

Rampion 2 Wind Farm

Category 8: Examination Documents

Review of IEMA Guidelines on Environmental Assessment of Traffic and Movement

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1. Introduction

1.1 Overview

- 1.1.1 This Technical Note (TN) has been prepared and submitted at Deadline 2 to provide a review of the conclusions of the **Chapter 23: Transport, Volume 2** of the Environmental Statement (ES) **[APP-064]** and **Chapter 32: ES Addendum, Volume 2** of the ES **[REP1-006]**, against the Institute of Environmental Management and Assessment (IEMA) Guidelines: ‘*Environmental Assessment of Traffic and Movement*’ (EATM 2023) (IEMA, 2023). This TN has been prepared in response to Action point 8 from Issue Specific Hearing 1: *Note to be provided on the principal differences between the 1993 and 2023 Institute of Environmental Management’s Traffic Assessment Guidance documents and whether there would be difference in the outcome of the assessment if the latter was used.*
- 1.1.2 This new IEMA guidance supersedes the ‘*Guidelines for the Environmental Assessment of Road Traffic*’ (GEART 1993), that was originally used to assess the effects in the **Chapter 23: Transport, Volume 2** of the ES **[APP-064]** and **Chapter 32: ES Addendum, Volume 2** of the ES **[REP1-006]**.
- 1.1.3 This TN complements the work completed by the Applicant since submission of the Development Consent Order (DCO) Application for Rampion 2 Offshore Wind Farm (the ‘Proposed Development’), whilst also providing a robust assessment of effects.

1.2 Comparison of GEART 1993 and EATM 2023

- 1.2.1 To inform this TN, the Applicant has completed a review of the current EATM 2023 guidelines against the now superseded GEART 1993. In completing this review, the following statement from the EATM 2023 guidelines should be noted:

“The core tenets of the methodology provide in the 1993 Guidelines have been validated by cross-examination of expert witnesses in contested cases over the years and are therefore a testament to the original quality of the working group and their guidance.”

- 1.2.2 And in relation to the EATM 2023:

“The 2023 publication.... updates and replaces the 1993 Guidelines to meet current regulations processes, and latest guidance in environmental assessment, while retaining elements of the 1993 Guidelines that are still considered relevant.”

- 1.2.3 The EATM 2023 guidelines therefore do not represent a complete overhaul of GEART 1993 and instead provides updates or refinement to recommended assessment methodologies where appropriate.

Affected parties and sensitive receptors

- 1.2.4 The guidance on the consideration of sensitive receptors is broadly similar between GEART 1993 and EATM 2023 with the following interest groups included for consideration in the 2023 guidance:
- People at home;
 - People at work;
 - Sensitive and / or vulnerable groups;
 - Locations with concentrations of vulnerable users;
 - Retail areas;
 - Recreational areas;
 - Tourist attractions;
 - Collision clusters and routes with road safety concerns; and
 - Junctions and highways links at (or over) capacity.
- 1.2.5 When reviewing this list against Table 23-10 of **Chapter 23: Transport, Volume 2** of the ES **[APP-064]**, noting that pedestrians and cyclists can be considered across almost all identified receptors, the only difference is the inclusion of 'collision clusters and routes with road safety concerns'. This is therefore considered in more detail in **Section 3** of this TN.

