Appendix 13D. Air Noise Baseline Survey

13D. Air noise baseline survey

13D.1 Introduction

13D.1.1 This appendix of the Environmental Impact Assessment Report (EIAR), prepared by Bickerdike Allen Partners LLP (BAP), describes the survey work undertaken to measure the baseline noise conditions in the vicinity of Dublin Airport, where the surrounding noise environment is affected primarily by transport noise from the local road network and from airport operations.

13D.1.2 Due to the ongoing COVID-19 pandemic and its impact on the transport network, the noise conditions at the present time are likely to be unrepresentative of the normal baseline noise conditions. This effect is expected to be temporary, although the precise timescale is uncertain. Because of this, survey work undertaken by BAP in 2016 has been used and supplemented by more recent results from the Dublin Airport noise monitoring system.

13D.1.3 The baseline noise surveys comprised a combination of attended and unattended noise monitoring. Attended noise monitoring was undertaken at various locations during periods in August, September and October 2016. Unattended monitoring was carried out during similar periods to the attended monitoring.

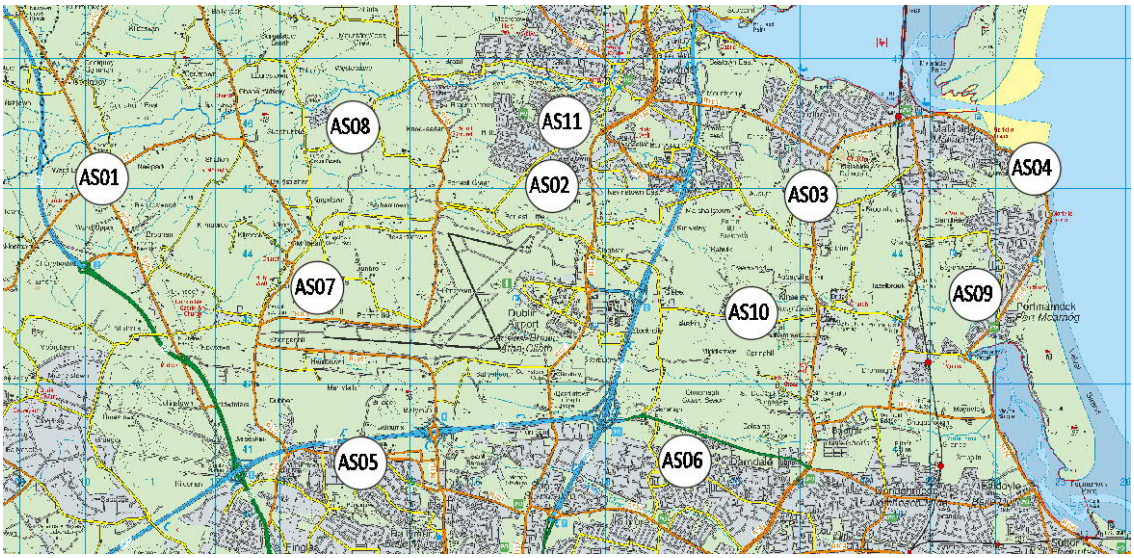
13D.1.4 In addition, the long-term monitoring data measured by Dublin Airport's Noise Monitoring Terminals (NMTs) has been utilised for the calendar year of 2018. A comparison of the NMT data for 2016 and 2018 has also been carried out to check if the conditions in 2016 were significantly different to those in 2018.

13D.2 Methodology

Measurement Locations

13D.2.1 The locations of the attended and unattended monitoring are shown in Figure 13D-1.

Figure 13D-1: Baseline Noise Measurement Locations



Attended Survey Measurements (Locations AS01 to AS06)

13D.2.2 All attended noise monitoring measurements were undertaken in general accordance with the British Standard BS 7445 Description and measurement of environmental noise. This comprised locations with free field conditions and a series of 5 minute measurement samples taken at a specified locations for typically at least 30 minutes. Repeat measurements were made at each location on a given day or night. The microphone of the noise monitor was located approximately 1.5 m above ground level with the monitor mounted on a tripod and away from any reflective surfaces. Observations were made of the noise climate prevailing at the time. These attended measurements include the noise contribution of aircraft activity as well as non-aircraft related activities. This procedure is commonly used to obtain attended environmental noise information, supplemented where possible with unattended noise measurement data. Details of the sound level meters used for each survey, including calibration certificates, are available on request.

Unattended Survey Measurements (Locations AS07 to AS11)

13D.2.3 During the unattended surveys noise measurements were obtained over a period of around three weeks at each location used. At locations AS07, AS08 and AS09 noise measurements were obtained under free field conditions. At locations AS10 and AS11 measurements were made approximately 1 m from a reflective surface and therefore a reflection effect was included in the measurements. Unattended measurements comprised a series of consecutive 15 minute measurement samples over the full survey period. The noise monitors were located in environmental cases with the microphones connected via extension cables. The microphones were fitted with windshields and attached to tripods so they were positioned approximately 1.5 m above local ground level with the exception of location AS09, Portmarnock Community School, where the tripod was on a first floor flat roof.

13D.3 Results

Attended Noise Monitoring

13D.3.1 A summary of the average measured noise levels at each attended survey location is given in Table 13D-1.

Table 13D-1: Baseline Noise Measurements – Attended – Dublin Airport

Reference	Location	Daytime (07:00-23:00)		Night-time (23:00-07:00)		Location Description and Observations	Survey dates
		$L_{Aeq,T}$ dB	$L_{A90,T}$ dB	$L_{Aeq,T}$ dB	$L_{A90,T}$ dB		
AS01	The Ward Cross	61	52	59	44	Measurement location approximately 60 metres from R135	9th and 11th August 2016
AS02	Ridgewood	61	47	57	39	Residential area with infrequent local road traffic	9th and 11th August 2016
AS03	South Malahide	50	40	47	32	Residential area, measurement location approximately 90 metres from Swords Road	16th to 18th August 2016
AS04	Malahide	69	54	55	40	Coastal area, adjacent to the sea and R106	17th and 18th August 2016
AS05	Belcamp Park	57	53	52	46	Residential area with infrequent local road traffic	9th to 11th August 2016
AS06	Hampton Wood	59	56	48	44	Residential area with infrequent local road traffic	10th and 11th August 2016

Noise Environment Description

13D.3.2 This section describes the general noise environment in the vicinity of the attended monitoring locations based on observations made on site and the results presented in Table 13D-1. Reference is made below to ambient noise levels, depicted by the $L_{Aeq,T}$ index, and background noise levels, depicted by the $L_{A90,T}$ index.

North west (Location AS01)

13D.3.3 North west of the airport approximately 4km away contains further rural areas. The R135 and R121 roads are dominant noise sources. Ambient and background noise levels of 61 dB $L_{Aeq,T}$ and 52 dB $L_{A90,T}$ respectively were measured. The night-time ambient and background noise levels measured were 59 dB and 44 dB respectively. Aircraft noise was not considered dominant.

North (Location AS02)

13D.3.4 Ridgewood is a residential area located just under 2 km north of the airport. The R132 and M1 are located approximately 1km and 2.5km from measurement location AS02. Daytime ambient and background noise levels ranged between 56 dB – 61 dB $L_{Aeq,T}$ and 45 dB – 47 dB $L_{A90,T}$ respectively. Night-time ambient noise levels ranged between 45 – 57 dB and background noise levels were around 39 dB at both locations. Local road traffic was generally the dominant noise source, however between 6:30 and 07:00 frequent plane activity was the dominant noise source.

North east (Locations AS03 & AS04)

13D.3.5 Malahide is located near the coast, north east of the airport. The R106 was a dominant noise source in the area during the daytime. Location AS04 was located next to the R106 approximately 7km away from Dublin airport with ambient and background noise levels of around 69 dB $L_{Aeq,T}$ and 54 dB $L_{A90,T}$. At night-time ambient and background noise levels at this location were around 55 dB and 40 dB respectively. Location AS03 was located approximately 4km away from Dublin airport in a quieter residential area located away from busy main roads. The daytime ambient and background noise levels were 50 dB and 40 dB respectively. The night-time levels were 47 dB $L_{Aeq,T}$ and 32 dB $L_{A90,T}$. Aircraft noise at these locations was considered negligible.

South (Location AS05)

13D.3.6 The M50 and the Hampton Wood residential area are located south of the airport. The measurement location was approximately 500 metres from the M50 and 2km from Dublin airport. The daytime ambient and background noise levels were 59 dB $L_{Aeq,T}$ and 56 dB $L_{A90,T}$ respectively. The night-time ambient and background noise levels measured were 48 dB and 44 dB respectively.

South east (Location AS06)

13D.3.7 Clonshaugh's business and technology park and Belcamp Park are located approximately 3 km to the south east of the airport. The M1, M50 and R139 are dominant noise sources in the area. The daytime ambient and background noise levels measured were 57 dB $L_{Aeq,T}$ and 53 dB $L_{A90,T}$ respectively. The night-time ambient and background noise levels measured were 52 dB and 46 dB respectively. Aircraft noise was occasionally dominant.

Unattended Noise Monitoring

A summary of the average measured noise levels at each unattended survey location is given in Table 13D-2. Further details of the unattended monitoring results are provided in

Table 13D-3

13D.3.8 Table 13D-3 to **Error! Reference source not found.** alongside time history graphs in

Figure 13D-2 to

13D.3.9 Figure 13D-7.

Table 13D-2: Baseline Noise Measurements – Unattended – Dublin Airport

Reference	Location	Daytime (07:00-23:00)		Night-time (23:00-07:00)		Location Description and Observations	Survey dates
		$L_{Aeq,T}$ dB	$L_{A90,T}$ dB	$L_{Aeq,T}$ dB	$L_{A90,T}$ dB		
AS07	St Margaret's Dunsoghly	64	45	59	39	Small village in rural area. Aircraft activity the dominant noise source	11th to 29th August 2016
		64	47	57	42		15th to 26th September 2016
AS08	Kilbrook	50	40	44	33	Quiet residential area. No obvious dominant noise source	11th to 29th August 2016
AS09	Portmarnock Community School	51	40	44	33	Measurement location within the school grounds. No obvious dominant noise source	19th August to 5th September 2016
AS10	The Baskins	58	43	52	37	Residential area Aircraft activity occasionally the dominant noise source	11th to 29th August 2016
AS11	River Valley	56	45	45	39	Measurement location within the school grounds	10th to 30th October 2016

Table 13D-3: Location AS07, long-term noise monitoring results, August 2016

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)
2016/08/10	64	47	59	43
2016/08/11	68	49	59	42
2016/08/12	65	49	58	40
2016/08/13	65	43	60	35
2016/08/14	66	39	61	38
2016/08/15	60	46	52	40
2016/08/16	62	51	53	41
2016/08/17	58	45	61	36
2016/08/18	62	42	53	41
2016/08/19	60	49	60	41
2016/08/20	64	49	56	38
2016/08/21	63	42	57	40
2016/08/22	65	45	50	38
2016/08/23	66	45	60	39
2016/08/24	64	43	60	38
2016/08/25	65	44	60	41
2016/08/26	65	46	60	38
2016/08/27	60	42	60	33
2016/08/28	66	37	60	38
2016/08/29	65	45	60	39
2016/08/30	66	49	-	-
Average	64	45	59	39
Range	58 - 68	37 - 51	50 - 61	33 - 43

Figure 13D-2: Location AS07, long-term noise monitoring time history

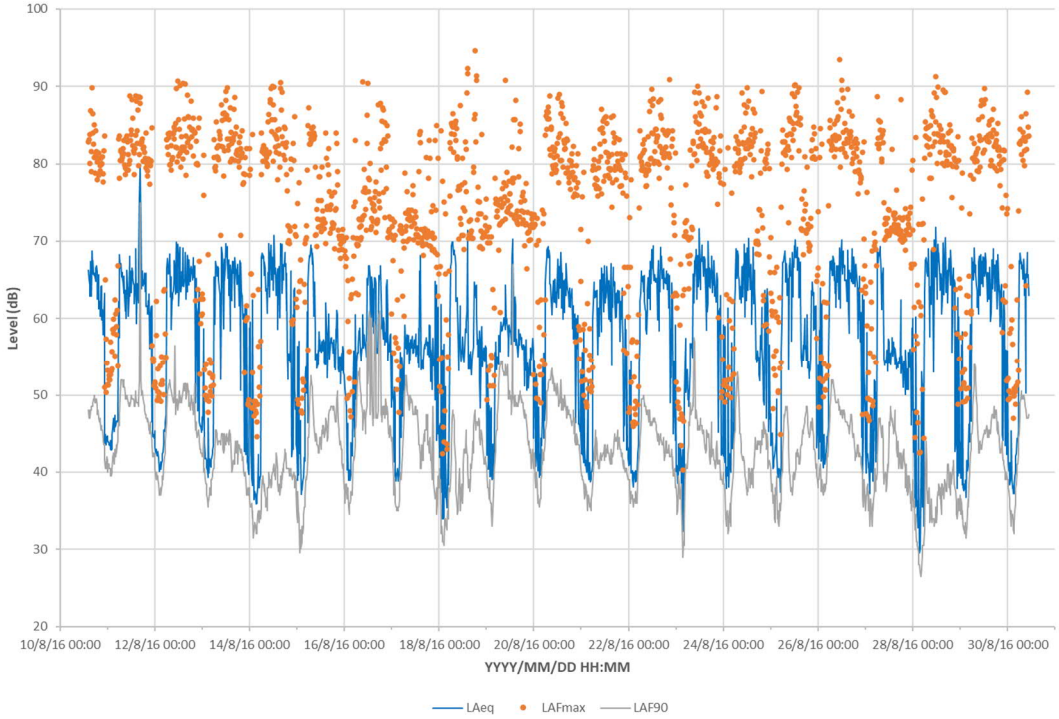


Table 13D-4: Location AS07, long-term noise monitoring results, September 2016

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)
2016/09/14	59	42	57	41
2016/09/15	64	46	56	41
2016/09/16	63	47	56	40
2016/09/17	63	44	58	40
2016/09/18	64	45	57	39
2016/09/19	64	44	57	39
2016/09/20	62	44	58	42
2016/09/21	64	48	58	44
2016/09/22	64	50	56	44
2016/09/23	65	51	59	50
2016/09/24	62	50	58	43
2016/09/25	64	48	58	43
2016/09/26	64	46	58	42
2016/09/27	63	50	48	45
Average	63	47	57	42
Range	59 - 65	42 - 51	48 - 59	39 - 50

Figure 13D-3: Location AS07, long-term noise monitoring time history, September 2016

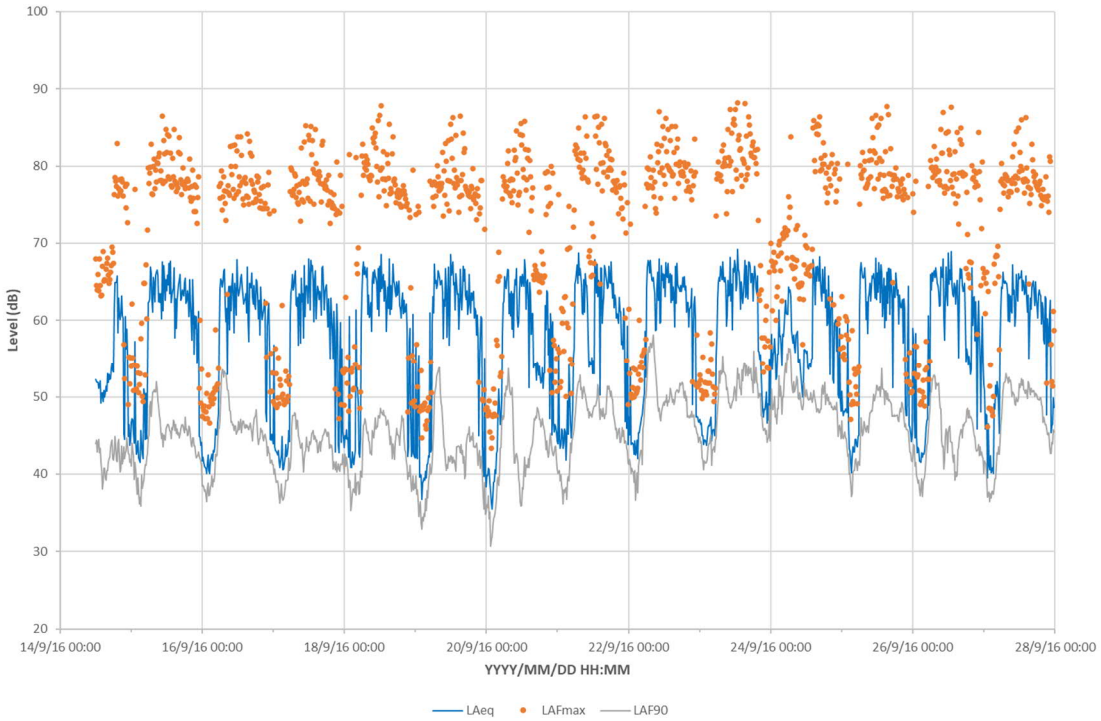


Table 13D-5: Location AS08, long-term noise monitoring results

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)
2016/08/10	49	40	46	38
2016/08/11	51	43	44	35
2016/08/12	51	44	43	34
2016/08/13	49	37	45	27
2016/08/14	54	34	45	31
2016/08/15	48	41	44	35
2016/08/16	49	42	45	36
2016/08/17	49	41	41	31
2016/08/18	46	37	47	37
2016/08/19	52	45	47	38
2016/08/20	53	45	42	33
2016/08/21	48	39	45	37
2016/08/22	48	39	42	34
2016/08/23	48	38	46	29
2016/08/24	48	37	45	32
2016/08/25	49	39	43	33
2016/08/26	49	40	45	31
2016/08/27	51	37	41	28
2016/08/28	46	33	45	28
2016/08/29	50	40	42	31
2016/08/30	50	43	-	-
Average	50	40	44	33
Range	46 - 54	33 - 45	41 - 47	27 - 38

Figure 13D-4: Location AS08, long-term noise monitoring time history

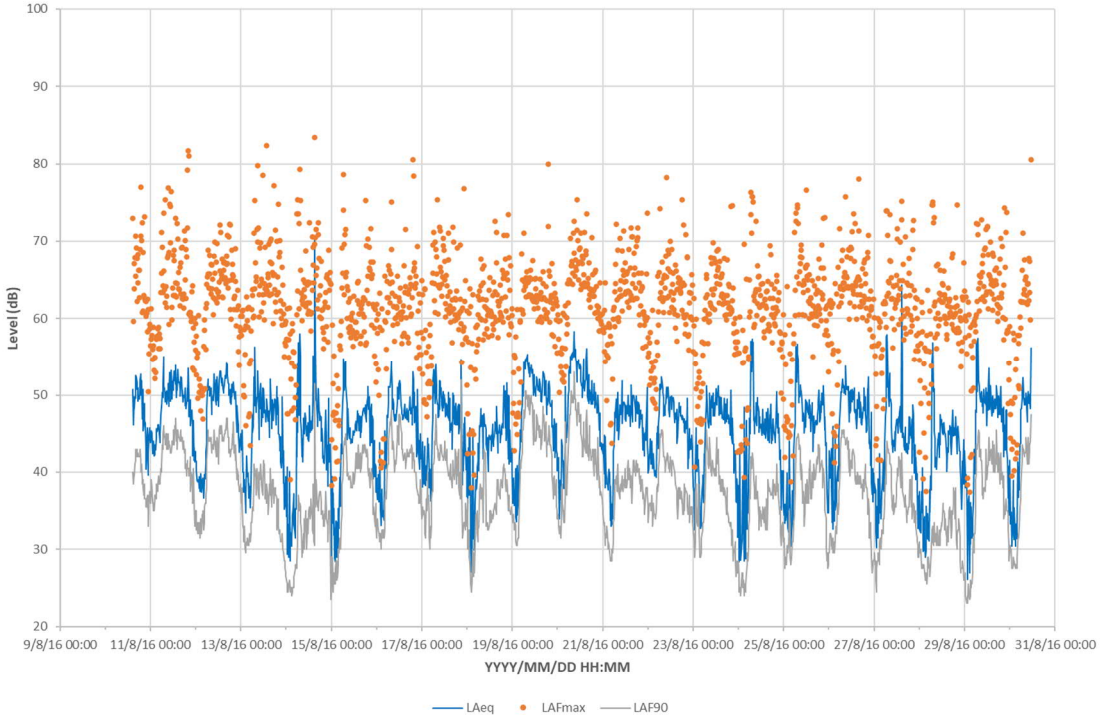


Table 13D-6: Location AS09, long-term noise monitoring results

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)
2016/08/18	56	38	49	35
2016/08/19	57	47	46	40
2016/08/20	53	45	43	35
2016/08/21	46	39	43	35
2016/08/22	53	39	45	29
2016/08/23	47	38	42	30
2016/08/24	49	37	41	30
2016/08/25	54	38	42	32
2016/08/26	47	39	39	30
2016/08/27	52	37	41	32
2016/08/28	44	34	41	29
2016/08/29	47	40	41	30
2016/08/30	49	41	42	34
2016/08/31	55	41	42	31
2016/09/01	50	42	42	33
2016/09/02	50	41	42	33
2016/09/03	51	41	42	33
2016/09/04	48	37	50	41
2016/09/05	49	41	43	35
2016/09/06	58	44	-	-
Average	52	40	44	33
Range	44 - 58	34 - 47	39 - 50	29 - 41

Figure 13D-5: Location AS09, long-term noise monitoring time history

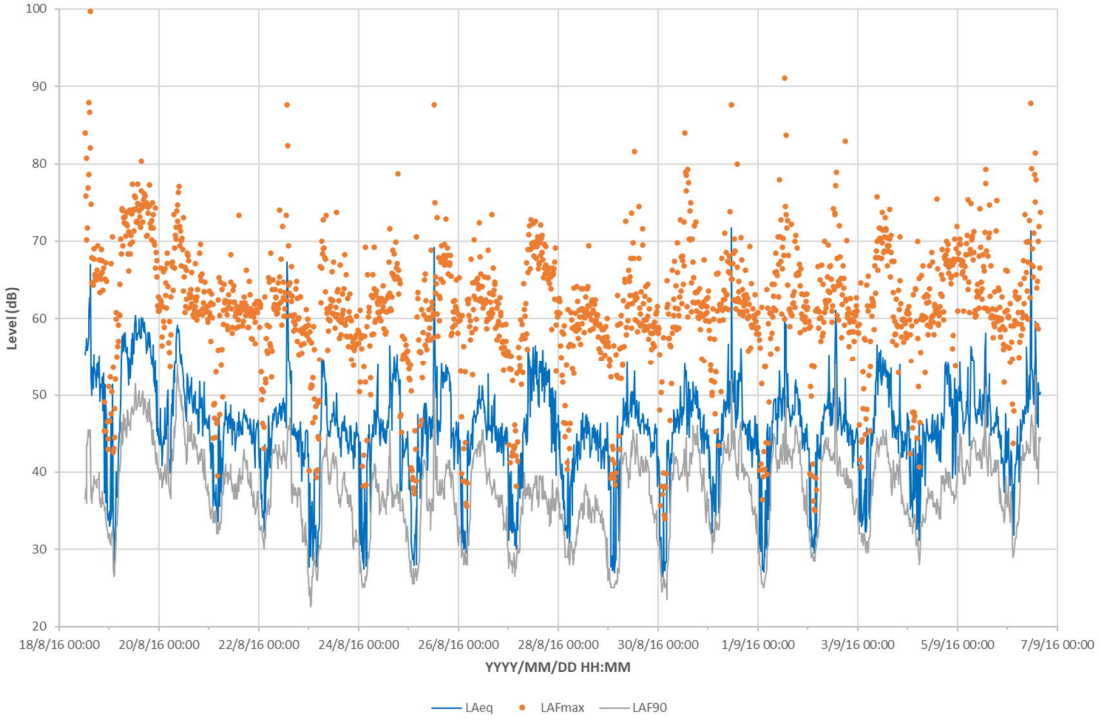


Table 13D-7: Location AS10, long-term noise monitoring results

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)
2016/08/10	54	46	49	43
2016/08/11	55	47	48	41
2016/08/12	55	46	50	40
2016/08/13	53	43	50	37
2016/08/14	55	38	47	32
2016/08/15	61	43	56	36
2016/08/16	61	44	56	36
2016/08/17	62	42	49	37
2016/08/18	60	39	56	37
2016/08/19	62	47	49	39
2016/08/20	56	48	51	41
2016/08/21	54	44	50	40
2016/08/22	55	43	56	30
2016/08/23	56	43	50	41
2016/08/24	57	40	48	34
2016/08/25	58	41	51	42
2016/08/26	54	44	48	33
2016/08/27	61	38	48	32
2016/08/28	53	38	49	39
2016/08/29	54	43	49	38
2016/08/30	54	46	-	-
Average	58	43	52	37
Range	53 - 62	38 - 48	47 - 56	30 - 43

Figure 13D-6: Location AS10, long-term noise monitoring time history

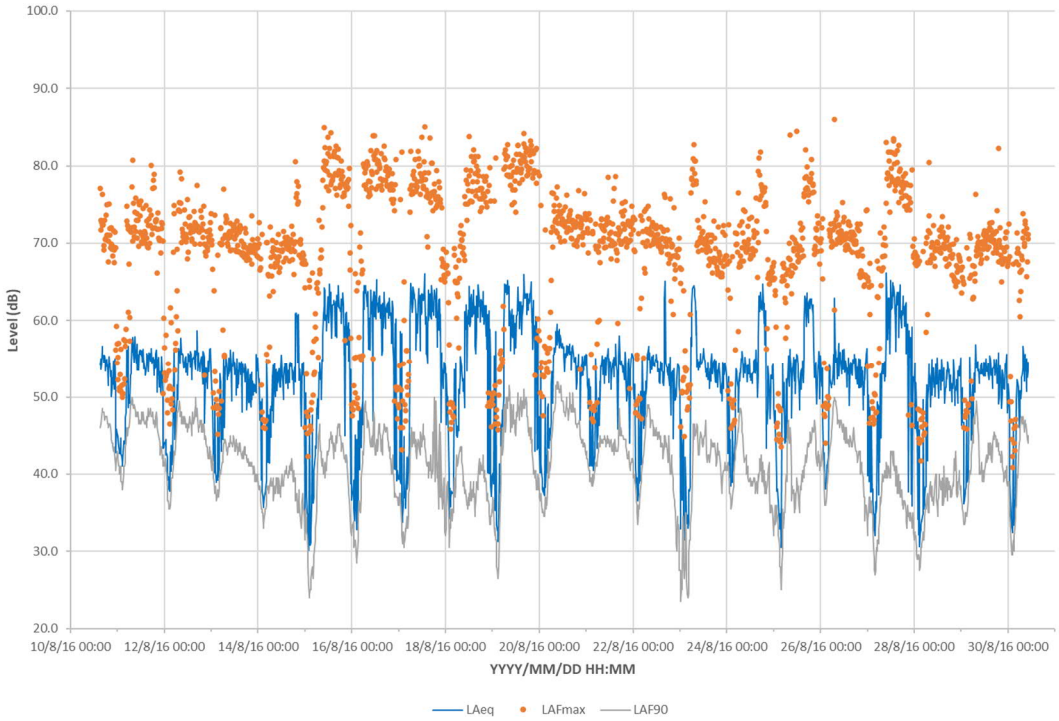
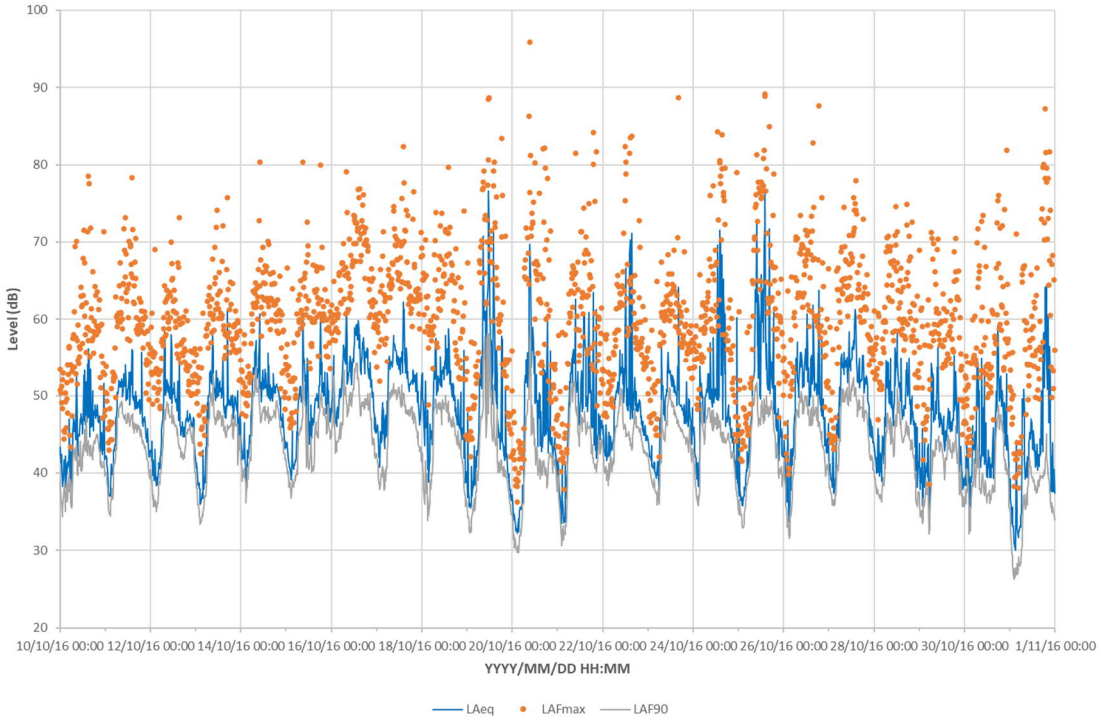


Table 13D-8: Location AS11, long-term noise monitoring results

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)
2016/08/12	48	43	44	40
2016/08/13	51	46	43	39
2016/08/14	50	45	43	38
2016/08/15	51	47	47	42
2016/08/16	52	48	44	40
2016/08/17	52	46	51	46
2016/08/18	56	49	48	41
2016/08/19	55	49	48	40
2016/08/20	52	46	43	36
2016/08/21	63	45	40	33
2016/08/22	57	43	44	37
2016/08/23	55	46	45	41
2016/08/24	58	46	43	39
2016/08/25	52	46	47	42
2016/08/26	61	45	47	37
2016/08/27	63	47	46	38
2016/08/28	54	47	47	40
2016/08/29	54	48	45	39
2016/08/30	51	45	44	36
2016/08/31	48	42	44	38
2016/09/01	49	41	40	30
2016/09/02	53	39	39	35
Average	51	45	45	38
Range	48 - 63	39 - 49	39 - 51	30 - 46

Figure 13D-7: Location AS11, long-term noise monitoring time history



Noise Environment Description

13D.3.10 This section describes the general noise environment in the vicinity of the unattended monitoring locations based on observations made on site and the results presented in Table 13D-2. Reference is made below to ambient noise levels, depicted by the $L_{Aeq,T}$ index, and background noise levels, depicted by the $L_{A90,T}$ index.

West (Location AS07)

13D.3.11 The area west of the airport contains further rural areas with smaller residential neighbourhoods. Aircraft noise dominated St Margaret's with daytime ambient noise levels of 64 dB and background noise levels ranging from 45 dB – 47 dB. The night-time ambient noise levels ranged between 57 dB – 59 dB and background noise levels ranged between 39 dB – 42 dB. The surrounding road network consisting of N2 and R135 were also audible. Aircraft noise was measured under both easterly and westerly modes of operation at the airport.

North West (Location AS08)

13D.3.12 The area north west of the airport contains further rural areas with smaller residential neighbourhoods. The area is generally quieter than other locations around the airport with the daytime ambient and background noise levels, measured at 50 dB $L_{Aeq,T}$ and 40 dB $L_{A90,T}$. The night-time ambient and background noise levels were around 44 dB and 33 dB. The surrounding road network consisting of N2 and R135 were also audible. Aircraft noise at this location was not considered dominant.

East (Locations AS09 & AS10)

13D.3.13 The area east of the Dublin airport, at a distance of approximately 2.5 km contains rural areas with smaller residential neighbourhoods located away from busy roads. The area is generally quieter than other locations around the airport with the daytime ambient and background noise levels, measured at location As10, of around 58 dB $L_{Aeq,T}$ and 43 dB $L_{A90,T}$. The night-time ambient and background noise levels were around 52 dB and 37 dB. Aircraft noise was occasionally dominant. For Portmarnock Community School (AS09), approximately 6.5km away from Dublin airport, which was closed for the summer holidays during the survey, a similar result was evident with daytime ambient and background noise levels of around 52 dB $L_{Aeq,T}$ and 40 dB $L_{A90,T}$. At night, the ambient and background levels were around 44 dB and 33 dB. Aircraft noise at this location was not considered dominant.

North (Location AS11)

13D.3.14 River Valley is a residential area located just under 2 km north of the airport. The R132 and M1 are located approximately 1km and 2.5km from measurement location M. Daytime ambient and background noise levels ranged between 48 dB – 63 dB $L_{Aeq,T}$ and 39 dB – 49 dB $L_{A90,T}$ respectively. Night-time ambient noise levels ranged between 39 – 51 dB and background noise levels ranged between 30 – 46 dB. Local road traffic was generally the dominant noise source.

daa Permanent Noise Monitoring Terminal Results

13D.3.15 This section describes the locations of the permanent noise monitors in place and operating in the vicinity of Dublin Airport. Results are presented for each noise monitor over the period commencing January 2016 to the end of December 2016, describing the noise environment with and without aircraft activity. The corresponding information for the period commencing January 2018 to the end of December 2018 is also presented to highlight any trends.

13D.3.16 The location of each noise monitoring terminal (NMT) is shown in Figure 13D-8. There are currently eight permanent NMTs in the vicinity of Dublin Airport. These are located as follows:

- Bay Lane (NMT1), monitoring Runway 28 Departures & Runway 10 Arrivals
- St. Doolaghs (NMT2), monitoring Runway 10 Departures & Runway 28 Arrivals
- Bishopswood (NMT3), monitoring the local area
- Feltrim (NMT4), monitoring the local area
- Balcultry (NMT5), monitoring Runway 34 Departures & Runway 16 Arrivals
- Artane (NMT6), monitoring Runway 16 Departures & Runway 34 Arrivals
- Coast Road (NMT20), monitoring Runway 10 Departures & Runway 28 Arrivals
- North-east of the airport off the Naul Road (NMT21), monitoring noise produced by aircraft on the ground at a location close to the airport.

13D.3.17 NMT22 is a mobile NMT, currently located within the airport site, located close to the West Apron in the vicinity of the mid-western boundary of the airport. NMTs 3 and 4 have been installed in preparation for the opening of the North Runway. daa publish half yearly reports on the outputs of these NMTs, providing a summary of the aircraft noise measurements from the system. The most recent of these reports are available from the Dublin Airport website[1].

[1] https://www.dublinairport.com/corporate/community-and-sustainability/noise/airport-noise-noise-reports

Figure 13D-8: Permanent Noise Monitoring Terminals at Dublin Airport

13D.3.18

13D.3.19 Table 13D-9 presents the average measured noise level over the six-month periods from January to June and July to December 2016 inclusive at each monitor, split into daytime (07:00 to 23:00) and night time (23:00 to 07:00) periods. Also presented is the noise level produced by aircraft, i.e. the correlated aircraft noise events. Where the “total” noise level at a given monitor is close in value to the “aircraft” noise level, this indicates that the total noise is dominated by aircraft noise. Where there is a 3 dB or more difference, this indicates that some other noise source(s) dominates the noise environment at the NMT. It can be seen that only at NMTs 1 and 2 does aircraft noise dominate the total noise environment. This is to be expected given the locations of these two monitors within 4 km directly to the east and west respectively of the airport’s existing main runway.

13D.3.20 These averages are not directly comparable to noise contours produced by computer modelling as noise contours are typically based on an average summer or annual day, and also include all aircraft movements rather than just those which produce a correlated noise event. Noise contours also include no other noise than that produced by aircraft.

13D.3.21 Table 13D-10 presents the average measured noise level over the six-month periods from January to June and July to December 2018 inclusive at each monitor, split into daytime (07:00 to 23:00) and night time (23:00 to 07:00) periods.

Table 13D-9: Average Measured Noise Levels (2016)

NMT	Daytime Noise Level, dB $L_{Aeq,16hr}$				Night Time Noise Level, dB $L_{Aeq,8hr}$			
	Jan-Jun 2016		Jul-Dec 2016		Jan-Jun 2016		Jul-Dec 2016	
	Total	Aircraft	Total	Aircraft	Total	Aircraft	Total	Aircraft
1	63.8	62.5	63.7	62.4	58.4	57.1	58.1	57.0
2	62.4	60.7	61.8	60.3	56.8	55.4	56.8	55.6
3	62.9	49.6	-	-	54.9	47.0	-	-
4	56.6	41.5	56.8	41.2	52.1	38.3	49.7	39.4
5	54.9	49.2	55.3	48.6	57.3	48.1	51.3	49.7
6	61.6	46.7	58.1	44.2	56.5	45.5	51.6	43.4
20	63.7	57.2	62.4	54.9	57.6	52.2	56.3	50.2

Table 13D-10: Average Measured Noise Levels (2018)

NMT	Daytime Noise Level, dB $L_{Aeq,16hr}$				Night Time Noise Level, dB $L_{Aeq,8hr}$			
	Jan-Jun 2018		Jul-Dec 2018		Jan-Jun 2018		Jul-Dec 2018	
	Total	Aircraft	Total	Aircraft	Total	Aircraft	Total	Aircraft
1	63.9	62.8	64.0	62.9	58.9	57.2	58.1	56.6
2	61.1	60.5	61.9	61.1	56.5	54.9	57.5	56.5
4	57.2	46.9	55.3	43.8	54.2	36.7	51.0	33.7
5	58.3	49.5	54.8	48.5	55.1	50.2	54.3	50.4
6	57.7	45.8	60.9	48.9	58.0	45.1	59.2	47.0
20	64.3	58.7	63.4	59.6	58.6	47.7	58.9	54.8

13D.3.22 Taking the NMTs where the highest noise levels were measured these are generally consistent between the two years, and are especially for NMT1 where the differences are not more than 0.5 dB, At some of the other locations the variations are greater, for example at NMT6 where the aircraft activity is due to use of the cross runway, the amount of which is weather dependent. Despite this the overall picture presented by the results is similar with regards to where the highest noise levels occur and where aircraft noise contributes the most.

Appendix 13E. Air Noise Glossary

13E. Air Noise Glossary

13E.1 Acoustic Terms

Sound

13E.1.1 Sound is a form of energy that is transmitted away from its source through a medium such as air by longitudinal pressure waves. The human ear can detect the small changes in pressure associated with sound and this manifests as the sense of hearing.

Decibel

13E.1.2 The decibel (dB) is the unit used to describe the magnitude of sound. It is a logarithmic ratio between a measured level and a reference level, typically sound pressure level against a reference pressure level of 20 µPa.

13E.1.3 The decibel scale effectively compresses a wide range of values to a more manageable range of numbers; the threshold of hearing occurs at approximately 0 dB (corresponding to the reference value of 20 µPa) and the threshold of pain is around 120 dB (corresponding to a value of 20 Pa).

13E.1.4 The sound energy radiated by a source can also be expressed in decibels. The sound power is a measure of the total sound energy radiated by a source per second, in Watts (W). The sound power level L_w is expressed in decibels, referenced to 10^{-12} Watts.

Frequency

13E.1.5 Frequency is equivalent to musical pitch. It is the rate of vibration of the air molecules that transmit the sound and is measured as the number of cycles per second or Hertz (Hz).

13E.1.6 The human ear is sensitive to sound in the range 20 Hz to 20 kHz. This frequency range is normally divided up into discrete bands for engineering use. The most common are octave bands, in which the upper limiting frequency for any band is twice the lower limiting frequency, and one-third octave bands, in which each octave band is further divided into three. The bands are named by their centre frequency value.

A-Weighting

13E.1.7 The sensitivity of the human ear is frequency dependent. Mid-frequency sound tends to be perceived as louder than very low- or high-frequency sound even when the decibel values are equal. Sound levels are therefore often frequency weighted to give an overall single figure value in dB(A) that accounts for the response of the human ear at different frequencies.

Ambient Noise

13E.1.8 Ambient noise, usually expressed using the $L_{Aeq,T}$ metric, is commonly understood to include all sound at any particular site over a defined period of time, regardless of whether the sound is actually defined as noise.

Background Noise

13E.1.9 Background noise, usually expressed using the $L_{A90,T}$ metric, is the steady sound attributable to less prominent and mostly distant sound sources above which clearly identifiable specific noise sources intrude.

Sound Transmission in the Open Air

13E.1.10 Most sources of sound can be characterised as a single point in space. Sound energy is radiated out in all directions and spreads over the surface area of a sphere centred on the point. The area of a sphere is proportional to the square of the radius, so the sound energy is inversely proportional to the square of the radius. This is the inverse square law. In decibel terms, for each doubling of distance from a point source the sound pressure level is reduced by 6 dB.

13E.1.11 Road traffic noise is a notable exception to this rule, as it approximates to a line source. The sound energy radiated is inversely proportional to the area of a cylinder centred on the line. In decibel terms, every time the distance from a line source is doubled, the sound pressure level is reduced by 3 dB.

Factors Affecting Sound Transmission in the Open Air

Reflection

13E.1.12 When sound waves encounter a hard surface, such as concrete, brickwork, glass, timber, or plasterboard, they are reflected from it. As a result, the sound pressure level measured immediately in front of a building façade is approximately 3 dB higher than it would be in the absence of the façade.

Screening

13E.1.13 If a solid screen is introduced between a source and receiver, interrupting the sound path, a reduction in sound level is experienced. Although this reduction is limited by diffraction of the sound around the edges of the screen, it can still provide valuable noise attenuation. For example, a timber boarded fence built next to a motorway can reduce noise levels on the land immediately beyond by around 10 dB. The best results are obtained when a screen is situated close to the source or close to the receiver.

Meteorological Effects

13E.1.14 Temperature and wind gradients affect noise transmission, especially over large distances. The wind effects range from increasing the level by typically 2 dB downwind, to reducing it by typically 10 dB upwind – or even more in extreme conditions. Temperature and wind gradients are variable and difficult to predict.

Noise Metrics

13E.1.15 Where noise levels vary with time, it is necessary to express the sound level over a period of time in statistical terms. Some commonly used descriptors follow.

$L_{Aeq,T}$

13E.1.16 $L_{Aeq,T}$, or the equivalent continuous A-weighted sound pressure level, is the most widely used noise metric. It is an energy average and is defined as the level of a notional sound which would deliver the same A-weighted sound energy as the actual variable sound over a defined period of time, T.

13E.1.17 $L_{Aeq,16h}$ and $L_{Aeq,8h}$ are commonly used to describe the daytime period (07:00 to 23:00) and night-time period (23:00 to 07:00) respectively. In the context of aircraft noise, these are typically averaged over the summer period (92 days from June 16th to September 15th inclusive) and are referred to as the summer day and summer night values.

L_{den}

13E.1.18 L_{den}, or the day-evening-night noise indicator, is a long-term average (usually annual in the context of aircraft noise) 24 hour $L_{Aeq,T}$ value where a 10 dB penalty is applied to noise at night and a 5 dB penalty is applied to noise in the evening. It is defined by the following formula:

$$L_{den} = 10 \times Log\left(\frac{12}{24} \times 10^{\left(\frac{L_{day}}{10}\right)} + \frac{4}{24} \times 10^{\left(\frac{L_{eve}+5}{10}\right)} + \frac{8}{24} \times 10^{\left(\frac{L_{night}+10}{10}\right)}\right)$$

13E.1.19 Where:

13E.1.20 L_{day} is the A-weighted long-term average sound level for the 12 hour daytime period (07:00 to 19:00),

13E.1.21 L_{eve} is the A-weighted long-term average sound level for the 4 hour evening period (19:00 to 23:00), and

13E.1.22 L_{night} is the A-weighted long-term average sound level for the 8 hour night-time period (23:00 to 07:00).

$L_{A90,T}$

13E.1.23 $L_{A90,T}$ is the A-weighted sound pressure level exceeded for 90% of the time over a defined period, T, and is normally used to describe background noise.

$L_{Amax,T}$

13E.1.24 $L_{Amax,T}$ is the maximum A-weighted sound pressure level measured in a defined period, T. Normally associated with a time weighting, F (fast, $L_{AFmax,T}$) or S (slow, $L_{ASmax,T}$), which is related to the sampling speed of the measurement instrument. It is sometimes used independently of a time period, for example when describing the maximum value of a single aircraft flyover.

SEL

13E.1.25 SEL is the sound exposure level which is a measure of the total sound energy from an event such as an aircraft movement. The SEL value is the notional constant sound level that has the same amount of energy in 1 second as the original noise event has in total. This is equal to $L_{Aeq,T}$ + 10Log(T).

Nx Contours

13E.1.26 Nx contours define the area exposed to a minimum number of events with a specified maximum noise level x in a given period. For example, an N60,100 contour shows the area exposed to at least 100 noise events, each of which has a maximum noise level of at least 60 dB L_{ASmax}.

Single Mode Contours

13E.1.27 Most noise contours reflect the aircraft operations that occur during a period when runways are used in both directions, primarily in response to the varying direction of the wind. Single mode contours differ in that they assume all the movements use only a single direction on each runway.

13E.2 Aviation Terms

ANCA

13E.2.1 ANCA, the Aircraft Noise Competent Authority, is the body responsible for ensuring that noise generated by aircraft activity at Dublin Airport is assessed in accordance with EU and Irish legislation.

FAA

13E.2.2 The Federal Aviation Administration (FAA) is the regulatory body for civil aviation in the United States. The FAA produces AEDT, the industry standard modelling software for aircraft noise.

AEDT

13E.2.3 The Aviation Environmental Design Tool (AEDT) is the industry standard software for the evaluation of aircraft noise in the vicinity of airports based on aircraft type, operation, route, flight profile and terrain.

NMT

13E.2.4 A noise monitoring terminal (NMT) is a fixed or mobile station with the appropriate instrumentation to measure aircraft noise in the vicinity of an airport on a long-term basis.

NFTMS

13E.2.5 A noise and flight track monitoring system (NFTMS) comprises a network of NMTs that record and correlate noise data with individual flights by use of other airport logged flight telemetry, such as radar data.

Start of roll

13E.2.6 The position on a runway where aircraft commence their take-off procedure.

Runway arrival threshold

13E.2.7 The beginning of the portion of the runway usable for landing.

Appendix 14A. Ground Noise Legislation and Guidance

14A. Legislation, policy, technical guidelines and assessment criteria relevant to aircraft ground noise

14A.1 Introduction

14A.1.1 This appendix of the Environmental Impact Assessment Report (EIAR), prepared by Bickerdike Allen Partners LLP, sets out details of the legislation and planning policy considered relevant to the assessment of aircraft ground noise.

14A.1.2 Chapter 6 of the EIAR contains details of the strategic planning context, national planning policy, and local planning policy. Further details of the strategic planning context are given in Section 14A.2. Relevant UK policy, standards and guidance are considered in Section 14A.4, and other international policy, standards and guidance in Section **Error! Reference source not found.**.

14A.1.3 There are various noise metrics available for the assessment of the impacts of aircraft ground noise. These are described in detail in Section 14A.5.

14A.1.4 The derivation of the effect scales used in the aircraft ground noise assessment are discussed in Section 14A.6.

14A.2 Strategic Planning Context

S.I. No. 549/2018 – Environmental Noise Regulations 2018

14A.2.1 This Statutory Instrument gives effect to Directive (EC) 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise, as amended by Commission Directive (EU) 2015/996 of 19 May 2015 establishing common noise assessment methods.

14A.2.2 The regulations are to be known as the European Communities (Environmental Noise) Regulations 2018 and came into operation on the 31 December 2018. They require the production of strategic noise maps for set agglomerations, major roads, major railways, and major airports. They also require the production of subsequent action plans.

EU Regulation 598/2014

14A.2.3 The European Commission introduced EU Regulation 598/2014[1] in 2016 to account for developments in the aviation world. This repeals 2002/30/EC[2] which set out procedures and rules for the introduction of noise related operating restrictions to the busiest of the European airports. This previous regime for managing airport noise placed the responsibility with the airport operator. The entry into force in 2016 of EU Regulation 598/2014 represents a shift in responsibility from the airport operator to a separate, independent statutory entity or competent authority to oversee the delivery of the new, more prescriptive approach to airport noise management.

14A.2.4 There are seven key elements of the new regulatory regime which are:

- Designation of a separate, independent statutory entity as the Competent Authority;

[1] European Commission (2014). Regulation (EU) No 598/2014 of the European Parliament and of the Council of 16 April 2014 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Union airports within a Balanced Approach and repealing Directive 2002/30/EC, [online]. Available at: https://publications.europa.eu/en/publication-detail/-/publication/b6947ca7-f1f6-11e3-8cd4-01aa75ed71a1/language-en [Checked 16/08/2021].
[2] European Commission (2002), Directive 2002/30/EC Directive of the European Parliament and the Council of 26th March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports [online]. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0030&from=EN [Checked 16/08/2021].

- Appropriate collaborative working arrangements;
- Robust consultation requirements;
- Adherence to the ICAO Balanced Approach;
- Compliance with Environmental Impact Assessment (EIA), Habitats & Birds, and the Environmental Noise Directives;
- Establishment of an appropriate, robust appeal mechanism, and
- Ongoing monitoring and enforcement activities.

14A.2.5 Regulation (EU) No 598/2014 under Article 5 requires that member states shall ensure that the Balanced Approach is adopted in respect of aircraft noise management at those airports where a noise problem has been identified. To that end, they shall ensure that the Noise Abatement Objective (NAO) for that airport is defined. This then allows the measures available to reduce the noise impact to be identified, and the likely cost-effectiveness of the noise mitigation measures to be thoroughly evaluated.

Aircraft Noise (Dublin Airport) Regulation Act, 2019

14A.2.6 The Aircraft Noise (Dublin Airport) Regulation Act 2019 (The Aircraft Noise Act) implements EU Regulation 598/2014 on the establishment of rules and procedures with regard to the introduction of noise related operating restrictions at European Union Airports within the Balanced Approach.

14A.2.7 The Aircraft Noise Act amends the Planning and Development Act 2000 as amended (PDA), to cater for the situation where development at Dublin Airport may give rise to an aircraft noise problem and where an airport wishes to apply to revoke, amend or replace operating restrictions at the airport.

14A.2.8 The Aircraft Noise Act was enacted on 22nd May 2019. It was subsequently amended on 1st September 2019, following the removal of Airport infrastructure from the Seventh Schedule of the PDA and thus the strategic infrastructure development planning process is no longer applicable to it.

14A.2.9 Fingal County Council has been designated as the competent authority for the purposes of aircraft noise regulation at Dublin Airport by section 3(1) of the Aircraft Noise (Dublin Airport) Regulation Act 2019.

14A.2.10 The Aircraft Noise Act amends the PDA by inserting a number of new sections in Part 3 of the PDA, which deals with control of development. These sections introduce a number of new measures for planning applications at Dublin Airport that may necessitate noise-related actions or that may require a new operating restriction.

14A.2.11 Section 34C of the PDA permits an applicant who is currently subject to a planning permission for development at the airport, that includes an operating restriction, to make an application under Section 34 of the PDA to revoke, amend, replace or take other action in respect of the operating restriction. Pursuant to Section 34C (23) of the PDA this is defined as a proposed 'Relevant Action'. In this regard, daa is enabled to make this application for a proposed relevant action as it seeks to make changes to the operating restrictions imposed by the North Runway Permission.

14A.3 International Policy, Standards and Guidance

ICAO Balanced Approach

14A.3.1 The International Civil Aviation Organisation (ICAO) is the inter-governmental body that oversees the worldwide civil aviation industry. ICAO has adopted a set of principles and guidance, constituting the 'balanced approach' to aircraft noise management, which encourages ICAO member states to address the following points:

14A.3.2 Mitigate aviation noise through selection at a local level of the optimum combination of four key measures;

- Reducing noise at source (from use of quieter aircraft);
- Making best use of land (plan and manage the land surrounding airports);

- Introducing operational noise abatement procedures (by using specific runways, routes or procedures);
- Imposing noise-related operating restrictions (such as a night time operating ban or phasing out of noisier aircraft);

14A.3.3 Select the most cost-effective range of measures; and

14A.3.4 Not introduce noise-related operating restrictions unless the authority is in a position, on the basis of studies and consultations, to determine whether a noise problem exists and having determined that an operating restriction is a cost-effective way of dealing with the problem.

14A.3.5 As detailed in the ANCA report titled Aircraft Noise Mitigation at Dublin Airport, the Balanced Approach to aircraft noise management is an internationally agreed approach to managing noise at large airports. Noise reduction is explored through four principal elements with the objective to address noise problems in the most cost-effective manner, and only apply operating restrictions as a last resort measure.

ICAO Convention on International Civil Aviation, Annex 16, Volume 1

14A.3.6 ICAO has set a number of standards for aircraft noise certification which are contained in Volume 1 of Annex 16 to the Convention on International Civil Aviation[3]. This document sets maximum acceptable noise levels for different aircraft during take-off and landing, categorised for subsonic jet aeroplanes as Chapter 2, 3, 4 and 14.

14A.3.7 Chapter 2 aircraft have been prevented from operating within the EU since 2002, unless they are granted specific exemption, and therefore the vast majority of aircraft fall within Chapter 3, 4 and 14 parameters. These aircraft are quieter than Chapter 2 aircraft.

14A.3.8 Chapter 4 standards have applied to all new aircraft manufactured since 2006. These aircraft must meet a standard of being cumulatively 10 dB quieter than Chapter 3 aircraft.

14A.3.9 Chapter 14 was adopted by the ICAO in 2014. It represents an increase in stringency of 7 dB compared with Chapter 4 and applies to new aircraft submitted for certification after 31st December 2017.

Environmental Noise Directive 2002/49/EC

14A.3.10 The Environmental Noise Directive (END)[4] concerning the assessment and management of environmental noise from transport, came into effect in June 2002. Its aim was to define a common approach across the European Union with the intention of avoiding, preventing or reducing on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. This involves:

- Informing the public about environmental noise and its effects;
- Preparation of strategic noise maps for large urban areas ('agglomerations'), major roads, major railways and major airports as defined in the END; and
- Preparation of action plans based on the results of the noise mapping exercise.

EU Commission Directive 2020/367

14A.3.11 Commission Directive (EU) 2020/367 of 4 March 2020 amends Annex III to Directive 2002/49/EC of the European Parliament and of the Council as regards the establishment of assessment methods for harmful effects of environmental noise. The amendment is to *Annex III Assessment Methods for Harmful Effects* and includes the introduction of formulae which compute a value for the proportion of a population highly annoyed or highly sleep disturbed from noise from specific sources, including aircraft and road traffic.

[3] ICAO (2017), Annex 16 to the Convention on International Civil Aviation, Volume 1 8th Edition. ICAO.
[4] European Commission (2002). Directive 2002/49/EC Directive of the European Parliament and of the Council of 25th June 2002 relating to the assessment and management of environmental noise, [online]. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0049&from=EN [Checked 16/08/2021].

WHO Guidelines for community noise (1999)

14A.3.12 WHO Guidelines for Community Noise[5] provide a range of aspirational noise targets aimed at protecting the health and well-being of the community. They therefore set out noise targets which represent goals for minimising the adverse effects of noise on health as opposed to setting absolute noise limits for planning purposes.

14A.3.13 For outside areas of dwellings, the WHO Guidelines state that to protect the majority of people from being seriously annoyed during the daytime, the outdoor sound level from steady, continuous noise should not exceed 55 dB L_{Aeq} on balconies, terraces and in outdoor living areas. To protect the majority of people from being moderately annoyed during the daytime, the outdoor sound level should not exceed 50 dB L_{Aeq}. Where it is practical and feasible, the lower outdoor sound level should be considered the maximum desirable sound level for new development. The WHO guidance cites a 16 hour period as applicable to the above limits.

14A.3.14 Although the attainment of these steady noise target values is not always achievable in practice, particularly where a dwelling is located close to a busy road or railway, controlling the daytime noise level to 55 dB $L_{Aeq,16h}$ or below in some gardens and amenity areas can sometimes be achieved for developments near roads and railways by the use of screening achieved using other buildings, fences or purpose made noise barriers.

WHO Night Noise Guidelines for Europe (2009)

14A.3.15 Guidance on absolute noise levels at night are given in by the WHO Night Noise Guidelines (NNG)[6]. These report findings from the WHO concerning night noise from transportation sources and its effects on health and sleep. These guidelines acknowledge that the effect of noise on people at night depends not just on the magnitude of noise of a single event but also the number of events. It considers that in the long term, over a year, these effects can be described using the $L_{night,outside}$ index. This is essentially equivalent to the $L_{Aeq,8h}$ index commonly used in the UK, but instead of being based on aircraft activities during the average summer night, is based on the average annual night.

14A.3.16 These guidelines were prepared by a working group set up to provide scientific advice to the Member States for the development of future legislation and policy action in the area of assessment and control of night noise exposure. The working group reviewed available scientific evidence on the health effects of night noise, and derived health-based guideline values. Although this provides guidance to the European Community in general and has no policy status, it provided a description of then recent research into the health effects of noise and provided guidance on noise targets.

14A.3.17 The following night noise guideline values are recommended by the working group for the protection of public health from night noise:

- Night noise guideline (NNG) $L_{night,outside}$ equal to 40 dB
- Interim target (IT) $L_{night,outside}$ equal to 55 dB

14A.3.18 The NNG is a health based limit to aspire towards whereas the IT represents a feasibility based intermediate target. This is borne out to some extent by the Strategic Noise Mapping work undertaken across European Member States in compliance with the Environmental Noise Directive. For night noise, Member States are required to produce noise maps in terms of the $L_{night,outside}$ index no lower than 50 dB for strategic planning purposes.

14A.3.19 The relationship between night noise exposure and health effects as defined by these WHO guidelines can be summarised as shown in Table 14A-1.

[5] Berglund, B. et al (1999). Guidelines for community noise. [Online]. Available at: http://apps.who.int/iris/bitstream/handle/10665/66217/a68672.pdf?sequence=1&isAllowed=y [Checked: 16/08/2021].
[6] World Health Organisation Europe (2009). Night Noise Guidelines for Europe, [Online]. Available at: http://www.euro.who.int/__data/assets/pdf_file/0017/43316/E92845.pdf [Checked 16/08/2021].

Table 14A-1: WHO guidance on the relationship between night noise exposure and health effects

$L_{night,outside}$	Relationship between night noise exposure and health effects
<30	No effects on sleep are observed except for a slight increase in the frequency of body movements during sleep due to night noise
30 – 40	There is no sufficient evidence that the biological effects observed at the level below 40 dB $L_{night,outside}$ are harmful to health
40 – 50	Adverse health effects are observed at the level above 40 dB $L_{night,outside}$, such as self-reported sleep disturbance, environmental insomnia, and increased use of somnifacient drugs and sedatives
>55	Cardiovascular effects become the major public health concern, which are likely to be less dependent on the nature of the noise

WHO Environmental Noise Guidelines for the European Region (2018)

14A.3.20 In October 2018 the WHO published their updated Environmental Noise Guidelines[7] which contain the following recommendations:

14A.3.21 For average noise exposure, the GDG (Guideline Development Group) strongly recommends reducing noise levels produced by aircraft below 45 dB L_{den}, as aircraft noise above this level is associated with adverse health effects.

14A.3.22 For night noise exposure, the GDG strongly recommends reducing noise levels produced by aircraft during night-time below 40 dB L_{night}, as night-time aircraft noise above this level is associated with adverse effects on sleep.

14A.3.23 These WHO guidelines could not be adopted as thresholds without imposing very significant restrictions on the current permitted operations of most major airports. As an example, even a single Airbus A320 or Boeing 737-800 aircraft operating once per night could expose hundreds of people to noise levels in excess of the guideline 40 dB L_{night} value at an airport in a relatively rural location. 10 aircraft events during the daytime (07:00-19:00) period (or smaller numbers in the evening and night periods) could expose a similar number of people to noise levels in excess of the 45 dB L_{den} parameter.

14A.3.24 These guidelines have not yet been adopted as UK policy, and there is no current indication that they will be. In December 2018, the UK Government published the consultation document Aviation 2050, which included the following regarding the WHO Guidelines:

14A.3.25 "3.106 There is also evidence that the public is becoming more sensitive to aircraft noise, to a greater extent than noise from other transport sources, and that there are health costs associated from exposure to this noise. The government is considering the recent new environmental noise guidelines for the European region published by the World Health Organization (WHO). It agrees with the ambition to reduce noise and to minimise adverse health effects, but it wants policy to be underpinned by the most robust evidence on these effects, including the total cost of an action and recent UK specific evidence which the WHO report did not assess."

ISO 9613-2:1996 Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation

14A.3.26 This part of ISO 9613 specifies an engineering method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound pressure level ($L_{Aeq,T}$) under meteorological conditions favourable to propagation from sources of known sound emission, downwind propagation.

14A.3.27 The method consists of octave-band algorithms (with nominal mid-band frequencies from 63 Hz to 8 kHz) for calculating the attenuation of sound which originates from a point sound source, or an

[7] World Health Organization Regional Office for Europe (2018). Environmental Noise Guidelines for the European Region. [Online]. Available at: http://www.euro.who.int/__data/assets/pdf_file/0008/383921/noise-guidelines-eng.pdf [Checked: 16/08/2021].

assembly of point sources. The source (or sources) may be moving or stationary. Specific terms are provided in the algorithms for the following physical effects:

- geometrical divergence;
- atmospheric absorption;
- ground effect;
- reflection from surfaces; and
- screening by obstacles.

14A.4 Relevant UK Policy, Standards and Guidance

Noise Policy Statement for England (2010)

14A.4.1 The Noise Policy Statement for England (NPSE)[8] provides the framework for noise management decisions to be made that ensure noise levels do not place an unacceptable burden on society. The stated aims of the Noise Policy Statement for England are to:

14A.4.2 Avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development;

14A.4.3 Mitigate and minimise adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development, and

14A.4.4 *Where possible, contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.*

14A.4.5 The NPSE introduces the concepts of NOEL (No Observed Effect Level), LOAEL (Lowest Observed Adverse Effect Level) and SOAEL (Significant Observed Adverse Effect Level). The definition of these is as follows:

> NOEL – No observed effect level. This is the level below which no effect can be detected;
>
> LOAEL – Lowest observed adverse effect level. This is the level above which adverse effects on health and quality of life can be detected, and
>
> SOAEL – Significant observed adverse effect level. This is the level above which significant adverse effects on health and quality of life occur.

14A.4.6 NPSE states that it is not possible to give a single objective noise-based measure that defines a SOAEL that is applicable to all sources of noise for all situations. It acknowledges that the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It also acknowledges that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise.

14A.4.7 Where any adverse noise effects are predicted, these are identified and if these cannot be avoided, mitigation measures are recommended to ensure no significant residual effects on health and quality of life arise. This approach is considered consistent with the principal aims of the NPSE. It is important to note that findings against the LOAEL and SOAEL are measures of the effect of noise on health and quality of life, and not environmental impact assessment findings.

[8] Defra (2010). Noise Policy Statement for England, [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69533/pb13750-noise-policy.pdf [Checked 16/08/2021].

UK Aviation Policy Framework (2013)

14A.4.8 The Aviation Policy Framework (APF) was published in March 2013[9] by the Department for Transport (DfT). The APF defines the Government's objectives and policies on the impacts of aviation in the UK.

14A.4.9 On managing aviation's environmental impacts, and specifically noise, it states in paragraph 3.12 that the Government's overall objective on noise is to *"Limit and where possible reduce the number of people in the UK significantly affected by aircraft noise"*.

14A.4.10 It goes on in paragraph 3.13 to state that *"This is consistent with the Government's Noise Policy, as set out in the Noise Policy Statement for England (NPSE) which aims to avoid significant adverse impact on health and quality of life."*

14A.4.11 Guidance is provided on the noise metric used to rate airborne noise in paragraph 3.13 where it states *"To provide historic continuity, the Government will continue to ensure that noise exposure maps are produced for the noise-designated airports on an annual basis providing results down to a level of 57 dB LAeq,16hour"*.

14A.4.12 The noise index is described in a footnote as *"the A-weighted average sound level over the 16 hour period of 07:00-23:00. This is based on an average summer day when producing noise contour maps at the designated airports."*

14A.4.13 In paragraph 3.17 the interpretation of the contour is given as *"We will continue to treat the 57 dB LAeq,16h contour as an average level of day time aircraft noise marking the approximate onset of significant community annoyance. However, this does not mean that all people within this contour will experience significant adverse effects from aircraft noise. Nor does it mean that no-one outside of this contour will consider themselves annoyed by aircraft noise."*

14A.4.14 Under the heading "Noise insulation and compensation" the APF states that:

14A.4.15 "The Government continues to expect airport operators to offer households exposed to levels of noise of 69 dB LAeq,16h or more, assistance with the cost of moving.

14A.4.16 *The Government also expects airport operators to offer acoustic insulation to noise sensitive buildings, such as schools and hospitals, exposed to levels of noise of 63 dB LAeq,16h or more. Where acoustic insulation cannot provide an appropriate or cost-effective solution, alternative mitigation measures should be offered."*

UK Airspace Policy: A framework for balanced decisions on the design and use of airspace 2017 consultation

14A.4.17 Although the APF[10] remains the current national aviation policy document, in 2017 the Department for Transport reported on the outcome of consultations regarding changes to UK airspace (Consultation Response on UK Airspace Policy: A framework for balanced decisions on the design and use of airspace) which included a review of criteria and metrics for assessing aircraft noise. This states in paragraph 9: *"The Government's current aviation policy is set out in the Aviation Policy Framework (APF). The policies set out within this document provide an update to some of the policies on aviation noise contained within the APF, and should be viewed as the current government policy. The government also intends to develop aviation noise policy further through the Aviation Strategy consultation process. As part of the Aviation Strategy consultation on sustainable growth planned for 2018 the Government intends to consider the roles, structures and powers that currently exist and what, if any, new ones will be necessary to bring about the network wide, co-ordinated and complex changes needed for airspace modernisation"*.

14A.4.18 Based on this report, the Government will implement a range of proposals of which the key points are:

[9] Department for Transport (2013). Aviation Policy Framework. [online]. Available at: https://www.gov.uk/government/publications/aviation-policy-framework [Checked 16/08/2021].
[10] Department for Transport (2017). Consultation Response on UK Airspace Policy: A framework for balanced decisions on the design and use of airspace. [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/653801/consultation-response-on-uk-airspace-policy-web-version.pdf [Checked 16/08/2021].

- The creation of an Independent Commission on Civil Aviation Noise (ICCAN) as an advisory non-departmental public body;
- A level of 54 dB $L_{Aeq,16h}$ is now acknowledged to correspond to the onset of significant community annoyance and replaces the 57 dB $L_{Aeq,16h}$ level in the APF,
- Some adverse effects of annoyance can now be seen to occur down to 51 dB $L_{Aeq,16h}$. A LOAEL of 51 dB $L_{Aeq,16h}$ and 45 dB L_{night}, for daytime and night-time noise respectively, are to be used in assessing and comparing noise impacts of airspace changes (N.B. Following consultation with the CAA, the Government consider it appropriate to use 45 dB $L_{Aeq,8h}$ as the LOAEL for air space change assessment, for consistency with daytime noise).

14A.4.19 As part of this consultation the Department for Transport published their draft Air navigation guidance on airspace and noise management and environmental objectives[11]. This proposes that rather than limiting the number of people exposed to any level of aircraft noise, the number of people experiencing significant adverse effects should be limited.

BS 8233:2014 Sound insulation and noise reduction in buildings – code of practice

14A.4.20 The British Standard BS8233:2014 Sound insulation and noise reduction for buildings – Code of practice[12] provides guidance on the control of external noise. The standard presents a number of design ranges for indoor noise levels for different types of space.

14A.4.21 The internal ambient noise guideline levels for dwellings are given in Table 14A-2.

Table 14A-2: Dwelling noise exposure hierarchy based on the likely average response

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16h}$	-
Dining	Dining room/area	40 dB $L_{Aeq,16h}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16h}$	30 dB $L_{Aeq,8h}$

14A.4.22 Regular individual noise events (for example, scheduled aircraft or passing trains) can cause sleep disturbance. A guideline value may be set in terms of SEL or L_{AFmax}, depending on the character and number of events per night. Sporadic noise events could require separate values.

14A.4.23 These guideline noise levels can be used for rooms for residential purposes including hotels, hostels, halls of residence, school boarding houses, hospices and residential care homes.

14A.4.24 BS8233:2014 also gives guideline ambient noise levels in non-domestic buildings. These are given in Table 14A-3.

[11] Department for Transport (2017). Air navigation guidance on airspace and noise management and environmental objectives. [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/587669/air-navigation-guidance-on-airspace-and-noise-management-and-environmental-objectives.pdf [Checked 16/08/2021].
[12] British Standards Institution (2014). BS 8233:2014 Sound insulation and noise reduction for buildings – Code of practice. [Online]. Available at: https://shop.bsigroup.com/ProductDetail/?pid=000000000030241579&_ga=2.85437209.1462736480.1535108011-979344642.1535108011 [Checked: 16/08/2021].

Table 14A-3: Non=domestic noise exposure hierarchy based on the likely average response

Activity	Location	Design range $L_{Aeq,T}$ (dB)
Speech or telephone communications	Department store, cafeteria, canteen, kitchen	50 to 55
	Concourse, corridor, circulation space	45 to 55
Study and work requiring concentration	Library, gallery, museum	40 to 50
	Staff/meeting room, training room	35 to 45
	Executive office	35 to 40
Listening	Place of worship, counselling, meditation, relaxation	30 to 35

Department of Education - Acoustic design of schools: performance standards BB93 (2015)

14A.4.25 The Department of Education's BB93[13] gives upper limits for indoor ambient noise level in terms of $L_{Aeq,30min}$ for new and refurbished schools, and schools formed by a material change of use, are as follows:

- Classroom and general teaching area - 35 dB $L_{Aeq,30min}$; and
- Teaching space (special communication needs) - 30 dB $L_{Aeq,30min}$.

14A.4.26 For classrooms and teaching spaces with natural ventilation, these levels can be achieved if the external noise level does not exceed 55 dB $L_{Aeq,30min}$.

14A.4.27 These standards, while not required by legislation to be achieved within those existing schools built prior to their introduction, provide a guide to determine potential impacts on existing schools.

Department of Health - Specialist Services, Health Technical Memorandum 08-01: Acoustics (2013)

14A.4.28 Guidance on recommended internal noise levels for healthcare facilities is given in the Department of Health's HTM 08-01[14]. This recommends internal noise levels for healthcare facilities as follows:

- Hospital wards, daytime - 40 dB $L_{Aeq,1h}$;
- Hospital wards, night - 35 dB $L_{Aeq,1h}$;
- Hospital wards, night - 45 dB $L_{Amax,F}$;
- Operating theatres, night - 40 dB $L_{Aeq,1h}$; and
- Operating theatres, night - 50 dB $L_{Amax,F}$.

14A.4.29 The L_{Amax} limit is applicable to events that occur several times during the night (for example passing trains) rather than sporadic events.

14A.4.30 These criteria would be relaxed for emergency situations and sporadic events subject to agreement by the local authority or other relevant body.

14A.4.31 For hospital wards with natural ventilation, these levels can be achieved if the external noise level does not exceed 55 dB $L_{Aeq,1h}$ and 50 dB $L_{Aeq,1h}$ during the day and night respectively.

[13] Department of Education (2015). Acoustic design of schools: performance standards Building bulletin 93, [Online]. Available at: https://www.gov.uk/government/publications/bb93-acoustic-design-of-schools-performance-standards [Checked 16/08/2021]
[14] Department of Health (2013). Specialist Services, Health Technical Memorandum 08-01: Acoustics, [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/144248/HTM_08-01.pdf [Checked 16/08/2021].

CAP1616a Airspace Change: Environmental requirements technical annex

14A.4.32 This guidance document[15] produced in 2017 by the Civil Aviation Authority for airspace change sponsors providing guidance on the seven-stage airspace change process used for permanent changes to the published airspace design. The document guides the user through each stage and describes what will happen at each stage of it, and why.

14A.4.33 CAP 1616a forms a technical annex to this document and gives an outline of relevant methodologies for use in environmental assessment.

BS7445 Description and measurement of environmental noise

14A.4.34 The aim of this British Standard is to provide authorities with material for the description of noise in community environments. The first part of the standard defines the basic quantities to be used and describes basic procedures for the determination of these quantities. The second part concerns the acquisition of data pertinent to land use, and the third part is a guide to application to noise limits.

14A.5 Noise Metrics for Assessment of Impacts of Ground Noise

14A.5.1 In the UK, the Independent Commission on Civil Aviation Noise (ICCAN) is a body created to act as an independent, impartial voice on civil aviation noise and how it affects communities. They have recently undertaken a review of aviation noise metrics[16].

14A.5.2 The review notes that metrics aim to quantify noise in a meaningful way and that in terms of trying to determine the effect caused by noise there are two ways to look at noise measurements, the absolute value and the relative change. *"Absolute levels are important from a regulatory point of view, whereas the relative change in noise might be more informative for assessing annoyance, because of the way the human ear perceives sound."*

14A.5.3 The background section reports that *"since the early 1970s, research found that the L_{Aeq} metric was most closely associated with subjective response. The $L_{Aeq,T}$ is a notional continuous A-weighted sound level over a given time period, T, that contains the same sound energy as the actual time varying signal over the same time period"*. Both L_{den} and L_{night} are L_{Aeq} based metrics in addition to others such as $L_{Aeq,16h}$ and $L_{Aeq,8h}$.

14A.5.4 "Most of these metrics are well-established within the aviation sector, with an extensive existing knowledge base. This makes them useful for research into annoyance, as well as other health and social issues (WHO, Environmental Noise Guidelines for the European Region, 2018)."

14A.5.5 The review notes that ground noise, which includes noise generated from aircraft such as taxiing or using auxiliary power units while on a stand at a terminal is different in its character and propagation from that of a flying aircraft and was not covered by the review. However a number of the exposure metrics commonly used for ground noise were reported in Table 1 of the review. The entries for metrics used in this assessment are included in Table 14A-4, although it should be noted the entries in the final two columns are specifically in relation to airborne aircraft noise.

[15] Civil Aviation Authority (2017). CAP1616: Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements, [online]. Available at: https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=8127 [Checked 16/08/2021].
[16] ICCAN A review of aviation noise metrics and measurement July 2020 https://iccan.gov.uk/wp-content/uploads/2020_07_16_ICCAN_review_of_aviation_noise_metrics_and_measurement.pdf [Checked 16/08/2021]

Table 14A-4: Exposure noise metrics based on L_{Aeq}

Metric	What it is	What if does	Weighting	Presence in UK Legislation, Policy and Standards	Links to effects on annoyance and other health issues
$L_{Aeq,T}$	The L_{eq} with the A indicating that the frequencies in the sound have been adjusted using the A weighting curve.	Provides an average value of the A weighted sound energy contained in the sound measured over a period, T.	Yes. The frequencies in the sound have been weighted using the A weighting curve.	Appears in various legislation, policy and standards associated with different time periods (T).	Generally felt to be a good indicator of likely annoyance and other health effects. Values can be influenced by a few very noisy events which could give a similar score to a large number of quieter events.
$L_{Aeq,16h}$	The $L_{Aeq,T}$ averaged over a 16 hour period. Conventionally that time period is 07:00 hours to 23:00 hours local time.	When determined for an average summer's day between the 16 June and 15 September, it is the main measure of aircraft noise impact	Yes. The frequencies in the sound have been weighted using the A weighting curve.	Appears in British Standards, such as BS 8233:2014. The summer average day value appears in Government policy on aviation noise management. This metric has been used by the UK for examining aircraft noise since 1990.	An Exposure Response Function (ERF) exists between this metric and annoyance. This is thought to have changed over time. Also, some ERFs exist for other health effects.
$L_{Aeq,8h}$	The $L_{Aeq,T}$ averaged over an 8 hour period. Conventionally that time period is 23:00 hours to 07:00 hours local time (i.e. the night period).	When determined for an average summer's night between the 16 June and 15 September, it is one of the measures of aircraft noise impact at night	Yes. The frequencies in the sound have been weighted using the A weighting curve	Appears in British Standards, such as BS 8233:2014. The summer average night value appears in Government policy on aviation noise management	The summer average night value is used to determine the percentage of people expressing self reported sleep disturbance – although strictly, the correct measure to use is L_{night}.
L_{night}	The $L_{Aeq,8h}$ averaged over the period of one year	Provides a measure of the annual average night noise impact, measured outside.	Yes. The frequencies in the sound have been weighted using the A weighting curve.	Appears in the regulations that transpose EC Directive 2002/49/EC, the Environmental Noise Directive	There is an ERF between this measure and determining the percentage of people expressing self reported sleep disturbance for aircraft noise (and road and rail noise).
L_{den}	The annual average $L_{Aeq,T}$, combining L_{day}, $L_{evening}$, and L_{night} but with the $L_{evening}$ value weighted by the addition of 5 dB and the L_{night} value weighted by the addition of 10 dB.	Provides a single measure of the overall annual average noise impact.	Yes. The frequencies in the sound have been weighted using the A weighting curve. $L_{evening}$ has been weighted by the addition of 5 dB. L_{night} has been weighted by the addition of 10 dB	Appears in the regulations that transpose EC Directive 2002/49/EC; The Environmental Noise Directive (END) which is translated into English legislation: The Environmental Noise (England) Regulations 2006 (UK) Statutory Instruments, The Environmental Noise (England) Regulations, 2006, as well as for the devolved nations.	There is an ERF between this measure and annoyance for aircraft noise (and road and rail noise). Also, some ERFs with other health effects.
$L_{Aeq,30mins}$	The $L_{Aeq,T}$ averaged over a 30 minute period.	Provides a measure of the average noise impact in a 30-minute period.	Yes. The frequencies in the sound have been weighted using the A weighting curve.	Appears in Building Bulletin 93 – Acoustic design of schools: performance standards.	Some links with the impact of noise on teaching and learning.

Metric	What it is	What if does	Weighting	Presence in UK Legislation, Policy and Standards	Links to effects on annoyance and other health issues
$L_{Aeq,1h}$	The $L_{Aeq,T}$ averaged over a 1 hour period	Provides a measure of the average noise impact in a 1-hour period. For aircraft noise, sometimes used to describe the impact during the period 06:00 – 07:00.	Yes. The frequencies in the sound have been weighted using the A weighting curve.	Can be found in BS 4142:2014+A1:2019 and BS 8233:2014. The value in the period 06:00 – 07:00 is sometimes used a control metric at some airports	No formal relationships exist.

14A.6 Derivation of Effect Scales Used

Ground Noise – Residential Receptors

14A.6.1 Regulation (EU) No 598/2014 under Annex I requires that air traffic noise impact will be described, at least, in terms of noise indicators L_{den} and L_{night} which are defined and calculated in accordance with Annex I to Directive 2002/49/EC. While this often is limited to air noise, ground noise can also be considered in this way.

14A.6.2 Consideration has been given to the significance of the change under the various options considered from the baseline. This considers both the resulting noise levels and the changes in noise levels. A consequence of this approach is that it puts emphasis on those newly affected, as they will experience the greatest changes, when considering the overall number significantly adversely affected.

14A.6.3 The classification and significance of effects is evaluated with reference to definitive standards, accepted criteria and legislation where available. This is supplemented by professional opinion and professional judgement.

14A.6.4 For the L_{den} and L_{night} noise indicators the significance of effect has been determined by separately rating both the absolute noise levels and the change in noise level as set out below. The individual ratings are then combined to determine the significance of any effects.

14A.6.5 While there is considerable research into the effects of aircraft noise, this is largely in relation to airborne aircraft. In the absence of specific research in relation to ground noise the same approach has been taken as for air noise. The absolute noise values and associated impact criteria for residential receptors that have been developed are given in Table 14A-5. They commence with a negligible band which applies to noise levels that lie below a low threshold, specifically 45 dB L_{den} and 40 dB L_{night}, as WHO 2018 states that aircraft noise above these levels is associated with adverse health effects. The subsequent bands are defined by values that are required to be reported under Directive 2002/49/EC.

Table 14A-5: Noise Impact Criteria (absolute) – residential

Scale Description	Annual dB L_{den}	Annual dB L_{night}
Negligible	<45	<40
Very Low	45 – 49.9	40 – 44.9
Low	50 – 54.9	45 – 49.9
Medium	55 – 64.9	50 – 54.9
High	65 – 69.9	55 – 59.9
Very High	≥70	≥60

14A.6.6 Taking L_{den}, the value of 55 dB is where WHO 2018 reports evidence of an effect on reading skills and oral comprehension in children. This value is also comparable to the level of 54 dB $L_{Aeq,16h}$ which is now

used in the UK as marking the approximate onset of significant community annoyance. The value of 55 dB L_{den} has therefore been assigned to medium impact, as it relates to the start of these effects.

14A.6.7 Taking the value of 65 dB L_{den}, this is where WHO 2018 reports an association between those exposed and those considering themselves highly annoyed of 45.5%. Such a noise level is also comparable with the level of 63 dB $L_{Aeq,16h}$ widely used in the UK for eligibility for acoustic insulation, following Government guidance, and is also used for eligibility at Dublin under the North Runway Permission. The value of 65 dB L_{den} has therefore been assigned to the start of a high impact.

14A.6.8 For the night period the value of 45 dB L_{night} has been assigned to low impact. This follows from the approach in the UK where the Government proposed the value as the Lowest Observed Adverse Effect Level, and this received broad support.

14A.6.9 The level of 50 dB L_{night} is described as the desirable level in the Noise Action Plan for Dublin Airport 2019 – 2023[17]. This value has therefore been assigned to the level above which medium impact arises.

14A.6.10 The higher level of 55 dB L_{night} has been assigned to the level above which high impact arises. This follows from the WHO Night Noise Guidelines 2009 (NNG 2009)[6] which describe it as the threshold at which "Adverse health effects occur frequently, a sizeable proportion of the population is highly annoyed and sleep-disturbed". The noise level is also comparable with the level of 55 dB $L_{Aeq,8h}$ commonly used at airports in the UK for eligibility for sound insulation schemes.

14A.6.11 The scale to be used to assess the change in noise level is given in Table 14A-6. The thresholds are derived from the difference contour bands recommended in CAP1616a. A semantic scale of this type, following the format of examples given in the Institute of Environmental Management and Assessment guidelines, has been applied in previous air noise assessments and accepted in Public Inquiries for airport developments in the UK and Ireland, for example the application for the North Runway at Dublin Airport. The same approach was followed in the Heathrow 3rd Runway Preliminary Environmental Impact Report (PEIR).

Table 14A-6: Noise Impact Criteria (relative)

Scale Description	Change in noise level, dB(A)
Negligible	0 – 0.9
Very Low	1 – 1-9
Low	2 – 2.9
Medium	3 – 5.9
High	6 – 8.9
Very High	≥9

14A.6.12 The effect of a change in noise level tends to increase with the absolute level of noise experienced at a receptor. If, for example, the night-time noise level at a dwelling were to change from 45 dB to 50 dB L_{night}, the overall effect for the occupants would be less than if the night-time noise level were to increase by the same amount from 55 dB to 60 dB L_{night}.

14A.6.13 The EPA Draft Guidelines advises that adherence to a systematic method of description can be of considerable assistance and includes in a Table 3.3 relevant terms that can be used to consistently describe specific effects. In terms of describing the significance of effects the terms range from imperceptible to profound, and they have been used here.

14A.6.14 There is no clearly accepted method of how to rate the magnitude of the effect of a change in the absolute ground noise level and the associated change in noise level. Some guidance however has been provided in the UK's National Planning Practice Guidance (NPPG) which states:

[17] Fingal County Council Noise Action Plan for Dublin Airport 2019 - 2023 - December 2018 https://www.fingal.ie/sites/default/files/2019-04/NAP%20Final.pdf [Checked 16/08/2021]

"In cases where existing noise sensitive locations already experience high noise levels, a development that is expected to cause even a small increase in the overall noise may result in a significant adverse effect occurring even though little or no change in behaviour would be likely to occur."

14A.6.15 The magnitude of an effect from changing between one scenario and another (e.g. baseline to future with the Relevant Action) has been established by considering both the absolute noise level in the higher of the two scenarios and the relative change in noise level that occurs at a given receptor.

14A.6.16 Table 14A-7 shows how the absolute and relative impacts are interpreted into magnitude of effect. This considers the criteria presented above, other guidance and professional judgement. The effect rating scale is taken from the EPA Draft EIAR Guidelines.

Table 14A-7: Summary of magnitude of effect – noise

Absolute Noise Level Rating	Change in Noise Level Rating					
	Negligible	Very Low	Low	Medium	High	Very High
Negligible	Imperceptible	Imperceptible	Imperceptible	Not Significant	Slight	Moderate
Very Low	Imperceptible	Imperceptible	Not Significant	Slight	Moderate	Significant
Low	Imperceptible	Not Significant	Slight	Moderate	Significant	Significant
Medium	Not Significant	Slight	Moderate	Significant	Significant	Very Significant
High	Slight	Moderate	Significant	Significant	Very Significant	Profound
Very High	Moderate	Significant	Significant	Very Significant	Profound	Profound

14A.6.17 A potential significant effect (adverse or beneficial) would be considered to arise if in Table 14A-7 the magnitude of the effect was rated as significant or higher.

Ground Noise – Non-Residential Receptors

14A.6.18 For non-residential receptors a similar, although simplified, approach has been used. Absolute levels rated as medium have been derived from the relevant guidance documents. These are given in Table 14A-8. The impact on each non-residential receptor has been rated as significant if the absolute noise level is above this threshold and the change in noise level is at least 3 dB(A), i.e. it is rated medium or higher.

14A.6.19 For schools the medium threshold has been based on the guidance in Building Bulletin 93, specifically that the internal noise levels for classrooms and teaching spaces that it contains can be achieved with natural ventilation if the external noise level does not exceed 55 dB $L_{Aeq,30min}$. Reviewing the distribution of flights at Dublin Airport it has been estimated that this criterion corresponds to approximately 55 dB L_{den}, which is the level where WHO 2018 reports evidence of an effect on reading skills and oral comprehension in children.

14A.6.20 For residential healthcare facilities, the medium thresholds have based on the guidance in Health Technical Memorandum 08-01, specifically that the internal noise levels for hospital wards that it contains can be achieved with natural ventilation if the external noise level does not exceed 55 dB $L_{Aeq,1h}$ and 50 dB $L_{Aeq,1h}$ during the day and night respectively. Reviewing the distribution of flights at Dublin Airport it has been estimated that these criteria correspond to approximately 55 dB L_{den} and 45 dB L_{night} respectively.

14A.6.21 For places of worship the medium threshold is the same as that for residential dwelling has on the basis that the British Standard BS8233:2014 recommends comparable internal noise levels for both types of spaces.

Table 14A-8: Ground Noise Impact Criteria (absolute) – non-residential

Receptor Type	*Threshold for Medium Absolute Effect*
Schools (08:00-16:00)	55 dB $L_{Aeq,30m}$ (approx. 55 dB L_{den})
Residential Healthcare Facilities – Day (07:00-23:00)	55 dB $L_{Aeq,1h}$ (approx. 55 dB L_{den})
Residential Healthcare Facilities – Night (23:00-07:00)	50 dB $L_{Aeq,1h}$ (approx. 45 dB L_{night})
Places of Worship	55 dB L_{den}

Appendix 14B. Ground Noise Methodology

14B. Ground noise modelling methodology

14B.1 Introduction

14B.1.1 This appendix of the Environmental Impact Assessment Report (EIAR), prepared by Bickerdike Allen Partners LLP, describes the modelling methodology for the aircraft ground noise predictions. The methodology for road traffic noise predictions is described in Appendix 14F.

- Section 14B.2 details the scenarios that have been assessed.
- Section 14B.3 sets out the methodology and the assumptions used in the prediction of aircraft ground noise levels and the production of noise contours.
- Section 14B.4 sets out the methodology used to assess the number of people and dwellings within the contours, as well as noise sensitive community buildings such as schools and hospitals.

14B.2 Assessment Scenarios

Scenarios to be Assessed

14B.2.1 Ten scenarios have been included in the ground noise assessment, these are:

- 2018
- 2022 Permitted
- 2022 Proposed
- 2022 Apron 5H
- 2025 Permitted
- 2025 Proposed
- 2025 Apron 5H
- 2035 Permitted
- 2035 Proposed
- 2035 Apron 5H

14B.2.2 The 2018 scenario is based on the actual aircraft movements that occurred during 2018 which have been supplied by the Applicant. The future assessments are based on air traffic movement forecasts which have been supplied by Mott Macdonald.

14B.2.3 The Apron 5H scenarios are as the Proposed scenarios with the assumption that the separate Apron 5H application is successful. The Apron 5H application has no effect on the total number of aircraft, but re-distributes some of them to stands on the proposed Apron 5H.

14B.2.4 The annual day, evening and night movements, and the summer day and night movements are given in *Appendix 13C Air noise modelling methodology.*

14B.3 Noise Modelling Methodology

Software

14B.3.1 The modelling of ground noise has been undertaken using Version 2020 of the Datakustik CadnaA environmental noise prediction software. This was the latest version of the software when the assessment work began. This software uses the methodology set out in ISO 9613-2:1996 and assumes that the wind is blowing from each source to each receptor and so is a worst case for each receptor. The software is used to produce noise exposure contours as well as predict noise levels at specific user-defined sites. For Dublin Airport the input data has comprised:

- Physical details of the airport, both current and future,
- The topography of the surrounding area,
- The aircraft movements themselves,
- The routes and procedures used by aircraft on the ground,
- Dwelling, population and community building data.

Study Area

14B.3.2 The study area is based on the largest extent of likely impacts due to ground noise, i.e. encompassing an envelope formed by the lowest value noise contours assessment for each metric. The extents of the study area are contained within a rectangle that extends approximately 3.5 km to the west, 5 km to the east, 4.5 km to the north and 3 km to the south of the centre of the South Runway at Dublin Airport.

CadnaA Model

14B.3.3 As a basis for the model a layout drawing of the airport site has been provided by the Applicant and imported into the software.

14B.3.4 Buildings have been included in the model based on the drawings supplied by the Applicant for those on the airport site, and based on building outlines derived from satellite imagery for buildings outside the airport site. Heights have been assigned to the airport buildings, such as the terminals and hangars, based on the drawings supplied by the Applicant. In practice some of the airport buildings are complex shapes and have been simplified in the model, but this is not considered to have any significant effect on the accuracy of the model. A standard height of 7 m has been assumed for residential buildings.

14B.3.5 Terrain data has been acquired for the study area. This was provided by emapsite in the form of a Digital Terrain Model dataset and has been incorporated within the noise model.

14B.3.6 The aircraft ground operations are represented in the noise modelling software by noise sources at locations across the airport. The source locations represent stand locations or segments of an aircraft's taxi route.

14B.3.7 Each activity, such as taxiing after an arrival, is modelled by assigning a noise level and duration to one or more locations. These are then added for all aircraft activities to give a noise level for each source. This information is then fed into the noise modelling software which computes the noise level at each receiver location, for each metric considered.

14B.3.8 The airfield layout including taxiways and stand locations is shown on the AIP Ireland Aerodrome Chart[1]. This information has been used with a construction drawing for the North Runway supplied by daa to locate the noise sources in the model.

[1] EIDW AD 2.24-1, dated 28 March 2019, http://iaip.iaa.ie/iaip/IAIP_Frame_CD.htm [Checked 25/08/2021]

Aircraft Ground Noise Sources

14B.3.9 There are a number of potential sources of aircraft ground noise, however this assessment has focussed on only the sources that make significant contributions to the overall ground noise produced at Dublin Airport, when assessed as a long-term average. This is in accordance with *EU Commission Directive 2015/996 Establishing common noise assessment methods according to Directive 2002/49/EC of the European Parliament and of the Council* which states "*Where noise generating activities associated with airport operations do not contribute materially to the overall population exposure to aircraft noise and associated noise contours, they may be excluded.*" The directive states that such excluded activities could include helicopters and engine testing, both of which are not considered here.

14B.3.10 The sources considered are aircraft taxiing between the stands and the runways, and the running of Auxiliary Power Units (APUs) on stands.

14B.3.11 The potential sources of noise from aircraft on the ground that have not been considered as part of this assessment are discussed below:

- Start of roll. This refers to the noise produced by aircraft on the runway while stationary, immediately before departing. Although the aircraft is physically on the ground, this noise source is considered as part of the air noise assessment.
- Reverse thrust. This refers to the noise produced by aircraft immediately after landing, when the engines are sometimes used in order to slow the aircraft down. Although the aircraft is physically on the ground, this noise source is considered as part of the air noise assessment.
- Engine testing. This refers to the noise produced by aircraft running engines for testing and maintenance purposes. When engines are run at high power, this can cause very high noise levels near the test location. However, this only occurs 1-2 times per day on average, and only during daytime hours. This is considered negligible in the context of the overall airport ground noise. Engine testing at lower power levels also occurs on stands. This occurs more frequently than high power testing, but still relatively rarely compared to the number of aircraft movements, and the noise levels are typically not higher than other activities such as taxiing.
- Aircraft parking on remote stands. The modelling work assumes that all aircraft taxi to one of the main stands and then use their APU for a time on the stand. In practice, a small number of aircraft park in other areas, such as Aircraft Park C to the north of the airfield. For Aircraft Park C in particular, aircraft are towed rather than taxiing when travelling to this area. Details of the exact usage of various non-stand locations were not available, although it is known to be a small percentage of the total aircraft and therefore would have a minimal effect on the overall noise environment.
- Other ground based activities that occur rarely and/or produce low noise levels relative to aircraft taxiing or APUs, such as ground support vehicles or de-icing.

14B.3.12 As noted above, the Apron 5H application has no effect on the total number of aircraft, so the majority of the excluded sources described above are not affected by that application in any event, for example start of roll and reverse thrust as the numbers of arrivals and departures are unaltered.

Aircraft Types

14B.3.13 For the purpose of this assessment, aircraft were split into two categories; "Typical" and "Large". The large aircraft, consisting of twin-aisle jet aircraft such as the Airbus A330 or Boeing 767 or larger, were considered separately as they have higher noise levels and also typically use different taxi routes for certain operations. The typical aircraft, while primarily being made up of the Airbus A320 and Boeing 737-800, also include smaller jet aircraft and propeller aircraft. Although these aircraft are significantly quieter once airborne, they are often found to be of a similar noise level when carrying out ground operations. The full list of aircraft operational codes and modelled aircraft categories are given in Table 14B-1.

Table 14B-1: Aircraft Classification for Ground Noise Modelling

Dublin Airport Operational Code	Modelled Aircraft Category	Dublin Airport Operational Code	Modelled Aircraft Category
100	TYPICAL	32N	TYPICAL
141	TYPICAL	32Q	TYPICAL
142	TYPICAL	33F	LARGE
223	TYPICAL	738F	TYPICAL
290	TYPICAL	73C	TYPICAL
313	LARGE	73E	TYPICAL
318	TYPICAL	73G	TYPICAL
319	TYPICAL	73H	TYPICAL
320	TYPICAL	73J	TYPICAL
321	TYPICAL	73P	TYPICAL
322	TYPICAL	73W	TYPICAL
332	LARGE	73Y	TYPICAL
333	LARGE	74Y	LARGE
339	LARGE	75F	TYPICAL
343	LARGE	75T	TYPICAL
345	LARGE	75W	TYPICAL
359	LARGE	75X	TYPICAL
380	LARGE	76F	LARGE
733	TYPICAL	76V	LARGE
734	TYPICAL	76W	LARGE
735	TYPICAL	76X	LARGE
736	TYPICAL	76Y	LARGE
737	TYPICAL	77L	LARGE
738	TYPICAL	77W	LARGE
739	TYPICAL	77X	LARGE
744	LARGE	7M2	TYPICAL
752	TYPICAL	7M8	TYPICAL
763	LARGE	A26	TYPICAL
764	LARGE	ABF	LARGE
772	LARGE	ABX	LARGE
773	LARGE	ABY	LARGE
779	LARGE	AN6	TYPICAL
781	LARGE	AN7	TYPICAL
788	LARGE	ANF	LARGE
789	LARGE	AR1	TYPICAL
14Z	TYPICAL	AR8	TYPICAL
31Y	LARGE	AT4	TYPICAL
32A	TYPICAL	AT6	TYPICAL
32B	TYPICAL	AT7	TYPICAL

Dublin Airport Operational Code	*Modelled Aircraft Category*	*Dublin Airport Operational Code*	*Modelled Aircraft Category*
32D	TYPICAL	ATP	TYPICAL
ATR	TYPICAL	E75	TYPICAL
BBJ	TYPICAL	E90	TYPICAL
BE2	TYPICAL	E92	TYPICAL
BE4	TYPICAL	E95	TYPICAL
BEH	TYPICAL	EM4	TYPICAL
BEJ	TYPICAL	EP1	TYPICAL
CC8	TYPICAL	EP3	TYPICAL
CCJ	TYPICAL	ER3	TYPICAL
CCX	TYPICAL	ER4	TYPICAL
CGX	TYPICAL	ERJ	TYPICAL
CJ1	TYPICAL	F50	TYPICAL
CJ2	TYPICAL	FDJ	TYPICAL
CJ3	TYPICAL	G28	TYPICAL
CJ8	TYPICAL	GJ4	TYPICAL
CJM	TYPICAL	GJ5	TYPICAL
CL3	TYPICAL	GJ6	TYPICAL
CL6	TYPICAL	GR2	TYPICAL
CN2	TYPICAL	GRS	TYPICAL
CN7	TYPICAL	GS4	TYPICAL
CNJ	TYPICAL	GS5	TYPICAL
CNT	TYPICAL	GS6	TYPICAL
CR2	TYPICAL	GS7	TYPICAL
CR9	TYPICAL	H25	TYPICAL
CRK	TYPICAL	H28	TYPICAL
CS1	TYPICAL	H29	TYPICAL
CS3	TYPICAL	H40	TYPICAL
D20	TYPICAL	IL7	LARGE
D38	TYPICAL	L35	TYPICAL
DA1	TYPICAL	L45	TYPICAL
DA2	TYPICAL	L55	TYPICAL
DA5	TYPICAL	L60	TYPICAL
DA9	TYPICAL	L75	TYPICAL
DF2	TYPICAL	M1F	TYPICAL
DF3	TYPICAL	M82	TYPICAL
DF7	TYPICAL	P18	TYPICAL
DF8	TYPICAL	PAG	TYPICAL
DF9	TYPICAL	PL2	TYPICAL
DH4	TYPICAL	Q00	TYPICAL
DH8	TYPICAL	Q12	TYPICAL
E3L	TYPICAL	Q22	TYPICAL

Dublin Airport Operational Code	*Modelled Aircraft Category*	*Dublin Airport Operational Code*	*Modelled Aircraft Category*
E70	TYPICAL	Q34	TYPICAL
Q35	TYPICAL	X98	TYPICAL
Q36	TYPICAL	Y08	TYPICAL
Q67	TYPICAL	Y58	TYPICAL
Q69	TYPICAL	Y59	TYPICAL
Q70	TYPICAL	Y67	TYPICAL
Q76	TYPICAL	Y72	TYPICAL
Q80	TYPICAL	Y73	TYPICAL
Q81	TYPICAL	Y77	TYPICAL
Q82	TYPICAL	Y82	TYPICAL
Q83	TYPICAL	Y83	TYPICAL
Q84	TYPICAL	Y89	TYPICAL
Q85	TYPICAL	Y93	TYPICAL
Q86	TYPICAL	Y98	TYPICAL
S20	TYPICAL	Y99	TYPICAL
SF3	TYPICAL	Z03	TYPICAL
SU9	TYPICAL	Z06	TYPICAL
SWM	TYPICAL	Z12	TYPICAL
X11	TYPICAL	Z13	TYPICAL
X13	TYPICAL	Z14	TYPICAL
X51	TYPICAL	Z15	TYPICAL
X52	TYPICAL	Z16	TYPICAL
X70	TYPICAL	Z17	TYPICAL
X75	TYPICAL	Z18	TYPICAL
X83	TYPICAL	Z20	TYPICAL
X84	TYPICAL	Z21	TYPICAL
X94	TYPICAL		

Number of Aircraft Movements

The number of modelled aircraft movements in each scenario is given in

14B.3.14 Table 14B-2 for each relevant time period.

