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Phase 1 - The Meadows - Bessborough

RESIDENTIAL HOUSING DEVELOPMENT

5800 TELECOMMUNICATION SIGNAL INTERFERENCE REPORT

Bessborough,
Ballinure,
Blackrock,
Co. Cork

Estuary View Enterprises 2020 Ltd

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1 Introduction

1.1 Document purpose.

This report gives information on the assessment of interference to existing telecommunications signals as a result of the new proposed development. High rise buildings or tall structures could potentially interfere, disturb or block an existing telecommunication signal. Officially licenced telecommunications signals operating in the correct designated area or path should not be adversely affected by the new development or if assessed to be effecting an existing signal should try to accommodate the signal provider to allow redirection or similar process.

1.2 DKPartnership (DKP) have been commissioned by Estuary View Enterprises 2020 Ltd, to carry out the analysis and report for the proposed development at Bessborough, Co. Cork.

1.3 Development description

The development consists of 280 build to sell apartments , associated supporting uses , a 25 child creche facility , communal open space areas, landscaping, under-podium and car parking spaces (99 spaces), bicycle parking spaces, bin stores, public lighting and all ancillary site development works.

The development also consists of a new pedestrian and cycle way bridge connecting the site to the passage west greenway to the Eastern boundary. The development is arranged around 4 main L-shaped blocks ,Builds A,B,C,& D with a central spine public route running East-West. A raised landscape podium is located to the South of this route .Building Heights range form 1 - 10 storeys at varying locations.

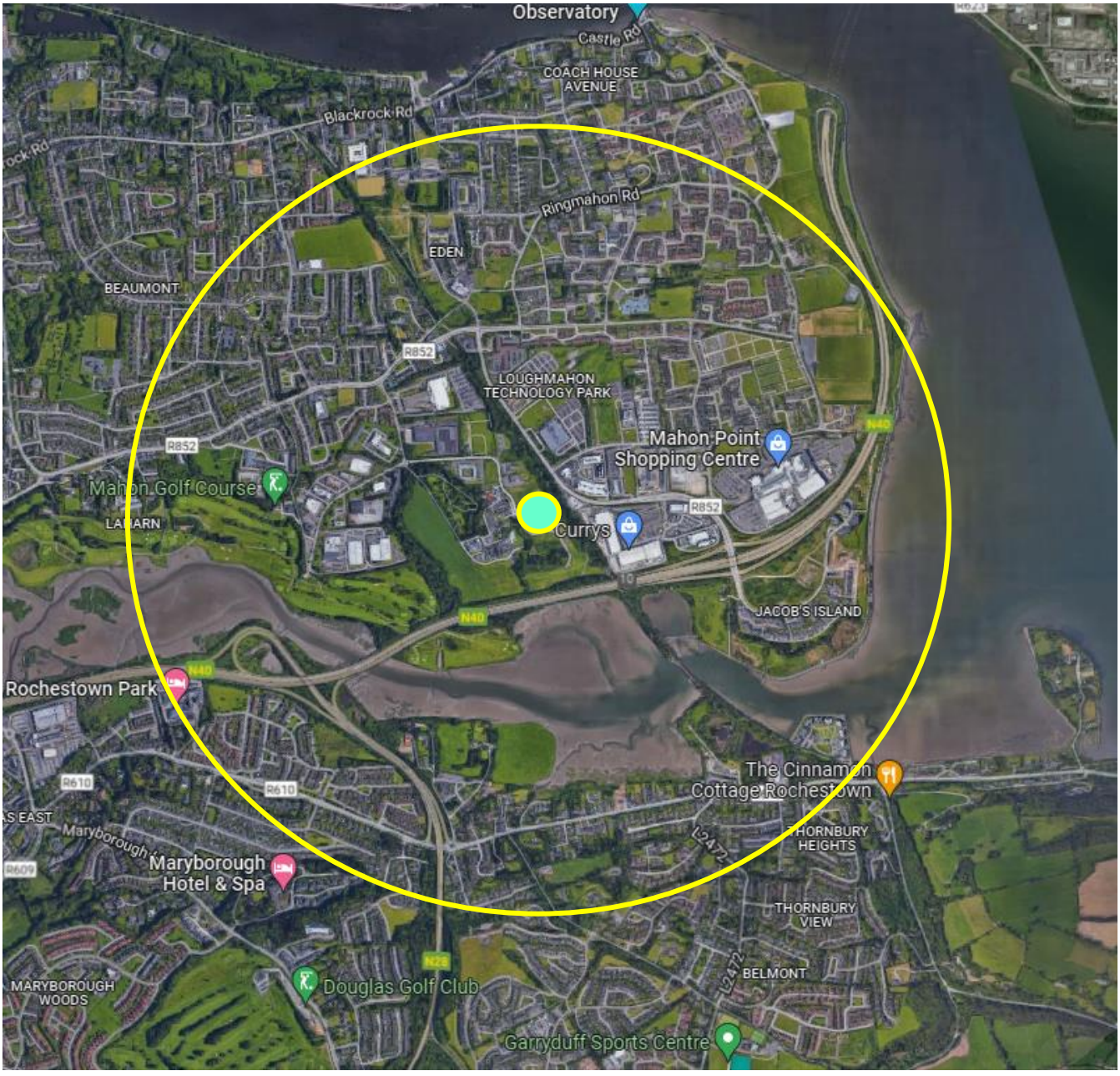
2 Findings and Summary

2.1 Finding existing tv/radio/telecommunication.

It is made difficult to establish if there are existing licenced television/radio/telecommunication signals present in the area as the Department of Environment, Climate and Communications and/or ComReg do not want to provide such information in the interest of home security as it is quoted to us by them. The only reasonable method currently available is scanning the area and in particular the taller buildings within the search range for existing aerials and identify an buildings occupied by blue light services.