Scope of Assessment

- 1.2.6 Both GEART 1993 and EATM 2023 provide the following criteria to assist in determining the extent of environmental assessment, based on predicted traffic flow increases of the Proposed Development:
- Rule 1: Include highway links where traffic flows will increase by more than 30% (or the total number of heavy good vehicles will increase by more than 30%).
 - Rule 2: Include highway links of high sensitivity where traffic flows have increased by 10% or more.
- 1.2.7 These screening rules were applied in **Chapter 23: Transport, Volume 2** of the ES **[APP-064]** and **Chapter 32: ES Addendum, Volume 2** of the ES **[REP1-006]** as a starting point, noting all high links rated as having either medium or high sensitivity were included for detailed assessment where traffic flows increased by 10% or more.
- 1.2.8 Further the provision of these screening rules the EATM 2023 guidance also states in paragraph 2.17 that it may not be appropriate to use this criteria for the assessment of air quality, noise, driver delay and road safety. Focusing on the topics contained within **Chapter 23: Transport, Volume 2** of the ES **[APP-064]** and **Chapter 32: ES Addendum, Volume 2** of the ES **[REP1-006]** and specifically driver delay, the Applicant notes the extensive scoping discussions completed with West Sussex County Council and National Highways prior to submission of the

DCO application. This included agreement that **Appendix 23.2: Traffic Generation Technical Note, Volume 4** of the ES [REP1-008] provided an appropriate level of assessment that was proportionate to the volume of traffic predicted to be generated by the Proposed Development (paragraph 23.3.24 of **Chapter 23: Transport, Volume 2** of the ES [APP-064]).

1.2.9 Further assessment of road safety is provided in **Section 2** of this TN.

Assessment methodology

- 1.2.10 Following a review of GEART 1993 and EATM 2023 the Applicant confirms that the following three assessment criteria required further review alongside the IEMA 2023 guidance: collisions and road safety and fear and intimidation.
- 1.2.11 For the methodology of other assessment criteria as seen in **Table 1-1**, such as severance, the Applicant considers that there have been minimal changes to the assessment of these criteria in the new IEMA guidance and the assessment remains unchanged.

Table 1-1 Summary of key changes between the GEART 1993 and IEMA 2023 guidance

IEMA GEART 1993 Table 2.1	IEMA EATM 2023 Paragraph 3.3	Comment
Noise (night time)	N/A	EATM 4.18-31 refers other ES guidelines for the assessment of Noise
Vibration	N/A	EATM 4.32-37 refers other ES guidelines for the assessment of Vibration
Severance	Severance of communities	Essentially unchanged
Driver delay	Road vehicle driver and passenger delay	Essentially unchanged
Pedestrian delay	Non-motorised user delay	Includes cyclists and equestrians but assessment methodology essentially unchanged
Pedestrian amenity	Non-motorised amenity	Includes cyclists and equestrians but assessment methodology essentially unchanged
	Fear and intimidation on and by road users	New assessment methodology provided
Collisions and safety	Road user and pedestrian safety	Further guidance provided on completion of detailed assessments

IEMA GEART 1993 Table 2.1	IEMA EATM 2023 Paragraph 3.3	Comment
Hazardous loads	Hazardous/large loads	Essentially unchanged
Air pollution	N/A	EATM 4.4-17 refers other ES guidelines for the assessment of Air Quality
Dust and dirt	N/A	

1.2.12 Further consideration of the changes in impact methodology summarised in **Table 1-1** is provided in **Section 2** for collisions and safety, fear and intimidation, and hazardous loads.

2. Methodology for ES assessment

2.1 Fear and Intimidation

Introduction

- 2.1.1 **Table 2-1** provides a comparison of the environmental assessment methodology between GEART 1993 and EATM 2023 guidance. The Applicant in **Chapter 23: Transport, Volume 2** of the ES [APP-064] and in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] has completed the environmental assessment for fear and intimidation based on GEART 1993 guidance.

Table 2-1 Fear and intimidation: GEART 1993 guidance and EATM 2023 guidance

GEART 1993	EATM 2023
<p>The ES magnitude has been set based on general level of pedestrian activity, visibility and physical conditions such as traffic flow, traffic composition, crossing points and pavement width / separation from traffic.</p> <p>The assessment carried out in Chapter 23: Transport, Volume 2 of the ES [APP-064] has concluded that there is no significant effect associated with fear and intimidation but Chapter 32: ES Addendum, Volume 2 of the ES [REP1-006] identified significant effects associated with fear and intimidation on Michelgrove Lane and Kent Street.</p>	<p>The 2023 update to the guidance suggests a new assessment approach which involves the calculation of a degree of hazard score based on 18-hour flows and average vehicle speeds. A magnitude of impact can then be determined based on the degree of hazard score.</p>

IEMA 2023 Guidance

- 2.1.2 The EATM 2023 guidelines suggest thresholds based on 18-hour daily flow and vehicle speeds, as shown in **Table 2-2**.