14B.3.15 Helicopters and military aircraft have been excluded from this assessment as they perform less than 1% of the aircraft operations at Dublin Airport and therefore do not materially contribute to the noise produced. They have historically been excluded from aircraft noise contours produced for Dublin Airport.

Table 14B-2: Modelled Aircraft Movements by Period

Scenario	Aircraft Category	Aircraft Movements[1]				
		Annual			92-Day Summer	
		Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
2018	TYPICAL	149,936	38,367	22,844	52,142	7,382
	LARGE	14,143	1,996	5,052	4,972	1,373
2022 Permitted	TYPICAL	101,547	33,348	13,219	40,482	3,967
	LARGE	14,120	1,502	2,103	4,688	631
2022 Proposed or Apron 5H	TYPICAL	104,841	32,444	20,728	41,203	6,221
	LARGE	12,317	1,502	3,905	4,147	1,172
2025 Permitted	TYPICAL	141,529	41,971	16,918	50,850	4,688
	LARGE	22,124	1,627	2,603	6,582	721
2025 Proposed or Apron 5H	TYPICAL	143,156	39,368	27,004	50,580	7,483
	LARGE	19,847	1,627	4,880	5,951	1,352
2035 Permitted	TYPICAL	149,663	42,947	16,918	53,375	4,688
	LARGE	22,124	1,627	2,603	6,582	721
2035 Proposed or Apron 5H	TYPICAL	143,156	39,368	27,004	50,580	7,483
	LARGE	19,847	1,627	4,880	5,951	1,352

[1] Movements derived from busy day forecast and expressed to nearest whole number.

Runway Usage

14B.3.16 For 2018 the runway used by each individual aircraft movement has been put into the model. A summary of the overall runway split for the 2018 annual period is given in Table 14B-3.

Table 14B-3: 2018 Annual Runway Usage

Runway	Arrivals	Departures
10	23.3%	24.1%
28	72.2%	71.4%
16	3.8%	2.4%
34	0.6%	2.1%

14B.3.17 Once the North Runway is operational the Crosswind Runway (16/34) will continue to be used, however only for essential use (e.g. when there are strong crosswinds) as stated in Condition 4 of the North Runway Permission. The past use of the crosswind runway has been reviewed and is reported in *Crosswind Runway Information, Requested by ANCA RFI Appendix A, Request H and Table 4 Items 79, 80 and 81, Ricondo, May 2021*. Allowing for this, for the purposes of noise modelling the future usage of the Crosswind Runway is assumed to be 1% of aircraft movements, with the remaining 99% of movements on the two main runways. 0.75% of aircraft movements are forecast to use Runway 16 with the remaining 0.25% on Runway 34. The modelled future runway usage over a given year is summarised in Table 14B-4 below, based on the average runway usage over the last 10 years and allowing for the expected reduction in Crosswind Runway usage.

Table 14B-4: Future Runway Usage

Runway	Arrivals	Departures
10L/10R	29%	29%
28L/28R	70%	70%
16	0.75%	0.75%
34	0.25%	0.25%

14B.3.18 Once the North Runway is operational Dublin Airport will operate during the daytime (07:00 – 23:00) in accordance with Conditions 3a-3c per the mode of operation Option 7b, as detailed in the Environmental Impact Statement Addendum, Section 16 as received by the planning authority on the 9th day of August, 2005. This provides that:

a. "the parallel runways (10R-28L and 10L-28R) shall be used in preference to the cross runway, 16-34,

b. when winds are westerly, Runway 28L shall be preferred for arriving aircraft. Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control,

c. when winds are easterly, either Runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft. Runway 10R shall be preferred for departing aircraft,

except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports."

14B.3.19 In practice it is expected that, unless capacity requires mixed mode, the runways will operate in segregated mode during the daytime with arrivals using either Runway 10L or Runway 28L and departures using either Runway 10R or Runway 28R depending on wind direction.

14B.3.20 Any movements by Code F aircraft are an exception to this, as they will always use the North Runway. It is also proposed that departures by Category A & B aircraft heading south during westerly operations will use the South Runway, and those heading north during easterly operations will use the North Runway.

14B.3.21 A method of determining mixed mode runway usage on the main runways (North and South) for modelling purposes has been developed. The modelled runway usage has been determined on an hourly basis.

14B.3.22 Most of the time the runways will operate in segregated mode, i.e. one runway for all arrivals, the other for all departures. However, there will be occasions during peak hours when runways will need to operate in some degree of mixed mode, i.e. both runways used simultaneously for arrivals and/or departures. The change from segregated to mixed mode and back to segregated mode will be determined by air traffic control (ATC) and once changed to a particular mode the airport is likely to operate in that mode for at least two hours.

14B.3.23 The method assumes activity switches from segregated mode to mixed mode where activity is such that any of the three following single runway capacity limits are exceeded:

- More than 35 arrivals in one hour.
- More than 44 departures in one hour.
- More than 48 movements (combined arrivals and departures) on one runway in one hour.

14B.3.24 The exception to this is for the Proposed Scenario in the Assessment Years of 2025 and 2035, where mixed mode has been assumed to be in operation between 06:00 and 07:59. This is based on advice from the IAA that they would require both runways to be available during this peak period once the Crosswind Runway was no longer available.

14B.3.25 In mixed mode, where each individual runway handles both arrivals and departures, departures will operate using the compass departure principle. This means that if a departure is using a route that turns to the north then the North Runway will be used, and conversely if it is using a route that turns to the south, the South Runway will be used.

14B.3.26 For westerly operations when in mixed mode as few arrivals as possible will use 28R, while not exceeding the single runway capacity limit of 48 combined arrivals and departures on runway 28L. For easterly operations when in mixed mode as few arrivals as possible will use 10R, while not exceeding the single runway capacity limit of 48 combined arrivals and departures on runway 10L.

14B.3.27 When using the North Runway most aircraft will not use the full length on departure, and instead join the runway from the 1st intermediate taxiway. The exceptions are Code E and any Code F aircraft, which will typically use the full runway length. All departures on the South Runway are assumed to use the full runway length.

14B.3.28 During the night-time period (23:00 – 07:00) for the Permitted Scenarios the South Runway is the preferred runway. For the Proposed and Apron 5H Scenarios the South Runway is the preferred runway in the core night period (00:00-06:00). Between 23:00 and 00:00 and between 06:00-07:00 the runway usage follows the same principles as in the daytime, i.e. Option 7b.

14B.3.29 The total number of modelled flights using each runway is given for each scenario and relevant assessment period in Table 14B-5 to Table 14B-9.

Table 14B-5: Aircraft Movements by Runway, Annual Day

Scenario	Number of Aircraft Movements by Runway, Annual Day (07:00-19:00)					
	10L (North)	28R (North)	10R (South)	28L (South)	16	34
2018	0	0	41,923	117,351	3,299	1,506
2022 Permitted	17,774	40,799	15,770	40,168	868	289
2022 Proposed or Apron 5H	17,685	42,057	16,291	39,954	879	293
2025 Permitted	24,720	52,838	22,739	61,720	1,227	409
2025 Proposed or Apron 5H	26,136	54,432	21,135	59,670	1,223	408
2035 Permitted	28,400	55,115	21,418	65,136	1,288	429
2035 Proposed or Apron 5H	26,136	54,432	21,135	59,670	1,223	408

Table 14B-6: Aircraft Movements by Runway, Annual Evening

Scenario	Number of Aircraft Movements by Runway, Annual Evening (19:00-23:00)					
	10L (North)	28R (North)	10R (South)	28L (South)	16	34
2018	0	0	9,015	29,526	1,570	252
2022 Permitted	6,273	9,464	3,834	14,932	261	87
2022 Proposed or Apron 5H	5,750	10,094	4,095	13,668	255	85
2025 Permitted	7,643	12,298	5,001	18,220	327	109
2025 Proposed or Apron 5H	6,888	12,298	5,001	16,398	307	102
2035 Permitted	7,831	12,526	5,095	18,675	334	111
2035 Proposed or Apron 5H	6,888	12,298	5,001	16,398	307	102

Table 14B-7: Aircraft Movements by Runway, Annual Night

Scenario	Number of Aircraft Movements by Runway, Annual Night (23:00-07:00)					
	10L (North)	28R (North)	10R (South)	28L (South)	16	34
2018	0	0	4,155	19,897	2,396	1,448
2022 Permitted	0	0	4,443	10,726	115	38
2022 Proposed or Apron 5H	1,655	5,888	5,488	11,355	185	62
2025 Permitted	0	0	5,661	13,665	146	49
2025 Proposed or Apron 5H	3,302	3,644	5,944	18,675	239	80
2035 Permitted	0	0	5,661	13,665	146	49
2035 Proposed or Apron 5H	3,302	3,644	5,944	18,675	239	80

Table 14B-8: Aircraft Movements by Runway, Summer Day

Scenario	Number of Aircraft Movements by Runway, Summer Day (07:00-23:00)					
	10L (North)	28R (North)	10R (South)	28L (South)	16	34
2018	0	0	9,582	47,026	3	503
2022 Permitted	7,216	15,084	5,883	16,535	339	113
2022 Proposed or Apron 5H	7,033	15,652	6,118	16,094	340	113
2025 Permitted	8,968	18,050	7,687	22,152	431	144
2025 Proposed or Apron 5H	9,151	18,492	7,243	21,079	424	141
2035 Permitted	10,040	18,744	7,347	23,225	450	150
2035 Proposed or Apron 5H	9,151	18,492	7,243	21,079	424	141

Table 14B-9: Aircraft Movements by Runway, Summer Night

Scenario	Number of Aircraft Movements by Runway, Summer Night (23:00-07:00)					
	10L (North)	28R (North)	10R (South)	28L (South)	16	34
2018	0	0	342	7,144	757	512
2022 Permitted	0	0	1,333	3,219	34	11
2022 Proposed or Apron 5H	497	1,767	1,647	3,408	55	18
2025 Permitted	0	0	1,569	3,787	41	14
2025 Proposed or Apron 5H	915	1,010	1,647	5,175	66	22
2035 Permitted	0	0	1,569	3,787	41	14
2035 Proposed or Apron 5H	915	1,010	1,647	5,175	66	22

Taxi Routes

14B.3.30 When using the North Runway most aircraft will not use the full length on departure, and instead join the runway from the 1st intermediate taxiway. The exceptions are Code E and Code F aircraft, which will typically use the full runway length. All departures on the existing South Runway are assumed to use the full runway length.

14B.3.31 To develop the modelled taxi routes it was necessary to rationalise the stands into groups, with the same taxi route being followed for all stands in the same group. This grouping is described in Table 14B-10 where the stand numbers are taken from the Dublin Airport Aircraft Parking/Docking Chart[2]. The proposed Apron 5H development involves stands 101-104 being replaced.

[2] http://iaip.iaa.ie/iaip/Published%20Files/AIP%20Files/AD/Chart%20Files/EIDW/EI_AD_2_EIDW_24-2_en.pdf [Checked 25/08/2021]

Table 14B-10: Aircraft Stand Groups

Stand Number	Modelled Stand Group	**Stand Number**	Modelled Stand Group
101	NORTHEAST	314	PIER3
102	NORTHEAST	315	PIER3
103	NORTHEAST	316	PIER3
104	NORTHEAST	317	PIER3
107	PIER1	318	PIER3
108	PIER1	400	PIER4
109	PIER1	401	PIER4
110	PIER1	402	PIER4
111	PIER1	403	PIER4
118	PIER1	404	PIER4
119	PIER1	405	PIER4
120	PIER1	406	PIER4
121	PIER1	407	PIER4
122	PIER1	408	PIER4
123	PIER1	409	PIER4
124	PIER1	410	PIER4
125	PIER1	411	SOUTH
126	PIER1	412	SOUTH
127	PIER1	413	SOUTH
130	TRIANGLE	414	SOUTH
131	TRIANGLE	415	SOUTH
132	TRIANGLE	416	SOUTH
133	TRIANGLE	417	SOUTH
137	NORTH	418	SOUTH
138	NORTH	600	WEST
139	NORTH	601	WEST
140	NORTH	602	WEST
141	NORTH	603	WEST
142	NORTH	604	WEST
143	NORTH	605	WEST
200	PIER2	606	WEST
201	PIER2	607	WEST
202	PIER2	610	WEST
203	PIER2	611	WEST
205	PIER2	612	WEST
206	PIER2	613	WEST
207	PIER2	614	WEST
311	PIER3	615	WEST
312	PIER3	616	WEST
313	PIER3	617	WEST

14B.3.32 With the stands rationalised, typical taxi routes for the different aircraft categories from each runway end to each stand group were developed through discussion with the Applicant. There are 216 potential different routes in total allowing for the runway ends, stand groups, and arrivals and departures. All of the modelled taxi routes are shown in Figure 14B-1. An example of a single route is shown in Figure 14B-2.

Figure 14B-1: Modelled taxi routes, all

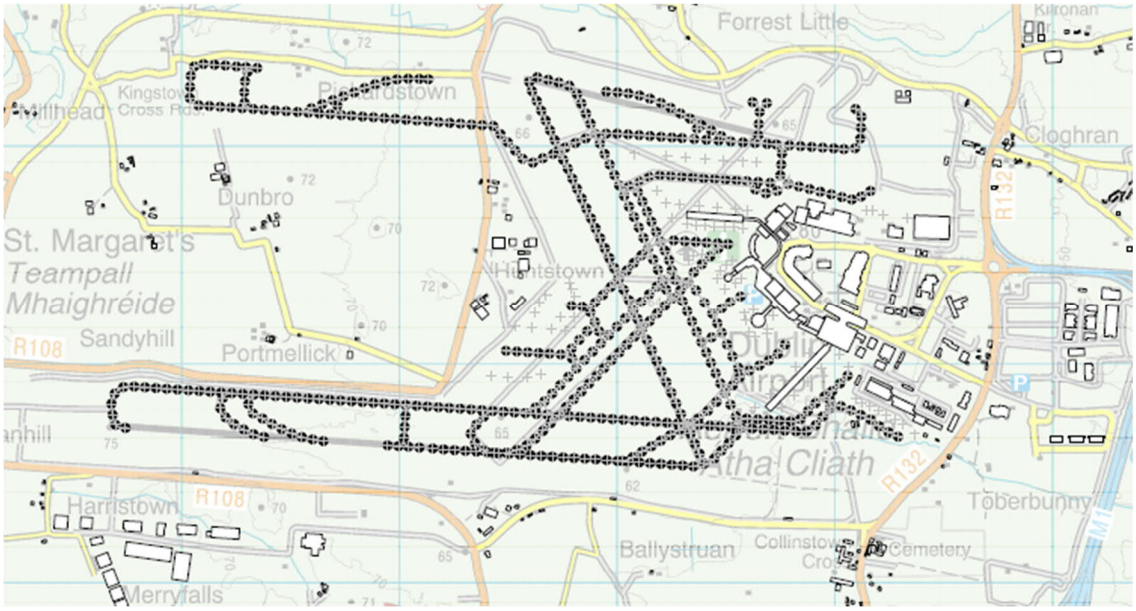
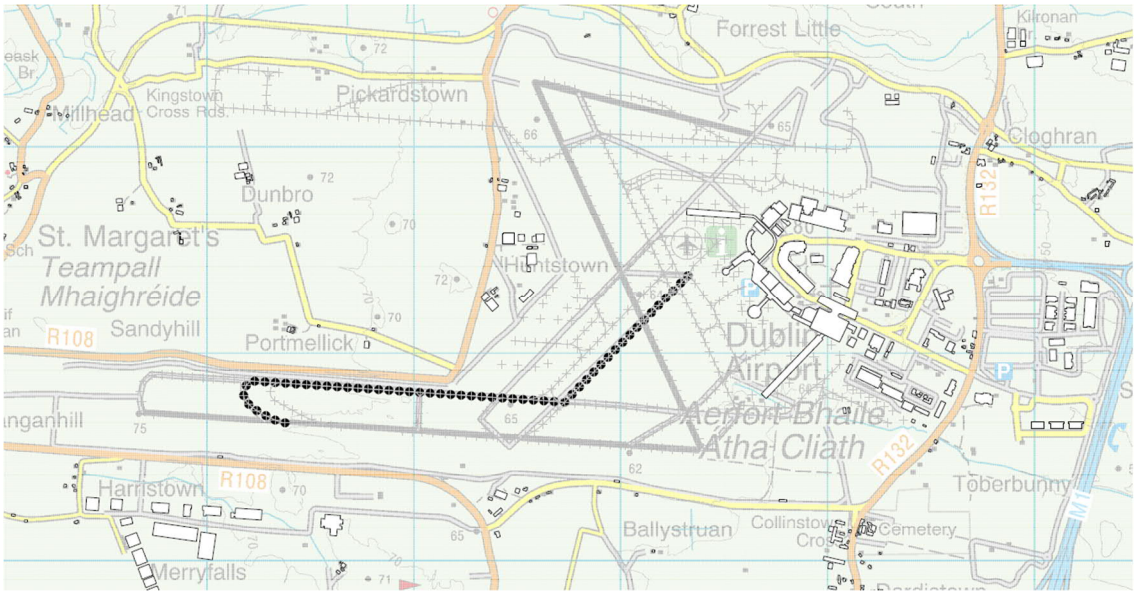


Figure 14B-2: Modelled taxi route, typical aircraft, runway 28L arrival to Pier 2 stand group



Stand Usage

14B.3.33 For 2018, the log of aircraft movements supplied included the stand used by each aircraft. Aircraft logged as using Light Aircraft Park B, HP1, or HP2, were distributed equally among the stands 101-104 for modelling purposes. In a small number of cases (<1%) the stand used was not clear from the data, and in those cases the movements were distributed equally among all stands for modelling purposes.

14B.3.34 For the future Permitted and Proposed Scenarios, the relative stand usage for a given aircraft type and runway was assumed to remain the same as 2018.

14B.3.35 For the Apron 5H Scenarios, the aircraft modelled as using the existing stands 101-104 and an additional 12 arrivals and 12 departures per day were equally distributed between the 10 new Apron 5H stands. The number of aircraft modelled as using all other stands was reduced pro-rata such that the total aircraft movements were unchanged and match that forecast.

14B.3.36 The modelled number of aircraft using each stand is given for each scenario in Table 14B-11 to .

Table 14B-11: Modelled Aircraft Movements by Stand Group, 2018

Modelled Stand Group	Aircraft Movements, 2018				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	1,289	1,391	2,055	589	542
NORTHEAST	3,819	641	375	1,152	103
PIER1	59,542	16,869	8,971	20,644	2,595
PIER2	23,961	7,051	2,792	8,482	869
PIER3	21,005	2,809	3,605	7,219	1,359
PIER4	32,634	7,208	5,926	11,429	1,961
SOUTH	7,510	1,605	1,648	2,624	626
TRIANGLE	13,590	2,182	546	4,604	174
WEST	729	607	1,977	371	526

Table 14B-12: Modelled Aircraft Movements by Stand Group, 2022 Permitted Scenario

Modelled Stand Group	Aircraft Movements, 2022 Permitted Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	2,363	712	313	923	94
NORTHEAST	2,423	730	321	946	96
PIER1	42,488	12,801	5,628	16,592	1,689
PIER2	16,835	5,072	2,230	6,574	669
PIER3	13,653	4,114	1,809	5,332	543
PIER4	22,778	6,863	3,017	8,895	906
SOUTH	5,361	1,615	710	2,094	213
TRIANGLE	8,139	2,452	1,078	3,179	324
WEST	1,627	490	216	635	65

Table 14B-13: Modelled Aircraft Movements by Stand Group, 2022 Proposed Scenario

Modelled Stand Group	Aircraft Movements, 2022 Proposed Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	2,394	694	503	927	151
NORTHEAST	2,454	711	516	950	155
PIER1	43,035	12,469	9,048	16,658	2,716
PIER2	17,052	4,941	3,585	6,601	1,076
PIER3	13,829	4,007	2,908	5,353	873
PIER4	23,072	6,685	4,851	8,931	1,456
SOUTH	5,430	1,573	1,142	2,102	343
TRIANGLE	8,244	2,389	1,733	3,191	520
WEST	1,648	477	346	638	104

Table 14B-14: Modelled Aircraft Movements by Stand Group, 2022 Apron 5H Scenario

Modelled Stand Group	Aircraft Movements, 2022 Apron 5H Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	3,094	817	581	1,089	162
NORTHEAST	9,336	2,464	1,752	3,080	457
PIER1	55,623	14,680	10,436	19,580	2,907
PIER2	22,040	5,817	4,135	7,758	1,152
PIER3	17,874	4,717	3,354	6,292	934
PIER4	29,821	7,870	5,595	10,497	1,558
SOUTH	7,018	1,852	1,317	2,471	367
TRIANGLE	10,656	2,812	1,999	3,751	557
WEST	2,130	562	400	750	111

Table 14B-15: Modelled Aircraft Movements by Stand Group, 2025 Permitted Scenario

Modelled Stand Group	Aircraft Movements, 2025 Permitted Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	3,344	891	399	1,174	111
NORTHEAST	3,428	913	409	1,203	113
PIER1	60,114	16,014	7,171	21,096	1,987
PIER2	23,819	6,346	2,841	8,359	787
PIER3	19,317	5,146	2,304	6,779	639
PIER4	32,228	8,586	3,844	11,310	1,065
SOUTH	7,585	2,021	905	2,662	251
TRIANGLE	11,516	3,068	1,374	4,041	381
WEST	2,302	613	275	808	76

Table 14B-16: Modelled Aircraft Movements by Stand Group, 2025 Proposed Scenario

Modelled Stand Group	Aircraft Movements, 2025 Proposed Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	3,331	838	652	1,155	181
NORTHEAST	3,414	859	668	1,184	185
PIER1	59,875	15,058	11,712	20,765	3,246
PIER2	23,725	5,967	4,641	8,228	1,286
PIER3	19,240	4,839	3,764	6,673	1,043
PIER4	32,100	8,073	6,279	11,133	1,740
SOUTH	7,555	1,900	1,478	2,620	410
TRIANGLE	11,470	2,885	2,244	3,978	622
WEST	2,293	577	448	795	124

Table 14B-17: Modelled Aircraft Movements by Stand Group, 2025 Apron 5H Scenario

Modelled Stand Group	Aircraft Movements, 2025 Apron 5H Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	3,290	832	615	1,146	171
NORTHEAST	9,588	2,425	1,791	3,138	468
PIER1	59,153	14,961	11,048	20,607	3,072
PIER2	23,439	5,928	4,378	8,165	1,217
PIER3	19,008	4,808	3,550	6,622	987
PIER4	31,713	8,021	5,923	11,048	1,647
SOUTH	7,464	1,888	1,394	2,600	388
TRIANGLE	11,332	2,866	2,116	3,948	588
WEST	2,265	573	423	789	118

Table 14B-18: Modelled Aircraft Movements by Stand Group, 2035 Permitted Scenario

Modelled Stand Group	Aircraft Movements, 2035 Permitted Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	3,510	911	399	1,225	111
NORTHEAST	3,598	934	409	1,256	113
PIER1	63,102	16,373	7,171	22,023	1,987
PIER2	25,003	6,488	2,841	8,727	787
PIER3	20,277	5,261	2,304	7,077	639
PIER4	33,830	8,778	3,844	11,807	1,065
SOUTH	7,962	2,066	905	2,779	251
TRIANGLE	12,088	3,137	1,374	4,219	381
WEST	2,416	627	275	843	76

Table 14B-19: Modelled Aircraft Movements by Stand Group, 2035 Proposed Scenario

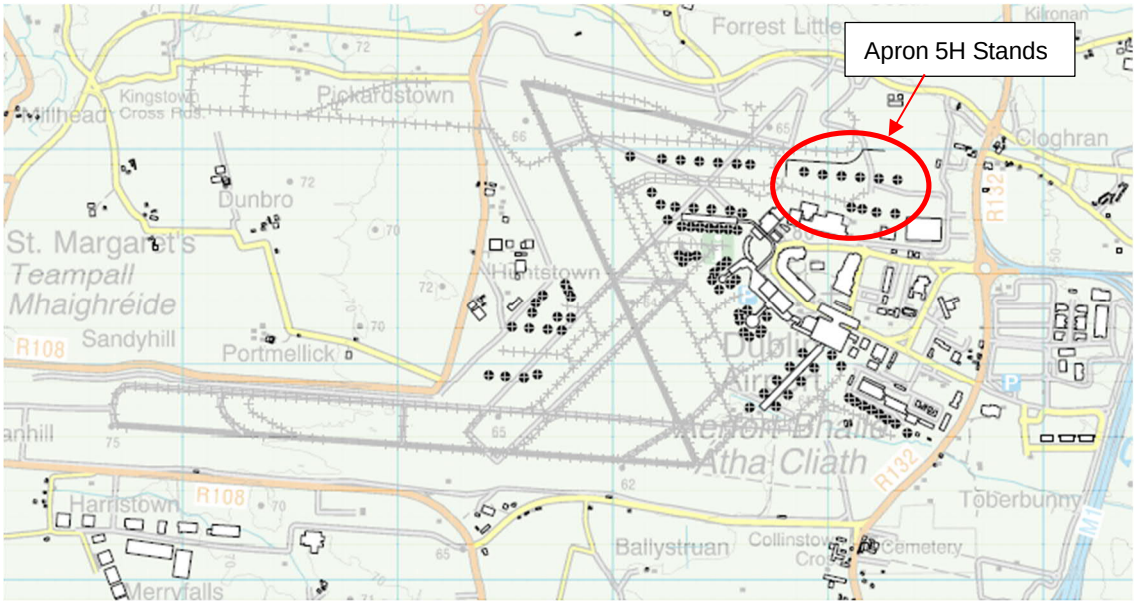
Modelled Stand Group	Aircraft Movements, 2035 Proposed Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	3,331	838	652	1,155	181
NORTHEAST	3,414	859	668	1,184	185
PIER1	59,875	15,058	11,712	20,765	3,246
PIER2	23,725	5,967	4,641	8,228	1,286
PIER3	19,240	4,839	3,764	6,673	1,043
PIER4	32,100	8,073	6,279	11,133	1,740
SOUTH	7,555	1,900	1,478	2,620	410
TRIANGLE	11,470	2,885	2,244	3,978	622
WEST	2,293	577	448	795	124

Table 14B-20: Modelled Aircraft Movements by Stand Group, 2035 Apron 5H Scenario

Modelled Stand Group	Aircraft Movements, 2035 Apron 5H Scenario				
	Annual			92-Day Summer	
	Day (07:00-19:00)	Evening (19:00-23:00)	Night (23:00-07:00)	Day (07:00-23:00)	Night (23:00-07:00)
NORTH	3,290	832	615	1,146	171
NORTHEAST	9,588	2,425	1,791	3,138	468
PIER1	59,153	14,961	11,048	20,607	3,072
PIER2	23,439	5,928	4,378	8,165	1,217
PIER3	19,008	4,808	3,550	6,622	987
PIER4	31,713	8,021	5,923	11,048	1,647
SOUTH	7,464	1,888	1,394	2,600	388
TRIANGLE	11,332	2,866	2,116	3,948	588
WEST	2,265	573	423	789	118

14B.3.37 The modelled stands for the scenarios are shown in Figure 14B-3, with the Apron 5H stands highlighted. Stands 101-104, which are used in other scenarios, are not shown as they overlap with the southern Apron 5H stands.

Figure 14B-3: Modelled stand locations



Aircraft Activity Locations and Noise Levels

Noise Source Locations - APU

14B.3.38 APUs are assumed to only be run on aircraft stands. These are modelled at the locations given in the Dublin Airport Aircraft Parking/Docking Chart. Apron 5H stand locations were taken from plans supplied by the Applicant.

Noise Source Locations – Taxi

14B.3.39 For the modelled taxi routes, source locations were assigned at 50 m intervals along each taxi route.

Reference Activity Noise Levels and Durations

14B.3.40 Reference noise levels and durations for each aircraft category and for each activity were derived from reviewing available data from other studies, as well as on-site measurements of taxiing noise. Specifically, results from the following other ground noise studies were used to inform this assessment:

- "Heathrow's North-West Runway Air and Ground Noise Assessment", prepared by AMEC Environment & Infrastructure UK Limited, 2014
- Environmental Statement supporting London City Airport's most recent planning application (London Borough of Newham planning reference 13/01228/FUL), prepared by Bickerdike Allen Partners, 2015.

14B.3.41 The relevant results from these studies have been converted to sound power level, where necessary, and are reproduced in Table 14B-21 below.

Table 14B-21: Summary of Noise Level Data from Other Assessments

Activity	Aircraft	Sound Power Level, dB(A)	Source
APU	Propeller Aircraft (typically Dash-8)	122	London City Airport
APU	A319/A320	118	Heathrow
APU	Boeing 777	118	Heathrow
APU	Airbus A380	123	Heathrow
Taxi	Propeller Aircraft (typically Dash-8)	129	London City Airport
Taxi	A319/A320	128	Heathrow
Taxi	Boeing 777	132	Heathrow
Taxi	Airbus A380	132	Heathrow

14B.3.42 Measurements have also been taken of activities at Dublin Airport by Bickerdike Allen Partners in 2019. The results from this survey were sound power levels of 128-129 dB(A) for Airbus A320/Boeing 737-800 aircraft taxiing. This is consistent with the results from the Heathrow and London City Airport assessments.

14B.3.43 The sources have been assumed to be omnidirectional with the levels and durations given in Table 14B-22. The durations are based on advice from the Applicant regarding typical activity. It is noted that at a number of stands, Fixed Electrical Ground Power (FEGP) is typically used, and therefore the assumed durations of APU usage are likely to be conservative from a noise perspective.

Table 14B-22: Reference Noise Levels for Ground Noise Assessment

Activity	Aircraft Category	Sound Power Level, dB(A)	Duration (s)
APU Usage - Arrivals	Typical	119	300
	Large	123	300
APU Usage - Departures	Typical	119	600
	Large	123	600
Taxi	Typical	128	5[1]
	Large	132	5[1]

[1] Source locations for taxi routes have a 50 m spacing. With an assumed speed of 10 m/s this equates to 5 s at each location.

14B.4 Population and Demographics Assessment Methodology

Dwelling and Population Data

14B.4.1 Dwelling data has been acquired from GeoDirectory for 2019 Q2, which was the latest available dataset when the assessment work began. The same dataset has been used for all assessment scenarios in order to aid comparison between scenarios.

14B.4.2 An assessment of not yet built dwellings, which have already been granted planning permission, has been carried out. This has utilised information on permitted developments provided by Tom Phillips and Associates (TPA) which has been compared to the 2019 Q2 data from GeoDirectory, as a number of the developments are progressing on site. This resulted in a separate consented dwellings database.

14B.4.3 Population data has been estimated using the average dwelling occupancy by small area. This has been obtained for 2016 based on Census data from the Central Statistics Office[3], by dividing the number of people by the number of dwellings for each small area. It has then been determined into which of the small areas each of the dwellings falls, based upon which they have been assigned the average dwelling occupancy for the relevant area. This approach is in line with that used for the last round of Noise Mapping.

14B.4.4 An assessment of zoned land has also been undertaken. This did not identify any areas which are designated for residential use within the study area.

Community Buildings

14B.4.5 Noise sensitive community buildings have been identified through a review of the GeoDirectory data. For the purposes of this assessment noise sensitive education buildings include nurseries, schools, colleges and universities, but not day-care or creches. Noise sensitive healthcare buildings include healthcare facilities where people may have an overnight stay such as hospitals or nursing homes, but not GP surgeries or dentists.

Noise prediction

14B.4.6 Each dwelling and community building has been included in the noise model as a receptor. A representative set of receptors has been created for each permitted development based on site plans and other publicly available information. Noise levels have been predicted at each of these receptor locations.

[3] http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=EP008 [Checked 25/08/2021]

Appendix 14C. Ground Noise Modelling Results

14C. Ground Noise Modelling Results and Figures

14C.1 Introduction

14C.1.1 This appendix of the Environmental Impact Assessment Report (EIAR), prepared by Bickerdike Allen Partners LLP (BAP), presents the results of the aircraft ground noise modelling. The modelling methodology is described in Appendix 14B.

14C.2 Assessment Scenarios

14C.2.1 The following scenarios have been included in the ground noise assessment:

- 2018
- 2022 Permitted
- 2022 Proposed
- 2022 Apron 5H
- 2025 Permitted
- 2025 Proposed
- 2025 Apron 5H
- 2035 Permitted
- 2035 Proposed
- 2035 Apron 5H

14C.3 Assessment Metrics

14C.3.1 For each assessment scenario the following metrics have been assessed:

- L_{den}, the average annual 24-hour noise level with a 5 dB penalty applied during the evening (19:00-23:00) and a 10 dB penalty applied during the night (23:00-07:00)
- L_{night}, the average annual noise level at night (23:00-07:00)
- $L_{Aeq,16h}$, the average summer noise level during the 16-hour day (07:00-23:00)
- $L_{Aeq,8h}$, the average summer noise level during the night (23:00-07:00)

14C.3.2 $L_{Aeq,1h}$, the average annual noise level during the specified hour, has also been assessed for scenarios in 2025.

14C.3.3 Summer in the above list refers to the 92-day period between 16 June and 15 September inclusive. This typically corresponds to the busiest period of the year.

14C.4 Assessment Results

Figures

14C.4.1 For each assessment scenario and metric, the results are first presented in a series of figures, showing contours on an Ordnance Survey Ireland base map. Table 14C-1 provides a reference to aid finding a specific figure.

Table 14C-1: Contour Figure References

Scenario	Metric and Figure Reference			
	L_{den}	L_{night}	$L_{Aeq,16h}$	$L_{Aeq,8h}$
2018	14C-1	14C-2	14C-3	14C-4
2022 Permitted	14C-5	14C-6	14C-7	14C-8
2022 Proposed	14C-9	14C-10	14C-11	14C-12
2022 Apron 5H	14C-13	14C-14	14C-15	14C-16
2025 Permitted	14C-17	14C-18	14C-19	14C-20
2025 Proposed	14C-21	14C-22	14C-23	14C-24
2025 Apron 5H	14C-25	14C-26	14C-27	14C-28
2035 Permitted	14C-29	14C-30	14C-31	14C-32
2035 Proposed	14C-33	14C-34	14C-35	14C-36
2035 Apron 5H	14C-37	14C-38	14C-39	14C-40

Contour Dwelling and Population Counts

14C.4.2 For each assessment scenario and metric, the tables below present the number of dwellings and people within each contour. The dwelling and population counts are presented in two categories:

- Existing dwellings
- Permitted dwellings, i.e. those with planning permission that are not yet built

14C.4.3 Also considered were zoned dwellings, i.e. those that are expected to be built in areas zoned for residential development, however there were none of these in any of the assessed contours.

14C.4.4 All of the counts below are cumulative, i.e. the people within a 60 dB contour would also be counted as within the corresponding 50 dB contour. Table 14C-2 provides a reference to aid finding a specific result.

Table 14C-2: Contour Dwelling and Population Count Table References

Metric	Result Item and Table Reference			
	Existing Dwelling Counts	Permitted Dwelling Counts	Existing Population Counts	Permitted Population Counts
L_{den}	Table 14C-3	Table 14C-7	Table 14C-11	Table 14C-15
L_{night}	Table 14C-4	Table 14C-8	Table 14C-12	Table 14C-16
$L_{Aeq,16h}$	Table 14C-5	Table 14C-9	Table 14C-13	Table 14C-17
$L_{Aeq,8h}$	Table 14C-6	Table 14C-10	Table 14C-14	Table 14C-18

Table 14C-3: Existing Dwelling Counts, L_{den} Metric

Metric Value, dB L_{den}	Scenario and Existing Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 50	8,100	4,520	7,547	7,782	7,729	9,745	9,741	7,895	9,745	9,741
≥ 55	63	39	88	110	57	250	276	69	250	276
≥ 60	13	15	18	18	16	21	21	18	21	21
≥ 65	1	1	1	1	1	1	1	1	1	1
≥ 70	0	0	0	0	0	0	0	0	0	0
≥ 75	0	0	0	0	0	0	0	0	0	0

Table 14C-4: Existing Dwelling Counts, L_{night} Metric

Metric Value, dB L_{night}	Scenario and Existing Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	668	53	937	1,187	61	2,346	2,451	61	2,346	2,451
≥ 50	24	13	28	29	13	31	31	13	31	31
≥ 55	7	1	3	3	1	11	11	1	11	11
≥ 60	0	0	0	0	0	1	1	0	1	1
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0

Table 14C-5: Existing Dwelling Counts, $L_{Aeq,16h}$ Metric

Metric Value, dB $L_{Aeq,16h}$	Scenario and Existing Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 51	384	1,009	893	1,200	2,448	2,213	2,240	2,672	2,213	2,240
≥ 54	40	36	36	38	83	82	84	104	82	84
≥ 57	15	21	21	21	26	26	26	27	26	26
≥ 60	9	7	7	7	15	13	13	15	13	13
≥ 63	1	1	1	1	1	1	1	1	1	1
≥ 66	0	0	0	0	0	0	0	0	0	0

≥ 69	0	0	0	0	0	0	0	0	0	0

Table 14C-6: Existing Dwelling Counts, $L_{Aeq,8h}$ Metric

Metric Value, dB $L_{Aeq,8h}$	Scenario and Existing Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	1,856	58	2,340	2,484	63	3,403	3,482	63	3,403	3,482
≥ 48	59	24	54	56	26	60	62	26	60	62
≥ 51	23	11	26	27	13	28	29	13	28	29
≥ 54	11	2	15	15	7	12	12	7	12	12
≥ 57	2	1	1	1	1	2	2	1	2	2
≥ 60	1	0	1	1	0	1	1	0	1	1
≥ 63	0	0	0	0	0	0	0	0	0	0

Table 14C-7: Permitted Dwelling Counts, L_{den} Metric

Metric Value, dB L_{den}	Scenario and Permitted Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 50	532	365	462	462	464	577	627	464	577	627
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0
≥ 75	0	0	0	0	0	0	0	0	0	0

Table 14C-8: Permitted Dwelling Counts, L_{night} Metric

Metric Value, dB L_{night}	Scenario and Permitted Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	0	0	0	0	0	48	48	0	48	48
≥ 50	0	0	0	0	0	0	0	0	0	0
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0

Table 14C-9: Permitted Dwelling Counts, $L_{Aeq,16h}$ Metric

Metric Value, dB $L_{Aeq,16h}$	Scenario and Permitted Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 51	0	0	0	0	20	0	10	48	0	10
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0
≥ 66	0	0	0	0	0	0	0	0	0	0
≥ 69	0	0	0	0	0	0	0	0	0	0

Table 14C-10: Permitted Dwelling Counts, $L_{Aeq,8h}$ Metric

Metric Value, dB $L_{Aeq,8h}$	Scenario and Permitted Dwelling Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	144	0	0	48	0	212	179	0	212	179
≥ 48	0	0	0	0	0	0	0	0	0	0
≥ 51	0	0	0	0	0	0	0	0	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0

Table 14C-11: Existing Population Counts, L_{den} Metric

Metric Value, dB L_{den}	Scenario and Existing Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 50	22,614	12,310	20,872	21,595	21,381	27,624	27,599	21,880	27,624	27,599
≥ 55	166	104	251	319	148	745	826	182	745	826
≥ 60	37	44	53	53	47	62	62	53	62	62
≥ 65	3	3	3	3	3	3	3	3	3	3
≥ 70	0	0	0	0	0	0	0	0	0	0
≥ 75	0	0	0	0	0	0	0	0	0	0

Table 14C-12: Existing Population Counts, L_{night} Metric

Metric Value, dB L_{night}	Scenario and Existing Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	1,620	139	2,580	3,305	156	6,274	6,615	156	6,274	6,615
≥ 50	65	37	77	80	37	86	86	37	86	86
≥ 55	22	3	9	9	3	32	32	3	32	32
≥ 60	0	0	0	0	0	3	3	0	3	3
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0

Table 14C-13: Existing Population Counts, $L_{Aeq,16h}$ Metric

Metric Value, dB $L_{Aeq,16h}$	Scenario and Existing Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 51	900	2,938	2,652	3,510	6,913	6,341	6,413	7,474	6,341	6,413
≥ 54	109	99	99	105	239	237	242	308	237	242
≥ 57	43	62	62	62	74	74	74	77	74	74
≥ 60	29	19	19	19	44	38	38	44	38	38
≥ 63	3	3	3	3	3	3	3	3	3	3
≥ 66	0	0	0	0	0	0	0	0	0	0
≥ 69	0	0	0	0	0	0	0	0	0	0

Table 14C-14: Existing Population Counts, $L_{Aeq,8h}$ Metric

Metric Value, dB $L_{Aeq,8h}$	Scenario and Existing Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	4,667	150	6,380	6,798	162	9,171	9,419	162	9,171	9,419
≥ 48	155	65	143	146	71	154	159	71	154	159
≥ 51	62	35	72	75	37	77	80	37	77	80
≥ 54	34	6	44	44	22	35	35	22	35	35
≥ 57	6	3	3	3	3	6	6	3	6	6
≥ 60	3	0	3	3	0	3	3	0	3	3
≥ 63	0	0	0	0	0	0	0	0	0	0

Table 14C-15: Permitted Population Counts, L_{den} Metric

Metric Value, dB L_{den}	Scenario and Permitted Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 50	1,653	1,089	1,403	1,403	1,410	1,827	2,021	1,410	1,827	2,021
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0
≥ 75	0	0	0	0	0	0	0	0	0	0

Table 14C-16: Permitted Population Counts, L_{night} Metric

Metric Value, dB L_{night}	Scenario and Permitted Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	0	0	0	0	0	133	133	0	133	133
≥ 50	0	0	0	0	0	0	0	0	0	0
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0

Table 14C-17: Permitted Population Counts, $L_{Aeq,16h}$ Metric

Metric Value, dB $L_{Aeq,16h}$	Scenario and Permitted Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 51	0	0	0	0	64	0	32	146	0	32
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0
≥ 66	0	0	0	0	0	0	0	0	0	0
≥ 69	0	0	0	0	0	0	0	0	0	0

Table 14C-18: Permitted Population Counts, $L_{Aeq,8h}$ Metric

Metric Value, dB $L_{Aeq,8h}$	Scenario and Permitted Population Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	399	0	0	133	0	603	496	0	603	496
≥ 48	0	0	0	0	0	0	0	0	0	0
≥ 51	0	0	0	0	0	0	0	0	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0

Community Building Counts

14C.4.5 For each assessment scenario and metric, the tables below present the number of community buildings within each contour. The following community buildings have been assessed:

- Education Buildings
- Residential Healthcare Facilities
- Religious Buildings

14C.4.6 All of the counts below are cumulative, i.e. the buildings within a 60 dB contour would also be counted as within the corresponding 50 dB contour. Table 14C-19 provides a reference to aid finding a specific result.

Table 14C-19: Community Building Count Table References

Metric	Result Item and Table Reference		
	Education Buildings	Residential Healthcare Facilities	Religious Buildings
L_{den}	Table 14C-20	Table 14C-24	Table 14C-28
L_{night}	Table 14C-21	Table 14C-25	Table 14C-29
$L_{Aeq,16h}$	Table 14C-22	Table 14C-26	Table 14C-30
$L_{Aeq,8h}$	Table 14C-23	Table 14C-27	Table 14C-31

Table 14C-20: Education Building Counts, L_{den} Metric

Metric Value, dB L_{den}	Scenario and Education Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 50	4	1	1	4	4	6	7	4	6	7
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0
≥ 75	0	0	0	0	0	0	0	0	0	0

Table 14C-21: Education Building Counts, L_{night} Metric

Metric Value, dB L_{night}	Scenario and Education Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	0	0	0	0	0	1	1	0	1	1
≥ 50	0	0	0	0	0	0	0	0	0	0
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0

Table 14C-22: Education Building Counts, $L_{Aeq,16h}$ Metric

Metric Value, dB $L_{Aeq,16h}$	Scenario and Education Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 51	0	0	0	0	0	0	0	1	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0
≥ 66	0	0	0	0	0	0	0	0	0	0
≥ 69	0	0	0	0	0	0	0	0	0	0

Table 14C-23: Education Building Counts, $L_{Aeq,8h}$ Metric

Metric Value, dB $L_{Aeq,8h}$	Scenario and Education Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	1	0	1	1	0	1	1	0	1	1
≥ 48	0	0	0	0	0	0	0	0	0	0
≥ 51	0	0	0	0	0	0	0	0	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0

Table 14C-24: Residential Healthcare Facility Counts, L_{den} Metric

Metric Value, dB L_{den}	Scenario and Residential Healthcare Facility Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 50	2	1	1	1	1	2	2	1	2	2
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0
≥ 75	0	0	0	0	0	0	0	0	0	0

Table 14C-25: Residential Healthcare Facility Counts, L_{night} Metric

Metric Value, dB L_{night}	Scenario and Residential Healthcare Facility Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	0	0	0	0	0	1	1	0	1	1
≥ 50	0	0	0	0	0	0	0	0	0	0
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0

Table 14C-26: Residential Healthcare Facility Counts, $L_{Aeq,16h}$ Metric

Metric Value, dB $L_{Aeq,16h}$	Scenario and Residential Healthcare Facility Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 51	0	0	0	0	0	0	0	0	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0
≥ 66	0	0	0	0	0	0	0	0	0	0
≥ 69	0	0	0	0	0	0	0	0	0	0

Table 14C-27: Residential Healthcare Facility Counts, $L_{Aeq,8h}$ Metric

Metric Value, dB $L_{Aeq,8h}$	Scenario and Residential Healthcare Facility Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	1	0	1	1	0	1	1	0	1	1
≥ 48	0	0	0	0	0	0	0	0	0	0
≥ 51	0	0	0	0	0	0	0	0	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0

Table 14C-28: Religious Building Counts, L_{den} Metric

Metric Value, dB L_{den}	Scenario and Religious Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 50	2	1	1	1	1	2	2	2	2	2
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0
≥ 75	0	0	0	0	0	0	0	0	0	0

Table 14C-29: Religious Building Counts, L_{night} Metric

Metric Value, dB L_{night}	Scenario and Religious Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	0	0	0	0	0	0	0	0	0	0
≥ 50	0	0	0	0	0	0	0	0	0	0
≥ 55	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 65	0	0	0	0	0	0	0	0	0	0
≥ 70	0	0	0	0	0	0	0	0	0	0

Table 14C-30: Religious Building Counts, $L_{Aeq,16h}$ Metric

Metric Value, dB $L_{Aeq,16h}$	Scenario and Religious Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 51	0	0	0	0	0	0	0	0	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0
≥ 66	0	0	0	0	0	0	0	0	0	0
≥ 69	0	0	0	0	0	0	0	0	0	0

Table 14C-31: Religious Building Counts, $L_{Aeq,8h}$ Metric

Metric Value, dB $L_{Aeq,8h}$	Scenario and Religious Building Count									
	2018	2022 Permitted	2022 Proposed	2022 Apron 5H	2025 Permitted	2025 Proposed	2025 Apron 5H	2035 Permitted	2035 Proposed	2035 Apron 5H
≥ 45	0	0	0	0	0	1	1	0	1	1
≥ 48	0	0	0	0	0	0	0	0	0	0
≥ 51	0	0	0	0	0	0	0	0	0	0
≥ 54	0	0	0	0	0	0	0	0	0	0
≥ 57	0	0	0	0	0	0	0	0	0	0
≥ 60	0	0	0	0	0	0	0	0	0	0
≥ 63	0	0	0	0	0	0	0	0	0	0

Night-time $L_{Aeq,1h}$ Noise Levels at Representative Locations

14C.4.7 For each Scenario, in the Assessment Year 2025, the tables below present the hourly $L_{Aeq,1h}$ noise levels at representative locations for the hours during the night (23:00 to 07:00). The locations are described in Chapter 14 and can be seen in Figure 14-3. Detailed modelling has not been carried out for these hourly metrics, they are instead based on the average annual night, L_{night}, while accounting for the proportion of aircraft movements and runway usage occurring in the specified hour.

Table 14C-32: $L_{Aeq,1h}$ Noise Levels Table References

Scenario	Table Reference
2025 Permitted	Table 14C-33
2025 Proposed	**Error! Reference source not found.**
2025 Apron 5H	**Error! Reference source not found.**

Table 14C-33: Noise Levels at Representative Locations ($L_{Aeq,1h}$) – 2025 Permitted Scenario

Ref. No.	Location	Hour and $L_{Aeq,1h}$ Noise Level (dB)							
		23-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07
GR01	Ridgewood	44	43	43	37	0	42	45	47
GR02	The Baskins	38	37	38	32	0	37	39	41
GR03	Mayeston Hall	46	45	46	40	0	45	47	49
GR04	St. Margret's	40	39	40	34	0	39	41	43

Note – noise levels rounded to nearest whole number.

Table 14C-34: Noise Levels at Representative Locations ($L_{Aeq,1h}$) – 2025 Proposed Scenario

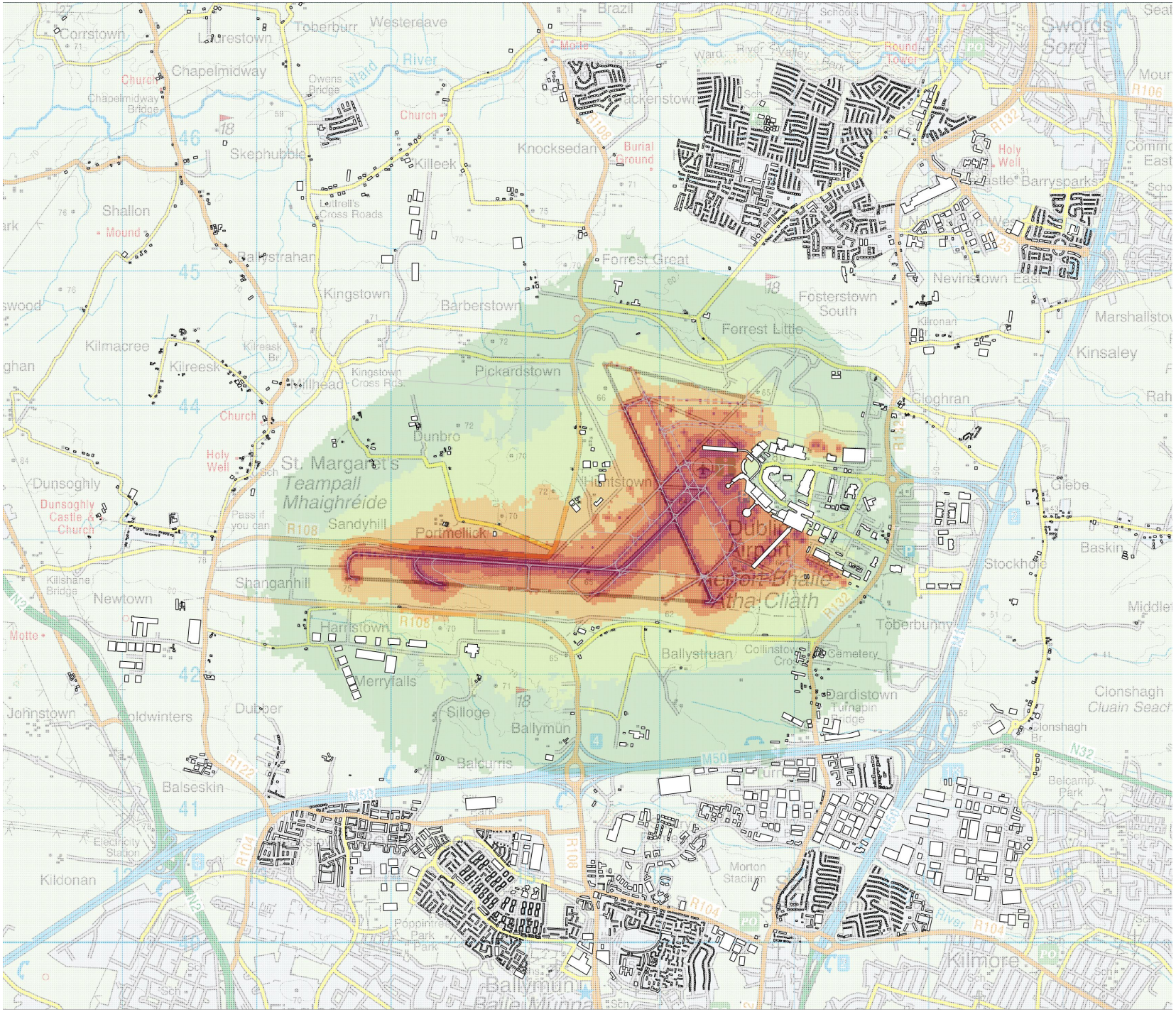
Ref. No.	Location	Hour and $L_{Aeq,1h}$ Noise Level (dB)							
		23-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07
GR01	Ridgewood	50	45	44	39	0	43	44	53
GR02	The Baskins	42	40	38	34	0	38	39	45
GR03	Mayeston Hall	50	48	46	42	0	46	47	53
GR04	St. Margret's	44	42	40	36	0	40	41	47

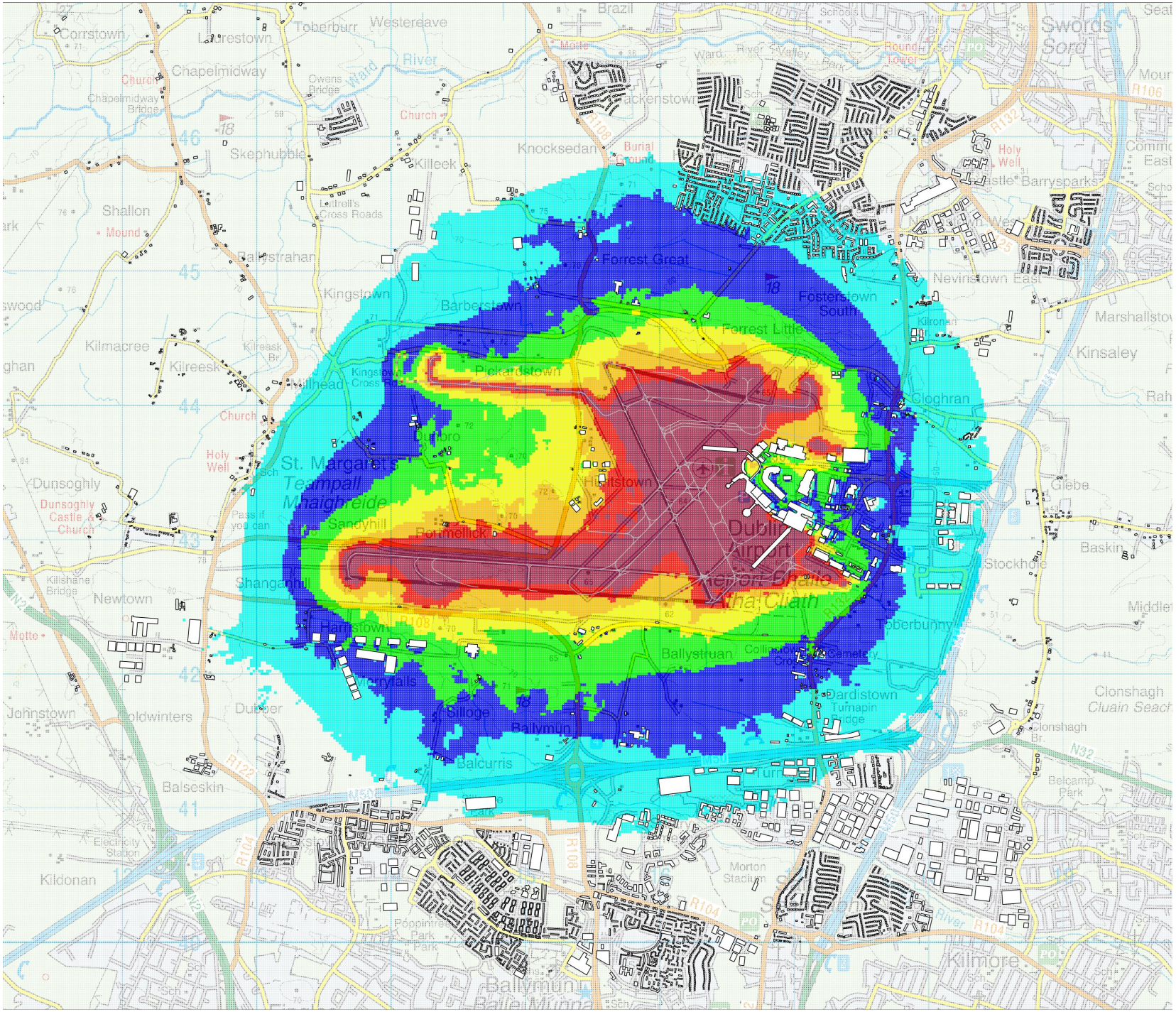
Note – noise levels rounded to nearest whole number.

Table 14C-35: Noise Levels at Representative Locations ($L_{Aeq,1h}$) – 2025 Apron 5H Scenario

Ref. No.	Location	Hour and $L_{Aeq,1h}$ Noise Level (dB)							
		23-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07
GR01	Ridgewood	50	45	44	39	0	43	44	53
GR02	The Baskins	42	40	38	34	0	38	39	45
GR03	Mayeston Hall	50	48	46	42	0	46	47	53
GR04	St. Margret's	44	42	40	36	0	40	41	47

Note – noise levels rounded to nearest whole number.


Corrstown
Toberburr
Westereave
Chapelmidway
Church
Chapelmidway Bridge
Owens Bridge
Ward River
Church
Knocksedan
Burial Ground
Skephubble
Killeek
Shallon
Mound
Forrest Great
Kingstown
Barberstown
Forrest Little
Fosterstown South
Kilmacree
Kilreask
Kingstown Cross Rds.
Pickardstown
Church
Holy Well
Dunbro
St. Margaret's
Teampall Mhaighréide
Dunsoghly
Dunsoghly Castle & Church
Sandyhill
Portmellick
R108
Dublin Airport
Aerfort Bhaile Átha Cliath
Shanganhill
Newtown
Harristown
Merryfalls
Ballystruan
Collinstown Cemetery
Johnstown
Dubber
Silloge
Ballymun
Balcurris
Balseskin
M50
R122
R104
R132
Kildonan
Electricity Station
Poppintree Park
Morton Stadium
Kilmore
Ballymun
Baile Munna
Nevinstown East
Barrysparks
Kinsaley
Cloghran
Glebe
Baskin
Stockhole
Toberbunny
Middle
Clonshagh
Cluain Seach
Belcamp Park
Turnapin Bridge
Bardistown
Swords
Sord
Commons East
Marshallstown
Rahe
Motte
Round Tower
Holy Well
Castle
Kilronan
Pass if you can
Killshane Bridge
Motte
Johnstown
Oldwinters
Dubber
Balseskin
Kildonan
Electricity Station
Poppintree Park
Ballymun
Baile Munna
Morton Stadium
Kilmore
Clonshagh
Belcamp Park
Turnapin Bridge
Bardistown
Swords
Sord
Commons East
Marshallstown
Rahe
Glebe
Baskin
Stockhole
Toberbunny
Middle
Nevinstown East
Barrysparks
Kinsaley
Cloghran
Kilronan
Fosterstown South
Forrest Little
Forrest Great
Kingstown
Barberstown
Pickardstown
Dunbro
St. Margaret's
Teampall Mhaighréide
Dunsoghly
Dunsoghly Castle & Church
Sandyhill
Portmellick
Dublin Airport
Aerfort Bhaile Átha Cliath
Shanganhill
Newtown
Harristown
Merryfalls
Ballystruan
Collinstown Cemetery
Johnstown
Dubber
Silloge
Ballymun
Balcurris
Balseskin
Kildonan



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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
- 60 - 62 dB(A) $L_{Aeq,16h}$
- 63 - 65 dB(A) $L_{Aeq,16h}$
- 66 - 68 dB(A) $L_{Aeq,16h}$
- 69 + dB(A) $L_{Aeq,16h}$

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Forecast LAeq,16h Ground Noise Contours
2035 Permitted Scenario
Figure 14C-31

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Drawing No:

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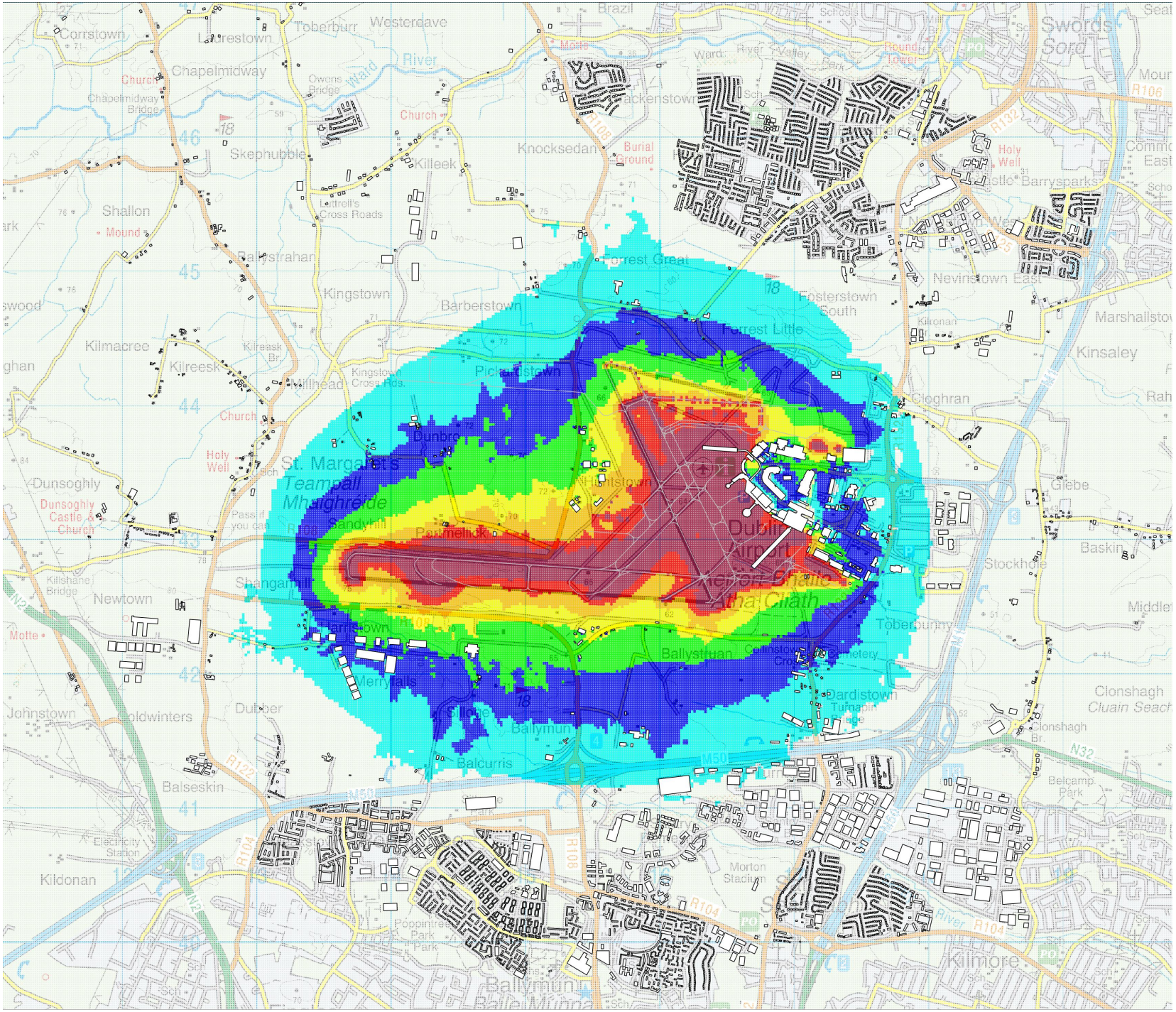

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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2035 Permitted Scenario
Figure 14C-32

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Drawing No:

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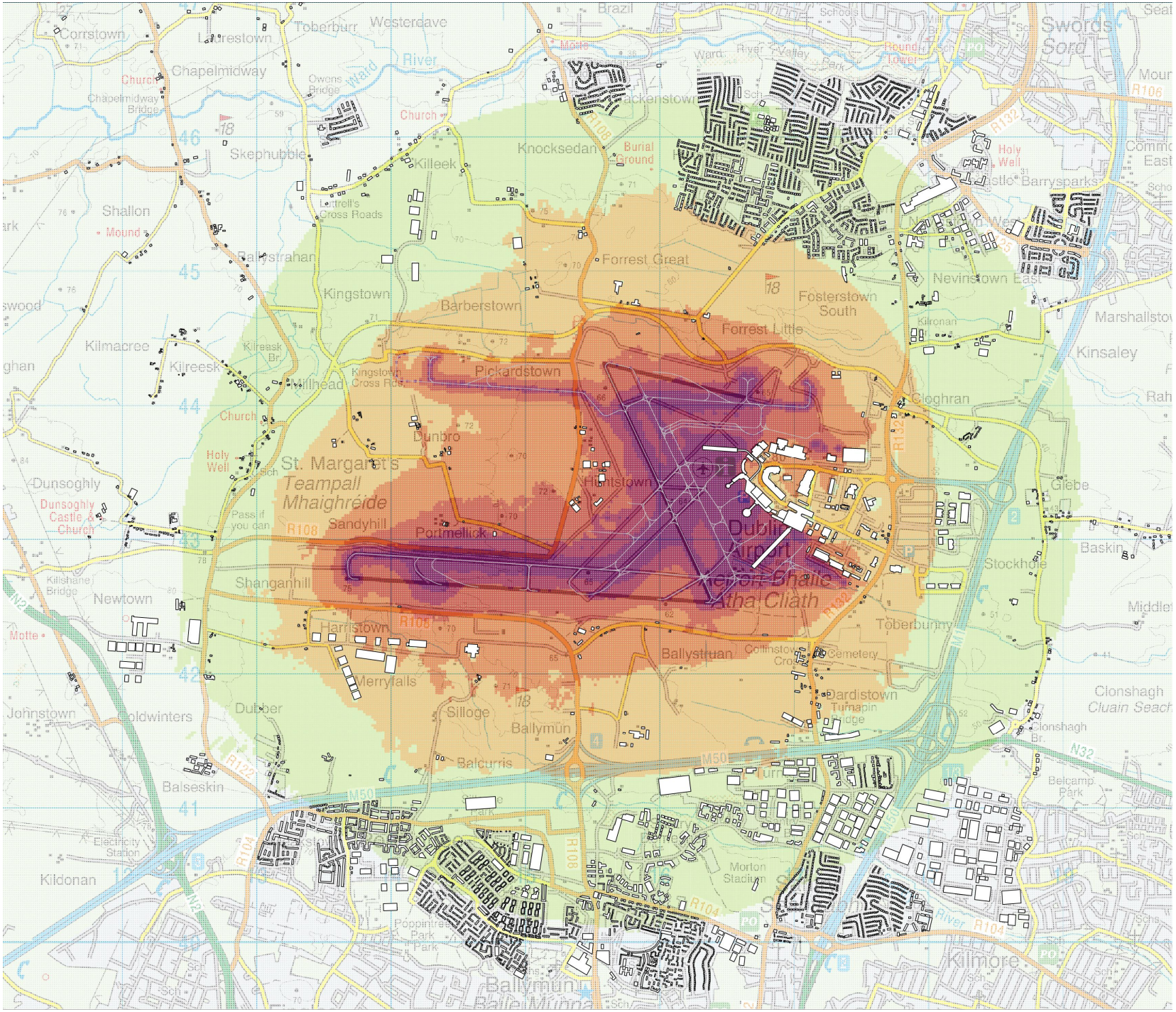

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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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2035 Proposed Scenario
Figure 14C-33

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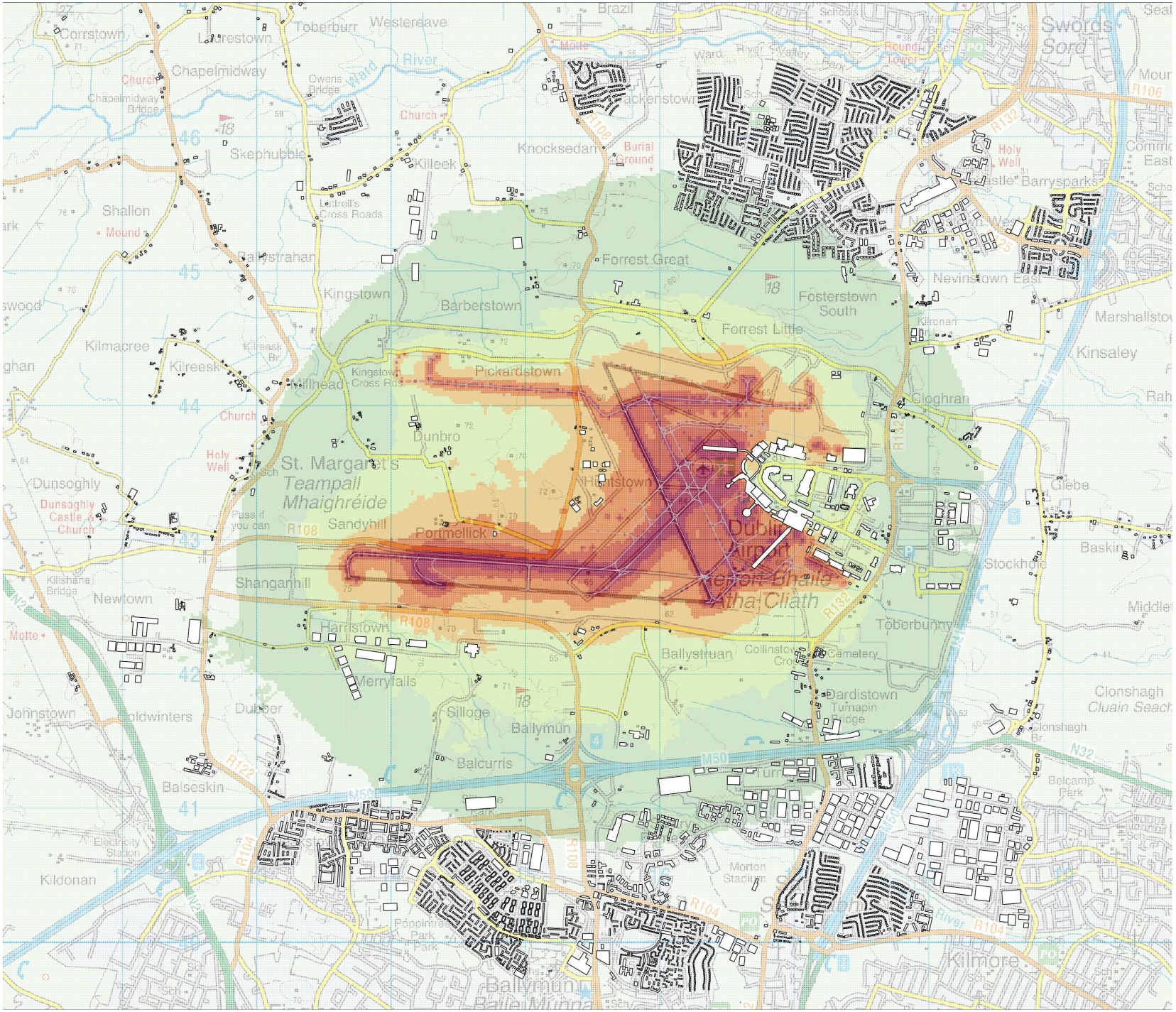

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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Forecast Lnight Ground Noise Contours
2035 Proposed Scenario
Figure 14C-34

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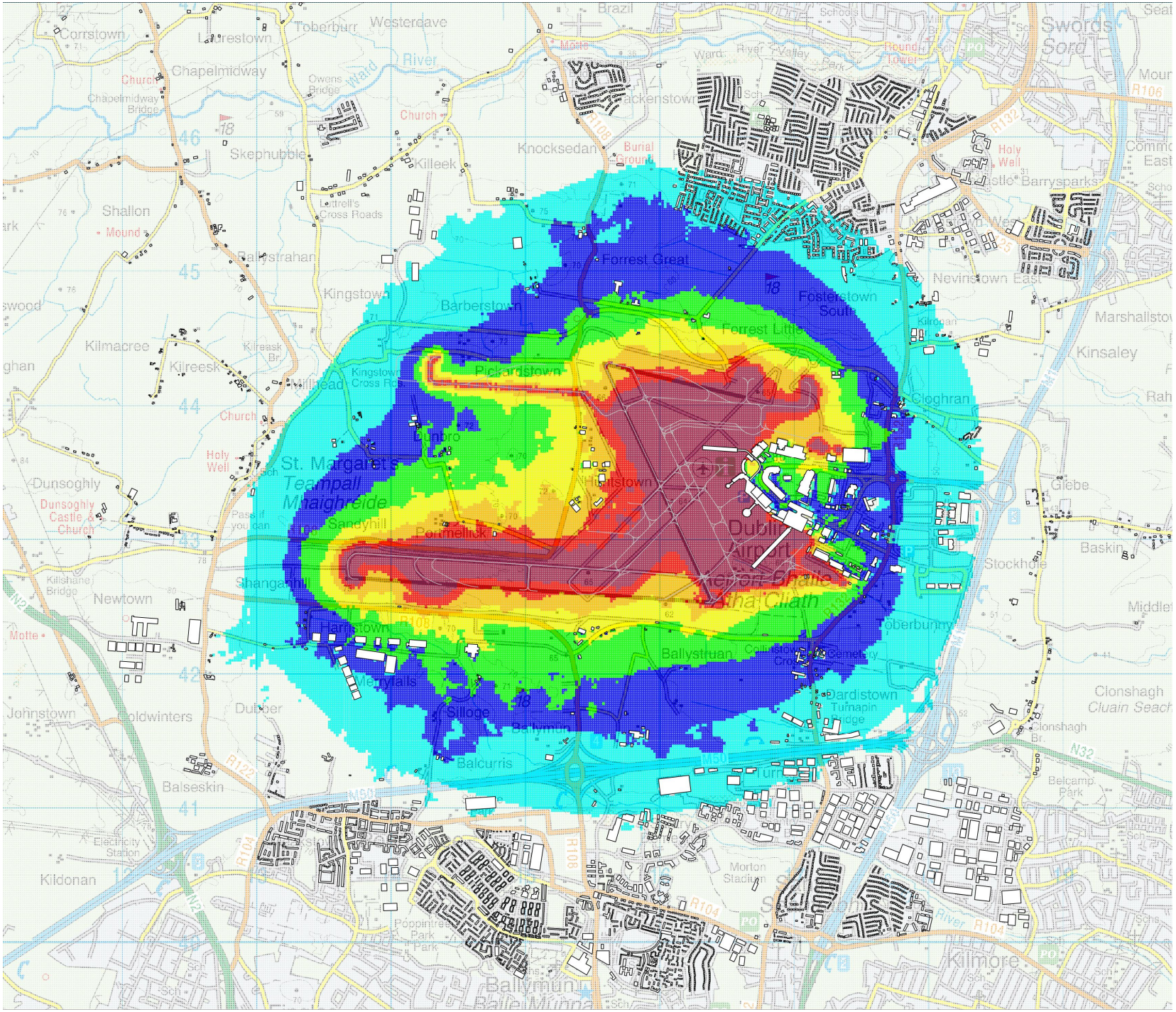

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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
- 60 - 62 dB(A) $L_{Aeq,16h}$
- 63 - 65 dB(A) $L_{Aeq,16h}$
- 66 - 68 dB(A) $L_{Aeq,16h}$
- 69 + dB(A) $L_{Aeq,16h}$

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Forecast LAeq,16h Ground Noise Contours
2035 Proposed Scenario
Figure 14C-35

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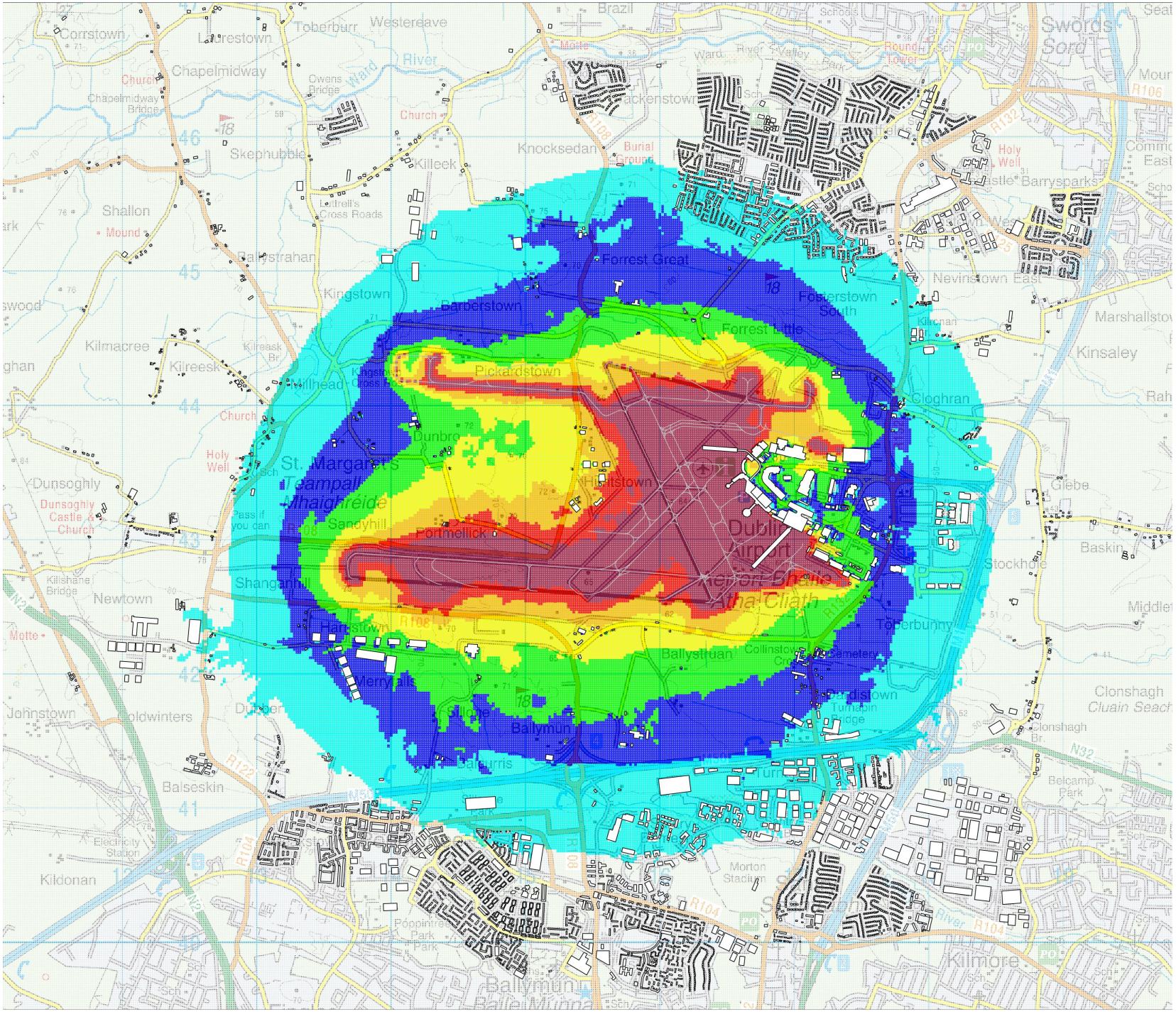

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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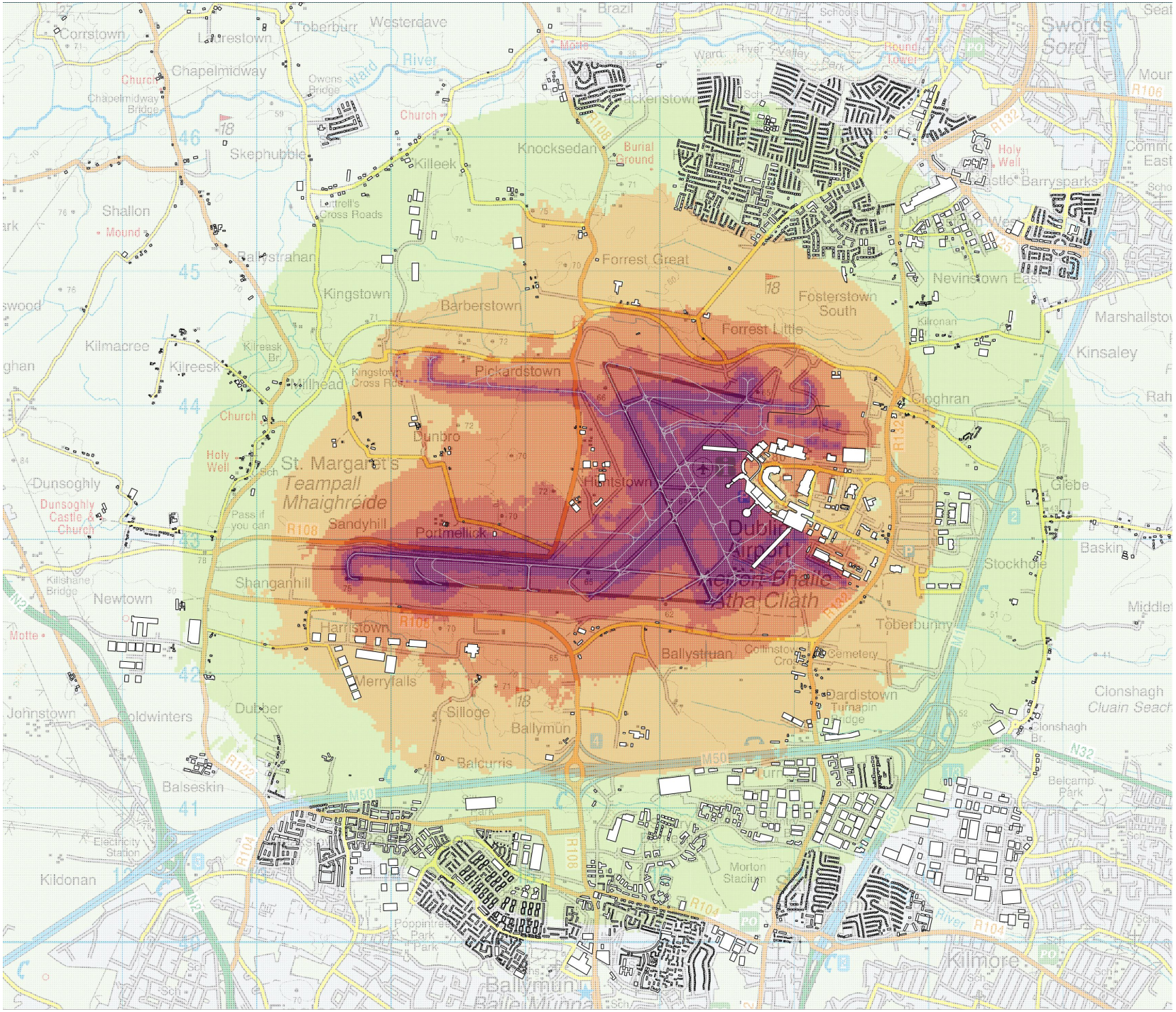

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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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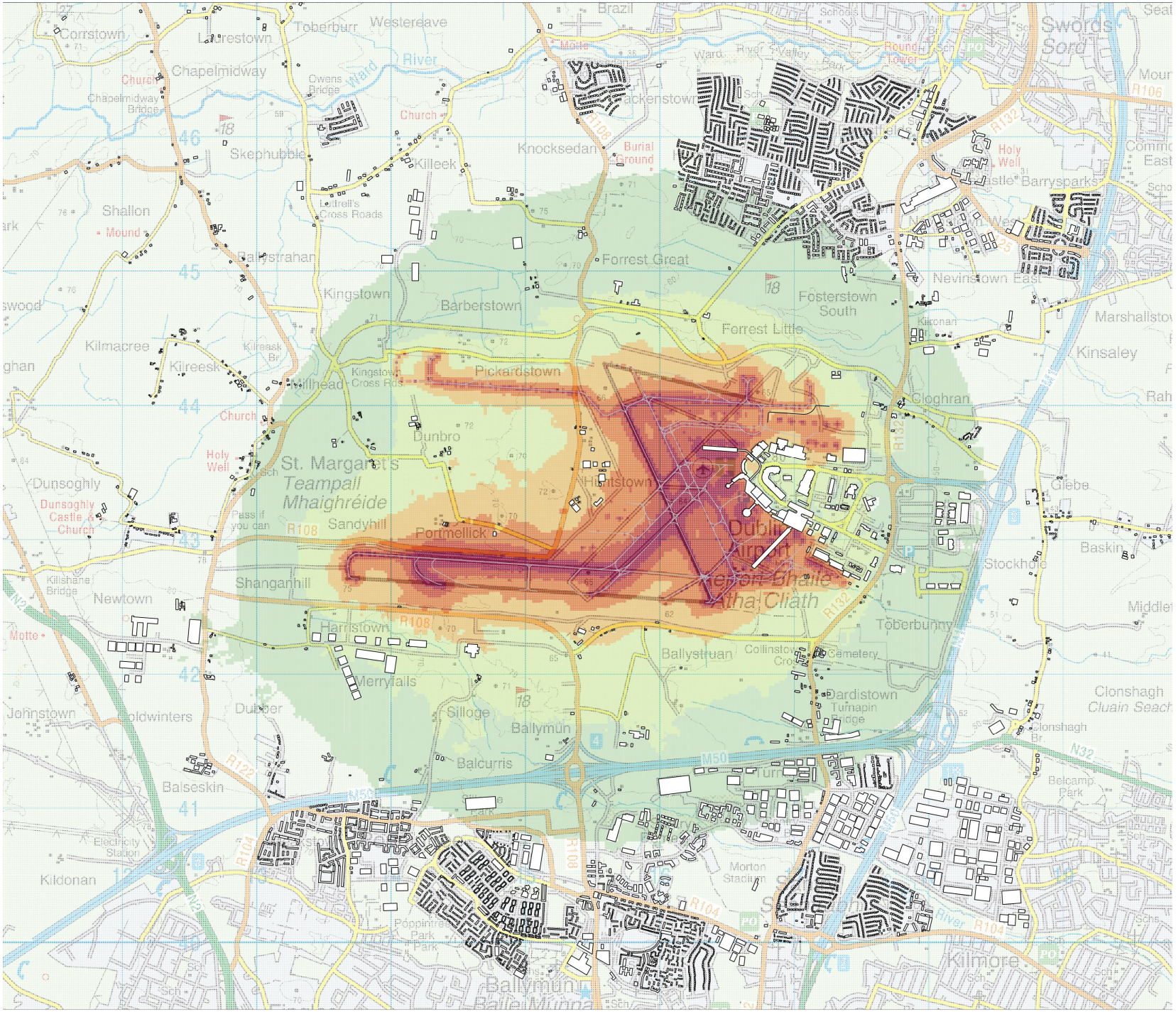
Forecast Lden Ground Noise Contours
2035 Apron 5H Scenario
Figure 14C-37

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

A11267_19_DR782_2.0



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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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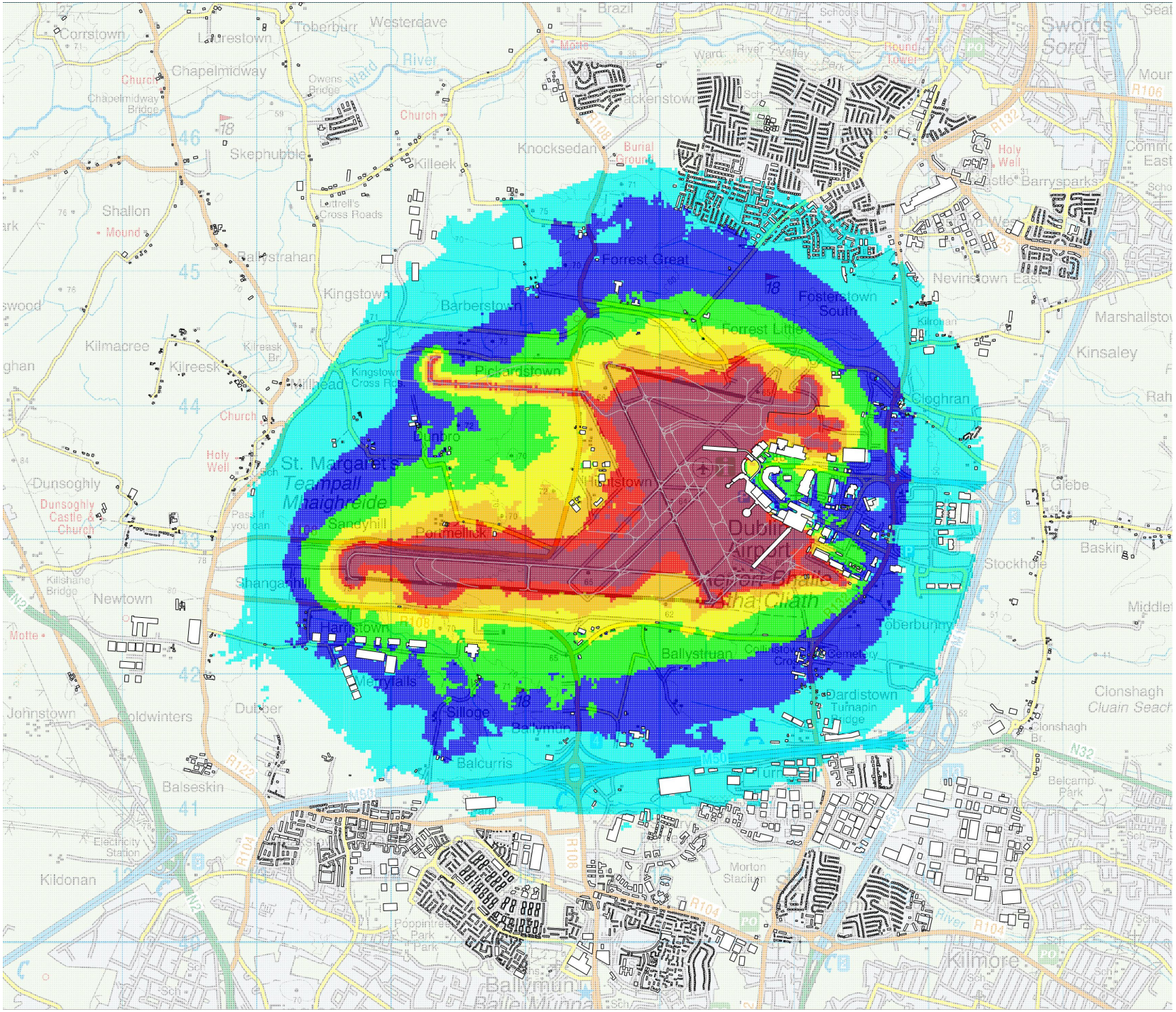
Forecast Lnight Ground Noise Contours
2035 Apron 5H Scenario
Figure 14C-38

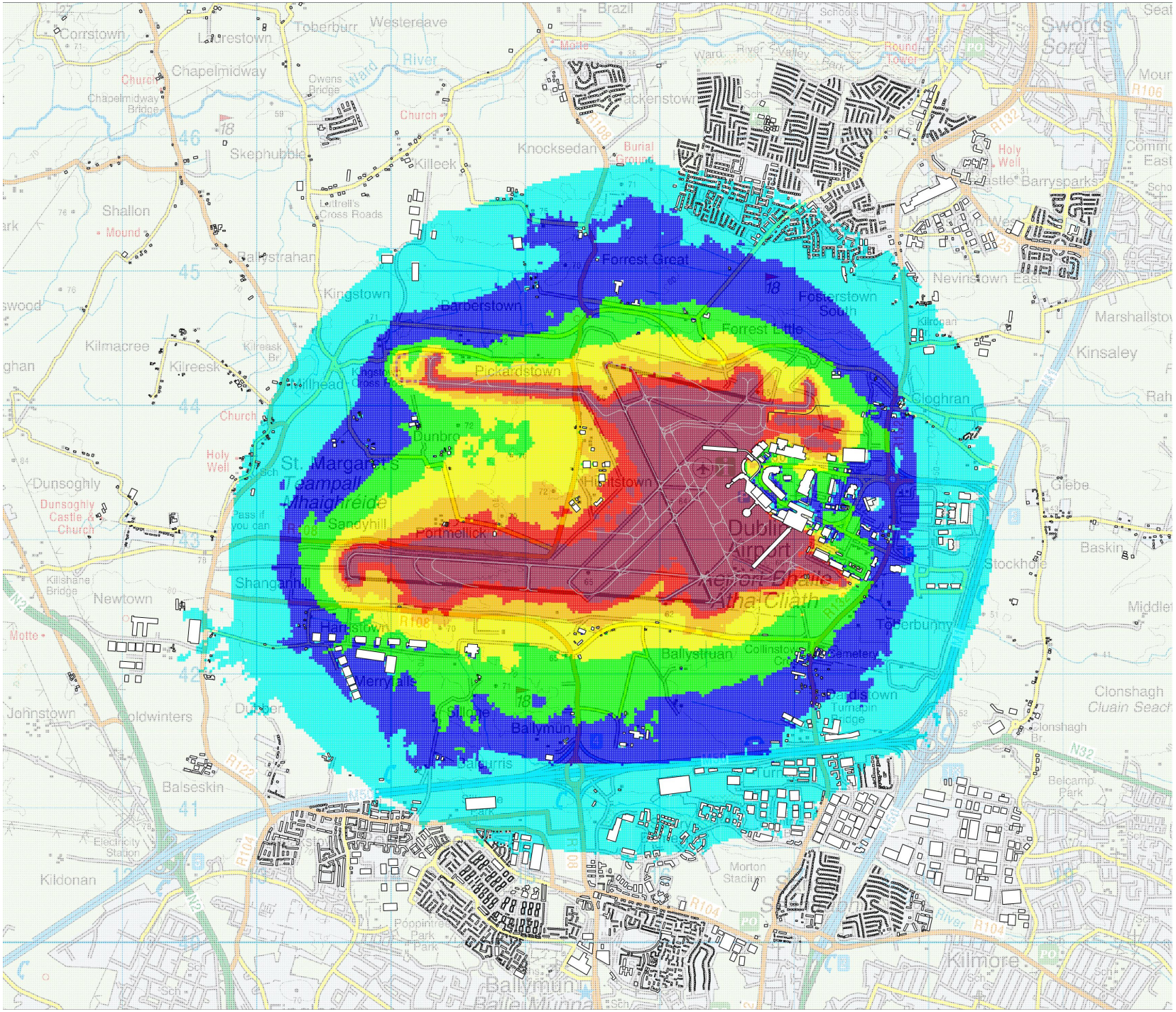
DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

A11267_19_DR783_2.0


Dublin Airport
Forrest Great
Forrest Little
Pickardstown
Barberstown
Kingstown
Fosterstown South
Fosterstown
Nevinstown East
Kinsaley
Cloghran
Glebe
Baskin
Stockhole
Toberbunny
Clonshagh
Cluain Seach
Ballystruan
Turnapin Bridge
Sillogue
Ballymun
Balcurris
Balseskin
Kildonan
Johnstown
Newtown
Harristown
Sandyhill
Shangarhill
Dunsoghly
Dunsoghly Castle & Church
Kilmacree
Kilreask
Shallon
Mound
Skephubble
Knocksedan
Killeek
Corrstown
Toberburr
Westerdave
Chapelmidway
Chapelmidway Bridge
Owens Bridge
Church
Holy Well
Burial Ground
Barrysparks
Marshallstown
Kilronan
Rahe
Ballymun
Poppintree Park
Morton Stadium
Belcamp Park
Kilmore
Electricity Station
Motte
Pass if you can
Kilshane Bridge
Kilreask Br.
Kingstown Cross Roads
Darrell's Cross Roads
Millhead
Milltown
Ballymun
Dublin Airport
Teampall Mhaighdeide
St. Margaret's
Church
Holy Well
Pass if you can
Motte
Dunsoghly Castle & Church



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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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Forecast LAeq,8h Ground Noise Contours
2035 Apron 5H Scenario
Figure 14C-40

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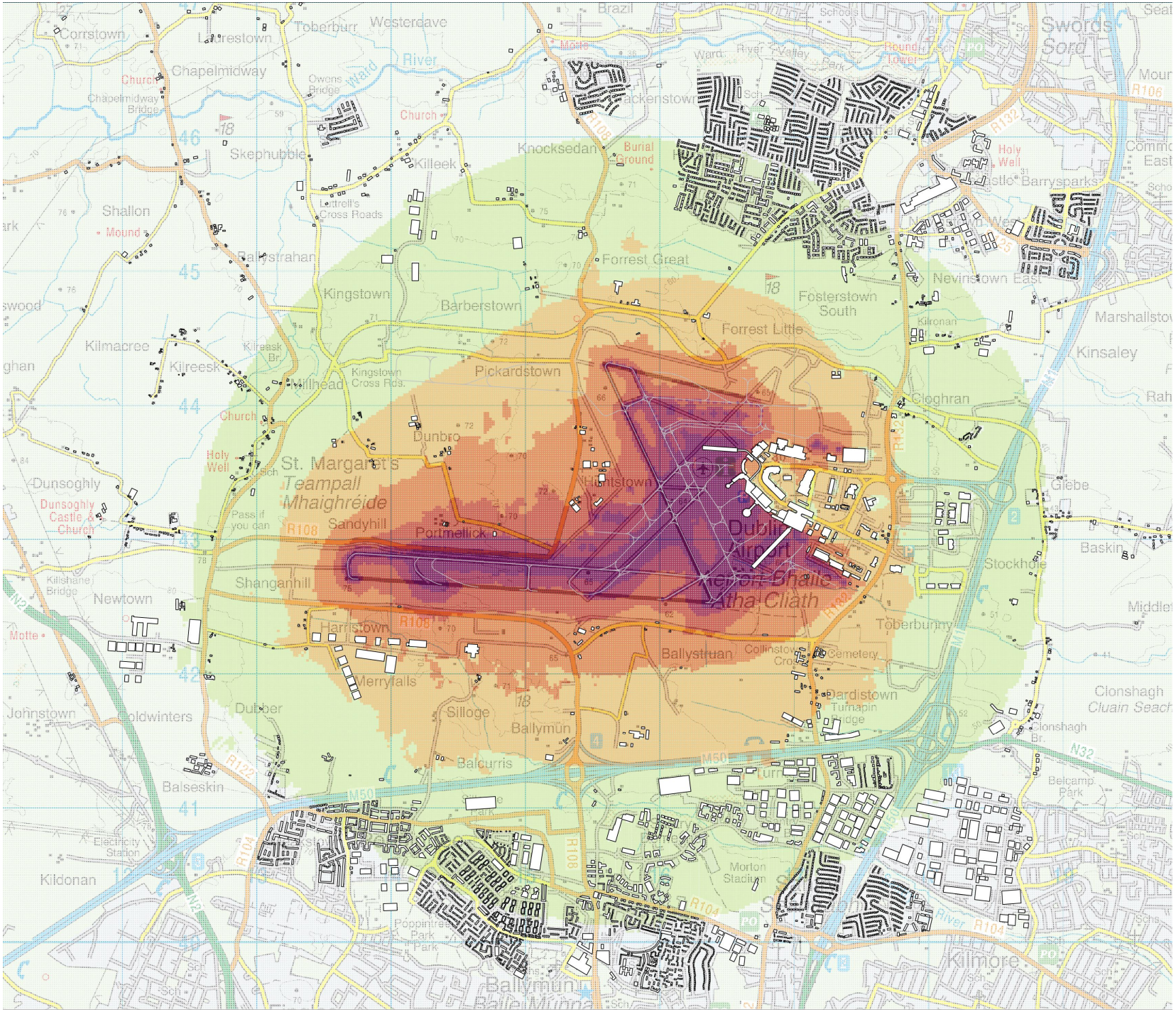
DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

