

Intermodal Logistics Park North Ltd

INTERMODAL LOGISTICS PARK NORTH (ILPN)

Intermodal Logistics Park North (IPLN) Strategic Rail Freight Interchange (SRFI)

Project reference TR510001

Preliminary Environmental Information Report (PEIR)

Appendix 9.3: Construction assessment data and results

October 2025

Planning Act 2008

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

This document forms a part of a Preliminary Environmental Information Report (PEIR) for the Intermodal Logistics Park North (ILPN) project.

A PEIR presents environmental information to assist consultees to form an informed view of the likely significant environmental effects of a proposed development and provide feedback.

This PEIR has been prepared by the project promoter, Intermodal Logistics Park North Ltd. The Proposed Development is described in Chapter 3 of the PEIR and is the subject of a public consultation.

Details of how to respond to the public consultation are provided at the end of Chapter 1 of the PEIR and on the project website:

<https://www.tritaxbigbox.co.uk/our-spaces/intermodal-logistics-park-north/>

This feedback will be taken into account by Intermodal Logistics Park North Ltd in the preparation of its application for a Development Consent Order for the project.

Appendix 9.3 ◆ Modelling Methodology

NOISE INPUTS

- The construction plant used for each works activity is listed in the following tables, together with relevant noise levels and other relevant information including quantity and % on-time
- The different source noise levels listed for each activity have been summed to calculate a single activity source noise level
- Each activity source has been modelled in a suitable location representing a reasonable worst-case in terms of distance from each relevant receptor based on the locations/extent of the relevant activity
- The activity source has been modelled at a height of 1.5 m above local ground level, except in the case of the building construction activity, which has been modelled 3 m below the maximum ridge height as stated on the parameters plan
- The model takes into account topography, ground type, screening and distance
- It has been assumed that main site earthworks are complete (e.g., bunding is in place etc) for all activities except “On Site Infrastructure – Earthworks” and “On Site Infrastructure – Estate Roads”)
- No development buildings have been assumed to be in place for any of the results (which may provide additional screening of the construction sources)
- The ground factor is set to 0.5.

Table 9.1 Construction plant data

Activity	Plant Item	Quantity	On-time %	BS 5228-1 Ref.	LpA at 10 m
On Site Infrastructure – Earthworks	70T tracked excavator	2	90%	C2.14	79
	40T tracked excavator	3	90%	C2.14	79

Activity	Plant Item	Quantity	On-time %	BS 5228-1 Ref.	LpA at 10 m
	30T tracked excavator	5	90%	C2.16	75
	30T articulated dumper	15	90%	C4.1	81
	18T tracked dozer	8	90%	C2.12	81
	20T single drum roller	6	90%	C2.37	79
	Tractor	2	40%	C4.04 +10 dB	86
	Road paver	1	60%	C5.31	77
	Tractor and bowser	1	50%	C4.04 +10 dB	86
On Site Infrastructure – Estate Roads	30T excavator	4	80%	C6.8	80
	20T excavator	2	75%	C2.3	78
	5t excavator	2	50%	C4.67	74
	3t excavator	1	59%	C3.20	68
	30T dump truck	2	50%	C8.16	81
	5T dumper	2	75%	C4.7	78
	3t dumper	3	50%	C4.9	77
	Self-propelled roller	1	25%	C5.26	77

Activity	Plant Item	Quantity	On-time %	BS 5228-1 Ref.	LpA at 10 m
	Self-propelled roller	2	35%	C5.27	67
	Dozer	1	25%	C8.7	75
	Tractor	1	25%	C4.74	80
	Road roller	2	25%	C5.29	82
	Road paver	1	25%	C5.33	75
	Asphalt spreader	1	25%	C5.31	77
	Road sweeper	1	50%	C4.90	76
Building Units - Unit Earthworks	40T excavator	3	90%	C2.14	79
	20T excavator	3	75%	C2.3	78
	5T excavator	1	25%	C4.67	74
	29T dump truck	13	90%	C2.30	79
	Self-propelled roller	7	90%	C5.26	77
	Dozer	7	75%	C8.7	75
	Tractor	4	25%	C4.74	80
	Road sweeper	1	50%	C4.90	76

