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Our ref: **Additional Submission**

Your ref WW010003

26<sup>th</sup> March 2024

## **Anglian Water Services Limited – The Cambridge Waste Water Treatment Plant Relocation Project - WW010003 Additional Submission**

### **Application Ref: WW010003**

Dear Deborah,

Further to matters raised by the Examining Authority during Issue Specific Hearing 4 (ISH4), agenda item Traffic & Transport, please find enclosed additional submissions from Anglian Water Services Limited (the Applicant), which we wish the Examining Authority to consider accepting into the examination, at its discretion.

### **Independent Review and Updates to the Transport Assessment (TA) and ES Chapter 19 Traffic and Transport**

Following the matters raised in ISH4, the Applicant commissioned an independent review of the Transport Assessment (App Doc Ref 5.4.19.3) and the ES Chapter 19: Traffic and Transport (App Doc Ref 5.2.19) and the transport modelling and analysis underpinning those documents. In response to the findings of this review, the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) has been updated including revised traffic forecasts and junction modelling and ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) has been updated to reflect the updated TA.

### **New Document – Independent Transport Review Report**

A report describing the findings of the independent review, conducted by SLR Consulting Limited, has been prepared and is submitted alongside the updated documents in this submission (App Doc Ref 8.26).

### **Note on ISH4 T&T Agenda Item 9.11**

In relation to the Issue Specific Hearing (ISH4) T&T Agenda Item 9.11: Review of ISH3 Action Point 25, and ISH4 Action Point 50 concerning Shoulder Hours, an explanatory note is included

with this letter in Annex 1 and will be included as part of the Deadline 6 submission in response to actions from ISH4.

### **New Document – Issue Specific Hearing (ISH4) T&T Agenda Item 9**

In relation to the Issue Specific Hearing (ISH4) T&T Agenda Item 9 a note detailing identified issues, including those identified by ExA as examples of matters to amend, and how these are addressed has been included in Annex 2 and will be provided at Deadline 6.

### **List of Documents included as part of the Additional Submission**

To assist the ExA and Interested Parties in navigating the additional submissions and to highlight where documents have either been superseded or where new documents have been provided, the Applicant has provided a list of the documents included with a high level summary of the updates made. The Guide to the Application (App Doc Ref 1.3) will be updated and provided at Deadline 6.

<b>Document Title and Application Document Reference (and where relevant previous PINs ref)</b>	<b>Reason for the update</b>
Covering Letter, including Annex 1 'Shoulder Hours' Note	Shoulder Hours Note to address Issue Specific Hearing (ISH3) and ISH4 Action Point 50
Covering Letter, including Annex 2 'Issues with traffic modelling in the TA Part A' note	Sets out the issues identified and how they have been rectified.
5.2.19 Chapter 19 Traffic and Transport <i>Supersedes REP5-046</i>	Updated following ISH4 – further review and overall update, inclusion of table cross references to TA sections, correction to some table headers
5.4.19.3 Transport Assessment Part 1 <i>Supersedes REP5-071 &amp; 072</i>	Updated following ISH4 - further review and overall update incorporating outputs of updated modelling
5.4.19.3 Transport Assessment Part 3 <i>Supersedes REP5-075 &amp; 076</i>	Updated following ISH4 TA Part 3 - correction to broken table reference in one of the appendices. No tracked version has been provided as this is the only change to Part 3 of the TA.
5.4.19.5 Traffic Flow Diagrams <i>Supersedes AS-184</i>	Updated following ISH4 – Updates to traffic flow diagrams, addition of further flow diagrams relating to ES construction scenarios, addition of dividers with contents pages to assist with document navigation.

Document Title and Application Document Reference (and where relevant previous PINs ref)	Reason for the update
5.4.19.6 Junction Capacity Reports <i>Supersedes AS-185</i>	Updated following ISH4 - Updates junction model output, addition of dividers with contents pages to assist with document navigation.
8.26 Independent Review Report	New document.

### Updates to related documents to be provided at Deadline 6

#### ***Construction Traffic Management Plan (CTMP) (App Doc Ref 5.4.19.7)***

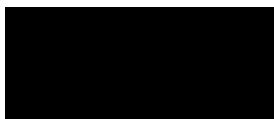
The CTMP has been updated to reflect the work undertaken on the Transport Assessment (App Doc Ref 5.4.19.3) and the ES Chapter 19 (App Doc Ref 5.2.19) (listed above), it has not been provided as part of the additional submission and will instead be provided at Deadline 6 in order to also reflect responses to the ExQ3s, ISH4 Action Points and submissions received at Deadline 5.