A11267_19_DR785_2.0



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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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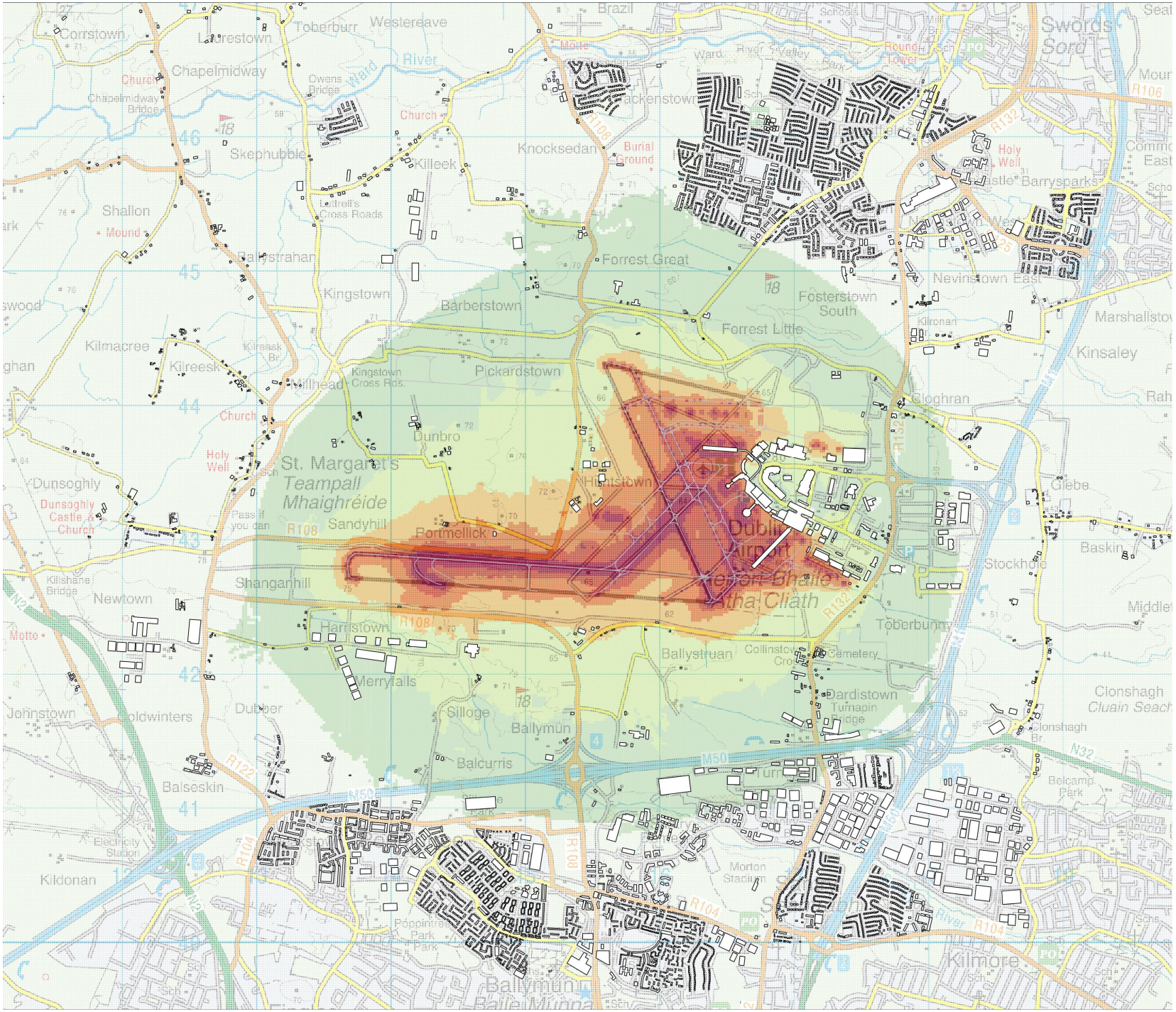
Actual Lden Ground Noise Contours
2018
Figure 14C-1

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

A11267_19_DR746_2.0



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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Actual Lnight Ground Noise Contours
2018
Figure 14C-2

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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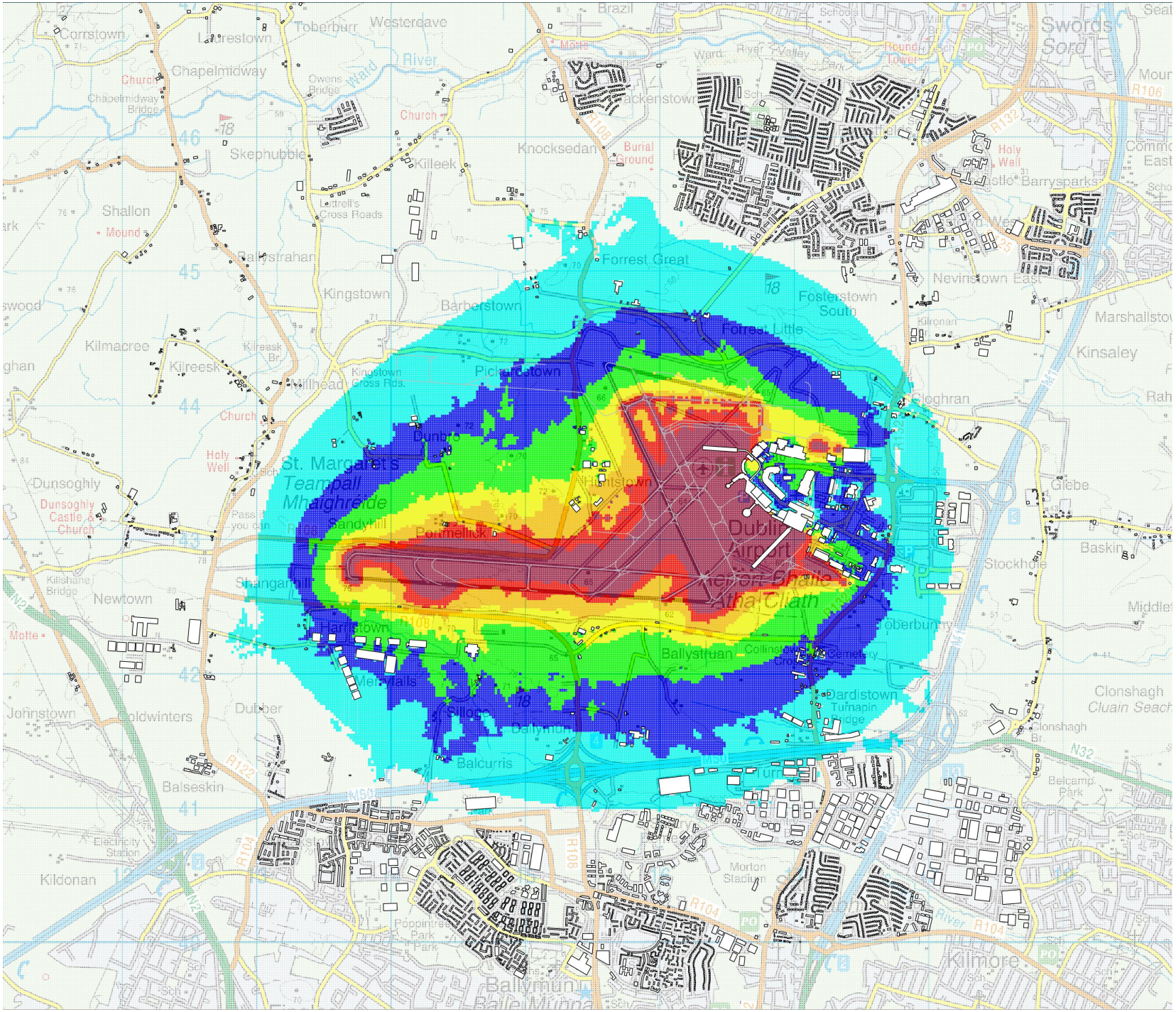

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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
- 60 - 62 dB(A) $L_{Aeq,16h}$
- 63 - 65 dB(A) $L_{Aeq,16h}$
- 66 - 68 dB(A) $L_{Aeq,16h}$
- 69 + dB(A) $L_{Aeq,16h}$

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Actual LAeq,16h Ground Noise Contours 2018
Figure 14C-3

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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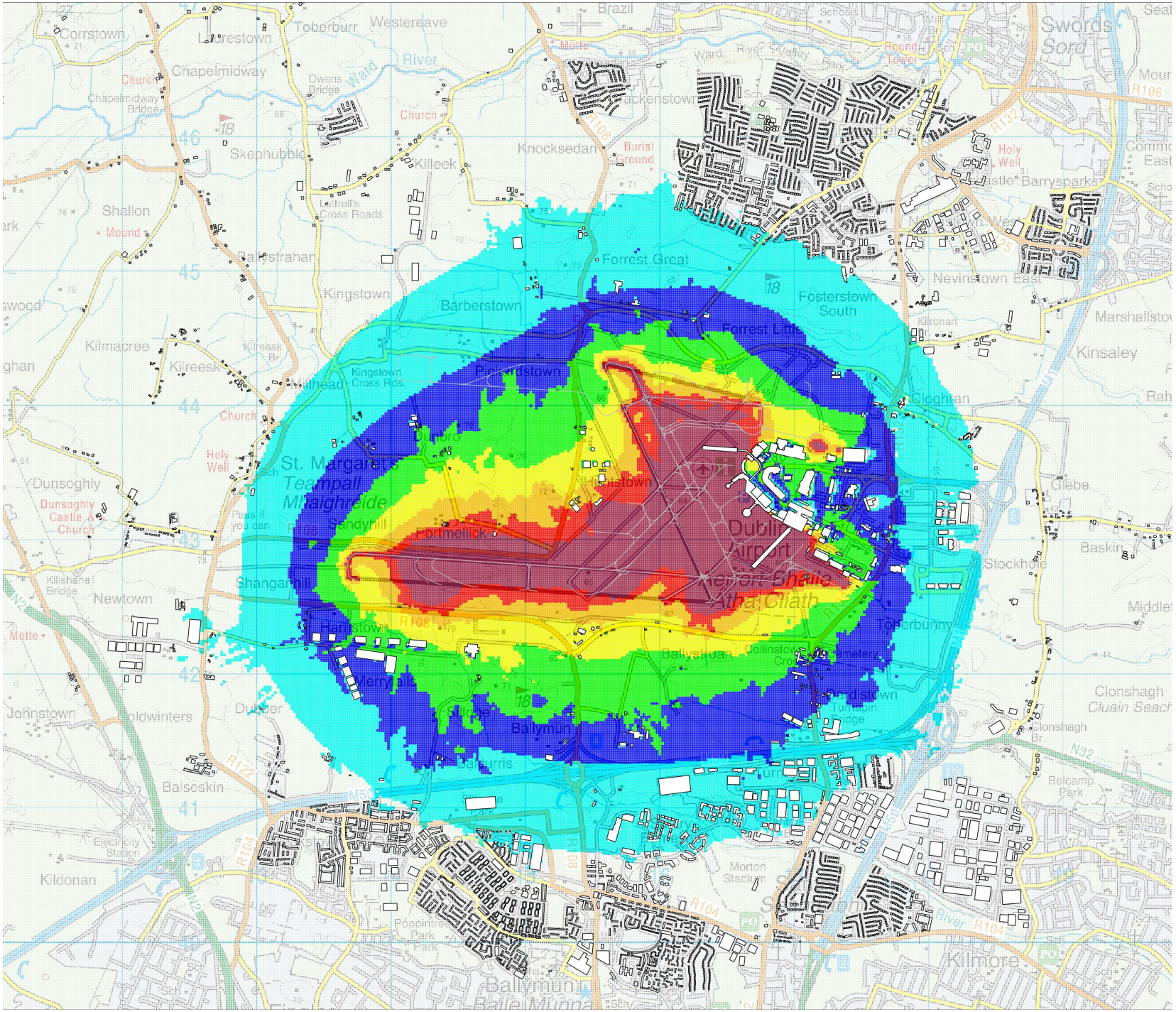

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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Actual LAeq,8h Ground Noise Contours
2018
Figure 14C-4

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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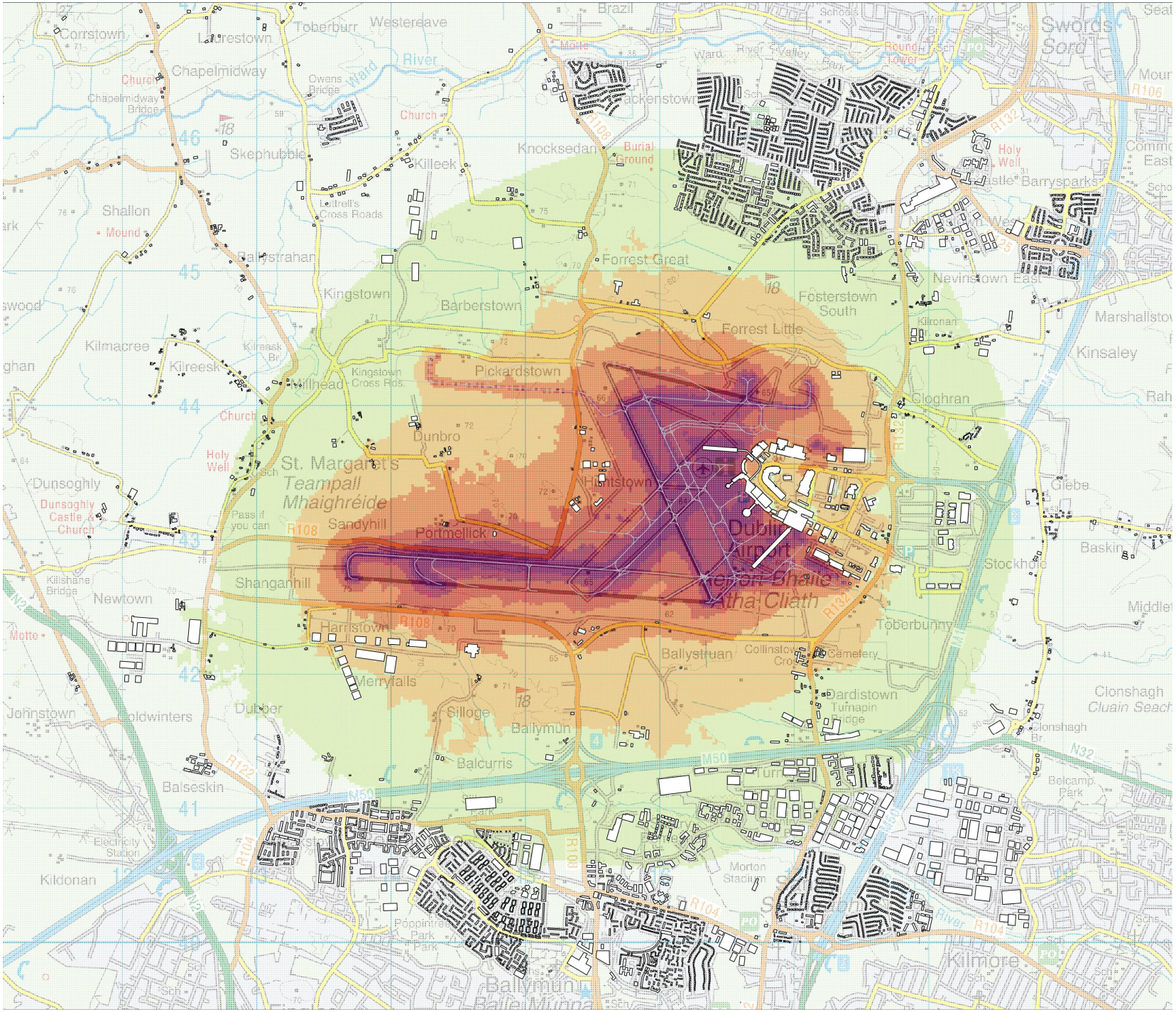

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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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Forecast Lden Ground Noise Contours
2022 Permitted Scenario
Figure 14C-5

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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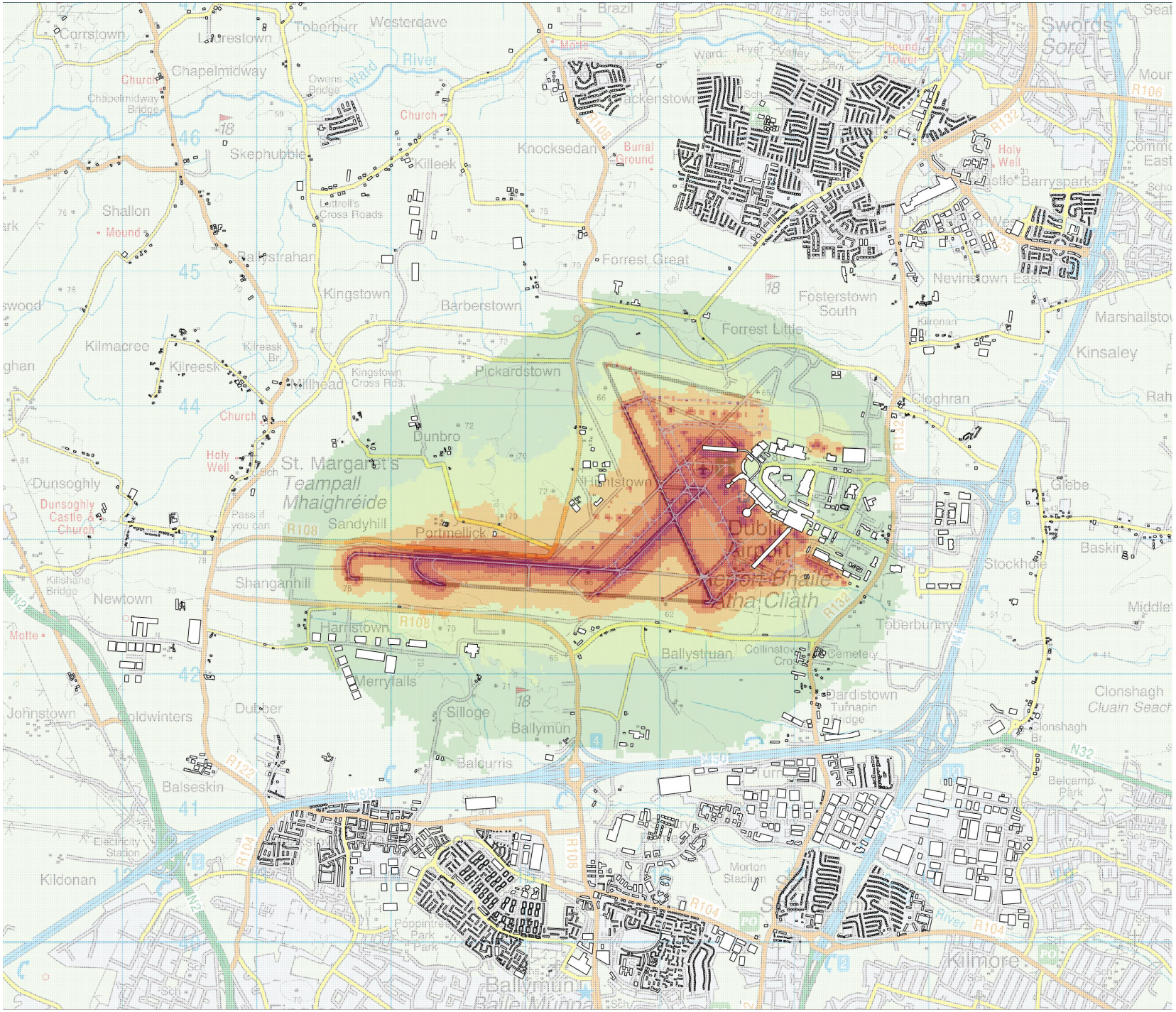

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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Forecast Lnight Ground Noise Contours
2022 Permitted Scenario
Figure 14C-6

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DATE: July 2021 SCALE: 1:40000@A4

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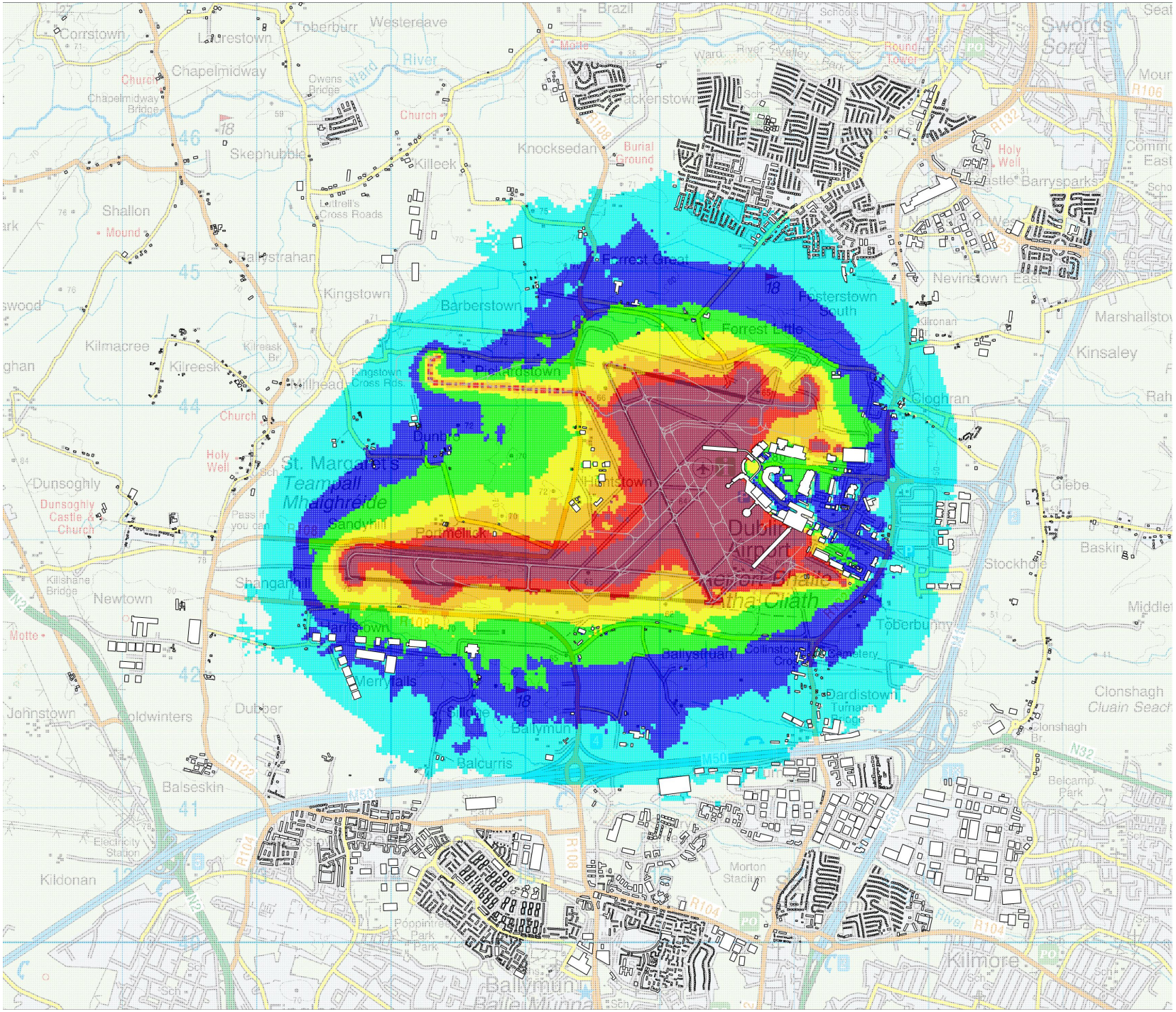

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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
- 60 - 62 dB(A) $L_{Aeq,16h}$
- 63 - 65 dB(A) $L_{Aeq,16h}$
- 66 - 68 dB(A) $L_{Aeq,16h}$
- 69 + dB(A) $L_{Aeq,16h}$

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Forecast LAeq,16h Ground Noise Contours
2022 Permitted Scenario
Figure 14C-7

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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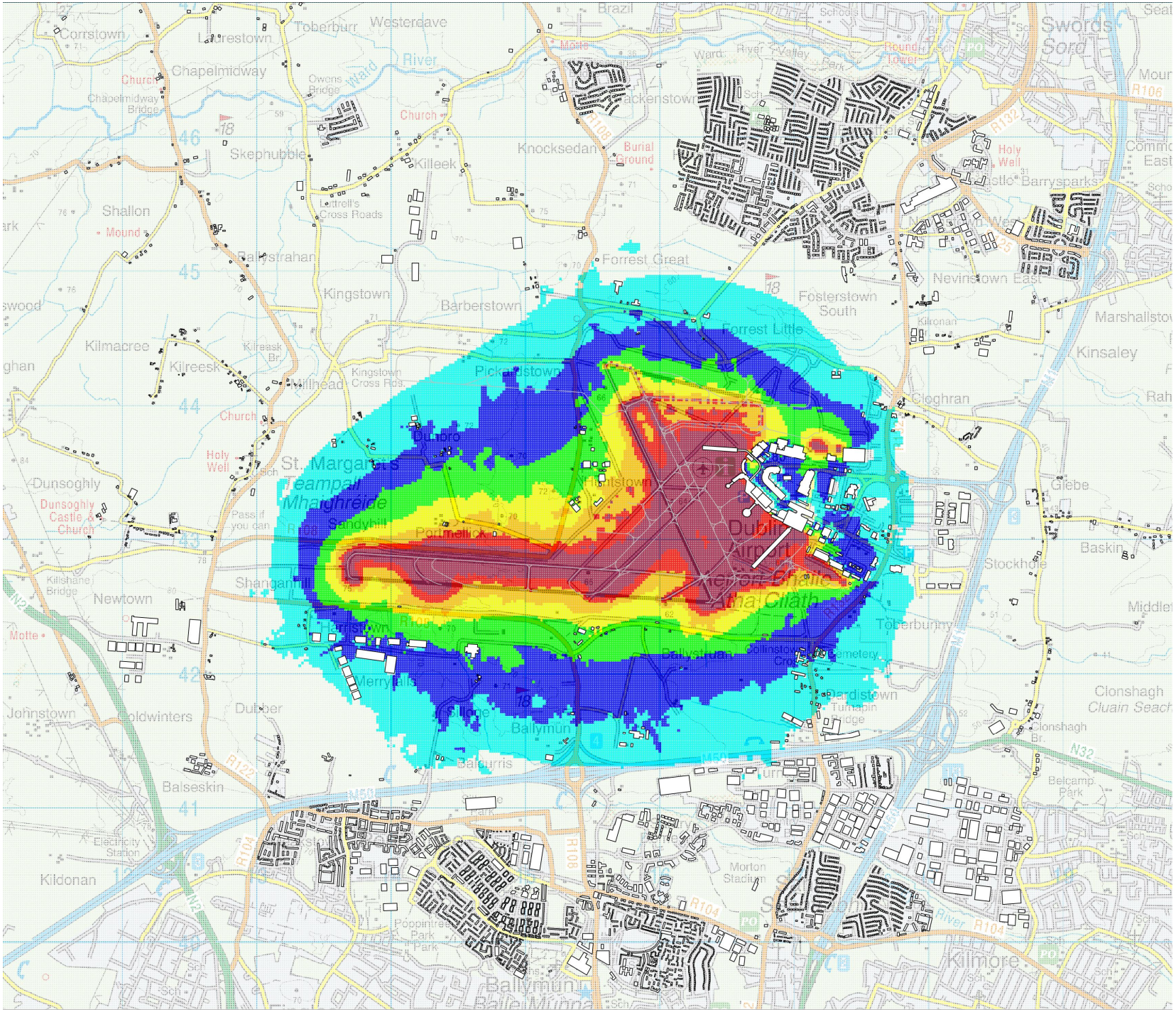

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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Forecast LAeq,8h Ground Noise Contours
2022 Permitted Scenario
Figure 14C-8

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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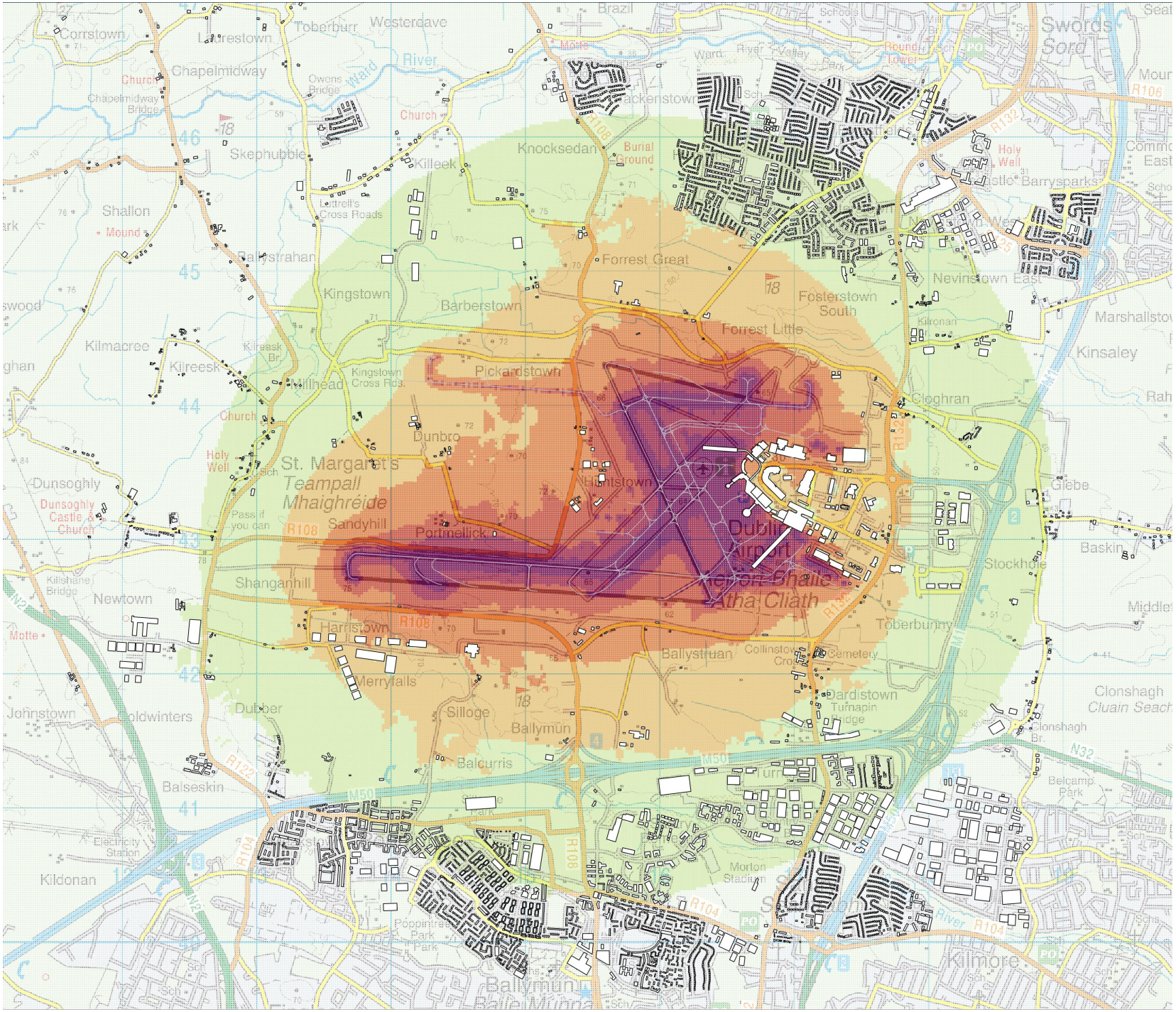

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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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Forecast Lden Ground Noise Contours
2022 Proposed Scenario
Figure 14C-9

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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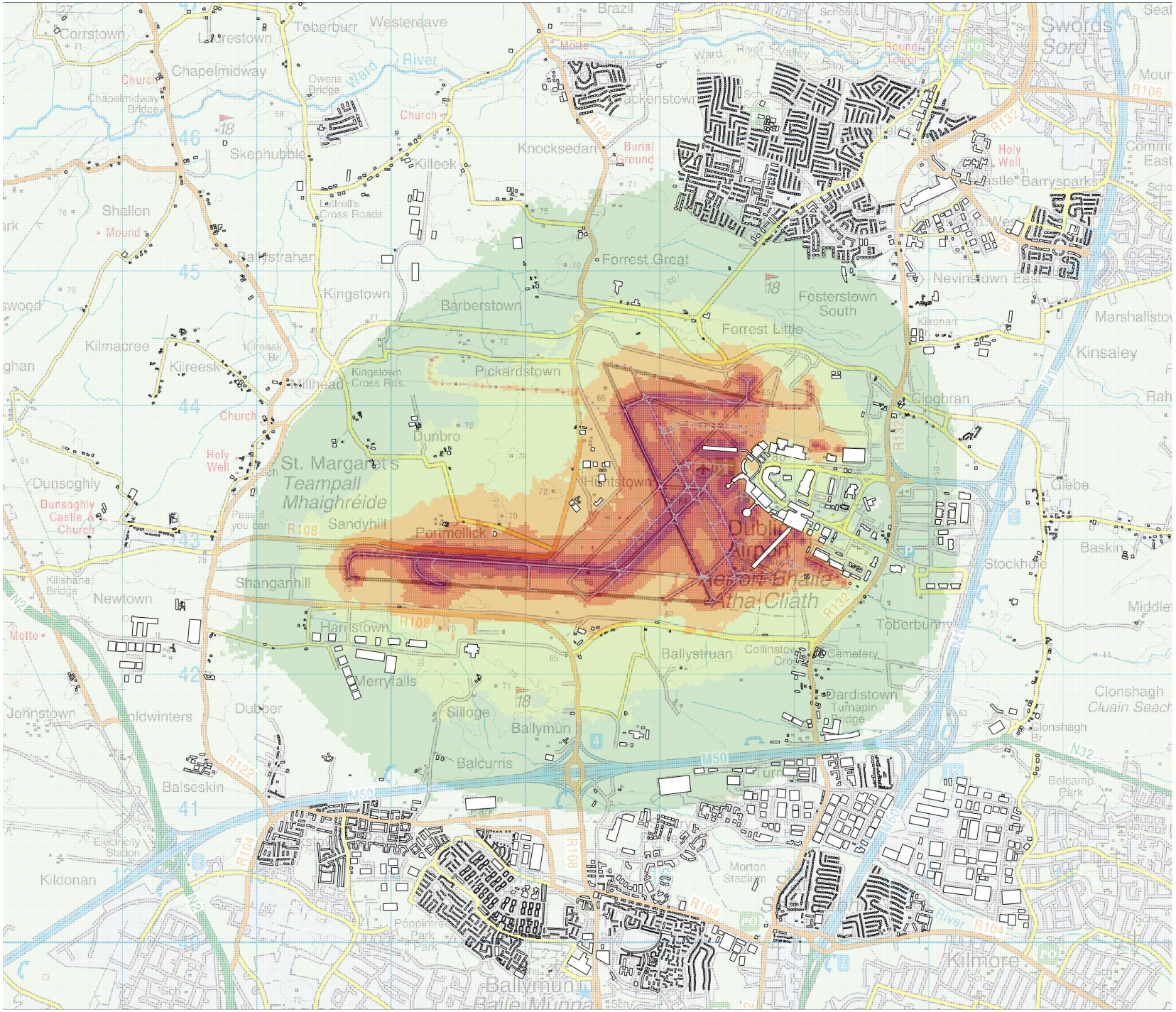

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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Forecast Lnight Ground Noise Contours
2022 Proposed Scenario
Figure 14C-10

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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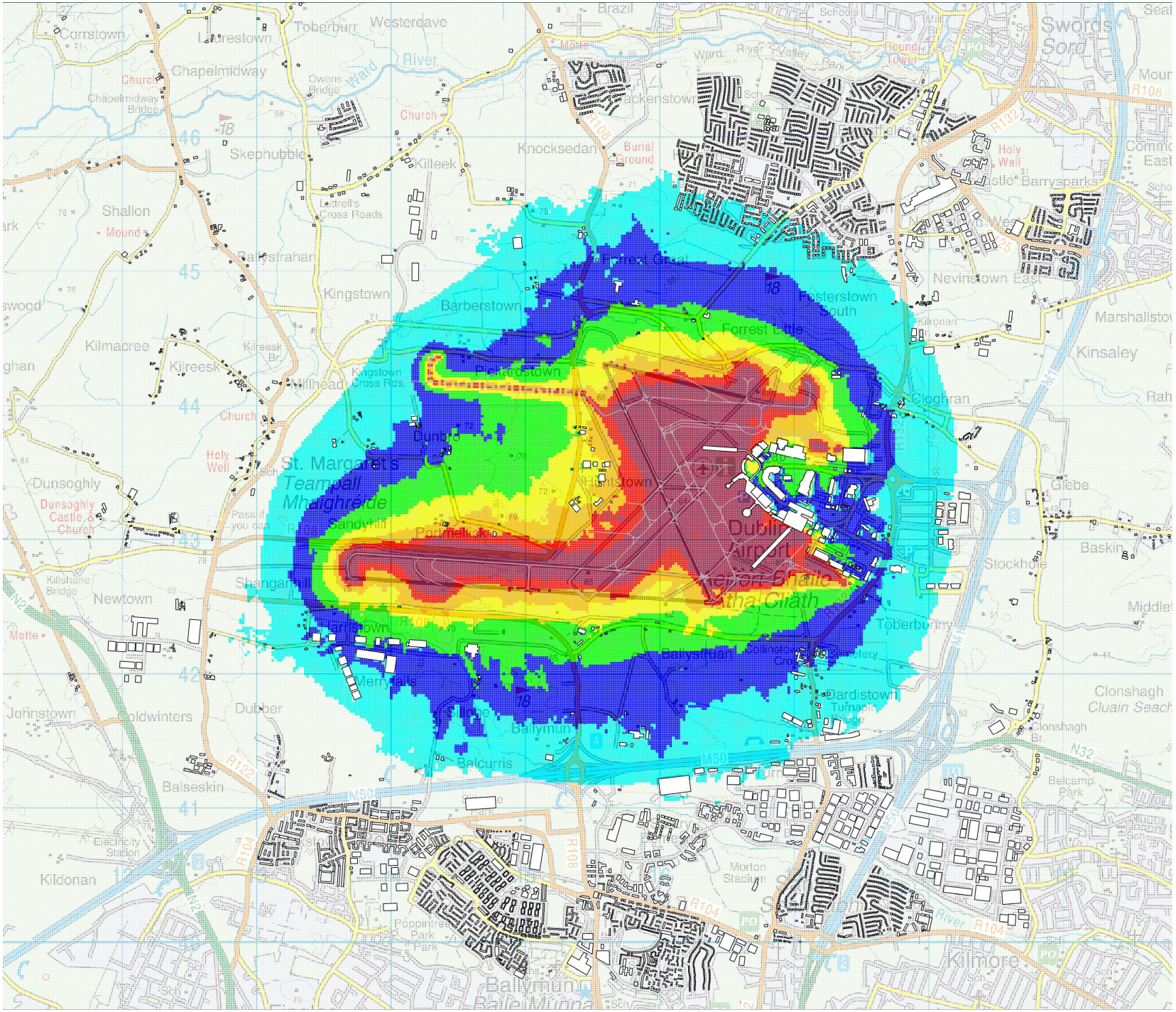

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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
- 60 - 62 dB(A) $L_{Aeq,16h}$
- 63 - 65 dB(A) $L_{Aeq,16h}$
- 66 - 68 dB(A) $L_{Aeq,16h}$
- 69 + dB(A) $L_{Aeq,16h}$

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Forecast LAeq,16h Ground Noise Contours
2022 Proposed Scenario
Figure 14C-11

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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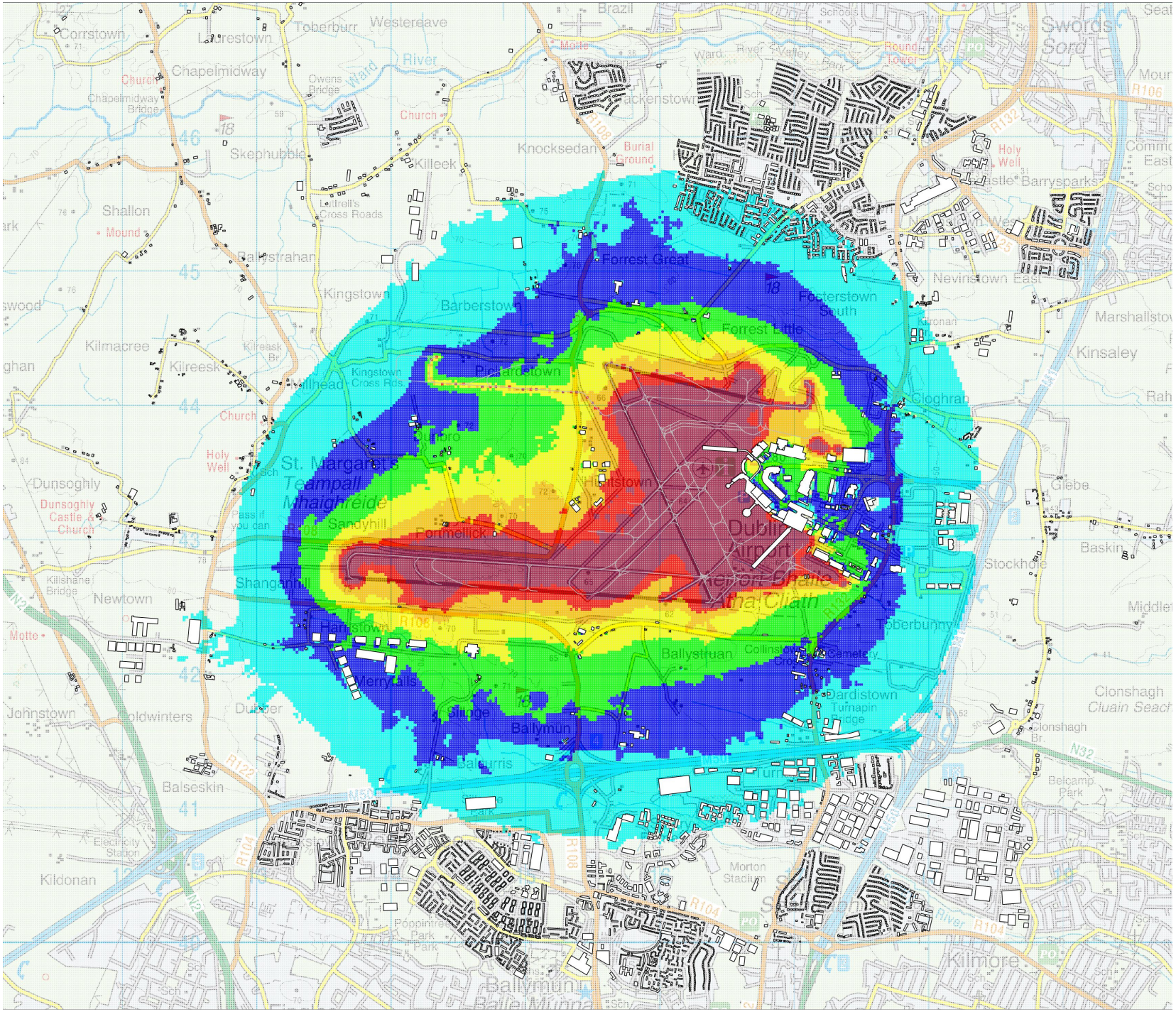

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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Forecast LAeq,8h Ground Noise Contours
2022 Proposed Scenario
Figure 14C-12

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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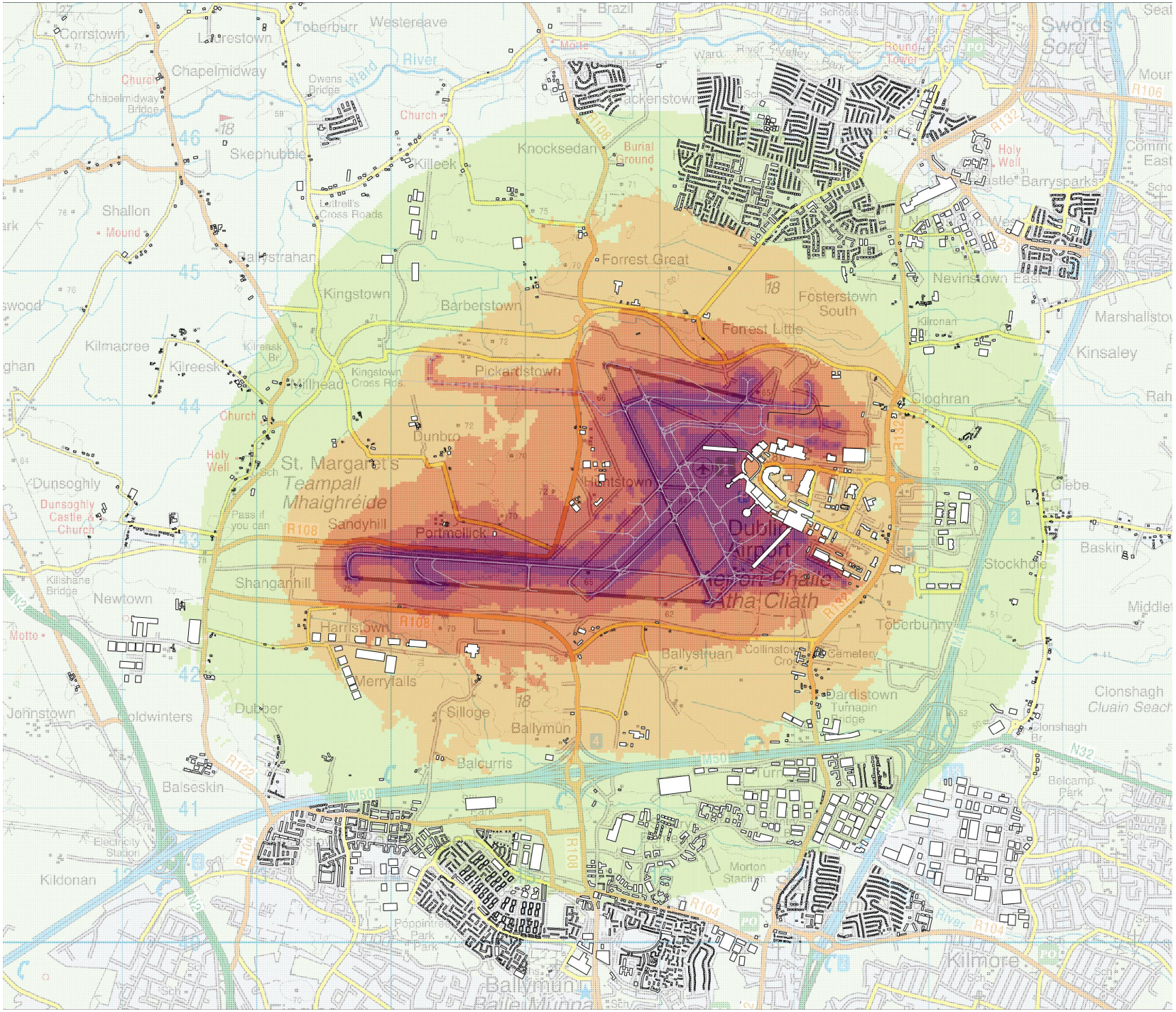

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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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Forecast Lden Ground Noise Contours
2022 Apron 5H Scenario
Figure 14C-13

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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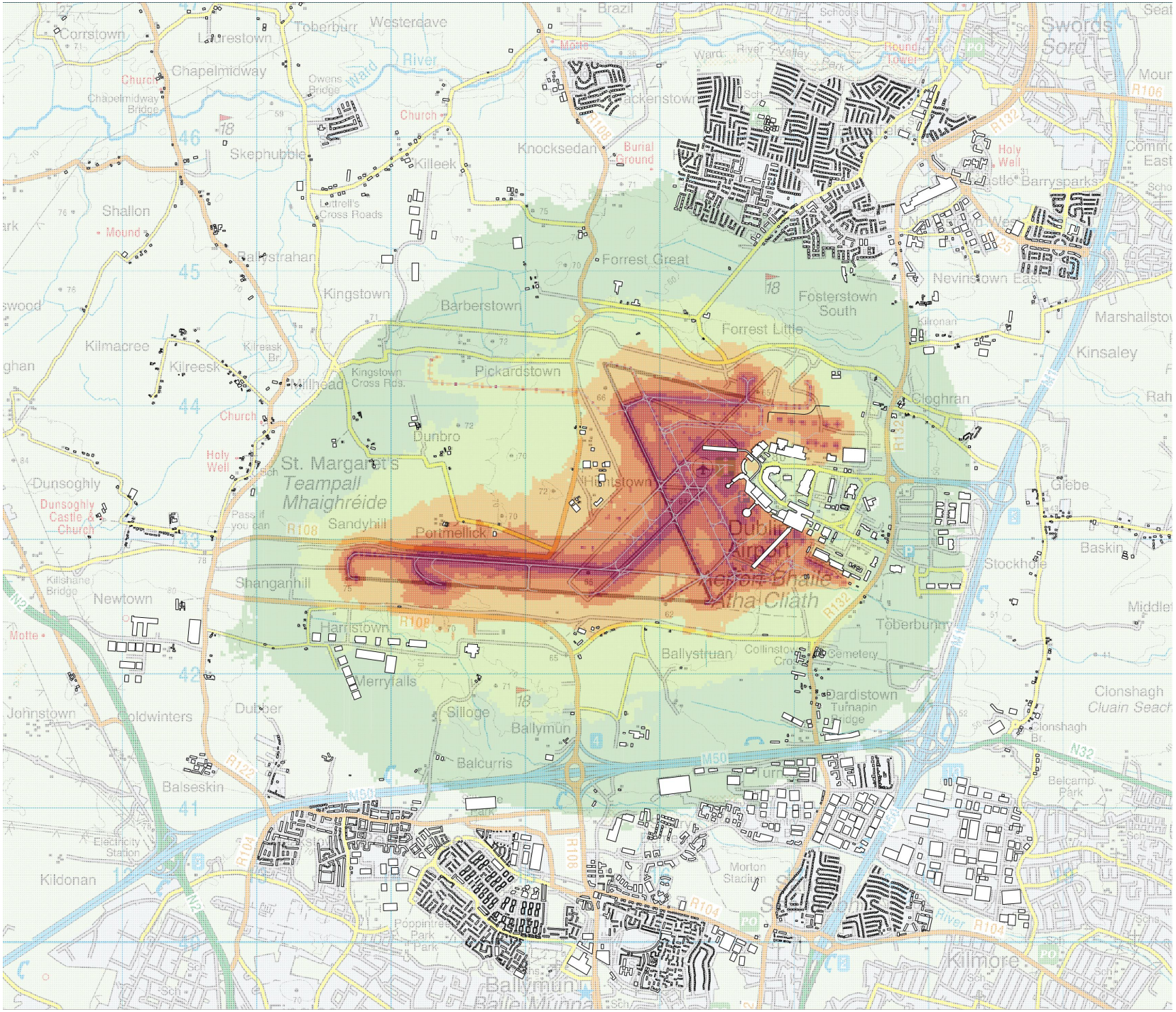

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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Forecast Lnight Ground Noise Contours
2022 Apron 5H Scenario
Figure 14C-14

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

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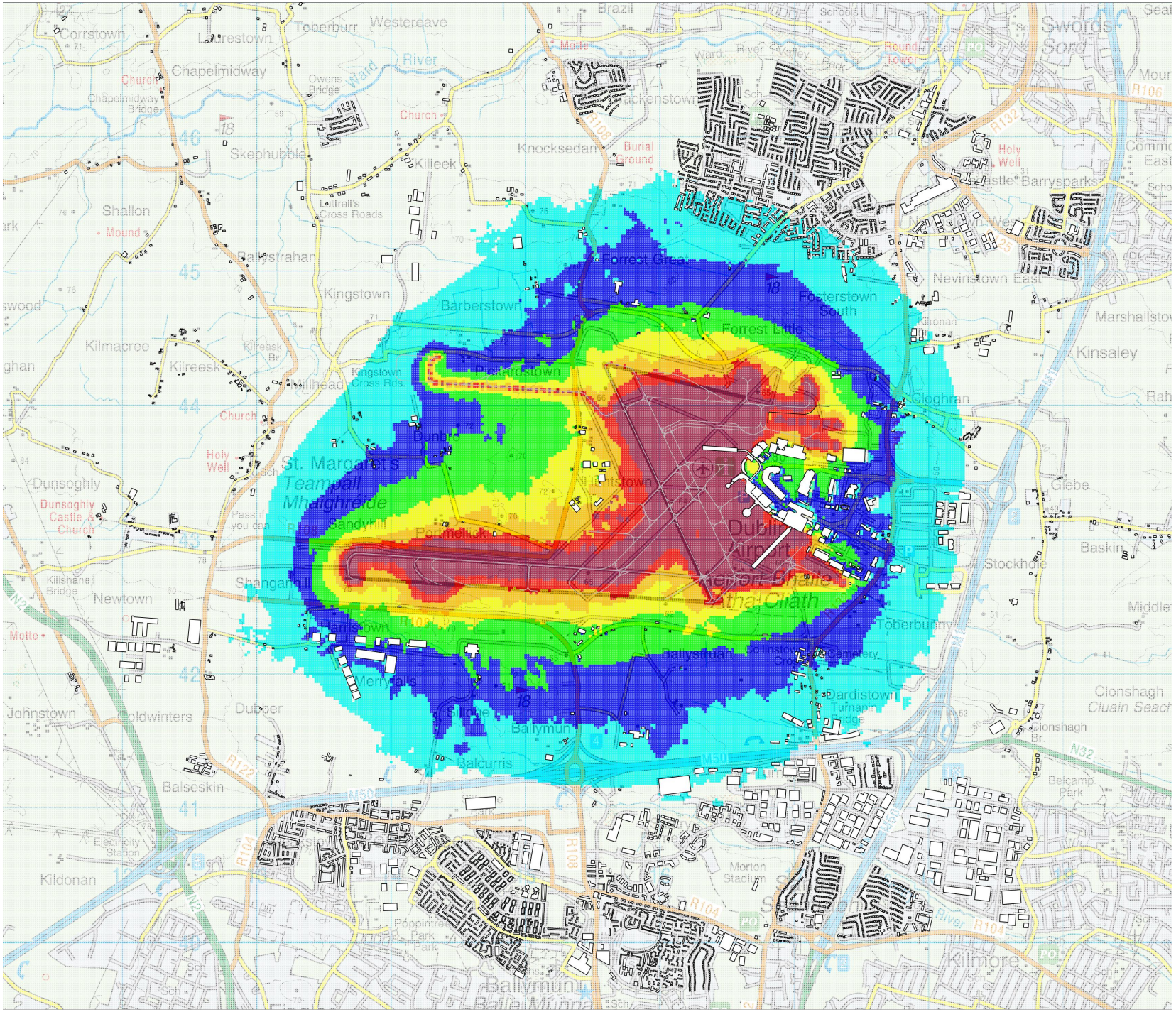

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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
- 60 - 62 dB(A) $L_{Aeq,16h}$
- 63 - 65 dB(A) $L_{Aeq,16h}$
- 66 - 68 dB(A) $L_{Aeq,16h}$
- 69 + dB(A) $L_{Aeq,16h}$

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Forecast LAeq,16h Ground Noise Contours
2022 Apron 5H Scenario
Figure 14C-15

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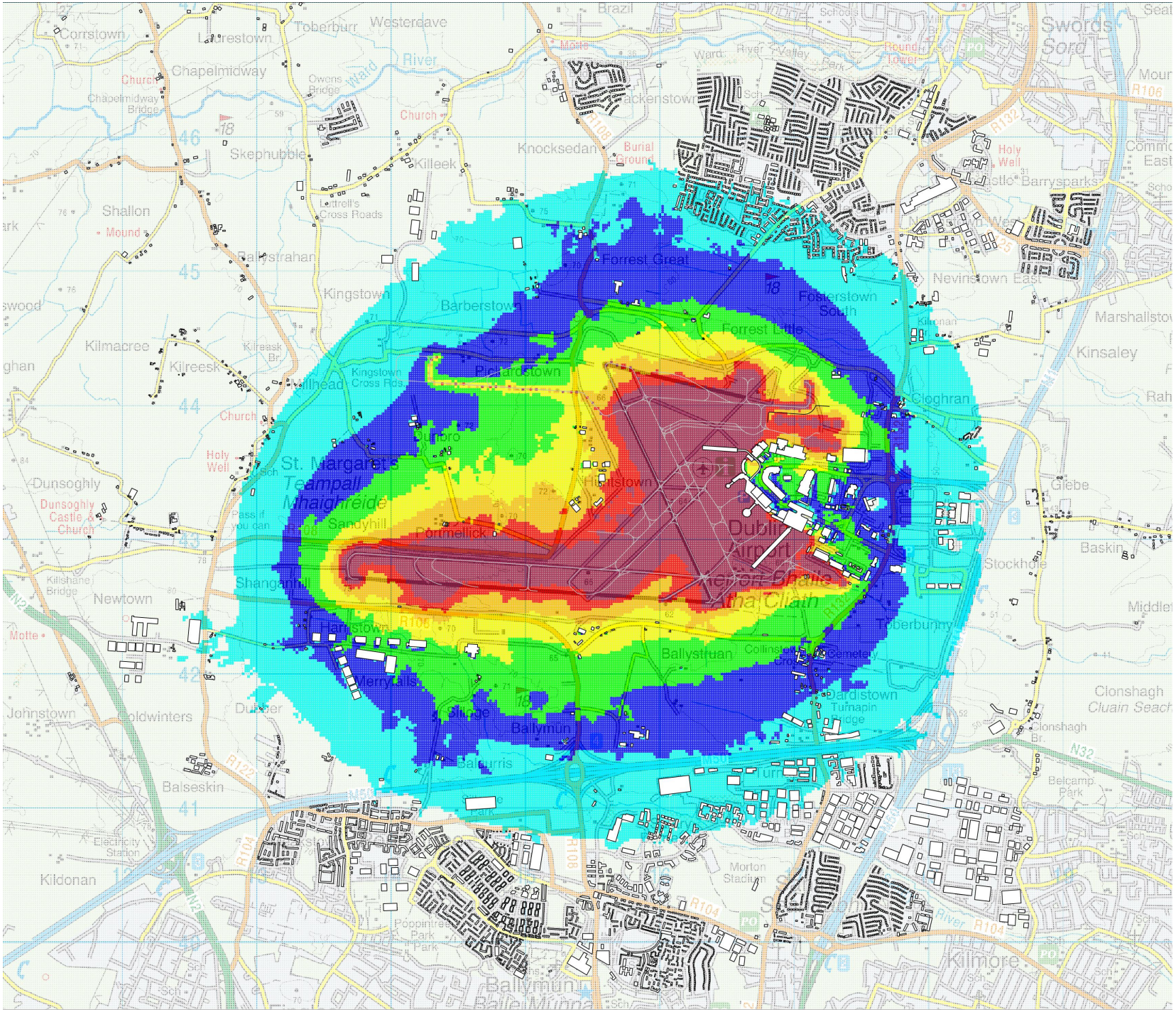

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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2022 Apron 5H Scenario
Figure 14C-16

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DATE: July 2021 SCALE: 1:40000@A4

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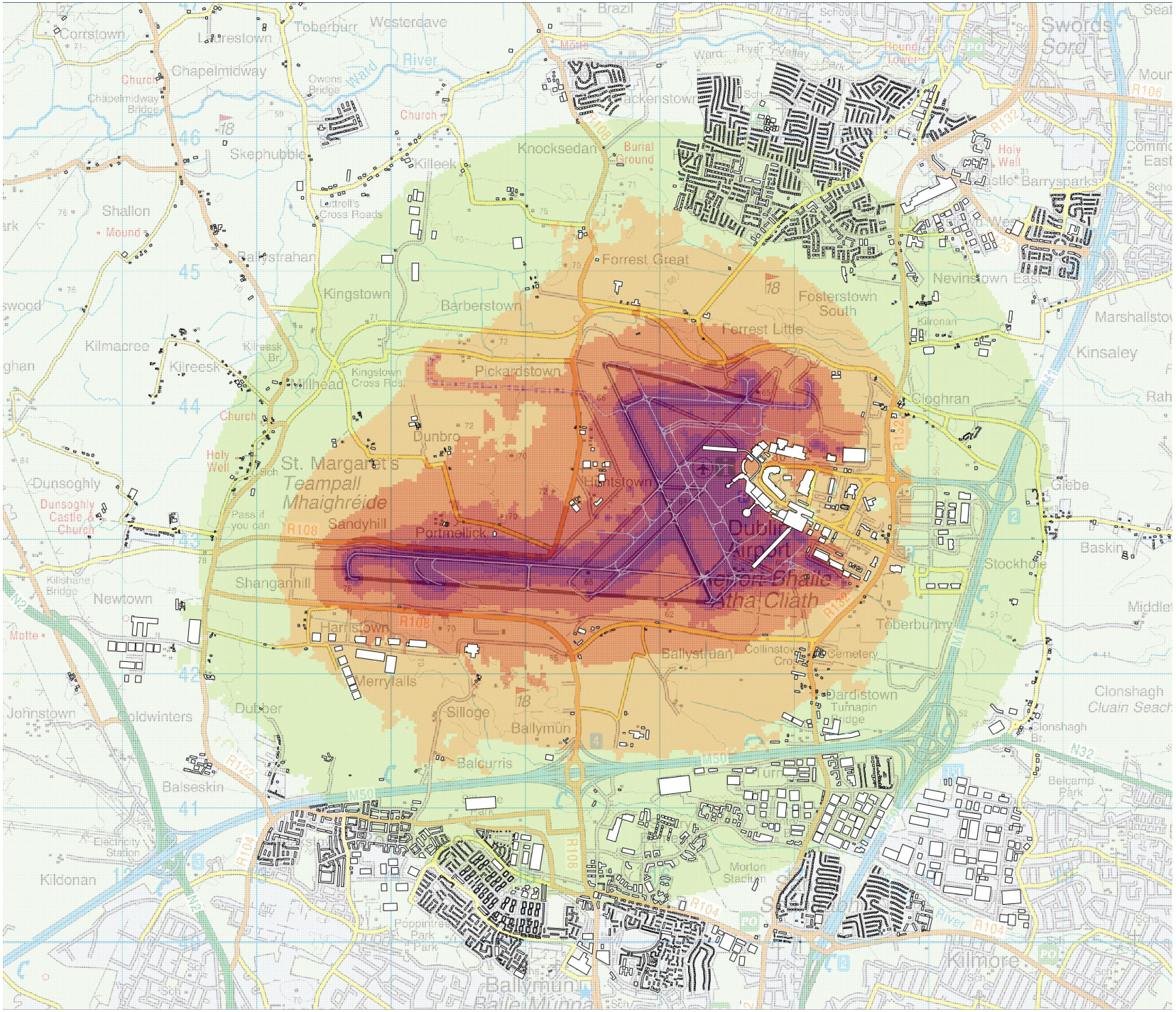

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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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Figure 14C-17

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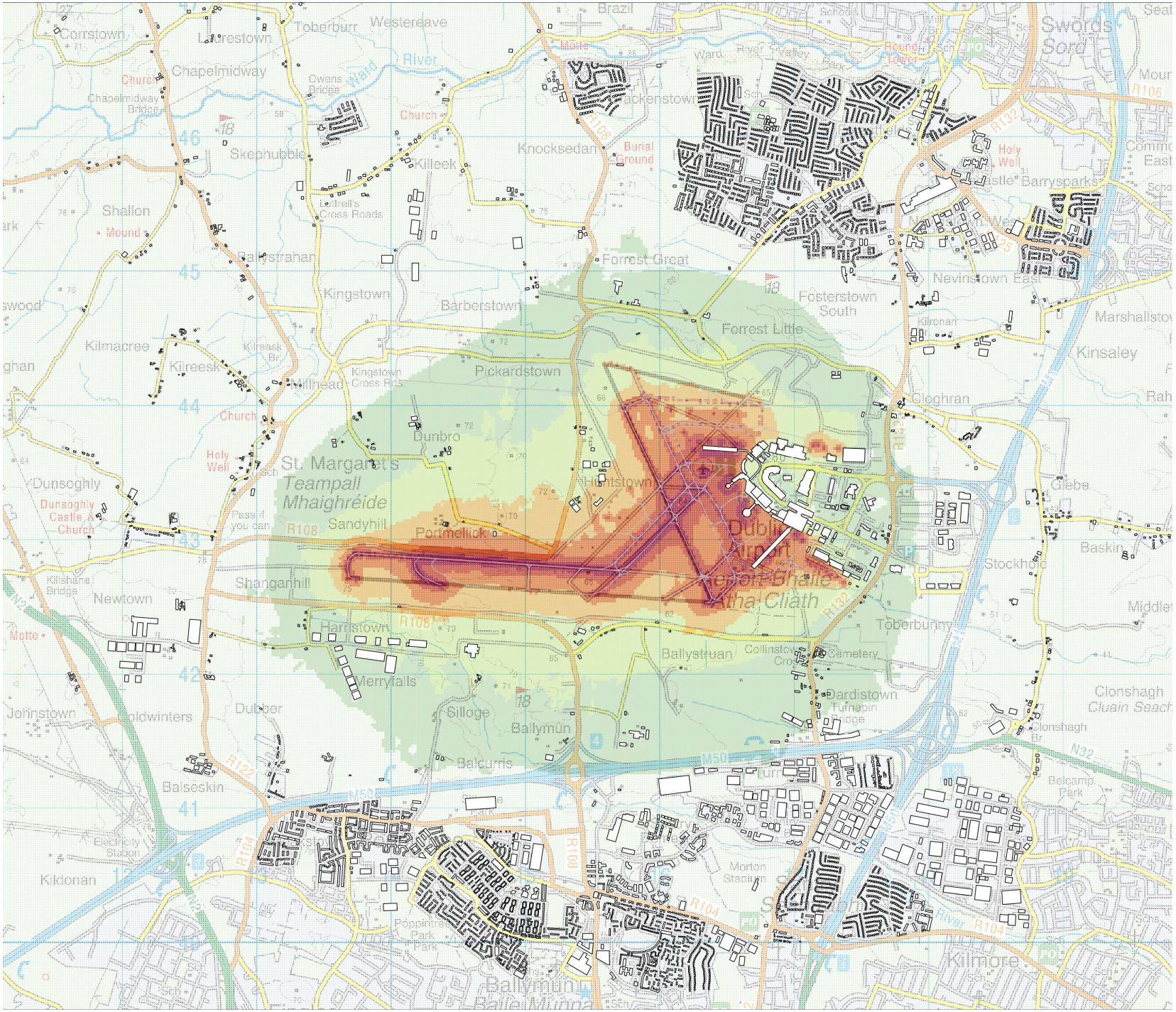

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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Forecast Lnight Ground Noise Contours
2025 Permitted Scenario
Figure 14C-18

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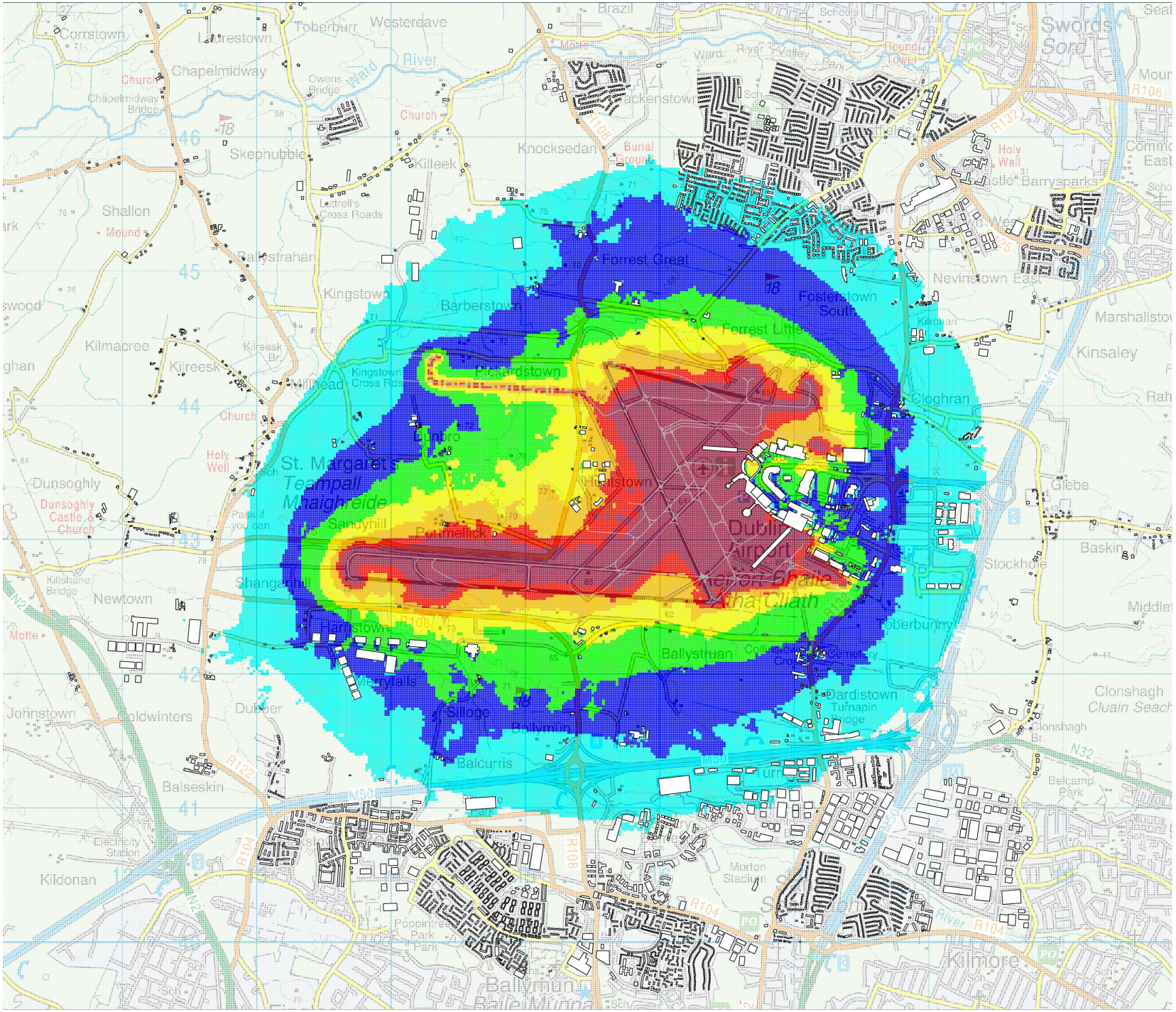

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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
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Figure 14C-19

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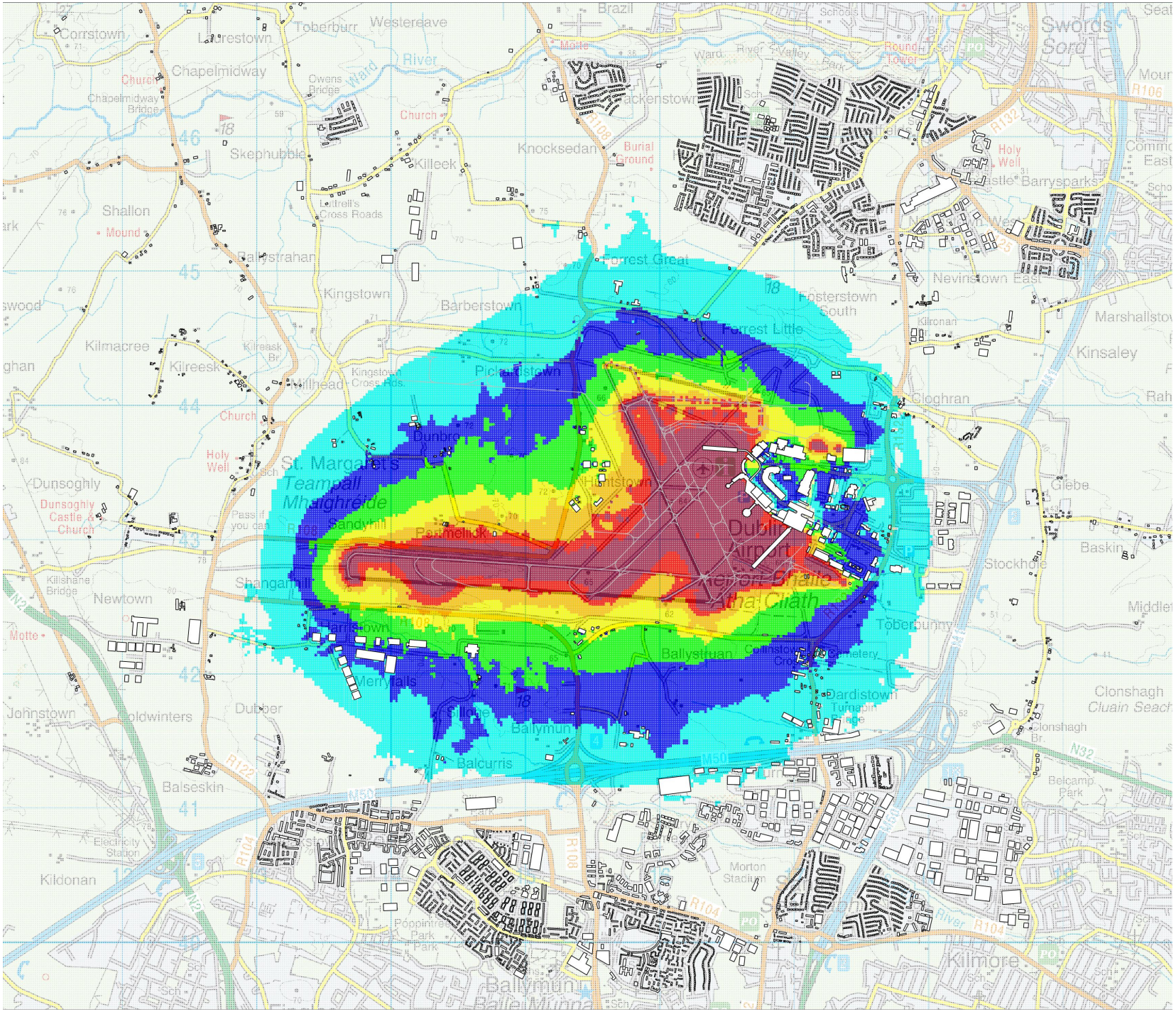

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
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- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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Figure 14C-20

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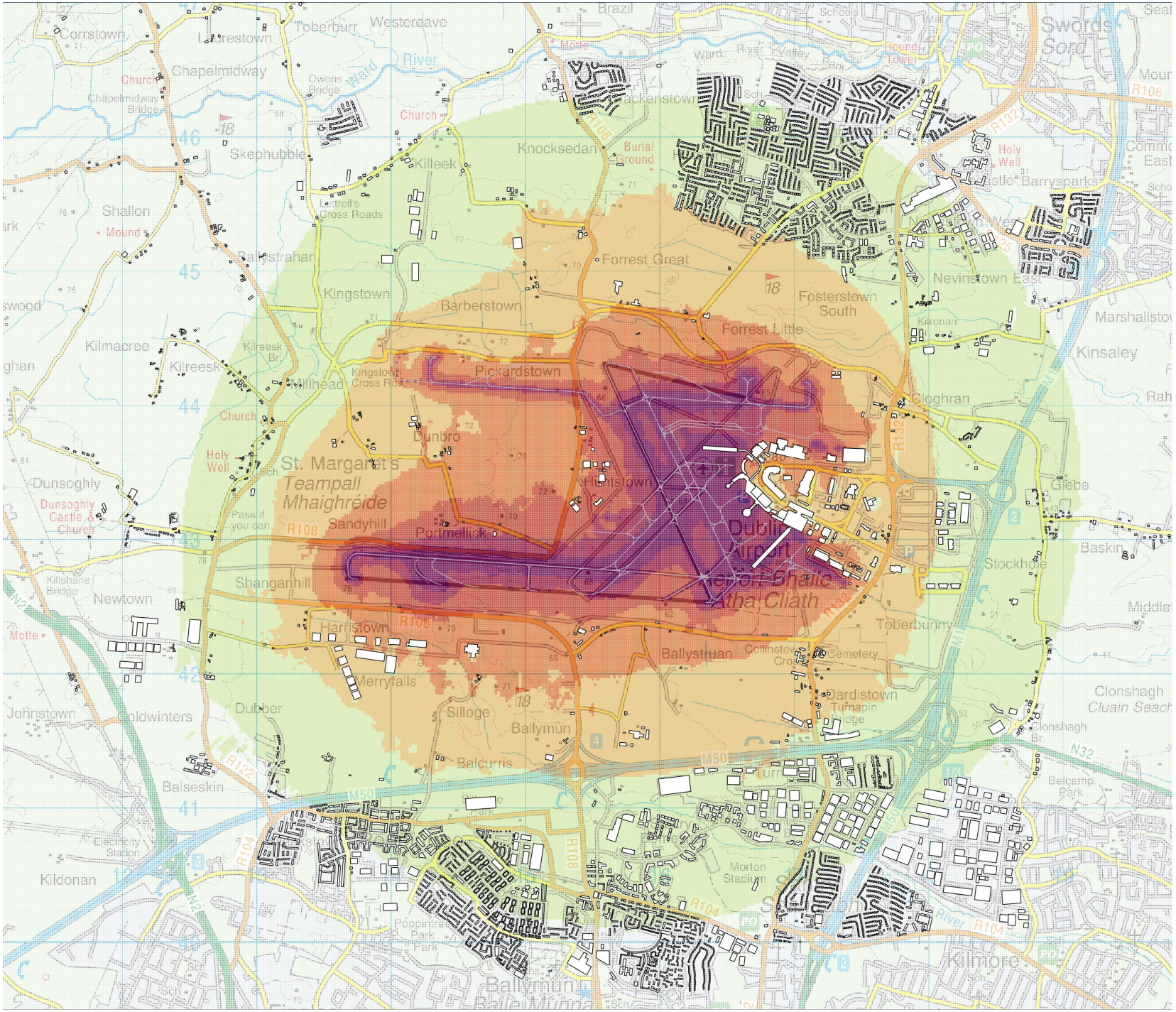

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LEGEND:

- 50 - 54 dB(A) L_{den}
- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
- 65 - 69 dB(A) L_{den}
- 70 - 74 dB(A) L_{den}
- 75 + dB(A) L_{den}

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Forecast Lden Ground Noise Contours
2025 Proposed Scenario
Figure 14C-21

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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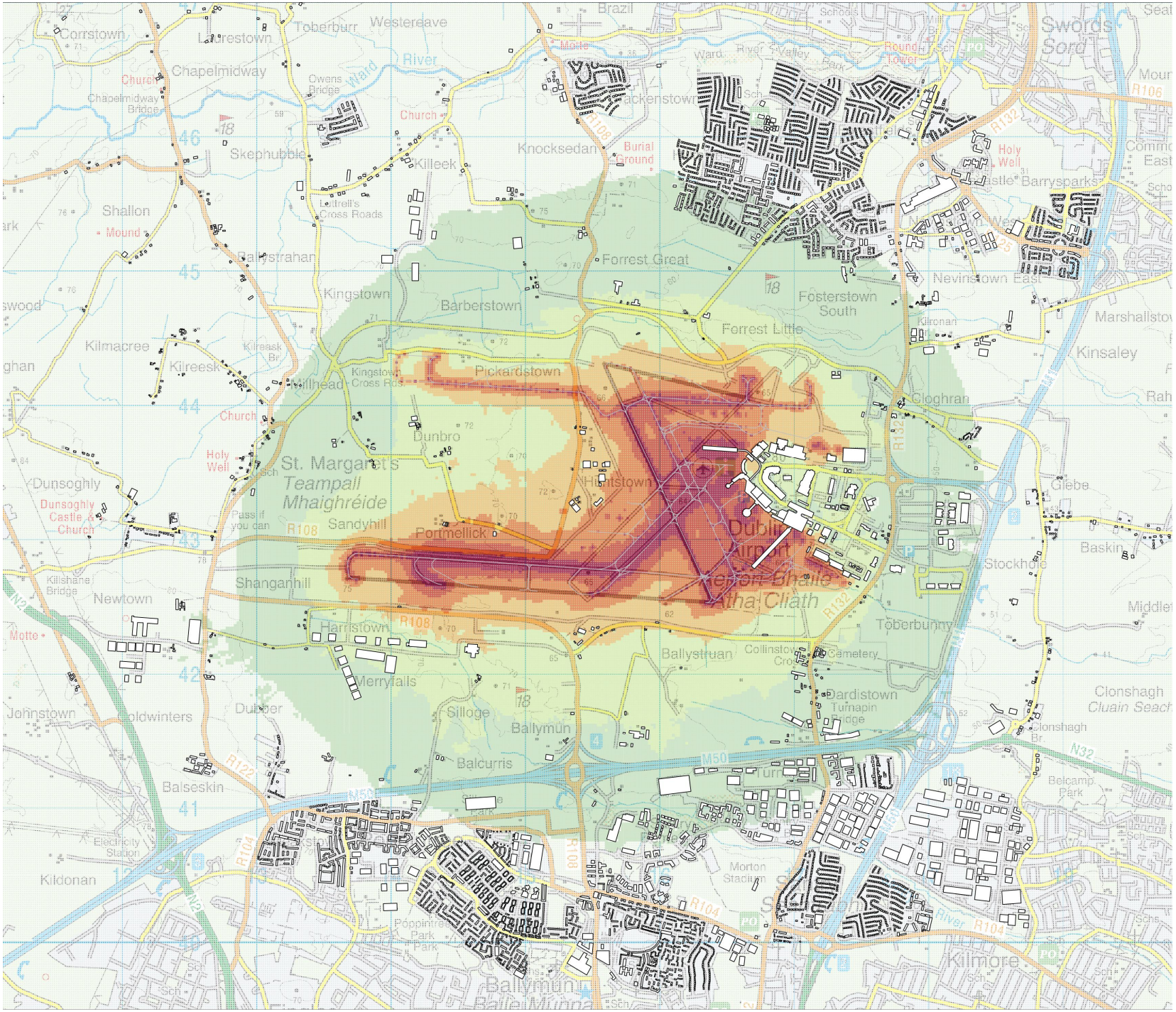

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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Dublin Airport
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Forecast Lnight Ground Noise Contours
2025 Proposed Scenario
Figure 14C-22

DRAWN: MP CHECKED: DC

DATE: July 2021 SCALE: 1:40000@A4

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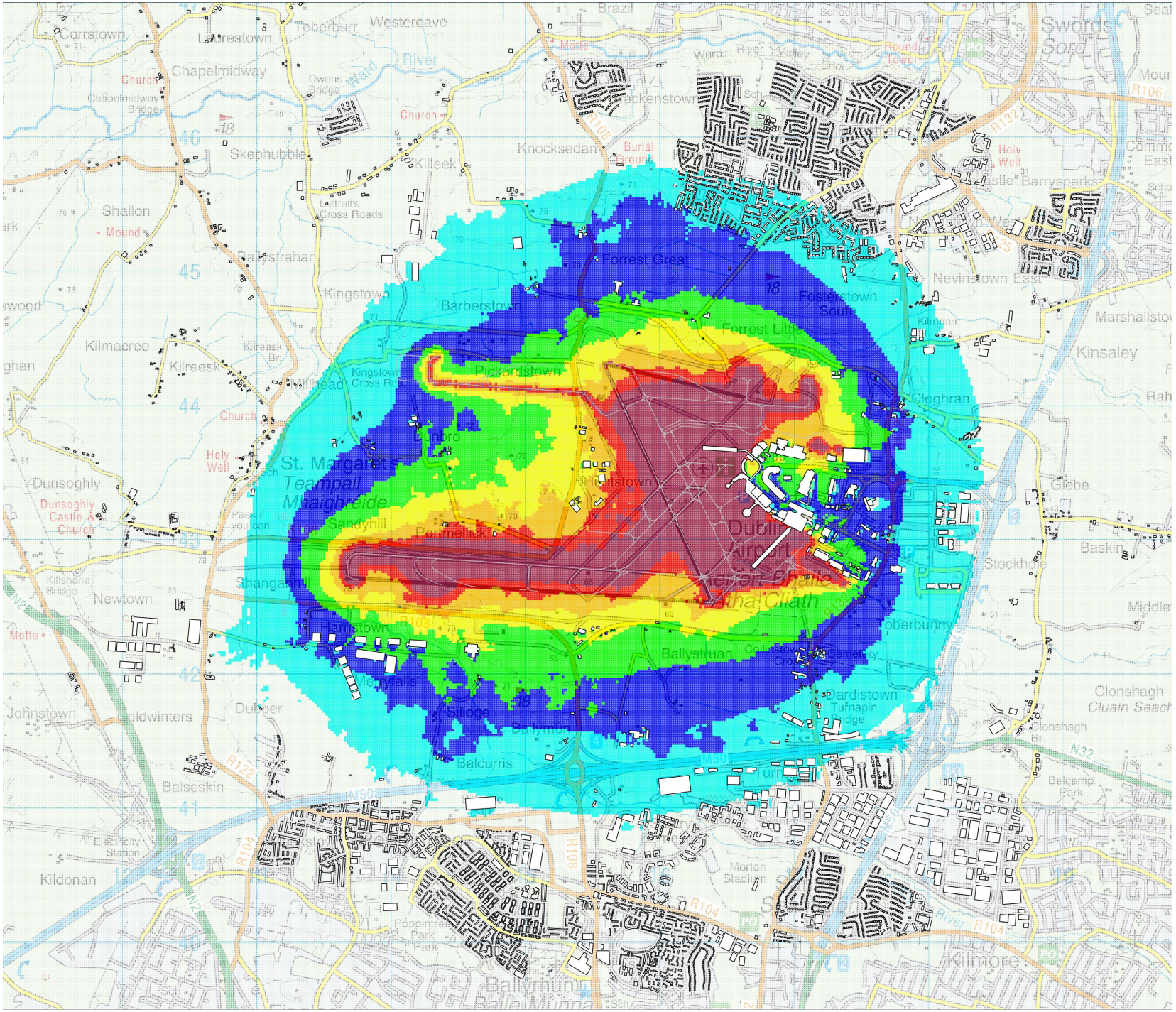

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LEGEND:

- 51 - 53 dB(A) $L_{Aeq,16h}$
- 54 - 56 dB(A) $L_{Aeq,16h}$
- 57 - 59 dB(A) $L_{Aeq,16h}$
- 60 - 62 dB(A) $L_{Aeq,16h}$
- 63 - 65 dB(A) $L_{Aeq,16h}$
- 66 - 68 dB(A) $L_{Aeq,16h}$
- 69 + dB(A) $L_{Aeq,16h}$

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Forecast LAeq,16h Ground Noise Contours
2025 Proposed Scenario
Figure 14C-23

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DATE: July 2021 SCALE: 1:40000@A4

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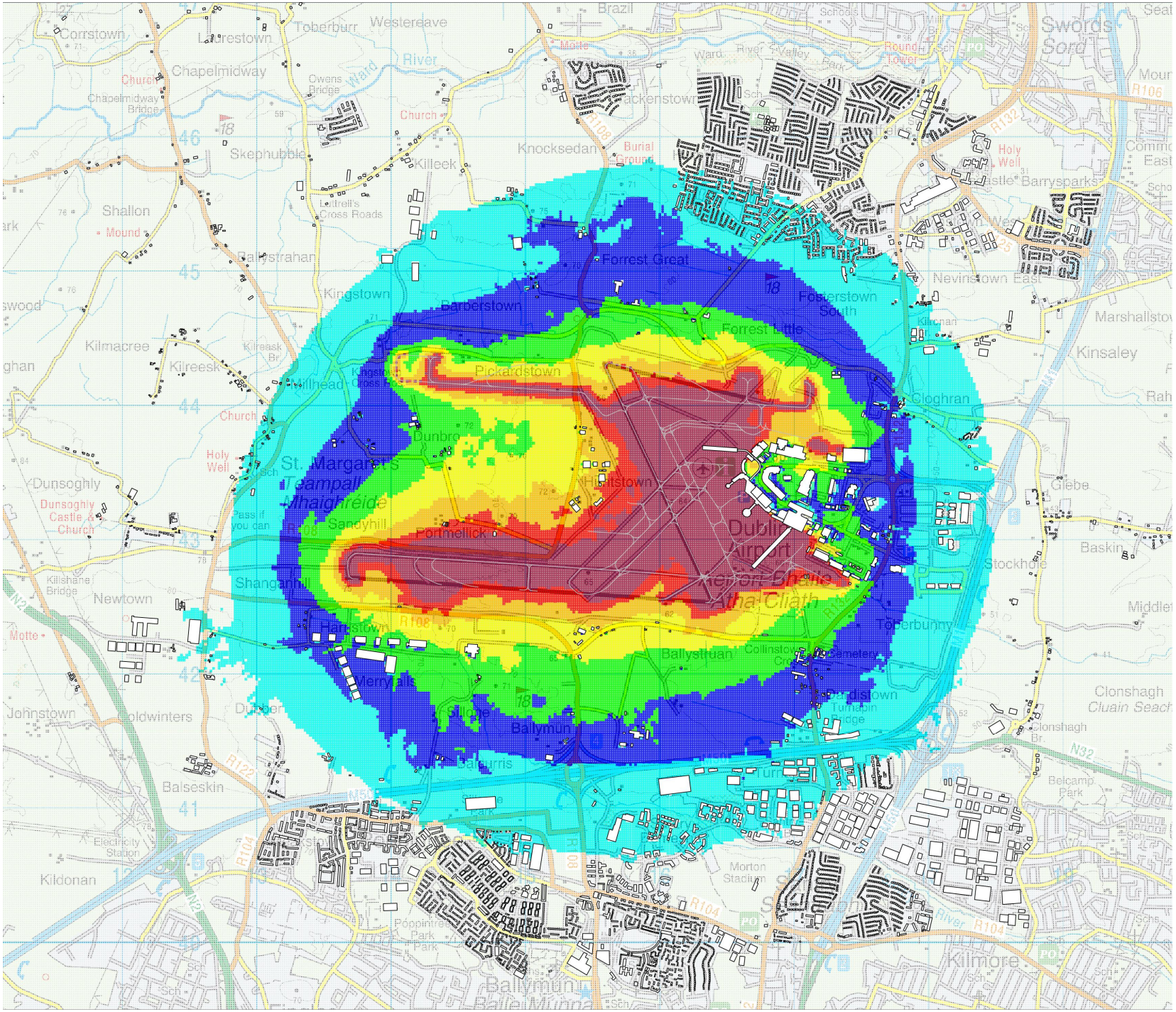

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LEGEND:

- 45 - 47 dB(A) $L_{Aeq,8h}$
- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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Forecast LAeq,8h Ground Noise Contours
2025 Proposed Scenario
Figure 14C-24

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DATE: July 2021 SCALE: 1:40000@A4

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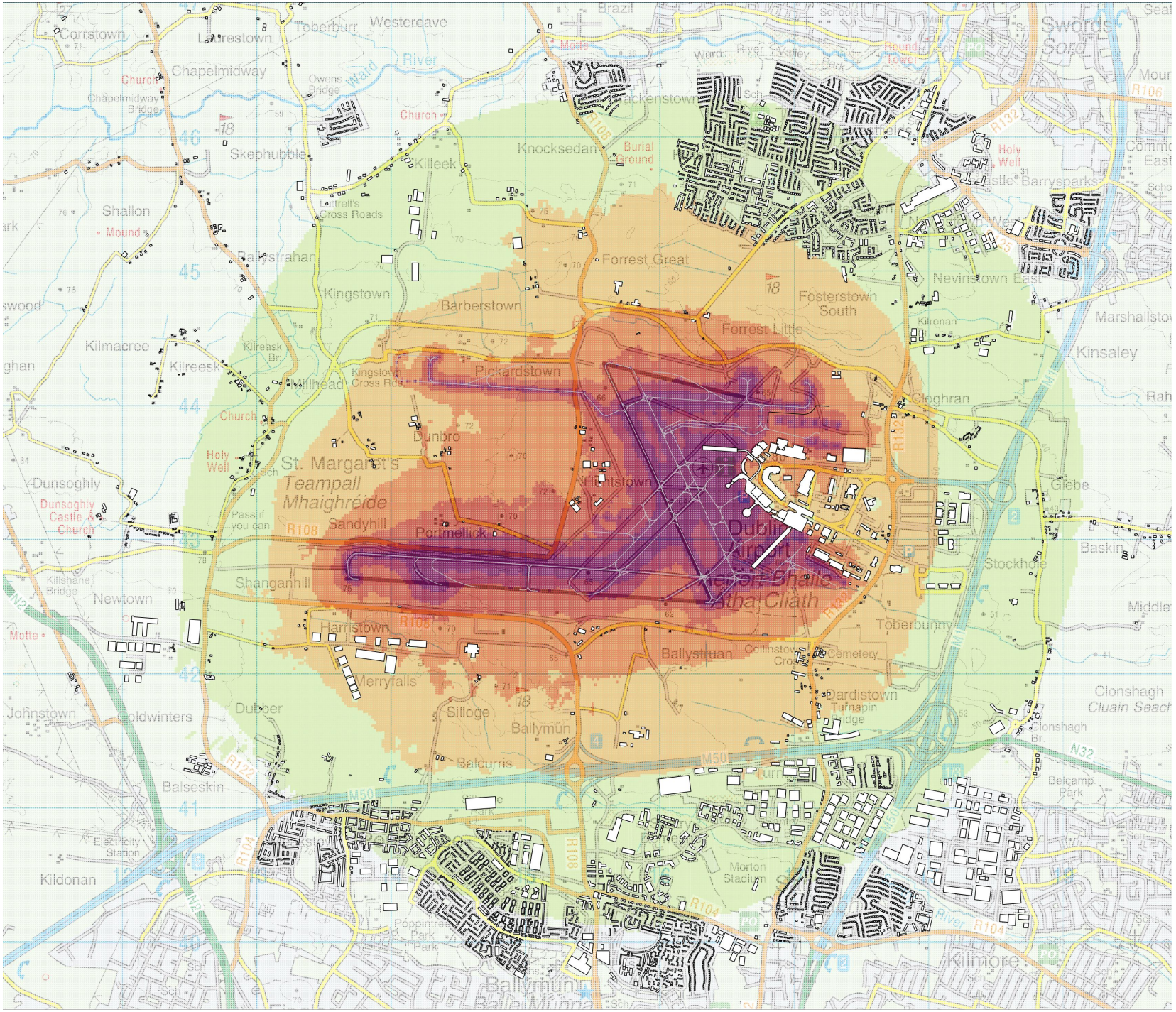
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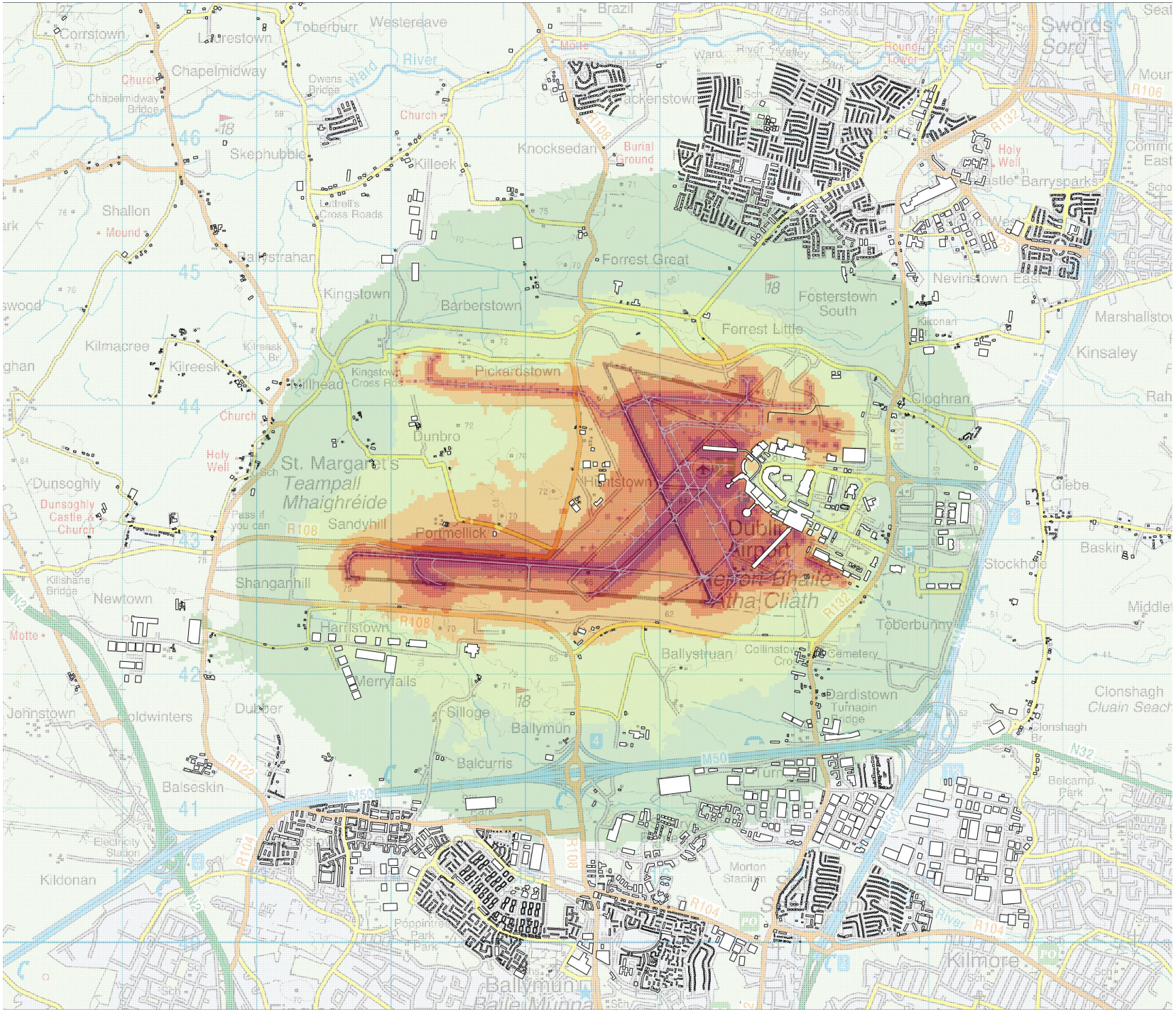
Baldoyle
Swords
Malahide
Portmellick
Sandyhill
Pickardstown
Forrest Great
Forrest Little
Barberstown
Kingstown
Knocksedan
Fosterstown South
Nevinstown East
Kinsaley
Cloghran
Glebe
Stockhole
Baskin
Toberbunny
Ballystruan
Merryfalls
Silloge
Ballymun
Balcurris
Dardistown
Clonshagh
Johnstown
Dubber
Balseskin
Kildonan
Newtown
Harristown
Shanganhill
Dunsoghly
Dunsoghly Castle & Church
St. Margaret's
Teampall Mhaighréide
Dunbro
Hollystown
Millhead
Kilmacree
Kilreask
Shallon
Mound
Skephubble
Killeek
Corrstown
Chapelmidway
Toberburr
Westerdave
Owens Bridge
Church
Holy Well
Burial Ground
Motte
Round Tower
Barrysparks
Kilronan
Marshallstown
Commonstown East
Collinstown Cemetery
Turnapin Bridge
Belcamp Park
Morton Stadium
Poppintree Park
Electricity Station
Kilmore
Coolock
Raheny
Killshane Bridge
Kilreask Br.
Kingstown Cross Rds
Lotrell's Cross Roads
Pass if you can
Holy Well
Church
Motte
Round Tower
Burial Ground
Holy Well
Church
Church
Church



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LEGEND:

- 45 - 49 dB(A) L_{night}
- 50 - 54 dB(A) L_{night}
- 55 - 59 dB(A) L_{night}
- 60 - 64 dB(A) L_{night}
- 65 - 69 dB(A) L_{night}
- 70 + dB(A) L_{night}

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Forecast Lnight Ground Noise Contours
2025 Apron 5H Scenario
Figure 14C-26

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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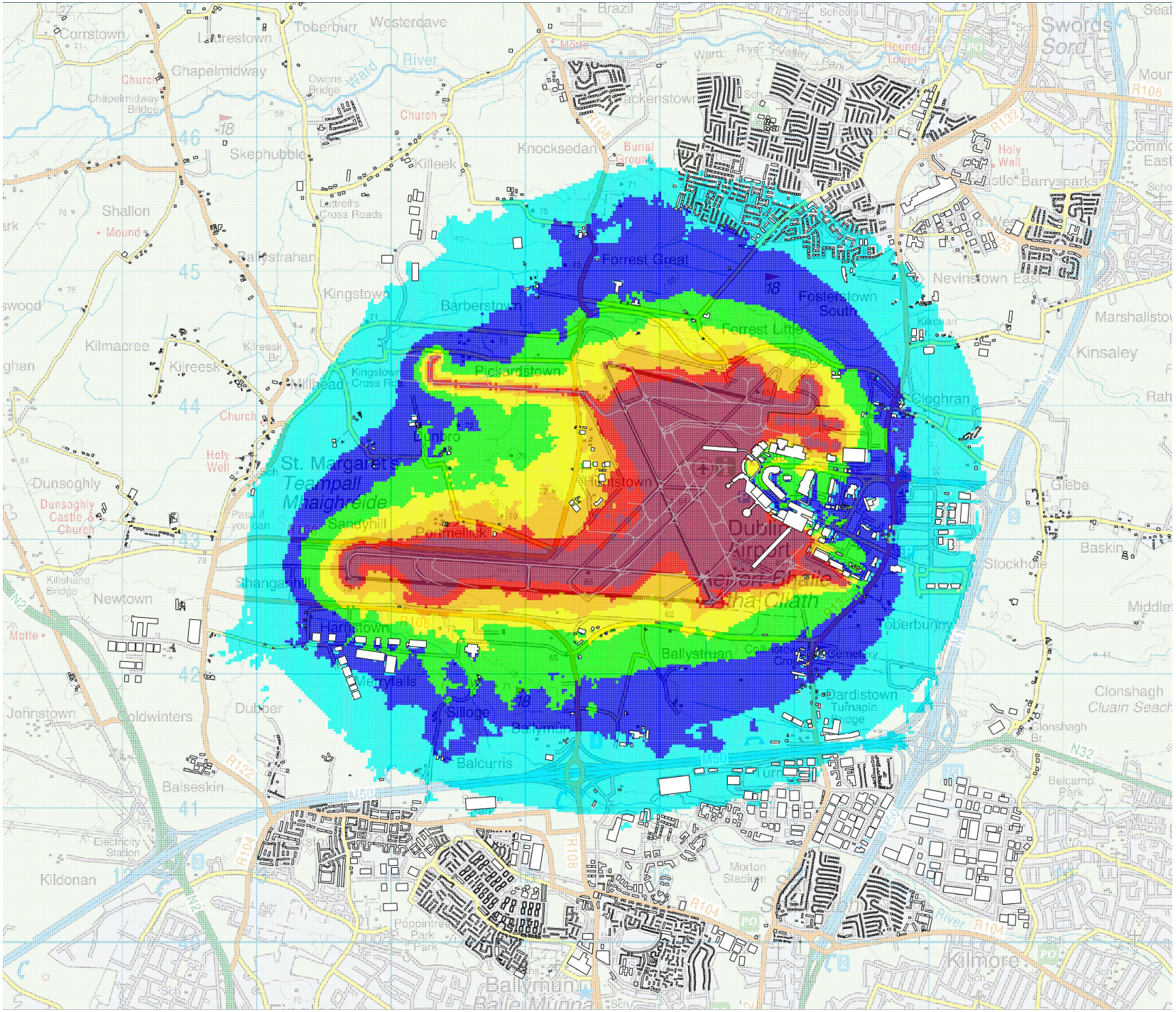
Dublin Airport
Forrest Great
Forrest Little
Pickardstown
Ballystruan
Sandyhill
Kilmacree
Kingstown
Barberstown
Fosterstown South
Nevinstown East
Kinsaley
Cloghran
Glebe
Baskin
Stockhole
Toberbunny
Clonshagh
Cluain Seach
Turnapin Bridge
Balcurris
Balseskin
Kildonan
Johnstown
Newtown
Dunsoghly
Dunsoghly Castle & Church
Shallon
Mound
Skephubble
Knocksedan
Killeek
Barryspark
Swords
Sord
Marshallstown
Kilmore
Ballymun
Baile Mhuire
Belcamp Park
Morton Stadium
Poppintree Park
Electricity Station
Holy Well
Burial Ground
Church
Motte
Pass if you can
Kilshane Bridge
Kilreask
Kilreask Br.
Kingstown Cross Roads
Strell's Cross Roads
Owens Bridge
Chapelmidway Bridge
Chapelmidway
Corrstown
Toberburr
Westerdave
Moresteown
Brazil
Ward River Valley
Round Tower
Mour
Commo
East
Scho
Rah
Glebe
Middle
Clonshagh
Belcamp Park
Poppintree Park
Morton Stadium
Kilmore
Ballymun
Baile Mhuire
Dublin Airport
Cnoc Ciath
Harristown
Merrylands
Silloge
Dardistown
Ballystruan
Sandyhill
Shangarhill
Dunber
Oldwinters
Johnstown
Balseskin
Balcurris
Kildonan
Newtown
Dunsoghly
Shallon
Kilmacree
Kingstown
Barberstown
Forrest Great
Forrest Little
Pickardstown
Fosterstown South
Nevinstown East
Kinsaley
Cloghran
Glebe
Baskin
Stockhole
Toberbunny
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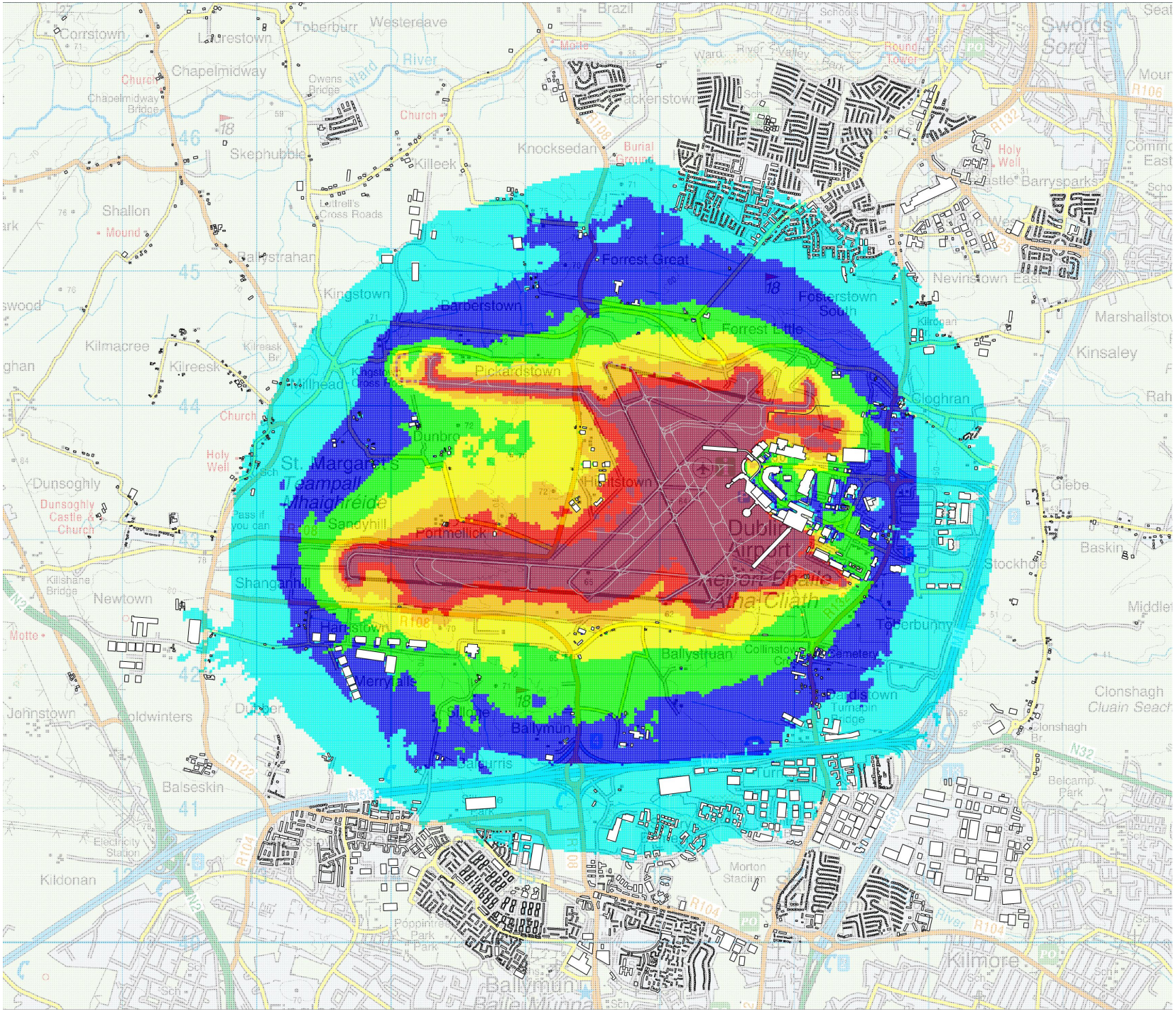
Cluain Seach
Turnapin Bridge
Balcurris
Balseskin
Kildonan
Johnstown



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LEGEND:

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- 48 - 50 dB(A) $L_{Aeq,8h}$
- 51 - 53 dB(A) $L_{Aeq,8h}$
- 54 - 56 dB(A) $L_{Aeq,8h}$
- 57 - 59 dB(A) $L_{Aeq,8h}$
- 60 - 62 dB(A) $L_{Aeq,8h}$
- 63 + dB(A) $L_{Aeq,8h}$

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2025 Apron 5H Scenario
Figure 14C-28

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DATE: July 2021 SCALE: 1:40000@A4

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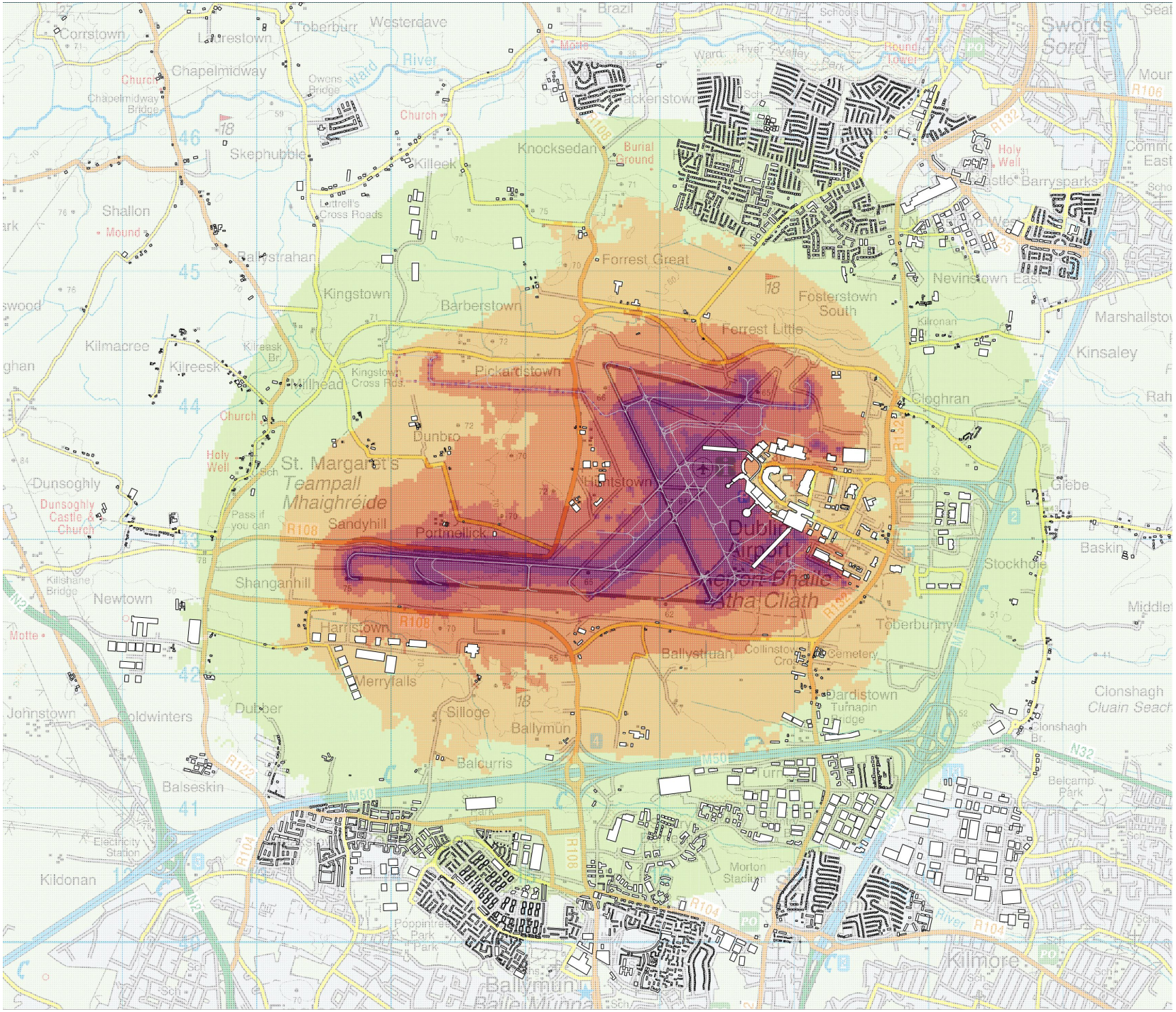

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- 55 - 59 dB(A) L_{den}
- 60 - 64 dB(A) L_{den}
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2035 Permitted Scenario
Figure 14C-29

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DATE: July 2021 SCALE: 1:40000@A4

Drawing No:

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Appendix 14D. Ground Noise Baseline Survey

14D. Ground Noise Baseline Survey

14D.1 Introduction

14D.1.1 This appendix of the Environmental Impact Assessment Report (EIAR), prepared by Bickerdike Allen Partners LLP (BAP), describes the survey work undertaken to measure the baseline noise conditions in the vicinity of Dublin Airport, where the surrounding noise environment is affected primarily by transport noise from the local road network and from airport operations. It also describes survey work undertaken to inform the reference noise levels used in the assessment.