Table 2-2 Fear and Intimidation Thresholds

Average Traffic Flow over 18-hour day (vehicles/hr two-way)	Total 18-hour HGV Flow	Average vehicle speed over 18-hour day (miles/hour)	Degree of hazard score
+1,800	+3,000	>40	30

Average Traffic Flow over 18-hour day (vehicles/hr two-way)	Total 18-hour HGV Flow	Average vehicle speed over 18-hour day (miles/hour)	Degree of hazard score
1,200-1,800	2,000-3,000	30-40	20
600-1,200	1,000-2,000	20-30	10
<600	<1,000	<20	0

2.1.3 The thresholds in **Table 2-2** define the degree of hazard to pedestrians by average traffic flow, 18-hour HGV flow and average vehicle speed over an 18-hour day in miles/hour. The total score from all three elements is combined to provide a ‘level’ of fear and intimidation for all three elements, as seen in the example **Table 2-3**.

Table 2-3 Levels of Fear and Intimidation

Level of fear and intimidation	Combined hazard score
Extreme	+71
Great	41-70
Moderate	21-40
Small	<20

2.1.4 The magnitude of impact is approximated with reference to the changes in the level of fear and intimidation from baseline conditions (**Table 2-4**).

Table 2-4 Magnitude of change for levels of fear and intimidation

Magnitude of impact	Change in step/traffic flows (AADT) from baseline conditions
High	Two step changes in levels
Medium	One step change in level, but with: <ul style="list-style-type: none"> • >400 veh increase in average 18hr AV two-way all vehicle flow; and/or • >500 HV increase in total 18hr HV flow
Low	One step change in level, with: <ul style="list-style-type: none"> • <400 veh increase in average 18hr AV two-way all vehicle flow; and/or • <500 HV increase in total 18hr HV flow
Negligible	No change in step changes

Conclusion

- 2.1.5 The Applicant has carried out an assessment of the Highway Links in the future assessment year and the future assessment year plus construction (peak week) using the new EATM 2023 guidance, as a test to compare results against the outputs obtained using GEART 1993 guidance contained within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006]. This new assessment is contained in **Section 3.2**.

2.2 Road Safety

Introduction

- 2.2.1 **Table 2-5** provides a comparison of the environmental assessment methodology between GEART 1993 and EATM 2023 guidance. The Applicant in the **Chapter 23: Transport, Volume 2** of the ES [APP-064] and in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] has completed the environmental assessment for collisions and road safety based on GEART 1993 guidance.

Table 2-5 Collisions and road safety: GEART 1993 guidance and EATM 2023 guidance

GEART 1993	EATM 2023
<p>The guidance states that assessment of existing link road accidents rates can be obtained from Highway Authority records or national statistics, with an assessment then completed on the anticipated increase in vehicle-kms for different classes of road. This provides a statistical assessment of the potential increase or decrease in accidents as a result of a development, noting that professional judgement should also be applied in relation to local circumstances or other factors that may alter the risk of accidents on a link.</p>	<p>The 2023 guidance notes that calculation of collision rates is still relevant to scale an assessment but that it is common for stakeholders to request a collision cluster assessment.</p> <p>In relation to such, the use of a ‘Safe System’ could be used which:</p> <ul style="list-style-type: none"> • Identifies the study area using historic crash data • Undertakes evidence led assessment of establish baseline road safety levels where impact thresholds are exceeded for motorised on non-motorised users. • Assess the impacts of additional development traffic for all users. <p>The guidance also notes that Road Safety Audits should be used to review safety attributes of any proposed engineering changes to the adopted highway.</p>