2.2 The reports search range.

To identify possible interference to point-to-point signals we use a 1.5km diameter or a 3km search range from the location of the proposed development in all directions identifying exiting taller buildings / structures which are most likely used for transmitting/receiving telecommunication signals.



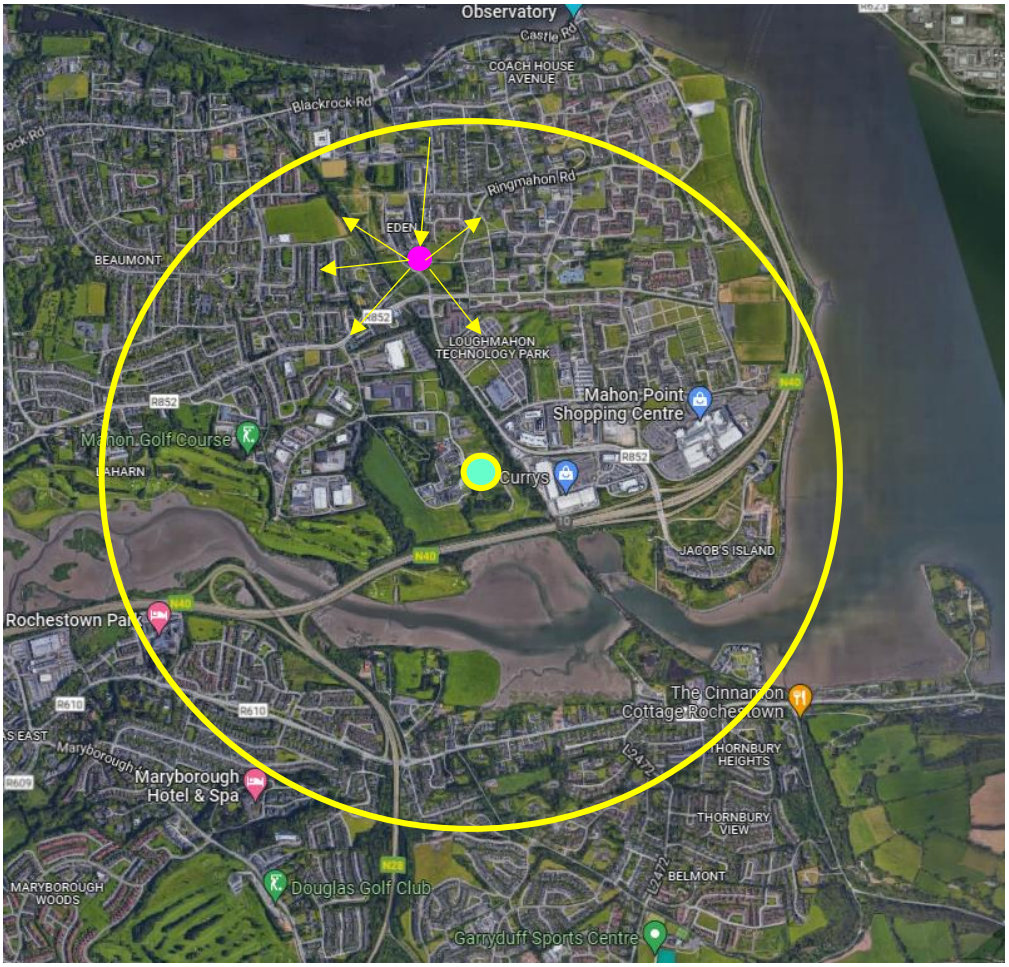
3km search range Approx site location

2.5 Typical frequency ranges.

TV signal providers use radio wave (30MHz-3000MHz) signals which are generally transmitted using multi directional aerials and by nature are typically long range (100km-200km) with multiple Fresnel zones and as a result are unlikely to be effected. Blue light services (Gardy, Ambulance, Fire Services and Coast Guard) use micro wave (30MHz-300MHz) signals which are generally transmitted using multi directional aerials and by nature are typically shorter range (10km-20km) with multiple Fresnel zones and also less likely to be effected . Telecommunication providers micro wave links, radar systems, satellite telemetry (300MHz-30GHz) signals generally require line of sight are could therefore be affected by taller structures. These signals also have multiple Fresnel zones but rely of the first Fresnel zone to be at least 60% clear. Long range signals have a very large first Fresnel zone and are unlikely to be affected, short range (1km-2km) point-to-point signals have a small (50m-100m) first Fresnel zone and could be more then 60% effected by a structure resulting in interference, disturbing or loss of signal.

2.6 Search findings

The search for roof / tall structures in the 3km zone around the new proposed development has not revealed any particular major dish or aerial locations or blue light services in this area except for existing telecommunications transmission repeater aerials on the blackrock hall approximately 1km from the proposed development.



● Exiting telecommunications distribution point

2.7 Assessment and conclusion.

Having assessed the existing telecommunication equipment and in particular the type of (directional) aerials on the roof of blackrock hall we conclude that there appears to be no telecommunication signals crossing the new development site and that it is very unlikely that the new development can interfere, disturb or block any existing licenced telecommunication signal. Any telecommunication signals crossing the site from greater distances beyond the 3km range will not be adversely affected as the signals would outside the first Fresnel zones.

2.8 New development advantage

The fact that the proposed development is taller then any other structure in the near vicinity it may give telecommunication companies an opportunity for a more elevated location to provide a better telecommunication service for the greater area.