14D.1.2 Due to the ongoing COVID-19 pandemic and its impact on the transport network, the noise conditions at the present time are likely to be unrepresentative of the normal baseline noise conditions. This effect is expected to be temporary, although the precise timescale is uncertain. Because of this, survey work undertaken by AWN Consulting Ltd. (AWN) in 2016 has been used in lieu of current baseline noise monitoring.

14D.1.3 The baseline noise surveys comprised a combination of long-term unattended and short-term attended noise monitoring, carried out at locations around Dublin Airport to establish the prevailing ambient and background noise conditions during both the daytime and night-time.

14D.1.4 An attended survey was also undertaken by BAP in 2019 to measure aircraft taxi noise levels for use in the modelling of current and future ground noise scenarios.

14D.2 Methodology

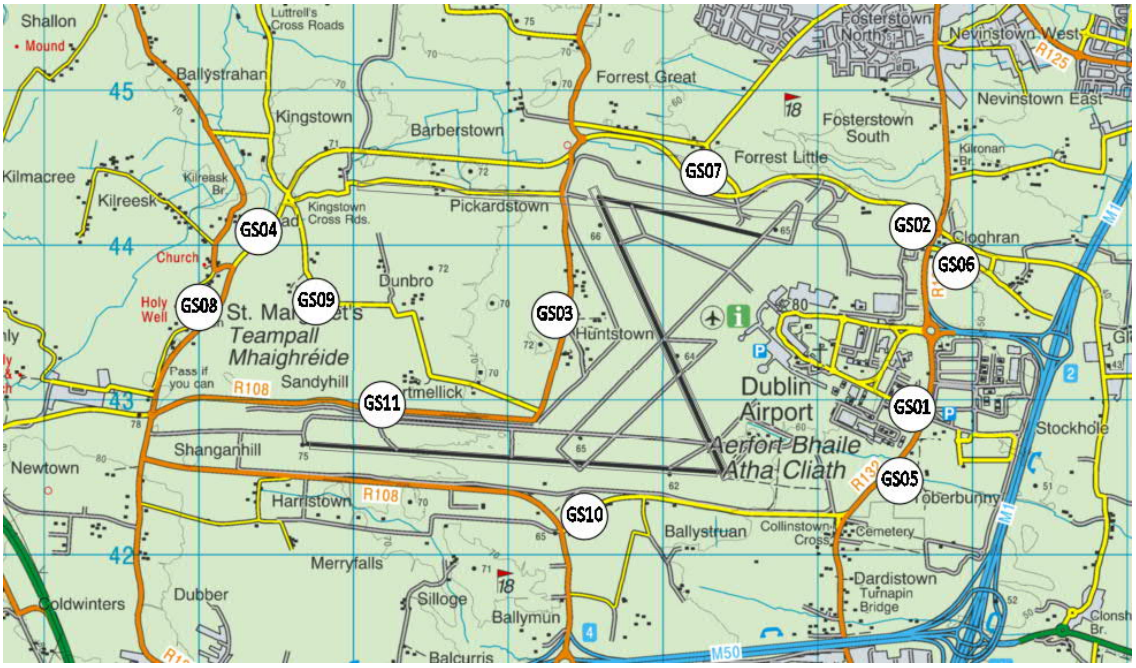
14D.2.1 The survey work described here comprises three discrete elements; the long-term and short-term surveys undertaken by AWN in 2016; and the aircraft taxi noise survey undertaken by BAP in 2019.

14D.2.2 The survey locations and dates are summarised in Table 14D-1, with the locations illustrated in Figure 14D-1. Baseline noise monitoring locations were selected to obtain representative ambient and background noise levels close to the airport. Because ground noise sources are restricted to the airport site, the area covered is more focused compared to the air noise baseline receptor set.

Table 14D-1: Ground noise baseline survey locations and dates

Receptor	Survey	Location	Dates of Survey
GS01	Short-term	Cloghran House car park off the R132, E of airport	2016/07/25 – 2016/07/28
GS02	Short-term	Creche off Naul Road, NE of airport	2016/07/25 – 2016/07/28
GS03	Short-term	Residential properties on the R108, W of airport	2016/07/25 – 2016/07/28
GS04	Short-term	Field off the R122 at St. Margaret's, W of airport	2016/07/25 – 2016/07/28
GS05	Long-term	daa owned site on the R132, SE of airport	2016/08/02 – 2016/08/10
GS06	Long-term	daa owned site on Old Stockhole Lane, NE of airport	2016/08/02 – 2016/08/10
GS07	Long-term	Field adjacent to Cooks Road and Forest Road, N of airport	2016/08/24 – 2016/09/01
GS08	Long-term	Field adjacent to St. Margaret's School, W of airport	2016/07/28 – 2016/07/29
GS09	Long-term	daa owned site on Dunbro lane, W of airport	2016/08/10 – 2016/08/17
GS10	Long-term	daa owned site on Old Airport Road, S of airport	2016/08/11 – 2016/08/17
GS11	Aircraft Taxi	Airport perimeter road, facing taxiways S5 and S6	2019/10/02

Figure 14D-1: Ground noise baseline survey locations



14D.2.3 All attended noise monitoring measurements were undertaken in general accordance with the British Standard BS 7445 Description and measurement of environmental noise. This comprised locations with free field conditions and 15 minute measurement samples (unless stated otherwise) taken at the specified locations. Repeat measurements were made at each location on a given day or night. The microphone of the noise monitor was located approximately 1.5 m above ground level with the monitor mounted on a tripod and away from any reflective surfaces. Observations were made of the noise climate prevailing at the time. These attended measurements include the noise contribution of aircraft activity as well as non-aircraft related activities. This procedure is commonly used to obtain attended environmental noise information, supplemented where possible with unattended noise measurement data. Details of the sound level meters used for each survey are available on request.

14D.2.4 During the unattended surveys noise measurements were obtained over a period of around three weeks at each location. Unattended measurements comprised a series of continuous 15 minute measurement samples (unless stated otherwise) over the full survey period. The noise monitors were located in environmental cases with the microphones connected via extension cables. The microphones were fitted with windshields and attached to tripods so they were positioned approximately 1.5 m above local ground level.

14D.2.5 For the aircraft taxi noise survey, $L_{eq,T}$ measurements were taken, both in terms of the overall A-weighted level and also for individual octave bands. Each measurement typically lasted around 90 seconds and was taken at a fixed position on the airport perimeter road, approximately 70 m from the junction of taxiway S6 and taxiway S. This was the primary exit from the runway used by R28 arrivals on the day of the survey.

14D.3 Results

Short-Term Noise Monitoring

14D.3.1 A summary of average values for each measurement location is given in Table 14D-2. Detailed results are provided in Table 14D-3**Error! Reference source not found.** to Table 14D-6**Error! Reference source not found.**.

Table 14D-2: Short-term noise monitoring daytime results summary

Metric		Location			
		GS01	**GS02**	**GS03**	**GS04**
Daytime (07:00 to 23:00)	$L_{Aeq,T}$ (dB)	59	57	56	70
	L_{AF90} (dB)[1]	55	53	44	51
Night-time (23:00 to 07:00)	$L_{Aeq,T}$ (dB)	54	53	52	64
	L_{AF90} (dB)[1]	49	48	41	49

[1] Average of $L_{AF90,15min}$ measurements

Table 14D-3: Location GS01,short-term noise monitoring results summary

Date	Start	$L_{Aeq,15min}$ (dB)	$L_{AF90,15min}$ (dB)	Notes
2016/07/25	10:30	60	56	Car park activity. Plant noise from public house. Aircraft arrivals and departures.
	14:05	59	56	
	15:37	58	54	
2016/07/27	10:21	58	54	
	11:50	57	53	
	23:07	53	48	Road traffic along Swords Road dominant. M1 traffic in distance. Airport ground and air noise.
2016/07/28	05:25	54	50	

Table 14D-4: Location GS02,short-term noise monitoring results summary

Date	Start	$L_{Aeq,15min}$ (dB)	$L_{AF90,15min}$ (dB)	Notes
2016/07/25	12:37	56	52	Road traffic along Naul Road. Construction activity nearby. Aircraft arrivals and departures.
	14:28	56	53	
	16:16	56	54	
2016/07/27	10:43	59	54	
	12:12	56	51	
2016/07/28	23:34	52	47	Road traffic along Naul Road. Aircraft arrivals and departures. Aircraft ground noise from nearby hangars.
	05:51	53	48	

Table 14D-5: Location GS03,short-term noise monitoring results summary

Date	Start	$L_{Aeq,15min}$ (dB)	$L_{AF90,15min}$ (dB)	Notes
2016/07/25	13:12	56	45	Road traffic along R108. Aircraft arrivals and departures.
	14:49	56	44	
	16:37	57	46	Grass cutting to rear of property.
2016/07/27	11:04	53	44	Work activities in adjacent yard.
	12:33	55	43	
2016/07/28	23:56	52	41	Road traffic along R108. Aircraft arrivals and departures.
	06:17	51	40	

Table 14D-6: Location GS04,short-term noise monitoring results summary

Date	Start	$L_{Aeq,15min}$ (dB)	$L_{AF90,15min}$ (dB)	Notes
2016/07/25	13:38	70	51	Road traffic along L3132. Aircraft overflights. Birdsong and horses in field.
	15:12	70	54	
2016/07/27	09:53	70	50	
	11:25	69	49	
	12:53	69	49	
2016/07/28	00:16	62	48	Road traffic along L3132. Aircraft overflights.
	06:42	66	49	

Long-Term Noise Monitoring

14D.3.2 Noise levels for the long-term surveys have been presented in terms of the $L_{Aeq,T}$ and $L_{AF90,T}$ metrics for the 16 hour daytime (07:00-23:00) and 8 hour night-time (23:00-07:00) periods.

14D.3.3 $L_{Aeq,T}$ is commonly used to denote the ambient noise level and signifies the average noise level which is equivalent in energy terms to that produced by the various fluctuating noise levels that occur in the measurement period.

14D.3.4 $L_{AF90,T}$ is commonly used to denote the prevailing background noise level and specifically, denotes the level of noise which is exceeded for 90% of the time.

14D.3.5 A summary of average values for each measurement location is given in Table 14D-7**Error! Reference source not found.**. Detailed results are provided in Table 14D-8 to Table 14D-13 alongside time history graphs in

[1] **Average of $L_{AF90,15min}$ measurements**

14D.3.6 Figure 14D-2 to Figure 14D-7.

14D.3.7 The results indicate that the general ambient noise level around Dublin Airport lies in the range of 50 to 70 dB $L_{Aeq,16h}$ during the daytime with an underlying background noise level in the range of 45 to 55 dB L_{AF90}. The wide range of ambient noise levels indicate that this is dependent on the proximity to local noise sources, for example airborne aircraft, road traffic, or local schools.

14D.3.8 During the night, ambient noise levels are generally around 3 – 5 dB lower than during the day and background noise levels are typically 5 – 10 dB lower. Road traffic noise remains is a significant factor, with roadside locations tending to have higher ambient noise levels.

Table 14D-7: Long-term noise monitoring results summary

Metric	Location					
	GS05	**GS06**	**GS07**	**GS08[2]**	**GS09**	**GS10**
$L_{Aeq,16h}$ (dB)	71	53	58	65	59	66
$L_{AF90,day}$ (dB)[1]	50	49	52	51	47	55
$L_{Aeq,8h}$ (dB)	68	50	56	57	54	63
$L_{AF90,night}$ (dB)[1]	45	45	48	38	39	48

[1] Average of $L_{AF90,15min}$ measurements between 07:00 – 23:00

[2] 5 minute base measurement period

Table 14D-8: Location GS05, long-term noise monitoring results summary

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)[1]	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)[1]
2016/08/02	72	48	69	46
2016/08/03	72	53	69	46
2016/08/04	71	50	67	43
2016/08/05	71	48	68	44
2016/08/06	71	49	68	46
2016/08/07	72	51	68	47
2016/08/08	71	50	68	46
2016/08/09	71	50	66	44
2016/08/10	71	50	-	-
Range	71 – 72	48 – 53	66 – 69	43 – 47
Average	71	50	68	45

[1] Average of $L_{AF90,15min}$ measurements

Figure 14D-2: Location GS05, long-term noise monitoring time history

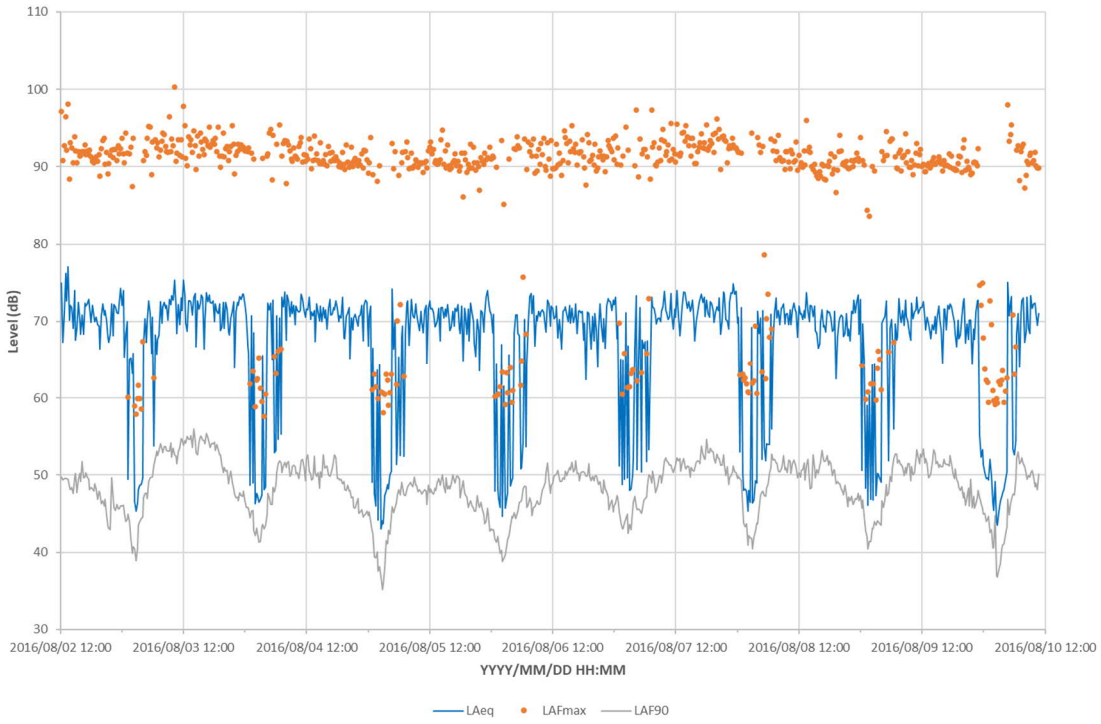


Table 14D-9: Location GS06, long-term noise monitoring results summary

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)[1]
2016/08/02	54	48	52	48
2016/08/03	57	54	50	47
2016/08/04	50	47	46	40
2016/08/05	50	47	49	44
2016/08/06	54	50	51	48
2016/08/07	56	52	52	47
2016/08/08	51	48	48	44
2016/08/09	51	47	48	43
2016/08/10	50	46	-	-
Range	50 – 57	46 – 54	46 – 52	40 – 48
Average	53	49	50	45

[1] Average of $L_{AF90,15min}$ measurements

Figure 14D-3: Location GS06, long-term noise monitoring time history

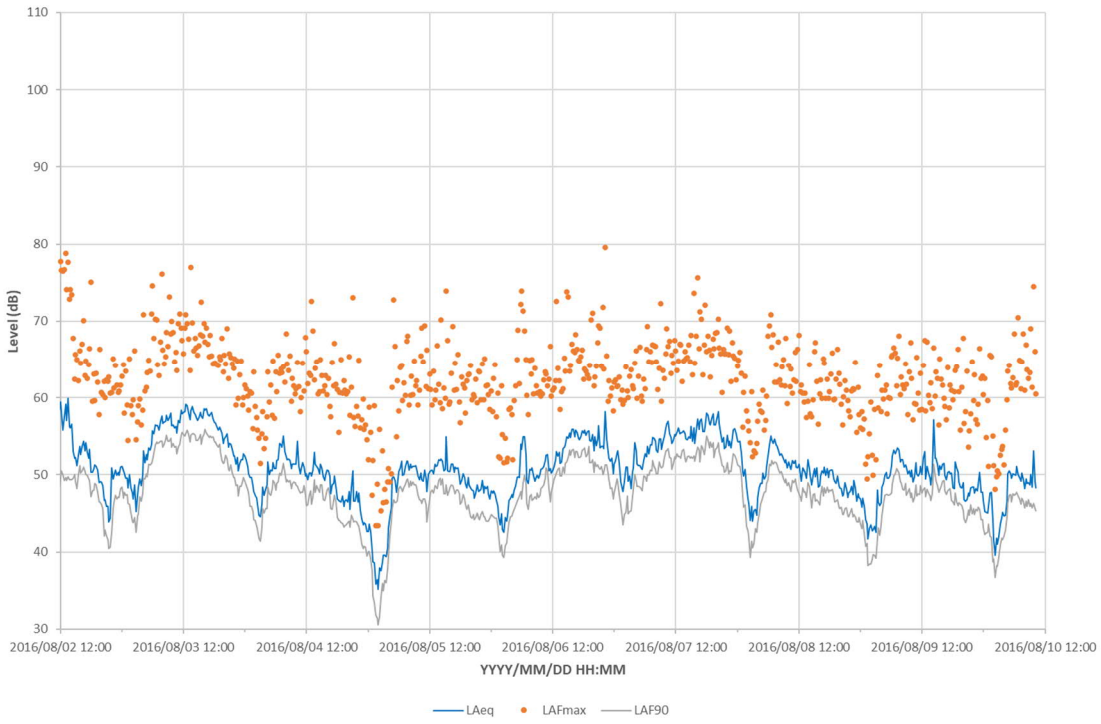


Table 14D-10: Location GS07, long-term noise monitoring results summary

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)[1]
2016/08/24	56	50	56	50
2016/08/25	57	52	58	50
2016/08/26	59	53	55	48
2016/08/27	55	49	47	41
2016/08/28	52	46	56	46
2016/08/29	58	53	56	49
2016/08/30	60	54	55	48
2016/08/31	62	53	57	49
2016/09/01	59	55	-	-
Range	52 – 62	46 – 55	47 – 58	41 – 50
Average	58	52	56	48

[1] Average of $L_{AF90,15min}$ measurements

Figure 14D-4: Location GS07, long-term noise monitoring time history

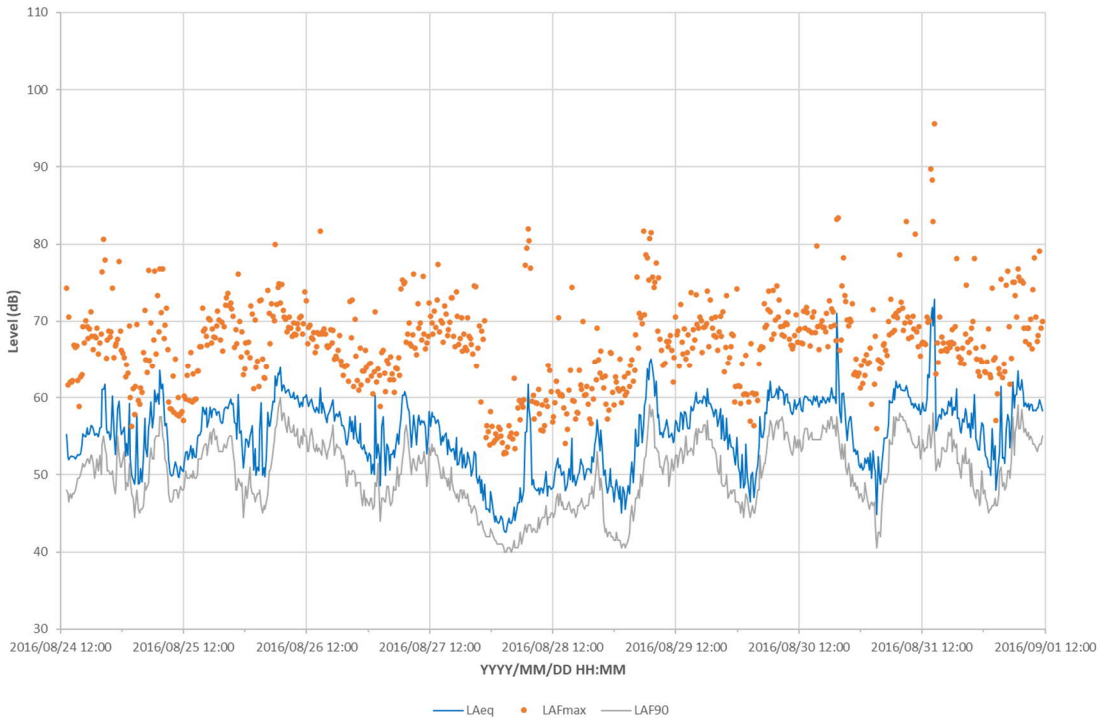


Table 14D-11: Location GS08, long-term noise monitoring results summary

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)[1]
2016/07/28	65	51	57	38
2016/07/29	65	51	-	-
Range	-	-	-	-
Average	65	51	57	38

[1] Average of $L_{AF90,5min}$ measurements

Note – 5 minute base measurement period for this location

Figure 14D-5: Location GS08, long-term noise monitoring time history

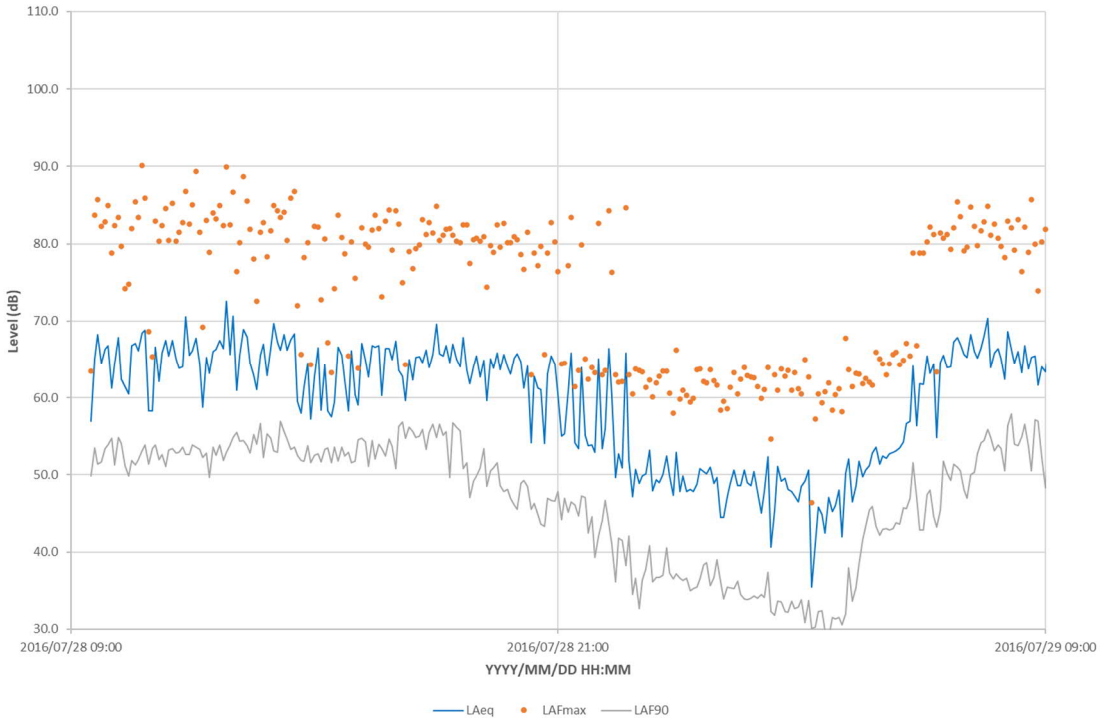


Table 14D-12: Location GS09, long-term noise monitoring results summary

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)[1]
2016/08/10	60	48	55	43
2016/08/11	60	49	54	40
2016/08/12	61	49	53	39
2016/08/13	59	43	53	33
2016/08/14	58	40	53	37
2016/08/15	57	46	55	41
2016/08/16	57	48	53	40
2016/08/17	58	50	-	-
Range	57 – 61	40 – 50	53 – 55	33 – 43
Average	59	47	54	39

[1] Average of $L_{AF90,15min}$ measurements

Figure 14D-6: Location GS09, long-term noise monitoring time history

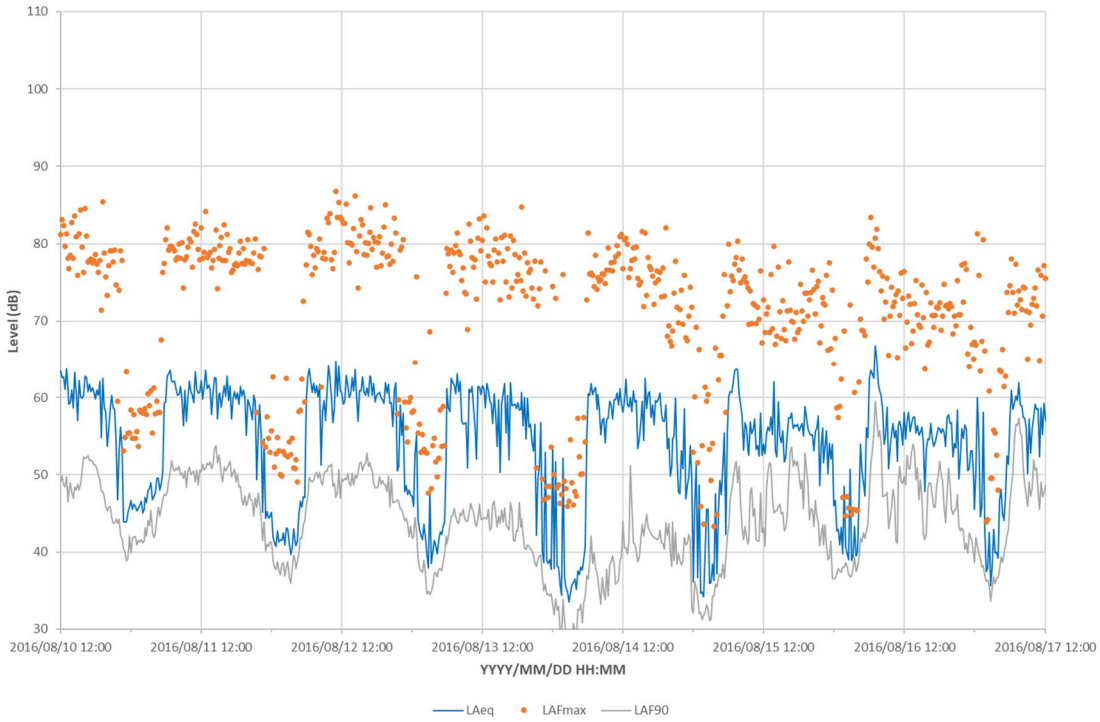
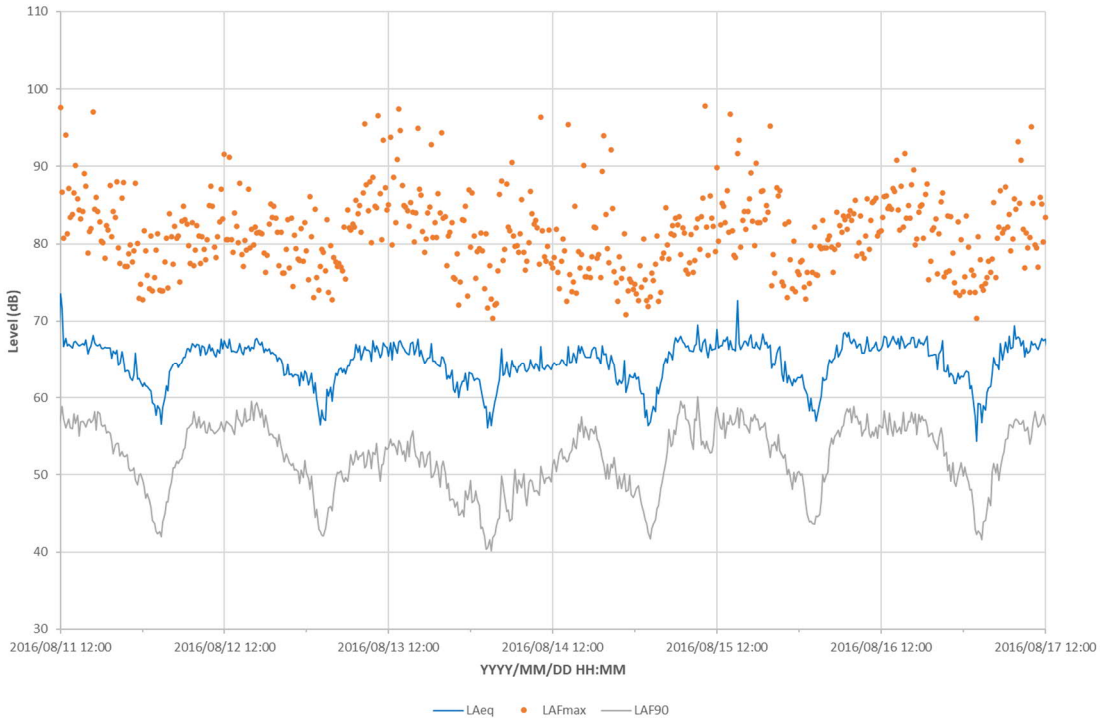


Table 14D-13: Location GS10, long-term noise monitoring results summary

Date	$L_{Aeq,16h}$ (dB)	$L_{AF90,day}$ (dB)	$L_{Aeq,8h}$ (dB)	$L_{AF90,night}$ (dB)[1]
2016/08/11	67	56	63	48
2016/08/12	66	56	62	48
2016/08/13	66	51	62	45
2016/08/14	65	51	64	49
2016/08/15	67	56	64	50
2016/08/16	67	56	63	49
2016/08/17	67	56	-	-
Range	65 – 67	51 – 56	62 – 64	45 – 50
Average	66	55	63	48

[1] Average of $L_{AF90,15min}$ measurements

Figure 14D-7: Location GS10, long-term noise monitoring time history



Aircraft Taxi Noise Survey

14D.3.9 The results of the aircraft taxi noise survey are summarised in Table 14D-14 by aircraft type. The results comprise the average overall A weighted noise levels and the average octave band noise levels by aircraft type. Movements by Airbus A320 and Boeing 737-800 type aircraft constitute the bulk of operations at Dublin Airport, and this is reflected in the data.

14D.3.10 The sound power level, L_{WA}, of each aircraft type taxiing after arriving has been estimated by using the measured $L_{eq,T}$ levels and assuming monopole source propagation over the distance of 70 m. The resulting levels are included in the table.

Table 14D-14: Location GS11, aircraft taxi noise survey results by aircraft type

A/C	*No.*	L_{WA}	L_{eq}									
			A	**31.5 Hz**	**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1 kHz**	**2 kHz**	**4 kHz**	**8 kHz**
Airbus A220	1	123	75	66	68	71	65	65	70	71	66	61
Airbus A320	14	128	81	69	76	79	72	70	74	75	73	67
Airbus A321	1	130	82	68	76	80	72	72	77	77	73	67
Airbus A330	2	135	87	75	79	78	86	78	80	80	80	70
Boeing 737-800	15	129	81	77	80	80	75	71	76	75	74	71
Boeing 787	1	129	81	73	76	76	80	75	73	75	74	66
Embraer E190	1	127	79	72	73	77	72	72	73	71	72	71
Learjet 60	1	121	73	63	61	62	62	59	64	69	65	61

Appendix 14E. Ground Noise Glossary

14E. Ground Noise Glossary

14E.1 Acoustic Terms

Sound

14E.1.1 Sound is a form of energy that is transmitted away from its source through a medium such as air by longitudinal pressure waves. The human ear can detect the small changes in pressure associated with sound and this manifests as the sense of hearing.

Decibel

14E.1.2 The decibel (dB) is the unit used to describe the magnitude of sound. It is a logarithmic ratio between a measured level and a reference level, typically sound pressure level against a reference pressure level of 20 µPa.

14E.1.3 The decibel scale effectively compresses a wide range of values to a more manageable range of numbers; the threshold of hearing occurs at approximately 0 dB (corresponding to the reference value of 20 µPa) and the threshold of pain is around 120 dB (corresponding to a value of 20 Pa).

14E.1.4 The sound power of a source can also be expressed in decibels. The sound power is a measure of the total sound energy radiated by a source per second, in Watts (W). The sound power level L_w is expressed in decibels, referenced to 10^{-12} Watts.

Frequency

14E.1.5 Frequency is equivalent to musical pitch. It is the rate of vibration of the air molecules that transmit the sound and is measured as the number of cycles per second or Hertz (Hz).

14E.1.6 The human ear is sensitive to sound in the range 20 Hz to 20 kHz. This frequency range is normally divided up into discrete bands for engineering use. The most common are octave bands, in which the upper limiting frequency for any band is twice the lower limiting frequency, and one-third octave bands, in which each octave band is further divided into three. The bands are named by their centre frequency value.

A-Weighting

14E.1.7 The sensitivity of the human ear is frequency dependent. Mid-frequency sound tends to be perceived as louder than very low- or high-frequency sound even when the decibel values are equal. Sound levels are therefore often frequency weighted to give an overall single figure value in dB(A) that accounts for the response of the human ear at different frequencies.

Ambient Noise

14E.1.8 Ambient noise, usually expressed using the $L_{Aeq,T}$ metric, is commonly understood to include all sound at any particular site over a defined period of time, regardless of whether the sound is actually defined as noise.

Background Noise

14E.1.9 Background noise, usually expressed using the $L_{A90,T}$ metric, is the steady sound attributable to less prominent and mostly distant sound sources above which clearly identifiable specific noise sources intrude.

Sound Transmission in the Open Air

14E.1.10 Most sources of sound can be characterised as a single point in space. Sound energy is radiated out in all directions and spreads over the surface area of a sphere centred on the point. The area of a sphere is proportional to the square of the radius, so the sound energy is inversely proportional to the square of the radius. This is the inverse square law. In decibel terms, for each doubling of distance from a point source the sound pressure level is reduced by 6 dB.

14E.1.11 Road traffic noise is a notable exception to this rule, as it approximates to a line source. The sound energy radiated is inversely proportional to the area of a cylinder centred on the line. In decibel terms, every time the distance from a line source is doubled, the sound pressure level is reduced by 3 dB.

Factors Affecting Sound Transmission in the Open Air

Reflection

14E.1.12 When sound waves encounter a hard surface, such as concrete, brickwork, glass, timber, or plasterboard, they are reflected from it. As a result, the sound pressure level measured immediately in front of a building façade is approximately 3 dB higher than it would be in the absence of the façade.

Screening

14E.1.13 If a solid screen is introduced between a source and receiver, interrupting the sound path, a reduction in sound level is experienced. Although this reduction is limited by diffraction of the sound around the edges of the screen, it can still provide valuable noise attenuation. For example, a timber boarded fence built next to a motorway can reduce noise levels on the land immediately beyond by around 10 dB. The best results are obtained when a screen is situated close to the source or close to the receiver.

Meteorological Effects

14E.1.14 Temperature and wind gradients affect noise transmission, especially over large distances. The wind effects range from increasing the level by typically 2 dB downwind, to reducing it by typically 10 dB upwind – or even more in extreme conditions. Temperature and wind gradients are variable and difficult to predict.

Noise Metrics

14E.1.15 Where noise levels vary with time, it is necessary to express the sound level over a period of time in statistical terms. Some commonly used descriptors follow.

$L_{Aeq,T}$

14E.1.16 $L_{Aeq,T}$, or the equivalent continuous A-weighted sound pressure level, is the most widely used noise metric. It is an energy average and is defined as the level of a notional sound which would deliver the same A-weighted sound energy as the actual variable sound over a defined period of time, T.

14E.1.17 $L_{Aeq,16h}$ and $L_{Aeq,8h}$ are commonly used to describe the daytime period (07:00 to 23:00) and night-time period (23:00 to 07:00) respectively. In the context of aircraft noise, these are typically averaged over the summer period (92 days from June 16th to September 15th inclusive) and are referred to as the summer day and summer night values.

L_{den}

14E.1.18 L_{den}, or the day-evening-night noise indicator, is a long-term average (usually annual in the context of aircraft noise) 24 hour $L_{Aeq,T}$ value where a 10 dB penalty is applied to noise at night and a 5 dB penalty is applied to noise in the evening. It is defined by the following formula:

$$L_{den} = 10 \times Log\left(\frac{12}{24} \times 10^{\left(\frac{L_{day}}{10}\right)} + \frac{4}{24} \times 10^{\left(\frac{L_{eve}+5}{10}\right)} + \frac{8}{24} \times 10^{\left(\frac{L_{night}+10}{10}\right)}\right)$$

14E.1.19 Where:

14E.1.20 L_{day} is the A-weighted long-term average sound level for the 12 hour daytime period (07:00 to 19:00),

14E.1.21 L_{eve} is the A-weighted long-term average sound level for the 4 hour evening period (19:00 to 23:00), and

14E.1.22 L_{night} is the A-weighted long-term average sound level for the 8 hour night-time period (23:00 to 07:00).

$L_{A90,T}$

14E.1.23 $L_{A90,T}$ is the A-weighted sound pressure level exceeded for 90% of the time over a defined period, T, and is normally used to describe background noise.

$L_{Amax,T}$

14E.1.24 $L_{Amax,T}$ is the maximum A-weighted sound pressure level measured in a defined period, T. Normally given with a time weighting, F (fast, $L_{AFmax,T}$) or S (slow, $L_{ASmax,T}$), which is related to the sampling speed of the measurement instrument. It is sometimes used independently of a time period, for example when describing the maximum value of a single aircraft flyover.

SEL

14E.1.25 SEL is the sound exposure level which is a measure of the total sound energy from an event such as an aircraft movement. The SEL value is the notional constant sound level that has the same amount of energy in 1 second as the original noise event has in total. This is equal to $L_{Aeq,T}$ + 10Log(T).

14E.2 Aviation Terms

ANCA

14E.2.1 ANCA, the Aircraft Noise Competent Authority, is the body responsible for ensuring that noise generated by aircraft activity at Dublin Airport is assessed in accordance with EU and Irish legislation.

FAA

14E.2.2 The Federal Aviation Administration (FAA) is the regulatory body for civil aviation in the United States. The FAA produces AEDT, the industry standard modelling software for aircraft noise.

AEDT

14E.2.3 The Aviation Environmental Design Tool (AEDT) is the industry standard software for the evaluation of aircraft noise in the vicinity of airports based on aircraft type, operation, route, flight profile and terrain.

NMT

14E.2.4 A noise monitoring terminal (NMT) is a fixed or mobile station with the appropriate instrumentation to measure aircraft noise in the vicinity of an airport on a long-term basis.

NFTMS

14E.2.5 A noise and flight track monitoring system (NFTMS) comprises a network of NMTs that record and correlate noise data with individual flights by use of other airport logged flight telemetry, such as radar data.

Start of roll

14E.2.6 The position on a runway where aircraft commence their take-off procedure.

Runway arrival threshold

14E.2.7 The beginning of the portion of the runway usable for landing.

APU

14E.2.8 An auxiliary power unit (APU) is a small engine, often located in the tail of the aircraft, that provides power to electrical systems independently from ground support equipment. It is often run on the stand during boarding and disembarking where an external GPU or FEGP are unavailable.

GPU or MGPU

14E.2.9 A ground power unit (GPU) or mobile ground power unit (MGPU) is an external power source to the aircraft which may be used in place of the APU.

FEGP

14E.2.10 Fixed electrical ground power (FEGP) may be installed on individual aircraft stands. This allows aircraft to ‘plug in’ while on the stand and negates the need to run an APU or GPU.

Appendix 14F. Traffic Noise Methodology

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To:
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From:
Colin O'Connor, BEng (Hons) IEng MIOA CEnv MIEnvSc

Date:
11 August 2021

Memo

Subject: Road Traffic Noise Modelling

1. Introduction

AECOM has undertaken road traffic noise modelling to inform the Dublin Airport North Runway Environmental Impact Assessment Report (EIAR).

This technical note summarises the methodology and results of road traffic noise modelling including noise contour plots; and provides an outline assessment road traffic noise impacts due to the introduction of the proposed Relevant Action.

Road traffic noise modelling was carried out for the following scenarios, with production of contour grids showing the Lden[1] and Ln[2] sound level indicators:

- 2018 Baseline
- 2022 Baseline / Do-Minimum (DM) - i.e. Permitted Scenario
- 2022 Relevant Action / Do-Something (DS) - i.e. Proposed Scenario
- 2025 Baseline / DM - i.e. Permitted Scenario
- 2025 Relevant Action / DS - i.e. Proposed Scenario
- 2035 Baseline / DM - i.e. Permitted Scenario
- 2035 Relevant Action / DS - i.e. Proposed Scenario
-

[1] Day-evening-night level. It is a descriptor of noise level based on energy equivalent noise level (Leq) over a whole day with a penalty of 10 dB(A) for night time noise (23.00-7.00) and an additional penalty of 5 dB(A) for evening noise (i.e. 19.00-23.00).
[2] Night level. It is a descriptor of noise level based on energy equivalent noise level (Leq) over the night time (22.00-7.00 hrs).

2. Modelling

2.1 Methodology

In order to determine the propagation of road traffic noise across the study area, noise prediction models were prepared using the CadnaA®[3] v2020 MR2 BMP L software package. CadnaA® employs the road traffic noise prediction routines commonly used in Ireland and the UK, Calculation of Road Traffic Noise (1988) (CRTN)[4].

The following assumptions and parameters were used to prepare the noise model:

- The base CadnaA model was provided by Bickerdike Allen Partners LLP (BAP) which included ground heights and land topography and building massing including heights;
- Road links were included into the CadnaA model by AECOM and modelled to fit with the digital terrain model;
- Road traffic data for day (07:00-19:00 hrs) evening (19:00-23:00 hrs) and night (23:00-07:00 hrs) periods were input for the relevant road links based on the transport analysis undertaken by AECOM for the proposed Relevant Action (see Appendix A for relevant data);
  - The 2018 baseline noise modelling is based on actual recorded flows from TII permanent traffic counters, as well as survey flows from 2019, factored to reflect observed differences between 2018 and 2019 flows at relevant adjacent TII count sites. As such it does not include the same set of road links modelled for the 2022/2025/2035 scenarios as these were developed from traffic models.
- The ground acoustic absorption was set to 0.5 (i.e. assumed mixed soft and hard ground conditions);
- The maximum order of reflections was 1;
- Air temperature was assumed to be 10 degrees and humidity 70%; and
- Noise contour grids were produced at a standard height of 4 metres (m) with a 20 m x 20 m resolution with corners at the following points (Irish Grid coordinates).

Easting	Northing
311500	239500
311500	247000
320000	247000
320000	239500

2.2 Results

Road traffic noise contour plots of are presented in Appendix B.

Outputs of the road traffic noise contour plots were provided to BAP in the CadnaA .cnr format, as so BAP can overlay and combine with the aircraft noise contour plots.

[3] CadnaA®, registered trademark of Datakustik GmbH (Munich, Germany). (www.datakustik.com).
[4] Department of Transport/Welsh Office (1988); Calculation of Road Traffic Noise.

3. Assessment

Assessment criteria for permanent changes in road traffic are presented in Table 1. These are based on guidance within the Highways England (2020) Design Manual for Roads and Bridges (DMRB) LA111[5] Table 3.54a 'Magnitude of change - short term'. It is generally accepted that a change in road traffic noise of 1 dB is the smallest that is considered perceptible, and as such changes from the constrained to unconstrained development traffic flow scenarios are considered to be below the level at which they can be perceived.

Table 1. Road Traffic Noise Impact Criteria

Significance	Magnitude	Noise change (dB Lden or Lnight)
Significant	Major	Greater than or equal to 5.0
Significant	Moderate	3.0 to 4.9
Not significant	Minor	1.0 to 2.9
Not significant	Negligible	less than 1.0

Potential noise level changes between the DM and DS scenarios in each of the 2022, 2025 and 2035 assessment years was assessed by subtracting the DM from the DS grids within CadnaA.

Noise contour plots showing the increase in Lden and Ln levels from the DM to the DS scenarios are presented in Appendix C.

Changes in road traffic noise levels between the 2022 DM and DS scenarios are estimated to be limited to an increase of 0.3 dB Lden and 0.4 dB Ln.

Changes in road traffic noise levels between the 2025 DM and DS scenarios are estimated to be limited to an increase of 0.2 dB Lden and 0.2 dB Ln.

Changes in road traffic noise levels between the 2035 DM and DS scenarios are estimated to be limited to an increase of 0.2 dB Lden and 0.3 dB Ln.

With reference to the ground noise impact criteria set out in Table 1, a relative noise level increase of up to 0.4 dB is a negligible impact. As the magnitude of change is negligible, it is considered that the noise change will not cause changes to behaviour or response to noise and as such, will not give rise to a likely significant effect. No mitigation measures are considered to be required to address road traffic noise, although the absolute level of ground noise due to the interaction of road traffic with aircraft noise affecting surrounding receptors should be considered further.

4. Summary/Conclusions

AECOM has undertaken road traffic noise modelling to inform the Dublin Airport North Runway EIAR.

Road traffic noise models were produced using a base model provided by BAP and road traffic data sourced from the transport analysis undertaken by AECOM.

Noise contour grids have been prepared showing the Lden and Ln sound level indicators for a 2018 baseline scenario, as well as the Permitted and Proposed Scenarios in each of the 2022, 2025 and 2035 Assessment Years.

An assessment of relative changes to road traffic noise levels concludes that changes will be limited to a negligible impact. However, the absolute level of ground noise considering both the interaction of road traffic with aircraft noise should be considered further. It is understood that this additional assessment will be undertaken by BAP in the production of the EIAR.

[5] Highways England (2020) LA 111 Noise and Vibration, Revision 2

Appendix A Traffic Data

Figure 1. Site Locations

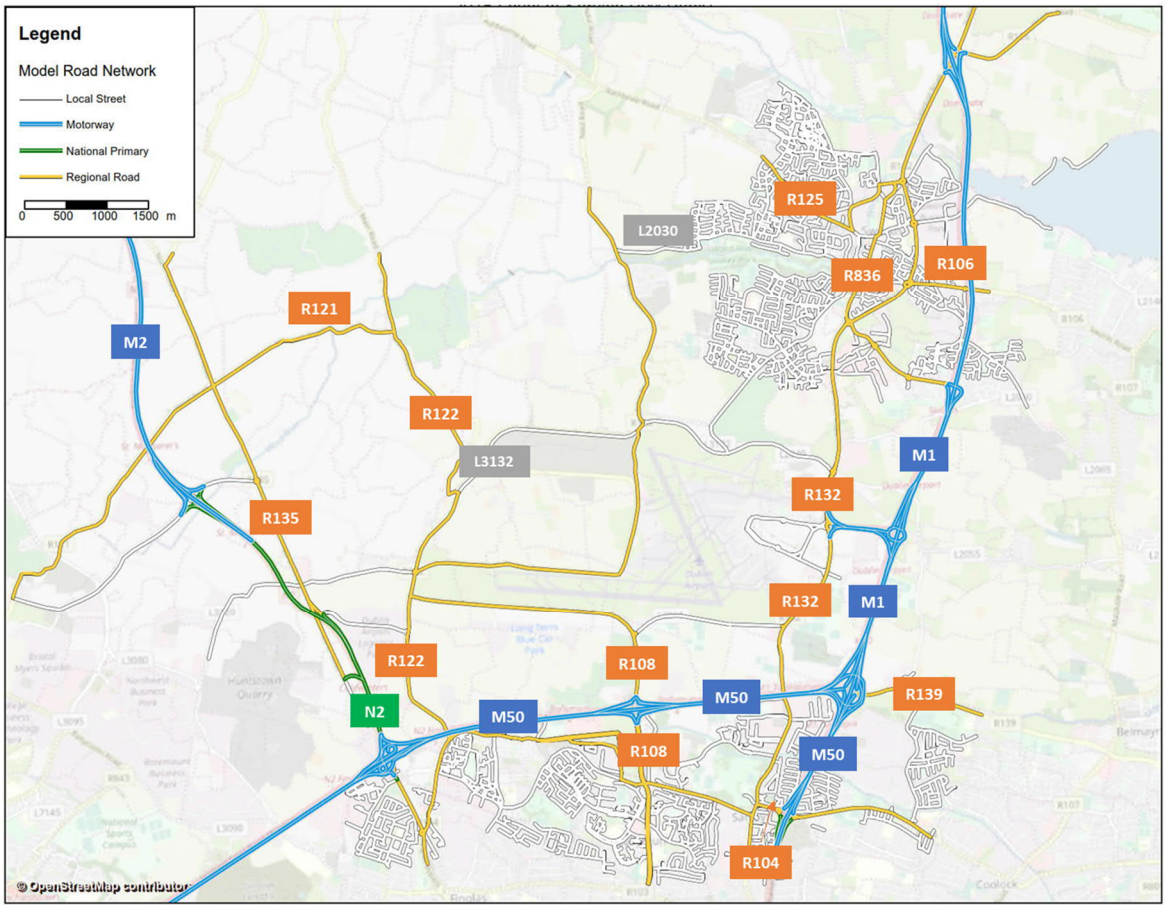


Table 2. Road Traffic Data – 18-hour (06:00-00:00) Annual Average Daily Traffic (AADT)

2022 DM (Constrained)	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
AADT	115,181	68,579	42,240	29,509	74,946	108,327	123,109	20,120	15,018	14,229	34,296	862	7,418	8,422	7,173	23,410	19,608	11,015	36,634	10,826	4,866	17,122
%HGV	4.6%	5.1%	9.0%	6.4%	10.9%	6.0%	6.3%	3.4%	4.4%	5.8%	3.3%	1.5%	2.9%	6.5%	1.8%	6.3%	9.5%	10.7%	3.2%	4.7%	4.3%	5.5%

2022 DS (Unconstrained)	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
AADT	116,587	68,868	42,243	29,520	75,273	109,381	124,487	20,120	15,018	14,622	34,349	876	7,432	8,436	7,173	23,660	20,182	11,015	36,658	10,968	4,866	17,136
%HGV	4.5%	5.1%	9.0%	6.4%	10.8%	5.9%	6.3%	3.4%	4.4%	5.7%	3.3%	1.5%	2.8%	6.4%	1.8%	6.2%	9.4%	10.7%	3.2%	4.6%	4.3%	5.5%

2025 DM (Constrained)	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
AADT	152,079	111,443	46,627	32,576	94,087	138,516	157,493	26,272	19,610	21,719	39,492	1,132	9,692	11,003	9,366	30,680	25,861	14,382	47,844	14,199	6,354	22,363
%HGV	5.4%	5.9%	10.9%	7.4%	12.9%	6.8%	7.1%	4.0%	6.2%	6.0%	4.0%	1.4%	4.8%	7.9%	3.3%	6.6%	9.6%	14.2%	3.1%	5.2%	4.9%	6.7%

2025 DS (Unconstrained)	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
AADT	153,282	111,690	46,630	32,586	94,368	139,418	158,672	26,272	19,610	22,056	39,537	1,143	9,704	11,015	9,366	30,894	26,352	14,382	47,864	14,322	6,354	22,374
%HGV	5.3%	5.8%	10.9%	7.4%	12.9%	6.7%	7.1%	4.0%	6.2%	5.9%	4.0%	1.4%	4.8%	7.9%	3.3%	6.6%	9.5%	14.2%	3.1%	5.2%	4.9%	6.7%

2035 DM (Constrained)	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
AADT	157,615	112,284	49,078	33,591	95,747	140,226	165,847	27,708	22,543	23,458	41,349	1,414	10,895	11,987	10,636	33,754	28,978	14,688	46,269	15,142	7,604	25,445
%HGV	6.1%	6.6%	12.8%	8.5%	14.9%	7.6%	7.9%	4.6%	8.0%	6.1%	4.7%	1.4%	6.7%	9.3%	4.7%	7.0%	9.6%	17.8%	3.0%	5.8%	5.4%	8.0%

2035 DS (Unconstrained)	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
AADT	157,745	112,311	49,079	33,592	95,777	140,323	165,974	27,708	22,543	23,495	41,354	1,415	10,896	11,988	10,636	33,777	29,031	14,688	46,271	15,155	7,604	25,446
%HGV	6.1%	6.6%	12.8%	8.5%	14.9%	7.6%	7.9%	4.6%	8.0%	6.1%	4.7%	1.4%	6.7%	9.3%	4.7%	7.0%	9.6%	17.8%	3.0%	5.8%	5.4%	8.0%

Table 3. Road Traffic Data – Vehicle Speed Limits (kph)

M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
80	80	80	120	100	100	100	50	50	60	60	60	80	80	60	60	60	60	60	50	80	60

Table 4. Road Traffic Data – Hourly Flows 2018

Hour Commencing	M1 Airport Link	M1 J1-J2	M1 J2-J3	N2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R108 North	R108 South	R132 North	R132 South	R139	Old Airport Rd	Naul Road	Kilshane Road	R104	R135
00:00	1,266	1,629	885	280	984	1,162	1,391	337	231	320	392	354	289	195	129	355	129
01:00	657	1,116	565	180	630	679	886	239	152	214	283	179	207	131	91	256	91
02:00	400	640	431	150	388	445	552	116	88	107	131	121	98	65	44	118	44
03:00	970	1,061	583	155	571	654	872	239	87	248	331	146	224	152	91	299	91
04:00	2,117	2,235	918	302	1,175	1,302	1,688	455	144	444	558	272	400	271	174	505	174
05:00	2,878	3,693	1,816	726	2,187	2,423	2,934	682	360	750	831	571	605	307	182	227	182
06:00	2,555	7,457	5,704	2,499	4,817	6,760	7,119	904	1,055	1,069	964	1,700	731	601	346	624	346
07:00	3,308	10,106	8,381	4,078	6,378	10,953	11,455	1,127	2,541	1,580	1,505	3,350	1,045	966	423	1,163	423
08:00	4,052	10,516	8,602	4,228	5,900	9,888	9,806	1,239	3,148	1,939	1,765	2,701	1,112	1,217	503	1,580	503
09:00	3,642	8,760	6,723	3,126	5,803	8,782	9,796	1,208	2,523	1,765	1,712	2,636	1,060	954	481	1,721	481
10:00	3,609	7,894	5,646	2,340	5,518	7,599	8,544	1,176	2,075	1,585	1,566	2,255	1,079	969	449	1,417	449
11:00	3,466	7,690	5,505	2,286	5,492	7,614	8,349	1,140	2,153	1,544	1,582	2,372	1,069	944	436	1,432	436
12:00	3,565	7,918	5,779	2,471	5,662	7,916	8,687	1,235	2,310	1,589	1,636	2,387	1,130	971	472	1,481	472
13:00	3,714	8,347	6,303	2,553	5,775	7,365	9,110	1,305	2,531	1,666	1,516	2,667	1,118	1,018	499	1,372	499
14:00	3,692	8,318	6,309	2,620	5,342	7,316	9,194	1,330	2,457	1,776	1,630	2,724	1,170	1,085	508	1,475	508
15:00	3,694	9,280	7,203	2,870	6,136	8,131	10,194	1,408	2,449	1,916	1,626	2,924	1,203	1,171	538	1,472	538
16:00	3,799	10,708	8,813	3,537	6,334	9,406	11,748	1,545	3,043	2,243	1,856	3,008	1,389	1,300	553	1,907	553
17:00	3,740	10,749	9,113	4,114	6,734	8,645	11,613	1,308	3,232	1,827	1,585	2,974	1,171	1,340	522	1,603	522
18:00	3,239	9,304	7,503	3,035	5,920	7,901	9,587	1,126	2,468	1,652	1,291	2,862	1,029	1,106	478	1,583	478
19:00	2,565	6,972	5,513	1,893	4,932	5,908	7,157	969	1,801	1,410	1,087	2,275	817	862	370	984	370
20:00	2,344	5,572	4,003	1,407	3,444	4,619	5,490	869	1,439	1,087	925	1,763	715	664	332	837	332
21:00	2,201	4,534	3,362	1,128	2,845	4,028	4,758	620	1,161	958	823	1,664	568	586	237	745	237
22:00	2,042	3,554	2,297	737	2,163	2,753	3,251	459	638	638	668	1,017	441	390	175	605	175
23:00	1,947	3,109	1,588	471	1,813	2,158	2,579	520	422	611	719	643	486	373	199	650	199
Total	65,461	151,162	113,545	47,186	96,943	134,407	156,760	21,556	38,508	28,939	26,980	43,565	19,154	17,640	8,232	24,411	8,232
HGV %	3.0%	5.1%	5.7%	10.3%	9.3%	8.3%	7.6%	5.0%	3.4%	3.5%	5.5%	3.2%	7.5%	6.5%	11.4%	3.5%	12.5%
Actual Flows																	
Factored Flows																	

Table 5. Road Traffic Data – Hourly Flows 2022

2022 Do Minimum Flows

Hour Commencing	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
00:00	932	453	201	138	760	622	805	310	176	125	193	10	119	136	84	234	283	183	256	86	57	280
01:00	352	259	161	110	348	197	271	182	96	30	118	5	67	77	46	111	156	105	117	30	31	160
02:00	356	215	124	87	260	250	365	116	66	81	96	5	47	53	31	99	113	70	87	43	21	109
03:00	1,017	360	150	106	500	675	896	226	118	219	154	11	78	88	56	211	243	112	118	111	38	176
04:00	1,170	416	285	196	773	584	804	422	233	170	143	14	154	175	111	316	389	235	200	119	76	361
05:00	3,161	1,221	703	492	1,828	2,096	2,548	643	403	523	393	30	245	278	192	651	656	361	457	310	131	563
06:00	6,114	3,964	2,425	1,695	4,015	5,718	6,323	738	568	611	1,156	37	319	362	271	889	736	473	1,574	409	184	736
07:00	8,122	5,305	3,835	2,680	5,057	8,567	9,348	1,187	865	800	2,410	48	410	465	413	1,360	1,189	608	2,806	629	280	945
08:00	8,346	5,286	3,759	2,813	4,702	8,293	9,206	1,215	1,068	920	2,712	57	372	449	303	1,701	1,369	617	2,627	504	280	1,147
09:00	7,074	4,166	2,764	1,932	4,488	7,015	7,878	1,243	890	820	2,236	48	406	460	425	1,410	1,253	600	2,302	658	288	934
10:00	6,010	3,334	2,110	1,475	4,275	5,821	6,674	1,106	777	748	1,813	45	383	435	371	1,223	1,108	568	2,017	566	252	884
11:00	5,785	3,262	2,147	1,500	4,052	5,504	6,475	1,198	812	768	1,918	46	398	452	388	1,273	1,198	591	1,978	587	263	918
12:00	5,913	3,427	2,142	1,496	4,296	5,736	6,603	1,219	822	793	2,071	49	423	480	393	1,280	1,213	629	2,015	585	266	977
13:00	6,708	3,898	2,315	1,618	4,611	6,503	7,485	1,261	962	994	2,271	59	501	569	460	1,519	1,267	742	2,184	706	312	1,155
14:00	6,348	3,814	2,343	1,636	4,298	6,198	7,033	1,252	947	860	2,140	53	469	533	452	1,467	1,239	699	2,289	667	307	1,084
15:00	7,525	4,541	2,725	1,904	5,012	7,438	8,565	1,291	1,056	996	2,463	60	515	585	504	1,657	1,290	764	2,503	765	342	1,188
16:00	8,271	5,459	3,413	2,384	5,033	8,508	9,400	1,385	1,162	975	2,881	60	529	601	555	1,804	1,372	788	2,815	823	376	1,224
17:00	8,121	5,604	3,704	2,403	5,119	8,050	8,756	1,577	1,116	1,029	2,835	59	614	670	740	1,742	1,434	844	2,716	1,094	427	1,126
18:00	7,284	4,713	2,682	1,873	4,712	6,952	7,792	1,006	893	745	2,230	46	403	458	427	1,389	997	600	2,389	634	289	932
19:00	5,572	3,437	1,701	1,189	3,854	5,032	5,743	767	691	625	1,680	37	316	358	330	1,089	770	467	1,895	506	224	727
20:00	4,329	2,463	1,274	891	2,892	3,769	4,382	683	557	602	1,375	36	297	337	266	885	690	439	1,493	414	181	683
21:00	3,435	1,943	999	697	2,192	2,972	3,439	570	461	348	872	22	197	223	220	710	561	294	1,243	321	149	456
22:00	2,850	1,352	682	477	1,810	2,174	2,563	507	336	318	510	19	161	182	160	530	509	238	808	246	109	370
23:00	2,736	1,086	458	323	1,586	1,864	2,268	428	253	418	323	22	148	167	121	447	462	212	491	234	82	334
Total	117,532	69,979	43,102	30,112	76,475	110,538	125,621	20,531	15,325	14,519	34,996	880	7,570	8,593	7,319	23,997	20,497	11,240	37,382	11,047	4,966	17,472

2022 Do Something Flows

Hour Commencing	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
00:00	1,352	539	202	141	858	937	1,217	310	176	242	209	15	123	140	84	277	311	183	263	128	57	284
01:00	743	339	162	113	440	491	655	182	96	140	133	8	71	81	46	151	183	105	124	70	31	164
02:00	401	224	124	87	270	283	409	116	66	93	98	6	48	54	31	103	116	70	88	48	21	110
03:00	766	308	149	104	441	486	650	226	118	148	145	9	75	86	56	185	226	112	114	86	38	174
04:00	1,677	520	286	200	891	964	1,301	422	233	312	162	19	159	180	111	367	423	235	208	170	76	366
05:00	3,003	1,189	702	491	1,791	1,979	2,394	643	403	479	387	29	244	277	192	635	645	361	455	294	131	562
06:00	6,174	3,976	2,426	1,695	4,029	5,763	6,382	738	568	628	1,158	38	319	362	271	895	740	473	1,575	415	184	736
07:00	8,147	5,310	3,835	2,680	5,063	8,585	9,372	1,187	865	807	2,411	48	410	465	413	1,362	1,191	608	2,807	632	280	946
08:00	8,300	5,277	3,759	2,812	4,691	8,259	9,160	1,215	1,068	908	2,710	57	371	448	303	1,697	1,366	617	2,626	500	280	1,146
09:00	6,991	4,149	2,764	1,931	4,469	6,953	7,797	1,243	890	796	2,233	48	405	460	425	1,402	1,247	600	2,300	650	288	933
10:00	6,031	3,338	2,110	1,475	4,280	5,837	6,694	1,106	777	754	1,814	45	383	435	371	1,225	1,109	568	2,018	568	252	884
11:00	5,842	3,273	2,147	1,500	4,066	5,547	6,531	1,198	812	784	1,920	47	398	452	388	1,279	1,202	591	1,979	593	263	919
12:00	6,063	3,458	2,142	1,497	4,332	5,849	6,751	1,219	822	835	2,077	50	425	482	393	1,295	1,223	629	2,018	600	266	979
13:00	6,678	3,892	2,315	1,618	4,604	6,480	7,455	1,261	962	986	2,270	59	501	569	460	1,516	1,265	742	2,184	703	312	1,155
14:00	6,588	3,864	2,344	1,638	4,354	6,378	7,268	1,252	947	927	2,148	56	471	535	452	1,492	1,256	699	2,293	692	307	1,087
15:00	7,591	4,555	2,725	1,904	5,028	7,487	8,629	1,291	1,056	1,015	2,465	61	516	585	504	1,664	1,295	764	2,504	771	342	1,189
16:00	8,526	5,512	3,414	2,386	5,093	8,699	9,650	1,385	1,162	1,047	2,890	63	532	604	555	1,830	1,389	788	2,819	849	376	1,226
17:00	8,129	5,606	3,704	2,403	5,121	8,056	8,764	1,577	1,116	1,032	2,836	59	615	670	740	1,743	1,435	844	2,716	1,095	427	1,126
18:00	7,466	4,750	2,682	1,874	4,755	7,089	7,971	1,006	893	796	2,237	48	405	460	427	1,407	1,009	600	2,393	652	289	933
19:00	5,558	3,434	1,701	1,189	3,851	5,021	5,730	767	691	621	1,680	37	315	358	330	1,088	769	467	1,895	504	224	727
20:00	4,259	2,449	1,274	890	2,876	3,717	4,313	683	557	582	1,372	35	296	336	266	878	685	439	1,492	407	181	683
21:00	3,586	1,975	1,000	699	2,228	3,086	3,588	570	461	390	877	23	198	225	220	726	572	294	1,245	336	149	457
22:00	2,843	1,350	682	476	1,809	2,169	2,556	507	336	316	510	19	161	182	160	529	508	238	807	245	109	370
23:00	2,250	986	457	320	1,473	1,499	1,790	428	253	281	305	17	143	162	121	398	429	212	483	184	82	330
Total	118,966	70,273	43,105	30,123	76,810	111,614	127,028	20,531	15,325	14,921	35,050	893	7,584	8,608	7,319	24,143	20,594	11,240	37,406	11,192	4,966	17,485

Table 6. Road Traffic Data – Hourly Flows 2025

2025 Do Minimum Flows

Hour Commencing	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
00:00	1,436	805	222	153	996	938	1,216	405	230	270	228	16	158	179	110	327	384	238	338	133	74	368
01:00	507	454	177	121	441	273	374	238	125	79	135	6	88	101	60	149	207	138	154	44	41	210
02:00	478	354	137	95	327	324	472	151	86	127	111	7	62	70	41	130	148	92	114	58	28	143
03:00	1,103	520	165	116	576	692	923	295	154	251	170	13	99	113	73	252	302	146	151	122	50	228
04:00	1,562	711	314	216	967	747	1,028	551	304	291	163	18	201	229	145	414	509	307	261	157	99	472
05:00	4,201	1,980	776	544	2,304	2,711	3,299	840	526	793	455	40	321	364	251	855	859	471	598	410	171	736
06:00	8,105	6,446	2,677	1,871	5,049	7,336	8,122	963	742	944	1,333	49	417	473	354	1,168	965	618	2,056	541	240	961
07:00	10,538	8,577	4,233	2,957	6,307	10,813	11,776	1,550	1,129	1,168	2,769	61	534	606	539	1,761	1,543	794	3,662	807	366	1,233
08:00	11,109	8,598	4,150	3,106	5,927	10,674	11,869	1,586	1,394	1,424	3,127	76	486	587	396	2,235	1,797	806	3,432	673	366	1,499
09:00	9,373	6,765	3,051	2,133	5,645	8,998	10,116	1,624	1,162	1,252	2,577	64	530	602	555	1,848	1,641	783	3,007	867	376	1,221
10:00	7,912	5,410	2,329	1,628	5,362	7,427	8,516	1,444	1,015	1,133	2,088	59	500	568	485	1,597	1,448	742	2,634	740	329	1,154
11:00	7,591	5,291	2,369	1,655	5,076	7,003	8,237	1,565	1,060	1,158	2,207	60	519	590	506	1,661	1,564	771	2,583	765	343	1,199
12:00	7,909	5,595	2,365	1,652	5,416	7,408	8,543	1,592	1,073	1,242	2,388	65	554	629	513	1,684	1,592	822	2,634	777	348	1,278
13:00	8,692	6,294	2,556	1,785	5,751	8,194	9,416	1,646	1,256	1,462	2,610	76	653	742	600	1,970	1,646	969	2,850	909	407	1,507
14:00	8,513	6,236	2,587	1,807	5,424	8,018	9,118	1,635	1,236	1,357	2,467	71	614	697	590	1,933	1,629	912	2,992	888	401	1,418
15:00	9,812	7,353	3,007	2,100	6,264	9,417	10,834	1,685	1,379	1,483	2,831	78	672	763	659	2,155	1,679	998	3,267	990	447	1,551
16:00	11,057	8,908	3,768	2,632	6,349	10,973	12,151	1,808	1,517	1,536	3,321	80	693	787	725	2,374	1,803	1,029	3,678	1,092	492	1,600
17:00	10,700	9,094	4,089	2,652	6,422	10,277	11,182	2,059	1,457	1,560	3,265	78	803	876	966	2,277	1,874	1,102	3,547	1,431	558	1,471
18:00	9,733	7,687	2,960	2,068	5,942	8,973	10,078	1,314	1,166	1,178	2,572	61	528	599	557	1,829	1,312	783	3,123	843	378	1,218
19:00	7,284	5,564	1,878	1,312	4,822	6,383	7,280	1,001	902	930	1,932	48	412	467	431	1,418	1,003	610	2,474	656	292	949
20:00	5,822	4,017	1,407	984	3,657	4,904	5,716	891	727	941	1,587	48	389	441	347	1,169	909	573	1,952	554	236	893
21:00	4,615	3,182	1,103	770	2,769	3,858	4,474	744	602	560	1,006	30	258	293	287	937	740	384	1,624	429	195	596
22:00	3,750	2,192	753	526	2,270	2,773	3,270	661	438	480	588	25	210	238	209	692	664	311	1,055	321	142	483
23:00	3,383	1,686	506	356	1,946	2,229	2,699	559	330	543	367	26	191	216	158	563	589	277	637	284	107	434
Total	155,183	113,718	47,578	33,241	96,007	141,343	160,707	26,808	20,010	22,163	40,298	1,155	9,890	11,227	9,557	31,399	26,807	14,676	48,821	14,489	6,484	22,819

2025 Do Something Flows

Hour Commencing	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
00:00	1,777	875	222	155	1,075	1,194	1,551	405	230	366	240	19	161	183	110	362	407	238	344	168	74	371
01:00	977	550	178	125	551	625	835	238	125	211	153	11	93	105	60	197	239	138	162	91	41	214
02:00	528	364	137	96	339	361	521	151	86	141	113	7	62	70	41	135	152	92	115	63	28	143
03:00	1,006	500	165	115	553	619	828	295	154	224	167	12	98	112	73	242	296	146	149	112	50	227
04:00	2,205	843	316	221	1,117	1,229	1,658	551	304	471	187	24	207	235	145	479	552	307	272	222	99	478
05:00	3,949	1,928	775	542	2,245	2,522	3,052	840	526	723	446	37	318	361	251	829	842	471	594	384	171	733
06:00	8,117	6,449	2,677	1,871	5,052	7,346	8,134	963	742	948	1,333	49	417	473	354	1,169	966	618	2,056	542	240	961
07:00	10,711	8,612	4,234	2,959	6,348	10,943	11,946	1,550	1,129	1,217	2,776	63	535	608	539	1,779	1,555	794	3,665	825	366	1,235
08:00	10,912	8,558	4,149	3,105	5,881	10,526	11,676	1,586	1,394	1,369	3,120	74	485	585	396	2,215	1,783	806	3,429	652	366	1,497
09:00	9,192	6,728	3,051	2,132	5,603	8,862	9,938	1,624	1,162	1,201	2,570	62	529	600	555	1,830	1,629	783	3,004	848	376	1,219
10:00	7,929	5,414	2,329	1,628	5,365	7,439	8,532	1,444	1,015	1,138	2,088	59	501	568	485	1,599	1,449	742	2,635	741	329	1,154
11:00	7,681	5,309	2,370	1,656	5,097	7,071	8,325	1,565	1,060	1,183	2,211	61	520	591	506	1,670	1,570	771	2,584	774	343	1,200
12:00	7,972	5,608	2,365	1,653	5,430	7,455	8,604	1,592	1,073	1,260	2,391	65	554	629	513	1,691	1,597	822	2,635	784	348	1,278
13:00	8,780	6,312	2,556	1,786	5,771	8,260	9,502	1,646	1,256	1,487	2,613	77	654	742	600	1,979	1,651	969	2,851	918	407	1,508
14:00	8,662	6,266	2,587	1,808	5,458	8,129	9,264	1,635	1,236	1,399	2,473	73	615	699	590	1,948	1,640	912	2,994	903	401	1,419
15:00	9,980	7,387	3,008	2,102	6,303	9,544	10,999	1,685	1,379	1,530	2,838	79	673	764	659	2,172	1,690	998	3,270	1,007	447	1,553
16:00	11,210	8,939	3,768	2,633	6,384	11,088	12,300	1,808	1,517	1,579	3,327	82	695	788	725	2,390	1,813	1,029	3,681	1,108	492	1,601
17:00	10,688	9,092	4,089	2,652	6,419	10,268	11,171	2,059	1,457	1,556	3,264	77	802	875	966	2,276	1,873	1,102	3,547	1,430	558	1,470
18:00	9,816	7,704	2,961	2,069	5,961	9,036	10,160	1,314	1,166	1,201	2,575	62	529	600	557	1,838	1,318	783	3,124	852	378	1,219
19:00	7,307	5,569	1,878	1,312	4,828	6,400	7,303	1,001	902	936	1,933	49	412	467	431	1,420	1,004	610	2,474	659	292	950
20:00	5,599	3,971	1,406	983	3,605	4,738	5,497	891	727	879	1,579	46	387	439	347	1,146	894	573	1,948	531	236	891
21:00	4,715	3,202	1,103	771	2,793	3,933	4,573	744	602	588	1,010	30	259	294	287	948	746	384	1,626	439	195	597
22:00	3,738	2,190	753	526	2,268	2,765	3,258	661	438	476	587	25	210	238	209	691	663	311	1,054	320	142	483
23:00	2,958	1,599	505	353	1,846	1,910	2,282	559	330	424	351	22	187	212	158	520	560	277	630	241	107	430
Total	156,410	113,970	47,581	33,251	96,294	142,263	161,910	26,808	20,010	22,506	40,344	1,167	9,902	11,239	9,557	31,524	26,889	14,676	48,841	14,614	6,484	22,831

Table 7. Road Traffic Data – Hourly Flows 2035

2035 Do Minimum Flows

Hour Commencing	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
00:00	1,473	807	233	158	1,008	935	1,274	428	264	290	238	20	177	195	125	359	424	244	326	141	89	418
01:00	521	454	187	125	446	266	398	251	144	89	142	9	100	110	68	166	230	141	148	47	49	239
02:00	491	355	144	98	332	324	494	160	99	136	116	9	69	76	47	142	164	94	110	61	33	162
03:00	1,139	524	174	119	586	701	968	311	176	267	178	15	111	123	83	275	333	149	146	129	60	259
04:00	1,606	712	331	222	979	739	1,083	581	350	316	170	24	226	249	165	457	564	314	251	168	118	537
05:00	4,512	2,031	817	562	2,383	2,874	3,632	886	605	895	483	51	361	397	285	952	958	481	581	452	204	838
06:00	8,393	6,492	2,818	1,929	5,136	7,422	8,546	1,016	853	1,020	1,396	61	468	515	402	1,282	1,067	631	1,988	577	288	1,094
07:00	10,888	8,632	4,456	3,049	6,411	10,913	12,363	1,635	1,298	1,259	2,898	77	600	660	612	1,931	1,704	811	3,541	859	438	1,403
08:00	11,375	8,865	4,423	3,200	6,288	11,187	12,551	1,654	1,625	1,530	3,275	90	604	634	488	2,324	1,985	819	3,209	713	423	1,673
09:00	9,738	6,823	3,212	2,200	5,751	9,129	10,669	1,712	1,335	1,358	2,698	80	596	656	630	2,029	1,813	800	2,908	926	450	1,389
10:00	8,204	5,453	2,452	1,678	5,456	7,521	8,968	1,523	1,167	1,224	2,186	73	562	619	551	1,753	1,599	758	2,548	789	394	1,313
11:00	7,897	5,337	2,494	1,707	5,171	7,111	8,700	1,650	1,219	1,258	2,312	76	584	643	575	1,825	1,729	788	2,498	818	411	1,364
12:00	8,165	5,631	2,489	1,703	5,502	7,475	8,962	1,679	1,234	1,331	2,499	80	622	684	582	1,845	1,756	839	2,546	825	416	1,453
13:00	9,016	6,343	2,690	1,841	5,853	8,299	9,921	1,737	1,444	1,578	2,733	95	734	808	681	2,162	1,818	990	2,756	969	487	1,715
14:00	8,813	6,280	2,723	1,863	5,516	8,106	9,591	1,724	1,421	1,462	2,583	89	690	759	671	2,119	1,799	932	2,893	945	479	1,613
15:00	10,123	7,398	3,165	2,166	6,363	9,494	11,360	1,777	1,585	1,589	2,963	97	755	830	748	2,360	1,852	1,019	3,158	1,050	535	1,764
16:00	11,439	8,969	3,966	2,714	6,457	11,087	12,772	1,907	1,744	1,654	3,476	100	779	857	823	2,603	1,991	1,051	3,557	1,163	588	1,820
17:00	11,256	8,965	4,249	2,738	6,289	10,043	11,740	2,191	1,653	1,699	3,417	101	845	960	1,059	2,627	2,071	1,129	3,541	1,531	682	1,706
18:00	10,105	7,747	3,116	2,133	6,051	9,096	10,630	1,386	1,341	1,281	2,694	77	594	653	633	2,010	1,452	800	3,020	902	452	1,386
19:00	7,494	5,594	1,976	1,352	4,894	6,422	7,613	1,056	1,037	990	2,021	60	462	508	489	1,550	1,104	623	2,391	694	350	1,080
20:00	6,037	4,050	1,481	1,015	3,723	4,974	6,020	940	836	1,013	1,662	59	437	480	395	1,281	1,004	585	1,888	590	282	1,016
21:00	4,773	3,204	1,161	794	2,816	3,899	4,705	785	692	604	1,053	37	290	319	326	1,028	817	392	1,571	457	233	678
22:00	3,861	2,205	792	542	2,305	2,793	3,422	698	504	511	615	31	235	259	238	756	732	317	1,019	340	170	550
23:00	3,515	1,704	532	367	1,984	2,276	2,849	589	379	584	385	32	214	235	179	616	649	282	617	303	128	494
Total	160,832	114,576	50,080	34,276	97,701	143,087	169,232	28,274	23,003	23,937	42,193	1,443	11,117	12,231	10,853	34,453	29,614	14,988	47,213	15,451	7,759	25,964

2035 Do Something Flows

Hour Commencing	M1 J1-J2	M1 J2-J3	N2	M2	M50 J2-J3	M50 J3-J4	M50 J4-J5	R104	R106	R108 North	R108 South	R121	R122 North	R122 South	R125	R132 North	R132 South	R135	R139	R836	L2030	L3132
00:00	1,829	880	234	160	1,091	1,202	1,623	428	264	389	251	23	181	199	125	395	448	244	332	177	89	422
01:00	1,006	553	188	128	559	629	874	251	144	225	160	14	104	115	68	216	263	141	156	97	49	243
02:00	543	366	144	99	344	363	545	160	99	150	118	9	70	77	47	148	167	94	111	66	33	163
03:00	1,036	503	173	119	561	623	866	311	176	238	174	14	110	122	83	264	326	149	144	119	60	258
04:00	2,269	848	332	227	1,134	1,237	1,734	581	350	502	195	30	233	256	165	524	609	314	263	235	118	544
05:00	4,064	1,939	816	558	2,279	2,538	3,192	886	605	770	466	46	357	393	285	906	928	481	574	407	204	834
06:00	8,354	6,484	2,818	1,929	5,127	7,393	8,508	1,016	853	1,009	1,395	61	468	515	402	1,278	1,064	631	1,987	573	288	1,093
07:00	11,023	8,660	4,456	3,050	6,442	11,014	12,496	1,635	1,298	1,296	2,903	78	601	662	612	1,945	1,713	811	3,543	873	438	1,404
08:00	11,121	8,813	4,422	3,198	6,229	10,997	12,302	1,654	1,625	1,459	3,266	88	602	631	488	2,298	1,968	819	3,205	687	423	1,671
09:00	9,459	6,766	3,211	2,198	5,686	8,920	10,396	1,712	1,335	1,280	2,688	77	594	653	630	2,001	1,794	800	2,904	898	450	1,386
10:00	8,160	5,444	2,452	1,678	5,446	7,488	8,925	1,523	1,167	1,212	2,184	73	562	618	551	1,748	1,596	758	2,547	784	394	1,313
11:00	7,905	5,338	2,494	1,707	5,173	7,116	8,708	1,650	1,219	1,260	2,312	76	584	643	575	1,826	1,729	788	2,498	819	411	1,364
12:00	8,204	5,639	2,489	1,704	5,511	7,504	9,000	1,679	1,234	1,342	2,501	81	622	685	582	1,848	1,759	839	2,547	829	416	1,454
13:00	9,035	6,347	2,690	1,841	5,857	8,313	9,940	1,737	1,444	1,584	2,733	95	734	808	681	2,164	1,819	990	2,756	971	487	1,715
14:00	8,914	6,301	2,723	1,864	5,540	8,182	9,690	1,724	1,421	1,490	2,587	90	691	760	671	2,130	1,806	932	2,895	955	479	1,614
15:00	10,271	7,428	3,166	2,167	6,397	9,605	11,505	1,777	1,585	1,630	2,968	98	756	832	748	2,375	1,862	1,019	3,161	1,066	535	1,766
16:00	11,536	8,989	3,966	2,715	6,480	11,160	12,867	1,907	1,744	1,682	3,480	101	780	858	823	2,613	1,998	1,051	3,558	1,172	588	1,821
17:00	11,108	8,935	4,249	2,737	6,255	9,933	11,595	2,191	1,653	1,657	3,411	100	843	959	1,059	2,612	2,061	1,129	3,538	1,516	682	1,704
18:00	10,102	7,747	3,116	2,133	6,050	9,094	10,627	1,386	1,341	1,280	2,694	77	594	653	633	2,009	1,452	800	3,020	901	452	1,386
19:00	7,520	5,600	1,976	1,353	4,900	6,442	7,639	1,056	1,037	997	2,022	60	462	509	489	1,553	1,106	623	2,392	697	350	1,080
20:00	5,762	3,993	1,480	1,013	3,659	4,768	5,750	940	836	936	1,652	56	434	478	395	1,253	985	585	1,883	562	282	1,014
21:00	4,853	3,220	1,161	795	2,834	3,959	4,783	785	692	627	1,056	38	291	320	326	1,036	822	392	1,572	465	233	679
22:00	3,847	2,202	792	542	2,302	2,783	3,408	698	504	507	614	31	235	259	238	755	731	317	1,019	339	170	550
23:00	3,044	1,608	531	364	1,874	1,923	2,387	589	379	452	367	27	210	231	179	568	617	282	609	255	128	489
Total	160,964	114,603	50,080	34,277	97,732	143,187	169,362	28,274	23,003	23,974	42,197	1,444	11,118	12,232	10,853	34,467	29,623	14,988	47,216	15,464	7,759	25,965

Appendix B Noise Contour Plots – Lden and Ln

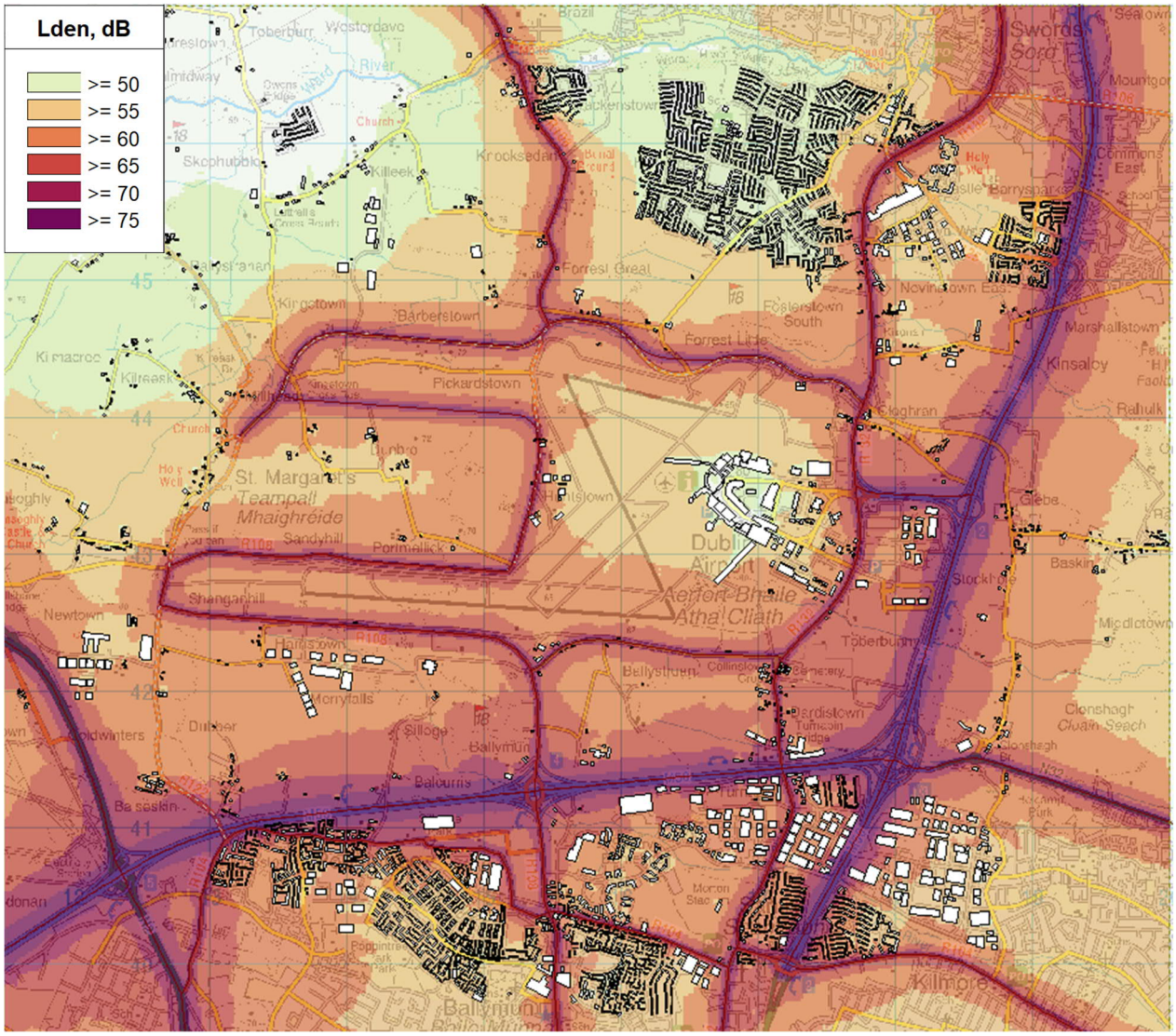
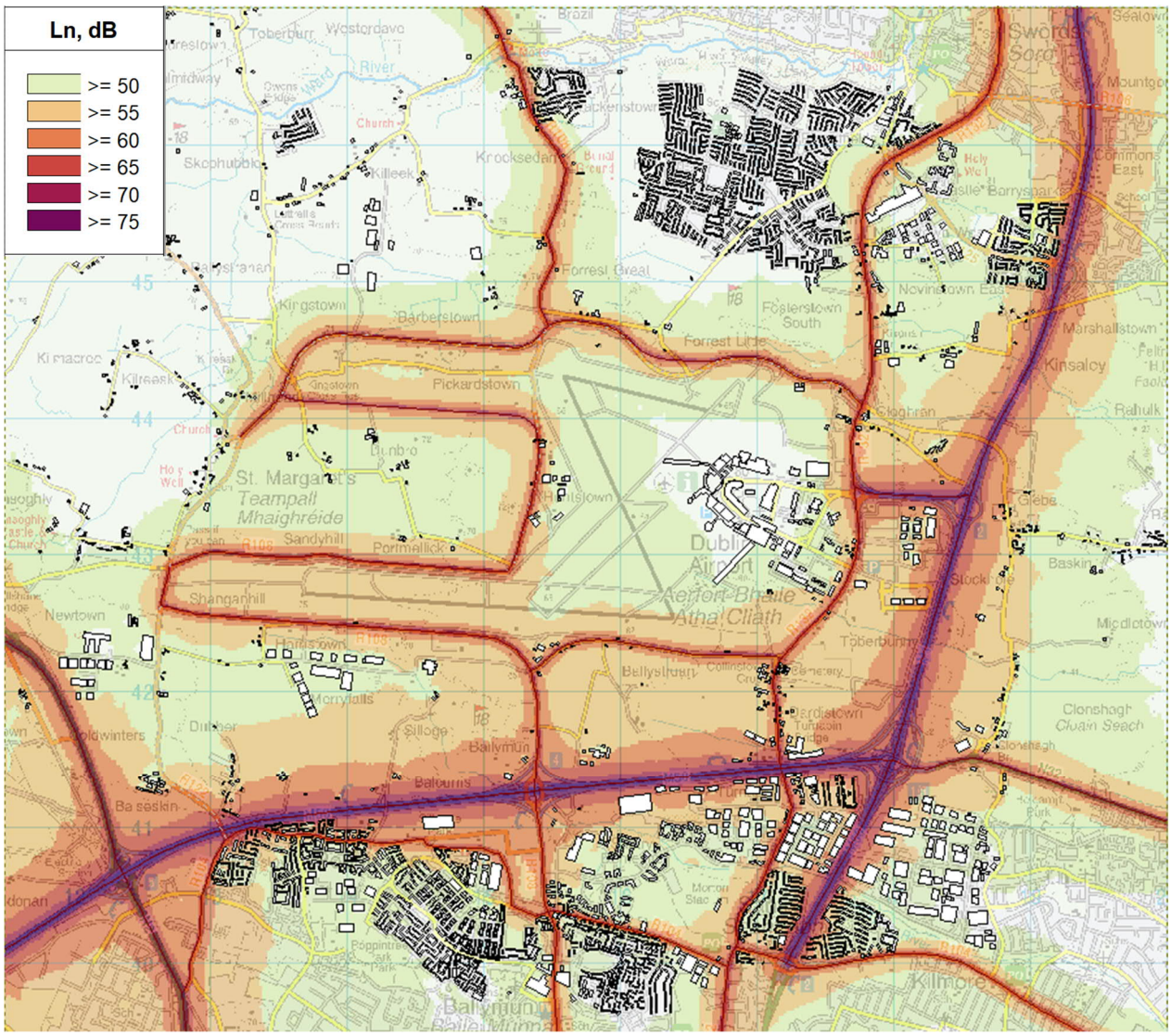