- 2.2.2 Personal Injury Collision data for 2017-2021 has been analysed across the study area comprised of all roads in which onshore construction, decommissioning, or operation and maintenance phase traffic will travel. Collision rates for each section of road (i.e. A272 between A281 and A23) have been analysed in line with national rates as seen in Table 2-3 and the associated paragraphs 2.2.40-2.2.43 within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006].
- 2.2.3 In addition, within 500m either side of every access point, collisions recorded between 2017-2022 have been identified in Table 2-5 within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006]. The collisions which caused serious or fatal injuries have then been analysed in more detail to try to understand the causal factors and any patterns as outlines in paragraphs 2.2.48-2.2.109 within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006].
- 2.2.4 The magnitude of change has been determined within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] based on professional judgement, considering the general level of pedestrian activity, visibility and physical conditions such as traffic flow, traffic composition, crossing points and pavement width/separation from traffic. A summary of personal injury collision (PIC) history is available in Section 2.2 'Existing Collision Record' within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006].
- 2.2.5 The assessment carried out in **Chapter 23: Transport, Volume 2** of the ES [APP-064] and in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] has concluded that there is no significant effect on collisions and road safety.

Road Safety Audits (RSA)

- 2.2.6 The Applicant is currently preparing preliminary designs for proposed access junctions to the temporary construction compounds and Oakendene substation. Each of these junction designs will be subject to an independent Road Safety Audit prior to submission to West Sussex County Council. The aim is to reach agreement in principle on the layout and / or traffic management strategy of each of these access junctions prior to the end of the Examination.

Conclusion

- 2.2.7 The assessments completed within **Chapter 23: Transport, Volume 2** of the ES [APP-064] and in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] included an assessment of collision rates for links within the study area and a detailed assessment of accidents within the vicinity of all proposed access junctions. This therefore provides an assessment of the impact of the proposed development at a study area level whilst also focusing in more detail on locations where traffic generated by the proposed development will be at its highest. The Applicant, as requested by National Highways and West Sussex Highways in their role of strategic and local highway authority, will also complete road safety audits at key construction access junctions where engineering changes are proposed for the highway network prior to the end of the DCO Examination.
- 2.2.8 The Applicant therefore concludes that further assessment of road safety is not required and that the conclusions of **Chapter 23: Transport, Volume 2** of the ES

[APP-064] and in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] remain valid.

2.3 Hazardous Loads

Introduction

2.3.1 **Table 2-6** provides a comparison of the environmental assessment methodology between GEART 1993 and EATM 2023 guidance.

Table 2-6 Comparison of the environmental assessment methodology between GEART 1993 and EATM 2023 guidance

GEART 1993	EATM 2023
<p>The ES needs to clearly outline the estimated number and composition of abnormal loads. Where the number of movements is considered to be significant a statement should be produced to assess the potential for an accident to happen and the likely effect of such an event.</p>	<p>The estimated number of such loads must be outlined. Where the number of vehicles/movements carrying loads is considered to be significant, the assessment should include a risk or catastrophe analysis.</p>

Conclusion

2.3.2 As agreed within the Planning Inspectorate’s Scoping Opinion (2020a) (Response 5.6.1) in Table 23-3 of **Chapter 23: Transport, Volume 2** of the ES [APP-064], no hazardous loads are expected as part of the Proposed Development and have been scoped out of the assessment. Owing to no hazardous load deliveries it is considered that the effect is neutral and not significant in both the construction, operation and maintenance and decommissioning phases.

3. Significance of effect based on EATM 2023

3.1 Introduction

3.1.1 This section provides an assessment of highway links contained taken forward for detailed assessment in **Chapter 23: Transport, Volume 2** of the ES [APP-064] and in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006]. This is based upon the screening rules of assessment summarised in **Section 1.2**.