#### ***Operational Logistics Traffic Plan (OTLP) (App Doc Ref 5.4.19.10)***

The OTLP has been updated to reflect the work undertaken on the Transport Assessment (App Doc Ref 5.4.19.3) and the ES Chapter 19 (App Doc Ref 5.2.19) (listed above), it has not been provided as part of the additional submission and will instead be provide at Deadline 6 in order to also reflect any required amendments in relation to responses to the ExQ3s, ISH4 Action Points and submissions received at Deadline 5.

Should you have any questions please do not hesitate to contact me.

Yours sincerely



Karen Barclay

Head of Major Infrastructure Planning & Stakeholder Engagement



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## **Annex 1 Shoulder Hours Note**

## 1 Introduction

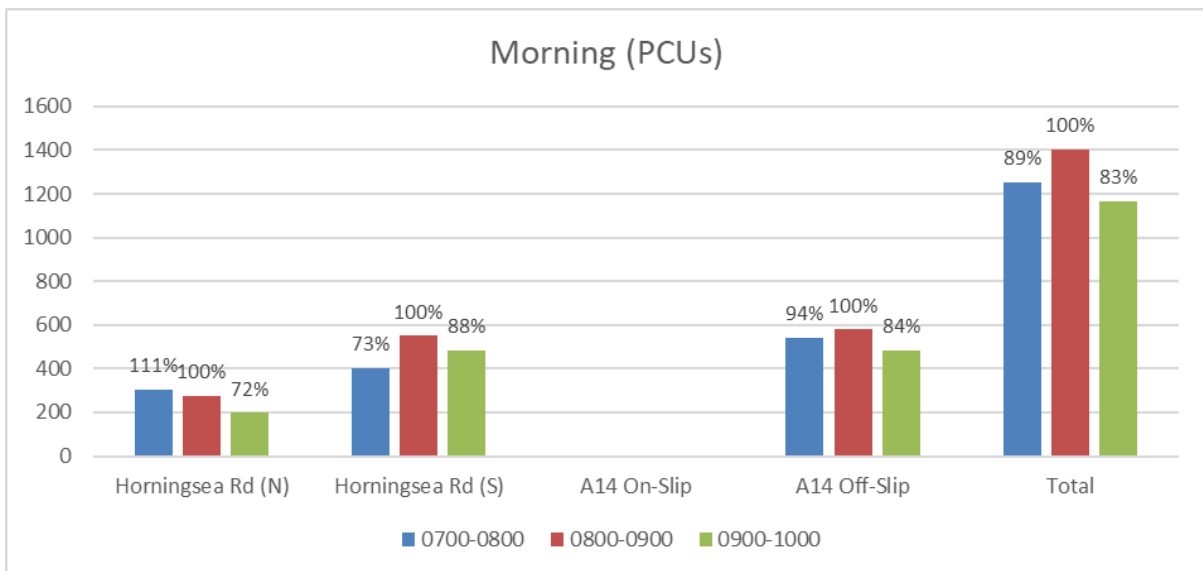
- 1.1.1 In Action Point 25 in the Action Points ISH3 [EV-007v], the Examining Authority (ExA) requested commentary for each arm of J34 to explain whether traffic during the shoulder hours during the AM and PM peak periods would exceed the threshold that was used to assess whether mitigation was needed during the peak hours assessed in the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP3-034] submitted at Examination Deadline 3.
- 1.1.2 As set out in the Applicant's responses to ExA Hearing Actions from ISH3 [REP4-087], following ISH3, the Applicant carried out a review of the Transport Assessment (App Doc Ref 5.4.19.3) and the Environmental Statement (ES) Chapter 19: Traffic and Transport (App Doc Ref 5.2.19) and associated supporting data, including the supporting transport modelling and analysis. This review highlighted a number of issues which need to be rectified, including an error that fed into the traffic modelling for junction 34 of the A14, which resulted in an over-estimation of background traffic flows on the Horningsea Road southbound (SB) approach to the junction, leading to an over-assessment of the level of congestion on affected junctions/road network. These issues were addressed and updated modelling and analysis was presented within Revision 5 of the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP5-071] submitted at Examination Deadline 5.
- 1.1.3 Following ISH4, the Applicant has carried out a further detailed review and independent audit of the Transport Assessment (App Doc Ref 5.4.19.3) and the ES Chapter 19: Traffic and Transport (App Doc Ref 5.2.19) and the transport modelling and analysis underpinning those documents. In response to the findings of this detailed review and independent audit, updated versions of ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) and the Transport Assessment Part 1 (App Doc Ref 5.4.19.3), including revised traffic forecasts and junction modelling, have been prepared. These updated documents have been submitted to the Examination in an Additional Submission made on 26 March 2024.
- 1.1.4 This revised traffic modelling indicates that there is no traffic capacity issue at Junction 34 during the assessed network peak hours (08:00-09:00 and 17:00-18:00) and therefore it should not be necessary to impose peak hour restrictions on traffic movements associated with the proposed WWTP.