Figure 2. 2018 Baseline - Lden


Ln, dB
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>= 55
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>= 75
Swords
Forrest Great
Kirkpatrickstown
Kirkpatrickstown
Kirkpatrickstown

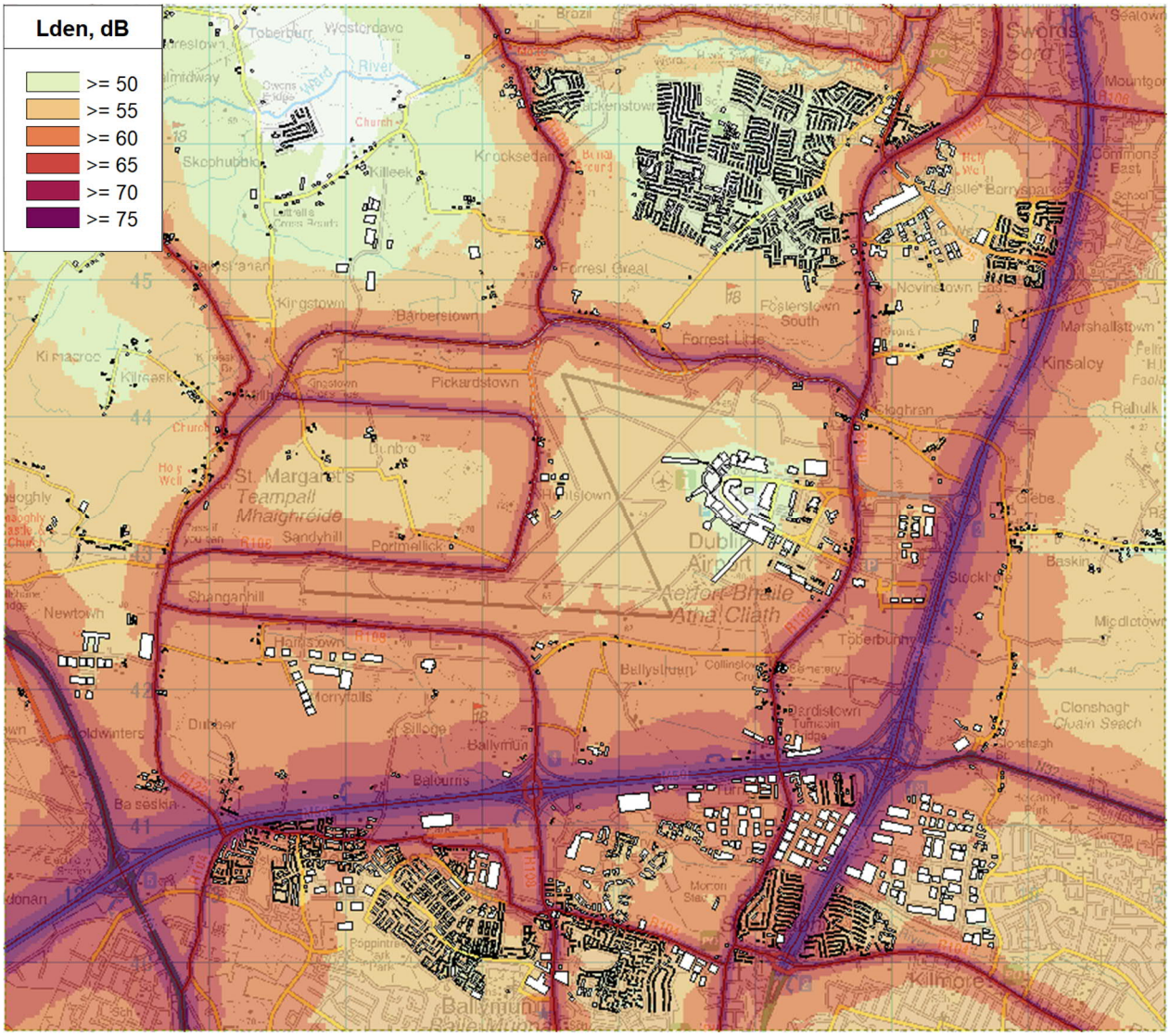


Figure 4. 2022 Baseline (DM) - Lden

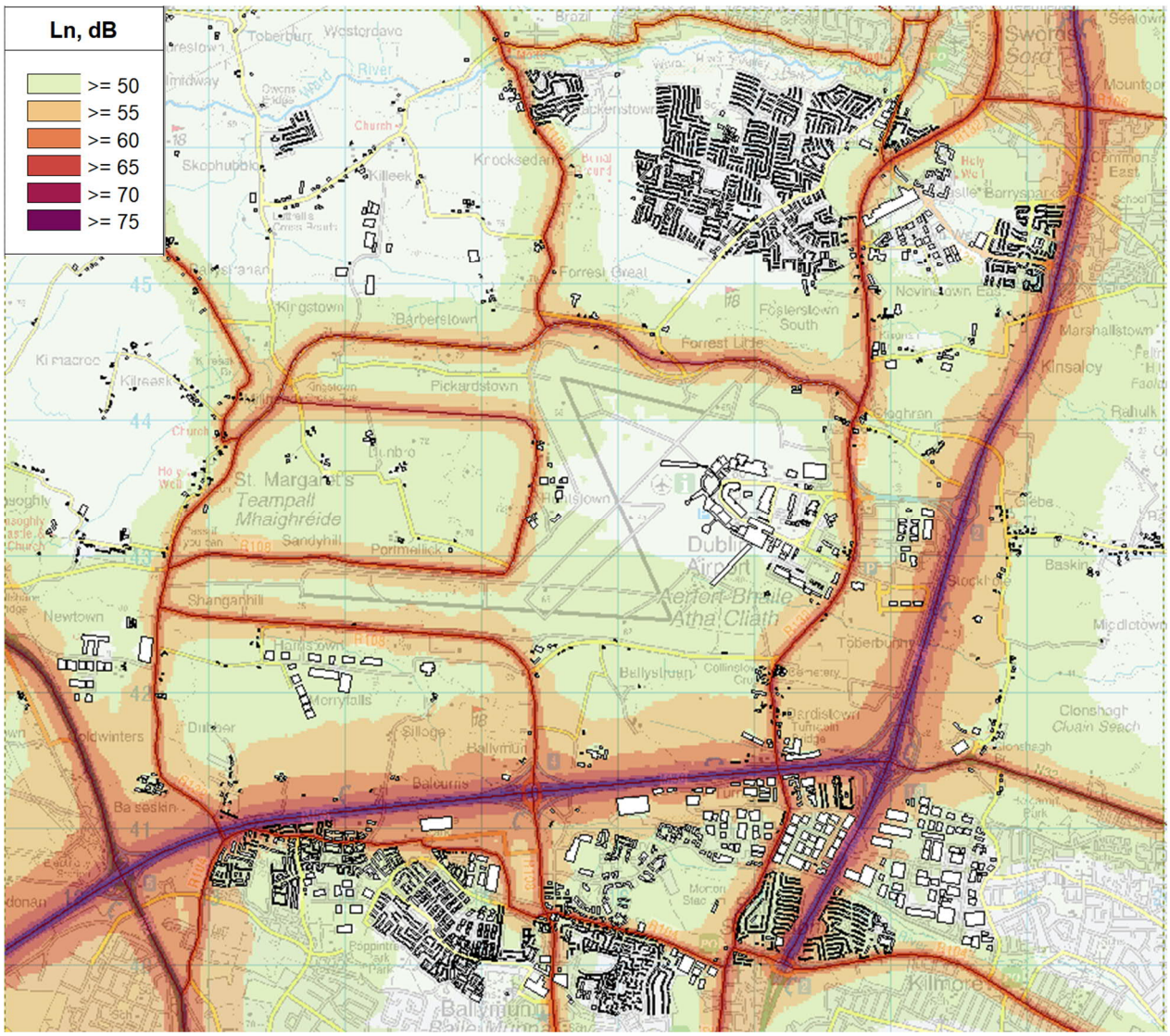


Figure 5. 2022 Baseline (DM) - Ln

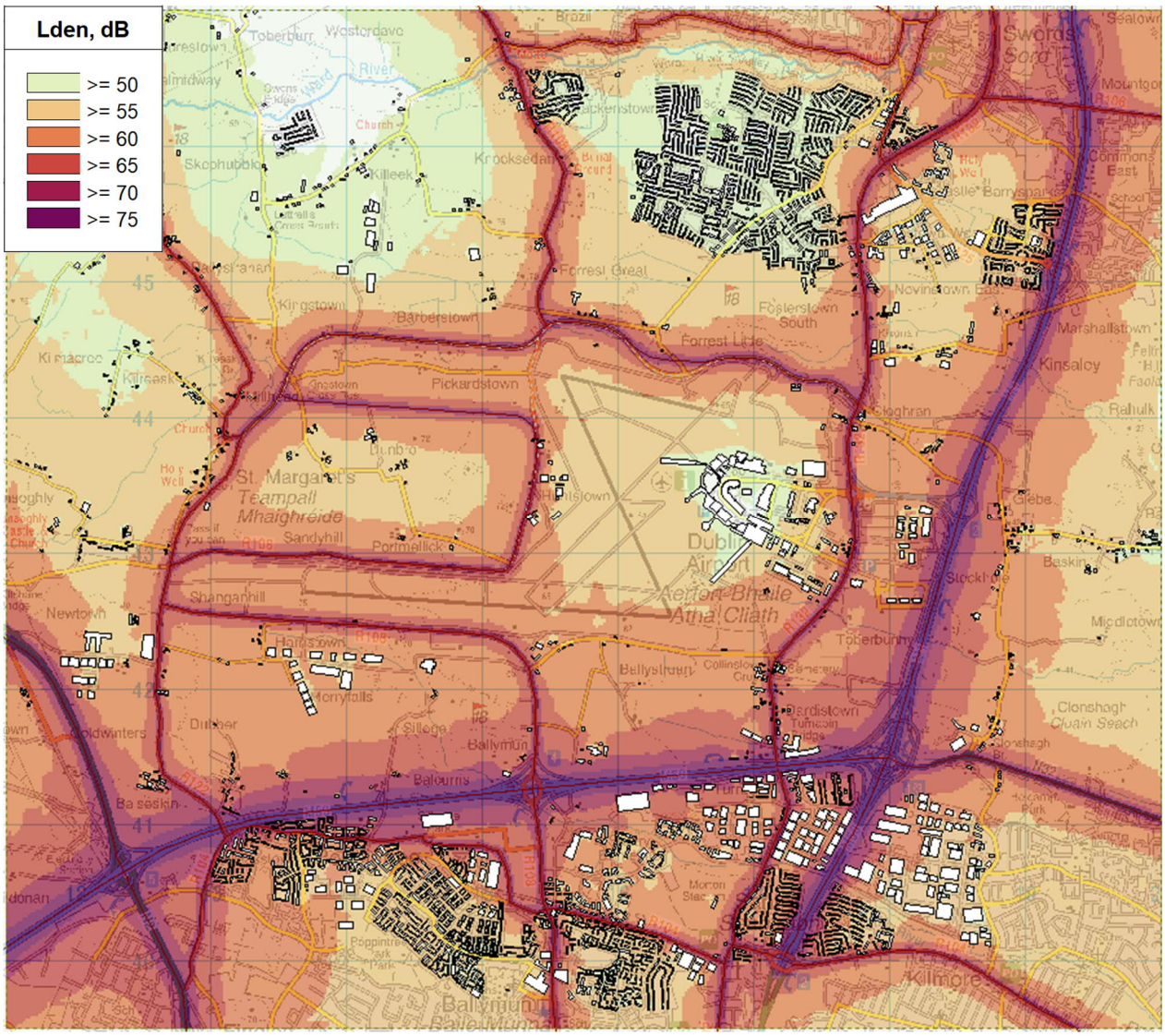


Figure 6. 2022 Relevant Action (DS) - Lden

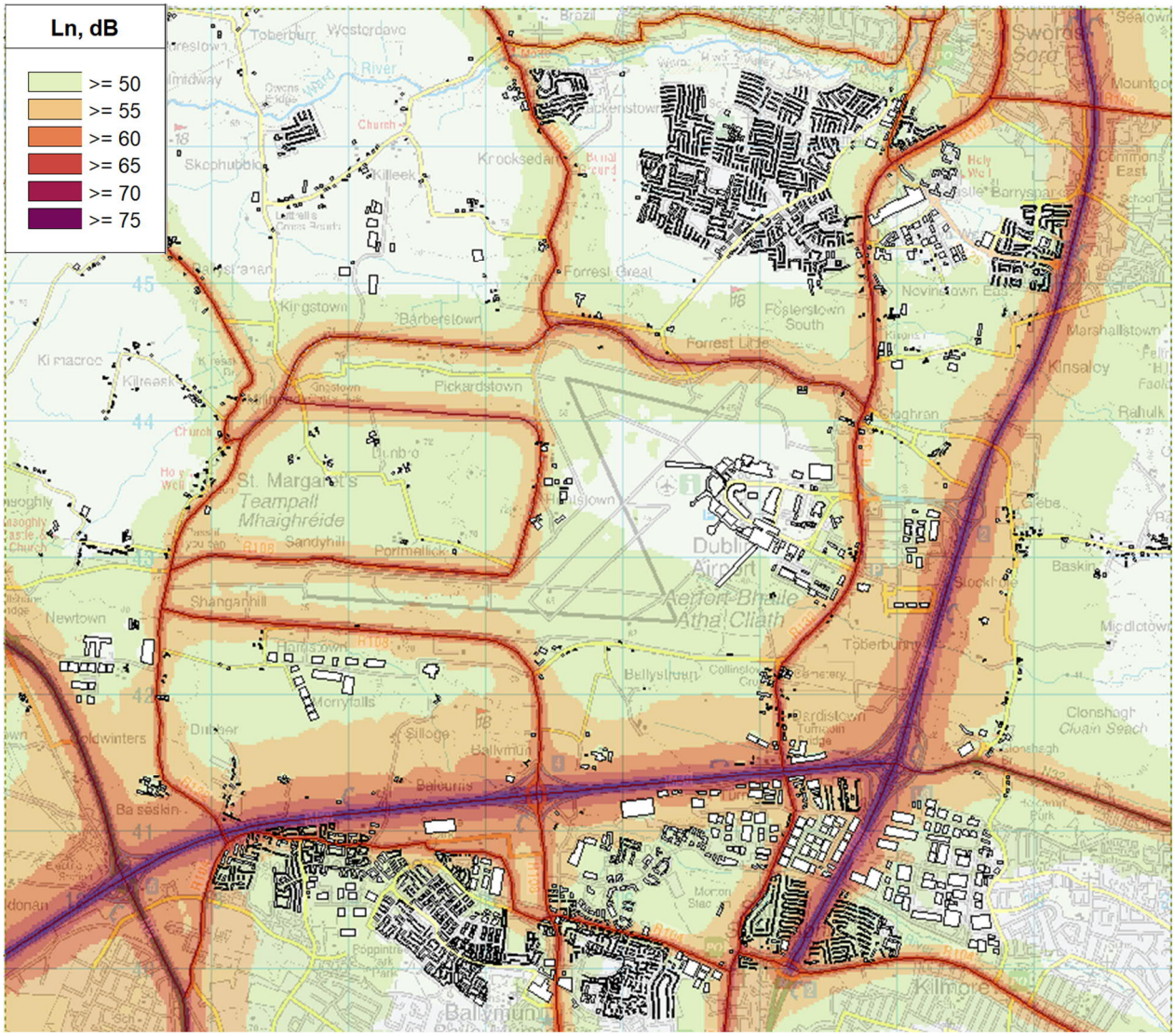


Figure 7. 2022 Relevant Action (DS) - Ln

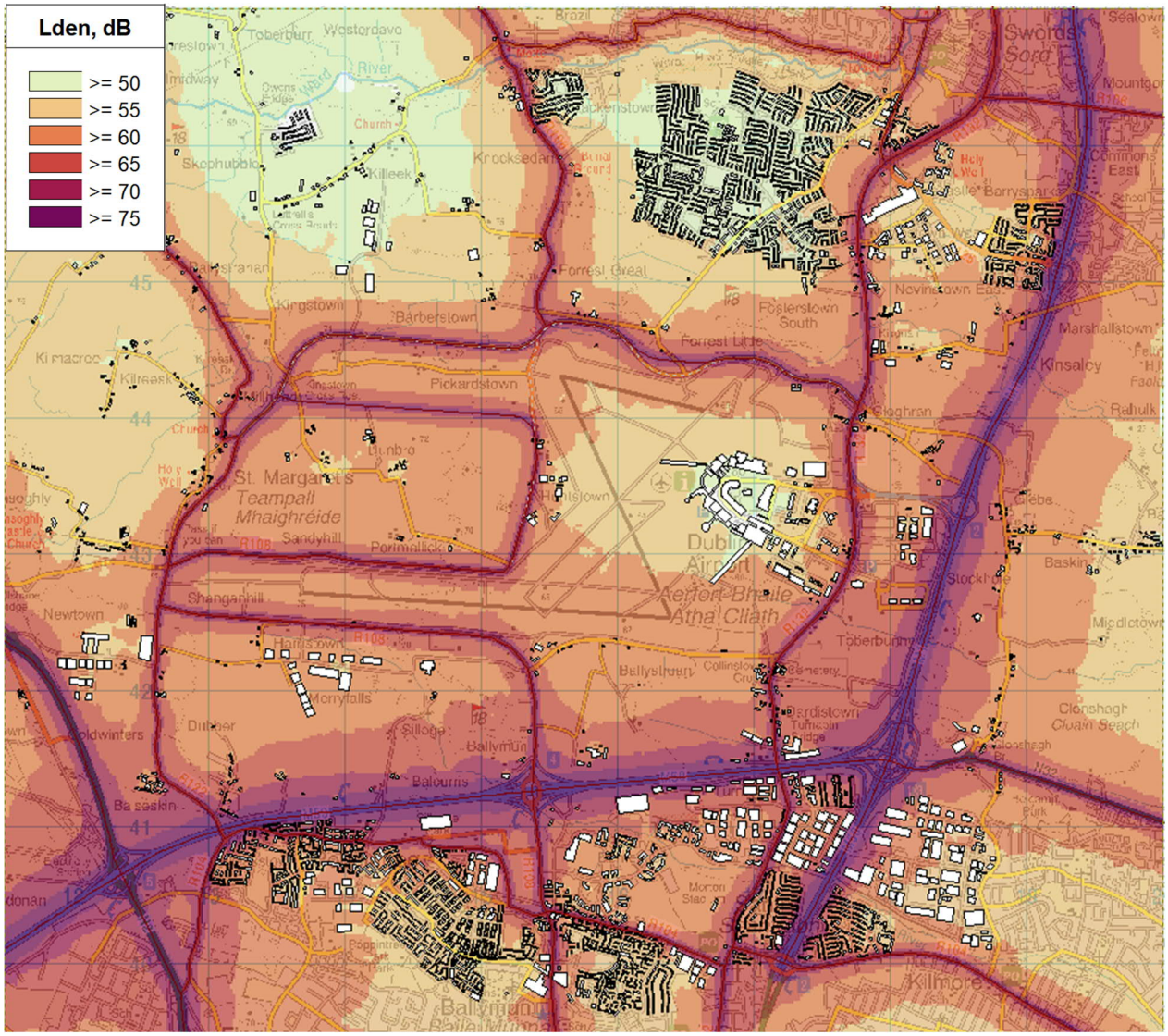
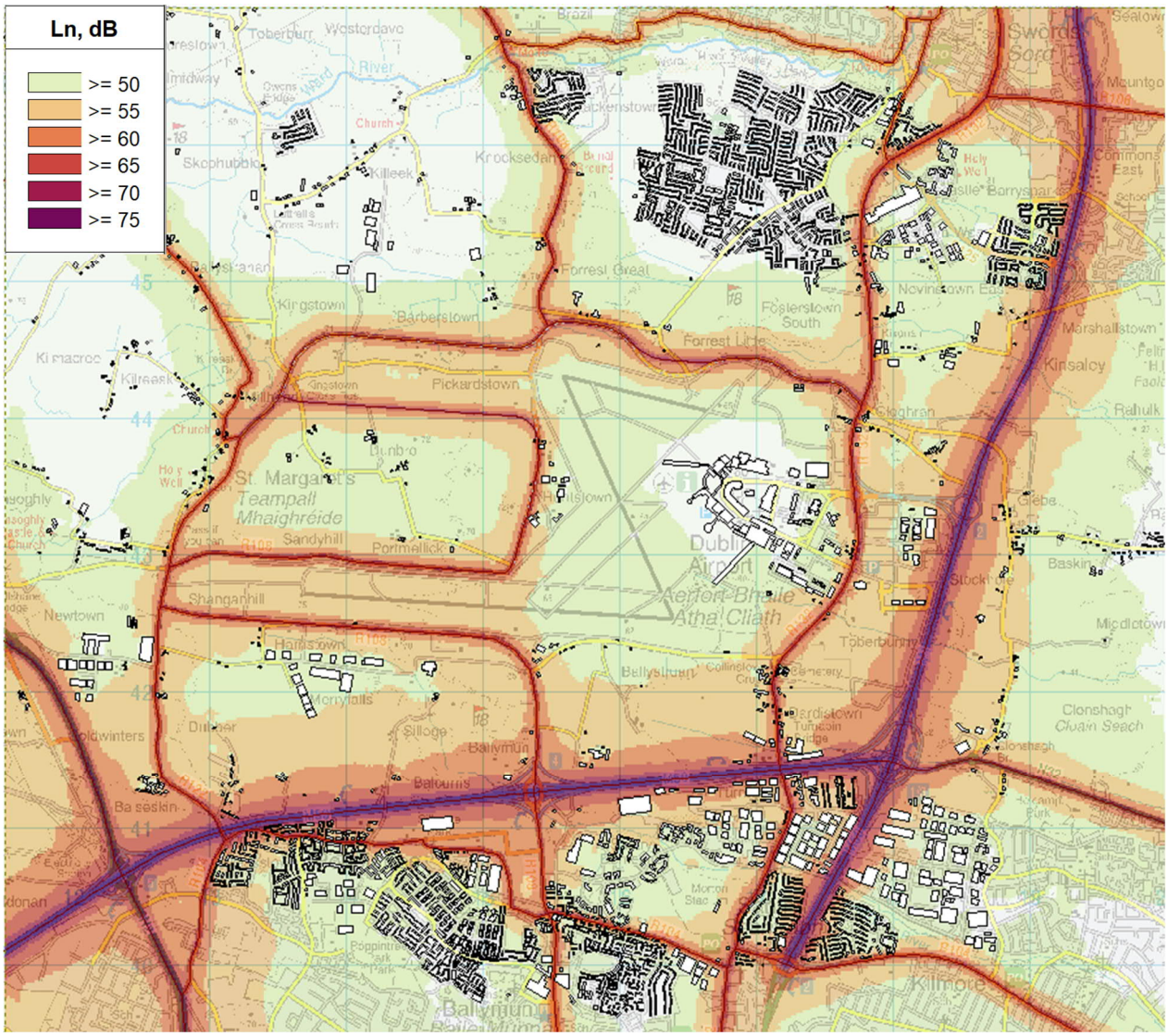


Figure 8. 2025 Baseline (DM) - Lden



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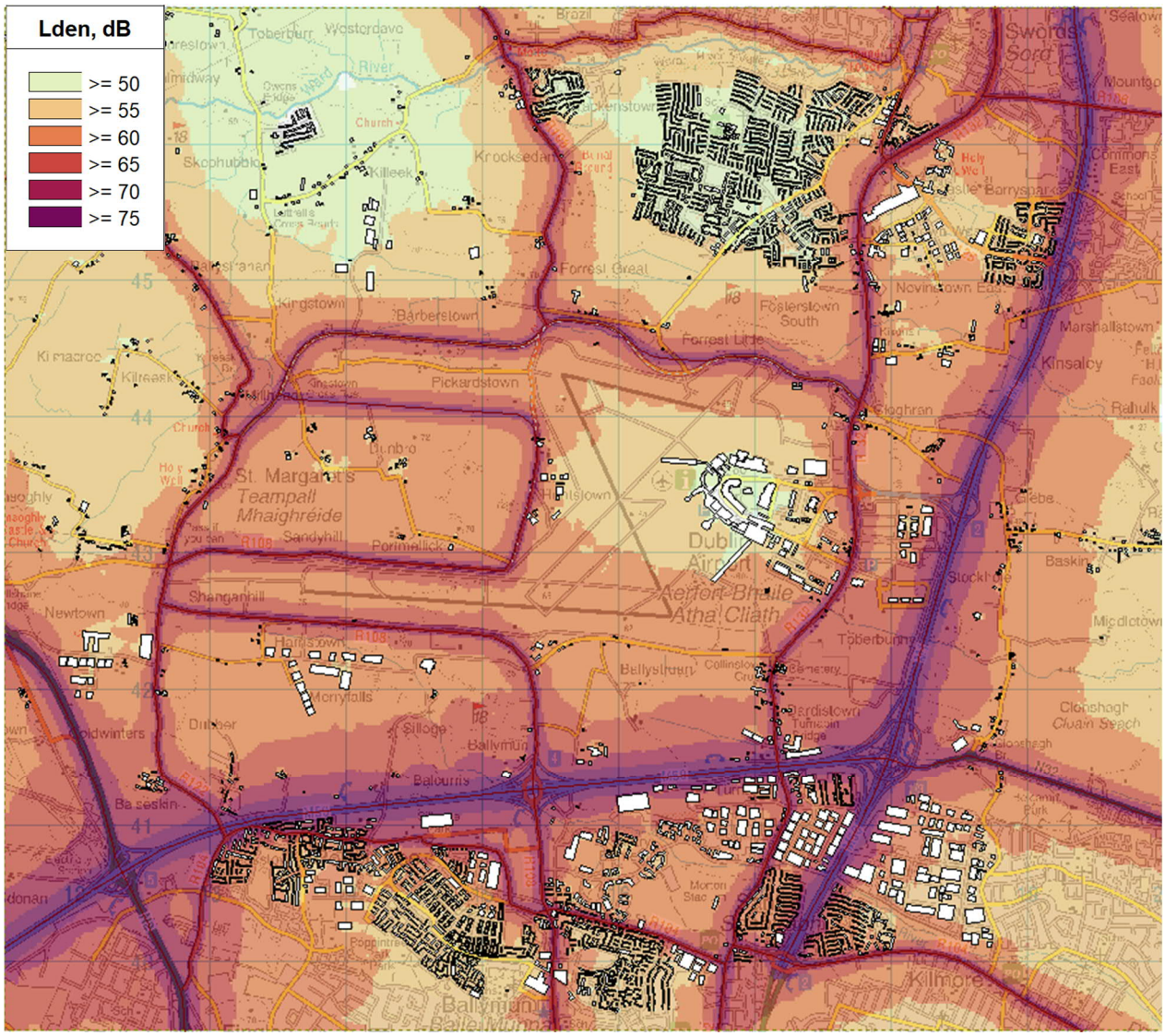

Figure 10. 2025 Relevant Action (DS) - Lden

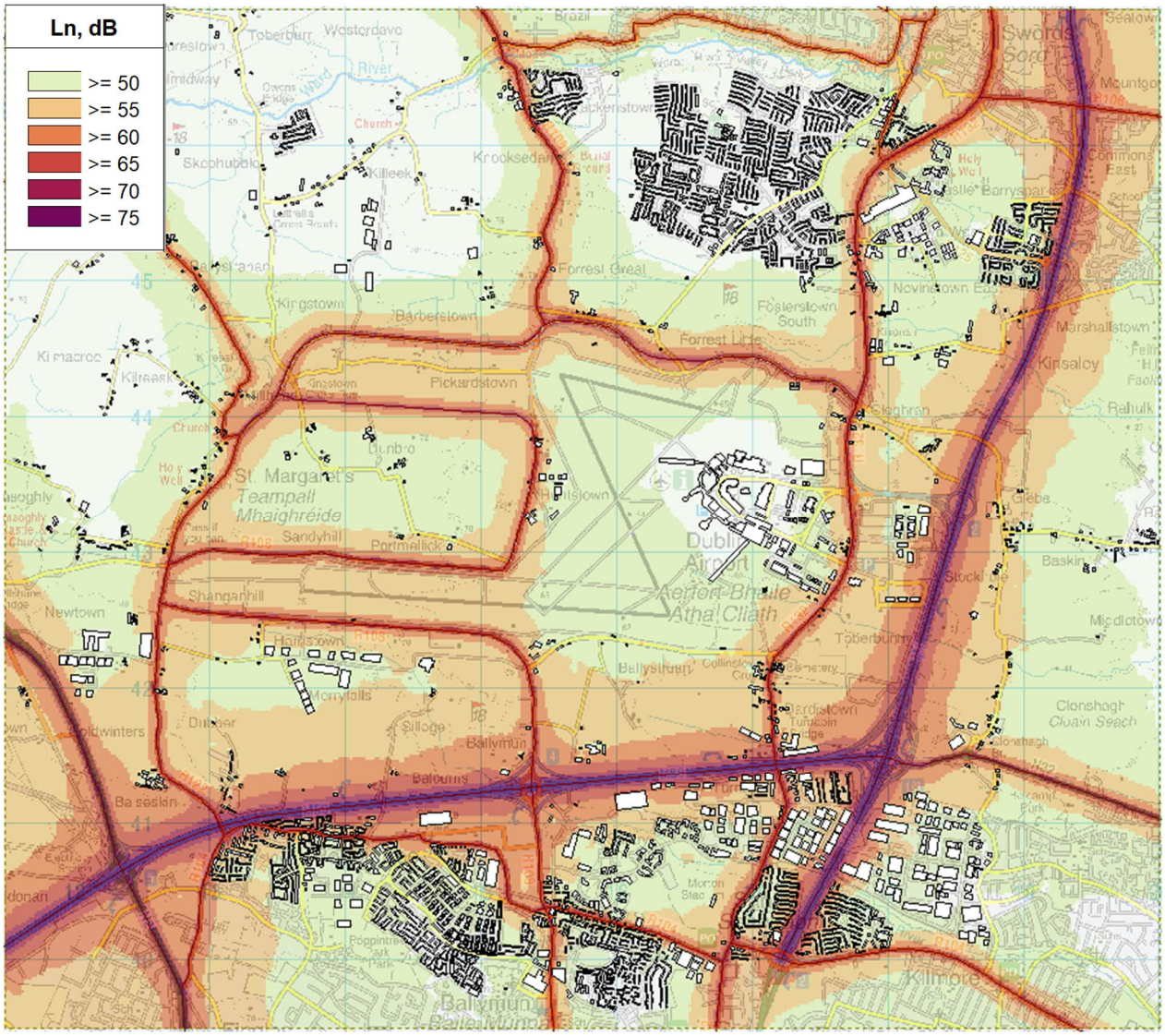

Figure 11. 2025 Relevant Action (DS) - Ln

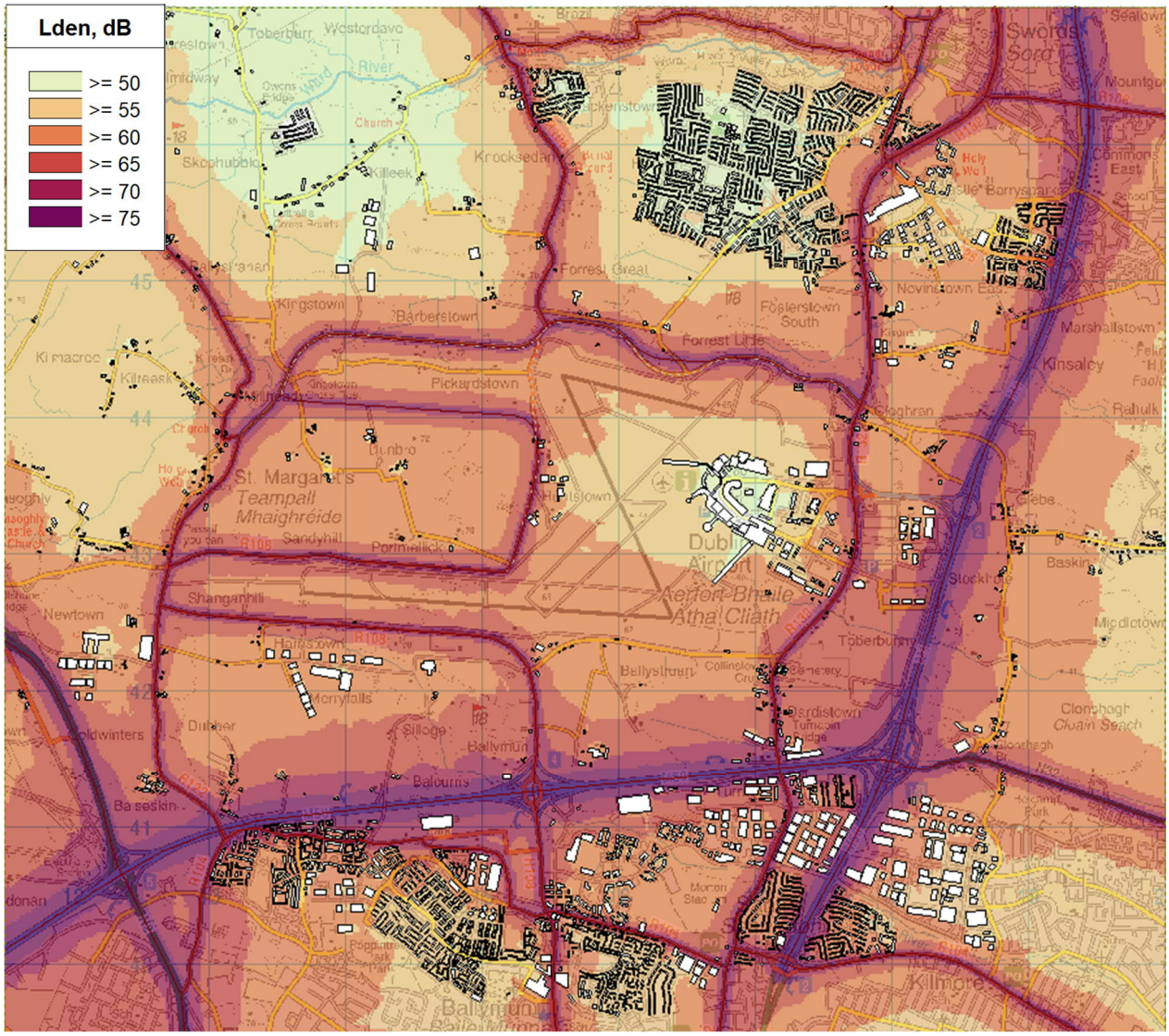

Figure 12. 2035 Baseline (DM) - Lden

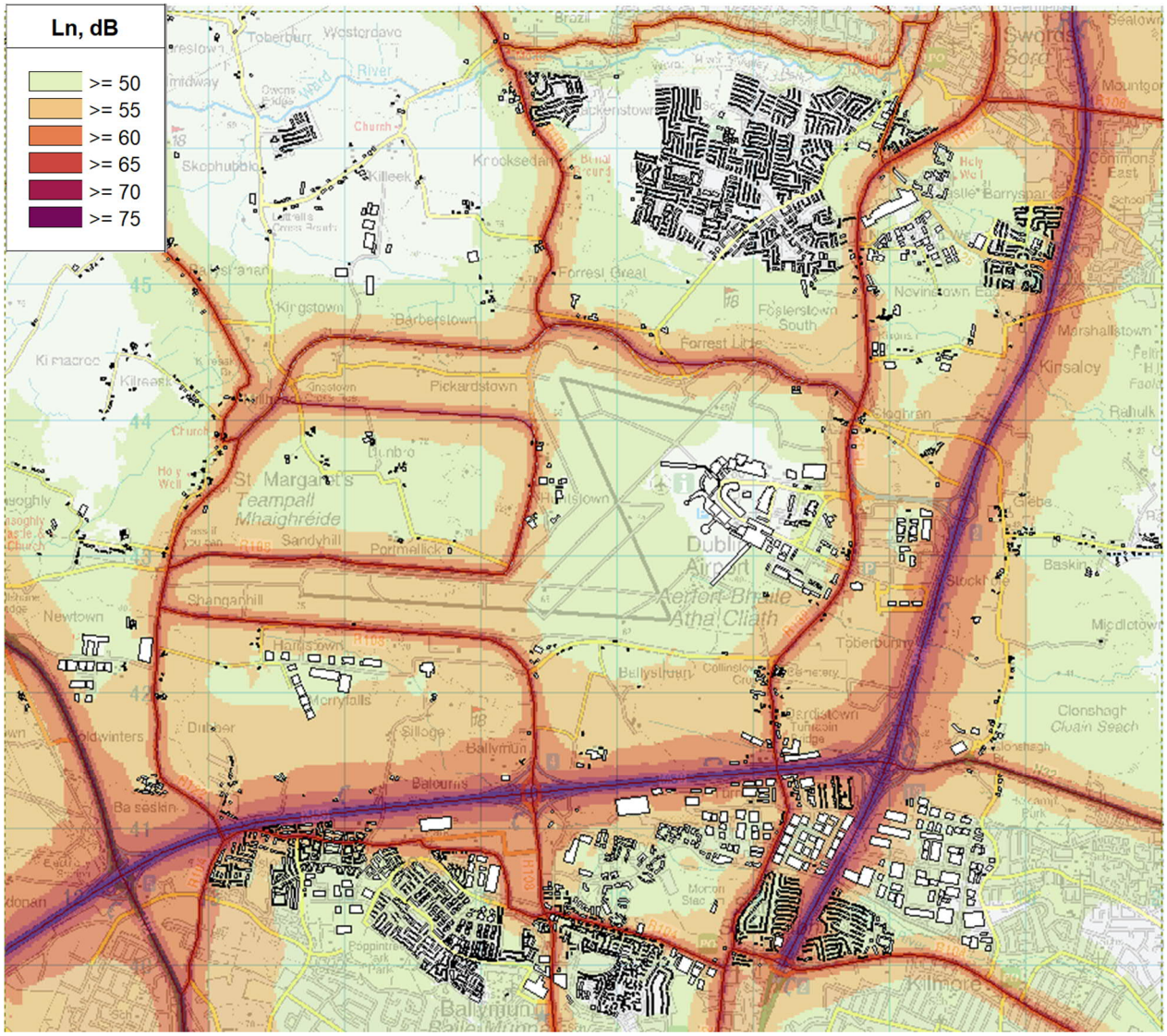

Figure 13. 2035 Baseline (DM) - Ln

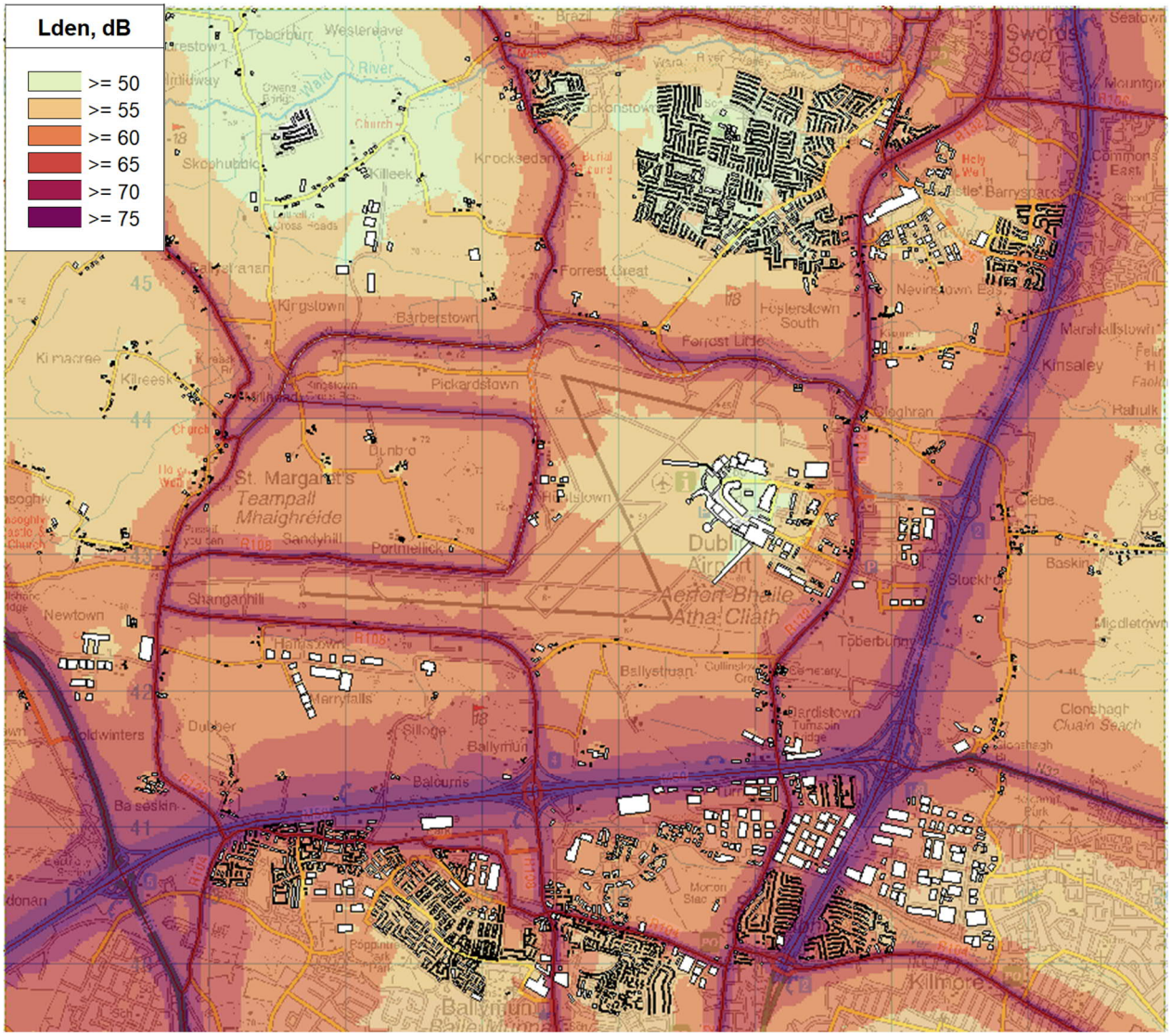

Figure 14. 2035 Relevant Action (DS) - Lden

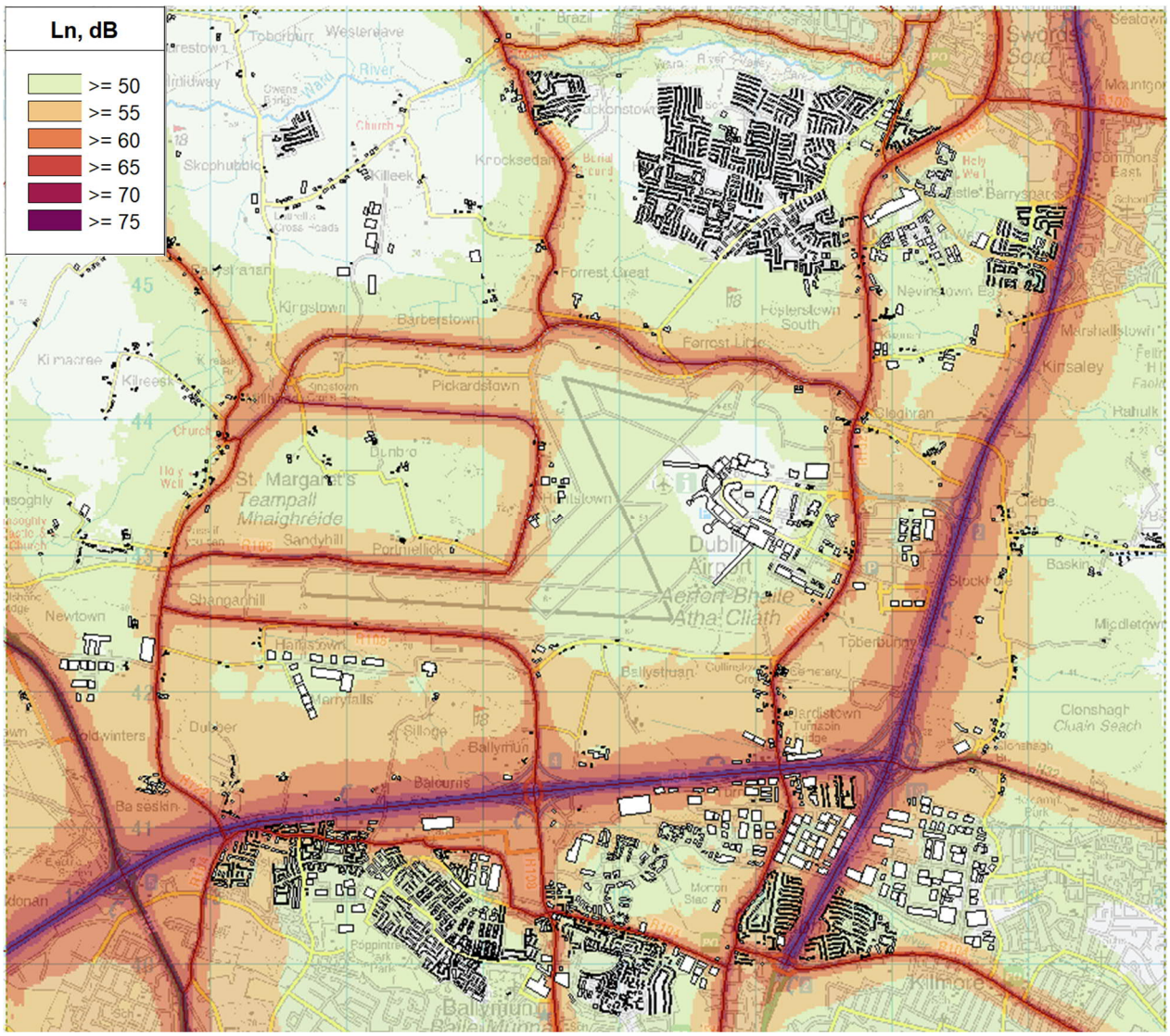

Figure 15. 2035 Relevant Action (DS) - Ln

Appendix C Change from DM to DS – Lden and Ln

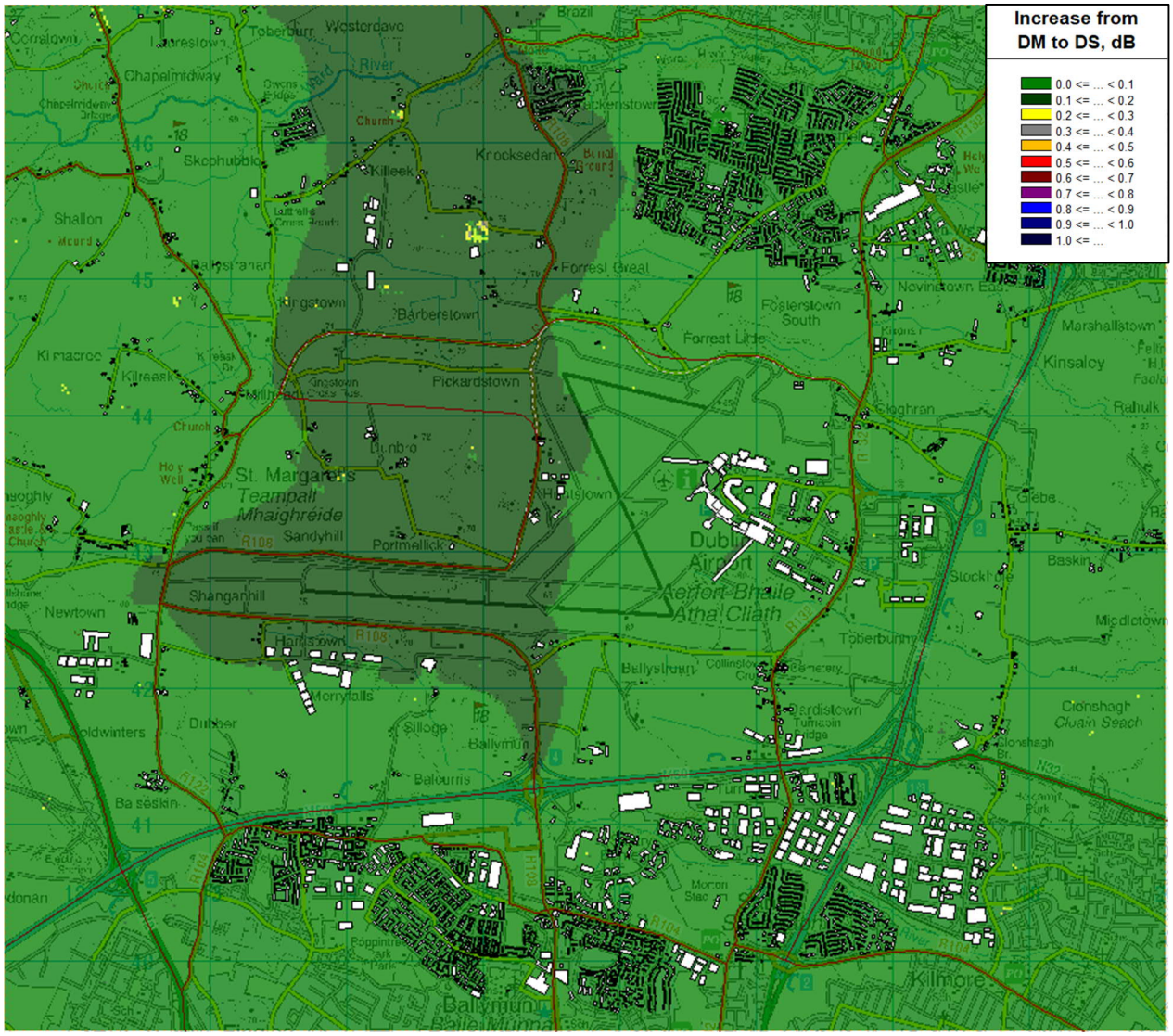

Figure 16. 2022 Increase from Baseline (DM) to Relative Action (DS) - Lden

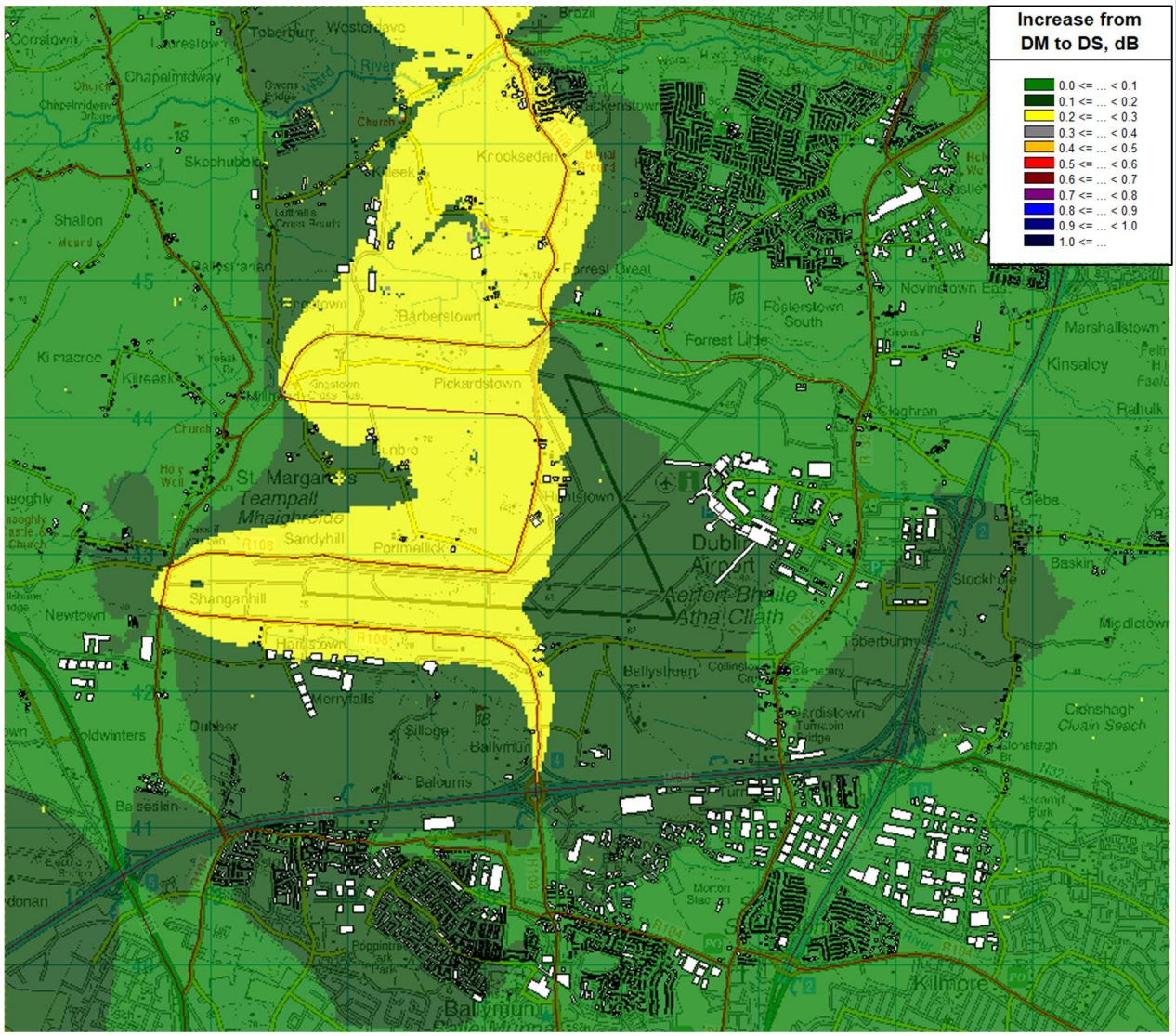

Figure 17. 2022 Increase from Baseline (DM) to Relative Action (DS) - Ln

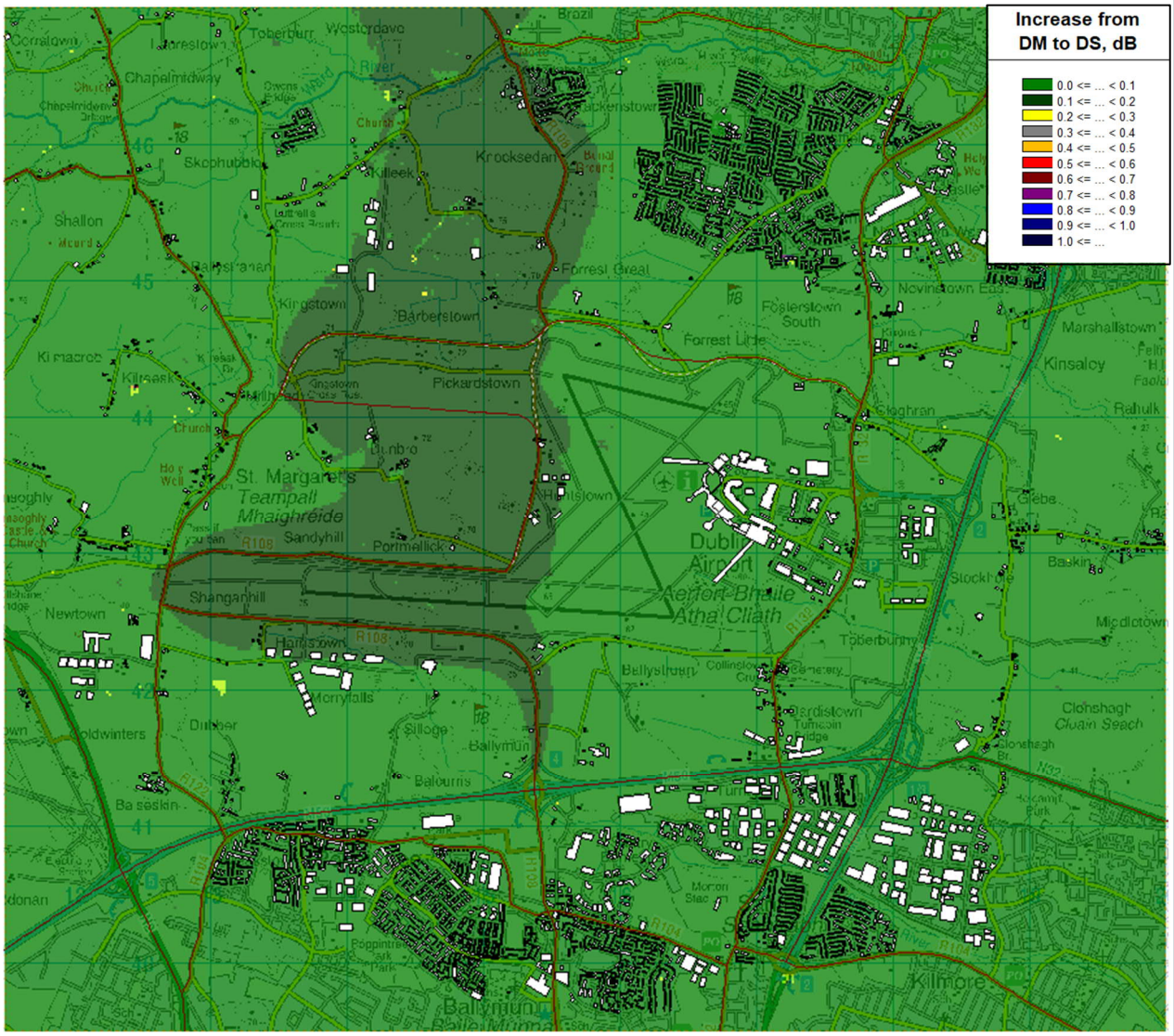

Figure 18. 2025 Increase from Baseline (DM) to Relative Action (DS) - Lden

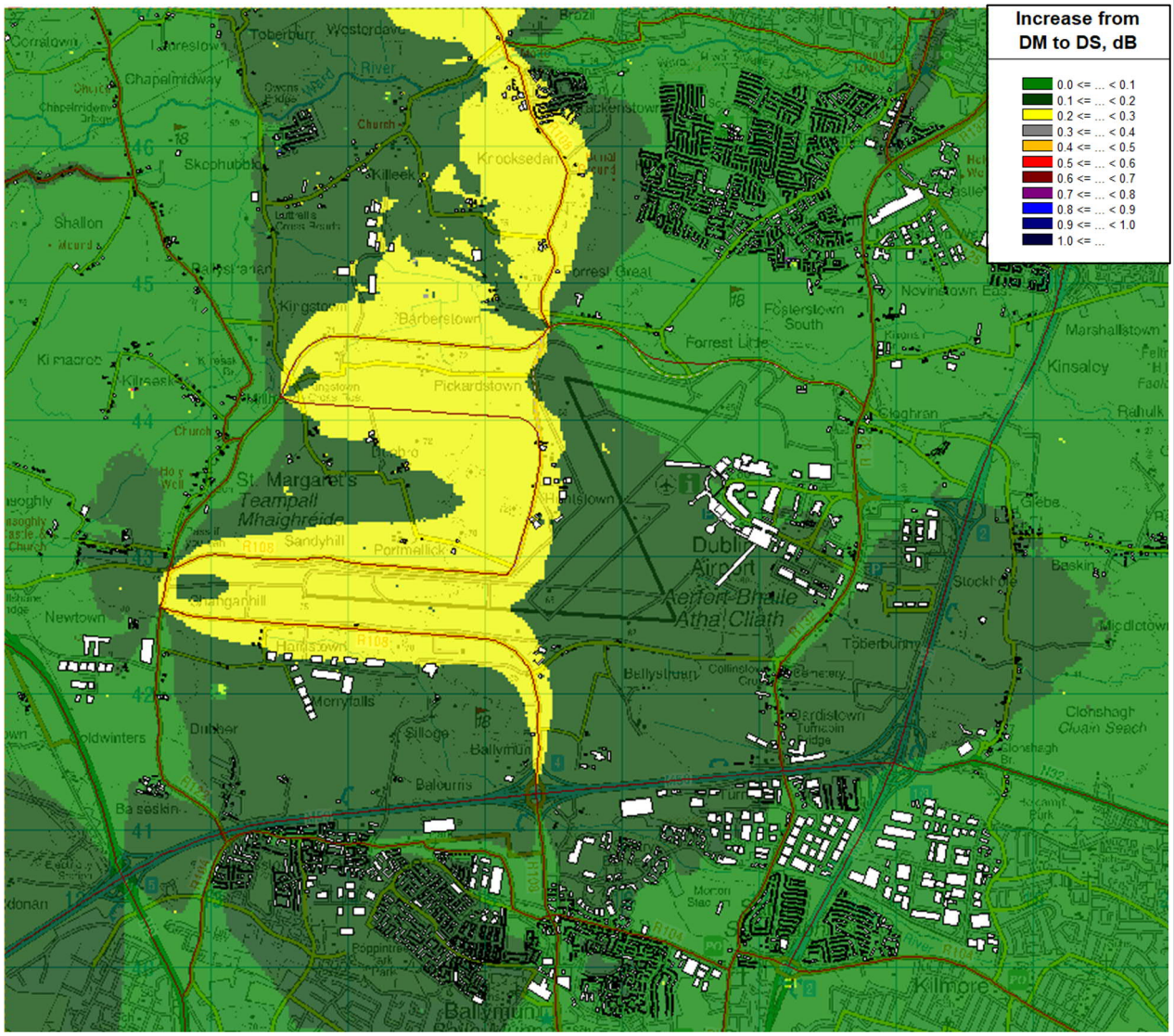

Figure 19. 2025 Increase from Baseline (DM) to Relative Action (DS) - Ln

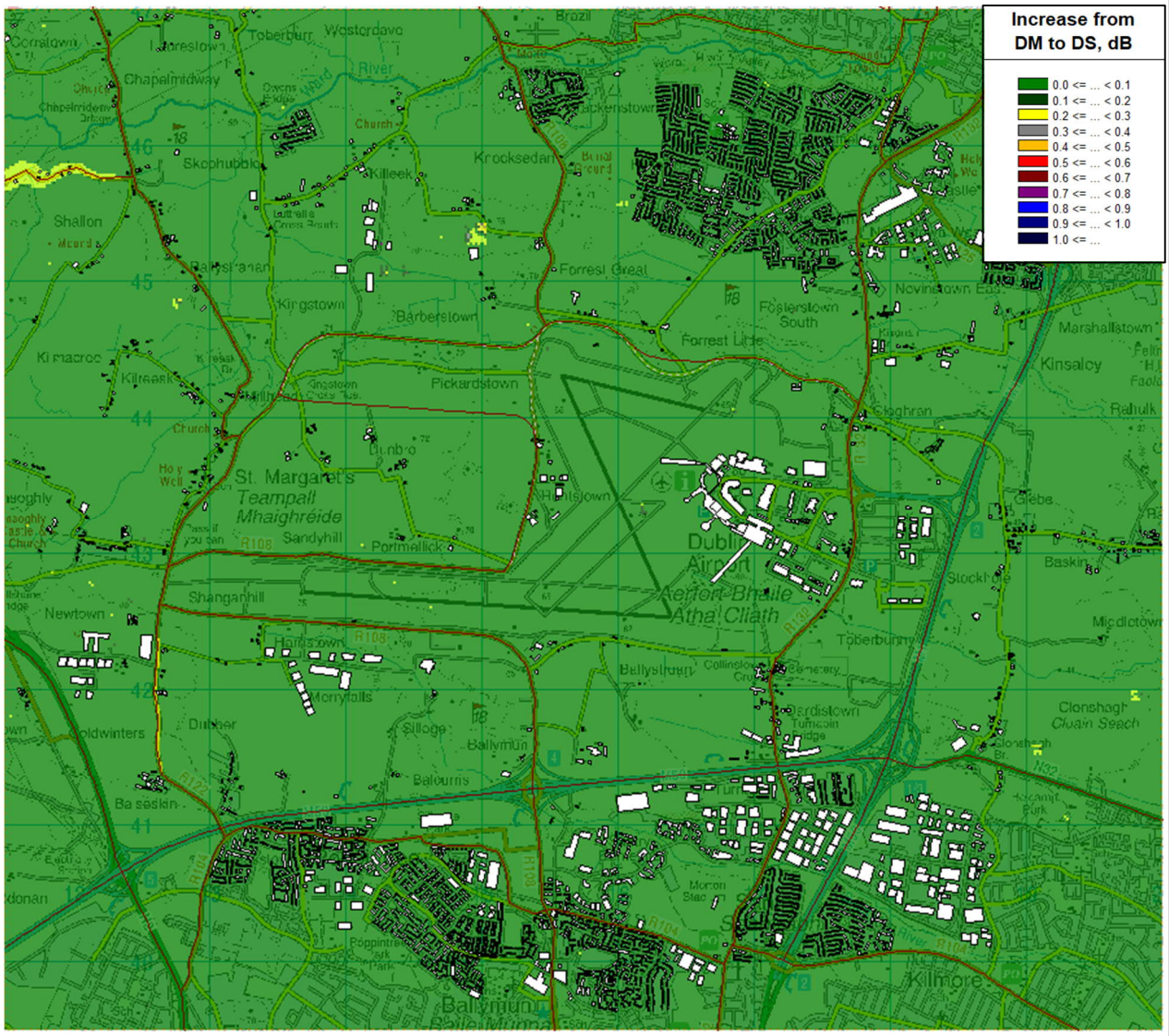

Figure 20. 2035 Increase from Baseline (DM) to Relative Action (DS) - Lden

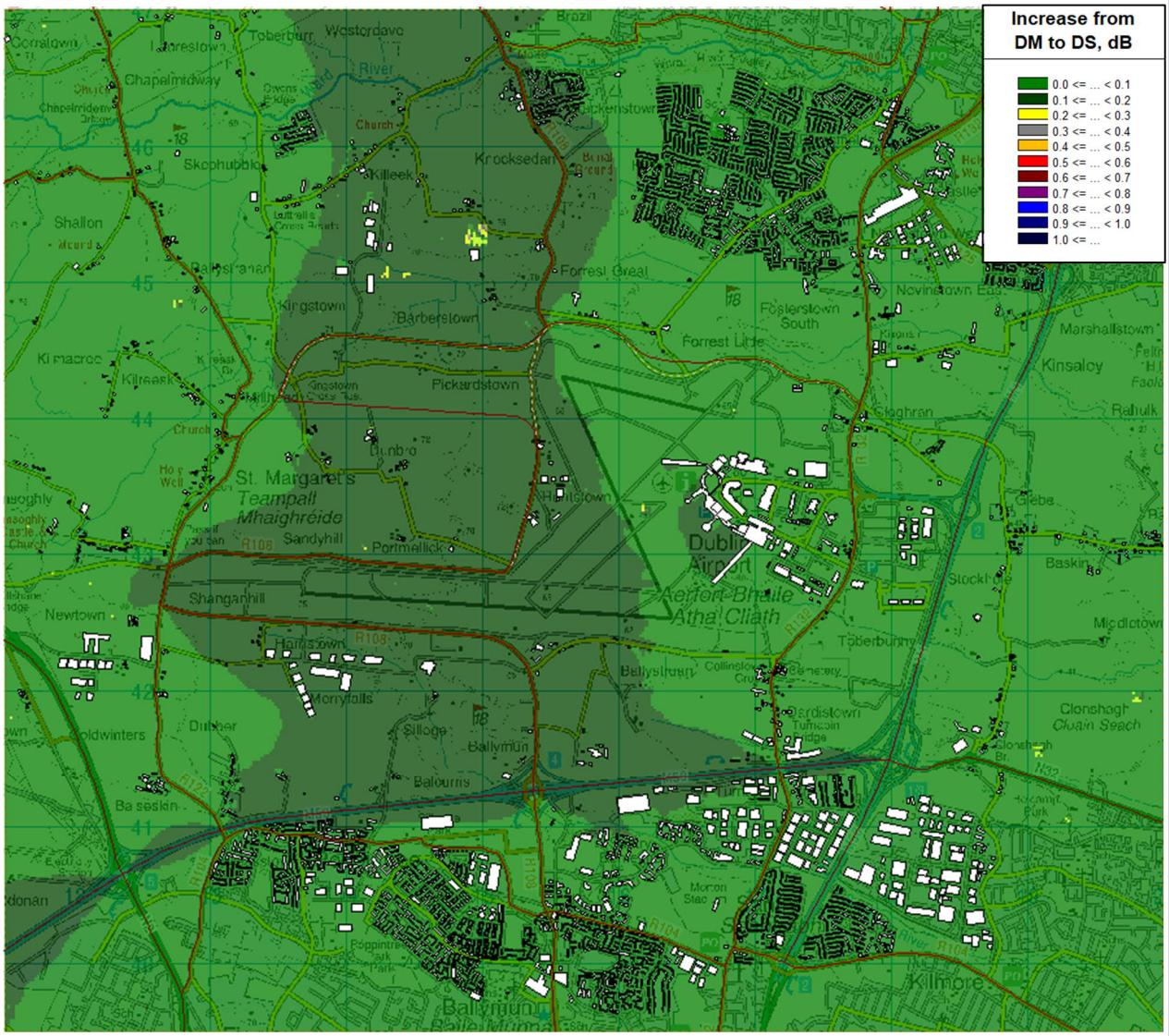

Figure 21. 2035 Increase from Baseline (DM) to Relative Action (DS) - Ln

Appendix 15A. Non-breeding Bird Survey

Appendix 15A

Species recorded during non-breeding bird field survey at Dublin Airport from November 2018 to March 2019.

Species name	Scientific name
Blackbird	*Turdus merula*
Black-headed gull	*Chroicocephalus ridibundus*
Blue tit	*Cyanistes caeruleus*
Bullfinch	*Pyrrhula pyrrhula*
Buzzard	*Buteo buteo*
Carrion crow	*Corvus corone*
Chaffinch	*Fringilla coelebs*
Coal tit	*Periparus ater*
Collard dove	*Streptopelia decaocto*
Common gull	*Larus canus*
Curlew	*Numenius arquata*
Dunnock	*Prunella modularis*
Feral pigeon	*Columba livia domestica*
Fieldfare	*Turdus pilaris*
Goldcrest	*Regulus regulus*
Golden plover	*Pluvialis dominica*
Goldfinch	*Carduelis carduelis*
Great tit	*Parus major*
Greenfinch	*Chloris chloris*
Grey wagtail	*Motacilla cinerea*
Grey heron	*Ardea cinerea*
Herring gull	*Larus argentatus*
Hooded crow	*Corvus cornix*
House sparrow	*Passer domesticus*

Jackdaw	*Corvus monedula*
Kestrel	*Falco tinnunculus*
Lapwing	*Vanellus vanellus*
Lesser black-backed gull	*Larus fuscus*
Lesser redpoll	*Acanthis cabaret*
Linnet	*Linaria cannabina*
Magpie	*Pica pica*
Mallard	*Anas platyrhynchos*
Meadow pipit	*Anthus pratensis*
Mistle thrush	*Turdus viscivorus*
Moorhen	*Gallinula chloropus*
Pied wagtail	*Motacilla alba*
Peregrine	*Falco peregrinus*
Pheasant	*Phasianus colchicus*
Raven	*Corvus corax*
Redstart	*Phoenicurus phoenicurus*
Redwing	*Turdus iliacus*
Reed bunting	*Emberiza schoeniclus*
Robin	*Erithacus rubecula*
Rook	*Corvus frugilegus*
Skylark	*Alauda arvensis*
Snipe	*Gallinago gallinago*
Song thrush	*Turdus philomelos*
Starling	*Sturnus vulgaris*
Stock dove	*Columba oenas*
Stonechat	*Saxicola rubicola*
Wood pigeon	*Columba palumbus*
Wren	*Troglodytes troglodytes*
Yellowhammer	*Emberiza citrinella*

Appendix 17A. Impact on Landscape Tranquillity

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Dun Laoghaire
Co. Dublin A96 T927
Ireland

T: +353 1 238 3100
aecom.com

Project name:
Dublin Airport North Runway Relevant Action

Date:
02 September 2021

Memo

Subject: Landscape/ Tranquillity – ANCA RFI 12 and 13

Request for Information 12

Aircraft Noise Competent Authority Request:

The Applicant is requested to clarify whether effects on tranquillity in important designated landscapes have been considered. If so, the Applicant should clarify whether the additional overflying generally, and the additional overflying at night, create any tranquillity issues.

Applicant's Response:

In order to consider 'tranquillity' fully it would need to be defined and captured in a specific tranquillity mapping based on a robust methodology listing environmental components against which tranquillity can be measured and subsequently assessed. This would allow the Applicant to compare the existing / future baseline tranquillity with the tranquillity as it would be if the proposed Relevant Action where to be consented. The current Fingal County Development Plan 2017-2023 does not provide a definition of tranquillity nor a mapping of tranquillity within designated 'Highly Sensitive Landscapes'. Consequently, the Applicant has not been able to carry out a full assessment on the effects on tranquillity in relation to designated 'Highly Sensitive Landscapes', located within a 4km study area radius of the proposed Relevant Action.

In order to provide some information on the potential impact on tranquillity, the term tranquillity must be understood and defined.

Fingal County Development Plan 2017-2023 contains a number of objectives in relation to 'Highly Sensitive Landscapes'. The most relevant in terms of 'tranquillity' is Objective NH34 stating the following:

"Ensure development reflects and, where possible, reinforces the distinctiveness and sense of place of the landscape character types, including the retention of important features or characteristics, taking into account the various elements which contribute to their distinctiveness such as geology and landform, habitats, scenic quality, settlement pattern, historic heritage, local vernacular heritage, land-use and ***tranquillity****".*

The proposed Relevant Action will not physically impact on 'Highly Sensitive Landscapes' located within the study area.

Guidelines and Background

The Transport Infrastructure Ireland (TII) publication 'Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Specified Infrastructure Projects - Overarching Technical Document', PE-ENV-01101, December 2020 defines tranquillity as follows:

"*Tranquillity e.g. sense of remoteness and isolation, or lack of it, within the landscape. This is often determined by the presence or absence of built development, human activity, infrastructure, and traffic. Background traffic noise can be a contributing factor to loss of tranquillity*".

The TII guidelines generally associate 'tranquil' areas with a sense of remoteness and the "*absence of negative elements (e.g. volumes of traffic, noise, dereliction, unmanaged areas)*".

Further guidance is provided by the 'Technical Information Note 01/2017 (Revised), Tranquillity – An overview', March 2017 prepared by the Landscape Institute UK. It provides "*an overview of what is understood by the term 'tranquillity' within the landscape profession and to inform discussions and actions on the topic*".

It acknowledges that there are various definitions in dictionaries explaining the meaning of 'tranquillity'. The glossary of the 3rd Edition of the 'Guidelines for Landscape and Visual Impact Assessment (GLVIA) ',LI and IEMA 2013, define it as "*a state of calm and quietude associated with peace, considered to be a significant asset of landscape*".

The Technical Information Note 01/2017 (Revised), 'Tranquillity – An overview', March 2017 provides additional context and background information as follows (emphasis added):

"*In Wales, the definition of tranquillity that has been adopted by both Welsh Government (Welsh Government 2012) and Natural Resources Wales (NRW 2016a) is "An untroubled state, which is peaceful, calm and free from unwanted disturbances. This can refer to a state of mind or a particular environment. Tranquillity can be measured in terms of the absence of unwanted intrusions, or by a balancing of positive and negative factors. These include the presence of nature, feeling safe, visually pleasing surroundings and a relaxing atmosphere."*

Following from this 'tranquil areas' have been defined in experiential terms as 'areas with the characteristics most likely to induce a state of tranquillity for people who are there'.

"Tranquil areas should not be confused with 'quiet areas' which are defined by the European Environmental Noise Directive (END; 2002/49/EC) as 'those areas delimited by national authorities that are undisturbed by noise from traffic, industry or recreational activities'."

"The interpretation of tranquillity is often linked to an association or engagement with the natural environment and it is this interpretation that places the term within the realms of landscape related study and research. Tranquillity is commonly associated with 'wildness' and 'remoteness' but it is widely recognised that none of these terms is synonymous."

"Consistent with the definitions provided above, tranquillity cannot readily be defined as an environmental characteristic or quality as it is a state of mind that is being described and thus human perceptions as well as factual evidence must be considered in any studies relating to the term. Tranquillity is, in effect, an umbrella term used to refer to the effect of a range of environmental factors on our senses and our perception of a place."

"A distinction is made between ***absolute tranquillity*** *and* ***relative tranquillity*** *… For instance,* ***the tranquillity promoted by a summer sunrise on a calm day on top of a high mountain may be close to absolute, with almost no disturbance of any kind detracting from that state of mind. Yet the benefit to people of the relative tranquillity in an urban greenspace may be very high, despite intrusion from background traffic noise or the presence of many other people.*** *Both sorts are important to recognise and value, but for different reasons, the commonality being the achievable state of mind rather than the environmental setting*"."

Components of 'Highly Sensitive Landscapes'

The following 3 areas of 'Highly Sensitive Landscapes' have been reviewed and are indicated in the figure overleaf:

i. Kinsealy
ii. Coast
iii. Blanchardstown

Kinsealy

This area is located along the R107 and the L2055 / Baskin Lane and approximately 4km east, southeast of the proposed Relevant Action. It consists of large private estates with non-public significant greenbelts, a number of housing estates and commercial and educational facilities.

Coast

Relevant sections of this area include Malahide Castle, Malahide town centre, sections of Malahide Golf Club, Portmarnock, Portmarnock Golf Club and beach, Howth, large amounts of housing estates along the coastline and to either side of regional roads including the R105, R106, R107, R123 and R124,. This closest area to the Proposed Action is Malahide Castle at approximately 4km distance.

Blanchardstown

Relevant sections of this area include the M50 motorway, N3 dual Carriageway, Section of Elmgreen Golf Club, Connolly Hospital Blanchardstown, various large scale sporting facilities and remaining pockets of woodland, green fields with hedgerow boundaries including stands or clusters of trees. This area is located approximately 7km from the proposed Relevant Action.

Figure 1 Relevant areas of Highly Sensitive Landscapes (Fingal Development Plan viewer, 2020)

There is a considerable variety of components within these designated landscapes including:

- Mixture of public and private use;
- Public access to the land or the lack of it;
- Location in relation to the proposed Relevant Action;
- The mixture of built-up, designed or natural landscapes; and
- Noise from traffic, air traffic, industry, or recreational activities.

The main receptor groups within these designated areas include the following:

- Residents;
- Vehicle Passengers;
- Pedestrians / Cyclists;
- Visitors / Tourists;
- Workers; and
- Students / pupils of educations facilities.

The proposed Relevant Action, if permitted, would allow flights to take off from and/or land on the North Runway for an additional two hours i.e. 23:00 to 00:00 and 05:59 to 07:00. Overall, this would allow for an increase in the number of flights taking off and/or landing at Dublin Airport between 23:00 and 07:00 over and above the number stipulated in the North Runway Planning Permission. The impact of the proposed Relevant Action will be an operational change, the net effect of which would be to facilitate recovery in the number of flights permitted to take off from, or land at, Dublin Airport at night in the Proposed Scenario compared with the Permitted Scenario.

A change to the tranquillity would relate to the additional visibility of aircraft during the proposed additional night-time and early morning hours, and extended lighting of navigation lights. Considering the proposed time windows as stated above, the main receptor group likely experiencing a noticeable change in tranquillity would be residential receptors. Vehicle travellers, Pedestrians / Cyclists and Workers would be lesser affected.

Designated areas most affected by any visual change in the number of visible aircraft are 'Kinsealy' and 'Coast', as they are closer to the airport than receptors located in 'Blanchardstown', where aircraft may be discernible but are at a higher altitude than when closer to the airport.

Lighting of the airport in the Permitted Scenario will be as consented in the North Runway Planning Permission. The North Runway will be lit for the same time during the night in both scenarios, so there is no additional visual impact and therefore no change to the tranquillity arising from the proposed Relevant Action.

Navigation lights are also positioned at the end of the runways for safety reasons, to assist planes landing during the hours of darkness or at times of low visibility. These are only visible from the direction of approach to the runways but can also be seen by people on the ground when in close proximity. In the Permitted Scenario the navigation lights on the South Runway would be on throughout the night, whereas those on the North Runway would only be used until 23:00 and again after 07:00, when aircraft are using this runway.

In the Proposed Scenario, the navigation lights on the North Runway would be used for an additional hour at night (23:00-00:00) and in the morning (06:00-07:00), although these lights would not normally be needed in the morning when it is light and visibility is good. Outside these times there would be no difference between the Permitted and Proposed Scenarios. None of the Highly Sensitive Landscapes are located in close proximity to the navigation lights. Therefore, there will be no change to the tranquillity of these sensitive landscapes.

The main change to the tranquillity in any area would be related to noise, which has been assessed separately by the relevant discipline. The impact on tranquillity resulting from additional aircraft visibility during the additional hour late at night and early in the morning can only be measured and assessed if there is an existing tranquillity mapping, which would provide an agreed definition of the term, factors relevant to measure tranquillity and a methodology for measuring and identifying tranquil places.

Request for Information 13

Aircraft Noise Competent Authority Request:

The Applicant is requested to clarify whether there would be any change to lighting at night with the change to the Conditions, and if so, whether impacts of additional lighting have been considered.

Applicant's Response:

The proposed lighting scheme has not changed since the North Runway Planning Permission was granted, resulting in no additional / new landscape and visual effects. If the proposed Relevant Action is consented, safe operation of the runway system would entail lighting and approach lighting of the North Runway between 22:00 – 23:00 and also 05:59 – 07:00. Lighting of the runway is not considered in the EIAR because the net change between the Permitted and Proposed Scenarios is considered insignificant but the project description has been updated to clarify that the proposed change would be minimal.

Appendix 19A. Waste Minimisation Plan

Zero Waste, Circular Material Flows

daa

Waste Minimisation Plan

AIRBIZ

Version 2.0

March 2021

Zero Waste, Circular Material Flows

daa Waste Minimisation Plan

Disclaimer

Airbiz, the consultant, has developed this Waste Minimisation Plan in collaboration with daa. This report is provided on the basis that the consultant considers the information contained within to be true, current, and correct at the date of this report based on experience, knowledge, and using reputable sources. As our client, you will need to be aware that this report is intended to be a guide only in respect of future outcomes and this report cannot be projected with absolute accuracy given that all business environments are uncertain.

For the reasons above, the consultant will not accept any liability for any loss or damage which may be incurred by you (including any of your affiliated persons) as a result of acting in reliance upon the information contained in our report. The consultant confirms that it is your responsibility to assess the relevance and the accuracy of the information at the time you choose to rely on the report. The consultant expressly disclaims any liability for any financial, accounting, taxation, or legal advice in this report.

This report has been prepared for direct use by you as our client considering your instructions and requirements in accordance with the scope of work defined in the engagement letter. At your discretion, you may release this report to third parties provided you release the whole report including this disclaimer.

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Authors: Ken Conway, Mark van Doorne, Tristan Noel
Reviewed by: David Cohney
Prepared for: daa
Prepared by: Airbiz Aviation Strategies Ltd.

Version: 2.0 Final / March 2021

Executive Summary

Over the past decade we have developed plans and targets to improve the waste performance of Dublin Airport. Significant progress has been made to reduce and recycle our waste across the airport. The recycling of our operational (dry, non-hazardous, municipal solid) waste has increased significantly from 18% in 2010 to nearly 46% in 2019.

This Waste Minimisation Plan (WMP) builds on existing actions and initiatives to define our approach to reduce and recycle waste across the airport more effectively. It sets the strategic direction on how we develop and manage our waste, and our resource recovery infrastructure. The WMP provides the overarching framework to help guide decisions that may affect the procurement and management of materials at the airport, not just under our direct control but across the entire value chain.

2030 Targets

We have set ourselves, and the wider Dublin Airport community, a set of ambitious but realistic targets for this decade. Our objective is to be recognised as a national exemplar and European airport leader in the way we manage waste and use materials.

- **Reduce Operational, Non-Hazardous Municipal Solid Waste:** reduce 30% passenger waste-intensity by 30% in 2030 from 0.164kg in 2019 to 0.116kg per passenger.
- **Increase Operational Waste Recycling:** recycle 60% of operational non-hazardous, municipal solid waste under our control by 2030.
- **Increase Construction & Demolition Waste Recycling:** reuse and recycle 90% of waste generated by our capital projects and development activities.
- **Become a leader in Sustainable Airport Construction Practices:** gradually transition to a circular economy by transforming the way we procure and consume materials and in the way we develop and grow the airport, minimising resource and energy use.

Roadmap for Action

Our roadmap for action is a phased implementation of initiatives that should propel us to our 2030 targets, and beyond. It comprises three distinct types of initiatives:

Short-term Initiatives (<2 years)

Continue to implement existing initiatives along with new ideas to strengthen our waste credentials in the short-term (<two years).

Mid-term Initiatives (3-7 years)

Initiatives that are realistically achievable towards the middle part of this decade and will require us to work closely with our airport partners and other stakeholders across our value chain.

Long-term Initiatives (>7 years)

Significant initiatives requiring more substantial investment to step-change our waste management performance in the longer term (>7 years)

The roadmap is structured based on five priority areas:

1. Material Flows: tackle the sources of operational waste under our direct control with the goal to use and reuse materials more productively over their entire life cycles.
2. Awareness: drive behavioural change among passengers, staff, tenants, and other visitors of the airport through targeted waste campaigns and awareness raising.
3. Infrastructure: install effective waste infrastructure with built in source segregation systems to continue our ‘zero waste to landfill’ practice and to meet our operational waste reduction and recycling targets.
4. Circular Economy: maximise opportunities for circular material flows through Environmentally Sustainable Design (ESD) principles; locally sourced, low environmental impact materials; and sustainable procurement and construction practices.
5. Leadership: leverage our successes in waste management and promote the benefits among the wider airport community as a future blueprint for action to catalyse more effective practices across the airport.

Initiative	Priority Area	Timeframe	Effort and Action	Towards Target
Remove and Eliminate Single Use Plastics	Material Flows	Ongoing	Engage with tenants & mandate requirements	Increase recycling rate
Increase Use of Compostable Materials	Material Flows	Ongoing	Engage with tenants & mandate requirements	Increase recycling rate
Reduce Paper Waste	Material Flows	Ongoing	Targeted awareness campaigns	Reduce waste volume
Evidence-Based Decision-Making	Awareness	<2 years	Improve data monitoring systems & end-market trends	Reduce waste volume & increase recycling rate
Waste Smart Passengers	Awareness	<2 years	Targeted blitz campaigns & awareness raising	Reduce waste volume & increase recycling rate
Staff Training and Awareness	Awareness	Ongoing	Dedicated training team to raise awareness & assign responsibilities	Reduce waste volume & increase recycle rate
Motivate Tenants	Awareness	Ongoing	Engage with tenants & update existing agreements	Reduce waste volume & increase recycling rate
Install Campus-wide Recycling Stations	Infrastructure	<2 years	Feasibility evaluation & business case	Increase recycling rate
Sustainable Design	Circular Economy	Immediate	Upfront planning/design to meet MSRs from Sustainability Guidelines	Reduce waste volume & increase C& D recycling
Whole-Life-Cycle Evaluation	Circular Economy	Immediate	Feasibility evaluation across the lifespan of waste assets	Leadership in Sustainable Airport Construction Practices
Repair before Recycle	Circular Economy	Immediate	Engage & raise awareness with tenants, staff & other partners	Reduce waste volume
Working with our Concessionaires & Tenants	Leadership	Ongoing	Engage with tenants & advocate the benefits of being waste smart	Reduce waste volume & increase recycling rate
Encourage Cargo and MRO Operators to Reduce & Recycle	Leadership	<2 years	Engage with stakeholders & advocate the benefits of being waste smart	Reduce waste volume & increase recycling rate
Evaluate Passenger Processing Waste	Material Flows	5 year	Engage with stakeholders & introduce new technology	Reduce waste volume & increase recycling rate
Improve Onsite Waste Segregation - MRF	Infrastructure	3-5 years	Evaluate feasibility and benefits case	Increase recycling rate
Mitigate Cross-Contamination	Infrastructure	3-5 years	Maximise recycling potential	Increase recycling rate
Green Procurement	Circular Economy	3 years	Purchase materials that provide the best value	Leadership in Sustainable Airport Construction Practices
New Ownership Models	Circular Economy	3-5 years	Review & update procurement strategy & lease agreements	Reduce waste volume & increase recycling rate
Centralised Waste Collection	Infrastructure & Circular Economy	3-5 years	Evaluate feasibility & consult regulatory agencies	Increase recycling rate
Airline Engagement to Reduce & Recycle	Leadership	ongoing	Engage with airlines & align with daa airport waste & materials management practices	Reduce waste volume & increase recycling rate
Airport Community Collaboration	Leadership	ongoing	Engage with key partners to align waste management approach & practices	Reduce waste volume & increase recycling rate
Onsite Organic Waste Composting Facility	Infrastructure & Circular Economy	>7 years	Evaluate feasibility and benefits case	Increase recycling rate
Onsite Waste to Energy	Infrastructure & Circular Economy	>7 years	Evaluate feasibility and benefits case	Increase recycling rate & low-grade renewable heat generation.

Introduction

daa is committed to leadership in airport sustainability. We aim to be more efficient in the way we use resources. Since 2015, Dublin Airport has been a 'Zero Waste to Landfill' airport. This has been achieved by implementing various waste reduction and recycling initiatives. Moving forward, we have set ourselves targets, taking a more holistic approach to waste management. In the future, we aspire to progressively embed circular economy principles at Dublin Airport. This will create opportunities to decouple aviation growth from the increased consumption of natural resources and materials.

We are committed to more efficient and responsible use of resources at Dublin Airport. Waste is an important issue for the airport and prominent in our Sustainability Strategy. We recognise the importance of conserving natural resources. This requires effective and innovative solutions to reduce the amount of waste produced, recycle as much as possible and treat what is left over in the most sustainable way.

This Waste Minimisation Plan (WMP) builds on existing actions and initiatives to define our approach to reduce and recycle waste across the airport more effectively. It provides the overarching framework to help guide decisions that may affect the procurement and management of materials at the airport, not just under our direct control but across the entire value chain. The WMP has been developed for the period up to 2030.

Standout features include clear targets for 2030, priority areas and actions to shift Dublin Airport from a traditional linear economy (take-make-use-dispose system) to a more resource-efficient, productive circular economy.

Our Strategic Priorities

As we plan the airport's future, we aspire to:

- Raise our waste and materials management ambitions
- Minimise negative impacts on the environment
- Consume as few resources as possible
- Communicate what is being done to staff, community, and passengers.

We are taking a holistic approach to waste management to encompass all aspects of airport operations and development. This is formalised by our Board-approved Sustainability, Waste Management and Green Procurement Policies, embodied by our Sustainability Strategy, and recently developed Sustainability Guidelines, and communicated through our annual Sustainability Report.

The WMP is both a strategic tool and a tactical guide for implementation. It is a 'living' document which must evolve in line with new and emerging policy, technology, and best practice.

We recognise the importance to align this WMP with National, Regional and Fingal County Council (FCC) objectives and targets. Strong emphasis has been placed on circular economy and waste management by FCC in the Dublin Airport Local Area Plan (LAP) 2020. We at daa have an important role to play in minimising and avoiding waste across the airport. All major new builds, retrofits and redevelopments must integrate materials management within a dynamic and developing airport environment.

This will be done in accordance with the LAP's waste management objectives:

- ***Objective WM01:*** Support, where appropriate, the provision of proposals to aid the transition from a waste management economy to a green circular economy.
- ***Objective WM02:*** Promote waste prevention and minimisation programmes to target all aspects of waste in the LAP boundary area, focusing on all airport, commercial and domestic waste producers.

Dublin Airport 2030 Waste Targets

Reduce Operational, Non-Hazardous Municipal Solid Waste
30% reduction in passenger waste-intensity in 2030 from 0.164kg in 2019 to 0.116kg per passenger

Increase Operational Waste Recycling
60% of operational non-hazardous, municipal solid waste under daa's control to be recycled in 2030

Increase Construction & Demolition Waste Recycling
90% of construction and demolition waste generated in future capital projects to be recycled or reused

Leadership in Sustainable Airport Construction Practices
Gradually transition to a circular economy through the implementation of green procurement and more efficient waste management and project integration

Waste Goals and Targets

Over the past decade we have developed plans and targets to improve the waste performance of Dublin Airport. Significant progress has been made to reduce and recycle our waste across the airport with the rate of recycling increasing from 18% in 2010 to 46% in 2019. Since 2015, Dublin Airport has been a 'Zero-Waste-to-Landfill' airport and we are committed to maintaining this through to 2030 and beyond.

Responsible consumption and production are one of the United Nation's (UN) 2030 Sustainable Development Goals (SDGs). Reducing, reusing, and recycling materials is vital to achieving this. We recognise the key role we must play and have set bold targets to improve waste and materials management where by 2030 we aim to achieve:

- 30% reduction of operational, non-hazardous, solid waste per passenger
- 60% recycling of operational, non-hazardous municipal solid waste
- 90% recycling of construction and demolition waste
- Zero waste to landfill.

These targets underpin this WMP and were formulated through benchmarks with other international airports, an analysis of existing plans and policies, and internal collaboration.

Resource Stewardship

Our priorities for this decade are to continue to transform Dublin Airport into a low-emissions and resource-efficient operation and focus on:

- Reducing emissions: we are accelerating efforts to decarbonise in line with global action on climate change
- Reducing waste: we are developing a group-wide approach to resource efficiency which minimises waste and maximises opportunities for reuse and recycling

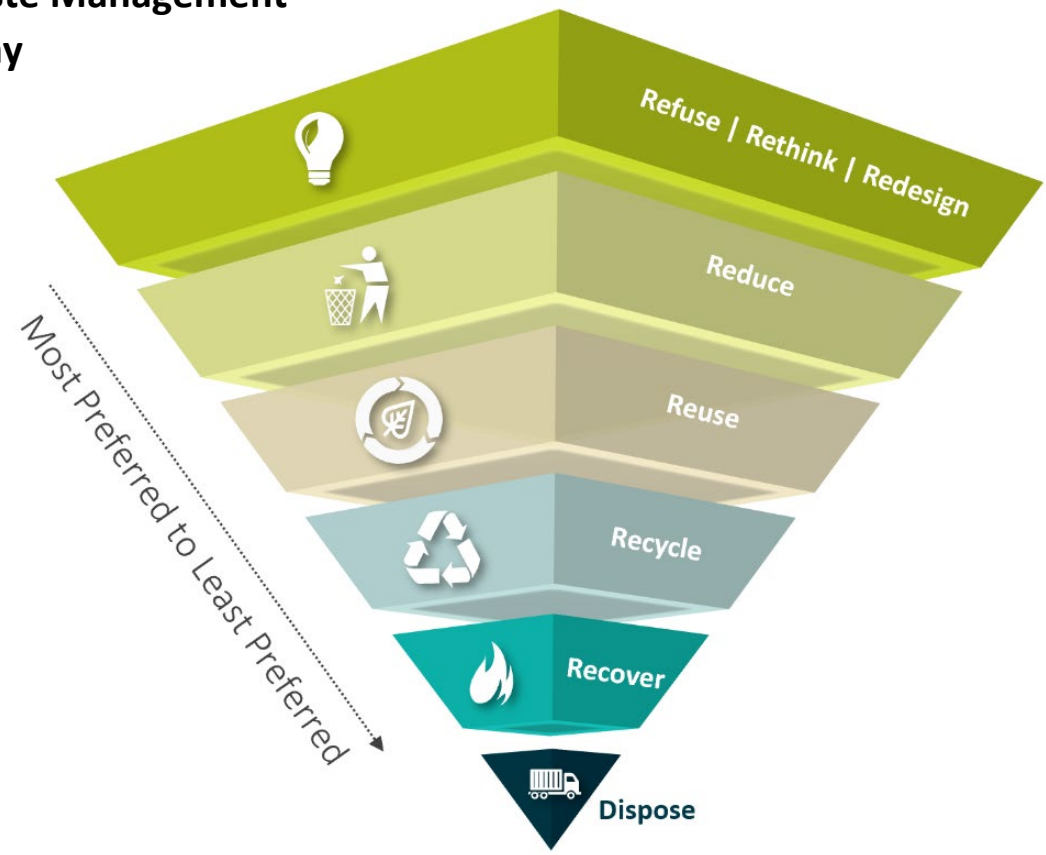
The actions in this WMP build upon more than a decade of achievements. They provide a pathway to a sustainable future where we will significantly reduce the waste generated by each passenger 30% below 2019 levels (kg/Pax/yr.) and increase the amount of waste (operational non-hazardous, municipal solid waste), we recycle to 60% by 2030.

Central to how we manage waste at Dublin Airport are three aspirational goals:

- Reduce operational, non-hazardous solid waste through targeting the waste generated by passengers, visitors, staff, and the wider airport community
- Increase opportunities to recycle operational waste through targeting our selection of materials, installing systems to better segregate and capture recyclables, as well as changing behaviours and raising waste awareness
- Become a European leader in sustainable airport construction by targeting more resource efficient designs, exemplary procurement and site waste management practices and encouraging our supply chain to meet our objectives and targets.

These goals are supplemented by a set of minimum sustainability requirements (MSRs) from our recently developed Sustainability Guidelines. The MSRs are mandatory for all major new build, retrofit and redevelopment projects at Dublin Airport above applicable thresholds.

The Waste Management Hierarchy



Our Waste Hierarchy

The waste hierarchy is a set of priorities to guide the efficient use of resources.

It embodies the objectives of the European Waste Framework Directive (WFD) 2008/98/EC which are also reflected in National waste legislation and policy, the Eastern Midlands Region Waste Management Plan 2017-23, and FCC's LAP 2020.

The waste hierarchy shown above is built on the principles of:

- Avoidance, reducing the amount of waste generated by the airport
- Resource recovery including reuse, recycling, reprocessing, and energy recovery
- Disposal in the most environmentally responsible manner possible (limited relevance as Dublin Airport has been a 'Zero Waste to Landfill' airport since 2015).