3.1.2 As noted within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] the highway links that require detailed environmental assessment based on the total construction traffic peak week screening method are as follows:

- Highway Link 12 – A27 High Salvington (**Rule 2**);
- M – A281, High Steet, Henfield (**Rule 2**); and
- P – Michelgrove Lane (**Rule 1**); and
- U – Kent Street (**Rule 2**).

3.1.3 As a sensitivity test, the HGV peak week also identified within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] showed the following receptors as requiring assessment as follows, noting some receptors appear in both:

- Highway Link 12 – A27 High Salvington (**Rule 2**);
- Highway Link 18 – B2135, South of Ashurst (**Rule 1**);
- Highway Link 22 – A281, South Shermanbury (**Rule 2**);
- Highway Link 26 – Wineham Lane, South of A272 (**Rule 1**);
- F – A272, Cowfold Road West of the A23 (**Rule 2**);
- M – A281, High Steet, Henfield (**Rule 2**);
- P – Michelgrove Lane (**Rule 2**); and
- U – Kent Street (**Rule 2**).

3.1.4 The section will summarise the effects on fear and intimidation on the above highway links.

3.2 Fear and Intimidation

Highway Link 12 – A27 High Salvington

3.2.1 For Highway Link 12, the total hazard score is 50 across both 2026 future assessment year and 2026 future assessment year with the Proposed

Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-1**, **Table 3-2** and **Table 3-3**.

Table 3-1 Test assessment of Highway Link 12 in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	Future Year of Assessment	18-hour daily flows				Speed (85 th %) mph	Total Hazard Score	
			Peak Development Traffic		Future Year + Development Peak				
			Total	HGV	Total	HGV			Total
12	A27 High Salvington	24426	890	130	97	24555	987	30	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	20	50
Future Baseline + Development Score		-	-	N/A	N/A	30	0	20	50

Table 3-2 Test assessment of Highway Link 12 in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	Future Year of Assessment	18-hour daily flows				Speed (85 th %) mph	Total Hazard Score	
			Peak Development Traffic		Future Year + Development Peak				
			Total	HGV	Total	HGV			Total
12	A27 High Salvington	24426	890	131	97	24557	986	30	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	20	50
Future Baseline + Development Score		-	-	N/A	N/A	30	0	20	50

Table 3-3 Significance of effect Highway Link 12 in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
12	A27 High Salvington	Negligible	Medium	Negligible (Not Significant)

- 3.2.2 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.
- 3.2.3 The assessment using GEART 1993 Guidance in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Negligible** and the significance of residual effect on fear and intimidation was **Negligible (Not Significant)**.
- 3.2.4 The Applicant concludes that there is not a material change to the outputs for the assessment of fear and intimidation and that the effect on fear and intimidation remains **Not Significant**.

Highway Link 18 – B2135, South of Ashurst

- 3.2.5 For Highway Link 18, the total hazard score is 60 across both 2026 future assessment year and 2026 future assessment year with the Proposed Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-4, Table 3-5 and Table 3-6**.

Table 3-4 Test assessment of Highway Link 18 in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	Future Year of Assessment	18-hour daily flows				Speed (85 th %) mph	Total Hazard Score		
			Peak Development Traffic		Future Year + Development Peak					
			Total	HGV	Total	HGV			Total	HGV
18	B2135, South of Ashurst		3835	116	46	40	3881	156	48	N/A
Future Baseline Score			30	0	N/A	N/A	-	-	30	60
Future Baseline + Development Score			-	-	N/A	N/A	30	0	30	60

Table 3-5 Test assessment of Highway Link 18 in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	Future Year of Assessment	18-hour daily flows				Speed (85 th %) mph	Total Hazard Score		
			Peak Development Traffic		Future Year + Development Peak					
			Total	HGV	Total	HGV			Total	HGV
18	B2135, South of Ashurst		3778	113	68	28	3846	141	48	N/A
Future Baseline Score			30	0	N/A	N/A	-	-	30	60
Future Baseline + Development Score			-	-	N/A	N/A	30	0	30	60