Activity	Plant Item	Quantity	On-time %	BS 5228-1 Ref.	LpA at 10 m
Building Units - Unit Foundations	Excavator	1	50%	C4.10	66
	Truck mixer with pump	1	30%	C4.28	75
	Compressor	1	60%	C5.5	66
	Poker Vibrator	2	30%	C4.34	69
	Dump truck	1	40%	C4.4	76
	Vibratory Compactor	1	30%	C5.20	75
Building Units - Unit Construction	Lorry Unloading	2	10%	C2.34	80
	Dump Truck	1	40%	C4.4	76
	Forklift truck	1	60%	Vanguardia Library	68
	Concrete Pump	1	10%	C3.25	78
	Mobile Crane	2	25%	C3.28	67
	Wheeled Loader	1	40%	C4.13	71
	MEWP	3	50%	C4.57	67

NOISE RESULTS**Table 9.2 Predictions of construction noise from on-site infrastructure earthworks and comparison to LOAEL/SOAEL assessment thresholds (core hours)**

Name	Predicted construction noise level (dB L_{Aeq,T} façade)	Significance
R01 Highfield Farm GF South	58	No
R01 Highfield Farm GF West	57	No
R02 465 Newton Rd GF	56	No
R03 The Orchard Parkside Road GF East	67	No
R03 The Orchard Parkside Road GF South	67	No
R04 Rosemary Drive GF South	67	No
R05 Banastre Drive GF East	72	No
R06 12 Whitefield Ave WA128BY GF	68	No
R07 59 Winwick Rd WA128DB GF	64	No
R08 Monk House Parkside Rd WA28ST GF	65	No
R09 The Cottage Parkside Rd GF	58	No
R10 Hermitage Green	53	No
R11 Hilbre Winwick Road GF	68	No
R12 Hill Crest Winwick Road GF	68	No

Name	Predicted construction noise level (dB L _{Aeq,T} façade)	Significance
R13 Hollow Dene Crest Winwick Road GF	70	No
R14 Sherbrooke Crest Winwick Road GF	71	No
R15 Over Back Farm Crest Winwick Road GF	70	No
R16 Over Back Cottage Crest Winwick Road GF	65	No
R17 Sandy Brow Lane GF	60	No
R18 Rock House Sandy Brow Lane GF	54	No
R19 The Lodge Sandy Brow Lane GF	59	No
R20 Carringtons Coffee Co Winwick Lane GF South	64	No
R20 Carringtons Coffee Co Winwick Lane GF West	63	No
R21 Kenyon Hall Farm South Winwick Lane GF South	67	No
R21 Kenyon Hall Farm South Winwick Lane GF West	68	No
R22 Kenyon Hall Farm North Winwick Lane GF	61	No
R23 Morris's Farm Main Lane GF	66	No
R24 10 Main Lane GF	60	No

Name	Predicted construction noise level (dB L _{Aeq,T} façade)	Significance
R25 Home Main Lane GF	56	No
R26 High Peak Residential & Nursing Home Main Lane GF	55	No
R27 49 Kenyon Lane GF	50	No
R28 345 Newton Rd GF	55	No

Table 9.3 Predictions of construction noise from on-site infrastructure earthworks and comparison to LOAEL/SOAEL assessment thresholds (core hours)

Receptor	Predicted construction vibration level from vibratory compaction	
	VDV ^a m/s ^{1.75}	PPV ^b mm/s
R16 Over Back Cottage Crest Winwick Road (distance 50m)	0.21	1.08
<i>a Predictions include correction for potential amplification at upper floors, and incorporate assumed used of plant over day (e.g., on-time, area covered etc).</i> <i>b Predictions at foundation level.</i>		