We place the highest priority on the elimination and reduction of waste generated across the airport. One of our main goals is to become more efficient in the way we use resources and avoid unnecessary consumption through:

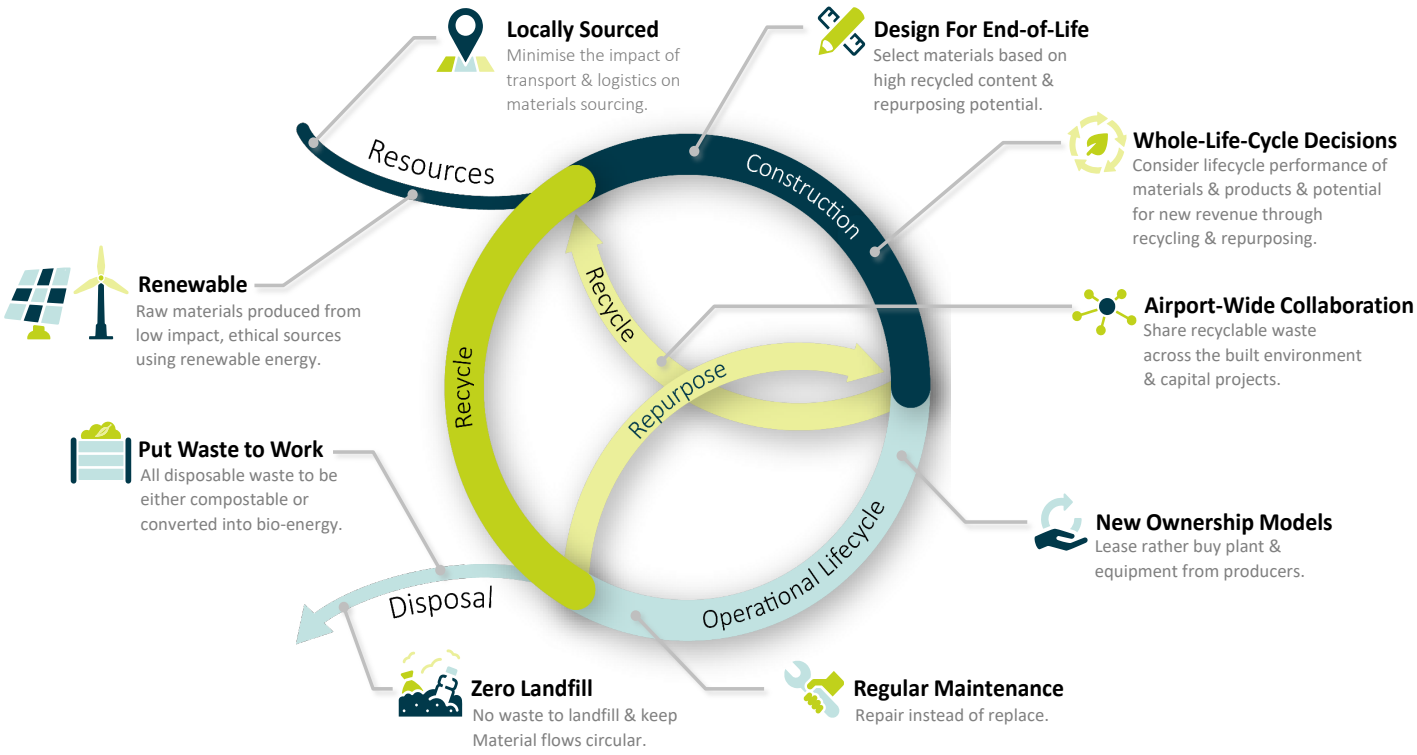
- Selecting materials with the least packaging or that require the fewest resources to produce
- Avoiding disposable goods or single-use materials
- Purchasing materials that are recycled, recyclable, repairable, refillable, reusable or biodegradable using leftover food rather than throwing it away.

This goal is supported by the priority we give to the recovery of resources through maximising reuse, recycling, reprocessing, and energy recovery opportunities.

Reuse (without further processing) and recycling (processing waste materials to make the same or different products) keeps materials in use for longer and benefits the environment by reducing demand for new materials.

Where further recycling is not feasible, it may be possible to recover the energy from the material as a lower grade renewable heat source to power airport buildings and infrastructure. We continue to evaluate the practicality and feasibility of such initiatives 'on-airport'.

The Circular Airport Model



Transition from Linear to Circular Economy

Waste flows and management at Dublin Airport are currently based on a linear economy. This means most of our materials are extracted, processed, transported, used, and then discarded. Typically, there is little to no secondary reusable value for these materials. In many cases, it is difficult to recycle back to the original raw material for reproduction.

We are conscious of demand pressures for resources and materials at the airport from expansion activities and passenger growth. With scarcer resources and rising costs, we must think differently about how we manage our resources and the waste produced.

A circular economy is premised on designing out waste and pollution, keeping products and materials in use and regenerating natural systems.

The progressive transition from a linear to a circular economy underpins our future focus on waste. In a circular economy, resources flow through a system to be productively reused. We have already achieved a significant milestone on this journey by sending none of our operational, non-hazardous solid waste to landfill. By embracing a circular economy, we can unlock significant benefits, including:

- Strengthen our practices around procurement and materials selection
- Reduce our operational environmental footprint
- Create new business opportunities and sources of revenue
- Maximise the time in which materials stay in use
- Facilitate more collaboration with local partners and the wider airport community to use resources more efficiently to reduce and avoid waste.

The circularisation of Dublin Airport will bring its challenges. One of these involves a change to our mindset, particularly in the way we plan, design, and develop our projects, select, and procure materials, tackle the waste generated daily by our passengers, staff, tenants, contractors, and suppliers.

Our Responsibility

For many years we have had in place a Sustainability Strategy at Dublin Airport. It has matured over time and is reflected in the way we continue to operate and build a safe, efficient, and resilient airport. The Sustainability Strategy guides our approach to policy development, governance, and risk management, decision-making, and the way we report our performance.

What matters most to us is the way we work collaboratively with our local partners and other stakeholders to manage business risks and opportunities. Doing the right thing when it comes to the way we use resources, reduce, or avoid generating waste across Dublin Airport lies at the heart of our approach to being a responsible business.

At Dublin Airport, we now consume more resources and generate more waste than before. With plans to expand the airport and increase its capacity to handle forecast demand, better waste and materials management practices and approaches need to be applied to all our capital projects to improve resource recovery and overall environmental and social outcomes. This will require transformative change to our current consumption and disposal habits. We plan to incentivise appropriate behavioural change in this area and encourage our local partners to follow our lead.

Ideally waste and materials management issues should be given early consideration in project design. The management of waste and materials can typically become a significant cost where materials need to be moved off-airport.

We are committed to driving awareness and action in support of the UN's SDGs. The SDGs are a set of 17 goals that define global sustainable development priorities and aspirations for 2030. This WMP aligns to several SDGs but contributes mostly to:

- Goal 9: Industry, Innovation, and Infrastructure
- Goal 12: Responsible Consumption and Production
- Goal 13: Climate Action.

At the European and national level, policy makers are translating these SDGs and giving effect to them in various statutory instruments and plans.

Under the EU WFD (2008/98/EC), a waste hierarchy is set out to prioritise the management practices that deliver the best overall environmental outcomes. The WFD affords Member States provisions to take the necessary action to encourage the prevention, reuse, and recycling of waste.

In July 2014, the EC adopted the Communication *Towards a circular economy: A zero waste programme for Europe*. This establishes a common and coherent EU framework to promote the circular economy. Embedded within this document are key targets with the most relevant to us being:

- Increase recycling and preparing for reuse of municipal waste to 70% by 2030.
- Increase recycling and preparing for reuse of packaging waste to 80% by 2030.

In Ireland, the primary legislative platform governing the prevention and management of waste is the *Waste Management Act 1996* and the *Protection of the Environment Act 2003*. Nationally waste is regulated by the Environmental Protection Agency (EPA).

The EPA licenses certain waste activities which are enforced by the EPA's Office of Environmental Enforcement. Officers of the EPA and FCC are legally entitled to serve statutory notices in relation to incidents of non-compliance with the *Waste Management Act 1996*.

The legal definition of waste is set down in EU law and Section 4(1) of the *Waste Management Act 1996* defines waste as, "*'waste' means any substance or object which the holder discards or intends or is required to discard."*

Article 27 of the *European Communities (Waste Directive) Regulations 2011* contains four criteria that distinguish a by-product from a waste. These criteria have a key function in determining whether the waste legislative powers apply to materials generated by airport construction. They are:

a. Further use of the substance or object is certain
b. The substance or object can be used directly without any further processing other than normal industrial practice
c. The substance or object is produced as an integral part of a production process
d. Further use is lawful in that the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

For these criteria to be relevant, Regulation 27 indicates that it is essential that (a) the material in question is "resulting from a production process" and (b) its production is not the "primary aim" of that process.

Article 27 requires a review of the waste to determine if it is fit to be classed as a by-product. It was enacted by Irish law to implement Section 5 of the EU WFD (2008/98/EU). Pursuant to the requirements of Article 27 our proposed plans to develop the infrastructure necessary for Dublin Airport to sustainably accommodate up to 40 million passengers annually must consider whether material won from construction and demolition activities can be recovered and reused across all our infrastructure projects. The proposed development consists of 15 infrastructure projects where no single project on its own can facilitate growth up to 40 million annual passengers. By treating the package of infrastructure projects as one, we could classify waste from enabling, construction and demolition works as "by product" and reuse avoiding unnecessary transport of such waste off-airport. This would help to minimise adverse environmental impacts resulting from any of the development activities.

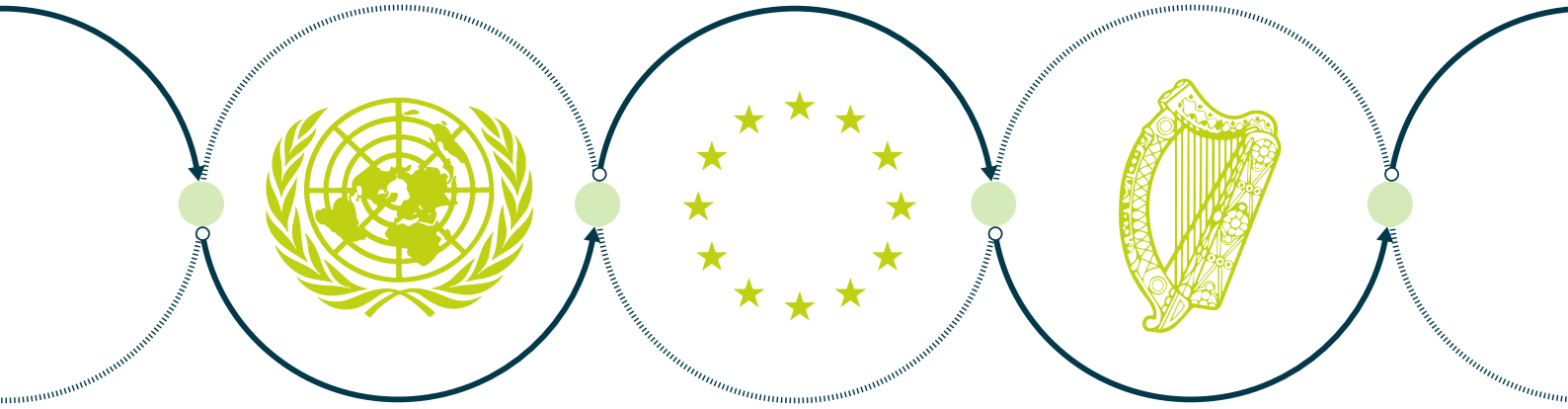
Effective materials management can enhance the sustainability and cost efficiency of construction projects. The objective of materials management for this project are to prevent waste generated on and off-site, to re-use excavated materials including construction and demolition materials, and options to import fill material. Materials include by-products, products, intertidal mud, waste, and materials for reuse.

Under the national framework local authorities must prepare detailed plans for the management of waste. This includes initiatives to support the reduction of waste, a move away from non-recyclable materials and new ways to reuse or recycle materials including the possibility of 'waste to energy'.

Waste management plans in Ireland are statutory planning documents.

The management of municipal and other wastes is covered for in the three Regional Waste Management Plans (Connacht-Ulster Region, Eastern-Midlands Region and Southern Region). The Eastern & Midlands General Assembly (EMGA) supports a regional transition to a circular economy in tandem with more efficient resource stewardship. FCC is part of the EMGA and has set specific objectives for waste management and circular economy across the county.

These objectives are established in the LAP, and support the implementation of international, airport sector-led and national initiatives and policy.



United Nations

UN 2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development, adopted by all 193 UN member states in 2015, provides a multilateral framework for action to eradicate poverty, tackle inequality and injustice, stimulate economic growth, and protect the planet. There are 17 UN SDGs, each of which has targets with 169 targets in all. The UN SDGs define global sustainable development priorities and aspirations for 2030 and seek to mobilise global efforts around a common set of goals and targets.

Many airports worldwide have started to use the UN SDGs as an overarching framework to shape, steer, communicate and report their strategies, goals, and activities to address sustainable development challenges. For waste, UN SDGs 9, 12 and 13 are most relevant.

Goal 9 relates to the development of sustainable infrastructure and facilities, and innovation through planning, design, and technology.

Goal 12 focuses on the responsible consumption of resources, targeting an outright reduction and improving recycling, by transitioning to a 'circular' resource use mindset.

Goal 13 calls for action to combat climate change. The way in which waste is managed will impact carbon emissions.

European Commission

Circular Economy Waste Plan 2020

The Circular Economy Action Plan (CEAP) presents new initiatives along the entire life cycle of products to modernise and transform the way in which resources are used. Circular economy is a precondition for achieving Europe's climate-neutrality target by 2050 which is now enshrined in law. It is a key building block of the European Green Deal, Europe's new agenda for sustainable growth.

The CEAP focuses on the design and production for a circular economy, with the aim to maximise the potential for circular material flows – keeping resources in use in the EU economy for as long as possible., Various legislative and non-legislative measures are in place to make sustainable products the norm in the EU, empower consumers, avoid waste and spotlight on those sectors which use the most resources and where the potential for circular economy is high.

There is significant potential at Dublin Airport to progressively take steps and transition to a circular economy starting with its capital programme. The overarching target is to ensure less waste by making circular economy work for people, regions and cities and sectors such as airports.

Government of Ireland

Waste Action Plan For a Circular Economy 2020

The Waste Action Plan for a Circular Economy sets out the new legislative framework and measures for waste planning and management in Ireland. A key feature of this policy document is the shift away from waste disposal to the use of resources over the product life cycle. This centres on extending the life of products and materials while avoiding or preventing waste in the first place.

The Plan establishes a roadmap for Ireland to inform the steps to be taken to a circular economy in the decade ahead. One of the overarching objectives is to focus on consumption patterns and cycles and take innovative steps to keep materials in productive use for longer thereby preventing waste and supporting reuse through a policy framework that discourages the wasting of resources and rewards circular economy.

The plan identifies opportunities for the application of circular economy principles across a range of areas, including food, plastics, and packaging.

The way we use resources also forms a central plank of the National Climate Action Plan (CAP), with 60% of greenhouse gas emissions attributed to the sourcing and transporting of materials.

Eastern & Midland General Assembly

Eastern-Midlands Region Waste Management Plan 2015-2021

This Plan provides the framework to prevent and manage waste across the Region comprising 12 local authority areas in a "safe and sustainable manner". It supports the achievement of mandatory European and national targets all of which are focused on more efficient use of resources.

Supported by the Plan is a transition to higher levels of resource efficiency and productivity. This requires organisations like daa to rethink their approach to waste and materials management. The strategic intent of the Plan is to enable a progressive move to a circular economy.

There are three key performance targets of the Plan, two of which are relevant to us:

- Achieve a recycling rate of 50% of managed municipal waste by 2020
- Reduce to zero the direct disposal of unprocessed municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment.

This will require us to implement best practices from design through to construction to maximise opportunities to prevent waste and recycle. .

Fingal County Council

Dublin Airport Local Area Plan 2020

FCC is part of the Eastern-Midlands Region. The LAP recognises the waste objectives set out under National and Regional plans and policies and seeks to pursue these across the county. Future development and growth at Dublin Airport will be required to demonstrate how these waste management objectives have been integrated across the lifespan of the built asset.

FCC is also exploring the concept of circular economy and related opportunities that keep the flow of materials in use for longer. Attention is focused on the collaborative frameworks, partnerships and value chain contributions needed to enable such a transition. FCC is a strong advocate of waste reuse and recycling and expects Dublin Airport to make significant contributions in both areas.

FCC has established specific waste management objectives in the LAP which apply to Dublin Airport. These objectives are premised on the circular economy transition and promotion of waste prevention and minimisation across all airport waste streams.

Dublin Airport Authority

Sustainability Strategy: Taking Action for a Greener Airport 2019

Sustainability is a core part of daa corporate strategy. It encompasses seven priority areas with waste being one of them. For more than a decade, many commitments and initiatives have been delivered through the Sustainability Strategy. These comprise a mix of short- and long-term actions which have already significantly improved our overall sustainability performance across the airport.

In recent years, the way we report our sustainability performance, including waste has become more transparent. This is important to meet the expectations of our stakeholders, customers, the EPA, and the community. Our sustainability performance is disclosed in our annual Sustainability Report. Our most recent report, 'Taking Action for a Greener Airport' summarises our achievements in 2019. This includes an improved rate of waste recycling. We continue to focus on the reduction of waste at the source, responsible and ethical materials selection through more sustainable procurement practices and increasing waste recycling rates.

Looking ahead, we will continue to increase the transparency of our business, operations, and performance, and the decisions we make related to waste management at Dublin Airport.

Spotlight

Recycling Stations

New recycling stations were installed at more convenient, prominent locations throughout our terminals with improved visibility and signage.

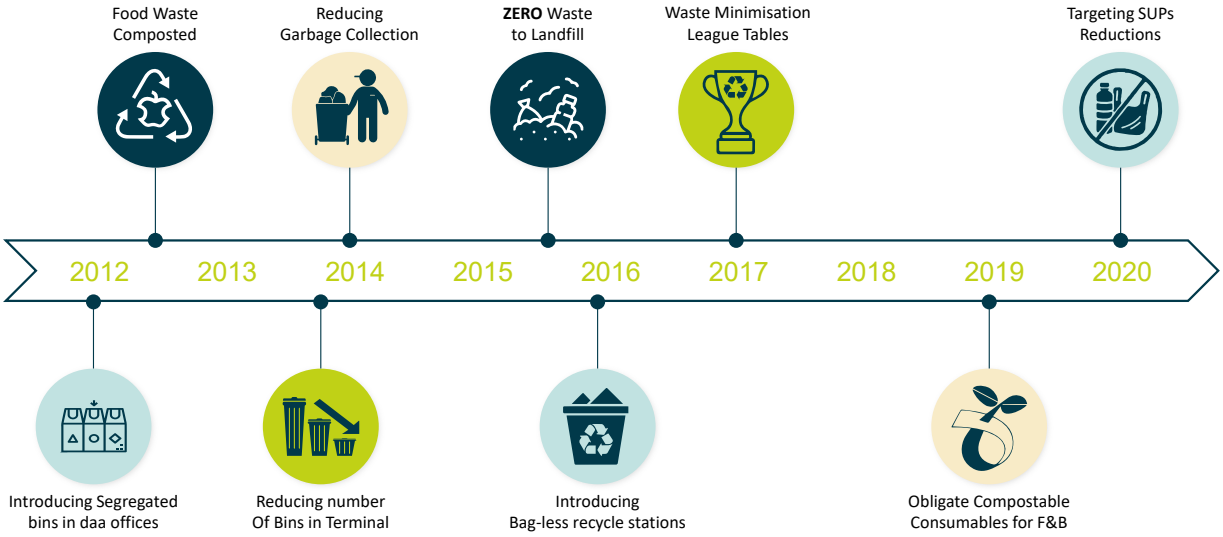
The recycling station design features source segregation systems with each of the bin partition modules helping to improve the recovery of recyclables. A 3-partition system is used to maximise the collection of general waste, plastics and cans, and paper products.

To minimise the potential for cross contamination of waste streams, the recycling station modules were configured to the items they were intended to receive. Supported by appropriate waste stream aperture and colour cues, the discarding of waste becomes more intuitive.

The deployment of these new recycling stations coincided with changes to our waste handling procedures. The reduction in the number of bins was offset by larger, more centrally located systems. Waste collection frequencies were optimised with some bins dispensing with plastic liners to support the progressive phase-out of plastics at the airport.

Building on Momentum

Over the last decade we made significant progress in managing waste across Dublin Airport. We will build on these achievements and make efforts to further reduce and reuse waste while maximising the opportunities to capture high quality, dry-mixed recyclables on our way to becoming a more circular airport.



Our approach throughout this next decade is to reduce, reuse and recycle as much as possible. The prevention of waste through smarter materials selection and procurement processes is important and will involve all our local partners and value chain.

Throughout our public and staff areas we will deploy and locate the right sort of waste systems, so recycling is more accessible and intuitive for our passengers, staff, tenants, and visitors.

Starting with Ourselves

In 2019, we generated over 5,400 tonnes of operational, non-hazardous MSW. Waste that we cannot prevent, we look to manage as a valuable resource. If we cannot extract value through recycling, all residual, non-recyclables are collected by our waste contractor and prepared for bulk transfer to the Dublin Waste-to-Energy facility for processing into solid recovered fuel (SRF). By taking a more holistic approach to waste management we are starting to work more closely with our tenants and business partners to improve their waste avoidance, reuse, recycling, and recovery performance. Through advocacy, training and further education on specific waste streams and best practice we will continue to take the lead in the planning and decision making on waste and materials recovery at the airport.

On average, in 2019, around 0.164kg of waste was generated per passenger. This level of waste intensity has been consistent over the last decade.

We design, build, and operate our assets to reduce waste and deliver a more resilient, efficient, and circular airport. Activities that generate waste across the airport are:

- Administrative functions
- Terminal operations
- Retail and food and beverage outlets

- Landscaping
- Sweeping of roads, aprons, taxiways, and runways
- Security.

We work with our local partners to help them reduce waste particularly within the terminals and piers (retail, food and beverage, airline lounges, customs/border management). While we do not directly control the selection of materials and packaging used by our tenants, we are starting to influence the correct identification and segregation via service lease agreements. We do however manage all the waste from our activities and most of our tenants. Waste that we do not handle includes the waste from construction activities, the airlines (i.e. CAT 1), cargo and aircraft maintenance, and other various third parties operating across the airport (i.e. tenants in Dublin Airport Central).

How waste contracts are designed materially impacts how waste is collected, recovered, recycled, and repurposed for end-use. We have started to consolidate waste service contracts into a new single, vertically integrated contract structure. The contract is performance-based and aligned to our waste targets and requirements. All waste handling, collection and recycling across the airport will be serviced by a single, suitably qualified contractor.

MSRs will be attached to our procurement and contract documentation for construction waste. These set minimum standards and practices expected in management of waste from our capital projects.

Through training and awareness campaigns, our staff are more conscious about their responsibilities when it comes to waste. We have started to update our terminal tenancy and cleaning programme.

Waste audits are being conducted to monitor the types and quantities of materials and products used by each business unit. They also look at the performance of collection and cleaning activities across the airport.

We plan to also develop a standard waste catalogue specifying materials of local origin, responsible and ethical sources, and of the highest environmental performance for use at the airport.

These initiatives in combination with others have already increased the recycling rate of our offices to 55%.

Zero Waste to Landfill

A landmark achievement of our waste programme has been 'Zero Waste to Landfill'. By working closely with our tenants, contractors, cleaners, asset care and procurement teams we have been a zero-waste airport since 2015.

Through our recycling contractor, we have a granular and transparent understanding of the waste generated at the airport. This allows us to implement measures to avoid sending any general waste to landfill. Today, our material is either recycled at the airport before collection or recycled together with other waste at our contractor's recycling plant offsite. All our non-recyclable solid waste is sent to the 60MWe Dublin Waste-to-Energy facility operated by Covanta at Poolbeg in Dublin Airport. This waste is converted to SRF through shredding and dehydration. Energy from the facility is then exported to Ireland's national grid network.

Increasing Recycling Rates

Our rate of operational waste recycling is up from 11% in 2013, to almost 46 % in 2019. The next challenge is to prioritise actions and seek new alternative solutions to achieve our 60% recycling target by 2030.

Our current rate of recycling has been primarily achieved through intensive source segregation across multiple waste streams under our direct control. All single-partition bins in the terminals and piers have been replaced with centrally located three-partitioned, 'recycling stations. These feature in-built source segregation systems for a multitude of waste types (general, co-mingled waste, organics; plastics; paper and cardboard).

Another key driver behind our increased rates of recycling has been better communication of recycling benefits to our passengers, staff, tenants, and other users. We are now planning a series of 'blitz campaigns' targeting specific waste issues such as single use plastics (SUPs), biodegradable foodservice ware and packaging. These will be progressively rolled out to reinforce a positive mindset in all airport users.

On the SUP front, we have installed free-to-use public drinking water stations (for bottle refilling) throughout the terminals and piers to reduce plastic water bottle usage. This type of initiative has helped to subtly change passenger behaviour through a switch to using a refillable water bottle while providing safe drinking water alternative. Beyond the Covid-19 pandemic we will monitor the public health advice related to the use of the stations to eliminate risks of transmission.

Many of our airlines are encouraging passengers to reduce SUPs by taking a reusable water bottle and filling it from one of the airport's drinking water stations before they board their aircraft. Other airlines offer passengers, in flight, water and other beverages in recyclable plastic bottles or compostable cups.

Driving Change

Most of our waste originates from public areas, facilities, and offices under our direct control. Overall, this accounts for less than half of the airport's total waste. A significant amount of waste at the airport is produced by third parties, including our retail and food and beverage tenants, office tenants, airlines, and ground handlers.

We continue to champion the importance of waste minimisation and recycling, through leadership, encouraging behavioural change and setting minimum requirements for waste management at the airport in our tenancy agreements.

In 2017, we introduced waste league tables to further encourage our tenants to be more resource efficient, reduce waste and recycle as much as possible. Every month we update these league tables according to the waste performance of our tenants.

More recently, we have tightened the packaging requirements that our tenants must adhere to. We are actively working with our suppliers to reduce the amount of packaging used and when required that it be recyclable and compostable.

We will keep working closely with our tenants to reduce waste and increase recycling in the material recovery areas of our terminals and piers.

As momentum builds towards a future circular economy, 'closing the loop' on material flows and lifecycles through more effective recycling and reuse we will further strengthen our waste credentials. We realise this cannot be achieved on our own and a cooperative effort will be required with all levels of government, our tenants and business partners and the airport value chain.

REPAK Member

We are a proud member of the REPAK initiative and are working together with like-minded organisations to recycle waste, transition to a circular economy and make a meaningful difference to our future.

Our combined goal is to make Ireland a primary leader in Europe of package recycling, by achieving a 50% recycling of all plastics used in the country by 2025, and up to 80% by 2030.

We are cooperating with our tenants, of which many are a REPAK member themselves, to reduce packaging volumes and recycle what is left. Through REPAK, we communicate and learn from other industries and share knowledge on on successful initiatives and practices.

Waste Minimisation Focus Areas

Waste at Dublin Airport is generated by our passengers, staff and other people who work and visit the airport every day. Our passenger terminals account for almost 90% of the 5,400 tonnes of operational waste we handle each year. For the decade ahead there will a stronger focus on opportunities to reduce waste across the airport and value chain.

To limit the impacts of the airport's predicted growth and consumption we must produce less waste, reuse, and recycle more, and keep materials in use for longer. As we plan to manage and reduce the expected mix and amount of waste across the airport to accelerate towards our 2030 targets, the spotlight is on four key sources of waste:

- daa Operational Waste: waste under our direct control or one of our tenants, as a result of normal day-to-day operations.
- Third Party Waste: sources of waste not under our control, and subject to third party waste policies and agreements
- Irregular Waste: waste under our direct control or one of our tenants, but unrelated to day-to-day operations
- Construction and Demolition (C&D) Waste: driven by the development and decommissioning of airport buildings and infrastructure.

Over time we are planning to strategically locate more 'state-of-the-art' collection and sorting facilities along with innovative technologies to process all these waste streams into new products (a key step in our circular economy transition).

Waste Snapshot

In 2019, we handled around 5.400 tonnes of operational waste from airport areas under our direct control. Approximately 90% of this waste was generated by our terminals and piers.

Passenger Terminals and Piers

Our increased performance in recycling is mainly the result of our efforts to change behaviour and tackling the materials used in the key passenger terminal areas, like concessions and general dwelling areas. Passengers bring waste to the airport from their homes or hotels (water bottles, food, magazines etc.), or buy and consume products from our duty-free, retail and food and beverage outlets.

We are now able to reduce these sources through our awareness campaigns, and facilities like water bottle filling stations. We facilitate proper material segregation with our centrally located recycling stations and enforce the use of recyclable materials for our concession holders.

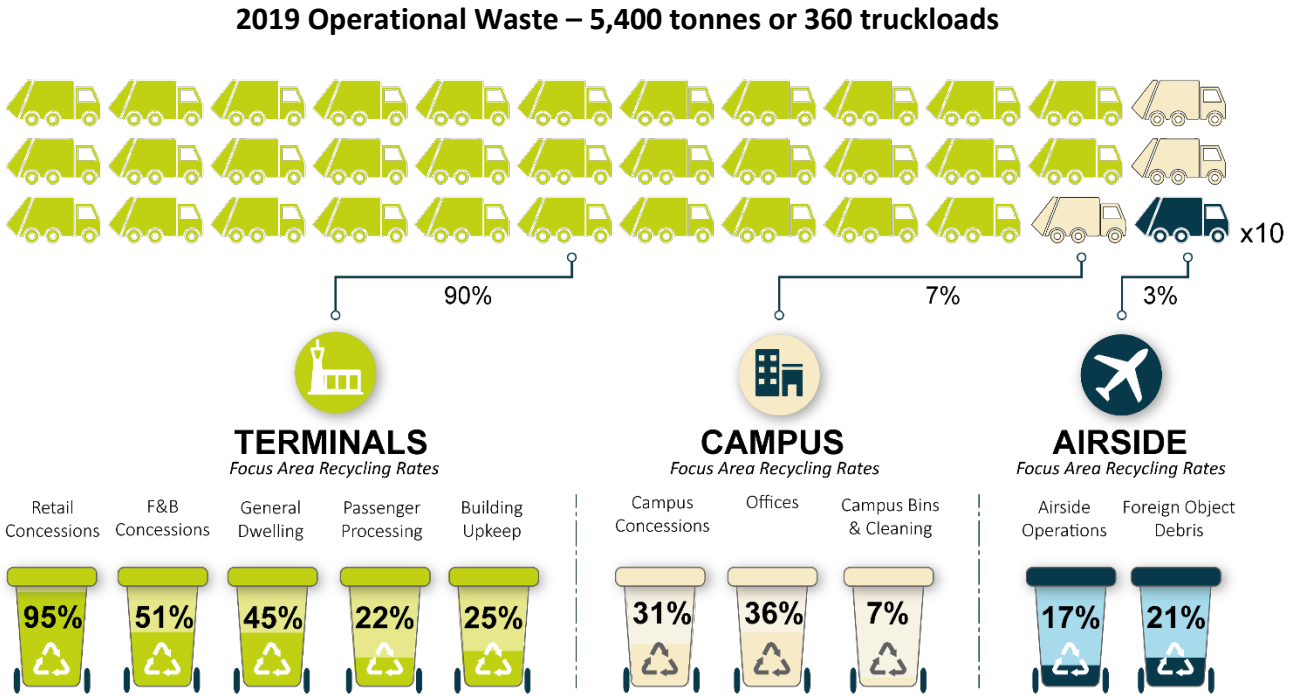
Our food and beverage tenants are starting to use either durable (crockery) foodservice ware for eat-in services or approved compostable foodservice ware for takeaway services. Approved foodservice ware that is certified compostable to European EN13432 standards is suitable for composting within a commercial composting facility. Compostable materials include:

- Coffee cups and lids
- Other cups and lids
- Straws
- Napkins
- Plates, bowls, and lids
- Cutlery including chopsticks
- All containers, lids, wrapping including cling wrap.

Our efforts in these passenger areas are starting to pay off, with our dwelling areas and food and beverage concessions reporting around 50% recycling, and retail concessions excelling beyond 90%.

Nonetheless, we are also aware that we are lagging in other areas in the terminal building and there are 'hidden' sources of waste indirectly related to the passengers. Key processing touchpoints along the passenger journey like security and baggage reclaim are underperforming.

Current operational protocols and procedures prohibit effective recycling. For instance, security screening areas are reporting low rates of recycling. All prohibited items (razors, metal cutlery, scalpels, sharp weapons), powders,



liquids, aerosols, and gels (PLAGs) exceeding 100 ml and dangerous goods (explosives, lithium batteries, flammable liquids) posing a significant aviation safety risk are discarded without segregation.

Upkeep of the terminal recorded a recycling rate of 25%. This is low compared to other terminal activities and will be the focus of future improvement plans. Therefore, new initiatives are needed to update our procedures, operations and supporting technology, to tackle this 'hidden' terminal waste and replicate the success we achieved in the public material recovery areas.

Airport Campus

Across the airport campus rate of recycling needs to be improved. Significant effort is required to step up the recycling of our tenants (offices and commercial), as well as by general waste handling and cleaning.

We have piloted and tested many initiatives to reduce waste and increase recycling. In our offices this has led us to reduce our (mis)use of paper (the paper-less office), create an awareness among staff on the importance of recycling (training), and using the recycling stations put in place.

The recycling rate in our offices is 55% which outperforms the recycling rates being achieved by the entire airport office network by 19%. Due to this success, we will continue to advocate the 'use less and recycle more' principle in all offices on the airport, including those that we lease out. On average, the office network across the airport

COVID-19 Pandemic Impact

In 2019, the recycling rate reached 46% and was on track to achieve our 2020 target of 50%. Early in 2020 the Covid-19 pandemic struck. It has had a significant impact on all aspects of our business, including our waste programme where the recycling rate is tracking at around 25%. As a result of Covid-19, we have introduced extra measures to help protect everyone who comes to or passes through the airport. Specialist cleaning teams have been trained to implement numerous preventative measures to thoroughly disinfect the airport and minimise the risk of transmission. They clean all surfaces, especially the main passenger touchpoints more regularly than ever before. Other precautions being taken are the continual sanitisation of trolleys, lift buttons, check-in and bag drop kiosks. In line with public health protocols, we are required to discard instead of recycling materials which could be infectious such as paper towels, face masks and hand sanitising containers.

The COVID-19 outbreak also puts the spotlight on our non-passenger waste flows, which have a small contribution in normal circumstances. With lower passenger numbers, these secondary waste flows are more prominent in our overall recycling rate. It highlights that these sources are lagging and lack initiatives to improve. What we learnt during the pandemic is that we need to be more holistic in our waste management.

recycles 36%, and so work is necessary to meeting our 2030 operational waste recycling target of 60%.

We also need to focus on our landside concessions, which are currently only recycling 27% of their waste. Our objective is to take the lessons learned inside the terminal and apply them to our concessions campus-wide. We are aware that our campus currently lacks the infrastructure and facilities to properly sort waste (recycling stations) from the pick-up and drop-off kerbs, car parking facilities, and other public areas.

Airside

During 2019 the airport handled more than 300 aircraft daily. Many staff from airlines, caterers, ground handlers and refuellers and our own staff are on the airside at any time, each generating waste. For safety we routinely train staff to identify and collect Foreign Object Debris (FOD) from the ramps, aprons, and rest of the airfield. FOD has the potential to cause substantial damage if ingested by an aircraft. It also poses a significant hazard to people working on the airfield, as it can be propelled at force by aircraft jet blast. For these waste streams, recycling is currently limited. Proper recycling facilities and waste awareness among airside staff are lacking. This is now a focus for future improvement.

Third Party Waste

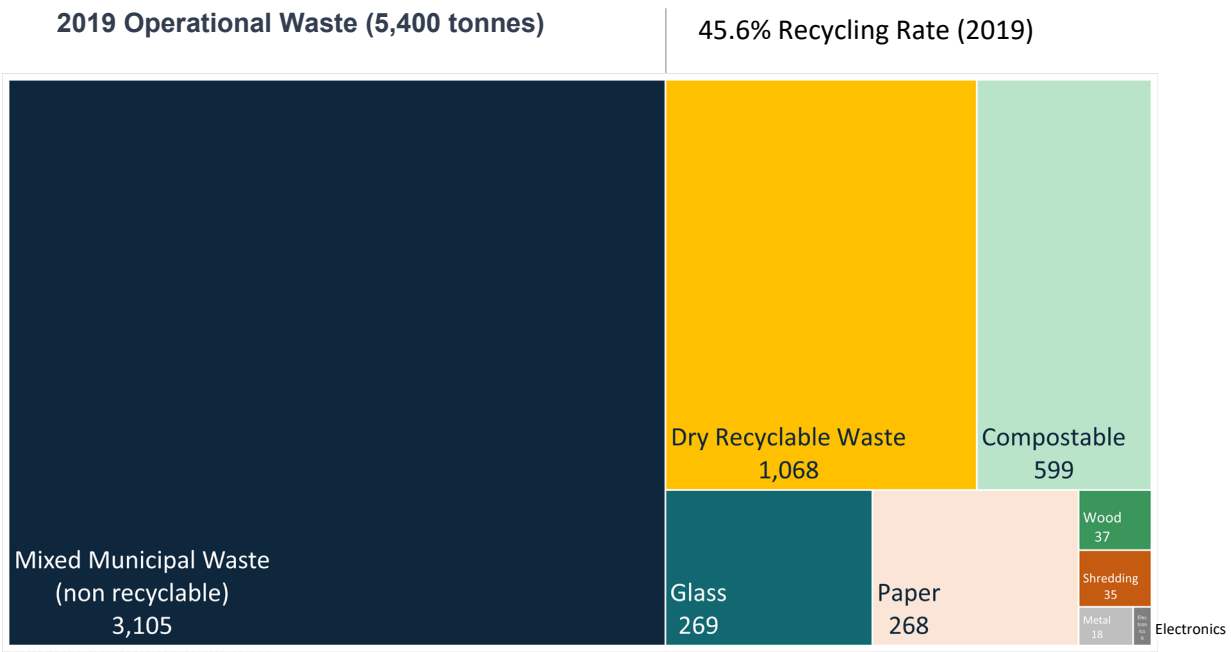
daa is responsible for the handling of waste in most public areas in and around the passenger terminals, as well as the airfield. However, there are several waste sources where we have no visibility, as they are under the control of other stakeholders in the airport community. Whilst we cannot directly influence these sources, we have a leadership responsibility as the airport authority to engage these third parties, set an example in good waste management and encourage buy-in to our overarching targets.

Aircraft Cabin Waste

The largest third-party group at the airport is the airline community and their respective ground handlers.

Aircraft cabins are a major waste source for food packaging, plastics (water bottles, cups, blanket wraps, cutlery), and food waste (scraps, service ware). Other waste generated in flight includes disposable polypropylene head rest covers, amenity kits, used headphones, napkins, shredded or soiled paper/cardboard (wet or food stained).

All flights to Dublin Airport generate CAT 1 catering waste (inclusive of food and packaging). CAT 1 waste is classified as a high-risk waste stream as it can contain animal by-products. It is subject to regulatory inspections and special handling and disposal requirements. All CAT 1 waste is sent off-airport to a suitably licensed facility for incineration or steam sterilisation.



Aviation Support Facilities

Aviation support facilities like aircraft maintenance hangars, air freight handling facilities, and various GSE and vehicle maintenance workshops operated by third parties generate waste.

The types of waste generated by these facilities consist of oils, solvents, and other chemical waste from activities such as aircraft and ground vehicle washing and cleaning, fuelling operations, aircraft maintenance and repair including painting and metalwork.

Some of this waste is classified as hazardous where such materials and fluids are subject to special handling requirements.

Airport Campus

Many buildings across the airport are occupied and operated by third parties, including office buildings, hotels, and rental car facilities. These generate substantial amounts of waste. We can influence waste practices by setting an example to our local partners.

Irregular Waste

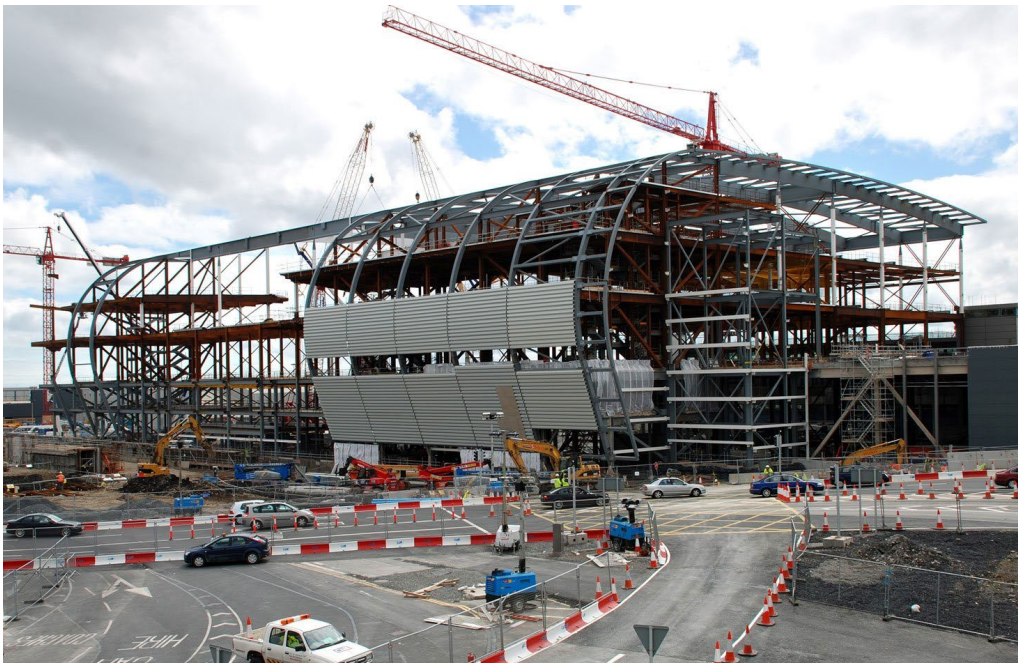
Most operational waste is generated by the day-to-day activities of our terminals and piers, aviation support facilities, airfield and on the campus. However, we also deal with irregular events, like clearing out a concession unit, which generate a spike of waste on the airport.

Dublin Airport operates an estate of more than 15 square kilometres of land, almost as large as Dublin's historic city centre. We have specialist teams continuously cleaning the airport and keeping it free of unwanted waste and debris including occasional 'fly-tipping' in the publicly accessible areas around the airport.

In 2019, some than 450 tonnes of this irregular waste were collected across the airport. Currently most of this waste is not recycled. With the right protocols and facilities in place all recyclables in this waste stream could be captured. Whilst this waste stream is not the directly related to our airport operations, we are planning to develop initiatives that allow us to better treat it and make a positive change towards the future.

Construction Waste

One of our largest sources of waste is generated by our capital projects involving the construction, demolition, refurbishment and fit-out of old buildings, aircraft stands, airfield pavements (taxiways and runways), roads and tunnels. Our current Capital Investment Programme (CIP) 2019-24 contains all the projects that that will enable Dublin Airport to develop sustainably to accommodate predicted demand growth to 40 million annual passengers. Waste generated by our CIP is expected to be largely inorganic or inert which means they do not decompose or generate emissions. Reuse and recovery of this waste provides a significant opportunity to reduce our carbon emissions by preventing further extraction of natural resources.



Major projects planned for this decade include the new north runway, new capacity enhancement of the North and South Apron Hubs and various building, car park and airfield improvement works. These developments can generate three types of waste:

- Demolition waste: waste generated from site clearance works typically comprising masonry (rubble, bricks, asphalt, concrete), plasterboard, timber products, steel, metals, glass, various fixtures and fittings, and aggregates. Our objective is to evaluate, early in project development the types and volumes of materials to be discarded, to maximise opportunities for reuse.
- Construction waste: dependent on the scale and conditions of the site, and construction techniques employed, waste is generated from the spoil of foundations and building materials including concrete, steel, wood, glass, plasterboard, pallets, and packaging. Our green procurement practices will seek to select locally available materials with high recycled content from certified sources that are ethical and responsible and where the materials are produced to the highest environmental standards (i.e., low embodied energy and carbon performance).
- Construction site waste: waste arising from the preparation and consumption of meals such as packaging and food, surplus materials from over-ordering, offcuts and general waste from site offices, workshops, and the hundreds of construction workers who work onsite each day.

Ground excavation and enabling works will be required to facilitate the construction of new building footprints, underground services, and airfield infrastructure. It is anticipated most of material will not be suitable for reuse 'on-airport' and will have to be removed 'off-airport' for recovery or disposal.

Excavated soil and rubble may be reused 'on-airport' for landscaping or as engineering fill or aggregate. Material from excavations and stockpiles that could be reused as engineering fill would have to demonstrate suitability for such use and will be subject to inspection and testing.

The management of C&D waste will be in accordance with the waste hierarchy priorities. During pre-construction, a Site Waste Management Plan (SWMP) will be developed and put in place. The SWMP should:

- Provide a description of each waste type expected to be produced during the site works.
- Contain an estimate of the quantity of each different waste type expected to be produced.
- Information about how the waste will be measured, recorded and reported during onsite works.
- Specify the waste and materials management procedures for each different waste type, along with the reuse, recycle, recovery and disposal needs.

Further consideration should be given to the avoidance of waste in the first place. This should cover the following elements:

- Select materials that are adaptable and can be easily modified in future C&D works and generate minimal waste.
- Use of modular components through prefabrication offsite to significantly reduce onsite wastage.
- Procure and purchase according to exact specifications to minimise the over-ordering of materials.

- Minimise packaging and agree with suppliers to take back packaging and unused materials, such as pallets.
- Provide suitable storage and management of materials onsite to safeguard against damage from weather or machinery while eliminating the need for the purchase of replacement materials and waste generation.

Circular economy principles, to fundamentally change the approach to materials use and waste in construction, will also be pursued as far as reasonably practicable.

Until final material schedules and detailed construction methodologies have been finalised, it is difficult to predict with a high degree of certainty the amount of construction waste that will be generated from the proposed infrastructure projects as the exact materials and quantities may change and vary during construction.

The following measures should be considered to manage construction waste across all proposed development sites at the airport, to maximise recycling, and to minimise potential environmental impacts.

- Appoint a dedicated waste champion to be responsible for the avoidance, minimisation and management of onsite waste and materials.
- Hold regular awareness raising sessions onsite to communicate and educate all personnel on their responsibilities under the SWMP.
- Segregate all waste materials into appropriate streams, including:
    - Topsoil, sub-soil, bedrock
    - Concrete, bricks, plasterboard
    - Asphalt, tar, and tar products
    - Metals
    - Dry recyclables (e.g., cardboard, plastic, timber).
- Establish C&D waste boundaries for generation rates using appropriate KPIs/metrics.
- All waste material is to be stored in secured, clearly labelled skips or other suitable receptacles in a designated waste storage area(s) onsite away from machinery, transport routes and fitted with weather proofing, as required.
- Wherever practicable, left-over material (e.g., timber off-cuts), unused material and any suitable demolition materials are to be reused 'on- or off-airport' or returned to the supplier.
- Uncontaminated excavated material (topsoil or sub-soil) is to be reused 'on-airport' in preference to the importation of clean fill, as soil to be reused or removed must be tested to confirm its contamination status and subsequent management requirements.
- All hazardous C&D waste is to be handled, stored and transported offsite to a suitably licensed facility according to specific procedures (waste type dependent).
- All waste leaving the airport is to be recorded before being transported by a suitably licensed/permitted contractor and taken to an appropriate licensed facility.
- All waste leaving the airport is to be recorded and controlled copies of relevant documentation held onsite .
- Work with suppliers to minimise or avoid unnecessary packaging and to ensure this packaging is suitable for reuse and/or recyclable.
- Use 'just-in-time' logistics and best housekeeping practices in line with the site works schedule to minimise the requirements to store and hold a build-up of materials onsite.
- Adopt techniques such as off-airport pre-fabrications and use of standardised products and material components with high recycled content and environmental (eco-) ratings.

Spotlight

Paper Packaging

Dublin Airport has successfully removed plastic packaging from our terminal concessions, replacing cups, bottles, plates, cutlery and shopping bags with biodegradable, compostable products.

We achieved this milestone in cooperation with our tenants and made this compulsory for all concessionaires operating in our terminals and piers. This initiative is a first step to make our waste recyclable. The next challenge is to move to situation in which we start re-using our packaging and avoid generating waste altogether.

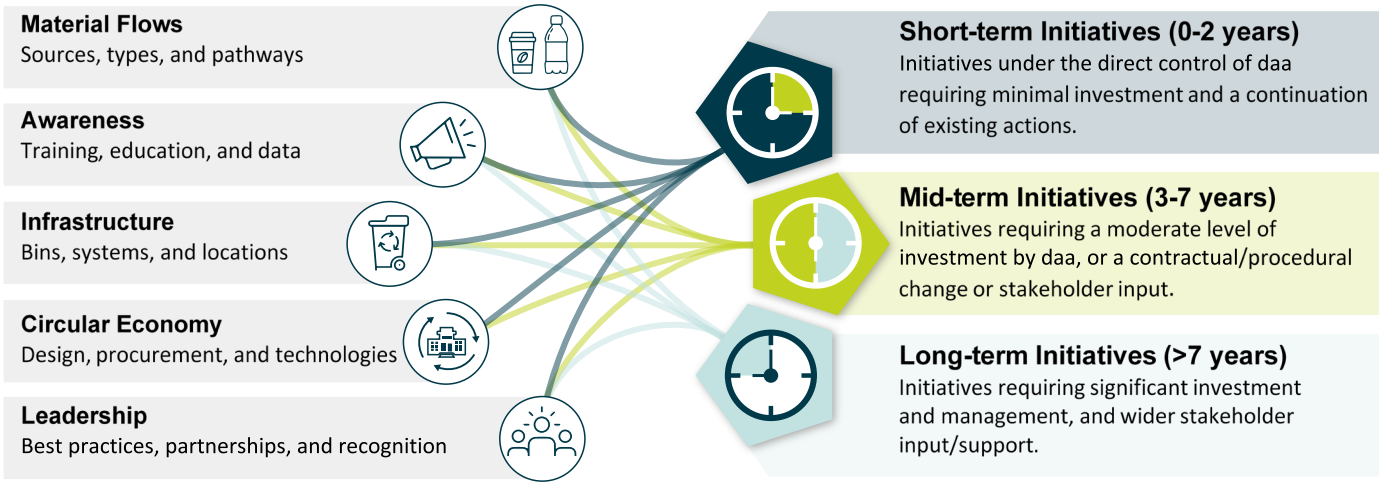
Waste League Tables

Our largest sources of operational waste are from our tenants who operate businesses inside our terminals and piers and across other parts of the airport. As part of our airport-wide approach to be more resource efficient and reduce and recycle as much waste as possible, we have introduced waste league tables.

The league table ranks our tenants according to their waste performance based on waste volumes and recycling rates. The tables are updated and shared with tenants every month. They are intended to further encourage tenants to implement best practices to reduce, reuse and recycle waste. We recognise the efforts of those tenants taking significant steps to improve their waste performance through a reward scheme.

Waste Minimisation Roadmap

The waste minimisation roadmap is a guide to help us reduce waste, reuse and recycle more, and transition to a circular economy. Five priority waste objectives have been identified, each supported by initiatives to make meaningful contributions to the way we use resources and manage waste across the airport in the short, medium, and long term Maintaining the status quo for waste and materials recovery at Dublin Airport is not an option. Waste volumes will continue to grow because of airport expansion and more passengers, staff and tenants using the airport. The cost of handling and treating waste is also increasing every year.



Taking waste materials and recycling or repurposing them back into the same or similar product has a much greater environmental benefit than using virgin materials to create the same product. For many materials this is a cheaper alternative and, in some cases, generates revenue.

A roadmap has been developed to help us conserve resources, reduce waste, recycle more, and move to a circular economy. It provides a clear path forward to meet our waste targets (30% passenger-intensity reduction and a 60% recycling rate by 2030). It documents the main steps and initiatives required to pursue opportunities to minimise and recycle waste, increase awareness, and change behaviour, work collaboratively with our local partners across the value chain.

The roadmap consists of initiatives in five priority areas, providing solutions for the short, mid and long term.

Short-term inititatives are fundamentally a continuation of succesful programmes already commited to by daa. We continue to explore what 'low-hanging fruit' exists for us to make a significant impact on our waste performance at minimal effort, cost and risk.

Mid-term initiatives typically require us to work more closely with our tenants and other partners to minimise waste and identify opportunities to reuse/recycle waste. Whilst some of the solutions are relatively straightforward to implement additional time is needed to properly develop the plans and obtain all necessary input.

Long-term initiatives typically require significant investment and planning effort to implement. These initatives also require longer lead in times to develop and a greater level of collaboration with our tenants and other partners to build concensus on the implementation timetable and actions to meet our targets and any applicable compliance obligations.

	Short Term Initiatives *Commitment* Continue to implement existing initiatives along with new concepts to strengthen our waste credentials in the short-term (<two years).	Mid Term Initiatives *Exploration* Initiatives that can be realistically implemented in the next 3-7 years and will require us to work closely with our partners and other stakeholders across our value chain.	Long Term Initiatives *Aspiration* Significant initiatives requiring substantial investment to step-change our waste performance in the longer term (>7 years)
 Material Flows	• Remove and Eliminate Single Use Plastics • Increase Use of Compostable Materials • Reduce Paper Waste	• Evaluate Passenger Processing Waste	
 Awareness	• Evidence-Based Decision-Making • Waste Smart Passengers • Staff Training and Awareness • Motivate Tenants		
 Infrastructure	• Install Campus-wide Recycling Stations	• Improve Onsite Waste Segregation-MRF • Mitigate Cross-Contamination	• Onsite Composting • Onsite Waste to Energy
 Circular economy	• Sustainable Design • Whole-Life-Cycle Evaluation • Repair before Recycle	• Green Procurement • New Ownership Models • Centralised Waste Collection	
 Leadership	• Working with our Concessionaires & Tenants • Encourage Cargo and MRO Operators to Reduce & Recycle	• Airline Engagement to Reduce & Recycle • Third Party Collaboration	

Five Priority Areas

Our roadmap for action is summarised below, listing a selection of initiatives that should pave the way to our 2030 targets, and beyond. This list identifies a selection of opportunities to be implemented and evaluated this decade.

The roadmap is based on five priority areas:

1. Material Flows: tackle the sources of operational waste under our direct control with the goal to use and reuse materials more productively over their entire life cycles.
2. Awareness: drive behavioural changes among passengers, staff, tenants, and other visitors of the airport through targeted waste campaigns and awareness raising.
3. Infrastructure: install effective waste infrastructure with built in source segregation systems to continue our 'zero waste to landfill' practice and to meet our operational waste reduction and recycling targets.
4. Circular Economy: maximise opportunities for circular material flows through Environmentally Sustainable Design (ESD) principles; locally sourced, low environmental impact materials; and sustainable procurement and construction practices.
5. Leadership: leverage our successes in waste management and promote the benefits among the wider airport community as a future blueprint for action to catalyse more effective practices across the airport. third parties to buy into the challenge.

Material Flows

We conduct our business in a way that protects and sustains the environment. Through the more efficient use of our resources, we can reduce our environmental impact and are committed to environmental performance transparency. As a responsible airport business, we will continue to tackle waste across Dublin Airport holistically and in close collaboration with our tenants and business partners.

Remove and Eliminate Single Use Plastics

SHORT TERM

Single Use Plastics (SUPs) are a key component of our waste streams and are notoriously difficult to recycle. Left alone, these materials do not break down and can cause significant damage to the environment. SUPs used across our airport, include plastic bottles, plastic food packaging, plastic shopping bags, and plastic waste bin liners. It is critical for us to actively reduce plastic products at the source and maximise the segregation for recycling. In cooperation with our commercial tenants, we are currently rolling out initiatives to remove plastic packaging, including plastic water bottles, shopping bags and plastic cutlery. We are also looking to initiatives to reduce SUPs in other areas and processes, like the many plastic bottles removed at security, and the plastic packaging used in offices and commercial units on the wider airport campus.

Increase Use of Compostable Materials

SHORT TERM

We are actively pursuing solutions to change our waste sources and solely use compostable materials. We have recently removed non-recyclable (plastic) from our terminal retail and food and beverage areas, and continue to replace food packaging, plates and cutlery, and shopping bags with compostable foodservice ware and paper products. We are extending this further across the airport campus, ensuring that all 'disposable' materials created can be subsequently recycled with ease. Takeaway coffee cups continue to present a major environmental dilemma. There is no facility in Ireland equipped to deal with the coffee cup structure which is mostly lined with plastics.

Evaluate Passenger Processing Waste

MID TERM

Part of our waste originates from the passenger processing areas, like check-in, security, customs, and emigration. We are exploring initiatives to work together with airlines, airport security and other stakeholders, to review and improve every part of the passenger process, removing waste sources and improving recycling. We see a great opportunity to introduce best available technologies and practices seen at other airports in Europe and around the world. As any other major airport, daa is planning for the implementation of new passenger processing technologies that leverage digitisation, biometric identification, and advanced screening facilities. We are exploring new check-in initiatives like tag less bag screening and reducing paper ticketing (through web/mobile check-in). We are investigating new screening methodologies like CTX, which reduce the need for removal and disposal of PLAGs and other items.

Reduce Paper Waste

SHORT TERM

Most of our dry recyclable waste and shredding waste is paper. We continue to commit to paperless workplaces and are actively advocating similar procedures with our tenants and the wider airport community. We want to explore solutions with our own and tenant's suppliers to reduce cardboard packaging on deliveries, either by removing unnecessary waste, or set up a waste loop within the delivery schedules

Waste Awareness

Awareness is a key success factor of any waste management strategy. Collectively we must become more conscious of the impact of our choices that generate waste. We see small steps being made in our everyday life. People are becoming more waste aware that every bit helps, even if it is just re-using a water bottle or picking up a coffee with your own cup. We need the help and 'buy-in' from our staff, passengers, and the wider airport community to solve the waste problem.

Evidence-Based Decision-Making

SHORT TERM

We are working together with our waste contractor and local partners to improve our understanding of waste types, volumes, flows, pathways (front- and back-of-house) and related monitoring and reporting data. Creation of a digital platform to collect, store, transfer and report waste and recycling data will allow us to better monitor progress against our targets and regulatory requirements. This will also help us to better respond to changes in waste types, volumes, and patterns across the airport. This type of evidence-base will help to inform decisions and investment to improve the integration of suitable waste infrastructure across the airport. Regular analysis of this data should allow us to track performance against targets, which we can share internally and externally.

Waste Smart Passengers

SHORT TERM

Our biggest source of waste is the vast number of passengers we welcome every day. With some 90% of our operational waste generated in the terminal building, we are seeking initiatives to educate our passengers in an engaging manner. Achieving meaningful changes in behaviour will take some time and requires continuous campaigning through as many sources as possible. The digital environments we are creating in the airport (at kiosks, FIDs, and digital billboards) create opportunities where we can actively inform and encourage the right behaviours from our passengers. Social media and our mobile applications or information services can also be harnessed for this purpose. In partnership with our commercial tenants, we are also exploring opportunities to change the way passengers' shop, dine, or get a drink. Through simple and encouraging initiatives, like discounts for bringing your own cup or bottle, or surcharging bags for duty-free items, we believe we have been driving the right sort of waste smart behaviours.

Staff Training and Awareness

SHORT TERM

With over 20,000 people working at the airport on any given day, we need to incentivise behavioural changes among our staff and the rest of the airport community when it comes to waste. Our objective is to set an example at daa and have regular staff training sessions the purpose of which is to educate our staff on the benefits to refuse, reuse and recycle waste. We are also exploring ways to engage our tenants and business partners on how they can avoid waste and recycle more.

Motivate Tenants

SHORT TERM

daa manages a large portion of the airport community, and in particular the commercial concession tenant's operations in our terminals and piers. We are exploring initiatives to engage them more in the topic of waste management and motivate them to support future improvements. One of these initiatives is the waste league table, which ranks the performance of our tenants monthly. We want to continue this and implement other initiatives, to create awareness and greater accountability on waste performance with our tenants.

Infrastructure

The provision of adequate waste and recycling infrastructure across the airport is a top priority. This requires long-term, integrated planning, robust information, and analysis to properly evaluate any potential infrastructure gaps and improvement opportunities. By addressing our future waste infrastructure needs in line with more reliable information, new and emerging policy, and technologies we can make strategic decisions about investments and operations of infrastructure to achieve our waste targets and address national, regional, and FCC priorities.

Install Campus-wide Recycling Stations

SHORT TERM

We have made great strides in increasing our recycling rate over the last decade, mostly achieved by introducing proper recycle bins. Our own offices have been the testbed, where we introduced them first, and followed by terminal buildings. We recorded great results using these assets in the terminal and are committed to create a uniform standard for recycling stations across the rest of the campus. This includes other processes and areas in the terminal building, campus offices, and outside areas like the bus stops and car parks.

Improve Onsite Waste Segregation – Materials Recovery Facility

MID TERM

We are exploring initiatives to treat general, dry-mixed, co-mingled waste, and segregate this into recyclables before sending it off-site. Materials Recovery Facilities (MRFs) use both manual and mechanical processes to sort and recover recyclables such as plastic, aluminium, glass, paper, and cardboard into separate waste streams. They are then baled and transported to be reprocessed into new products including glass containers, aluminium cans, paper, cardboard, plastic packaging, and steel products. Currently, we collect a significant portion of our waste without segregating, including rubbish collected by cleaning and maintenance teams inside the terminal and across the rest of the airport.

We are working together with relevant stakeholders to find better ways to segregate waste (wet (food) and dry) through new, mandated operational procedures and new infrastructure and systems. We see opportunities to work together with our local partners and waste contractor to find the best solution to improve the way we segregate and recycle our materials.

Onsite Organic Waste Composting Facility

LONG TERM

An onsite composting plant to improve the way we collect, treat, and convert organic waste into specialised compostable products for broad use in our capital projects, public space, and landscaped areas. This organic material includes our green waste (grass clippings, leaves, flowers, weeds, twigs, and small branches), small timber off-cuts, fruit, and vegetable scraps, along with most other food waste except meat and bones, and compostable foodservice ware.

These facilities are equipped with technology to process mixed solid waste, clean garden organics, combined food and garden organics and industrial food wastes into compost for use as soil conditioner/improver, landscape mixes and underlays. Until now such waste volumes at the airport were considered too low to make this a viable proposition. We will, however, continue to evaluate the viability of this type of facility to determine cost-benefits over the whole life of the facility and return on investment.

Mitigate Cross-Contamination

MID TERM

We are reviewing our bin recycling systems and methods of information sharing, to mitigate the cross contamination of our recyclable waste streams. This could result in the adjustment of our waste classifications/groupings or increasing the number of waste streams to be segregated at our recycling bin stations.

Onsite Waste to Energy

LONG TERM

As a 'zero waste to landfill' airport, we currently have an agreement in place with our waste contractor to recover energy and heat from any non-recyclable waste. We continue to explore initiatives to bring this process onto the airport, through small-scale alternate waste technologies. Anaerobic digestion is one such example where a wide range of putrescible wastes are biologically decomposed in a low oxygen environment. Within a series of closed-vessels (chambers) anaerobic digesters generate biogas, a mix of carbon dioxide and methane which can be captured/combusted to produce low grade renewable heat and electricity. This type of facility provides numerous benefits ranging from an alternate source of onsite renewable energy to reducing our carbon emissions to increasing the overall recycling and recovery of waste across the airport.

Circular Economy

A circular economy at Dublin Airport is one that is sustainable, and as much as possible eliminates waste. Transitioning to a circular economy requires action by everyone and not just daa, but also through strong partnerships and working closely with our tenants, other airport partners and stakeholders. We must recognise that all waste generated across the airport must be considered separately to devise the right solutions. This is also because different waste types vary in value and the demand for end-products are impacted differently by contamination and/or require specific sorting and handling practices. Progressively moving to a circular economy aligns with the Irish Government's objective for sustainable economic growth and has the potential to create co-benefits through job creation and productivity increases while decarbonising the airport's activities and preserving the value of raw materials.

Green Procurement

Through our 'green' procurement strategy, we continue to overhaul the way we tender, evaluate, and procure materials, products, and services. Our objective is to apply a sustainable mindset across the whole value chain, obligating our suppliers and contractors to take responsibility for the goods and services they provide. Waste management and the materials we use is a key element of our green procurement strategy, whereby minimum requirements are set to help us avoid waste at-source and time-trapping, maximise opportunities to recycle and reuse at end-of-life.

We seek to maximise the integration of materials with high recycled content, like paper, wood, metals, and concrete/asphalt for larger construction projects, or have a good reusability, like standard sized construction elements, furniture, glazing panes and electronics. Key in our green procurement strategy will be to source materials and equipment locally with low embodied energy and toxicity (all adhesives, paints, sealants, and other finishes). The choice of materials should be an integrated consideration throughout the planning, design, and specification stage, trading-off various 'green' solutions based on the WLV, including sourcing, effectiveness throughout operational lifespan, and end-of-life.

Sufficient internal/external space allocations for materials recovery systems and infrastructure are integral to the design of our built environment and all future capital projects (i.e. furniture, fittings, and fixtures).

MID TERM

Sustainable Design

This decade there are several major new capacity enhancement projects that will shape the future of Dublin Airport (i.e. new north runway, northern and southern apron hub developments). The lifespan of these projects will span many decades ahead and are potentially large sources of waste in the future. The decommissioning of some of our existing built assets are creating large volumes of C&D waste which cannot be reused or is difficult to recycle.

We continue to evaluate new practices, initiatives, and technology for integration in our CIPs. This requires us to learn from the past and avoid creating unnecessary sources of waste or material time traps (i.e. materials that are difficult to replace or exhibit high embodied energy). There are several fundamental principles that should underpin our future approach to designing out waste across our built environment. We should strive to incorporate greater flexibility into our designs, select more durable, low impact materials/products with low embodied energy/carbon, prioritise the sourcing of locally available materials, consider the use of temporary or relocatable materials and specify the use of materials with high recycled content during procurement.

SHORT TERM

	Designing out waste and setting well-defined, realistic waste targets gives clarity and focus to the objectives of each capital project. Often this will require consideration to be given to potential trade-offs on conventional and new construction techniques, material, and product specifications, especially to deliveries, packaging and storage and whole value chains. Examples are the use of standardised construction and material components, that can be prefabricated and reused at their 'end-of-life'. It is also important to review the opportunities to reuse or recycle materials and equipment on-site, like demolition rubble, low wear/refurbished furniture and fixtures, and glazing elements.
Whole-Life-Cycle Evaluation SHORT TERM	Sustainable development is often hampered by perceived higher capital costs and low returns on investment. At daa we are looking beyond this to focus on the importance of whole-of-life value to strengthen our corporate responsibility and sustainability credentials along with our balance sheet. We are confident that value is created across the lifespan of our built assets delivering significant operational and maintenance cost savings. Through the application of whole life value principles in our planning and design processes we are better placed to find more closed-loop, 'circular' solutions. These could require more capital outlay upfront but over the lifespan of the project are likely to deliver significant savings when accounting for the benefits resulting from waste reduction, recycling, and reuse.
Centralised Waste Collection MID TERM	The built environment of Dublin Airport is continuously changing, with new buildings and infrastructure being developed and existing assets being refurbished, modernised, or decommissioned. On one hand each of these projects requires resources and on the other hand generates waste. We are exploring opportunities to connect the dots and be able to recycle resources between assets on the airport. This will require a centralised waste collection centre, where demolition and refurbishment materials are cleaned and stored to be used for another project. The goal is to create a catalogue of available waste, which can serve as a reference for planning and design decisions.
New Ownership Models MID TERM	We are reviewing our asset ownership models and looking into new initiatives that might provide us with more flexibility and sustainable management. Whilst our normal procedure today is to acquire most of our assets, like furniture and fittings, there are opportunities to lease them instead. Our suppliers are in a better place to recycle and re-use assets, as they can redistribute them across a larger pool of customers. For instance, while we might need to throw out a broken chair, the furniture supplier has the tools and capability to repair and restore it for future use.
Repair before Recycle SHORT TERM	We need to consider carefully what we discard and look at alternative options to better maintain our assets. We see a lot of 'waste' generated by damaged equipment and facilities across the airport, which could be repaired for reuse, or redirected to second-hand charity shops. We want to improve the segregation of our waste, singling out items to be repaired in our workshops.

Leadership

daa is responsible for most of the waste generated at Dublin Airport and will continue to manage, reuse, and recycle in areas under our direct control, and through our tenants. However, a significant amount of waste is handled by other stakeholders in the airport community, working with their own contractors and procedures. We want to leverage our leadership in the airport community and achieve a shared commitment to tackle waste, the choice of materials and packaging and other sustainability initiatives together.

Third Party Collaboration

SHORT TERM

We have successfully rolled out initiatives with our concessionaires in the terminals and piers to gradually remove SUPs and mandate compostable foodservice ware and recyclable packaging materials. We will continue to explore new initiatives collaboratively, ensuring we meet our 2030 waste and recycling targets. Lessons from past initiatives in our terminals and piers will form the basis to extend to other tenants across the rest of the airport.

Airline Engagement

MID TERM

The airlines are major source of waste, handling the rubbish collected from the aircraft cabin through their own contractors. The key airlines operating out of Dublin Airport are conscious of their responsibilities and like daa they are committed to improve their waste management. The airlines are already adjusting the packaging used for catering and are making efforts to segregate waste packaging inside the aircraft. We will start engaging airlines particularly on waste treatment and investigate collaborative solutions to collect waste, segregate it and send it off-site for recycling.

Encourage Cargo and MRO Operators to Reduce & Recycle

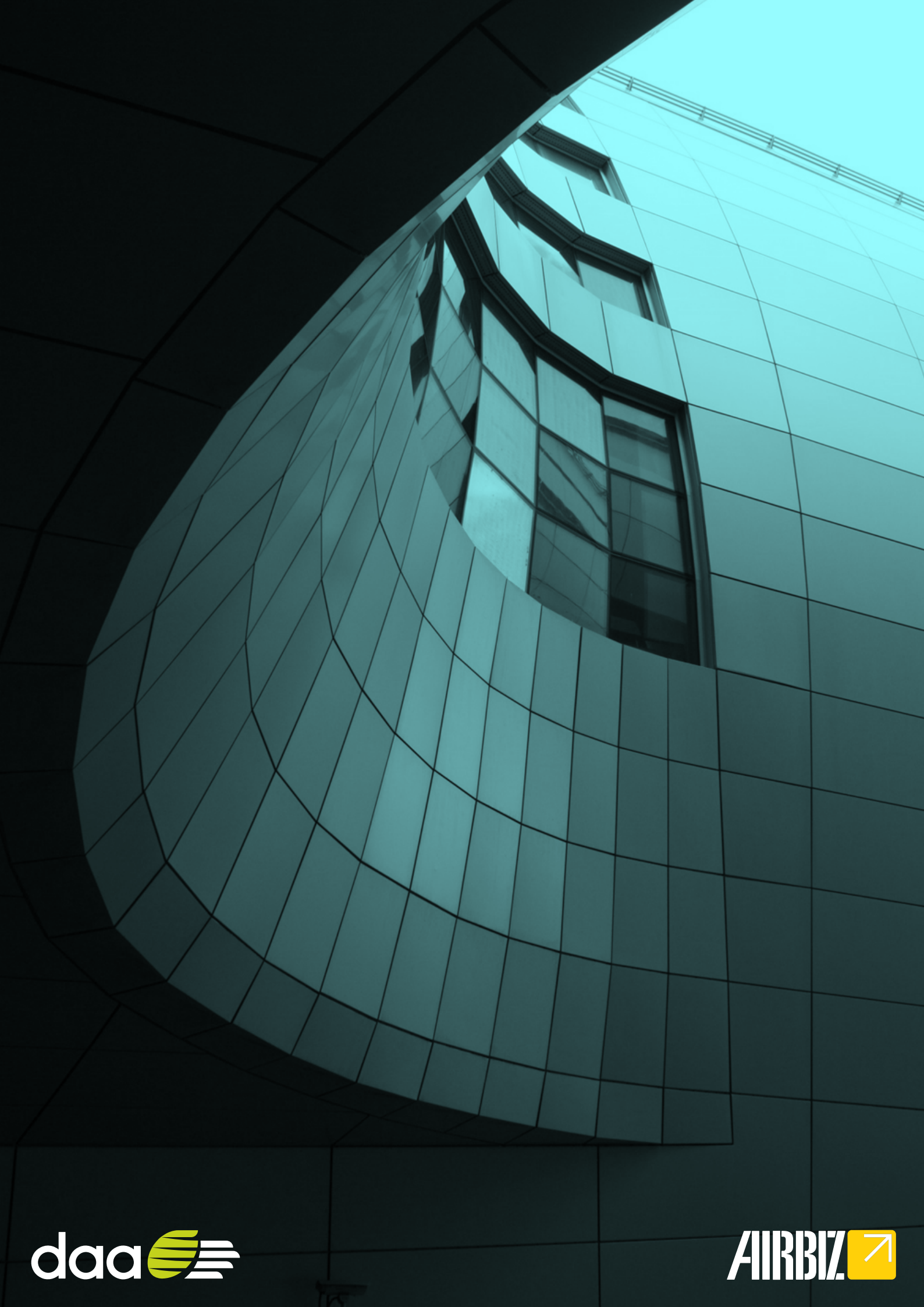
SHORT TERM

Some 130,000 tonnes of air cargo were handled at Dublin Airport in 2019. The airport is a base for over 100 aircraft. These aircraft require regular maintenance at the hangars located on the airport. Currently we have little visibility on what kinds of operational waste are generated and nor how it is collected and treated. We have started to engage with the cargo and MRO companies to improve dialogue and work towards more collaborative waste solutions in the future. We are keen to continue to raise awareness among these stakeholders and their staff on our airport-wide waste initiatives and need to recycle more where possible. This extends to the safe handling and management of hazardous waste material generated by these essential aviation activities at the airport.

Waste Blitz Campaigns

MID TERM

daa wants to create awareness in the airport community, by advocating collaborative initiatives. These can be single day events, like ‘clear the clutter’, or more substantial and longstanding agreements, like aligning our waste treatment supply chains, or centralising on-site segregation and recycling facilities.



Appendix 20A. Impact of Overflights

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Project name:
Dublin Airport North Runway Relevant Action

Date:
30 July 2021

Memo

Subject: Cultural Heritage - Noise Assessment (ANCA RFI 14)

Introduction

This note has been prepared in response to a Request for Information (RFI) received from the Aircraft Noise Competent Authority (ANCA) for further information relating to the effect of overflying of sensitive heritage assets resulting from the proposed Relevant Action. Specifically, the RFI asked:

- *The Applicant is requested to clarify whether additional overflying of Dunsink Observatory (Protected Structure RPS No. 0687) at night has been considered.*
- *Furthermore, the Applicant is requested to clarify whether the effect of increased overflying of other sensitive cultural heritage receptors has been considered.*

This note reports on the results of the analysis of the potential increase in noise levels resulting from overflying aircraft (airborne noise) from the proposed Relevant Action on sensitive heritage assets, utilising data prepared for *Chapter 13: Aircraft Noise and Vibration* of the revised Environmental Impact Assessment Report (EIAR).

It should be noted that Dunsink Observatory lies within an area of very low change in noise level from the proposed Relevant Action (see *Chapter 13: Aircraft Noise and Vibration* of the revised EIAR for further information). Furthermore, in the Proposed Scenario Dunsink Observatory is unlikely to be overflown at all, as the attached Figures from the revised EIAR (Appendix B.1), showing the centrelines of flightpaths in the segregated and mixed modes of operation, indicate. This asset is, therefore, not discussed further.

Methodology

This assessment addresses the impact of changes in noise levels on sensitive heritage assets as a result of changes to airborne traffic between the Permitted Scenario, which is the situation which will come into effect once the North Runway is operational and the Proposed Scenario, which is the situation which will come into effect if the proposed Relevant Action is consented. It analyses predicted changes in noise as identified in *Chapter 13: Aircraft Noise and Vibration* in the revised EIAR and overlays this with the location of sensitive cultural heritage receptors to establish those assets which will experience a change in noise level. These are then analysed to highlight where such a change would lead to a change in our ability to appreciate the importance of the asset. This note only considers assets recorded as Protected Structures on the Fingal County Development Plan 2017 in recognition of their national importance and associated sensitivity to change. There are no National Monuments within those areas experiencing a change in noise level.

Each asset which falls within a noise contour has been analysed to establish the likelihood of an impact to the importance of the structure. This takes into consideration the existing ambient noise levels already experienced

by the asset and forming part of its setting, and how the change will be perceived. For example, an asset within an existing urban townscape may not be adversely affected by a change in noise level. A landscaped park, in contrast, may be enhanced by the tranquillity of its setting. In accordance with the noise assessment, an increase in noise level of below 3 dB is considered to be. An increase of between 3-5.9 dB is medium; 6-8.9 dB is high and anything above 9 dB is very high. This assessment therefore only considers assets which will experience a change of 3 dB or above (refer to Figures 1-2, Appendix B.2 and B.3). A full list of assets in included in Appendix A.

In accordance with the methodology outlined in *Chapter 13: Aircraft Noise and Vibration* of the revised EIAR, this note considers three Assessment Years of 2022, when the North Runway is expected to become operational, 2025, the first year when 32 million passengers per annum (mppa) is expected to be reached, and 2035 for an assessment over a longer term period. The assessment analyses the effect of changes in noise levels from the Proposed Scenario over the Permitted Scenario. It does not assess the impact of any increased noise resulting from the Permitted Scenario.

As the proposed Relevant Action will result in no changes to the design or construction of North Runway; therefore, no assessment has been made of noise impacts resulting from construction.

Baseline

2022

Within the study area, no increase in noise levels above 3dB has been predicted for the 2022 Assessment Year. Therefore, no Protected Structures will be affected. This Assessment Year has not been considered further.

2025

A total of 69 Protected Structures fall within the 3 dB or higher noise contours for the 2025 Assessment Year (Figure 1, Appendix B.2). All assets are listed in Appendix A.

The majority of the assets lie within the settlement of Malahide and are associated with its growth during the 19th century as a coastal retreat for wealthy Dubliners. The assets include a number of 19th century terraces, including James's Terrace, Castle Terrace, Carlisle Terrace, Killeen Terrace and Windsor Terrace, alongside individual houses such as those along Dublin Road and Coast Road. Alongside these are the associated public buildings necessitated by the growing village, including the library and schoolhouse. The settlement was also enhanced with the construction of a number of churches in the 19h and 20th century, many of which still stand, including those on Dublin Road and Church Road. Other structures reflect the arrival of the railway in 1844, including the extant station and stationmaster's house on Dublin Road and a stone bridge on Bissett's Strand.

Evidence for the earlier settlement of Malahide can be found at Malahide Castle (Protected Structure RPS No. 0383) set within the Malahide Demesne. The medieval castle is now largely concealed within the 18th century Gothic rebuild which itself has historic and architectural interest. The castle lies in an elevated position, surrounded by extensive formal gardens and designed parkland. To the east lies the medieval church which survives as part of a former abbey (Protected Structure RPS No. 0384). The church is maintained as a managed ruin.

Evidence for an earlier, motte and bailey castle can be found to the east within the Sainthelens area (Protected Structure RPS No. 0445). The feature survives as flat-topped mound heavily planted with thick vegetation, surrounded by open greenspace, including sports pitches.

Further evidence for the earlier settlement at Malahide is Sylvester's Well on Old Road (Protected Structure RPS No. 0390). Thought to date from at least the 5th century, the present structure was added at a later date and restored again in 2001. The well sits adjacent to the 20th century St Sylvester's RC Church, itself constructed on medieval foundations.

The importance of the coast around Malahide is emphasised by the incorporation of defensive features. Dating from the 15th century, Robswall Castle (Protected Structure RPS No. 0422) incorporates a four-storey tower house, with later Victorian residence added on one side. Further down the coast is a 19th century Martello

Tower (Protected Structure RPS No. 0421). The tower was decommissioned in the late 19th century and subsequently converted to residential use.

Situated close to the airport are three assets, only one of which remains extant. The Cloghran Holy Well (Protected Structure RPS No. 0608) is disused and survives as a slight hollow located within an area of open pasture. Located to the west of the well are the foundations of a medieval church (Protected Structure RPS No. 0609), situated alongside the remains of a later, 18th century church. Both are located within the Cloghran Cemetery retaining their historic setting. Castlemoate House (Protected Structure RPS No. 0611), in contrast, survives as a 19th century house, although heavily modified and converted to office use. The house sits on the busy R132 with Dublin Airport to the rear.

2035

A total of 57 Protected Structures fall within the 3 dB or higher noise contours for the 2035 Assessment Year (Figure 2, Appendix B.3). These are all located within the contours for the 2025 scenario and are discussed above.

Assessment

The noise assessment (*Chapter 13: Aircraft Noise and Vibration* of the revised EIAR) has assessed the potential change in noise level resulting from increased aircraft movements as part of the proposed Relevant Action. This identifies the change in level between the Permitted Scenario and the Proposed Scenario. In accordance with the noise assessment, any change over has been given a medium impact weighting. As such, only those changes of 3dB and above are considered in this assessment.

It should be noted that changes in the Lden (24 hour) noise contours and resulting difference contours are primarily a result of the change in usage of the North Runway between the hours of 06:00 and 07:00 in the Proposed Scenario.

No increases in noise have been identified above 3dB have been identified for the 2022 Assessment Year. Therefore, there will be no effects on sensitive cultural heritage assets.

A total of 69 Protected Structures fall within the 3dB or higher noise contours for the 2025 Assessment Year (Figure 1, Appendix B.2). The majority of Protected Structures fall within the area of Malahide to the east of the airport. The existing ambient noise experienced by these assets is generated by their urban setting, including traffic noise and industrial activity. The noise assessment for the 2025 Assessment Year has identified a potential increase in noise from aircraft movements of between 3dB and 5dB on these assets. The majority fall within the 4-4.9dB bracket, with a single milestone experiencing an increase of 5dB. This falls within the category of medium impact and will, therefore, be perceptible.

Malahide grew in size during the Georgian period and continued to expand throughout the 19th and 20th centuries. As a result, ambient noise from commercial and industrial activities has always been a characteristic of its setting, albeit increasing as the settlement grew. The increase in noise will, therefore, not significantly affect the appreciation of these assets.

There are assets within the settlement which are considered to be more sensitive to change. This includes Malahide Castle (Protected Structure RPS No. 0383) which is situated in an area of greenspace to the west of the historic settlement. The castle lies within the 4-4.9dB contour and will therefore experience a perceptible increase in noise. The castle can be appreciated within substantial grounds, alongside the ruins of the medieval abbey (Protected Structure RPS No. 0384) and its formal gardens. The area is appreciated as a calm and tranquil setting, associated with the 18th century stately home rather than the medieval castle. The increase in noise will be noticeable when appreciating the asset and will interrupt the peaceful setting during aircraft movements. The level of this distraction is low but will be perceptible.

Those assets identified in close proximity to the airport already experience high levels of noise from both ground based and airborne aircraft movements. These are all predicted to experience an 4dB increase in noise levels. For Castlemoate House (Protected Structure RPS No. 0611) this should be seen in the context of the busy R132 and is unlikely to have an effect on the appreciation of the asset. The Cloghran Well (Protected Structure RPS No. 0608) and remains of Cloghran Church (Protected Structure RPS No. 0609), in contrast, have a more secluded setting which forms part of their historic character. The increase in noise levels will affect

the experience of these assets. Taking into consideration their location close to the airport the effect would be negligible.

The noise assessment for the 2035 Assessment Year has identified a maximum increase of 3dB (Figure 2, Appendix B.3). For some assets this will be a slight decrease in the 2025 Assessment Year. This includes Malahide Castle and those assets located in Cloghran. However, these assets will continue to experience an effect as a result of the changes. It should be noted that the proposed Relevant Action seeks to amend the hours of use of North Runway to allow flight during the shoulder hours 06:00-07:00 and 23:00-00:00 and therefore the only potential change between Permitted and Proposed scenarios is in these hours.

Conclusion

This note has been prepared in response to a Request for Information (RFI) received from ANCA to establish the effect of any overflying traffic on sensitive heritage assets. This assessment has taken the noise contours prepared for *Chapter 13: Aircraft Noise and Vibration* of the revised EIAR and compared this against the location of Protected Structures. These contours assess the change in noise level between the Permitted Scenario and the Proposed Scenario (the Relevant Action). In accordance with the methodology set out in the noise assessment, any change in noise level of 3dB or above has been identified as a medium increase and assets assessed accordingly.

Three Assessment Years have been considered; 2022, 2025 and 2025. No increase of 3dB or above has been identified for the 2022 Assessment Year. A total of 69 assets have been identified with an increase of 3dB or above in the 2025 Assessment Year, falling to 57 for the 2035 assessment year. The majority of assets will not experience an effect on their importance as a result of the change. This is due mainly to their location, either within an existing urban location, or in proximity to the airport.

Adverse effects have been identified on Malahide Castle and associated assets (Protected Structure RPS No. 0383 and 0384). This is due to the peaceful setting created by the large gardens and parkland of the 18th century manor house. The increase in noise will be perceptible and may be distracting; however, the effect would only be apparent in the 06:00-07:00 period, when the additional aircraft noise would be discernible.

In addition, although in close proximity to the airport, the ruins of Cloghran Church (Protected Structure RPS No. 0609) and Holy Well (Protected Structure RPS No. 0608) will experience a change in their setting. Their setting is considered to contribute to their importance; therefore, the distraction of aircraft movements will interrupt the appreciation of the assets. Taking into consideration the aircraft movements and those of the Permitted Scenario, the effect is considered to be negligible.

Dunsink Observatory (Protected Structure RPS No. 0687) is unlikely to be overflown. The asset lies within an area of very low change in noise level resulting from the proposed Relevant Action (see *Chapter 13: Aircraft Noise and Vibration* of the revised EIAR for further information) and will not be affected by the proposed Relevant Action.

Appendix A Asset List

RPS No.	Asset Name	Description	2025 (dB)	2035 (dB)
421	Hicks Tower, Coast Road (R106), Robswalls, Malahide, Co. Dublin	Former early 19th century Martello Tower, adapted in early 20th century for residential use	4-4.9	3-3.9
422	Robswalls Castle, Coast Road (R106), Robswalls, Malahide, Co. Dublin	Five-bay two-storey house connected to 15th century stone tower house	4-4.9	3-3.9
423	Railway Bridge, Bissett's Strand, Malahide, Co. Dublin	Mid-19th century stone rail bridge over road	3-3.9	3-3.9
424	Rosca, Dublin Road, Malahide, Co. Dublin	One of pair of 19th century semi-detached two-storey two-bay redbrick houses	3-3.9	3-3.9
425	Sonas, Dublin Road, Malahide, Co. Dublin	One of pair of 19th century semi-detached two-storey two-bay redbrick houses	3-3.9	3-3.9
426	Malahide Presbyterian Church, Dublin Road, Malahide, Co. Dublin	Mid-20th century Presbyterian Church with steeply pitch roof with flared eaves and copper clad spire	3-3.9	3-3.9
428	1 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
429	2 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
430	3 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
431	4 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
432	5 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
433	6 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
434	7 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
435	8 Carlisle Terrace, Church Road, Malahide, Co. Dublin	One of terrace of four pairs of semi-detached redbrick houses built in 1859	4-4.9	3-3.9
387	Former Station Master's House, Dublin Road, Malahide, Co. Dublin	Mid-19th century redbrick former station masters house converted to office use and extended	3-3.9	3-3.9
388	Malahide Railway Station, Dublin Road, Malahide, Co. Dublin	Mid-19th century Railway Station, Signal Box, Pedestrian Bridge & Entrance	3-3.9	3-3.9
389	St. Sylvester's Catholic Church, Dublin Road, Malahide, Co. Dublin	19th century Catholic Church, on site of earlier church and mound	3-3.9	v
390	St. Sylvester's Well, Old Street, Malahide, Co. Dublin	Holy Well - enclosed circular stone structure with conical roof	3-3.9	3-3.9
391	1 Castle Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of seven three-storey 19th century houses incl gates & front railings	4-4.9	3-3.9
392	2 Castle Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of seven three-storey 19th century houses incl gates & front railings	4-4.9	v
393	3 Castle Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of seven three-storey 19th century houses incl gates & front railings	4-4.9	3-3.9

RPS No.	Asset Name	Description	2025 (dB)	2035 (dB)
394	4 Castle Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of seven three-storey 19th century houses incl gates & front railings	4-4.9	3-3.9
395	5 Castle Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of seven three-storey 19th century houses incl gates & front railings	4-4.9	3-3.9
396	6 Castle Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of seven three-storey 19th century houses incl gates & front railings	4-4.9	3-3.9
397	7 Castle Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of seven three-storey 19th century houses incl gates & front railings	4-4.9	3-3.9
402	1 Windsor Terrace, Church Road, Malahide, Co. Dublin	One of group of six semi-detached three-bay three-storey 19th century houses incl railings & gates	4-4.9	3-3.9
403	2 Windsor Terrace, Church Road, Malahide, Co. Dublin	One of group of six semi-detached three-bay three-storey 19th century houses incl railings & gates	4-4.9	3-3.9
404	3 Windsor Terrace, Church Road, Malahide, Co. Dublin	One of group of six semi-detached three-bay three-storey 19th century houses incl railings & gates	4-4.9	3-3.9
405	4 Windsor Terrace, Church Road, Malahide, Co. Dublin	One of group of six semi-detached three-bay three-storey 19th century houses incl railings & gates	4-4.9	3-3.9
406	5 Windsor Terrace, Church Road, Malahide, Co. Dublin	One of group of six semi-detached three-bay three-storey 19th century houses incl railings & gates	4-4.9	3-3.9
407	6 Windsor Terrace, Church Road, Malahide, Co. Dublin	One of group of six semi-detached three-bay three-storey 19th century houses incl railings & gates	4-4.9	3-3.9
408	Malahide Library, The Mall, Malahide, Co. Dublin	Early 20th century redbrick Carnegie Library with dutch-billy gable (incl front railings & gates)	4-4.9	3-3.9
409	Garda Station, James's Terrace, Malahide, Co. Dublin	One of group of twelve terraced houses - No1 & 2 are interlinked semi-detached two-bay two-storey former houses now in use as garda station	3-3.9	3-3.9
446	Wheatfield Blackwood Lane, Sainthelens, Malahide, Co. Dublin	Late 18th or early 19th century house, previously known as "St. Helen's", including historic outbuildings now converted to dwellings	3-3.9	3-3.9
381a	Thatch Cottage West, Bissett's Strand, Malahide, Co. Dublin	One of pair of semi-detached single-storey thatched dwellings	3-3.9	3-3.9
451	Lime Kiln, Feltrim Quarry, Feltrim Road, Feltrim, Swords, Co. Dublin	Remains of 18th or early 19th century stone limekiln	5-5.9	3-3.9
447	Milestone, Dublin Road (R107), Auburn, Malahide, Co. Dublin	Freestanding 19th century cast-iron milestone in granite setting at footpath near entrance to Little Auburn House	5-5.9	3-3.9
448	Auburn House, Dublin Road (R107), Auburn, Malahide, Co. Dublin	Late 18th or early 19th century house, outbuildings & walled garden	4-4.9	3-3.9
912	Kincora. Main Street, Malahide, Co. Dublin	Early 20th century redbrick two-storey house (excluding lean-to and single-storey extension and shed)	4-4.9	3-3.9

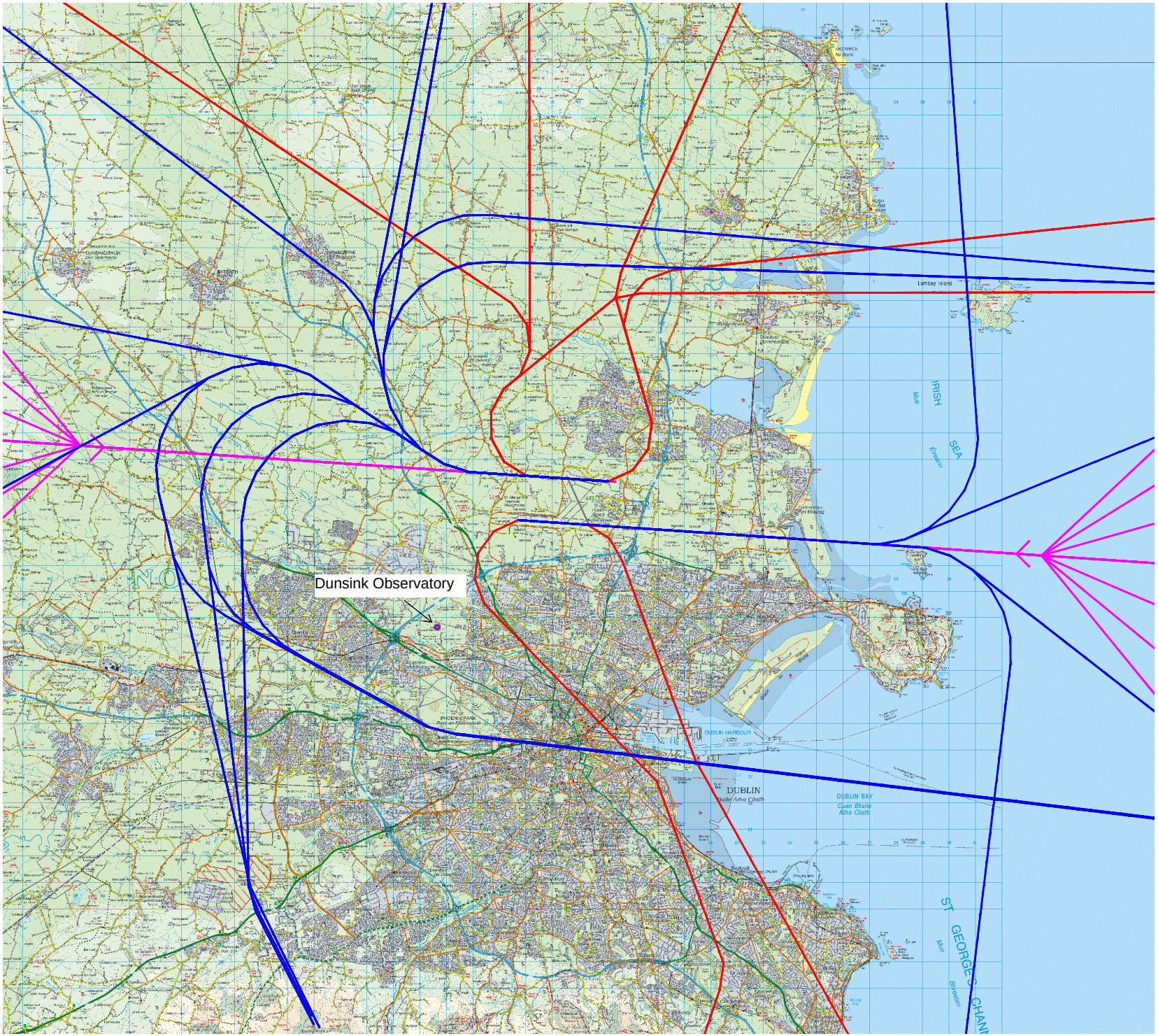
RPS No.	Asset Name	Description	2025 (dB)	2035 (dB)
410	3 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 3 is two-bay two-storey house	3-3.9	3-3.9
411	4 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 4 is two-bay three-storey house	3-3.9	3-3.9
412	5 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 5 is two-bay three-storey house	4-4.9	3-3.9
413	6 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 6 is two-bay three-storey house	4-4.9	3-3.9
414	7 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 7 is two-bay three-storey house	4-4.9	3-3.9
415	8 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 8 is two-bay three-storey house	4-4.9	3-3.9
416	9 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 9 is two-bay three-storey house	4-4.9	3-3.9
417	10 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 10 is two-bay two-storey house	4-4.9	3-3.9
418	11 James's Terrace, Malahide, Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 11 is two-bay two-storey house	4-4.9	3-3.9
419	12 James's Terrace, Malahide ,Co. Dublin	One of group of twelve mid-19th century terraced houses - No. 12 is two-bay two-storey house	4-4.9	3-3.9
436	Tir na nOg, Church Road, Malahide, Co. Dublin	Large redbrick late 19th century house	4-4.9	3-3.9
381b	Thatch Cottage East, Bissett's Strand, Malahide, Co. Dublin	One of pair of semi-detached single-storey thatched dwellings	4-4.9	3-3.9
382	Lime Kiln (in ruins) Within grounds of Malahide Castle, Malahide Demesne, Malahide, Co. Dublin	Remains of square stone lime kiln within grounds of Malahide Castle, west of castle building	4-4.9	3-3.9
383	Malahide Castle Back Road, Malahide Demesne, Malahide, Co. Dublin	Medieval castle and later additions (including within the demesne four gate lodges, stone outbuilding complex, entrance gates & piers)	4-4.9	3-3.9
384	Malahide Abbey (in ruins) Within grounds of Malahide Castle, Malahide Demesne, Malahide, Co. Dublin	Medieval church (in ruins) with Sheela-na-gig on external wall, sited within enclosed graveyard within grounds of Malahide Castle	4-4.9	3-3.9
385	Casino, Dublin Road, Malahide, Co. Dublin	Late 18th or early 19th century thatched dwelling in cottage orneé style	4-4.9	3-3.9
386	Milestone, Dublin Road, Malahide, Co. Dublin	19th century cast-iron milestone in granite setting in boundary wall of thatched house 'Casino'	4-4.9	3-3.9

RPS No.	Asset Name	Description	2025 (dB)	2035 (dB)
398	1 Killeen Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of four three-bay three-storey 19th century houses incl gates & front railings recessed from street by common garden	4-4.9	3-3.9
399	2 Killeen Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of four three-bay three-storey 19th century houses incl gates & front railings recessed from street by common garden	4-4.9	3-3.9
400	3 Killeen Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of four three-bay three-storey 19th century houses incl gates & front railings recessed from street by common garden	4-4.9	3-3.9
401	4 Killeen Terrace, Dublin Road, Malahide, Co. Dublin	Terrace of four three-bay three-storey 19th century houses incl gates & front railings recessed from street by common garden	4-4.9	3-3.9
437	St. Andrew's Church (C of I) Church Road, Malahide, Co. Dublin	Early 19th century Church of Ireland church	4-4.9	3-3.9
438	Roseneath Church Road, Malahide, Co. Dublin	Large Tudor-Revival style early 20th century house	4-4.9	3-3.9
439	St. Andrew's National School Church Road, Malahide, Co. Dublin	Early 19th century three-bay two-storey schoolhouse	4-4.9	3-3.9
440	Seamount House & Gate lodge Seamount Road, Malahide, Co. Dublin	Early 20th century Tudor Revival style house and gate lodge	4-4.9	3-3.9
441	Muldowney House Coast Road (R106), Robswalls, Malahide, Co. Dublin	Three-bay two-storey 19th century house, home of artist Nathanial Hone	4-4.9	3-3.9
445	Motte & Bailey Blackwood Lane, Sainthelens, Malahide, Co. Dublin	Archaeological site of large flat-topped elongated mound of Anglo-Norman motte (former castle and settlement site) in field north of Wheatfield House	4-4.9	3-3.9
608	Holy Well Stockhole Lane, Cloghran, Swords, Co. Dublin	Enclosed stone well at base of steps under tree in field	4-4.9	3-3.9
609	Cloghran Church (in ruins) & Graveyard Stockhole Lane, Cloghran, Swords, Co. Dublin	Site of early 18th century parish church (now demolished) and foundation remains of early medieval church within enclosed graveyard	4-4.9	3-3.9
611	Castlemoate House Swords Road (R132), Cloghran, Swords, Co. Dublin	19th century house, outbuilding & gates, now in use as offices (built in early 19th century but significantly altered in late 19th century in Italianate style)	4-4.9	3-3.9

Source: Chapter 13: Aircraft Noise and Vibration

Appendix B Figures

B.1 Revised EIAR Figures Showing Dunsink Observatory



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LEGEND:

Category A&B Aircraft
Departure Route Centrelines

Category C&D Aircraft
Departure Route Centrelines

Arrival Routes

Rev	Date	Description	Initials

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Dublin Airport
Change to Permitted Operations

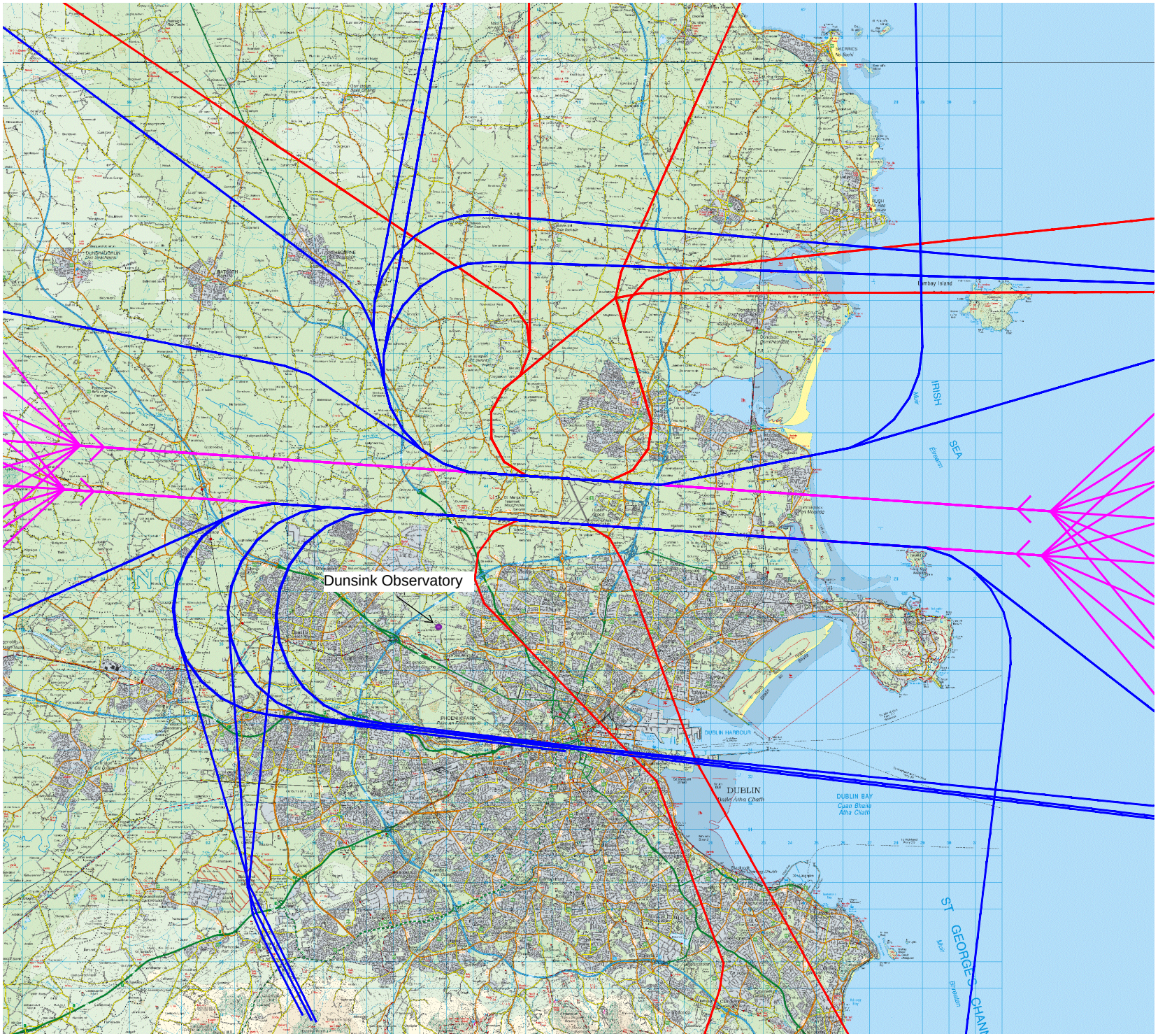
Figure 13B-3
Main Runway Modelled Routes
Future Segregated Mode

DRAWN: DR CHECKED: DC

DATE: November 2020 SCALE: 1:200000@A4

FIGURE No:

A11267_01_DR034_3.0



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LEGEND:

Category A&B Aircraft
Departure Route Centrelines

Category C&D Aircraft
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Arrival Routes

Rev	Date	Description	Initials

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Dublin Airport
Change to Permitted Operations

Figure 13B-4
Main Runway Modelled Routes
Future Mixed Mode

DRAWN: DR CHECKED: DC

DATE: November 2020 SCALE: 1:200000@A4

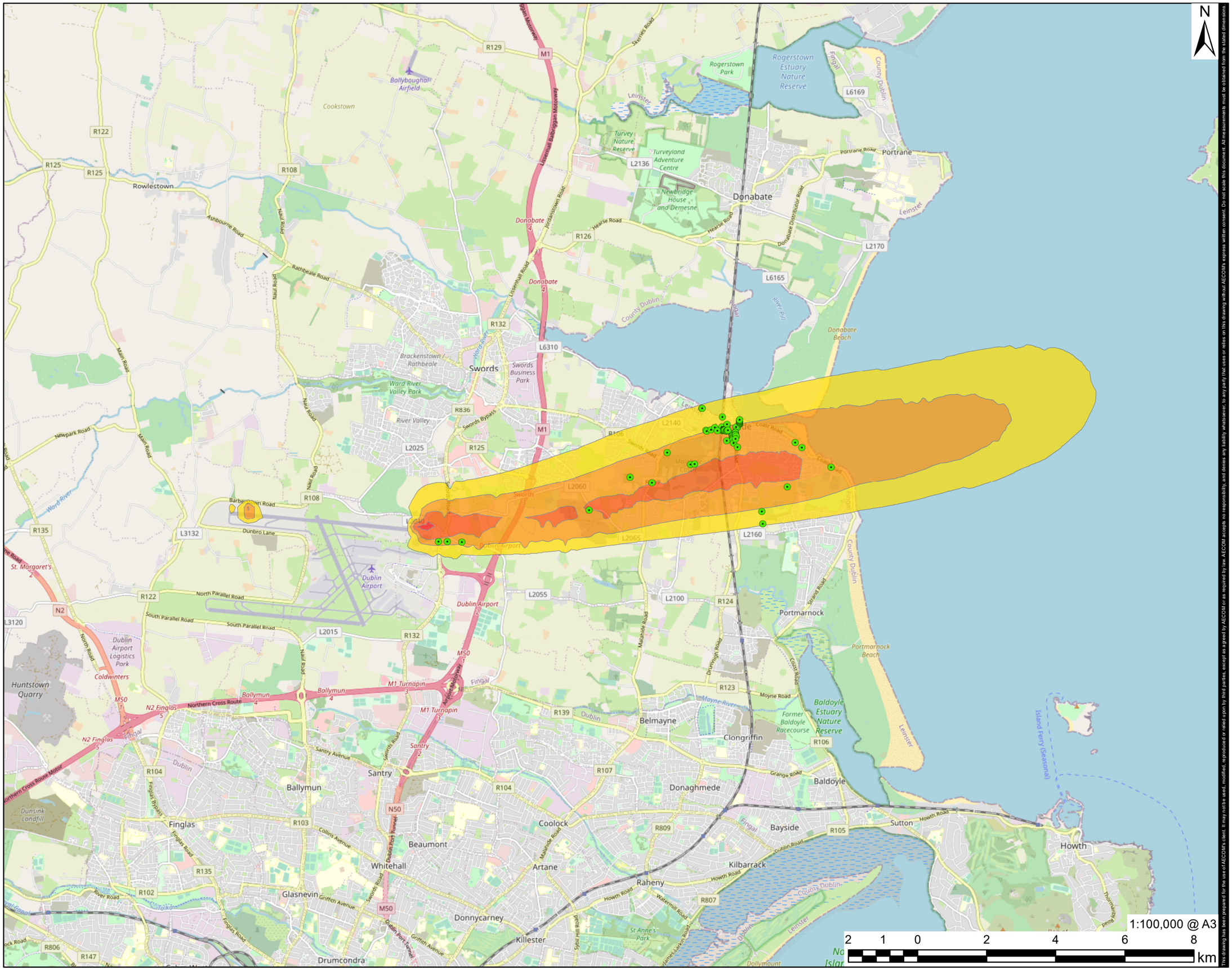
FIGURE No:

A11267_01_DR035_3.0

B.2 Figure 1 2025 Permitted versus Proposed Scenario Difference in Forecast Noise Contours (L_{den})

Filename: \\du-man-002.scottwilson.co.uk\Dublin-Jobs\GIS\60586397_DAA_ERA\GIS\02_Maps\Heritage\Updated\Figure 1 2025 Lden_Heritage.mxd

Revision: Rev No. Drawn: DG Checked: SW Approved: CB Date: 09/07/2021



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North Runway
Proposed Relevant Action

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LEGEND

- Protected Structures

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NOTES

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ISSUE PURPOSE

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PROJECT NUMBER

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SHEET TITLE

2025 Permitted versus Proposed Scenario Difference in Forecast Noise Contours (Lden)

SHEET NUMBER

Figure 1

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B.3 Figure 2 2035 Permitted versus Proposed Scenario Difference in Forecast Noise Contours (L_{den})

Revision: Rev No. Drawn: BS Checked: SW Approved: CB Date: 09/07/2021

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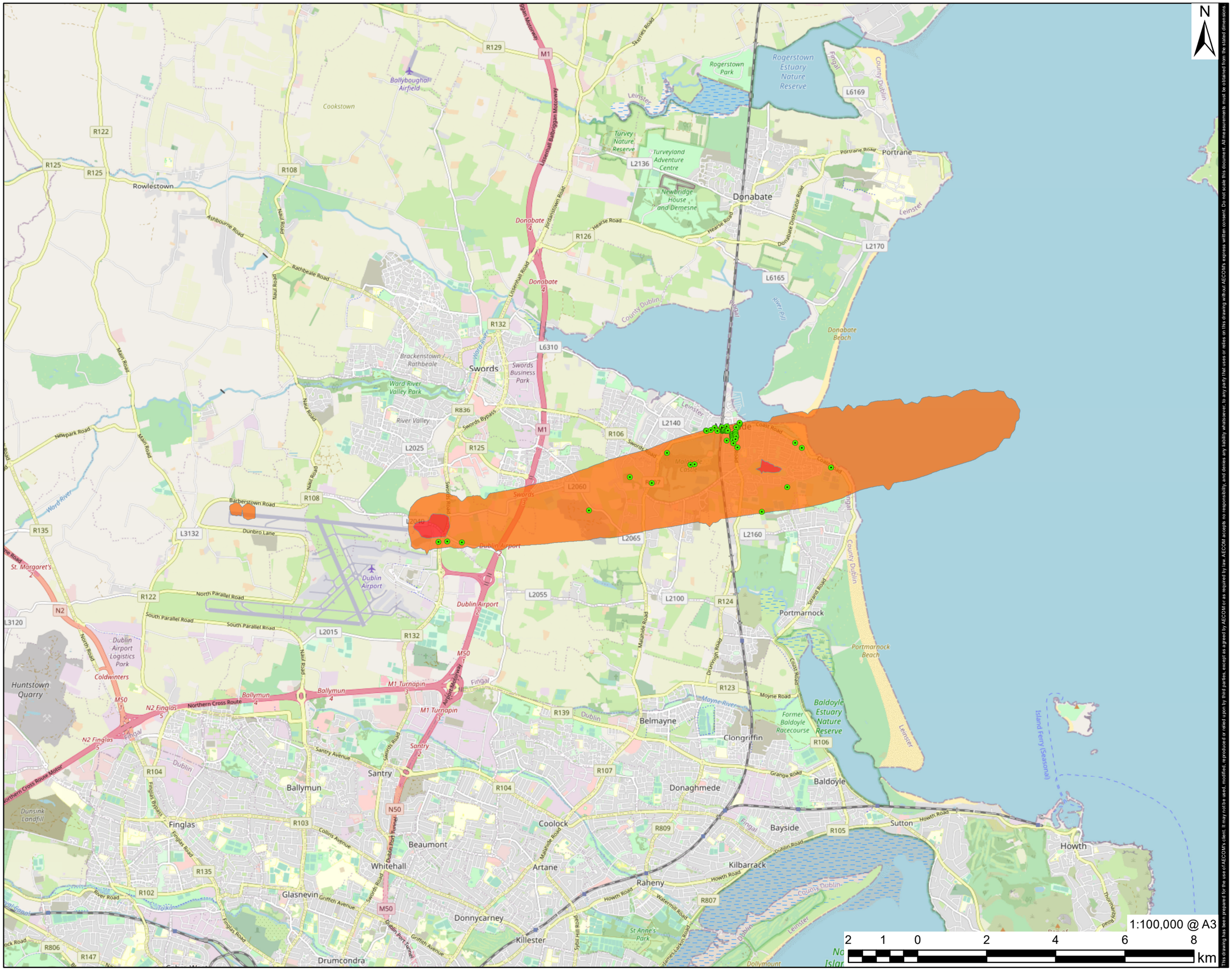

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ISSUE PURPOSE

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PROJECT NUMBER

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SHEET TITLE

2035 Permitted versus Proposed Scenario Difference in Forecast Noise Contours (Lden)

SHEET NUMBER

Figure 2

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Appendix 21A. Planning Applications Assessed

Appendix 21A. Table 1

Extant Regular Planning Permissions Granted or Pending Decision within Study Area between January 2011 - June 2021 (Source: NPAD) - Indicative locations identified on Phase 2 Exclusion Summary Map in EIAR Appendix 21B.