Table 3-6 Significance of effect Highway Link 18 in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
18	B2135, South of Ashurst	Negligible	Low	Negligible (Not Significant)

- 3.2.6 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.
- 3.2.7 The assessment using GEART 1993 Guidance included in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Negligible** and the significance of residual effect on fear and intimidation was **Negligible (Not Significant)**.
- 3.2.8 The Applicant concludes that there is not a material change to the outputs for the assessment of fear and intimidation and that the effect on fear and intimidation remains **Not Significant**.

Highway Link 22 – A281, South Shermanbury

- 3.2.9 For Highway Link 22, the total hazard score is 60 across both 2026 future assessment year and 2026 future assessment year with the Proposed Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-7, Table 3-8, and Table 3-9**.

Table 3-7 Test assessment of Highway Link 22 in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
22	A281, South Shermanbury	8629	365	69	2	8698	367	40	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	30	60
Future Baseline + Development Score		-	-	N/A	N/A	30	0	30	60

Table 3-8 Test assessment of Highway Link 22 in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
22	A281, South Shermanbury	8758	376	53	48	8811	425	40	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	30	60
Future Baseline + Development Score		-	-	N/A	N/A	30	0	30	60

Table 3-9 Significance of effect Highway Link 22 in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
22	A281, South Shermanbury	Negligible	Medium	Negligible (Not Significant)

- 3.2.10 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.
- 3.2.11 The assessment using GEART 1993 Guidance included in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Negligible** and the significance of residual effect on fear and intimidation was **Negligible (Not Significant)**.
- 3.2.12 The Applicant concludes that there is not a material change to the outputs for the assessment of fear and intimidation and that the effect on fear and intimidation remains **Not Significant**.

Highway Link 26 – Wineham Lane, South of the A272

- 3.2.13 For Highway Link 26, the total hazard score is 40 across both 2026 future assessment year and 2026 future assessment year with the Proposed Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-10, Table 3-11, and Table 3-12**.

Table 3-10 Test assessment of Highway Link 26 in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	18-hour daily flows						Speed (85 ^{tho} %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
26	Wineham Lane, South of the A272	915	15	69	0	984	15	60	N/A
Future Baseline Score		10	0	N/A	N/A	-	-	30	40
Future Baseline + Development Score		-	-	N/A	N/A	10	0	30	40

Table 3-11 Test assessment of Highway Link 26 in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	18-hour daily flows						Speed (85 ^{tho} %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
26	Wineham Lane, South of the A272	922	16	67	41	988	57	60	N/A
Future Baseline Score		10	0	N/A	N/A	-	-	30	40
Future Baseline + Development Score		-	-	N/A	N/A	10	0	30	40

Table 3-12 Significance of effect Highway Link 26 in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
26	Wineham Lane, South of the A272	Negligible	Low	Negligible (Not Significant)

- 3.2.14 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.
- 3.2.15 The assessment using GEART 1993 Guidance included in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Negligible** and the significance of residual effect on fear and intimidation was **Negligible (Not Significant)**.
- 3.2.16 The Applicant concludes that there is not a material change to the outputs for the assessment of fear and intimidation and that the effect on fear and intimidation remains **Not Significant**.

Highway Link F – A272 Cowfold Road West of the A23

- 3.2.17 For Highway Link F, the total hazard score is 60 across both 2026 future assessment year and 2026 future assessment year with the Proposed Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-13, Table 3-14, and Table 3-15**.