## 2 Variation in Peak Hour Traffic Flows

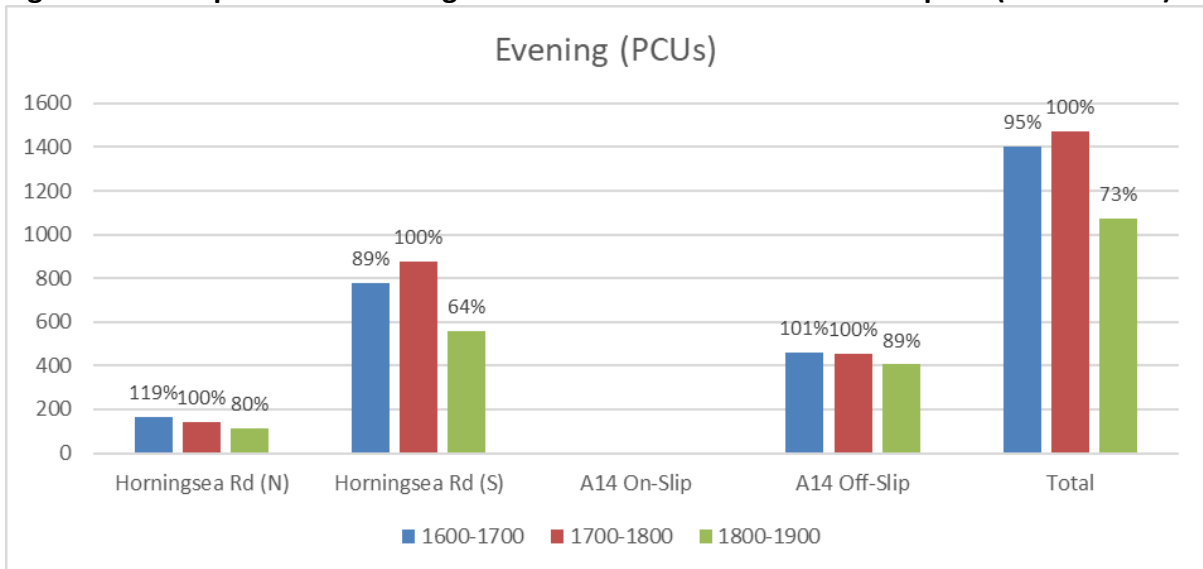
- 2.1.1 The Applicant has reviewed the existing (2021) traffic flows at Junction 34 during the AM peak and PM peak periods (07:00-10:00 and 16:00-19:00) to understand the variation in the level of traffic on each arm of the junction in the shoulder hours relative to the assessed peak hours (08:00-09:00 and 17:00-18:00).
- 2.1.2 Figure 2-1 shows the variation in traffic flows (expressed in Passenger Car Units (PCUs)) on each arm of the junction and for the junction as a whole in each hour

during the AM peak period (07:00-10:00). Figure 2-2 shows the variation in traffic flows on each arm of the junction and for the junction as a whole in each hour during the PM peak period (16:00-19:00). Horningsea Road (N) represents the section of Horningsea Road to the north of Junction 34. Horningsea Road (S) represents the section of Horningsea Road to the south of Junction 34.

**Figure 2-1: Comparison of existing 2021 traffic flows at J34 in the AM peak (07:00-10:00)**



**Figure 2-2: Comparison of existing 2021 traffic flows at J34 in the PM peak (16:00-19:00)**



2.1.3 This analysis demonstrates that total traffic flows (in PCUs) passing through Junction 34 in the shoulder hours are lower the total traffic flows in the assessed peak hours.

2.1.4 Focusing on individual arms, the traffic flow on Horningsea Road (N) is 11% higher between 07:00-08:00 than the traffic flow in the assessed AM peak hour (08:00-09:00), while the traffic flow on Horningsea Road (N) is 19% higher between 16:00-17:00 than the traffic flow in the assessed PM peak hour (17:00-18:00). However,

these higher flows on Horningsea Road must be viewed in the context of the lower traffic flows on other arms in these time periods.