No.	Planning Authority		Development Description	Development Address	Application Status	Decision	DecisionDate	Included in Cumulative Effects Assessment: noise level difference 3dB or greater
1	Dublin City Council	3300/16	Development at a site comprising part (0.43ha) approx on the 4.5ha landholding. The development will consist of; the construction of a 963 sq.m single storey archive building comprising repository, office and ancillary accommodation, external plant at ground level, the formation of a new internal boundary, landscaping, external lighting, solar panel array, green sedum roof, 6 cycle spaces, the relocation of 7 car parking spaces and associated internal access road, temporary use for the period of construction of an existing access off Jamestown Road, Jamestown Business Park and all ancillary site and	Site comprising part (0.43 ha approx.) of the 4.5 ha landholding at, ESB Networks Engineering Centre, St. Margaret's Road, Finglas, Dublin 11	Decision Notice Issued	GRANT PERMISSION	01/09/2016	N
2	Dublin City Council	4449/16	The development will comprise: (1) The construction of a new one-storey c.14,107 sq. m. building for use as electrical rooms for electronic operations, mechanical plant rooms and support areas including offices and welfare facilities, a loading bay, back-up generators and a water tank farm. The facility will also provide (2) 30 no. car parking spaces; (3) The relocation of an attenuation area to the western side of the site; (4) Landscaping and associated ancillary works; (5) The addition of an 8m acoustic screen to the existing transformer compound (Planning Permission Reg. Ref. DCC 3288/16). (6) Changes to previously approved perimeter security boundary railings and fencing including a fenced vehicle lock with double gates placed at the main site entrance. This change is consequent on the enlargement of the site of the existing DUB 54 building (Planning Permission Reg. Ref. DCC3874/15) to form the current site by the addition of lands to the east and west. The security hut at the site entrance has been amended by the addition of a services room. The building height to top of plant screen is circa 11.5m. meaning mechanical plant at roof level of the main building is screened from view on all	Former Diamond Innovations site (Unit 1C) and adjacent lands, Clonshaugh Business And Technology Park, Clonshaugh, Dublin 17	Decision Notice Issued	GRANT PERMISSION	24/02/2017	N
3	Dublin City Council	2569/17	Permission is sought for development of a new hotel, located at the site known as Block 19, Station Square, Clongriffin, Dublin 13. The site is located on the south side of Station Square, Clongriffin, Dublin 13 and is bounded by station square to the North, Railway Road to the west and south west, Station Way to the south east and the proposed Block 17 (current planning application reg.Ref.3634/16) to the east. Heights vary from 7 storeys over basement carpark on Station Square to 4 and 5 storeys over basement on the other street frontages. The development will comprise principally. 209 guest bedrooms, hotel bar/restaurant/front of house reception areas, main and secondary function rooms and meeting rooms, kitchen/service/ancillary facilities, fitness suite, service and plant areas, 20 apartments (with balconies) for short term letting for holiday and business use, (4 x 3 bed, 8 x 2 bed, 4 x2 bed+study, 4 x 1 bed), basement carpark, controlled carpark access ramps, electrical substation, external illuminated signage, site services and site development works, minor repositioning of existing bus stop, soft and hard landscaping. Applicant: Gannon Properties	Block 19, Station Square, Clongriffin, Dublin 13	Decision Notice Issued	GRANT PERMISSION	18/05/2017	N
4	Dublin City Council	3096/18	The development will comprise: 1) The construction of a new two-storey c.16,860 sq.m building for use as data storage facilities containing: data storage rooms, electrical & mechanical plant rooms and support areas including offices and welfare facilities, loading bays, back-up generators and water storage tanks; mechanical plant at roof level is screened from view on all sides by permanent screens. The facility will also include: 2) 40 no. car parking spaces; 3) Amendment to previously permitted site landscaping and associated site infrastructure - Planning Permission Reg.Ref. DCC 4449/16. An EIS will be submitted to the Planning Authority with the planning application and the EIS will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy, during public opening hours at the offices of Dublin City Council.	Former Diamond Innovations site (Unit 1C), Clonshaugh Business & Technology Park, and adjacent lands, Dublin 17	Decision Notice Issued	GRANT PERMISSION	18/07/2018	N

5	Dublin City Council	3767/18	The proposed development will consist of the erection of new units 122A (300 sqm) and 122B (300 sqm) for use as cafe, restaurant and retail food service with external deck area on vacant site and a change of use of existing unit 122 (150 sqm) from motor accessories area and car wash to cafe restaurant, retail food service use, together with ancillary rear service loading area, 18 no carparking spaces to forecourt, with elevational changes including corporate illuminated signage and other ancillary associated works.	Island site housing unit 120 & 121 & 122 and vacant island site unit 122 A+B to east, at Omni Park Shopping Centre, Swords Road, Santry, Dublin 9	Decision Notice Issued	GRANT PERMISSION	16/10/2018	N
6	Dublin City Council	3997/18	Planning Application for new part single storey / part 2 storey Block 6 (1,640 sq.m.) containing 5 no. single storey warehouse units at 242 sq.m. with 2 storey ancillary offices at (82 sq.m.) each; and new part single storey/part 2 storey Block 7 (1,972 sq.m.) containing 6 no. single storey warehouse units at 242 sq.m. with 2 storey ancillary offices at (82 sq.m.) each; car parking and associated siteworks all for use as Light	Port Tunnel Business Park, Unit 13, Clonshaugh Industrial Estate, Dublin 17	Decision Notice Issued	GRANT PERMISSION	11/01/2019	N
7	Dublin City Council	4185/18	The development will comprise: (1) The construction of a new two-storey c.16,860 sq. m. building for use as data storage facilities containing; data storage rooms, electrical & mechanical plant rooms and support areas including offices and welfare facilities, loading bays, back-up generators and water storage tanks; mechanical plant at roof level is screened from view on all sides by permanent screens. The facility will also include (2) 40 no. car parking spaces; and (3) associated landscaping and site infrastructure.	Former Diamond Innovations site (Unit 1C), Clonshaugh Business & Technology Park, and adjacent lands, Dublin D17	Decision Notice Issued	GRANT PERMISSION	11/12/2018	N
8	Dublin City Council	2229/19	Planning permission for development at a site of c.3.1ha comprising Units 15/16, Clonshaugh Business & Technology Park, Clonshaugh, Dublin 17. The development will comprise the following: Demolition of existing former industrial buildings (c.7,400 sq.m total GFA), associated plant and hard-standing. Construction of a 2 storey data centre including data halls, offices/admin, staff areas, storage/loading areas, circulation, UPS rooms, and roof plant (total floor area c.9,250 sq.m). Provision of a generator yard with 3 no. buildings (total floor area c.275 sq.m) housing 5 no. back-up generators. Provision of a substation building (floor area c.34.5sq.m), waste compound building (floor area c.16sq.m), 14 no. car parking spaces, 10 no. bicycle parking spaces, internal roads, docking/service yard, site lighting, new entrance gate, new security fencing to replace existing fencing. All associated site development works, landscape works and services provision. Total floor area of the proposed development is c.9,520.5m	Units 15/16, Clonshaugh Business & Technology Park, Clonshaugh, Dublin 17	Decision Notice Issued	GRANT PERMISSION	30/05/2019	N
9	Dublin City Council	2402/19	Permission for development at the former Diamond Innovations site (Unit 1C), Clonshaugh Business & Technology Park and adjacent lands, Dublin D17 V088. The development will consist of: (1) 2 no. satellite antennae, 5.4m in diameter on; (2) 2 no. support towers in galvanised structural steel clad in powder coated steel mesh; (3) Access stairs and platforms behind existing plant screen; (4) 3m 2 tool cabin behind existing plant screen and; (5) 2 no. access roads for maintenance in permeable paving.	Former Diamond Innovations site (Unit 1C), Clonshaugh Business & Technology Park, Dublin 17	Decision Notice Issued	GRANT PERMISSION	12/06/2019	N
10	Dublin City Council	3400/19	Planning permission for development on a site of c. 0.025 hectares at Clonshaugh Business and Technology Park, Dublin 17. The site is located to the south of an existing data storage facility at the former Cahill Printers building (Building B). The proposed development comprises of a container compound for the purposes of providing ancillary modular plant, electronic equipment and machinery space. The development comprises 4 no. prefabricated metal containers (stacked to form 2 no. storeys), associated access arrangements and staircases, a boundary fence enclosure around the proposed	Clonshaugh Business and Technology Park, Dublin 17	Decision Notice Issued	GRANT PERMISSION	26/08/2019	N

11	Dublin City Council	3803/20	The proposed development comprises: 1.2 no. 2 storey data centre buildings (each 16,576 sqm), which are 16m in height at the main parapet level. Each building to include: Office administration area, data halls, associated electrical and mechanical plant rooms, a loading bay, maintenance and storage spaces, screened plant and solar panel array at roof level, with rainwater harvesting system to support industrial water requirements. 16 no. emergency generators with emission stacks along with a single emergency house supply generator, all contained in a fenced compound adjacent to each building. Diesel storage tank, fuel filling area and associated plant. 2.1 no. water sprinkler pump room (68 sqm), water storage tanks and humidifier tanks (175 sqm all inclusive). 3.1 no. single storey client control building (216 sqm) and 2 no. transformers set within a fenced compound. 4.Demolition of 26 sqm substation building. 5.Partial diversion and undergrounding of ESB overhead lines. 6.Construction of internal site road network and circulation areas connecting to existing internal road network to the south, footpaths, provision of 100 no. car parking spaces, 4 no. motorcycle spaces and with 68 no. cycle parking spaces within a bicycle shelter, all accessed via existing campus to the south. 7.Temporary construction access road along western boundary. 8.Landscaping and planting including provision of planted berms to the eastern and northern boundary. 9.Perimeter security fencing, site lighting, bollards, camera poles, bin stores and all associated and ancillary site works including underground utility cables, water supply, foul and storm drainage network & over ground attenuation pond. All on an application site area measuring 11.52 hectares. An Environmental Impact Assessment Report (EIAR) will be submitted to the Planning Authority with the planning application and the EIAR will be available from inspection or purchase, at a fee not exceeding the reasonable cost of making a copy, during public opening hours at the offices of Dublin City Council.	Woodlands & Former Diamond Innovations Site, Clonshaugh Business & Technology Park, Dublin 17	Registered Application	-	-	N
12	Dublin City Council	3811/20	Planning permission for development on the island site known as Building 126 (formerly known as units 122A & B Plan Reg Ref 3767/18) to east of Omni Park Shopping Centre, Swords Road, Santry, Dublin 9. The proposed new development will consist of a 3 storey multi-tenant commercial building c. 1992 sqm with full banking and financial service uses on ground level in unit 126-1 circa 390 sqm to include cashiers, self-service devices, offices, event space, external ATM and ancillary accommodation and unit 126-2 circa 109 sqm of retail use; associated illuminated corporate signage at corner entrances indicated on elevations, first floor office accommodation circa 558 sqm, second floor of media-associated use circa 558 sqm; 11 car parking spaces with bicycle stands, plant room and waste storage facility, including associated modifications to internal road and footpath layouts.	Omni Park Shopping Centre, Swords Road, Santry, Dublin 9	Decision Notice Issued	GRANT PERMISSION	05/05/2021	N
13	Dublin City Council	3865/20	Planning permission for the demolition of the existing building immediately south of "The Range" store and the construction of a single storey discount food store (supermarket) with ancillary off-licence sales area. Provision of 75 surface level car parking spaces within the application red line boundary, including two electrical vehicle (EV) charging spaces (parking outside the application red line boundary is operational and therefore does not form part of this application); boundary treatments; 12 cycle stands (space for 24 bicycles); trolley bay canopy; hard and soft landscaping; ESB substation building and external mechanical plant areas; site lighting and connections to drainage and on site drainage infrastructure including attenuation tank; roof mounted photo-voltaic panels; all advertising signage. Access to the proposed development is via the two existing operational access points on the Clonshaugh Road, used by "The Range". All ancillary works to facilitate the	Property adjacent and generally south of "The Range" store, Clonshaugh Road, Coolock, Dublin 17, D17 TY30	Registered Application	-	-	N

14	Dublin City Council	4004/20	A new gas reciprocating engine power plant which will have the capability to generate 50 MW of electricity. The footprint of the development site area within Dublin City Council is 1.1 hectares, a further 1.7 hectares is located within Fingal County Council's administrative area. The proposed development within Dublin City Council area comprises: 1. A gas above ground installation (AGI) compound which will contain the Pressure Regulating & Metering Building (approx. 3.0 m width by 11.0 m length x 4.1 m height); Control & Instrumentation Building (approx. 3.0 m width by 4.0m length x 4.3 m height); Chromatography Building (approx. 2.5 m width by 2.5 m length by 4.2 m height). 2. Access to the power plant development will be via the R139 and one emergency exit is also provided. 3. Internal access roads, two bridges to access the remainder of the site within the Fingal County Council area, and the overall development will be enclosed with a 2.6 m high palisade security fencing. 4. All other ancillary site development works including water supply pipeline, firewater and stormwater drainage, as required to facilitate the development. 5. For clarification, the electricity generating power plant is located within the administrative area of Fingal County Council and will be the subject of a separate planning application. The planning application is accompanied by a Natura Impact Statement. This application also relates to a development that will require an Industrial Emission	Lands to the south of Belcamp 220 kV substation, Dublin 17	Decision Notice Issued	ADDITIONAL INFORMATION	23/02/2021	N
15	Fingal County Council	FW20A/0072	The proposed development will consist of a building with 2 No single storey semi-detached Industrial and/or Warehouse units with two-storey ancillary offices and an internal ESB substation. All ancillary site development works to include underground duct work, drainage, utility services, car parking and signage to the proposed units form part of this application. The building has a gross floor area of 4,020 square meters on a 0.918	North City Business Park (ie lands north of Cappagh Road), Finglas, Du	Decision made	GRANT PERMISSION	11/09/2020	N
16	Fingal County Council	F16A/0128	Four single storey units for industrial and/or warehouse use with ancillary two storey office with a gross floor area of 15,692 square metres. The development will also include two ESB sub-stations, ancillary site development works for underground duct work, drainage and utility services, service yards, car parking, signage to the proposed units, the extension of Birch Drive to the east and to the west linking back to Elm Road and a new separate access road off Elm Road, on a site of 3.52 hectares.	Dublin Airport Logistics Park, St. Margaret's Road, St. Margaret's, Co	Decision made	GRANT PERMISSION	23/05/2016	N
17	Fingal County Council	FW20A/0209	The development shall consist of the construction of two single storey units (Unit 23 and 27) for Industrial and/ or Warehouse use with associated ancillary two storey offices and car parking, comprising a total gross floor area of 10,718.84 m2. Unit 23 shall measure 4,485.45 m2 complete with 50 carpark spaces and Unit 27 shall measure 6,215.89 m2 complete with 71 carpark spaces. The development will also include an ESB sub-station to Unit 27, measuring 17.5 m2, service yards, signage to the proposed units, the extension of Birch drive to the east, service access roads and all associated landscaping and ancillary site works for undeground duct work, drainage and utility services, on a site area of 2.49 hectares	Dublin Airport Logistics Park, St Margaret's Road, St Margaret's, Co.	Decision made	GRANT PERMISSION	16/02/2021	N
18	Fingal County Council	F17A/0664	The construction of a single storey unit for Industrial and/or Warehouse use with ancillary two storey offices measuring a gross floor area of 3,438 square metres. The development will also include an inboard ESB sub-station, ancillary site development works for underground duct work, drainage and utility services, service yards, car parking, signage to the proposed units, extension of the access road off Maple Avenue to the south and new access location off Elm Road to the north, on a site area of 0.7863	Dublin Airport Logistics Park, St. Margaret's Road, St. Margaret's, Co	Decision made	GRANT PERMISSION	18/12/2017	N

19	Fingal County Council	F17A/0091	Development on this site (2.321 HA on lands north and west of Charlestown Centre, Charlestown Place and bounded by the M50 to the north). The proposed development will consist of: 3 motor dealerships (Sites A, B & C) with motor sales showrooms/workshops, wash/valet facilities and associated car parking & car storage, as follows:- Site A (0.9550ha): motor sales showroom and service garage building (3,820 sq.m gross floor area) with accommodation over two levels with a maximum height of 11.81 metres. The proposed accommodation comprises a car sales showroom (1,949 sq.m.) at ground and first floor, workshop (1,050 sq.m.) at ground floor, with staff accommodation and general storage (492 sq.m.) at ground and first floor, circulation areas at ground and first floor including car lift (328 sq.m.). Open car storage for 49 no. cars at roof level. A separate vale/wash building (221 sq.m.) with a maximum height of 5.30 metres is also proposed. This site includes 42 no. surface customer car parking spaces and 182 no. spaces for the display and storage of cars at surface level, and 26 no. spaces for display and storage of motorcycles. Site B (0.3550ha): motor sales showroom and service garage building (1,359 sq.m gross floor area) with accommodation over two levels with a maximum height of 10.60 metres. The proposed accommodation comprises a car sales showroom (640 sq.m.) at ground and first floor, workshop (388 sq.m.) at ground floor, with staff accommodation and general storage (186 sq.m.) at ground floor, circulation areas at ground and first floor including car lift (145 sq.m.). Open car storage for 15 no. cars at roof level. A separate valet/wash building (135 sq.m.) with a maximum height of 5.30 metres is also proposed. This site includes 14 no. surface customer car parking spaces and 61 no. spaces for the display and storage of cars at surface level. Site C (0.7985ha): motor sales showroom and service garage building (3,118 sq.m. gross floor area) with accommodation over two levels with a maximum height of 11.0 metres. The proposed accommodation comprises a car sales showroom (519 sq.m.) at ground and first floor, workshop (1,243 sq.m.) at ground floor, with staff accommodation and general storage (506 sq.m.) at ground and first floor, circulation areas at ground and first floor including car lift (304 sq.m.). Open car storage for 74 no. cars at roof level. A separate valet/wash building (191 sq.m.) with a maximum height of 5.30 metres is also proposed. This site includes 40 no. surface customer car parking spaces and 206 no. spaces for the display and storage of cars at surface level. Permission is also sought for hard and soft landscaping, new boundary treatments, bicycle parking, signage and all associated site and development works. Access to Sites A,B & C is provided via 3 access points off the existing distributor road linking to St. Margaret's Road to the east and Charlestown Place to the south which will result in the reconfiguration of the parking layout and the loss of 4 no. parking spaces from the distributor road parking layout. An access to the compound on the southern part of Site A	Charlestown, Finglas, Dublin 11.	Decision made	GRANT PERMISSION	04/07/2017	N
20	Fingal County Council	FW19A/0170	Construction of a two storey unit for training facility use, with ancillary offices. With an overall gross floor area of 4,438 meter squared, the development will also include one ESB Substation, ancillary site development works including external training unit, underground duct works, drainage and utility services, service yards, car parking and signage to the the proposed building and the extension of Cedar Drive to the North and	Dublin Airport Logistics Park, St Margarets Road, St Margarets, Co Dub	Decision made	GRANT PERMISSION	10/12/2019	N
21	Fingal County Council	FW20A/0211	The development will consist of 3 no. buildings for industrial/warehouse/logistics use (Units 3,4 and 5) with gross floor area of 24,356sq.m. Each building will measure 18.1m high (at parapet level) and have 2 storey ancillary offices. Elevational signage will be provided. The units will form Phase 2 of the Vantage Business Park, with Phase 1 to the south (units 1 and 2) under construction. The proposed development includes 39 HGV parking spaces, 224 car parking spaces, 134 cycle parking spaces, 29 dock levellers and 7 grade loading bays. All associated site works including diversion of existing foul rising main, boundary treatments, landscaping, service yards, internal road and footpaths, swales, lighting, 3 no. free standing signs, signage at entrance, refuse storage, substation, foul pumping station, extension of foul infrastructure from Phase 1, modified vehicular entrance off the R135 (including new entrance gate and pillars) and dedicated new footpath and cycleway along the east side of the R135	Lands between the N2 and R135 (north of the N2-R135 link road), at Col	Decision made	GRANT PERMISSION	13/04/2021	N
22	Fingal County Council	FW19A/0143	The construction of 2 no. Single-Storey Units for industrial and/or Warehouse use with ancillary Two-Storey offices with a gross floor area 11,157.90 square meters. The development will also include 2no. ESB substations, ancillary site development works for underground duct work, drainage and utility services, service yards, car parking, signage to the proposed units, the extension of Cedar Drive to the west, on a site area of 2.97	Dublin Airport Logistics Park, St Margaret's Road, St Margaret's, Coun	Decision made	GRANT PERMISSION	10/02/2020	N

23	Fingal County Council	F17A/0308	Permission for the construction of 4 no. warehouse/logistics buildings with a total GFA of 12,095 sq.m., including ancillary office accommodation (D4-D7), site access roads, service yards, ESB substation (25 sq.m.), detention basin, car and cycle parking and landscaping on an application site of 4.024 hectares. Unit D4 includes warehouse/logistics floorspace of approximately 3,500 sq.m. and ancillary office floorspace of 443 sq.m., with an overall GFA of 3,954 sq.m. over two levels, and 40 no. car parking spaces. Unit D5 includes warehouse/logistics floorspace of approximately 2,629 sq.m. and ancillary office floor space of 365 sq.m, with an overall GFA of 3,005 sq.m over two levels, and 33 no. car parking spaces. Unit D6 includes warehouse/logistics floorspace of approximately 1,756 sq.m and ancillary office floorspace of 339 sq.m, with an overall GFA of 2,106 sq.m over two levels, and 21 no. car parking spaces. Unit D7 includes warehouse/logistics floorspace of approximately 2,629 sq.m. and ancillary office floorspace of 365 sq.m, with an overall floorspace of 3,005 sq.m over two levels, and 31 no. car parking spaces. Each unit contains an entrance/reception room and associated accommodation (toilets, tea room, storage room). Each unit has a service yard, loading docks, cycle parking, landscaping, boundary treatment and associated site services and site development works. A shared access road is provided to the service yards for Unit D4 and D5 and D6 and D7. Unit D5 and D6 have a shared vehicular access to the car parking spaces.	SIte D4-D7, Horizon Logistics Park, off the R108 at Harristown, St Mar	Decision made	GRANT PERMISSION	24/07/2017	N
24	Fingal County Council	F17A/0769	Development will consist of the construction of two single storey units for industrial and/or warehousing use with ancillary two storey offices with a gross floor area of 9422sq.m.. The development will include site developments works for boundary treatments, entrance wing walls and railings, landscaping, underground ductwork, drainage, utility connections, service yards, parking, car parking, elevational signage to the units along with a new separate vehicular access of the R135 on a total site area of	Coldwinters, St. Margaret's, Co. Dublin	Decision made	GRANT PERMISSION	21/05/2018	N
25	Fingal County Council	FW20A/0021	The development will consist of storage and logistic facilities comprising yards, warehouses, workshops and ancillary offices at Plots 1, 3, 4, 5, 6, 7, and 9 and amendment to permitted development (Reg. Ref. FW19A/0101 and F18A/0139) at Plot 8 and internal road network at Dublin Inland Port. Planning permission is sought for the following development: Plot 1 (c.1.54ha) comprising a warehouse building including an ancillary office of c.2433sqm and c.10m in height with 1 no. sign on building and c.280sqm photovoltaic panels on roof and storage yard with approx. 50 no. lorry spaces. Plot 3 (c.0.87ha) comprising an office building of c.144sqm and c. 4.6m in height with 1 no. sign on building and c.60sqm photovoltaic panels on roof and storage yard with approx. 24 no. lorry spaces and approx. 205 no. car storage spaces. Plot 4 (c.2.99ha) comprising a warehouse building including workshop, store, substation and ancillary office of c.8,061sqm and c.15m in height and c.680sqm photovoltaic panels on roof and storage yard with approx. 70 no. lorry spaces and approx. 96 no. car storage spaces. Plot 5 (c.1.16ha) comprising a warehouse building including workshop and ancillary office of c.735sqm and 10.2m and an office building of c.300sqm and c.5.8m in height with 1 no. sign on building, and storage yard with approx. 28 no. lorry spaces and including vehicle washing area and fuel storage area. Plot 6 (c.0.31ha) comprising a warehouse and store building including ancillary office of c.569sqm and 10.2m in height with 1 no. sign on building and c.92sqm photovoltaic panels on roof and storage yard with approx. 7 no. lorry spaces. Plot 7 (c1.2ha) comprising a warehouse building including ancillary office of c.1,293sqm and c.10m in height with 1 no. sign on building and c.220sqm photovoltaic panels on roof and storage yard with approx. 42 no. lorry spaces. Plot 9 (c.0.47ha) comprising a warehouse building including ancillary office of c.569sqm and 10.2m in height with 1 no. sign on building and c.92sqm photovoltaic panels on roof and storage yard with c.8 no. lorry spaces. The proposed development across the 7 no. plots will also include: 134 no. car staff parking space and 112 no. bicycle parking spaces; high strength surface treatment including underground drainage, attenuation, water services and electricity infrastructure including 2 no. substations of c. 14sqm and c.26sqm respectively; 3m high wall and internal 4.5m electrified fence along the boundary of Plot 4 and 2.4m high fences along other internal plot boundaries; gated vehicle and pedestrian accesses to each plot; 3m high fencing along the external site boundaries; CCTV poles (approx. 7.5m) and new lighting (including 8 no. lighting towers (approx. 30m)); and all associated landscaping,	Dublin Inland Port, South of Dublin Airport Logistics Park, Off Maple	Decision made	GRANT PERMISSION	07/04/2020	N

26	Fingal County Council	F18A/0457	Permission for the construction of 1 no. warehouse/logistics building including ancillary office accommodation with a total floor area of 10,368 m², site access roads, service yards, a stand alone ESB Substation and switch room (25m²), external binstore (10m²) , external signage of (7m²), detention basin, car & covered cycle parking and associated site services and landscaping on application site area of 2,836 hectares.	Unit D9 Horizon Logistics Park, Harristown, St Margaret's, Swords, Co	Decision made	GRANT PERMISSION	25/09/2018	N
27	Fingal County Council	FW20A/0187	The construction of 8 no. light industrial/warehouse (including wholesale use) / logistics units including ancillary office use and entrance/reception areas over two levels, with maximum height of c. 15.5 m and combined total gross floor area (GFA) of 39,732 sq.m. (units N1-N8); The demolition of 2 no. existing agricultural sheds and the construction of a link road (Estate Road No. 4), extending south from the proposed development to connect with existing road infrastructure (Sillogue Green); The implementation of a new internal road network with all access points, internal access roads and footpaths, service yards and access roads, cycle paths and landscaping; The construction of 2 no. new roundabouts on Estate Road No. 4, the construction of Estate Road No. 3 branching west and the extension of Estate Road No. 2 which currently serves Horizon Logistics Park; The development includes 2 no. ESB substation buildings and switchrooms (with a combined GFA of 68 sq.m.), service yards including loading bays, bin storage areas and a total of 395 no. car parking spaces, 8 no. motorcycle parking spaces and 202 no. cycle parking spaces; The proposal includes landscaping and planting, boundary treatment, lighting, security fencing and all associated site services and development works including underground foul and storm water drainage network and sustainable urban drainage systems, all on a site of 14.64 hectares.	Horizon Logistics Park (Site N), Off the R108, Harristown, St. Margare	Planner Assignment	-	-	N
28	Fingal County Council	F17A/0134	The construction of a new Multi-Use All Weather Surface Games Area to be located in the North Eastern corner of the site. Proposed works to include all associated fencing, floodlighting, infrastructure and drainage.	St Margarets Road, Finglas, Dublin 11	Decision made	GRANT PERMISSION	28/04/2017	N
29	Fingal County Council	F16A/0439	The erection of a warehouse/logistics unit (D2 7,163m²) on its own self-contained site with dedicated service yard, loading docks, perimeter fencing, 2 storey ancillary offices, car parking and associated site development works including an ESB substation with switch room. Also included will be the associated estate development works by extending & upgrading the existing road infrastructure, including a new roundabout, landscaping, additional detention basis plus alterations to the existing car parking layout & relocated entrances to unit D1 (previously granted under F15A/0213). All of the	Site D2, Horizon Logistics Park, Harristown, St. Margarets, Swords, Co	Decision made	GRANT PERMISSION	18/01/2017	N
30	Fingal County Council	F19A/0033	The erection of a warehouse/logistics unit (D8 14,933m²) on its own self-contained site with dedicated service yard, loading docks, perimeter fencing, 2 storey ancillary offices, 150 car parking spaces and associated site development works to include an ESB substation with switch room (38m²). All of the above on a site of 3.395ha.	Site D8, Horizon Logistics Park, Harristown, St. Margarets, Swords, Co	Decision made	GRANT PERMISSION	03/05/2019	N
31	Fingal County Council	FW21A/0049	The proposed development will consist of a building with 2 No. single storey semi-detached industrial and/or warehouse units with two-storey ancillary offices and an internal ESB substation. All ancillary site development works to include trucking yard to rear, underground duct work, drainage, utility services, car parking, landscaping, cycle shelter and signage to the proposed units form part of this application. The building has a gross floor area of 4,011 square meters on a 0.9 hectare site.	North City Business Park, Cappogue, Finglas, Dublin 11	Decision made	GRANT PERMISSION	06/05/2021	N
32	Fingal County Council	FW19A/0090	The proposed development will consist of the installation of 10 No. containerised gas fired generating units with an export electricity capacity of 20 megawatts and underground cabling route c 1.45 km along the R135 road. The development will include 1 no. single storey electrical substation building, 1 no. customer switchgear, electrical inverter/transformer station modules, concrete support structures, heating, ventilation and air conditioning units (HVAC units), underground electrical cabling, underground gas pipework and connection points, access tracks and new site entrance, security gates, perimeter security fencing, CCTV security monitoring system, earth bund and landscaping works and all associated ancillary infrastructure on land at Newtown & Coldwinters,	Newtown & Coldwinters, North Road, Fingal, Co. Dublin	Decision made	GRANT PERMISSION	21/11/2019	N
33	Fingal County Council	FW16A/0055	The demolition of two derelict houses on the site and the construction of a new single storey light industrial unit with a floor area of 658 sq.m. and a ridge height of 7.40 m. The unit will comprise a warehouse, a retail showroom, administrative offices and canteen facilities. Permission is also sought for signage on the front elevation of the building, 26 no. car parking spaces and all associated site works.	Balseskin, The Ward, Co. Dublin.	Decision made	GRANT PERMISSION	19/08/2016	N

34	Fingal County Council	F07A/0389/E1	The development will consist of the construction of four single storey warehousing and logistics buildings with ancillary three storey offices with ancillary three storey offices with a gross floor area of 12,673sq.m., ESB Substation, ancillary site development works including underground duct work, drainage and utility services, service yards, car parking and signage to the buildings and the extension of Spine Road B (to the south of Spine Road A) and Spine Roads B1 and B2, on a site of 2.91 hectares	Dublin Airport Logistics Park, St. Margaret's Road, St. Margaret's, Co	Decision made	GRANT EXTENSION OF DURATION OF PERM.	18/06/2012	N
35	Fingal County Council	F17A/0017	The proposed development will consist of the demolition of the existing buildings on site and the construction of a warehouse/logistics building (D3) including associated accommodation (workshops, plant room, staff canteens and welfare facilities and ancillary offices for logistics administrative and support staff), with a gross floor area of 4,419 sq.m over two levels. The proposed building includes a green roof and plant areas at roof level. The proposed building is located on a self-contained site with a dedicated service yard, loading docks, perimeter security fencing, walls and boulders, car parking, cycle parking, security hut (7 sq.m.), ESB sub-station compound (124 sq.m.), a generator and pump room building (66 sq.m.), sprinkler tank (106 sq.m), landscaping, attenuation areas and associated site services and site development works. A separate vehicular access is provided to the car park and the service yard. Also included is the associated estate development works involving the extension and upgrading of the existing road infrastructure to serve Site D3, including a new roundabout, landscaping, and alterations to the existing car parking layout & relocation of 2 no. of the vehicular entrances to Unit D1 (previously granted under F15A/0213). All on an application site area of c.2.11	Site D3, Horizon Logistics Park, Off the R108, Harristown, St. Margare	Decision made	GRANT PERMISSION	10/03/2017	N
36	Fingal County Council	F08A/0759/E1	A single storey distribution warehouse at Dublin Airport Logistics Park (in the Townland of Coldwinters and facing on to the N2). The development consists of the construction of a single storey warehouse building with ancillary three storey offices with a gross internal floor area of 6176 sq.m., ESB substation, ancillary site development works including underground duct work, drainage and utility services, service yard, car parking and signage to the building and minor level changes to part of previously approved spine road B2 Reg. Ref. F07A/0389 and extension to spine road B2 to service the subject site. The proposed works also include amendments to part of previously approved spine road B3 Reg. Ref. F07A/1605 including new hammerhead and changes to levels on a site of 1.377 Hectares accessed off of the main park distribution road network for which planning permission was obtained Reg. Ref. F07A/0389 and F07A/1605	Dublin Airport Logistics Park, St. Margaret's Road, St. Margaret's, Co	Decision made	GRANT EXTENSION OF DURATION OF PERM.	27/09/2013	N
37	Fingal County Council	F17A/0728	The construction of a single storey unit for industrial and/or warehouse use with ancillary two storey offices measuring a gross floor area of 2,598 square metres. The development will also include ancillary site development works for underground duct work, drainage and utility service yards, car parking, signage to the proposed unit, complete with new access locations off Birch Avenue Extension (currently under construction) to the north and new access location off Maple Avenue to the west, on a site area of 0.6258 hectares.	Dublin Airport Logistics Park, St. Margaret's Road, St. Margaret's, Co	Decision made	GRANT PERMISSION	26/01/2018	N
38	Fingal County Council	F07A/1605/E1	The development will consist of the construction of three single storey warehousing and logistics buildings with ancillary three storey offices with a gross floor area of 7,570m², ESB Substation, ancillary site development works including underground duct works, drainage and utility services, service yards, car parking and signage to the buildings and the extension of Spine Road B and Spine Roads B2 and the construction of Spine Road B3	Dublin Airport Logistics Park, St. Margaret's Road, St. Margaret's, Co	Decision made	GRANT EXTENSION OF DURATION OF PERM.	04/03/2013	N
39	Fingal County Council	F07A/1637/E1	Permission for 7,487.8 sq. m. of warehouse and light industrial buildings with ancillary offices, 2 No. ESB substations and related site infrastructural and landscape works (as Phase 3 North of a wider master plan development) on part of a 18.4 ha site approximately, located at NorthCity Business Park (i.e. lands north of Cappagh Road), Cappoge, Finglas, Dublin 11. The site is principally bounded by the M50 motorway to the north-west, the North Park Development to the north-east; the Northern Cross Business Park to the east; lands zoned for residential use under the Cappagh Road Local Area Plan to the south-east; and lands zoned for residential use under the Cappagh Road Local Area Plan and the M50 motorway to the south-west. The Phase 3 North development will consist of G1 - G11 contained within 2 blocks with individual units ranging in size from 256 sq. m. to 498 sq. m; Units G3, G4, G5, G8, G9 and G10 will have warehouse/light industrial usage while remaining units will be warehouse with ancillary offices. Unit A7A/A7B will be a single unit with a gross floor area of 3,529.2 sq. m. divided into two units each having an area of 1,764.6 sq. m. The ESB substations will be provided in unit G7 and A7B. All units will have two storey ancillary offices and surface car parking and signage. Ancillary site works to include underground duct work, drainage and water services and distribution road connections to the Estate roadway extension for which	Northcity Business Park (ie Lands North Of Cappagh Road), Cappoge, Fin	Decision made	GRANT EXTENSION OF DURATION OF PERM.	19/04/2013	N
40	Fingal County Council	FW21A/0026	Permission to construct a compressed natural gas dispensing facility with dispensing pump, island and canopy, compressor room, store and cooler room, new pavement layout, external lighting and 2 no. recycling truck-washes and 2 no. vehicular entrances and	Cappagh Road, Dublin 11	Decision made	REQUEST ADDITIONAL INFORMATION	08/04/2021	N

41	Fingal County Council	F19A/0023	Amend the North Parallel Runway (North Runway)(permitted under FCC Reg. Ref. F04A/1755; An Bord Pleanála Ref: PL06F.217429), on this site of c.265.7 hectares at Dublin Airport, Co. Dublin, in the townlands of Millhead, Kingstown, Dunbro, Barberstown, Pickardstown, Forrest Great, Forrest Little, Cloghran, Collinstown, Corballis, Rock and Huntstown. The permitted runway is located to the north and north-west of terminal 1 and Terminal 2, Dublin Airport. The development will consist of : Amendments to the structural composition of the outer shoulder of the runway (7.5m wide on each side of the runway) to be constructed of reinforced grass instead of paved construction; Reduction in the width of permitted taxiways from c.30m (min. width) to c.27m (min. width); Removal of 4 No. permitted taxiways (2 No. rapid exit taxiways (RETS) (P4 and P9); and 2 No. north-south taxiways (P5 and P12); Relocation of 5 No. permitted taxiways; RETS P3 relocated to the east (renamed 'N5'); RETS P10 relocated to the west (renamed 'N3); North-south access taxiway (P2), relocated by c. 152 m to the east at eastern end of runway (renamed 'N6'); North-south taxiway (P17) (linking parallel taxiway to the North Apron) relocated by c. 116 m to the east (renamed 'Kilo'); Re-location of taxiway at intersection with existing Runway 16/34 (P6 renamed 'Mike' and P7 renamed 'Echo 1'); Removal of taxiways (P14, P15, P16) including passing bay located to the south of parallel taxiway; minor amendments to the runway levels where the permitted runway intersects existing Runway 16/34; Re-location of 2 No. permitted sub-stations (each increasing from c.450 sq.m. to c. 475 sq.m. GFA) and associated amendments to access roads; Amendments to the alignment and location of permitted fire access roads, including removal of 6 No. permitted crash gates with egress to St. Margaret's Bypass L3132 and Castlemoate Road; and the re-location of 1 No. permitted crash gate with egress to St. Margaret's Bypass L3132; Amendments to the location of the permitted airside perimeter fence (along northern, south-western and eastern boundaries); Re-location of 2 No. permitted localiser (equipment) cabins and associated amendments to permitted localiser access roads; and re-location / provision of maintenance access to permitted and proposed air navigation equipment; drainage and pollution monitoring facilities. The development will also consist of: Amendments to ground profiles providing 6 No. elevated Earthworks Landscape Areas (ELAs) to the north, west and south of the permitted runway (to improve the quality of the	North Runway, Dublin Airport, Co. Dublin.	Appeal decided	GRANT PERMISSION	09/08/2019	N
42	Fingal County Council	FW20A/0120	The proposed development will consist of a Petrol Filiing Station to include (i)A forecourt area with 4no. fuel pump islands, illuminated forecourt canopy over, 4 no. 40.000 litre underground fuel stroage tanks, associated pipework and overground fill points and overground fill points & vents, hcv pump and electric car charging points and associated infrastructure, (ii) A car wash area with 2 no.car wash boys associated underground water storage tanks, drainage and plant room, (iii) On- site facilities including,car services areas, car and bicycle parking, dedicated delievery lane, loading area pedestrian routes and associated line markings. (iv) Works to R122 including relocation of existing site access, formation of new access from R122, road widening and road markings. (v) Illuminated & non- illuminated operator signage including main ID Totem sign, canopy and facade signage, (vi) An amenity building of 626 sqm gross floor area which will include a convenience shop (100 sq.m net retail area) restaurant/café area with 2 no food offerings with hot and cold meals and refreshments for sale for consumption on and off the premises, associated drive thru facility , customer seating customer Wc's back of house area with food preparation areas, ancillary office, staff welfare facilities, storage and plant areas, ancillary off licence, (vii) Esb substation, (viii) Overground LPG tanks (ix) All site drainage works including rainwater harvesting, attenuation and foul treatment system,	Sandyhill, St Margarets, Co. Dublin	Planner Assignment	-	-	N
43	Fingal County Council	FW19A/0123	The development will consist of a two storey commercial unit comprising of a vehicle testing centre, vehicle maintenance centre, reception area, ancillary offices, staff areas at ground floor level, 2 No. I.T. Centre offices, staff areas at first floor level, signage, associated car parking, site development works and landscaping. The site will be accessed via 1 no. proposed new vehicular entrance off Damastown Close.	Damastown Close, Damastown Business Park, Mulhuddart, Dublin 15	Decision made	GRANT PERMISSION	17/12/2019	N

44	Fingal County Council	F21A/0255	For development at these site addresses: Site A - Hotel Site adjoins the T2 Multi-Storey Car Park to the north, Dublin Airport, townland of Corballis: Site B - Skybridge House (former TASC Building), Dublin Airport, townland of Collinstown; Site C-Site Compound 1 is bounded by the T2 Departure Road to the west and T2 Multi-storey Car Park to the east, Dublin Airport, townland of Corballis; Site D-Site Compound 2 is located to the east of Swords Rugby Club in the townland of Stockhole. Site A- The proposed development comprises the erection of a new part 3-, part 11- and part 12-storey terminal-linked 410 bedroom hotel integrated with the existing elevated pedestrian link bridge connecting T2 to the south with the T2 Multi-storey Car Park to the north at 2nd floor level through the hotel. At ground floor level provision is made for 10 no. meeting rooms; a Children's Play Room (Kids Club); and, an internal bicycle storage room to provide at least 15 no. bicycle parking spaces for the use of staff (6 no spaces) and guests (9 no spaces) adjoining the security office. At first floor level provision is made for 5 no, meeting rooms, and an event/business space (approx. 500 sq.m) adjoined by a pre-function space (approx. 518 sq.m, including bar area). At second floor level provision is made for a staff canteen; kitchen, restaurant and private dining area with bar; a retail unit, and, associated and ancillary plant rooms, storage, offices, kitchen, breakout spaces, toilets / changing facilities, and housekeeping facilities. A total of 410 hotel bedrooms are provided at third to eleventh floor levels. Ancillary facilities at the upper levels include a leisure centre at third floor (comprising a reception area and a range of facilities to include a gym, treatment rooms, sauna, steam room and jacuzzi). Provision is made at 11th floor level for a bar and an executive lounge, both of which open onto south facing roof terraces. An internal one-way access road is provided (in the form of a left-in from the T2 Car Park access road to the east and a right-out egress onto the T2 departures road to the south). A designated drop-off / layby is provided to the front of the hotel on this internal access road. A height control barrier and ticketed raised arm barrier is provided to control vehicular access onto the internal access road. To the west of the hotel at ground level is a gated vehicular access off the Internal access road to a service yard that also provides access to a recycling and refuse storage area. Vehicular egress from the service yard is to the rear (at the north-western corner of the site) onto the T2 Departures Road. Other associated works include site clearance and ground works, hard and soft landscaping works and the provision of 10 no. external visitor bicycle spaces together with associated infrastructure and services connections. The proposed hotel includes a pedestrian access to the entire first floor level of the existing T2 Multi Storey Car Park constructed under Planning Permission ABP Ref. PLO6F.PA0008 that contains	Site A - Hotel Site adjoins the T2 Multi-Storey Car Park to the north,	Registered Application	-	-	N
45	Fingal County Council	F07A/0269/E1	Block of 6 warehouses, extension to existing unit, sub-division of existing offices and parking structure	Blanchardstown Industrial Park, Snugborough Road, Snugborough, Dublin	Decision made	GRANT EXTENSION OF DURATION OF PERM.	05/07/2012	N
46	Fingal County Council	F07A/1472/E1	The development will consist of a Materials Recovery Facility (MRF) with a capacity for a maximum annual intake of 100,000 tonnes of dry mixed recyclable material and construction and demolition waste collected from the commercial / industrial and domestic sectors. The development comprises a metal clad process building having a plan area of 3,960 sq. metres with a maximum height of 14.2 metres; separate two storey office / welfare building of plan area 163 sq. metres with a maximum height of 8 metres; associated vehicle marshalling yard; 2 no. weighbridges with hut; 47 no. car parking spaces; truck wash; fuel storage area; water tank; all associated security fencing and site services including an electrical sub-station and site landscaping works. An Environmental Impact Statement (EIS) has been prepared in respect of the planning application. This application relates to an activity requiring a waste license	Millennium Business Park, Cappagh Road, Townland Of Grange, Dublin 11	Application Registered	-	22/01/2014	N
47	Fingal County Council	F19A/0493	Proposed landside facility and snow base. The demolition of 3 no. existing single storey sheds, the removal of the surface of the existing yard, and the construction of (1) a part single (double height), part two-storey machinery/salt storage building, consisting of a machinery storage facility with 2 no. roller shutter doors, 3 no. separate salt stores with open front, and ancillary facilities over the two floors (2) new single-storey (double height) vehicle wash bay, (3) A new vehicular and pedestrian access of the existing Castlemoate Road, (4) new concrete yard, (5) staff parking facilities, (6) 2 no. concrete mulch storage bins, (7) 2.4 m high paladin boundary fence, (8) internal concrete path, (9) 2 no. rainwater harvesting tanks, (10) an underground tank, and (11) all associated site development, drainage, landscaping and ancillary works. The proposed development is located within the curtilage of Castlemoate House, A Protected Structure. (Fingal County Council Protected Structure Reference: 0601)	Townland of Cloghran, Swords, Co. Dublin.	Decision made	GRANT PERMISSION	11/03/2020	Y
48	Fingal County Council	FW17A/0161	A single storey office space with a total floor area of 335m2.	Damastown Road, Damastown Industrial Park, Mulhuddart, Dublin 15	Decision made	GRANT PERMISSION	13/11/2017	N

49	Fingal County Council	FW21A/0060	Permission for a permanent construction compound, located to the centre of the BMS site consisting of 4 no. single storey workshops sized 70 square metres and 4.1 meters high, 1 no. toilet facility sized 50 meters square and 3.1 meters high and office/canteen facility sized 50 square meters and 3.1 meters high, all previously granted permission under planning ref: FW17A/0097 but not constructed within the period of validity as set out under condition 2 (ii) of the Grant requiring that the life of the permission is limited to previously approved planning application, planning ref: FW15A/0043. The proposed development is for modifications to an establishment which includes an activity requiring an industrial emissions licence.	Cruiserath & Goddamendy Townlands, Cruiserath Road, Mulhuddart, Dublin	Decision made	GRANT PERMISSION	20/05/2021	N
50	Fingal County Council	FW19A/0098	The development will consist of a 2941 sq.m. logistics warehouse building, the height of which will not exceed 13.85m. This is inclusive of a 977 sq.m. temperature-controlled warehouse, a reception area, office, store and toilet facilities. Photovoltaic panels along the western aspect of the roof structure not exceeding 150 sq.m. A new heavy goods vehicular entrance and a pedestrian access along Damastown Rise, 26 car parking spaces, 2 no disability access parking spaces, cycle parking and a service yard to the rear (west) of the proposed building. Vehicular access for staff shall be via the existing vehicular enrance along Damastown Avenue associated with the adjoining DG McArdle International Ltd. site to the west of the proposed development. New boundary wall and railing detailing to the eastern and southern boundaries, all associated signage, lighting, landscaping, a detention basis and site development	Damastown Avenue/Damastown Rise, Damastown Industrial Estate, Macetown	Decision made	GRANT PERMISSION	08/08/2019	N
51	Fingal County Council	F16A/0471	The development will consist of decommissioning of the existing concrete crushing and screening plant and erection and operation of a proposed concrete plant consisting of concrete mixer plant, conveyors, 4 no. aggregate silos, 8 no. cement silos, tip in bin, 2 no. water storage tanks and a control cabin (c. 849.2m²) (with a maximum height of 23.0m), a truck wash out (c. 187.0m²), aggregate storage bays (152.0m²) and ancillary facilities (connections to existing water discharge system, electricity supplies and proposed downward lights) on a hardstanding area with a reduced floor level to 23mOD over c. 0.94 ha of the site and a proposed overburden storage area within the quarry site (c. 0.58ha), with an overall application area of c. 2.25 ha. at the existing quarry landholding (Q/05/005). It is proposed to operate the concrete plant between the hours of 2 a.m. to 10 p.m. Monday to Saturday and on 20 occasions per year outside these hours with prior agreement from Fingal County Council.	Feltrim Quarry, Feltrim, Swords, Co. Dublin.	Appeal decided	GRANT PERMISSION	29/03/2017	Y
52	Fingal County Council	FW17A/0167	The development will comprise the following: Demolition of existing warehouse building (c.14,940 sq.m) Construction of 3 no. 2-storey, Data Centres, each building including data halls, offices, staff areas, plant areas, roof plant. Max height of each building c.12 m to parapet. Provision of an Energy Centre at each Data Centre, each including 5 no. flues (c.28m high), fuel tanks, switch rooms and associated plant. Provision of gas pressure reduction facility (including 2 no. service buildings of total c.52 sq.m) and with separate access. Provision of 80 no. car parking spaces, 60 no. bicycle parking spaces, internal roads and docking areas. Individual vehicular access to each data centre to be provided via the 3 no. existing entrances to the north of the site. Extension of existing footpath to the north-east of the site. Site lighting and security fencing (c.2.4m high palisade.) All associated site development works, landscape works and services provision. Total floor area of the proposed development is c.31,537 sq.m. Additional Information lodged 20/12/17 is now deemed "significant" 03/01/18 "Public Notices"	Former Brian Daly Transport Services Building, Orion Business Park, Ba	Decision made	GRANT PERMISSION	31/01/2018	N
53	Fingal County Council	FW21A/0086	Permission for the provision of 360 sq/metres of Photovoltaic (PV) Solar Panels at ground level to the existing landscaped area north of the existing part 2 storey, part 3 storey building, and associated works	Helsinn Birex, Damastown Road, Damastown Industrial Estate, Mulhuddart	Planner Assignment	-	-	N

54	Fingal County Council	FW19A/0232	The construction of a Data Centre comprised of 4 no. buildings consisting of (a) Data Hall Building, (48,303 sq.m) 4 storey building with plant room over (b) Generator Building, (4,064 sq.m) 4 storey building over a single basement level, (c) Sprinkler Pump House building, (119 sq m.) single storey building, and (d) Security Hut, (21 sq.m.) single storey building with associated security barrier system, and the formation of a new vehicular entrance onto Damastown Avenue, 102 no. car parking spaces including 6 no. disabled car parking spaces, 30 no. cycle spaces, internal site roads and hardstanding, site lighting, perimeter security fencing and gates, site signage, soft landscaping, SUDS drainage system, and all other associated site works, on a 2.6709 hectare site at Damastown Avenue, Damastown Industrial Park, Macetown Middle, Mulhuddart, Dublin 15	Damastown Avenue, Damastown Industrial Park, Macetown Middle, Mulhudda	Decision made	GRANT PERMISSION	23/09/2020	N
55	Fingal County Council	FW18A/0082	The development is a wastewater treatment plant comprising a 3m high bunded area enclosing self-bunded chemical tank 1 (c.100m³ & 8.49m high), ammonia stripping plant (up to 12.15m high & c. 98m2), solid separation building (c. 62.66m² & 5.55m high), digestate storage tank (c. 2,000m³ & 9.94m high), digestate treatment tank (c. 1,267m³ & 9.94m high), flotation unit building (c. 51m² & 9.94m high), vacuum degassing tower (18m high), roof mounted blowers (2m high), 4no. mixing tanks (rectangular tanks: c. 8m³ & 2m high, cylindrical tanks: c. 3.5m³ & 2m high), conveyor 1 (7.7m long), conveyor 2 (9m long), & a pipe bridge (c. 8m high & 17.3m long); & a yard containing 2no. skips (c. 2.5m high), big bag system (c. 2.25m2 & 2.5m high), 3no. self-bunded chemical tanks to the south (c. 6m³ & 2m high), an underground pump station, Motor Control Centre (MCC) room (2.46m high & 19.5m2), self-bunded chemical tank 2 (6.97m high & c. 30m³), self-bunded chemical tank 3 (5.34m high & c. 20m³), self-bunded chemical tank 4 (c. 25m³ and 6.84m high), auxillary building (190m2 & 8m high), a spare skip and including all stairwells, pathways and ancillary development. The wastewater treatment plant permitted under planning ref. FW13A/0089 will be substituted for the proposed wastewater treatment plant. The boundary will be landscaped in accordance with planning ref. FW13A/0089. Planning ref. FW13A/0089 is the	Huntstown, North Road, Finglas, Dublin 11	Decision made	GRANT PERMISSION	26/07/2018	N
56	Fingal County Council	F17A/0564	A new warehouse at existing facility. The development (6,845m²) consists of warehouse area (5,496m², 16.6m high max) incorporating Goods Inwards, Order Picking & dispatch of fresh produce plus ancillary offices/staff facilities on 2 floors, (714m², 10.9m high max.), plus 635m² attached plantroom and forklift charging area, associated HGV marshalling yard, ancillary car parking provided through rearrangement of and extending existing car park, drainage including surface water attenuation, foul sewage treatment plant discharging to a) existing on-site percolation area in the short term and b) discharge to an on-site integrated constructed wetlands (which is the subject of a current separate retention application F17A/0463) in the long term. The proposal also includes the provision of 135m³ above ground fire-fighting water supply tank plus all associated site development works	Palmerstown, Oldtown, North County Dublin	Decision made	GRANT PERMISSION	07/11/2017	N
57	Fingal County Council	FW16A/0189	The proposal development will consist of (i) the decommissioning of 3 no. existing underground fuel storage tanks, (ii) the installation of 5 no. new underground fuel storage tanks, (iii) new overground fill points, (iv) 3 no. replacement fuel dispensers, and (v) all associated site, drainage, boundary, landscaping and development works.	Topaz Mulhuddart Service Station, Main Street, Mulhuddart, Dubllin 15	Decision made	GRANT PERMISSION	16/02/2017	N
58	Fingal County Council	FW17A/0089	The construction of a circa 8,500 square metre warehouse/distribution centre which can consist of 1168 sqm of office space over two floors, 7423 sqm warehouse space, 60 no car parking spaces, 24 no articulated vehicle parking spaces, site fencing, gates, marshalling yard, lighting, signage and all associated site works and ancillary services. Permission is also sought for the development of an access road to the existing road network along with connections to all existing site services and the erection of advertising signage in	Huntstown Business Park, Cappagh Road, Huntstown, Dublin 11	Decision made	GRANT PERMISSION	13/07/2017	N
59	Fingal County Council	FW18A/0121	(i) construction of a two-storey office building with landscaped roof and central circular planted open courtyard. Ground / surface level will comprise entrance hall, 38 no. cycle spaces, 80 no. car spaces, bin store, plant room, store rooms, loading area and staff facilities including staff gym. First floor level will comprise a reception area, open plan office, office show space, staff training rooms, store rooms and staff facilities including WCs, staff kitchen, canteen and staff shop; and external terraces; (ii) new vehicular entrance on Cruiserath Drive; (iii) new / upgraded boundary treatment including sliding gate to site entrance; (iv) landscaping to comprise green roof and central circular planted open courtyard to new building, tree and hedgerow planting, and staff running track; (v) SuDS drainage and all other ancillary site development works necessary to facilitate the development. Retention permission is sought for a new 2.4m high fence inside the northern and western site boundaries	Cruiserath Drive, Townland of Cruiserath, Mulhuddart, Dublin 15	Decision made	GRANT PERMISSION & GRANT RETENTION	08/10/2018	N

60	Fingal County Council	F05A/0327/E1	Construction of an office development within lands at Santry Demesne. The proposed development replaces office Blocks A, B, C, D, E, F, G, H, I, J and P and a multi-storey carpark, all previously granted permission under Ref. PL 06F.112730 (F98A/1328). The development comprises construction of 7 no. office blocks; total gross floor area 22,925 sq.m. The breakdown of the 7 no. proposed offices is as follows: Block A - 4 storey (5,328 sq.m.), Block B - 3 storey (3740 sq.m.), Block D - 4 storey (4290 sq.m.) Block G 1,2,3 - 3 storey (1542 sq.m.) Block G 4,5,6 - 3 storey (1542 sq.m., Block G 7,8,9,10 - 3 storey (2030 sq.m.) , Block J - 4 storey (4453 sq.m.) plus surface and basement carparking (772 no. spaces in total), ESB sub-stations, landscaping, footway and cycle paths and associated siteworks. The application site area is 2Ha	Santry Demesne, Santry, Dublin 9	Registered Application	GRANT EXTENSION OF DURATION OF PERM.	24/07/2012	N
61	Fingal County Council	F16A/0049	A Concrete plant (604 sq.m.) with a maximum height of 18m., replacing existing concrete plant, along with aggregate storage bays (152 sq. m), truck wash out (187 sq.m) and ancillary facilities on a hard standing area with in a 0.18 hectare site at the existing quarry landholding (Q/05/005) SIGNIFICANT ADDITIONAL INFORMATION REVISED PUBLIC	Feltrim Quarry, Swords, Co Dublin	Decision made	GRANT PERMISSION	07/09/2016	Y
62	Fingal County Council	FW19A/0087	Construction of two data storage facilities with a maximum overall height of c. 22 metres; • Each of the two data storage facilities will accommodate data halls, associated electrical and mechanical Plant Rooms, loading bays, maintenance and storage space, office administration areas, screened plant and solar panels at roof level; • Each of the proposed data storage facilities will have a gross floor area over two levels of c. 21,705 sq.m (43,410 sq.m in total); • Emergency generators (24 for each data storage facility), and associated emission stacks are provided in compounds adjacent to each of the two buildings; • The development includes a diesel tank and a filling area to serve the proposed emergency generators; • Construction of internal road network and circulation areas, footpaths, provision of 50 no. car parking spaces for each of the two data storage facilities (100 no. in total), and 25 no. cycle parking spaces for each of the two data storage facilities (50 no. in total); • Connections to vehicular access routes, roads, services and infrastructure permitted under An Bord Pleanála Reg. Ref.: PL06F.248544 / Fingal County Council Reg. Ref.: FW17A/0025; • Hard and soft landscaping and planting, lighting, and all associated works including underground foul and storm water drainage network, attenuation area, and utility cables. The application site is located to the north of the data storage facility permitted under An Bord Pleanála Reg. Ref.: PL06F.248544 / Fingal County Council Reg. Ref.: FW17A/0025, and within an overall landholding bound to the south by the R121 / Cruiserath Road, to the west by the R121 / Church Road and to the north by undeveloped land and Cruiserath Drive. An Environmental Impact Assessment Report (EIAR) will be submitted to the Planning Authority with the planning application and the EIAR will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy at the offices of the	Cruiserath Road, Dublin 15, within an overall landholding bound to the	Decision made	GRANT PERMISSION	23/07/2019	N

63	Fingal County Council	FW20A/0087	Construction of 3 no. data hall buildings with ancillary offices, staff areas, front and back of house areas, entrance lobbies, toilets, storage, associated plant throughout, photovoltaic panels and screened plant areas at roof levels. The proposed data hall buildings range from 1-3 storeys including front of house areas at a 4th floor level serving Building 3. The single storey rotunda building will be retained and reconfigured from previously permitted under (Reg. Refs. FW18A/0032 and FW19A/0176) as front of house comprising lobby, offices, meeting rooms, workshops, associated staff areas and toilets. The overall height of the data hall buildings ranges from c.5.7m to c.17.6m to roof level and c.14.4m to c.24.8m including the roof top plant. The proposed development includes the provision of a 2 storey generator building (c.1,990sqm) comprising 20 no. MV generators and generator rooms, loadbank and customer compound with 5 no. flues c.19m high; 2 no. transformers (c.88sqm each); skip compactor and bin store area (c.51sqm); fuel pump room (c.24sqm); 12 no. above ground fuel tanks (c.8.4m high) within a fuel compound; 7 no. water tanks (c.16m high); water treatment plant room (c.228sqm); 2 no. salt saturators (c.5.7m high); heat recovery plant room (c.49sqm); sprinkler pump room (c.32sqm) and 2 no. sprinkler tanks (c.13.6m high). The total gross floor area of the data halls, front of house and ancillary structures is c.25,225sqm. All associated site development works, services provision, drainage works, landscaping, boundary treatment works, access roads/service entrance, loading bays, vehicular/pedestrian access, security gates, car parking, motorcycle parking and bike stores. No works are proposed to the existing telecommunication pylon and overhead lines running diagonally through the site from south west to north east. A proposed 110kv substation located to the south east of this site is subject of a separate Strategic Infrastructure Development application to An Bord Pleanála under section 182A of the Planning and Development Act 2000 (as amended)	Former Clyde House, IDA Blanchardstown Business and Technology Park, S	Decision made	GRANT PERMISSION	13/10/2020	N
64	Fingal County Council	F20A/0692	Permission for a new gas reciprocating engine power plant which will have the capability to generate 50 MV of electricity. The footprint of the development site area within Fingal County Council is 1.7 hectares; a further 1.1 hectares is located within Dublin City Council's administrative area. The proposed development within Fingal County Council area comprises: 1. An engine hall (approx 40.3m width by 43.3m length by 20.9m height) which will contain 3 no. gas engines, including control room, switch room, office, canteen facilities, and associated exhaust flue stack approx. 35m high. 2. Workshop and warehouse building (approx. 13.7 width by 14.6m length by 6.4m height); 3. 220 kV Air Insulated Substation (AIS) compound including transformer, lightning mast, underground electrical cables, fire wall and other necessary electrical equipment all enclosed by 2.6m high security fence. 4. 2 no. sections of 220 kV underground cabling measuring in total approx 47.4m in length within the application site. 5. Fire water pumphouse (approx. 10.0m width by 10.0m length by 7.2 high), fire water tank (approx. 11.0m high); oil pumphouse (approx. 9.0m width by 9.0 m length by 7.2 m high) and 2 no. lubricating oil storage tanks (approx. 12.5m high), urea storage tank(approx. 13.0m high) and associated bund 2 no. fuel storage tanks (approx. 13.0m high) and associated bund. 6. Internal access roads , carpark providing 6 no. car spaces, two bridges to access the remainder of the site within the Dublin City Council area and the overall development will be enclosed with a 2.6m high palisade security fencing. Access to the site is provided via the R139 with the Dublin City Council's administrative area, and one emergency exit is also provided. 7. All other ancillary plant and equipment, including water supply pipeline, firewater pipelines, wastewater and stormwater drainage, and site development works as required to facilitate the development; and 8. For clarification, additional development associated with the power plant is located	Lands to the south of Belcamp 220 kV substation, Belcamp, Dublin 17	Decision made	REQUEST ADDITIONAL INFORMATION	23/02/2021	N

65	Fingal County Council	FW20A/0169	The proposed development consists of the construction of 1 no warehouse/ logistics/light industrial unit (proposed Unit 634) including ancillary office floorspace over two levels with a maximum height of 17.09m and a total GFA of 4,667 sq.m. The proposal includes two vehicular access points (staff and service from Kilshane Park. The proposal includes 43 no. cars parking spaces and 20 no. cycle parking spaces. The development also includes 1 no. ESB substation, a backup generator signage zones, PV panels at roof level HGV service yard area, landscaping, boundary treatments, entrance gates, lighting and all associated site works including underground foul and storm water drainage network and attenuation areas. The proposed development will supersede the warehouse/ logisitics / light industrial unit (Unit 634) permitted on the subject site under Reg. Ref. FW20A/0081	Northwest Logistics Park (formerly known as Northwest Business Park),	Decision made	GRANT PERMISSION	07/12/2020	N
66	Fingal County Council	F16A/0587	A new standalone five storey over basement level hotel comprising 100 bedrooms, meeting rooms and ancillary services including snack bar, breakfast area, fitness room, toilets, plant rooms etc. with associated elevational signage. Permission is also sought for 33 no. car parking spaces at basement level, reconfiguration of existing surface car parking on site, bicycle parking, utilisation of existing entrance from Swords Road, landscaping, boundary treatments and all associated site works necessary to facilitate	Lands adjacent to the Carlton Dublin Airport Hotel, Turnapin Great, Ol	Decision made	GRANT PERMISSION	30/11/2017	N
67	Fingal County Council	FW20A/0083	19,151 sqm of warehousing within 6 No. units for the storage and distribution of materials including chemicals within a proposed secure 33 Acre site. The height of which does not exceed 16.0m. This is inclusive of MHE (Mechanical Handling Equipment) areas, clean rooms, warehouse office, link corridors and associated amenities. •917 sqm Individual standalone administration office (710 sqm) & staff amenities buildings (302 sqm) •230 sqm security offices (Hub), •1,205 sqm of associated plantrooms, stores and ancillary buildings •Provision for 182 No. of car parking spaces for warehousing office staff •Plus 3 No. disability access car parking spaces •Including provisions for 8 No. Electric Vehicle car parking spaces •An external ISO tank & container storage pad complete with associated circulation space (the area of which is circa 9.5 Acres or 38,450 sqm) •A perimeter attenuation channel (the area of which is circa 3,045 sqm with a capacity of over 5,045 cum) •A perimeter security fencing 2.4m high. •Associated landscaping •6 No. access points •Facility identification signage •Associated ancillary site and civil works at Damastown Rise, Damastown Industrial Estate, Macetown North, Dublin 15, all located within the boundaries of the secure 33 Acre site. This is a site to which the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) applies.	Damanstown Rise, Damanstown Industrial Estate, Macetown North, Dublin	Decision made	GRANT PERMISSION	28/01/2021	N
68	Fingal County Council	F21A/0147	2 no single storey light industrial buildings (total floor area of 3,333 sq.m) accommodating 3 units including ancillary office space; internal site road (356m) with associated verges and footpaths accessed via internal distributor road; 84 no car parking spaces; 42 no. bicycle parking spaces; surface water attenuation; sub-station and switch room; relocation of overhead power lines; pedestrian entrance gate to adjoining petrol station site; totem signage at entrance to development; landscaping and boundary	Site west of Stockhole Lane/Clonshaugh Road, Clonshaugh, Co. Dublin.	Decision made	REQUEST ADDITIONAL INFORMATION	06/05/2021	N
69	Fingal County Council	FW18A/0074	The development will consist of a two storey building (1340 sqm) with warehouse, demonstration / testing areas and ancillary offices. Vehicular access is from an existing spur road off Ratoath Road. The proposed development will include new vehicular gates, HGV hardstanding, parking spaces, a new gated pedestrian entrance, illuminated totem and building mounted signage and all associated site development works.	Ratoath Road,Northwest Business Park, Mitchelstown,Blanchardstown, Dub	Decision made	GRANT PERMISSION	09/10/2018	N
70	Fingal County Council	FW16A/0103	Development on site area of 0.39ha. The proposed development consists of the construction of a single storey building to be used as a car sales showroom, accommodating car display area, ancillary offices, staff areas, associated garage and signage. The proposed building has a floor area of 870 sq.m with an eave height of 5.7m and an apex height of 8m. The proposed development also provides for external car display area, car parking, car wash and valeting areas and all associated site development works and landscaping. The site will be access via 2 no. proposed new	Site at Damastown Close, Damastown Business Park, Dublin 15	Decision made	GRANT PERMISSION	06/09/2016	N

71	Fingal County Council	F19A/0534	Construction of a single storey office building of 134sq.m. gross floor area, located at ground floor level to the permitted decked car park. Mechanical plant will be provided above at deck level of the car park and will be screened by a pergola. The proposed development also includes the construction of a single storey building housing an ESB substation and switch room located adjacent to a reconfigured stair and lift core for the decked car park; a single storey plant room; and reconfiguration of car parking spaces (to include provision of 8 no. additional disabled spaces and reduction of 65 no. spaces), and landscaping to facilitate relocated main lift and stair core. Ancillary landscaping and reconfigured car parking layout at ground and upper floor level of the decked car park is also included, alongside all associated infrastructure works, all relating to a permitted hotel under planning Reg. Ref. F08A/1305 (ABP Ref: PL06F.232704), as amended under Reg. Ref. F17A/0748.	Site west of Stockhole Lane/Clonshaugh Road, Clonshaugh, Co. Dublin.	Decision made	GRANT PERMISSION	13/01/2020	N
72	Fingal County Council	F16A/0155	Permission for a period of 8 No. years for development at the existing western and eastern ancillary car parks associated with the former Aer Lingus Head Office Building (HOB) and the Annex building (and associated lands to the south). The application site comprises an area of c.4.58 hectares. The development will consist of the part demolition of part of the 2 storey Annex building and other single storey structures including removal of storage tanks (totalling c .2,825 sq.m. total Gross Floor Area (GFA). The substation element of the Annex building (c. 60 sq.m. GFA) is to be maintained and clad. The development will consist of the construction of 4 No. office blocks, ranging in height from 6 to 7 storeys (solar panels and ancillary plant at roof level), comprising c. 41,677 sq.m. GFA including a restaurant/café of c. 496 sq.m. GFA at ground floor of Building A6, a multi-storey car park (MSCP) of 5 storeys comprising 694 No. car parking spaces (c. 16,768 sq.m. GFA), a single storey café pavilion of c. 130 sq.m GFA and surface car park of 48 No. spaces to the north-east of HOB. The provision of a central landscaped courtyard and landscaped areas and raised pedestrian link from the central courtyard to connect to Level 3 of the existing Terminal 2 (T2) MSCP. The development also comprises the provision of car parking spaces on a temporary basis to allow for the construction of the proposed scheme. These temporary spaces will be removed and lands reinstated following completion of the development. Modifications to the permitted HOB development (Reg. Ref. F14A/0436) to provide for a new access road linking the existing cul-de-sac to the east of the T2 MSCP and Corballis Avenue. It is also sought to reconfigure the existing HOB car parking layout to the east which will provide for 174 No. spaces for this building. Associated works include the provision of a new foul sewer to connect to existing manhole adjoining the R132 (Swords Road) and upgrade of existing foul pump and provision of storage tank adjoining the R132, improvements to surface water drainage network, associated signage, the provision of set down areas for delivery vehicles, bin stores and 240 No. bicycle parking spaces and all other ancillary site development works	Corballis Drive, Dublin Airport, Corballis, Swords, Co. Dublin.	Appeal decided	GRANT PERMISSION	31/08/2016	N
73	Fingal County Council	F17A/0515	The construction of a two storey fish processing facility comprising of 231 sq.m. ground floor and 181 sq.m. first floor, a total of 412 m.sq. and all associated site works.	37-4(B) Claremont Industrial Estate, Westpier, Howth, Co. Dublin.	Decision made	GRANT PERMISSION	13/11/2017	N
74	Fingal County Council	FW21A/0075	Permission for the erection of a 15,705m2 commercial facility with 163 no. staff & visitor parking spaces and 28 no. lorry parking spaces with 1, 581m2 two storey office accommodation to include ancillary office space, reception area, staff rooms and all associated site development works including new access toads off Damastown Close &	Adjacent to Masterlinks Logistics Depot, damastown Retail Park, Mulhud	Planner Assignment	-	-	N
75	Fingal County Council	FW18A/0050	Planning Permission is being sought by Packside Ltd on lands at and adjacent to the former 'Auburn Lodge', Parslickstown, Mulhuddart, Dublin 15, for a development consisting of 2 no. detached, double height vehicle sales showrooms with ancillary offices and staff areas; 6 no. double height vehicle servicing units with ancillary offices and staff areas; signage (including signage to elevations of buildings and 3 no. totem signage poles); surface level car and bicycle parking, 2 no. new vehicular and pedestrian gated entrances to adjoining road to the north; 1 no. ESB kiosk and all associated engineering works (including provision of new surface and foul water mains), landscaping, boundary treatment and ancillary site development works necessary to facilitate the proposed development.	Lands at and adjacent to the former Auburn Lodge Parslickstown, Mulhud	Decision made	GRANT PERMISSION	29/08/2018	N

76	Fingal County Council	FW19A/0207	A soil and stone recovery facility that will allow for the full restoration of the lands that currently constitute a disused quarry, access via the already established existing site entrance, a new temporary administration building, a new temporary welfare facility, a new temporary weighbridge office, the relocation of the existing weighbridge, a new temporary internal access road, a new temporary storage facility, a new temporary wheelwash facility, removal of the existing fuel storage tank, temporary car parking, temporary lighting, temporary associated infrastructure, landscaping and all ancillary site works. An Environmental Impact Assessment Report and a Natura Impact Statement accompany this planning application and both documents are available for inspection or purchase. The proposed development will require a waste licence from the Environmental Protection Agency in order to operate.	The Townland of Bay, Bay Lane, St Margarets, Co Dublin	Decision made	GRANT PERMISSION	06/02/2020	N
77	Fingal County Council	FW17A/0119	A logistics (warehouse and distribution) complex building comprising a double height area consisting of a cold store, cross dock storage area and ground and first floor ancillary office and staff accommodation area, and single height mechanic workshop; a single storey truck wash; security kiosk; external truck fuelling area with associated pumps and storage tanks; surface car and truck parking area; bicycle parking; signage; provision of new cycle path and footpath to Bay Lane; new vehicular entrance/exit at Bay Lane; 1 no. ESB substation; and all associated landscaping, boundary treatment and	Bay Lane, The Ward, Mulhuddart, Dublin 15	Appeal decided	GRANT PERMISSION	01/05/2018	N
78	Fingal County Council	F08A/1271/E1	Permission to construct a mixed use development to consist of four buildings (Blocks A, B, C and D) and a waste management facility, with associated site works and landscaping. One building (Block A) of mixed height of 2 and 3 storeys with roof top screened plant area, all on the north-east side of the site, comprising 1 no. retail unit with Cafe of 199.7 sq.m. in total at ground floor and 10 no. owndoor office units all under 100 sq.m. gross floor area. Access to be provided from the 2nd floor to part of the roof area. Three buildings (Blocks, B, C and D) of two storeys, comprising 28 no. in total own-door self contained office suites all of under 100 sq.m. gross floor area each. Permission is requested for building signage as indicated on drawings along with 1no. site identification sign incorporated into waste management facility building adjacent to the proposed entrance to the site on the north boundary.	Site At Turnapin Great, Cloghran, Swords Road, Santry, Dublin 9	Decision made	GRANT EXTENSION OF DURATION OF PERM.	19/03/2014	N
79	Fingal County Council	FW19A/0006	The development will consist of: 1) part single storey, part two storey building that will be used for the repair, servicing and sales of trucks with an area of 3,301 sq m with a mezzanine level for storage and an overall height of 9.6 m. 2) 4 no. internally illuminated signs on the building. Two “Scania” signs will be located on the south-west and north-east elevation and will have an area of 6.175 sq m each. Two “dealer” signs will be located on the south-west and north-east elevation and will have an area of 5.7 sq m each. 3) A double sided totem sign with a height of 10 m and an overall advertising area of 13.144 sq m. 4) A truck wash (126.88 sq m), with a total height of 8 m. An environmental / storage station (120.32 sq m) with a height of 4 m. 5) 62 no. HGV parking spaces (including 3 spaces for truck sales display). 6) 16 no. tractor spaces (i.e. for trucks without the trailer). 7) 32 no. car parking spaces. 8) 36 no. bicycle spaces. A single storey ESB substation and switch room of 23.6 sq m. 9) A new vehicular access road off the existing roundabout that provides access to the Pallas Foods facility. This application will be accompanied by an Environmental Impact Assessment Report.	Townlands of Killamonan, Spricklestown and Cherryhound, The Ward, Co.	Decision made	GRANT PERMISSION	06/09/2019	N
80	Fingal County Council	FW20A/0190	The application site is bound by Ratoath Road to the west, Kilshane View to the south and Kilshane Avenue to the east. The proposed development consists of the following: - Construction of a warehouse distribution facility building (unit 638), including 5,575 sq.m of warehouse floorspace and 2,232 sq.m of ancillary office floorspace, resulting in a total GIA of 7,807 sq.m, and a maximum building height of 14.74 metres; - 129 no. car parking spaces and 66 no. cycle spaces; - HGV loading bays, service yard and van staging bays, with a canopy proposed over the van staging bay to the north of the building; - Associated delivery van fleet storage area accommodating 400 no. spaces located on the northern part of the site; - The proposal includes three vehicular access points (one from Kilshane View and two from Kilshane Avenue) off the existing estate road network serving the Logistics park; - The development also includes and ESB substation, EV charging infrastructure (including power module units), guard shelters, signage zones for the unit, PV panels at roof level, landscaping, boundary treatments, security fencing, entrance gates, site lighting, and all associated site development works, including underground foul and storm water drainage network and attenuation areas.	Site (Known as Site B), Northwest Logistics Park, Ballycoolin, Dublin	Decision made	GRANT PERMISSION	23/03/2021	N

81	Fingal County Council	F18A/0436	A) Completion of partially constructed part-two, part-three storey Core Aviation type office building as approved under Reg. Ref. F07A/1659 (subsequently extended under F07A/1659/E1). (b) Permission is also sought for alterations and extensions to previously approved building to result in a four-storey office building comprising: (i) construction of rear (west facing) extension at ground floor level and first floor level; (ii) extension to approved part-second floor level; (iii) construction of additional third floor level with external terrace area on front (east facing) elevation and green roof to the rear; and, (iv) new mains foul connection to be provide instead of previously approved on-site treatment system. (c) There are no material changes proposed to the approved basement level, ancillary drainage works, footpaths, and vehicular access from the Old Airport Road/Swords Road (R132) as previously approved.	Corballis Cottage, Old Airport Road/Swords Road (R132), Co. Dublin.	Decision made	GRANT PERMISSION	18/09/2018	N
82	Fingal County Council	F20A/0058	The removal of all existing portacabins and the construction of a vehicle maintenance building comprising of 2 no. units with mezzanine levels, 2 no. storage areas, a new boundary wall and all associated site development works. The proposed storage areas will each consist of 3 no. oil tanks, 2 no. bunded storage units and a refuse store.	The Junction of the Swords Road (R132) and Corballis Road south, Corba	Decision made	GRANT PERMISSION	03/04/2020	N
83	Fingal County Council	FW18A/0032	The proposed development will consist of 1) modifications to demolition permitted under FW17A/0205 to incorporate the front rotunda section of existing building into new development 2) the construction of 3no. single level Data Hall buildings (c.19,687m2 GFA) with 2 level associated electrical plant modules and 2 storey ancillary front of house office space, staff areas, plant areas (with flues ranging in height from c.15-20m) and roof plant including PV panel arrays. The height of the proposed buildings is c.9.5m to roof level and c.17.8m including roof top plant. The proposed development includes the provision of water treatment plant room and fuel storage compounds, 9no. water tanks (11.9m high), skip compactor, sprinkler tank and pumps; 1no. GNI Above Ground Installation compound (c.1000m2); gas generator compound (c.1550m2) including 9no. Flues (18m high), HV switch room, waste heat export to 3rd party connection building (c.24m2), telecommunications mast (c.9m high), 84 no. car parking spaces, 67 bicycle spaces and 8 motorcycle spaces, site lighting, security gates and boundary fencing (c.2.4m high) and all associated site development works, landscaping works and service connections. The main vehicular access to the development will be relocated north of its current location, with two existing service access points on the south and south east boundary being retained in the development. A 110kv substation located within the site to serve the development will be the subject of a separate Strategic Infrastructure Development application to An Bord Pleanála under section 182A of the Planning and	Clyde House, Blanchardstown Business & Technology Park, Blanchardstown	Decision made	GRANT PERMISSION	03/05/2018	N
84	Fingal County Council	F20A/0023	Proposed motor sales and service centre. The construction of Building 'A', a single storey 6.6metre high 1,060 sq.m motor vehicle service and sales facility building; Building 'B' a single 6.6 metre high 895 sq.m. motor vehicle service and sales facility building; Annexe building to the west of Building 'A & B', a single storey 605 sq.m. ancillary valeting and wash building; Building 'C' a single storey 55 sq.m. ancillary building providing an ESB substation, bin storage and security office; associated site-works including on-grade car parking/display spaces, attached and freestanding signage, flagpoles, proposed new vehicular site entrance of Holywell Dale extension, associated boundary treatments, landscaping and drainage.	Holywell, Marshallstown, Swords, Co Dublin	Application under appeal	GRANT PERMISSION	08/12/2020	Y
85	Fingal County Council	F16A/0303	The development will include construction of a reservoir adjacent to an existing reservoir including the construction of associated valve chambers and installation of disinfection kiosk and equipment. The access road to the existing reservoir will be extended to the proposed reservoir. Security fencing will be installed at the proposed reservoir, and the fencing at the existing reservoir will be modified and repaired, with a new main entrance	Malahide Reservoir Site, Malahide, Co. Malahide	Decision made	GRANT PERMISSION	08/11/2016	Y
86	Fingal County Council	FW20A/0202	The development will comprise the provision of a food processing warehouse facility (11,696 sq m) comprising a coldstore (10,955 sqm) with a maximum roof level height of 18.65 metres and a fire escape stairs extending to 19.8 metres; an ancillary office building (610 sqm) with a maximum height of 8 metres, including office space, meeting rooms, canteen locker rooms, toilet facilities and assoicated facilities; and 4.3 metre high driver welfare facilities building (131 sqm). The proposed development will also include the provision of a new vehicular entrance off the Food Central Access Road; internal roadways; traffic barriers; pedestrian access; 90 No. ancillary car parking spaces; bicycle parking; 52No. HGV parking spaces; 33 No. trailer parking spaces level access goods, hard and soft landscaping; smoking shelter; bioundary treatments; ESB substation; signage; PV panels a truck wash; a diesel tank; 2 No. diesel pumps with a layby for 8 No. trucks; weighbridge; waste storage area; lighting and assoicated site development works above and below ground . The scheme also includes retention permission for 33 No. trailer parking spaces (providing a total of 66 No. trailer	Food Central, Kingstown, St Margaret's, Co. Dublin	Decision made	GRANT PERMISSION & GRANT RETENTION	05/02/2021	N

87	Fingal County Council	F18A/0586	Development of a retail warehouse unit and ancillary development on this site of c. 1.79 ha approximately. The site is bounded: to the south by New St. Margaret's Road (aka St. Margaret's Road/R104); to the east by greenfield lands; to the north by the M50; and to the west by the internal access road serving IKEA (Eircode: D11 FW18). The site currently accommodates IKEA's partially decommissioned overflow car park. The development will consist of: the removal of existing car parking and coach parking spaces on site, and the removal of a swale that forms part of the surface water drainage system of the adjoining IKEA site; and the construction of a part-one, part-two storey retail warehouse unit to be constructed in two phases (Phase 1 and Phase 2) with a total gross floor area of c. 5,981 sq.m. (comprising: retail floorspace at ground floor level; ancillary office space and staff welfare areas (at Ground floor level and first floor level); warehouse area; customer and staff toilets; circulation areas; electrical intake room; sprinkler room; cleaner rooms; illuminated signage; an outdoor exhibition area; and external play areas (Play Area No. 2 will be covered by a canopy). The development will also consist of the provision of a storm water storage unit to compensate for the volume lost through the removal of the swale. Phase 1 will have a gross floor area of c.5,015 sq.m. and will be fully operational once completed. Phase 2 will comprise a c. 966 sq.m. extension of retail floorspace at Ground Floor Level to the south of the retail warehouse unit constructed in Phase 1. The construction of Phase 2 will reduce the number of play areas from four in Phase 1 to three (Play Area No. 4 will be removed to allow for the Phase 2 extension). The development will also consist of the construction/provision of: a delivery area; car parking (232 No. spaces); bicycle parking (25 no. spaces); pedestrian and vehicular access and egress via the existing local access road to the west (which also serves the IKEA Store); a vehicular egress point for deliveries via New St. Margaret's Road; internal vehicle and pedestrian circulation routes; sustainable Urban Drainage Systems including infiltration storage, filter strips/drains, swales, bioretention tree pits, permeable paving, flow control devices and attenuation tanks; ESB substation (c32 sq.m.); sprinkler tank enclosure; hard and soft landscaping works (including changes in levels), boundary treatments and lighting; works to adjacent New St. Margaret's Road, all of which are subject to agreement with Fingal County Council; and all associated site excavation and	Lands at New St. Margarets Road, Ballymun, Dublin 11.	Decision made	GRANT PERMISSION	06/12/2018	N
88	Fingal County Council	FW17A/0025	The proposed development consists of the following: • Construction of a data storage facility building with an overall height of c. 13 metres, containing data halls, associated electrical and AHU Plant Rooms, a loading bay, maintenance and storage space, office administration areas, screened plant and solar panels at roof level, all within a building with a total gross floor area of 20,739 sq.m; •	Emergency generators, emission stacks and a paladin fencing boundary treatment are provided in the adjacent compound; •	A temporary client control building, a transformer bay, a temporary substation, a permanent MV Switchroom building and a permanent MV / Control room building are to be provided for the construction	A water sprinkler pump room and storage tank, humidifier tanks and diesel tanks and filling area; •	Bounded to the south by the R121/ Cruiserath Road, to the west by R121	N
89	Fingal County Council	FW18A/0194	The construction of 4 no. light industrial units with ancillary offices totalling 1,881m². The development will also consist of associated site works including parking facilities and loading areas on an application site of 0.398 hectares.	Site C1, Millennium Business Park, Cappagh Road, Finglas, Dublin 11.	Decision made	GRANT PERMISSION	17/09/2019	N

90	Fingal County Council	FW17A/0049	10 year planning permission for development - the application site comprises of c. 5.75 hectares in total and is bound by Kilshane Avenue to the east and north, and Kilshane Park to the south. The proposed development consists of the following: •The construction of 6 no. warehouse/logistics/light industrial units (Unit 628, 629, 631, 632, 633 and 634), including ancillary office use, that range in height from c. 12 to 17 metres and have a combined total floor area of 20,951 sq.m; •Each unit is proposed to have associated office administration/reception areas, car parking to the front, and service yards, including loading bays and bin storage areas, to the rear of each unit; •The construction of 3 no. ESB substation buildings; •The units will be accessed off the existing road network. The development provides for vehicular and service access points, associated internal access roads and circulation areas, footpaths, and a total of 245 no. car parking spaces and 126 no. cycle parking spaces; •The proposal includes landscaping and planting, boundary treatment, lighting, security	Northwest Business Park, Ballycoolin, Dublin 15	Decision made	GRANT PERMISSION	25/07/2017	N
91	Fingal County Council	F05A/0962/E1	Development of 22,486 sq. m approximately of mixed use logistics, office, enterprise, laboratory and industrial accommodation (as Phase 1 of a wider mixed use master plan development) and related site infrastructural and landscaping works on a 13.4 ha site approximately, located in the townlands of Ballycoolin, Grange and Cloghran, Blanchardstown, Dublin 15. The site is principally bounded by Northwest Business Park to the north; the Orion Business Campus/Ballycoolin Business Park to the south; Rosemount Business Park to the east and Ballycoolin Business Park to the west. The Phase 1 development will consist of: 44 no. part two storey own door enterprise units in two buildings comprising industrial and office accommodation (10,173sq m); 1 no. part three storey building comprising logistics and office accommodation (6,696 sq. m) and 2 no. linked buildings comprising warehouse and distribution, laboratory and office accommodation (5,617sq m) ranging in height from one to three storeys, all with related service/marshalling yards, surface car parking, cycle parking, waste storage/recycling areas, signage and ancillary storage and staff facilities. There will be 2 no. new vehicular access points to the site from the access roads on the northern and eastern site boundaries respectively. The infrastructural works sought in this application are designed to facilitate the proposed and future development of the entire site and will consist of: the provision and upgrading of the foul drainage, water supply and surface water drainage network on the site; internal roads and pathways; pedestrian access points; the provision of a telecommunications ducted network; the provision of utilities infrastructure and connections (ESB and gas); street lighting; site landscaping and boundary treatments; plant; ESB substations and switchrooms; changes in level and all associated site excavation and development works above and below ground. (It should be noted that all other buildings planned for the site other than those described above will be subject to future planning applications). An Environmental Impact Statement (EIS)	Townlands Of Ballycoolin, Grange And Cloghran, Blanchardstown, Dublin	Decision made	GRANT EXTENSION OF DURATION OF PERM.	25/04/2013	N
92	Fingal County Council	F16A/0514	The construction of a new 5 storey office building with an overall height of +79.425m OD including core and plant comprising c.7,221 sq.m. above podium level, a single level ancillary basement comprising c. 1,911 sq.m. below ground level to contain 54 no. car parking spaces, 120 no. bicycle parking spaces, changing/shower/toilet areas, storage, services and plant areas with access from the existing ramp and basement serving Building No. 2, Swift Square; provision of 2 no. accessible car parking spaces at surface level; landscaped plaza with set down area, totem signage and smoking shelter; ESB substation (44.3 sq.m.) with service access arrangements from Northwood Avenue; temporary construction access to the east from Northwood Avenue and; attenuation foul and surface water arrangements, lighting; all associated site development boundary treatment services provision and landscaping works	Swift Square Office Park, Off Northwood Avenue, Santry, Dublin 9.	Decision made	GRANT PERMISSION	10/04/2017	N
93	Fingal County Council	F18A/0267	Construction of two number ground level industrial buildings (5 number units each) and associated site works. Add Info received 10th September 2018.	Claremont, West Pier, Howth, Co. Dublin	Decision made	GRANT PERMISSION	03/10/2018	N