Table 3-13 Test assessment of Highway Link F in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
F	A272 Cowfold Road West of the A23	18112	698	197	49	18974	833	60	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	30	60
Future Baseline + Development Score		-	-	N/A	N/A	30	0	30	60

Table 3-14 Test assessment of Highway Link F in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
F	A272 Cowfold Road West of the A23	18247	709	150	101	19067	898	60	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	30	60
Future Baseline + Development Score		-	-	N/A	N/A	30	0	30	60

Table 3-15 Significance of effect Highway Link F in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
F	A272 Cowfold Road West of the A23	Negligible	Medium	Negligible (Not Significant)

- 3.2.18 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.
- 3.2.19 The assessment using GEART 1993 Guidance included in **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Low** and the significance of residual effect on fear and intimidation was **Minor Adverse (Not Significant)**.
- 3.2.20 The Applicant concludes that there is not a material change to the outputs for the assessment of fear and intimidation and that the effect on fear and intimidation remains **Not Significant**.

Highway Link M – A281, High Steet, Henfield

- 3.2.21 For Highway Link M, the total hazard score is 40 across both 2026 future assessment year and 2026 future assessment year with the Proposed Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-16, Table 3-17 and Table 3-18**.

Table 3-16 Test assessment of Highway Link M in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
M	A281, High Steet, Henfield	8629	365	52	37	8780	409	30	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	10	40
Future Baseline + Development Score		-	-	N/A	N/A	30	0	10	40

Table 3-17 Test assessment of Highway Link M in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
M	A281, High Steet, Henfield	18247	709	150	101	19067	898	30	N/A
Future Baseline Score		30	0	N/A	N/A	-	-	10	40
Future Baseline + Development Score		-	-	N/A	N/A	30	0	10	40

Table 3-18 Significance of effect Highway Link M in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
M	A281, High Steet, Henfield	Negligible	Medium	Negligible (Not Significant)

- 3.2.22 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.
- 3.2.23 The assessment using GEART 1993 Guidance within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Low** and the significance of residual effect on fear and intimidation was **Minor Adverse (Not Significant)**.
- 3.2.24 The Applicant concludes that there is not a material change to the outputs for the assessment of fear and intimidation and that the effect on fear and intimidation remains **Not Significant**.

Highway Link P – Michelgrove Lane

- 3.2.25 As noted within paragraph 2.4.48 of **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] traffic survey information is not currently available for Michelgrove Lane. This means that it has been necessary to estimate the 85th percentile traffic speed on this link for assessment purposes. This has been estimated at 40mph noting the existing national speed limit that applies.
- 3.2.26 For Highway Link P, the total hazard score is 20 across both 2026 future assessment year and 2026 future assessment year with the Proposed Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-19**, **Table 3-20** and **Table 3-21**.

Table 3-19 Test assessment of Highway Link P in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
P	Michelgrove Lane	10	1	108	67	118	68	40	N/A
Future Baseline Score		0	0	N/A	N/A	-	-	20	20
Future Baseline + Development Score		-	-	N/A	N/A	0	0	20	20

Table 3-20 Test assessment of Highway Link P in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
P	Michelgrove Lane	10	1	100	91	110	92	40	N/A
Future Baseline Score		0	0	N/A	N/A	-	-	20	20
Future Baseline + Development Score		-	-	N/A	N/A	0	0	20	20

Table 3-21 Significance of effect Highway Link P in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
P	Michelgrove Lane	Negligible	High	Negligible (Not Significant)

- 3.2.27 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.
- 3.2.28 The assessment using GEART 1993 Guidance within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Low** and the significance of residual effect arising from fear and intimidation was **Moderate Adverse (Significant)**. The assessment of fear and intimidation based on the EATM 2023 guidance therefore represents a change from the conclusions of the ES, with a removal of a significant effect for Michelgrove Lane.