### 3 Shoulder Hour Junction Capacity Assessments

- 3.1.1 Junction 34 operates on MOVA (Microprocessor Optimised Vehicle Actuation), which automatically adjusts traffic signal green times on each arm of a junction between defined minimum and maximum values based on the approaching traffic flows to maximise the throughput of the junction.
- 3.1.2 The Applicant has carried out further junction modelling of the busiest shoulder hours in the AM and PM peak periods (07:00-08:00 and 16:00-17:00 respectively) during the combined construction peak in Construction Year 3 (2026).
- 3.1.3 Table 3-1 compares the operation of Junction 34 in the AM and PM peak hour during the Construction Year 3 assessment (i.e. 2026 future baseline with the proposed WWTP construction traffic flows) in Revision 6 of the Transport Assessment (App Doc Ref 5.4.19.3) with analysis undertaken for the busiest shoulder hours (07:00-08:00 and 16:00-17:00).

**Table 3-1: Comparison of J34 LinSig results for Construction Year 3 (2026) with combined construction peak traffic in the assessed peak hours and the busiest shoulder hours during the AM and PM peak periods**

Approach	DoS (%)	Queue (PCU)	DoS (%)	Queue (PCU)
<b>2026 future baseline with construction traffic, AM peak (08:00-09:00)</b>				
	<b>Assessed Peak Hour (08:00-09:00)</b>		<b>Busiest Shoulder Hour (07:00-08:00)</b>	
Horningsea Road (N) Southbound	54.9%	8.9	60.2%	10.0
Permanent access to the proposed WWTP	41.0%	1.9	41.0%	1.9
B1047 Horningsea Rd Bridge Northbound	22.9%	3.2	9.5%	1.3
A14 off-slip	58.1%	12.7	56.8%	12.2
B1047 Horningsea Rd Bridge Southbound	64.0%	11.8	61.3%	12.2
B1047 Horningsea Rd (S) Northbound	35.5%	2.9	26.2%	1.9
<b>Maximum DoS</b>	<b>64.0%</b>		<b>61.3%</b>	
<b>Practical Reserve Capacity (PRC) over all lanes</b>	<b>40.7%</b>		<b>46.9%</b>	
<b>2026 future baseline with construction traffic, PM peak (17:00-18:00)</b>				
	<b>Assessed Peak Hour (17:00-18:00)</b>		<b>Busiest Shoulder Hour (16:00-17:00)</b>	
Horningsea Road (N) Southbound	26.4%	4.0	30.1%	4.7
Permanent access to the proposed WWTP	60.2%	5.2	60.2%	5.2
B1047 Horningsea Rd Bridge Northbound	45.8%	6.8	39.9%	5.7
A14 off-slip	64.7%	13.0	62.6%	12.4
B1047 Horningsea Rd Bridge Southbound	79.1%	11.9	79.0%	12.6
B1047 Horningsea Rd (S) Northbound	58.9%	9.0	52.5%	7.3
<b>Maximum DoS</b>	<b>79.1%</b>		<b>79.0%</b>	
<b>Practical Reserve Capacity (PRC) over all lanes</b>	<b>13.7%</b>		<b>14.0%</b>	

- 3.1.4 This analysis demonstrates that Junction 34 would continue to operate within capacity in 2026 in both the assessed peak hours and the busiest shoulder hours

during the combined construction peak in Construction Year 3 (2026). The positive Practical Reserve Capacity (PRC) values indicate that the junction would have headroom to accommodate additional traffic in the event that there is a need to put more development traffic into the shoulder hours.

## 4 Summary

- 4.1.1 The Applicant's updated junction modelling, which is presented in Revision 6 of the Transport Assessment (App Doc Ref 5.4.19.3), demonstrates that Junction 34 would operate within capacity during both construction and operation of the proposed WWTP.
- 4.1.2 The Applicant has carried out a review of existing (2021) traffic flows at Junction 34 during the AM peak and PM peak periods to understand the variation in the level of traffic on each arm of the junction in the shoulder hours relative to the assessed peak hours (08:00-09:00 and 17:00-18:00). This analysis demonstrates that, while traffic flows on Horningsea Road (N) are highest between 07:00-08:00 and 16:00-17:00, total traffic flows (in PCUs) passing through Junction 34 in these shoulder hours are lower the total traffic flows in the assessed peak hours.
- 4.1.3 Junction 34 operates under MOVA control, which automatically adjusts traffic signal green times on each arm of a junction based on the approaching traffic flows to maximise the throughput of the junction.
- 4.1.4 The Applicant has carried out junction modelling of the busiest shoulder hours, which demonstrates that J34 would continue to operate within capacity in the Construction Peak (assumed to be 2026) with sufficient headroom to accommodate additional traffic in the event that there is a need to put more development traffic into these shoulder hours.



