to the excavation of the site to ensure that project waste disposal records are fully maintained. It is important to avoid C & D waste being subsequently used for unauthorised infilling of lands within the above European sites, which has been an issue on occasion in the past with large projects in Cork City.

You are requested to send any further communications to this Department's Development Applications Unit (DAU) at manager.dau@housing.gov.ie, or to the following address:

The Manager, Development Applications Unit (DAU)
Government Offices, Newtown Road, Wexford Y35 AP90

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A handwritten signature in blue ink, reading "Michael Murphy".

Michael Murphy,
Administration
Development Applications Unit