Highway Link U – Kent Street

- 3.2.29 As noted within paragraph 2.4.48 of **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] traffic survey information is not currently available for Kent Street. This means that it has been necessary to estimate the 85th percentile traffic speed on this link for assessment purposes. This has been estimated at 40mph noting the existing national speed limit that applies.
- 3.2.30 For Highway Link U, the total hazard score is 20 across both 2026 future assessment year and 2026 future assessment year with the Proposed Development construction traffic, which indicates that there is no change in the level of fear and intimidation from baseline conditions, and the magnitude of change is therefore negligible. Results of the test assessment for the calculations of the total hazard score are provided below in **Table 3-22, Table 3-23** and **Table 3-24**.

Table 3-22 Test assessment of Highway Link U in 2026 with and without the Proposed Development construction traffic – Total Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
U	Kent Street	100	10	35	0	135	10	40	N/A
Future Baseline Score		0	0	N/A	N/A	-	-	10	20
Future Baseline + Development Score		-	-	N/A	N/A	0	0	10	20

Table 3-23 Test assessment of Highway Link U in 2026 with and without the Proposed Development construction traffic – HGV Peak Week

Link ID	Location	18-hour daily flows						Speed (85 th %)	Total Hazard Score
		Future Year of Assessment		Peak Development Traffic		Future Year + Development Peak			
		Total	HGV	Total	HGV	Total	HGV		
U	Kent Street	100	10	32	28	132	38	40	N/A
Future Baseline Score		0	0	N/A	N/A	-	-	10	10
Future Baseline + Development Score		-	-	N/A	N/A	0	0	10	10

Table 3-24 Significance of effect Highway Link U in 2026 with and without the Proposed Development construction traffic

Link ID	Location	Magnitude of Change	Receptor Sensitivity	Significance of Evaluation
U	Kent Street	Negligible	High	Negligible (Not Significant)

3.2.31 The above test assessment concludes that the magnitude of change is **Negligible** and the significance of residual effect on fear and intimidation is **Negligible (Not Significant)** using the EATM 2023 Guidance.

3.2.32 The assessment using GEART 1993 Guidance within **Chapter 32: ES Addendum, Volume 2** of the ES [REP1-006] concluded that the magnitude of change was **Low** and the significance of residual effect on fear and intimidation was **Moderate Adverse (Significant)**. The assessment of fear and intimidation based on the EATM 2023 guidance therefore represents a change from the conclusions of the ES, with a removal of a significant effect for Kent Street.

4. Conclusion

- 4.1.1 This technical note provides an overview of the review undertaken to understand if application of the EATM 2023 guidance results in any changes to the significance of effects reported in **Chapter 23: Transport, Volume 2** of the ES [APP-064] and **Chapter 32: ES Addendum** of the ES [REP1-006] that was completed using the GEART 1993 guidelines.
- 4.1.2 The technical note has provided updated assessments of fear and intimidation only on the basis that all other assessment methodology remained similar between GEART 1993 or EATM 2023, assessments were already of a suitable standard or was scoped of assessment for **Chapter 23: Transport, Volume 2** of the ES [APP-064] and **Chapter 32: ES Addendum** of the ES [REP1-006].
- 4.1.3 No new significant environmental effects are identified as a result of these updated assessments, noting that the significant effects to pedestrian amenity identified within the **Chapter 32: ES Addendum** of the ES [REP1-006] on Michelgrove Lane and Kent Street should now also relate to cyclist and equestrian amenity. It should also be noted that use of the EATM 2023 guidance also removes the significant effects in relation to fear and intimidation identified within **Chapter 32: ES Addendum** of the ES [REP1-006] for Michelgrove Lane and Kent Street.
- 4.1.4 The Applicant therefore concludes that the Proposed Development is predicted to generate less harm than illustrated in **Chapter 32: ES Addendum** of the ES [REP1-006] when applying the EATM 2023 guidance.

5. References

Institute of Environmental Assessment (IEA), (1993). *Guidance Note 1 – Guidelines for the Environmental Assessment of Road Traffic*. IEA.

Institute of Environmental Management and Assessment, (2023). *Guidelines: Environmental Assessment of Traffic and Movement*. IEMA.