94	Fingal County Council	FW19A/0089	Demolition of two existing light industrial / commercial buildings and site clearance works (on a phased basis); Construction of two data storage facilities (both over two and three levels), to be delivered in two phases; Each of the two data storage facilities will accommodate data halls, associated electrical and mechanical plant rooms, loading bays, maintenance and storage space, office administration areas, water treatment rooms, and extract louvres and solar panels at roof level; Each of the proposed data storage facilities will have a gross floor area over three levels of c. 28,699 sq.m (57,398 sq.m in total for the two data storage facilities); Emergency generators (32 in total for both facilities), associated emission stacks and plant are provided in compounds adjacent to each of the two data storage facilities; Provision of an underground connection to the existing substation (permitted under Reg. Ref.: FW16A/0159) located adjacent to an existing data storage facility on lands to the southeast of the main application site; Construction of a two-storey office / administration building to the west of the two proposed data storage facilities with a gross floor area of c. 1,579 sq.m; Construction of internal road network, circulation areas and footpaths, provision of 160 no. car parking spaces and 60 no. cycle parking spaces; Hard and soft landscaping and planting, boundary treatments and security gates, bin storage, security hut, switchrooms, lighting, and all associated works including underground foul and storm water drainage network, attenuation area, and utility cables.	Ballycoolin Business Park, Ballycoolin Road, Dublin 15	Decision made	GRANT PERMISSION	29/07/2019	N
95	Fingal County Council	F17A/0044	A new single storey car maintenance facility of 111m² consisting of an enclosed 2 lane workshop facility with ancillary accommodation, with jet wash with car refuelling pump with new internal road, street lighting with temporary off season hardstanding for a maximum of 350 fleet cars with widening to existing entrance from Turnapin Great with new security gates with new 3 metre high boundary treatment to match existing along public road frontage (consisting of brickwork, nib wall and painted steel railings) with 3 metre high security fencing to non-public road frontage with 10 no. 10 metre high security lighting pillars with CCTV pillar at entrance with new landscaping and associated site	Santry Business Park, Turnapin Great, Swords Road, Santry, Dublin 9.	Decision made	GRANT PERMISSION	09/05/2017	N
96	Fingal County Council	F06A/1699/E1	Construct 5 Blocks containing 42 Light Industrial Units (7,781 m²) and associated site works	Gateway, Rosemount Business Park, Dublin 11	Decision made	GRANT EXTENSION OF DURATION OF PERM.	07/09/2012	N
97	Fingal County Council	FW19A/0073	Erection of a 70 Kw 600 m2 ground-mounted photovoltaic array adjacent to the western site boundary and all associated site works.	Marymount Care Centre, Westmanstown, Lucan, Co. Dublin	Decision made	GRANT PERMISSION	01/10/2019	N
98	Fingal County Council	F21A/0042	Permission for a Solar PV Energy Development with a total site area of c 105 ha, to include solar panels mounted on steel supports, associated cabling and ducting, 1 no. client substation, 33 no. MV Power Stations, 8 No. Battery Storage Containers, 1 no. Temporary Construction Compound, access tracks, boundary security fencing and security gates, CCTV,	Lands including Whitestown and Fieldstown, Killsallaghan, Co. Dublin	Decision made	REQUEST ADDITIONAL INFORMATION	23/03/2021	N

99	Fingal County Council	F17A/0686	Construction of a new Operations Depot and Civic amenity Site to include (i) 4 storey office building with staff welfare and canteen facilities, bin store, plant areas and 1st floor external terrace (4,963 sq.m.); (ii) Central Stores Warehouse building and workshops, part single storey and part 2 storey (Warehouse stores: 1,712 sq.m.; Welding Workshop: 355 sq.m; Painting Workshop: 77.5 sq.m; Electrical Workshop: 91 sq.m; Carpentry Workshop: 124 sq.m; signage Workshop: 314 sq.m; Vehicle Workshop: 507 sq.m; welfare facilities: 22 sq.m; circulation: 62.5 sq.m; total: 3,265 sq.m); (iii) Multi-Storey carpark, 4 storey, 132 spaces for fleet vehicles and 200 spaces for staff private vehicles plus 220 bicycle spaces (11,200 sq.m); (iv) covered parking for 15 no. fleet vehicles (721 sq.m.); (v) Salt barn, singles storey (457 sq.m); (vi) Civic Amenity Site office, single storey (43 sq.m.); (vii) Store for recycled batteries and clothes, single storey (12 sq.m); substations and LV switch room, single storey (64 sq.m); Plant room, 2 storey (76 sq.m). The development also includes a 3m high boundary wall (part 5m at Civic Amenity Office) with portals and gates at 3 no. vehicular & pedestrian access points along with 3m high weldmesh fencing; open area for fleet vehicle parking of 189 vehicles of various types; internal site fencing and walls to provide external material and equipment storage areas; waste compaction area with associated ramps; waste collection areas with associated ramp; waste container area within the Civic Amenity Site with associated customer parking/set down spaces (24 no.) and access road/pedestrian walkways; fleet vehicle wash bays; 10 no. visitor parking spaces; attenuation pond; internal roads and pedestrian walkways; 2 no. security kiosks (1.2 sq.m each); foul and surface water drainage; underground services infrastructure; associated site works; division of existing water main within application site; construction of 3 no. new vehicular & pedestrian access points - northern boundary and eastern boundary to St. Margaret's Road with associated traffic signalling and southern boundary to Carton way; security and amenity external lighting; building signage and signage to boundary wall; landscaping within the Depot and Civic Amenity Site boundary as well as landscaping to external areas outside the perimeter boundary wall plus an external water storage tank associated with a sprinkler system. the development also includes provision of new vehicular access gates to the existing ESB substation on St	St. Margarets Road, Ballymun, Dublin 11.	Decision made	GRANT PERMISSION	10/01/2018	N
100	Fingal County Council	FW18A/0150	Setanta Vehicle Holdings Limited intend to apply for permission for development on lands at Townlands of Goddamendy & Bay, Dublin 15. The development will consist of the construction of a part single / part 3 storey building (5071 sqm GFA) accommodating a C.V.R.T. testing centre comprising of 4 no. testing lanes (LGV/HGV), a Renault truck workshop comprising of 7 no. truck servicing lanes, connected to a 3 storey central ancillary area comprising a Renault truck sales centre, along with offices and a storage area for Renault and Truck and Bus Parts, 2) vehicular access off the N3- M2 link Road (granted planning application Reg. Ref FW17A/0179) 3) 42 no. staff parking spaces, 124 no. vehicle parking spaces and 10 no. bicycle spaces and 4) all landscape boundary treatment, site boundary enclosures ancillary signage and site development works on a site of c. 2.61 Ha. The Planning Application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy at the offices of the Planning Authority during its public opening hours and a submission or observation may be made to the Planning Authority in writing on payment of the prescribed fee within the period of 5 weeks beginning on the date of receipt by the authority of the application.	Townlands of Goddamendy & Bay, Dublin 15	Decision made	GRANT PERMISSION	30/11/2018	N
101	Fingal County Council	F16A/0483	Development on a site of c. 1.02 hectares. The development will consist of the erection of a single storey Pre-Boarding Zone building (c. 6.95m high including screened plant at roof level) with a total gross floor area (GFA) of c. 2,205 sq.m. with canopy on a site to the south west of the existing Aer Lingus Cargo Building. The Pre-Boarding Zone building comprises passenger waiting and boarding areas and all ancillary storage, toilet, food and beverage facilities including ancillary plant and equipment. The development will also consist of the realignment of a portion of the Bond Road to the north of the proposed Pre-Boarding Zone building, the realignment of the security fence to the south of the existing Aer Lingus Cargo Building and the provision of a gated access point; the realignment of the airside landside fence to the south of the realigned Bond Road; the provision of a Pre-Boarding Zone access road to the south of the realigned Bond Road; the provision of a covered passenger walkway; the provision of 2 No. bus turning circles; the demolition of the existing security Gate 25 and associated hut (c.12 sq.m. GFA) and the erection of a replacement security gate and hut (c. 125 sq.m. GFA), all to the north-west of the Pre-Boarding Zone building; the removal of 1 No. High Mast Light column (c. 25m high) and the provision of a replacement High Mast Light column (c. 20m high) to the south west of its original position, all to the east of the PBZ building; the provision of an access road from the eastern end of the South Apron to an existing sub-station adjacent to the South Apron; and all ancillary site development works above and below ground. Temporary planning permission is sought for a period of 7 years for the Pre-Boarding Zone building and the associated canopy and covered pedestrian walkway. Planning permission is	South Apron, Dublin Airport, Townland of Corballis, Co. Dublin.	Decision made	GRANT PERMISSION	16/12/2016	N

102	Fingal County Council	F17A/0087	An air Dome for indoor sporting activities together with ancillary portacabin structures for office and reception purposes.	Furry Park, Turnapin Great, Swords Road, Dublin 9.	Decision made	GRANT PERMISSION	11/04/2017	N
103	Fingal County Council	FW18A/0079	the construction of a single storey waste recovery/transfer building within the site of the existing Materials Recovery Facility. Permission is also sought for all associated site works and services. The proposed development relates to an activity covered by an existing Waste Licence No W0183-01 issued by the Environmental Protection Agency. The proposed development will not require a review of the Waste Licence.	Greenstar Materials Recovery Facility, Millennium Business Park, Cappa	Decision made	GRANT PERMISSION	20/09/2018	N
104	Fingal County Council	F20A/0638	The proposed development shall consist of a new standalone 8-12 -storey (over partial basement) hotel consisting of the following :- a) Kitchen, plant and back of house services at basement level ; b) Double height reception, restautant/bar/lounge area at ground floor; c) Kitchen, staff facilities, storage rooms, bin stores and toilets at ground floor; d) Outdoor seating areas at ground floor level; e) 300 no. hotel bedrooms at 1st to 11th floors; f) Plant at roof level; g) New landscaped entrance courtyard between the existing and proposed hotels; h) Coach set down and car drop -off area at entrance to new hotel ; i) Reconfiguration of car park to rear of existing hotel; j) Provision of 15 no. car parking spaces in service yard to rear of existing hotel; k0 Security hut, bicycle parking and all assoicated landscaping, signage site works and services	Radisson Blu Hotel, Corballis Way / East Link Road, Dublin Airport, Sw	Decision made	REQUEST ADDITIONAL INFORMATION	10/02/2021	N
105	Fingal County Council	FW19A/0193	1) Part single storey, part two storey building with plant room above that will be used for light industrial/warehousing purposes and ancillary two storey offices with a gross floor area of 4,209.6 sq m and an overall height of 15.17m; 2) 2 no. elevational signage areas with a total area of 40 sq m; 3) 46 no. car parking spaces; 4) 54 no. bicycle spaces; 5) A single storey ESB substation and switch room of 29.8 sq m; 6) A water attenuation pond for the adjacent zoned lands (totalling 1.12 hectares). The proposal includes revised boundaries and associated site works.	Townlands of Spricklestown and Cherryhound, The Ward, Co. Dublin.	Decision made	GRANT PERMISSION & REFUSE PERMISSION	09/07/2020	N
106	Fingal County Council	FW17A/0228	Extraction with associated crushing, screening and processing of rock over a 2 hectare lateral extension of the existing permitted North Quarry extraction area previously granted under planning permission P. Ref. FW12A/0022 and ABP Ref. PL06F. 241693. The final quarry floor depth will be at 23m AOD, similar to that previously granted under planning permission P. Ref. RW12A/0022 and ABP Ref. PL06F.241693. The development also provides for restoration through backfilling to the former ground level by importation of inert soil and stone waste. The proposed site restoration works will require a review of the existing waste licence (Ref. W0277-02) by the Environmental Protection Agency.	Huntstown Quarry, Huntstown Townland, North Road, Finglas, Dublin 11	Decision made	GRANT PERMISSION	15/02/2018	N
107	Fingal County Council	F15A/0265	The proposed development will consist of the construction of a two-storey building including supermarket, two retail units, one café unit, two office units, lobby areas, circulation and services spaces, with a maximum height of c. 11.1m and with a gross floor area measuring c. 2,740 sq.m. The proposed supermarket at first-floor level includes ancillary off-licence sales area, ancillary storage, staff and customer facilities, and two office units with shared staff facilities. At ground floor level proposals include two retail units and a café fronting onto Strand Road, and a new landscaped public space. The proposed development also provides for: - surface level and undercroft car parking and bicycle parking; the provision of vehicular and service access of St. Lawrence O'Toole Avenue; boundary treatments; 2 pole-mounted and 4 wall-mounted internally illuminated signs; signage zones, hard and soft landscaping, lighting, connections to drainage and water services and all ancillary developments works (including site clearance), all on a site measuring c.0.38 hectares. The site is bounded by St. Lawrence O'Toole Avenue to the south, St. Brigid's Avenue to the east and Church Avenue to the north	The Tin Church Site, Strand Road, Portmarnock, Co. Dublin.	Appeal decided	GRANT PERMISSION	02/12/2015	N
108	Fingal County Council	FW19A/0120	The proposed development consists of the construction of 1 no. warehouse/logistics/light industrial unit (proposed Unit 635), including ancillary office floorspace, over two levels, with a height of c.17.3 m and a total GFA of 9,044 sq.m. The proposal includes two access points (vehicular and service) off the existing road network serving the Business Park. The proposal includes 90 no. car parking spaces and 20 no. cycle parking spaces. The proposal includes 1 no. ESB substation, signage zones, a HGV service yard area, landscaping, boundary treatment, lighting, services including underground foul and storm water drainage network and attenuation areas, and all associated site works.	Northwest Business Park, Ballycoolin, Dublin 15	Decision made	GRANT PERMISSION	03/09/2019	N

109	Fingal County Council	FW20A/0102	The proposed development consists of the construction of 1 no. warehouse/logistics/light industrial unit (proposed Unit 637), including ancillary office floorspace over two levels, with a maximum height of c.17.09 m and a total GFA of 10,901 sq.m. The proposal includes two vehicular access points (staff/visitors and service) off the existing road network serving the Logistics Park. The proposal includes 109 no. car parking spaces and 20 no. cycle parking spaces. The development also includes 1 no. ESB substation, 1 no. sprinkler pumphouse, signage zones for the unit, PV panels at roof level, HGV service yard areas, landscaping, boundary treatments, entrance gates, lighting, and all associated site works including underground foul and storm water drainage network and attenuation	Site at Northwest Logistics Park, Ballycoolin, Dublin 15	Decision made	GRANT PERMISSION	25/08/2020	N
110	Fingal County Council	F19A/0084	Permission for development at 418.68 sq.m site. The development will consist of: A new Thermal Storage Tank to the south of the Terminal 2 Energy Centre and all associated site works. The horizontal tank will measure 16m by 4.8m and have a capacity of 250m³ for the storage of hot water. It will be used to store excess heat and improve energy efficiency of the existing Combined Heat and Power Plant serving Terminal 2	The Terminal 2 Energy Centre, Townland of Corballis, Corballis Road So	Decision made	GRANT PERMISSION	15/04/2019	N
111	Fingal County Council	FW17A/0210	The development will consist of 1) the construction of a part single / part 3 storey building (3551 sqm GFA) accommodating a C.V.R.T. testing centre comprising of 4 no. testing lanes (LGV/HGV), a Renault truck workshop comprising of 6 no. truck servicing lanes, connected to a 3 storey central ancillary commercial area comprising a Renault truck sales centre, along with offices and a storage area for Renault and Truck and Bus Parts, 2) vehicular access off the N3- M2 link Road (concurrent planning application Reg. Ref FW17A/0179) 3) 129 no. vehicle parking spaces and 18 no. bicycle spaces), 4) all landscape boundary treatment, ancillary signage and site development works on a site of	Townlands of Goddamendy & Bay, Dublin 15	Decision made	GRANT PERMISSION	03/05/2018	N
112	Fingal County Council	FW21A/0046	The development will consist of a light industrial warehouse/data centre totalling 1890 sq.m 321 sq.m of which will be office space, the provision for 21 car parking spaces, landscaping and all associated site and works.	Parslickstown, Navan Road, Mulhuddart, Dublin 15	Decision made	REQUEST ADDITIONAL INFORMATION	04/05/2021	N
113	Fingal County Council	F16A/0446	The proposed development shall consist of a new standalone 7-storey (over 2 level basement) hotel consisting of the following:- a) Restaurant and associated kitchen, bar, foyer, residents lounge and associated administrative and staff facilities at ground floor level; b) External seating area at ground floor level; c) 24 no. bedrooms and associated service rooms on each level from first to sixth floor (total of 144 no. bedrooms); d) 86 no. basement car parking spaces; e) Ancillary facilities including staff toilets/changing rooms, plant storage areas, maintenance facilities; refuse stores, loading bay and cycle parking within basement area; f) Relocation eastwards of existing vehicular entrance and relocation of existing internal access road and roundabout; g) Car drop-off area in front of	At the front car park of the Radisson Blu Hotel, Corballis Way/East Li	Decision made	GRANT PERMISSION	06/12/2016	N
114	Fingal County Council	FW15A/0151	Four storey office building with rooftop plant and associated car and parking, bin-store and siteworks.	Plaza 211, formerly Site E, Blanchardstown Corporate Park (Phase 2), B	Appeal decided	GRANT PERMISSION	27/01/2016	N

115	Fingal County Council	F20A/0550	For full planning permission to extend the North Apron in the Airfield at Dublin Airport, Co Dublin to facilitate the provision of twelve aircraft stands and a ground servicing equipment area on a site of 19.2ha. The development will consist of: * The expansion of the North Apron at Dublin Airport to provide twelve replacement Code C aircraft stands and ground servicing equipment storage area; * Construction of a 520m long by 6m high blast fence on the northern and western boundary of the extended Apron and ground servicing equipment area; * Construction of a 20m long by 6m high blast fence southwest of the Apron; * Construction of a 550m service road immediately to the north of the twelve replacement Code C aircraft stands to provide access for service vehicles; * Rehabilitation of existing pavement; * Construction of two new underground attenuation tanks on 9000m² of existing grassland; * Provision of a total organic carbon analyser enclosure; * Provision of drainage and electrical infrastructure; * Provision of Aerodrome Ground Light (AGL) installations this includes underground ducting to provide power to centreline lights and new edge lights; * Provision of 26 No. High Mast Lights; * Modifications to internal airside fencing, service road infrastructure and provision of construction site security fencing; * Provision of a temporary construction site compound and modification to the Airfield security fence to temporarily change part of the construction site form 'airside' with access restrictions to 'landside'; * Provision of road and stand pavement markings, Stand id-signs and High Mast Lighting (HML); * The application includes all associated site development works and services; * This planning application is accompanied by an Environmental Impact Assessment	Airfield in the townlands of, Cloghran, Corballis, Forrest Great, Forr	Decision made	REQUEST ADDITIONAL INFORMATION	04/01/2021	N
116	Fingal County Council	FW17A/0064	The construction of a new process vent abatement plant: to include pipebridge extension, access stair and single storey access platform, storage tanks, hard standing, monitoring station (area C. 15 m2), vent stack, access roadways, ground level plant & equipment (all of varying heights not to exceed 12.9m), perimeter palisade fencing (2.4m height) and all ancillary and associated site development works. This application is accompanies by an Environmental Impact Statement (EIS). The Application relates to a development which comprises of an activity requiring an Industrial Emissions licence. IED Licence no P0117-01	Ipsen Manufacturing, Blanchardstown Industrial Park, Blanchardstown, D	Decision made	GRANT PERMISSION	14/06/2017	N
117	Fingal County Council	FW20A/0126	The development will comprise the provision of 4 No. warehouses with marshalling offices, ancillary office space, staff facilities and associated development. The buildings will have a maximum principal height of 17.070 No. metres to the top of the parapet above ground floor level and will comprise the following areas: Unit 1 will have a gross floor area of 21,578 sq.m. including a warehouse (20,252 sq.m.), marshalling office (66 sq.m.), ancillary office space (1,216 sq.m.) and plant (44 sq.m.); Unit 2 will have a gross floor area of 9,206 sq.m. including a warehouse (8,347 sq.m.), marshalling office (66 sq.m.), ancillary office space (757 sq.m.) and pant (36 sq.m.); Unit 3 will have a gross floor area of 16,525 sq.m. including a warehouse (15,478 sq.m.), ancillary office space (944 sq.m.) and plant (37 sq.m.); and Unit 4 will have a gross floor area of 7,342 sq.m. including a warehouse (6,648 sq.m.), marshalling office (66 sq.m.), ancillary office space (589 sq.m.) and plant (39 sq.m.). A gate house with a gross floor area of 14 sq.m. will be positioned to the south-west corner of the site. The development will also include the repositioning of the access from the L3125 Road to the north of the site to provide a new entrance and a second vehicular access will be provided from the R135/Elm Road to the south-west. Road upgrade works are proposed along the L3125 to the north of the site which include the partial upgrade of Kilshane Cross signalised junction to incorporate a left turning lane and upgraded signals on the L3125 Local Road eastern approach arm and the provision of cycle paths and pedestrian footpaths. There will also be internal roadways; pedestrian access; 502 No. ancillary car parking spaces; bicycle parking; HGV parking and yards; level access goods doors; hard and soft landscaping; boundary treatments; ESB substations; signage; PV panels; lighting and associated site development works above and below ground. The total gross floor area of the development is 5,708 sq.m. (including ancillary structures and proposed ESB	Newtown, Kilshane Cross, Co. Dublin.	Application under appeal	GRANT PERMISSION	08/03/2021	N

118	Fingal County Council	F19A/0402	The proposed development comprises (1) the demolition of the existing site boundary wall and (2) the development of a mixed use scheme proposing, inter alia, a c. 1050m² retail unit and 109-bedroom aparthotel on a currently vacant site. The 4-6 storey development plus basement, also includes a) covered colonnade at street level b) lobby and guest facilities including food & beverage offers and c) aparthotel and retail service areas, d) 31 no. bicycle parking spaces at basement and surface level and e) a 12m. loading parking bay area. A roof terrace, set back at fifth floor level, and associated with the aparthotel is also proposed. Permission is also sought for landscaping and all	6 Malahide Road, Swords, Co. Dublin.	Appeal decided	GRANT PERMISSION	10/06/2020	N
119	Fingal County Council	F19A/0426	The development will consist of: i. Animal Welfare Facility - a single storey equine inspection facility with a gross floor area 376 sq.m. and a maximum height of c. 5.5m and overall dimensions of c. 8m in width and c. 44m in length incorporating 3 no. stables, a veterinary box, office, welfare facilities and circulation area. ii. Airside Operations Facilities c.0.88 hectare site located east of 'Gate Post 22' at the junction of the Swords Road (R132) and the Old Airport Road; a) 14 no. bus parking spaces, 8 no. HGV parking spaces and 2 no. car parking spaces and a tanker parking space. b) Semi-enclosed aircraft foul waste disposal unit, canopy with a maximum height of c. 4.5m. c) 3 no. waste compactors max height of c. 2.2m. and 3 no. portacabins max. height of c. 3m. for the storage of cleaning equipment. d) Tank farm encompassing 4 no. potassium acetate storage tanks used for de-icing, each with a capacity of 15,000 litres and a max height of c. 4m. e) Ancillary site development works and services including vehicle and bin washdown areas, drainage, internal circulation roads, landscaped berm along the southern and eastern boundaries, landside boundary fencing c. 3 m. high and lighting. iii. 'Substation 19' site, a greenfield c.0.05 hectare site southwest of the South Apron incorporating a single storey electrical substation (c. 168 sq.m) with a maximum height of c. 3.4m. and overall dimensions of c. 11m. in width and c. 15.5m. in length. Ancillary site development works and services including lighting and drainage and all ancillary site	Dublin Airport, Corballis, Co. Dublin.	Decision made	GRANT PERMISSION	31/10/2019	N
120	Fingal County Council	F21A/0081	Permission for works consisting of the provision of a stable block with 10 no. stables and wash bay at ground level, associated tack room and fodder storage at first floor level and associated minor alterations (O/A 309 sqm).	Wrenwood Stables, Killeen, Oldtown, Co Dublin, A45 H582	Decision made	REQUEST ADDITIONAL INFORMATION	12/04/2021	N
121	Fingal County Council	F18A/0041	Permission for development of a new wastewater pumping station on an approximately 0.19 ha site at Chapel Road, Kinsaley, Co Dublin, within the curtilage of Kinsaley House, a protected structure (RPS No. 464). The proposed pumping station compound will be approximately 35m x 45m in size and the development will comprise: a below ground pumping station structure (approximately 142m² x 7m deep) incorporating wet well, valve chamber and emergency storage tank an above ground welfare building (approximately 9m² x 4m high) including toilet and wash hand basin, ancillary plant and equipment (including approximately 7.6m high vent stack, 3.5m high lifting gantry, inlet chamber, flow meter chamber, surge vessel, control panel kiosk and 'wet kiosk') and ancillary site development works including a new entrance (approximately 6m wide) off Chapel Road, 2.4m high boundary fence, internal road circulation area, equipment wash-down area ground level alteration, retaining wall, landscape planting, sightline improvement works, headwall adjacent to the Sluice River, connection to existing water and power supplies, associated drainage infrastructure and associated works. The proposed development is located approximately 73 metres to the north east of Kinsaley House, a protected	Chapel Road, Kinsaley, Co. Dublin	Decision made	GRANT PERMISSION	23/10/2018	N
122	Fingal County Council	FW20A/0216	Construction of a warehouse distribution centre consisting of a single storey warehouse and canopy, associated office located over two floors, welfare facilities building, car and HGV parking spaces, marshalling yard, signage, site fencing, gates, lighting and all associated site works and ancillary services including the construction of two new site	Huntstown Business Park, Cappagh Road, Huntstown, Dublin 11	Planner Assignment	-	-	N
123	Fingal County Council	F08A/0731/E1	Office development on lands within Northwood. The development consist of the re-design to 1 No. office block (Reference F3), which is 5 storey's in height, the penthouse floor is set back on all elevations by a terrace and it has a total floor area of 3608sqm. The site has an area of 0.278 Ha and is situated adjacent to the recently constructed Northwood Court Office Campus within the lands previously approved for development under ref: F06A/0513. The development also consists of an ESB-substation, drainage, underground & permanent surface carparking, revisions to the temporary surface carpark with an additional 2 spaces (granted permission under Ref F05A/0327 & Ref: F06A/0513),	Northwood, Santry, Dublin 9	Registered Application	GRANT EXTENSION OF DURATION OF PERM.	21/11/2013	N

124	Fingal County Council	F18A/0146	A storage and distribution centre for new imported vehicles with a total capacity for 5,951 no. vehicles and comprises vehicle storage, internal circulation roadways, vehicle loading and unloading area and transporter parking spaces. the surface treatment of the vehicle storage areas comprises recycled plastic modular porous paving. Associated facilities include: a vehicle wash area, fuelling area and valet enclosure (approx. 120 sq.m.). The development also includes a vehicle inspection and fit out building (approx. 2656 sq.m. and 9.14m high) incorporating operation control room, offices, meeting room, canteen, toilets, plant area and building signage. Other site development works include: 1 no. security hut (11 sq.m); staff car parking (28 no. spaces) and staff bicycle parking spaces (14 no. spaces); boundary treatments including landscape berm and boundary fence over wall (approx. 3.33m high) new primary gated vehicular entrance onto the R135; emergency gated vehicular entrance onto Kilshane Road (L3125); lighting and CCTV poles (approx. 12m high); on-site substation (24.6 sq.m); external plant area (76 sq.m.); underground drainage and electricity infrastructure; the removal of existing vegetation and new landscaping works. The development also includes road improvement works to the Kilshane Road (L3125) comprising the reconfiguration of the existing roadway (including extending existing culvert); provision of a left turn lane at the junction with the R135; and dedicated cycle and pedestrian facilities. All development to take place on a site of approx. 13.1	Newtown, Kilshane Cross, Co Dublin	Decision made	GRANT PERMISSION	06/03/2019	N
125	Fingal County Council	FW18A/0117	Demolition of their existing store, and ancillary retail unit and sub-station. The construction of a licensed Discount Foodstore with ancillary off-licence sales and two retail units and public realm improvements; the provision of car and cycle parking; a new sub-station building, trolley bay; boundary treatments, hard and soft landscaping, drainage and underground services as required. The development includes all new signage including a single totem sign. The development also includes a new pedestrian	Block E, Tyrellstown Town Centre, Hollywood Road, Mulhuddart, Dublin 1	Decision made	GRANT PERMISSION	17/04/2019	N
126	Fingal County Council	FW18A/0078	Demolition of an existing industrial building on the subject site with a gross floor area (GFA) of 3,988 sq.m, along with 2 no. existing ancillary structures, and all associated site clearance works; • Construction of a new data storage facility with a GFA of 8,657 sq.m over two storeys (including a mezzanine level) with plant at roof level. The data storage facility building has parapet heights of 20.50 metres and 15.13 metres, with flues and lift overrun extending to a maximum overall height of 22.90 metres; the building will accommodate data storage rooms, electrical rooms, mechanical plant rooms, stair and lift cores, office administration areas, and staff facilities; • Provision of emergency generators with associated flues within a fenced compound, diesel top-up tank and fuel piping; • All associated site works including internal access road, new access to the adjacent site to the north, 19 no. car parking spaces, cycle parking, pump room with GFA of 21.3 sq.m, foul and storm water drainage, new boundary treatment, security fencing, lighting	Kingston Technology Building, IDA Blanchardstown Business and Technolo	Decision made	GRANT PERMISSION	26/07/2018	N
127	Fingal County Council	F06A/1911/E1	Demolition of existing bungalow and the construction of a new 2-storey commercial building with restaurant and kitchen (215 sq.m.) and external terraces (49 sq.m.) at first floor and retail unit, associated storage and toilet facilities (205 sq.m.) and external service yard to rear at ground floor, retail unit in existing archway in former stone tramway abutment (36 sq.m.), new pedestrian entrance to archway from the Howth Road and	Site Adjacent To Howth Dart Station, Howth, Co. Dublin.	Decision made	GRANT EXTENSION OF DURATION OF PERM.	04/07/2012	N
128	Fingal County Council	FW20A/0153	Permission for development consisting of: The construction of 2 no. office buildings, (Block A and Block B), with a total gross floor area of c. 23,180 sq m (excluding c. 17,607 sq m basement levels). - Block A comprises 9,477 sq m approximately of office floor space in a 4 to 6 storey building over single basement level and including a ground floor level cafe (245 sq m), fourth floor roof terrace (167 sq m) and 1 no. plant room (393 sq m) at roof level. - Block B comprises c. 13,703 sq m of office floor space in a 4 to 9 storey building over two basement levels and including 1 no. plant room (364 sq m) at roof level. A total of 750 no. car parking spaces are provided at basement and surface levels, with 386 no. bicycle spaces provided at surface level. The development will also comprise ancillary uses including atrium, staff areas, storage rooms, and 2 no. landscaping plazas located to the front and rear of the site. Vehicular access to basement and surface level car parking is via 2 no. entrances, connecting the proposed development to the internal road network within the Blanchardstown Corporate Park. The development will also include the provision of pedestrian and cyclist access from Corduff Road; Accessible ramp from Corduff Road; 2 no. external generator enclosures (43 sq m); hard and soft landscaping; improvements to the public realm; lighting; boundary treatments; 2 no. ESB substations (67 sq m); external bin store (29 sq m); basement air vents (12 sq m); attenuation chambers; piped infrastructure and ducting and all associated site	Site 2, Tyrellstown Link Road L3095, Blanchardstown Corporate Park, Du	Decision made	GRANT PERMISSION	15/03/2021	N

129	Fingal County Council	F20A/0535	The development will consist of a Petrol Filling Station to include: (i) A forecourt area with 3 no. fuel pump islands, illuminated forecourt canopy over, underground fuel storage tanks, associated pipework and over-ground fill points and vents, electric car charging points and associated infrastructure. (ii) An amenity building of 291 sqm gross floor area comprising a convenience shop (100 sq.m net retail area), restaurant/cafe area with 1 no food offering with hot and cold meals and refreshments for sale for consumption on and off the premises, associated customer seating, customer WCs, Back of House area with food preparation areas, ancillary office, staff welfare facilities, storage and plant areas. (iii) New vehicular entrance and exit, associated traffic signage, internal and external traffic calming measures. (iv) On-site facilities including, air/water services, car and bicycle parking. (v) Illuminated and non-illuminated operator signage including main ID Totem sign, canopy and facade signage. (vi) All associated site drainage, lighting, landscaping, boundary treatments and site development works.	Site at Holywell Distributor Road, Mountgorry, Swords, Co. Dublin	Decision made	GRANT TIME EXT (3 months) AI	17/05/2021	N
130	Fingal County Council	F16A/0549	The construction of a new single storey aircraft hangar and attached 2 storey facility of associated maintenance facilities, offices and staff areas with a total gross floor area of 2006 sq.m. The overall dimensions of the proposed structure are 39.6m by 46.5m with an overall height of 13.8m at its ridge. Permission is also sought for apron and associated site works. The development includes the demolition of the existing hangar structure with a floor area of 596 sq.m. and demolition of an existing 2-storey operations control	R108, Huntstown, Dublin Airport, Co. Dublin.	Decision made	GRANT PERMISSION	02/02/2017	N
131	Fingal County Council	F05A/1547/E1	Permission for a retail warehouse scheme measuring 13,973 sqm gross on a 5.4 hectare site to the west of the Ratoath Road, in the townland of Bay, County Dublin. The development includes for the following: 1 no. DIY unit measuring 6,000 sqm gross (including 1 no. outdoor garden centre of 846 sqm); 10 no. retail warehouse units totalling 7,973 sqm gross; 718 no. surface car parking spaces; 1 no. free standing flood lit sign at the proposed site entrance with an overall height of 8.15 metres; 2 no. ESB sub-stations (22 sqm each). All associated site development and landscape works. The proposal has a height of 9.25 metres. Access to the proposal is provided via an approved access road previously permitted under planning permission ref; F04A/1802. An EIS will be submitted	Lands To The West Of The Ratoath Road, In The Townland Of Bay, Co. Dub	Decision made	GRANT EXTENSION OF DURATION OF PERM.	15/08/2011	N
132	Fingal County Council	F17A/0513	A new food market building for the preparation, packaging, storage, sale and distribution of seasonally sourced (local and imported) fruit, vegetables, food and fresh produce. It will include a single storey portal frame refrigerated warehouse structure 12.5m in height with ancillary two storey facilities and office building. Also included are loading dock levellers and yard area, 83 car spaces including 2 accessible spaces, 41 cycle spaces, surface water attenuation, water storage, boundary fencing, plant and plant rooms, a new vehicular entrance off the main access road, vehicle parking and enclosed van loading area. The works will include landscaping, kerbs, hard and permeable surfaces, footpaths, railings and soft landscaping. All the above includes associated ancillary works and	Lands at Food Central (off the main internal access road), Roslin, St.	Decision made	GRANT PERMISSION	18/10/2017	N
133	Fingal County Council	F18A/0633	Construction of a two-storey combined workshop, accommodation (offices and canteen) and storage area with a gross floor area of 827sq.m. The proposed development shall be situated within the Howth FHC Boatyard.	Howth FHC Boatyard, West Pier, Howth, Co. Dublin	Decision made	GRANT PERMISSION	09/01/2019	N
134	Fingal County Council	F18A/0467	The construction of a six-storey office building plus rooftop plant, signage, bins stores, ESB substation, generator, and cycle shelters at Site A1. The proposed development will also consist of 593 no. surface car parking spaces, of which 160 no. spaces will be provided at Site A1 and 433 no. spaces will be provided at Site A2. The proposed 433 no. surface car parking spaces at Site A2 will include the continuation of use of the 235 no. surface car parking spaces permitted at Site A1 under application register reference F14A/0041, to be relocated to Site A2 for a further temporary period of 5 years. The proposed development will also consist of the construction of a new vehicular access off Lakeshore Drive to Site A2 (Site A1 will use the existing access of Lakeview Drive (the secondary access via the adjacent Ryanair HQ development will be removed), and a new pedestrian crossing over Lakeshore Drive connecting Site A1 with Site A2, including footpath, and all site development, drainage and landscaping works. A Natura Impact Statement (NIS) has been prepared in respect of the proposed development on Site of the existing temporary car park permitted under application register reference F14A/0041, bounded by Lakeview Drive and Lakeshore Drive (Site A1), as well as adjacent lands to the	Site of the existing temporary car park permitted under application re	Decision made	GRANT PERMISSION	13/12/2018	N

135	Fingal County Council	F08A/0381/E1	Permission for a period of 7 years on this site of 1.73 hectares. The site is bounded by an existing hotel car park and a long-term car park (under a different ownership) to the north, a long-term car park (under a different ownership) to the east, Corballis Way to the south and the East Link Road to the west. The proposed development will consist of: 1. The provision of a new 8 storey (28.2 metres above ground floor level) (over a 2 level basement) New Hotel Facility consisting of the following: a) A restaurant with associated preparation kitchen and storage area, a residents lounge, a foyer/reception area and associated administrative and staff rooms at ground floor level; b) The main entrance to the hotel will be from the east elevation; c) 168 no. suites from first floor level to seventh floor level (inclusive); d) There will be a housekeeping room, a laundry room and a 'comms' room from first floor level to seventh floor level (inclusive); e) 103 no. basement car parking spaces (40 no. spaces at basement level -1 and 63 no. spaces at basement level -2) and 10 no. bicycle parking spaces at basement level -1. Plant, storage, maintenance , boiler rooms and a delivery bay will also be housed within the basement area. Entrance to the basement car parking will be via a vehicle ramp on the northern elevation of the proposed New Hotel Facility; f) The overall parapet height of the proposed New Hotel Facility will be 28.2 metres above ground floor level; g) the overall gross internal floor area of the proposed new Hotel Facility will be c. 8,505 sq.m. (inclusive of Basement Areas, excluding Basement Parking areas, Goods Holding & Loading Bays); h) The proposed New Hotel Facility will require the removal of 103 no. existing parking bays. 2. Modifications and an extension to the existing Radisson SAS 4 star hotel. The existing hotel currently consists of: a) A 6 storey building with roof plant and a single storey conference centre; b) 230 no. suites from first floor level to fifth floor level (inclusive); c) 306 no. parking spaces at grade level (inclusive of 126 no. spaces outside of the application site). 3. The proposed extension will require the demolition of part of the existing conference and function area at ground floor level and also of 9 no. suites from first floor level to fifth floor level (inclusive). 4. The proposed 6 storey (21.65 metres above ground floor level) (over a 2 level basement) extension to the east and west elevation 4 star hotel will consist of: a) 155 no. suites (an overall net gain of 146 no. suites) from first floor level to fourth floor level (inclusive) to the east and south east elevation. Additional ancillary facilities will also be provided on each of these levels; b) Additional function and meeting rooms with associated conference reception area at ground floor level; c) An extension to the existing restaurant at the south western corner of the existing 4 star hotel at ground floor level which will incorporate a new ESB substation (c. 21.7 sq.m. gross floor area) at Basement Level -1; d) A new bar/lounge area and associated storage and staff/administrative rooms at ground floor level. A covered	Radission Blu Hotel, Dublin Airport, Co. Dublin.	Registered Application	GRANT EXTENSION OF DURATION OF PERM.	12/03/2015	N
136	Fingal County Council	FW16A/0168	Permission for (a) proposed storage building with 5 no. dock levelers, 2 grade access doors & associated first floor offices and ground floor staff facilities; (b) roof canopy between proposed building and existing facility to the east; (c) new canopy over existing door at north elevation of existing facilty; (d) 8 no. additional staff parking spaces ; (e) truck wash, fuel dispenser with associated underground tanks; (f) extension to existing service/marshalling yard; (g) new additional articulated vehicular entrance at south boundary; (h) landscaping and associated site, drainage and boundary works.	Northwest Business Park, Ballycoolin, Dublin 15	Decision made	GRANT PERMISSION	09/05/2017	N
137	Fingal County Council	FW19A/0147	Provision of a generator and air handling unit compound including 4 no. stainless steel flues, all to the south-east corner (rear and side of existing building), and provision of 218 sq.m. internal mezzanine plant area within the existing structure, all required to proivde critical technical support to Data Hall 3.	Kepple, Unit B10 IDA Business Park, Ballycoolin, Dublin 15, D15 YN9K	Decision made	GRANT PERMISSION	09/01/2020	N
138	Fingal County Council	F07A/0022/E1	3 No. Blocks of terraced units of total area c.4741.2m.sq, E.S.B. sub-station with switch room and associated site works. Block 7 consists of 9 No. Logistic/Distribution Warehouses with 2 storey ancillary offices totalling area c. 1995.7m.sq c. 9m high to parapet. 3 No. Units contained within Block 7 are c. 6m high to parapet. Block 8 consists of 10 No. Logistics/Distribution Warehouses with 2 storey ancillary offices totalling area c. 1717m sq c. 9m high to parapet. Block 9 consists of 6 No. Logistics/Distribution Warehouses with 2 storey ancillary offices totalling area c. 1,028.5m. sq c. 9m to parapet. ESB sub-station with switch room of c. 3.6m height. Ornamental fence c. 2.4m high on the	Units 735-759 Kilshane Drive, Northwest Business Park, Ballycoolin, Du	Decision made	GRANT EXTENSION OF DURATION OF PERM.	12/03/2012	N
139	Fingal County Council	F08A/0948/E2	Construction of a distribution services building of 8602sq.m. with ancillary site works, services, car parking at the Tesco Ireland St. Ann's Distribution Centre (allowing for a modification to the existing Tesco Ireland St. Ann's Distribution Centre car parking increasing it from 290 to 420 spaces, landscaping, boundary treatments (fencing), 14 no. unloading docks, circulation areas, cycle parking, solar panels (evacuated tubes) and ancillary development. This building will be ancillary to the existing Distribution Centre.	Tesco Ireland St. Ann's Distribution Centre, Old Ballymun Road, Dublin	Decision made	GRANT EXTENSION OF DURATION OF PERM.	11/09/2014	N

140	Fingal County Council	F17A/0158	A new temperature controlled food processing plant with single storey ancillary offices, loading docks, 36 surface car-parking including two accessible spaces, 26 cycle spaces, new vehicular entrance off the main access road, boundary fencing, surface water attenuation area, ESB sub-station & plant rooms. The works will include landscaping, kerbs, hard and permeable surfaces, footpaths, railings and soft landscaping. All the above includes associated ancillary works and services.	Lands at Food Central (off the main internal access road), Roslin, St.	Decision made	GRANT PERMISSION	29/06/2017	N
141	Fingal County Council	F17A/0031	The erection of a solar photovoltaic (PV) array over the existing reservoir, within a site of 0.79 ha. The array will consist of ca. 650 sq.m. of PV modules and associated development including inverters, cables and all associated site development works. The proposed PV array will have a maximum generating capacity of 109.88 kW.	The Reservoir Site, Townland of Cloghran, Adjoining Castlemoate House	Decision made	GRANT PERMISSION	15/03/2017	Y
142	Fingal County Council	F16A/0491	Development comprising construction of a Craft Centre incorporating [1] a single storey building unit (893m²) incorporating 14 no. craft units (15-66m²), internal courtyard incorporating temporary stalls and toilets [2] an outdoor seating area/plaza, craft centre signage, 27 no. car parking spaces (including 3 no. disabled spaces), 4 no. motorcycle spaces, 15 no. bicycle parking spaces and [3] ancillary site development works including SuDS drainage system, boundary and landscape works and all ancillary engineering	Lands bounded by the Malahide Road (R107) and Baskin Lane, Kinsaley, C	Decision made	GRANT PERMISSION	20/06/2017	N
143	Fingal County Council	F20A/0344	2 No. Commercial units, consisting of a café and hairdressers to the front of the existing public house and to the north-east of the property boundary.	The Racecourse Inn, Grange Road, Baldoyle, Dublin 13	Decision made	GRANT PERMISSION	28/01/2021	N
144	Fingal County Council	FW18A/0054	The development will consist of the construction of 2 no. office buildings with a total GIFA of 15,790sqm consisting of six levels of office floor space and plant enclosures at roof level; basement with a total GIFA of 10,320sqm accommodating 376 car parking spaces, 210 bicycle spaces, service rooms, general storage and bin storage; Podium level landscaping and associated site works to include 2 no. sub-stations with a total GIFA of 65sqm, parking for 125 cars and 55 bicycles for visitors, drainage and utility services, signage, internal roads and pathways all on an overall site with an area of 1.33ha.	Site 15, Tyrellstown Link Road L3095, Blanchardstown Corporate Park, D	Decision made	GRANT PERMISSION	21/08/2018	N
145	Fingal County Council	F04A/1755/E1	To construct on airport lands, a runway, 3110m in length and 75m in width. The permission sought to include all associated taxiways, associated road works including internal road network, substations, navigational equipment, equipment enclosures, security fencing, drainage, ducting, lighting, services diversions, landscaping and all associated site development works including the demolition of an existing derelict house and associated outbuildings; the relocation of the Forrest Tavern monument; the removal of a halting site including the demolition of any structure whether temporary or permanent on that site which is currently leased from the applicant. The road works include the realignment of an 800m section of the Forrest Little Road; the rerouting of a 700m section of the Naul Road (R108) and a 200m section of Dunbro Lane and replacement of these latter roads with a new 2km long road (7.5m wide carriageway) running in an east-west direction connecting to the St. Margaret's Bypass at a new junction. The proposed duration of this permission is 10 years. the development is located on lands of approximately 261 hectares in the Townlands of Millhead, Kingstown, Dunbro, Barberstown, Pickardstown, Forrest Great, Forrest Little, Cloghran, Collinstown, Corballis, Rock, and Huntstown, north and north-west of the Airport Terminal building. An	Dublin Airport, Co. Dublin	Decision made	GRANT EXTENSION OF DURATION OF PERM.	07/03/2017	N
146	Fingal County Council	FW21A/0077	The construction of (1) a warehouse/logistics building (total gross floor area: 11,090 sq.m. and max height: 17.8 metres) including 2 storey ancillary office accommodation (1,050 sq.m.), loading bays, marshalling yard, screened plant, solar panel array at office roof level, and 4 no. Back lit elevational signs (total area: 32.1 sq.m.); (2) 62 no. Surface car parking spaces and 9 no. Truck parking spaces to serve the proposed warehouse building; (3) a data storage building (total gross floor area 6,350 sq.m and max height: 11.14 metres) including office and ancillary accommodation (1,210 sq.m.), electrical rooms, data hall, mechanical plant rooms, a vehicle loading bay, ancillary workshops, back-up generators, screened plant on the roof, 2 no. Back lit elevational signs (total area: 4.5 sq.m.); (4) 32 no. Car parking spaces to serve the data storage building; (5) 2 no. Water sprinkler pump houses (11.65 sq.m. each) and 2 no. Tanks; (6) a security hut (37.9 sq.m.); (7) 2 no. Esb sub-stations/mv/lv buildings (24 sq.m. each); (8) internal site road network and circulation areas connecting to access road south of the site; (9) landscaping and Planting including provision of planted berms to the western and northern site boundaries; (10) perimeter security fencing (2.4 metre high), site lighting, bollards, camera poles, bin stores, smoking shelters, bicycle parking, and ancillary site development works including 2 no.	a c. 5.6 hectares site in the townland of Bay, Corduff Road, Ballycool	Planner Assignment	-	-	N

147	Fingal County Council	FW19A/0015	The development will consist of a Battery Energy Storage System (BESS) which will include up to 9 no. containerised battery storage modules (up to 14m length, 2.44m wide and 2.9m high) and ancillary equipment including up to: 9 no transformers (2.5m wide and 2.9m high), 7 no. power conditioning unit blocks (8m length and 1.5m wide), 1 no. power conditioning unit block (5m length by 5m wide), 9 no. switchgear units (1.5m length, 1.5m wide and 1.6m high), a sub-station container (4.5m length, 3.0m wide and 3.0m high) and all other associated site development works as required to facilitate the development. The BESS will be contained within a 0.0507 hectare site located entirely within the boundary of the existing Huntstown Power Station which is regulated by the Environmental Protection Agency through Industrial Emission Licences P0482-04 AND P777	Huntstown Power Station, Huntstown Quarry, Finglas, Dublin, D11 N407	Decision made	GRANT PERMISSION	21/03/2019	N
148	Fingal County Council	F08A/1305/E1	A 325 bedroom hotel with associated spa and leisure facilities, meeting and conference rooms, restaurant, bar and function facilities, plant, lighting and associated facilities, ESB substations, provision of 650 underground and surface car parking spaces with access to the development from the proposed access road and existing adjacent road and roundabout, landscaping and all associated ancillary works. The hotel building's overall height is ten storeys with basement on a site approximately 1.5 kilometres south-east of Dublin Airport, adjacent to the M1/M50 interchange, the N32 and Bewleys Hotel to the south and Clonshaugh Road to the east. Planning permission was previously granted on substantially the same site (under Council Reg. Ref. F04A/1684 and An Bord Pleanala reference PL06F.212020) for a 239 bedroom and 13 suite hotel comprising 16 floors over basement with plant at roof level	Clonshaugh, Co Dublin	Decision made	GRANT EXTENSION OF DURATION OF PERM.	04/12/2014	N
149	Fingal County Council	F16A/0200	The creation of a Passenger Transfer Facility, comprising a three storey extension on the south eastern elevation of Pier 4 (i.e. airside) with 2 No. c.10.2m long internal link bridges over existing void space within the Pier. The proposed development will have a gross floor area of c. 1,772 sq.m. and will include facilities for security screening, passenger processing, circulation, plant and other services. The proposed development also includes all other ancillary site development works above and below ground.	Pier 4, Dublin Airport, Co. Dublin.	Appeal decided	GRANT PERMISSION	27/07/2016	N
150	Fingal County Council	FW20A/0149	The application site is bound by Kilshane Way to the south and Kilshane drive to the east and north. The proposed development consists of the construction of 1 no. warehouse / logistics / light industrial unit (proposed unit 736) including ancillary office floorspace over two levels with a maximum height of c 17.09 m and a total GFA of 6,180 sqm. The proposal includes two vehicular access points (staff/ visitors and service) off the existing road network serving the Business Park. The proposal includes 61 no. car parking spaces and 20 no. cycle parking spaces. The development also includes 1 no. ESB substation signage zones for the unit, PV panels at roof level, HGV service yard areas, landscaping, boundary treatments, entrance gates, lighting, and all associated site works including underground foul and storm water drainage network and attenuation areas.	Northwest Business Park, Kilshane Drive, Ballycoolin, Dublin 15	Decision made	GRANT PERMISSION	21/01/2021	N
151	Fingal County Council	FW16A/0154	Permission for a three storey Administration Building (gross plan area 1936m²) located adjacent to the main Campus buildings on the main approach road. Accommodation to include open plan offices, staff offices, meeting rooms, Boardroom and associated	Blanchardstown North, Dublin 15	Decision made	GRANT PERMISSION	03/02/2017	N
152	Fingal County Council	FW15A/0167	Permission for a new warehouse of approx. 2,740 sqm with ancillary office, reception, and staff areas including staff gym, plus 17 car parking spaces, 9 bicycle spaces, landscaping and associated site development works including drainage and upgraded boundary treatment to the adjoining N3 roadway. SIGNIFICANT FURTHER INFORMATION HAS NOW	Parslickstown, Navan Road, Mulhuddart, Dublin 15	Decision made	GRANT PERMISSION	06/05/2016	N
153	Fingal County Council	F16A/0121	The construction of a Pre-Boarding Zone for passengers at the western end of Pier 1. This will comprise the removal of an existing equipment set-down area and staircore to the west of Pier 1; the construction of a single storey extension (c. 7.8m high) with a part mezzanine level plant room, linked to the existing west elevation of Pier 1 with a c. 7.75m. long linked corridor; and localised alterations to the glazing on the west elevation of Pier 1 to facilitate linkages with the proposed Pre-Boarding Zone. The proposed development will result in additional gross floor area of c. 1,066 sq.m. and includes all other ancillary site development works above and below ground. The application site comprises an area of c. 0.33 hectares	Pier 1, Dublin Airport, Co. Dublin.	Decision made	GRANT PERMISSION	16/05/2016	N
154	Fingal County Council	FW18A/0148	The construction of a circa 6,479sqm warehouse/logistics centre including ancillary office space and staff facilities; staff and visitor car parking and cycle parking spaces; articulated vehicle and van parking; site fencing, gates, sprinkler tank and pump house, signage and all associated site works and ancillary services including underground drainage and attenuation, landscaping and boundary treatment. Vehicular access to and from the site and connection to underground services, will be via the new road being constructed as permitted Planning Reference 3W17 [illegible]	Huntstown Business Park, Cappagh Road, Huntstown, Dublin 11	Decision made	GRANT PERMISSION	11/03/2019	N
155	Fingal County Council	F21A/0008	Development of an airside single-storey free-standing General Aviation dispatch hut and Tug Shelter and storage shelter (approx. 10.7m x 9.9m). The application includes all associated site works and services.	Site on the airfield, Huntstown, Dublin Airport, County Dublin	Decision made	GRANT PERMISSION	10/05/2021	N

156	Fingal County Council	F18A/0198	Development at an existing pharmaceutical manufacturing facility (approximately 13.4 hectares). The development consists of the construction of a biopharmaceutical manufacturing campus with a total additional floor area of 12,046 square metres and specifically provides for:- (a) the conversion of an existing warehouse building to a biopharmaceutical manufacturing processes building which will require internal alterations, extension and modifications to the existing elevations; (b) the conversion of an existing manufacturing building to a central utilities and laboratory building requiring internal alterations, extension and modifications to the elevations including the addition of 3 no. flue stacks (to a maximum height of 18.68 metres); (c) construction of a two-storey quality control laboratory and single-storey with mezzanine warehouse building; (d) extension of the existing central spine corridor to provide connectivity to the new laboratory and warehouse buildings, including provision of new staff entrance; (e) demolition of existing utilities plant and buildings comprising 2 no. boiler rooms, compressor room, electrical room, generator compound, water tank and pump house, and 2 no. store buildings; (f) provision of new logistics yard and new ancillary external utilities yard comprising 2 no. electrical switch room buildings, water pump and treatment building, bunded water tank, bunded gas and diesel storage tanks, 3 no. emergency generators and waste water management facility; (g) installation of mechanical plant to the roof of the existing administration, laboratory and canteen building (h) all ancillary site works including diversion and partially reopening of the existing culverted stream within the site; underground services; surface water attenuation tank; modifications to the internal road network, modifications to existing car parking including removal of 212 spaces; 2 no. new bicycle shelters; lighting; CCTV; soft and hard landscaping. An Environmental Impact assessment Report (EIAR, formerly known as and EIS) and Natura Impact Statement (NIS) have been prepared and will be submitted to the Planning Authority with the application. The EIAR and NIS will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during office hours at the offices of the Planning Authority. The proposed development is for the purposes of an activity requiring an application to the Environmental Protection Agency	Drynam Road, Barrysparks, Commons East, Crowcastle, Swords, Co. Dublin	Decision made	GRANT PERMISSION	14/06/2018	N
157	Fingal County Council	F19A/0386	The proposed development will consist of an eight storey hospital/healthcare facility (i.e. a seven storey over lower ground/undercroft level building) comprising main entrance/reception area, atrium winter garden, 1 no. café, 1 no. restaurant, 2 no. retail units, outpatients and diagnostics departments, GP departments and urgent care department all at ground floor level; out of hospital services/primary care at first and second floor levels; endoscopy unit and theatres at third floor level; theatre and building plant at fourth floor level; endoscopy unit and day hospital (20 beds) with staff hub at fifth floor level; day hospital (20 no. beds) with sky garden at sixth floor level; all with associated ancillary/common facilities and office/administration areas; FM department, water tank rooms, 115 no. car parking spaces, 72 no. bicycle spaces and 8 no. motorbike parking spaces all at lower ground floor level. Permission is also sought for an energy centre building; a service yard including plant, ESB substation and bin stores; 94 no. car parking spaces, 12 no. bicycle spaces and 2 no. motorbike spaces at surface level; foul pump station and associated works; 2 no. vehicular access roads to serve the development including works onto existing roundabout; landscaping; footpaths; public lighting; boundary treatments; and all associated site and engineering works necessary	Lands to the north of the R125 road and accessed off Holywell Link Roa	Appeal decided	GRANT PERMISSION	24/01/2020	N
158	Fingal County Council	F08A/0170/E1	The demolition of existing light industrial units, a derelict house and structures on site, and the construction of 11 no. double volume light industrial units with a total gross floor area of approximately 1817.3sqm, consisting of 2 no. units at 319.6sqm with 35.6sqm storage each, 3 no. units at 92.3sqm and 6 no. units at 150.2sqm and 27.8sqm storage each, 48 no. parking spaces, and associated site development works and landscaping, a new relocated vehicular entrance and associated road widening and alignment works to Church Road including a new footpath and railings to Lady's Well Park. Existing foul drains will be connected to proposed new foul drainage within the site to the Existing Foul Gravity Sewer across Church Road. Existing Surface Water Drains will be connected to proposed new Surface Water Drainage and underground Storm Attenuation to the Existing Road Drainage Sewer on Church Road. All on a 0.59 hectare site at Gaywood Industrial Estate. SIGNIFICANT FURTHER INFORMATION/REVISED PLANS Planning Application Reg. Ref. F08A/0170 in response to a request for Additional Information, comprising an increase in site area to accommodate improvements to the road, boundary treatments, a new entrance to the park and an area of hard standing for a car park to the adjacent Lady's	Gaywood Industrial Estate, Mountain View, Church Road, Mulhuddart, Dub	Decision made	GRANT EXTENSION OF DURATION OF PERM.	16/07/2013	N
159	Fingal County Council	F13A/0402/E1	Two-bay aircraft maintenance hangar, designed to accommodate a range of code C aircraft types, with a plan are of 4,233m². The overall dimensions of the proposed structure would be: 90.75m wide by 49.59m deep; with an overall height of 19.18m at its ridge. Planning permission is also sought for extension and modification of the paved apron area to facilitate access to the proposed new hangar, service connections to the proposed	Vacant lot between Hangars 5 and 6, North Apron, Dublin Airport, Corba	Decision made	GRANT EXTENSION OF DURATION OF PERMISSION	12/03/2019	N

160	Fingal County Council	FW15A/0073/E1	Permission for the construction of a new 5,250 sqm warehouse building for the storage and distribution of materials including hazardous and non-hazardous chemicals, comprising of storage areas, marshalling area, associated plant units and ancillary works, of which the height does not exceed 13.5m, all located to the eastern boundary of the secure 14.2 acre Seveso (Major Accidents Directives) site.	Damastown Rise, Damastown Industrial Estate, Macetown North, Dublin 15	Decision made	GRANT EXTENSION OF DURATION OF PERMISSION	04/06/2020	N
161	Fingal County Council	FW13A/0089/E1	Planning permission for the construction of a Renewable Bioenergy Plant to generate up to 3.8MW of electricity from 90,000 tonnes of non-hazardous biodegradable waste per annum utilising Anaerobic Digestion (AD) technology on a 2.38 hectares site within Roadstone Wood's Huntstown Quarry, Huntstown, North Road, Finglas, Dublin 11. The proposed plant will comprise the following elements: (i)13.9m high main building (4958.5 sq. m. floor area) incorporating feedstock reception and processing areas, digestate treatment areas, storage areas, workshop and including a 3 storey administration and welfare area (1744.8 sq. m. floor area); (ii)Digestion Tank Farm (4m high bund) enclosing 4 no. digester tanks (up to 25.4m max. height, c.5000m3), 2 no. digestate treatment tanks (up to 25.4m max. height, c.5000m3), 2 no. digester feed buffer tanks (up to 17.6m max. height, 1800m3), and 2 no. pre-pasteurisation tanks (up to 12.8m max. height, 700m3) [total 10 no. tanks], to include stairwell towers and gantries; (iii)Wastewater Treatment Plant Tank Farm (4m high bund) enclosing 3 no. SBR Aeration tanks (up to 16.0m max. height, c.2200m3), sludge tank (up to 10.8m max. height, c.75m3), process water tank (up to 22.9m max. height, 2000m3) and process liquor tank (up to 22.6m. max. height, 2400m3) [total 6 no. tanks], to include stairwell towers and gantries; (iv)2 no. enclosed Combined Heat and Power 2MW engines (3.6m high: 65.8 sq. metres floor area each), 28m high stack, 13.7m high gas holder (1800m3), 8.2m high biogas flare stack, 2 no. 12m high gas scrubbers, gas treatment equipment enclosed in 1.8m high container (30.6 sq. m floor area) and 2.5m high container (78.8 sq. m floor area), 3 no. bunded electrical transformers (4.8m high) and 3.0m high sub-station (51.9 sq. m. floor area); (v)Various plant and vessels including 2 no. pasteurisation units (5.85m high) each containing heat exchanger and 3 no. c.24m3 tanks, 2.5m high ferric chloride storage tank (c.15m3), 5m high caustic storage tank (c.35m3), storm water tank (up to 21m max. height, c.2000m3), 4 no. liquid waste tanks (up to 10.5m max. height, c.90m3), enclosed pump equipment (2m high, 10 sq. m floor area), boiler, and enclosed air blower unit (3m high, 36 sq. m floor area); (vi)Odour Control System (15.7m high: 313.8 sq. m. floor area) and 25m high stack;	Site within Roadstone Wood's Huntstown Quarry, Huntstown, North Rd, Fi	Decision made	GRANT EXTENSION OF DUR.	-	N
162	Meath County Council	AA201047	EXTENSION OF DURATION OF PLANNING PERMISSION AA151273 - development will consist of a storage building for end of life vehicles, upgrade of entrance and new waste water treatment system together with associated works. (A Waste Permit is required)	Bullstown & Wotton , The Ward , Ashbourne Co. Meath	APPLICATION FINALISED	UNCONDITIONAL	28/09/2020	N
163	Meath County Council	RA180038	development will consist of a Factory Building (maximum height 10.8m with Gross Floor Area of 3,840 square metres) used for the manufacture of concrete products, 3 No. Cement Silos (maximum height 13.5m), 8 No. covered Aggregate Storage Bays split into two structures (maximum height 7m each) with associated ancillary infrastructure comprising a paved Product Storage Area and Perimeter Screening Mound (approximately 6m high). The overall planning application area is 2.6 hectares (Screening for Appropriate	Piercetown , Dunboyne , Co. Meath	APPLICATION FINALISED	CONDITIONAL	24/05/2018	N
164	Meath County Council	RA180106	construction of a single storey garage with mezzanine including 4 rooflights and all associated site works	The Haven , Jarretstown Dunboyne , Co. Meath	APPLICATION FINALISED	CONDITIONAL	26/03/2018	N
165	Meath County Council	RA200104	single story building for use as an Amateur Boxing Club Training Facility and ancillary uses associated with Dunboyne Amateur Boxing Club. The development will include site entrance from Kilbrena Road, internal site road and parking, site boundary treatment, landscaping and associated site development works. Significant further information/revised plans submitted on this application	Kilbrena Road/Navan Road , Dunboyne , Co. Meath	APPLICATION FINALISED	CONDITIONAL	29/06/2020	N

166	Meath County Council	AA201395	the works seeking retention permission include; 1) Retention of the change of use of an existing shed, to a use facilitating waste processing. 2) Retention of concrete yard area and associated 1 full retention separator servicing same. 3) Retention of modified site boundary. 4) Retention of site security palisade fence. 5) Retention of alterations to site layout design to include revised designated ares for storage of End of Life Vehicles. The works seeking planning permission include; 1) Proposed 5 bay monopitch shed to facilitate processing of end of life vehicles. 2) Proposed increase in annual tonnage accepted at the facility to 4,000 tonnes per year. 3) Stormwater drainage infrastructure including proposed soakaway. 4) Works to facilitate the required sightlines along public road from existing site entrance. 5) All ancillary site development works. The above listed works will require a review of the existing 'Waste Facility Permit' which will be sought through a separate application to Meath County Council. Significant further information/revised plans submitted on this application	Bullstown and Wotton , The Ward , Ashbourne Co. Meath	NEW APPLICATION	N/A	-	N
167	Meath County Council	AA181386	a ten year planning permission for a solar farm at this site in the townland of Muckerstown, Co. Meath. The development will consist of the construction operation and decommissioning of a photovoltaic solar farm comprising photovoltaic panels on ground mounted frames, a 38kv DNO/Customer substation, GRP cabinet, inverter stations, switchgear substations, field transformers, auxillary transformer, monitoring house communications building, single storey storage shed, Battery containers, WC, Fencing, temporary construction compound, internal access tracks, CCTV Cameras, improvements to the existing entrance, underground cabling, landscaping, and all ancillary development works	Muckerstown , Co. Meath	APPLICATION FINALISED	CONDITIONAL	22/01/2019	N
168	Meath County Council	RA170873	grant of a ten year planning permission for a solar farm at this site in the townlands of Vesingstown, Polleban and Harlockstown, Dunboyne, County Meath. The development will consist of the construction, operation and decommissioning of a photovoltaic solar farm comprising photovoltaic panels on ground mounted frames, inverter stations, 1 No. 110KV 4 Bay Electrical Substation including control building, customer control building, switchgear, field transformers, auxillary transformer, GRP cabinet, monitoring house communications building, single storey storage shed, battery containers, transformer containers, WC, fencing, temporary construction compound, access tracks, CCTV cameras, 2 No. cable end masts, underground cabling, landscaping and all associated ancillary development works. Significant further information/revised plans submitted on this application	Vesingstown , Pollban & Harlockstown , Dunboyne Co. Meath	APPLICATION FINALISED	CONDITIONAL	23/07/2018	N
169	Meath County Council	AA181432	a new six bay covered practice range including safety netting, lighting and all associated site works	Ashbourne Golf Club , Archerstown , Ashourne Co. Meath A84 R528	APPLICATION FINALISED	CONDITIONAL	04/02/2019	N
170	Meath County Council	RA150605	development on this site: Lands within the townlands of Portan, Gunnocks and Clonee, County Meath - site bounded to the south by the R147, to the west by the Kilbride Road, to the north by The Mayne and to the east by lands at Damastown Industrial Park. The development will consist of: Construction of a data centre campus in two phases within 10 years which consists of the following: In Phase 1: Construction of two data centre buildings containing 8 no. data halls with a gross floor area of 50,800 m2 and with a data capacity of 36MW per building (each building is 25,400 m2 and contains 4 no. data halls) together with associated mechanical and electrical spaces and parking. 1 No. single storey ancillary administration/office building with gross floor area of 6,424 m2 linking and accessing the data centre buildings. Ground-level emergency back-up generators (with internal fuel tanks). New site access and temporary construction access and car parking arrangements (including utilisation of existing farm access) off the Kilbride Road (L5028). Closure of existing accesses (following the demolition of 2no. residential units). Site infrastructure to include entrance gates and appropriate signage, security hut (36m2), internal roadways & footpaths, 217 car parking spaces in total across the site in both phases, bicycle shelter, a water sprinkler tank, pumping facilities, water tanks, drainage networks, attenuation ponds and a connection to the public sewer on the R147. Bridges and culverts over the Pace and Portan streams. Hard and soft landscaping. Demolition of two existing residential dwellings on Kilbride Road (L0528), 150 metres northeast of R147/L5028. Upgrade to L5028 Kilbride Road to provide cycle path and pedestrian footpath between the R147 and the proposed new site access. Installation of temporary electrical infrastructure to service the data centre campus before final connection. Ancillary site works including underground electricity 20kV cables between substation and data centres. There is a separate planning application and associated Environmental Impact Statement (EIS) on lands enclosed by the data centre application. It is a Strategic Infrastructure Development (SID) application to An Bord Pleanala under Section 182A of the Planning and Development Act 2000 (as amended). The application comprises the	Lands at Portan Gunnocks and Clonee , County Meath	APPLICATION FINALISED	CONDITIONAL	23/07/2015	N

171	Meath County Council	RA150972	development at a site at The Hub Logistics Park, Bracetown (and including lands within the townlands of Bracetown, Gunnocks & Portmanna), Clonee, County Meath. A 10 year permission is being sought. The development will consist of an extension to the existing logistics park, permitted under Reg. Ref. DA50233, comprising of 3 no. additional logistics, warehousing and light industrial units of 6,480sqm; 9,792sqm and 12,672sqm gross floor area, respectively (total gross floor area of 28,944sqm), all with a maximum building height of approximately 15.75m. Access to the proposed development will be via the existing entrance and internal access route to The Hub Logistics Park. The development provides for the extension of and provision of new internal roads; a total of 266 no. surface car parking spaces; and all associated heavy goods, vehicle parking, loading and docking bays. The development also includes associated and ancillary site development works including attenuation pond to serve the proposed units, site services; landscaping, boundary treatments; lighting; and all associated site development and works.	The Hub Logistics Park Bracetown (and including lands within the townlands , of Bracetown; Gunnocks & Portmanna) , Clonee Co. Meath	APPLICATION FINALISED	CONDITIONAL	27/10/2015	N
172	Meath County Council	AA151273	development will consist of a storage building for end of life vehicles, upgrade of entrance and new waste water treatment system together with associated works. (A Waste Permit is required). Significant Further Information / Revised plans submitted on	Bullstown , The Wotton Ashbourne , Co. Meath	APPLICATION FINALISED	CONDITIONAL	27/04/2016	N
173	Meath County Council	AA160553	for a Solar Photovoltaic (PV) development in the townland of Bullstown Donaghmore, Ashbourne, Co. Meath. The development consists of solar PV arrays with a surface area of approximately 58,000m2 mounted on steel support structures, associated underground cabling and ducting, a grid control building, 5 No. inverter/transformer cabins, 2 no. battery enclosures, site entrance, access tracks, hardstanding area, boundary security fence, CCTV, landscaping and ancillary works. The solar PV arrays will have a height above ground level of up to 3m. An appropriate period of 10 years (i.e. duration of the planning permission to construct the development) is sought, with an operational life of 25 years after the date of commissioning (Appropriate Assessment Screening Report submitted). Significant further information/revised plans submitted on this application	Bullstown , Donaghmore Ashbourne , Co. Meath.	APPLICATION FINALISED	CONDITIONAL	17/01/2017	N
174	Meath County Council	RA161021	a Biopharmaceutical Manufacturing Facility located at our site at Piercetown, Cradockstown and Ballymagillin Townlands, Dunboyne, County Meath, including the following:- A two storey Biopharmaceutical Production Building sized 17,445 square metres in total and 19.5 metres high with roof mounted plant and equipment. This building will be built in 2 Phases. Phase 1 is sized 13,989 square metres and Phase 2 is sized 3,456 square metres. A two storey Warehouse Facility sized 8,517 square metres in total and 17.2 metres high with roof mounted plant and equipment and associated docking and yard areas. This building is to be built in 2 Phases. Phase 1 is sized 7,627 square metres and Phase 2 is sized 890 square metres. A single storey combined utility building sized 3,995 square metres and 10.4 metres high with internal mezzanines and with roof mounted plant and equipment including 8 no. boiler stacks 22.5 metres high. A three storey laboratory and administration building sized 12,453 square metres and 22 metres high including roof mounted penthouse and plant and equipment. A permanent staff and visitor car park for 496 cars and a temporary construction related car park for 420 cars. The temporary car park will be decommissioned upon completion of the facility. A single storey link building sized 1,751 square metres and 12.4 metres high. Ancillary site works include a bunded tank farm, water and waste water and oil storage tanks, pipe bridges, cooling towers, gas storage facilities, emergency generators, a waste recycling compound and structure, items of plant and equipment and their associated yards, internal roads and services, fencing, exterior lighting, landscaping and landscape berms, surface water attenuation ponds and building mounted and ground mounted signage. Ancillary site buildings include a single storey sprinkler pump house sized 91 square metres and 6.2 metres high and associated tanks, a single storey electrical building sized 65 square metres and 6.2 metres high, a single storey waste water pump house sized 7 square metres and 3.2 metres high, a gas reducing station and compound, a covered bicycle facility for 100 bicycles and 3 no. flagpoles 15 metres high, and a single storey bunded drum storage building sized 122 square metres and 6.2 metres high and a single storey waste water building sized 60 square metres and 6.2 metres high. Site access	Piercetown Craddockstown and Ballymagillin Townlands , Dunboyne , County Meath	APPLICATION FINALISED	CONDITIONAL	28/10/2016	N
175	Meath County Council	AA170091	development and permission for retention of development. The proposed development will consist of (a) Installation of new astro turf pitch complete with fencing and lighting to northern side of existing playing pitch. This facility was previously approved to the southern side of existing playing pitch under planning register reference number DA/140116. (b) Re-positioning of existing playing pitch towards southern boundary. (c) Erection of two new lighting poles to southern end of re-positioned playing pitch. The development for retention consists of (d) Retention of two existing lighting poles to	Priest Town , Kilbride , Co. Meath	APPLICATION FINALISED	CONDITIONAL	18/10/2017	N
176	Meath County Council	RA170175	a ten year planning permission for development which will consist of the construction of a 98.18 sq.m Water Pumping Station with access to the nearby R147 including associated site works to replace the existing Loughsallagh Water Pumping Station as part of improvements to the water supply network	Loughsallagh Pumping Station , Clonee , Co. Meath	APPLICATION FINALISED	CONDITIONAL	18/04/2017	N

177	Meath County Council	AA170600	the development will consist of a 10 year permission for the construction of a Solar PV Energy Development comprising installation of Solar Photovoltaic (PV) panels on ground mounted frames/support structures within existing field boundaries; underground cabling and ducting; 21 no. inverter/transformer stations, 21 no. HV Cabins; 1 No. 110kV Substation and associated infrastructure on hard standing inside palisade security fence; 2 no. customer control buildings (1 no. including associated hard standing adjoining the ESB Substation); 1 no. communications cabin; site perimeter (stock proof) security fencing (c. 74.54 hectares); CCTV security cameras; site access tracks; landscaping and all associated site development works. Three temporary construction compounds will also be provided (Screening for Appropriate Assessment submitted)	Ballymacarney and Part of Baytown , The Ward , Co. Meath	APPLICATION FINALISED	CONDITIONAL	20/12/2017	N
178	South Dublin County Council	SD178/0005	A new single storey public swimming pool building, including gymnasium and fitness suites, changing facilities and cafeteria and associated accommodation, comprising 3,308 square metres of internal accommodation. Landscaping and public realm improvements to surrounding area and new car park to allow for 108 car parking spaces and 88 bicycle parking spaces. The proposed works are close to a Protected Structure on the Record of Protected Structures in the South Dublin County Development Plan 2010 – 2016, number 103, 'King John's Bridge, Esker, Lucan.' The proposed works will not materially affect the external appearance or character of this structure, and views of the bridge will not be affected. Plans and particulars of the proposed schemes will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy from during the period from 14th July to 28th August 2017 at: South Dublin County Council, County Hall, Tallaght, Dublin 24 (between the hours of 9:00am – 5:00pm Monday to Thursday and 9.00am - 4.30pm on Friday) and Lucan Library, Supervalu Shopping Centre, Newcastle Road, Lucan, Co Dublin (between the hours of 9:45am – 8:00pm Monday to Thursday and 9.45am - 4.30pm on Friday and Saturday (closed Saturdays of Bank holiday weekends)). The plans and particulars can be viewed on: South Dublin County Council's website – www.sdcc.ie and the Public Consultation Portal http://consult.sdublincoco.ie. Written submissions or observations with respect to the proposed development, dealing with the proper planning and sustainable development of the area in which the developments would be situated, may be made in writing to arrive no later than 5pm on 11th September 2017 to: Senior Executive Officer of the Community Department, South Dublin County Council, County Hall, Tallaght, Dublin 24. https://consult.sdublincoco.ie/en/consultation/part-8-lucan-swimming-pool-griffeen-	Griffeen Valley Park, Lucan, Co. Dublin	Unregistered application	-	-	N
179	South Dublin County Council	SD17A/0083	Construction of a single storey detached club house with associated signage and site development works including the creation of a new pedestrian and vehicular entrance from Mount Bellew Way and car parking including an access roadway, footpaths, lighting,	Site off Mount Bellew Way, Lucan, Co. Dublin	Decision	GRANT PERMISSION	09/05/2017	N
180	South Dublin County Council	SD17A/0208	Partial demolition of existing buildings & construction of new 2 storey building with proposed veterinary clinic to ground & first floor & 'own door' office accommodation also at first floor, new car parking layout, associated site and landscaping works to the proposed development	Molloy's Ballydowd Stores/ Hermitge Veterinary Clinic, Lucan Road, Ballydowd, Lucan, Co. Dublin	Officer Allocation	GRANT PERMISSION	23/08/2017	N
181	South Dublin County Council	SD17A/0181	Demolition of 2 buildings containing 4 single storey 'Golf Suites' and their replacement by the construction of two wall plate dormer staff accommodation units with a setback building line, pedestrian access from the access avenue to Finnstown Castle Hotel, landscaping, all associated site development works and services. The existing parking spaces service the 'golf suites' will be removed in accordance with the grant of permission issued under planning, Reg. Ref. SD14A/0168, and new parking spaces will be provided within the existing carpark and new car parking area to be developed on foot of planning, Reg. Ref. SD14A/0168, at Finnstown Castle Hotel, a Protected Structure (Ref. No	Finnstown, Newcastle Road, Lucan, Co. Dublin.	Decision	GRANT PERMISSION	18/01/2018	N
182	South Dublin County Council	SDZ18A/0003	Development will comprise a c.7.7 Ha. Public park (Tandy's Lane Park), to include; a playing pitch (c.55 x 90) a natural play/neighbourhood play area (NEAP) (c.1,300sq.m); a natural play/local play area (LEAP) (c.500sq.m); a children's play area (previously permitted under Reg. Ref. SDZ16A/0005); provision of a car park with 39 car parking spaces; a new vehicular entry/egress point off Loop Road 1 (previously permitted under SDCC Reg. Ref. SDZ17A/0007); 48 bicycle parking spaces; the redistribution and re-profiling of c.30,400 cubic metres of soil spoilt from within the Adamstown Strategic Development Zone; and all ancillary site development and landscaping works, including: paths, planting, surface water drainage and boundaries; and the incorporation of a length of Tandy's Lane into Tandy's Lane Park. The development comprises minor revisions to the layout of a previously permitted portion of Tandy's Lane Park (Reg. Ref. SDZ16A/0005) and also revisions to permitted Loop Road No. 1 (Reg. Ref. SDZ17A/0007) to accommodate vehicular access to a new car park all on lands boud generally to the east and south by Tandys Lane, to the west by the alignemnet of Loop Road 1 (permitted), to the north by undeveloped lands in Somerton development Area and adjoining the lands of St. Helens House (a Protected Structure) to the southeast and the lands of Somerton House (a	Tandys Lane, Lucan, Co. Dublin	Officer Allocation	GRANT PERMISSION	04/04/2018	N

183	South Dublin County Council	SD118/0002	Construct a Parks Depot, ancillary services and utilities consisting of the following: (1) construction of a park depot building of approximately 450m² which will include staff welfare facilities (changing and lockers, toilets/showers & canteen), office; (2) construction of a machinery/vehicle storage building of approximately 870sq.m. incorporating craftsman workshop of approximately 240sq.m; (3) construction of staff car parking, bunded diesel fuel tank, material storage bays, external storage area, vehicle wash bay, safe circulation area and landscaping and boundary treatment; (4) widening of existing access from the proposed facility onto Hayden's Lane, as indicated on Site Location Drawing No. 10011/010; provision of services including water, biocycle/septic tank, utilities and telecoms all on a site of approximately 2 acres (8,000sq.m.) as indicated o Site Location Drawing No. P-001. Plans and particulars of the proposed development will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy at: (a) South Dublin County Council Offices, County Hall Tallaght, Dublin 24 between the hours of 9.00am – 5.00pm Monday to Thursday and 9.00am – 4.30pm on Friday (inspection and purchase); (b) Clondalkin Civic Offices, Clondalkin Dublin 22 between the hours of 9.00am – 5.00pm Monday to Thursday and 9.00am – 4.30pm on Friday (inspection and purchase); (c) Lucan Library, Superquinn Shopping Centre Newcastle Road Lucan between the hours of 9.45am – 8.00pm Monday to Thursday and 9.45am – 4.30pm Friday and Saturday (inspection only); (d) the plans and particulars can be viewed on the County Councils website – www.southdublin.ie - from 16th May 2011 to 27th June 2011. Written submissions or observations with respect to the proposed development dealing with the proper planning and sustainable development of the area in which the development would be situated may be made in writing before 4.00pm on the 27th June 2011 to The Senior Executive Officer, Parks Department, South Dublin County	Griffeen Valley Park, Lucan, Co. Dublin	Unregistered application	-	-	N
184	South Dublin County Council	SD158/0004	A new village plaza, footbridge link and pedestrian crossing improved entrances at Lucan Bridge and Watery Lane and new steps to weir promenade in Lucan, Co. Dublin as follows: (1) New village plaza, footbridge link over canalised section of river between Griffeen Bridge & Vesey Bridge and raised pedestrian crossing, comprising of removal of existing pergola, paths and sections of stone wall, alterations to paving, kerbing, car-parking, trees, public lighting and bollards in Village Green, Lucan, Co. Dublin. Works to include: -New village plaza with limestone paving -New footbridge with limestone paving and railings to match existing -Raised road crossing for pedestrians -Widened footpath outside O'Neills Public House with stone kerbing -New railing insert to stone wall at weir -New trees, public lights and bollards -Removal of existing pergola, paths and sections of stone wall -Removal of three on-street car parking spaces The site is within the Lucan Architectural Conservation Area as defined in the South Dublin County Council Development Plan 2010 - 2016. The proposed works are within the curtilage of the following Protected Structure on the Record of Protected Structures in the South Dublin County Development Plan 2010 - 2016: (1) Main Street, Lucan, described as a 'Canalised Section of River between Griffeen Bridge & Vesey Bridge', Map Reference Number 069. The proposed works to install a bridge crossing the canalised river, to make an opening in the wall and to re-make an opening in the wall further north, beside Vesey bridge will materially affect the external appearance or the character of this structure, however this intervention is reversible. (2) New widened entrance at Lucan Bridge, improved entrance at Watery Lane and St Andrews Lodge, Main Street and new steps with viewing platforms linking Lucan Bridge with Lucan Weir Promenade at Lucan Village, Co Dublin.Works to include: - Widening existing entrance from Lucan Bridge onto the steps - Removal of existing concrete stairs and construction of new steps complete with viewing platforms and balustrade - Upgraded entrance at Watery Lane to Lucan Weir by increasing area of footpath with improved paving and stone kerbing, removal of one on-street parking space at St. Andrews Lodge and No 8 Main Street, Lucan. The site is within the Lucan Architectural Conservation Area as defined in the South Dublin County Council Development Plan 2010 - 2016. The proposed works are beside the	Lucan Bridge/Watery Lane/Lucan Village Green, Lucan, Co. Dublin	Unregistered application	-	-	N

185	South Dublin County Council	SD118/0003	Construct a Parks Depot, ancillary services and utilities. Plans and particulars of the proposed development will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy at (a) South Dublin County Council Offices, County Hall Tallaght, Dublin 24 between the hours of 9.00am – 5.00pm Monday to Thursday and 9.00am – 4.30pm on Friday (inspection and purchase); (b) Clondalkin Civic Offices, Clondalkin Dublin 22 between the hours of 9.00am – 5.00pm Monday to Thursday and 9.00am – 4.30pm on Friday (inspection and purchase); (c) Lucan Library, Superquinn Shopping Centre Newcastle Road Lucan between the hours of 9.45am – 8.00pm Monday to Thursday and 9.45am – 4.30pm Friday and Saturday (inspection only); (d) The plans and particulars can be viewed on the County Councils website – www.southdublin.ie from 14th July 2011 to 25th August 2011. Written submissions or observations with respect to the proposed development dealing with the proper planning and sustainable development of the area in which the development would be situated may be made in writing before 4.00pm on the 8th September 2011. The Senior Executive Officer, Parks Department, South Dublin County Council, County Hall, Tallaght, Dublin 24. E-mail address – Parks@sdublincoco.ie	Griffeen Valley Park, Lucan, Co. Dublin	Unregistered application	-	-	N
186	South Dublin County Council	SD208/0009	Public realm works totalling approximately 1.1ha including: build a new Integrated Constructed Wetland, to treat and improve surface water quality, before discharging to the River Griffeen. Proposed works to include wetland planting scheme to treat surface water while offering greater biodiversity to the surrounding area. Proposed new surface water piped links between the existing surface water system and the Integrated Constructed Wetlands and a new surface water outfall to the River Griffeen. Reprofiling of levels and small landscaping berms within the Park. All ancillary site development and landscaping works, including biodiverse planting, furniture, and pathways. The proposal has undergone Appropriate Assessment Screening under the Habitats Directive (92/43/EEC) and screening for Environmental Impact Assessment under the EIA Directive 2014/52/EU. The authority has concluded that there is no real likelihood of significant effects on the environment arising from the proposed development and a determination has been made that an Environmental Impact Assessment (EIA) is not required. Any person may, within 4 weeks from the date of publication of this notice, apply to An Bord Pleanála for a screening determination as to whether the development would be likely to have significant effects on the environment. Persons wishing to inspect drawings of the proposed development should contact the Planning Department by emailing planningdept@sdublincoco.ie or by phoning (01) 4149000. Due to Covid-19 restrictions, plans and particulars of the proposed development will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy, only by appointment, at County Hall, Tallaght, Dublin 24 during office hours from 5th November 2020 to 3rd December 2020. The plans are available online on the Council's Public Consultation Portal website, http://consult.sdublincoco.ie during the period from 5th November 2020 to 18th December 2020. Submissions and observations with respect to the proposed development dealing with the proper planning and sustainable development of the area in which the proposed development will be situated, may be made in writing up to 5.00pm on the 18th December 2020 and may be submitted either via: Online Submissions: http://consult.sdublincoco.ie or Post to: Senior Executive Officer, Environment, Water and Climate Change, South Dublin County Council, County Hall, Tallaght, Dublin 24 YNN5. NOTE: Please make your submission by one medium only. All submissions should include name and a contact address. It should be noted that the Freedom of Information Act, 1997 (as amended) applies to all records held by South Dublin County Council. South Dublin County Council's Personal Data Privacy Statements can be viewed at www.sdcc.ie and all personal data will be retained in line with statutory requirements.	Griffeen Valley Park, Lucan, Co. Dublin	Unregistered application	-	-	N

Appendix 21A. Table 2

Extant SID Permissions Granted or Pending Decision within Study Area between January 2016 - June 2021 (Source: ABP Online Database) - Indicative locations identified on Phase 2 Exclusion Summary Map in EIAR Appendix 21B.

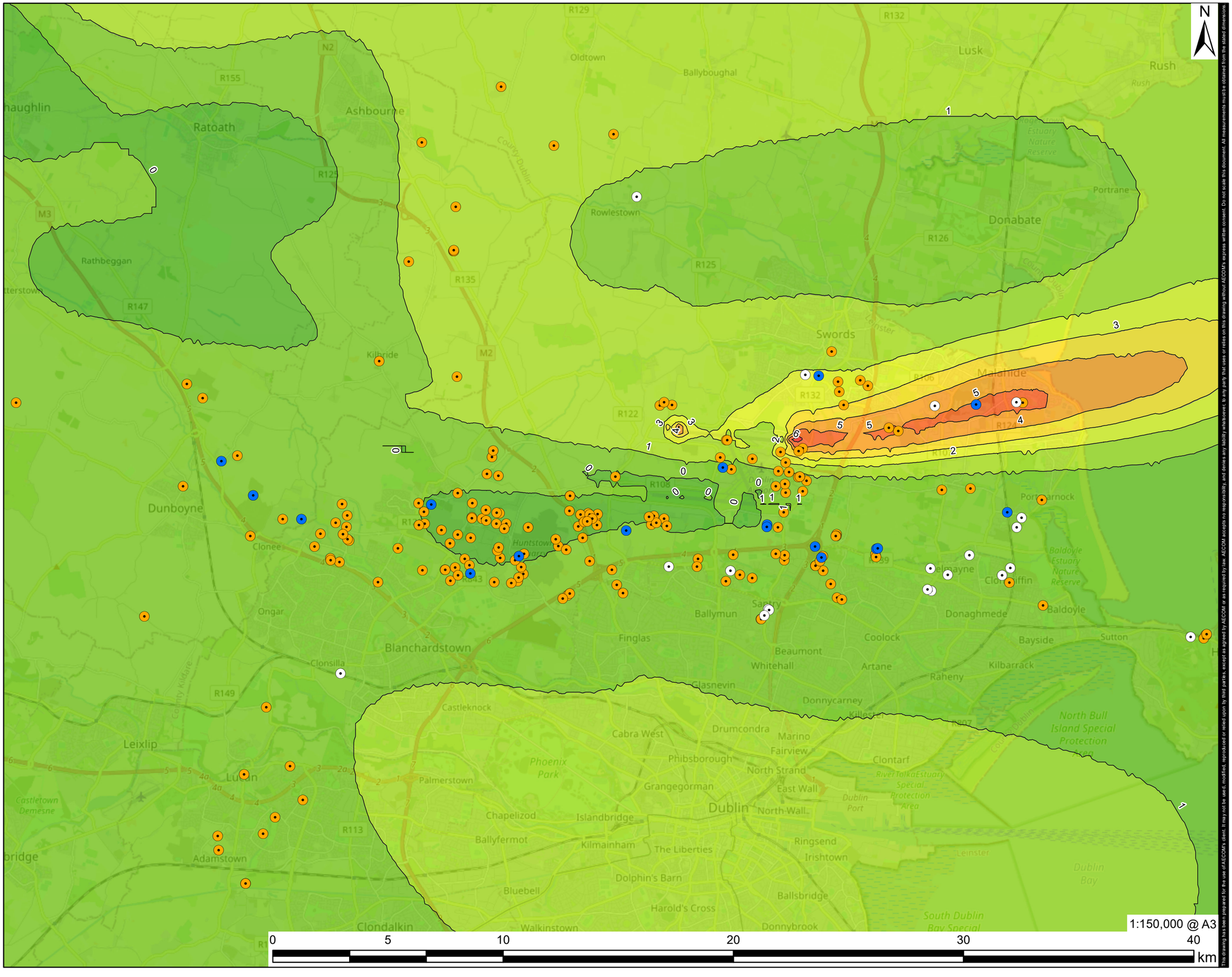
No.	Planning Authority	ABP Reg. Ref.	Development Address	Development Description	Decision	Grant Date	Included in Cumulative Effects Assessment: noise level difference 3dB or greater
1	ABP	JP06F.310145	Along existing R132 situated between Lissenhall Interchange and Pinnockhill Junction, to the east of Swords Town Centre, Co. Dublin	R132 Connectivity Project, to carry out road alteration works along the R132 at Sword, Co. Dublin	Case is due to be decided by 19/10/2021	N/A	N
2	ABP	PM06F.309684	Huntstown, Cloghran, Dublin Airport, Co. Dublin	to approved An Bord Pleanála case reference PL06F.PA0014 seeking to remove condition no. 5 allowing for the permanent retention of the existing surface radar and mast	Case is due to be decided by 13/07/2021	N/A	N
3	ABP	HC29N.309584	Dublin City and Greater Dublin Areas	BusConnects Dublin Core Bus Corridor Projects	Case is due to be decided by 06/07/2021	N/A	N
4	ABP	VA17.308130	Bracetown, Gunnocks, Paddingstown, County Meath	220kV substation with 2 underground transmission cables	Case is due to be decided by 30/07/2021	N/A	N
5	ABP	VA06F.307296	Blanchardstown Business and Technology Park, Snugborough Road, Blanchardstown, Dublin 15	Construction of a 2 storey 110kV Gas Insulated Switchgear (GIS) substation, underground cable and all associated and ancillary site works	Approve with conditions	06/11/2020	N
6	ABP	VA06F.306834	Townlands of Cruiserath, Goddamendy and Bay, Co. Dublin	transmission line and a 220kV gas insulated switchgear (GIS) substation along with associated and ancillary works.	Approve with conditions	09/10/2020	N
7	ABP	PM06F.307073	Located at Darndale and Belcamp, Dublin 17	Alternations to a permitted double circuit 110kV electricity transmission line development between substations	Alter decision - Not a material Alteration (No EIS)	04/06/2020	N
8	ABP	YA06F.304624	Malahide Demesne, Kilcrea, Newbridge Demesne, Donabate, Fingal, County Dublin	Greenway between Malahide Demesne and Newbridge Demesne to be known as 'Broadmeadow Way'.	Approve subject to conditions	19/05/2020	Y
9	ABP	CH06F.304883	townland of Maynetown, County Dublin	Construction of new wastewater pumping station and associated infrastructure	Objections withdrawn	03/12/2019	N
10	ABP	PA06F.301908	Townlands of Clonshagh, Dubber and Newtown, County Fingal and Dublin City	of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility	Grant Perm. w Conditions	11/11/2019	N
11	ABP	VA29N.303687	Former Diamond Innovations Site, Clonshaugh Business and Technology Park, Dublin 17	underground transmission line between the Belcamp 220kV and 110kV substation and the Darndale 110kV substation covering a distance of approximately two kilometres	Approve with Conditions	08/08/2019	N
12	ABP	PA06F.302651	Lands at Quickpark Car Park, Turnapin Great, Swords Road (Old Airport Road), Santry, Co. Dublin	existing long-term car park known as Quickpark, including construction of new entrance building with associated revised entrance layout resulting in 6,122 long-term car parking spaces, and all associated ancillary infrastructure and works.	Grant Perm. w Conditions	03/05/2019	N

13	ABP	VA17.301923	Townlands of Portan, Gunnocks and Clonee, Co. Meath	Construction of a new 220kV substation compound, associated underground 220kV cables and associated works to facilitate a new data centre campus.	Approve with Conditions	06/12/2018	N
14	ABP	PA06F.301458	Harristown, Silloge and Ballymun Townlands, South Parallel Road, Dublin Airport Co. Dublin and Stockhole, Cloghran, and Toberbunny Townlands, Dublin Airport, Co. Dublin	Permanent continuance of use of the 8,840 space long-term car park known as Holiday Blue on a site at Harristown, Silloge and Ballymun Townlands, South Parallel Road, Dublin Airport, Co. Dublin, that is currently used for the same purpose under and in accordance with temporary planning permission reg. ref PL06F.PA0022, and the 2,040 space long-term car park known as Express Red Zones Y and Z (Express Red) on a site at Stockdale, Cloghran, and Toberbunny Townlands, Dublin Airport, Co. Dublin that is currently used for the same purpose under and in accordance with temporary planning permission reg. ref:	Grant Perm. w Conditions	08/10/2018	N
15	ABP	VM17.301172	Clonee, Co. Meath	Request to alter previously approved 220kV substation compound and associated loop-in connection to the existing Corduff-Woodland No. 1 220kV overhead line, Clonee, Co. Meath (planning application reference number 17.VA0018). The proposed amendments relate to Outdoor Air Insulated Switchgear (AIS) equipment, Outdoor AIS equipment and associated site works.	Alter decision - Not a material Alteration (No EIS)	02/05/2018	N
16	ABP	PA06F.PA0048	Dublin 11	Facility of up to 170,000 tonnes per annum capacity at Millennium Business Park, Cappagh Road,	Private Development - Application	25/05/2017	N
17	ABP	VM06F.VM0011	Co. Dublin	Request to alter previously approved development of the Dublin North Fringe 220kV Reinforcement Project, (Application reference: 06F.VA0014),	Alter decision - Not a material Alteration (No EIS)	22/01/2016	N

Appendix 21B. Location of Planning Applications

Revision: Rev No. Drawn: DG Checked: SW Approved: CB Date: 12/07/2021

Filename: \\du-man-002.scottwilson.co.uk\Dublin-Jobs\GIS\60586397_DAA_ERA\GIS\02_Maps\Noise\Figure 3 2025 Lden Planning Applications.mxd



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AECOM

PROJECT

North Runway
Proposed Relevant Action

CLIENT

daa

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LEGEND

- SID Applications
- SHD Applications
- Regular Applications
- 2025 Proposed versus Permitted Scenario: Difference in Forecast Noise Contours (Lden)

dB(A)Lden

- -0.71
- 0
- 1
- 2
- 3
- 4
- 5
- 6

NOTES

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ISSUE PURPOSE

FINAL

PROJECT NUMBER

60586367

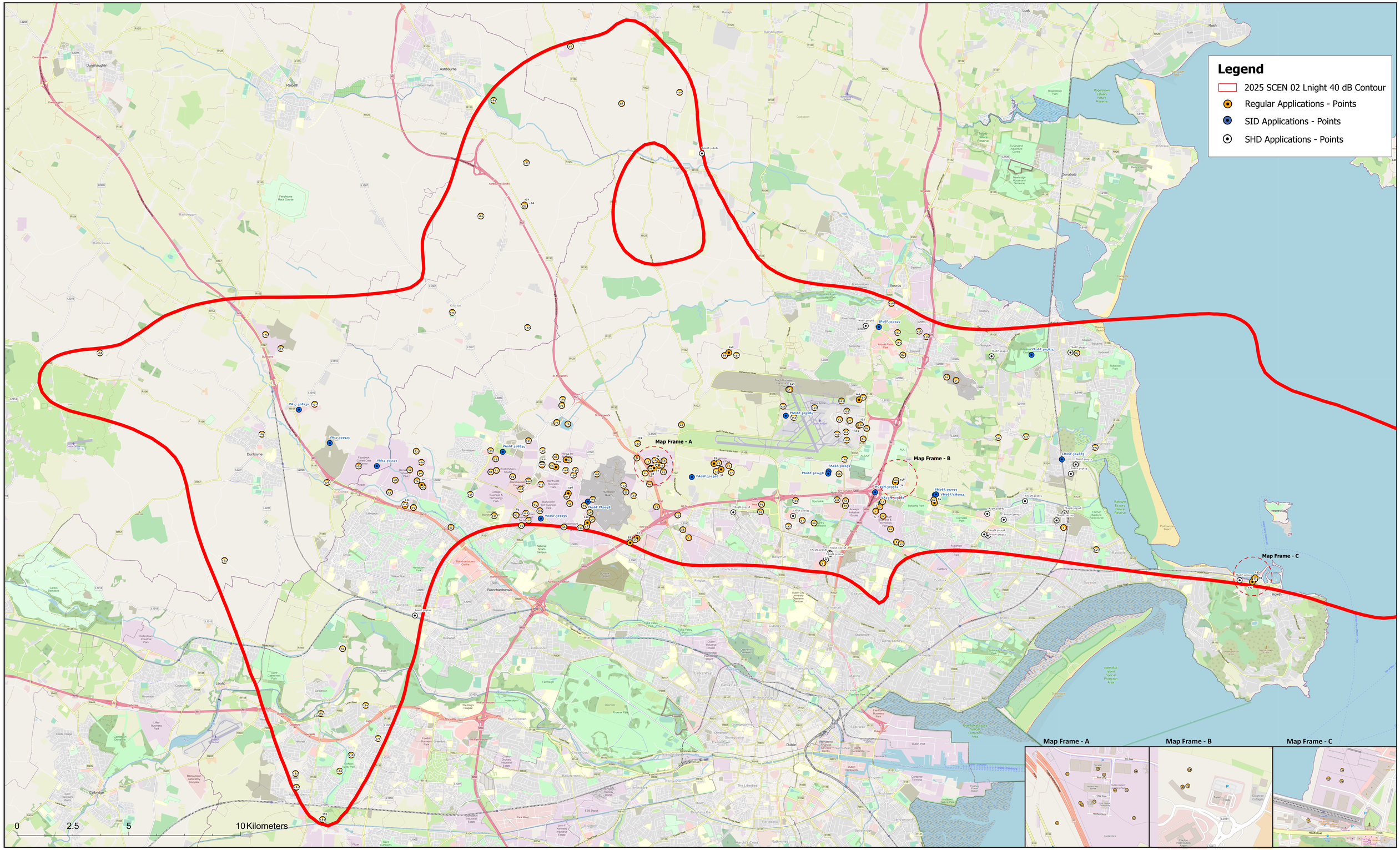
SHEET TITLE

2025 Proposed versus Permitted Scenario Difference in Forecast Noise Contours (Lden)

SHEET NUMBER

Figure 3

Phase 2 Exclusion Summary Map - Indicative Location of Potentially Significant Extant Developments (Permitted or Pending Decision) within 40dB Contour - January 2011 to June 2021



Survey Issue Date: 07 July 2021.

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