## **Annex 2 Issues with traffic modelling in the TA Part A Note**

## 1 Introduction

- 1.1.1 During the Issue Specific Hearings held on the 13th and 14th March 2024 (ISH4), the Examining Authority highlighted a number of issues in Section 4 of ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046] and Section 9 of the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP5-071] submitted at Examination Deadline 5.
- 1.1.2 The Applicant acknowledges that the traffic forecasts and junction modelling presented in Section 4 of ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046] and Section 9 of the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP5-071] submitted at Examination Deadline 5 contained various issues.
- 1.1.3 This note responds to some of the specific issues highlighted by the Examining Authority during ISH4.
- 1.1.4 The Applicant recognises that the issues raised by the Examining Authority were only examples of the issues in these documents not an exhaustive list. The Applicant has carried out a comprehensive review of the ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) and the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) and has commissioned an independent audit of these documents and the supporting traffic forecasts and junction modelling.
- 1.1.5 In response to the findings of this detailed review and independent audit, updated versions of ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) and the Transport Assessment Part 1 (App Doc Ref 5.4.19.3), including revised traffic forecasts and junction modelling, have been prepared. These updated documents have been submitted to the Examination in an Additional Submission made on 26 March 2024.

## 2 Table 4-77, Table 4-78 and Table 4-79 and Paragraph 4.3.5 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]

- 2.1.1 The Examining Authority questioned why the absolute traffic flow changes presented in Table 4-79 did not match the corresponding operational traffic flows presented in Table 4-77.
- 2.1.2 The Applicant confirms that the operational traffic movements presented in Table 4-77 are correct. These operational traffic movements reflect the reasonable worst case scenario set out in the Applicant's responses to ExA Hearing Actions from ISH3 [REP4-087] submitted at Examination Deadline 4 in which it is assumed that all parking spaces within the proposed WWTP being occupied in the peak hours. The daily peak traffic movements in Table 4-77 have therefore been determined based

on all office staff, operational staff and Discovery Center visitors all arrive or depart in the peak hours.

- 2.1.3 The Applicant acknowledges that the 'With Development' traffic flows presented in Table 4-78 are inconsistent with the operational traffic movements presented in Table 4-77, and hence the absolute traffic flow changes presented in Table 4-79 are also inconsistent. The Applicant also acknowledges that the description of the derivation of the operational traffic movements presented in paragraph 4.3.5 and 4.3.6 are inconsistent with the operational traffic movements presented in Table 4-77.
- 2.1.4 These matters have been addressed in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. Please refer to Table 4-79 (Operation phase: Daily and peak hour operational traffic movements), Table 4-80 (Operation phase: Two-way peak hour traffic flows in the 2038 Future Baseline and the 2038 Operation Scenario (vehicles)) and Table 4-81 (Operation phase: Absolute and percentage change in two-way peak hour traffic flows between the 2038 Future Baseline and the 2038 Operation Scenario (vehicles)) in the revised ES Chapter 19 (App Doc Ref 5.2.19).

### **3 Table 4-15 and Paragraph 4.2.56 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]**

- 3.1.1 The Examining Authority questioned why there were columns were titled '2038 future baseline' and 'With Operation' in Table 4-15 when paragraph 4.2.56 and the table title indicated that the information in the table related to the 2026 Future Baseline and 2026 Construction scenarios during construction of the Waste water transfer tunnel and shafts.
- 3.1.2 The Applicant has reviewed the data in Table 4-15 and can confirm that the data presented does relate to the 2026 Construction Peak. The Applicant acknowledges that the columns within Table 4-15 should have been labelled '2026 future baseline' and 'With Construction'.
- 3.1.3 These matters have been addressed in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. Please refer to paragraph 4.2.97 and Table 4-26 (Waste water transfer tunnel and shafts: Comparison of average driver delay (seconds per PCU) between the 2026 Future Baseline and the 2026 Construction Peak (RWC scenario)) in the revised ES Chapter.

## **4 Table 4-40 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]**

- 4.1.1 The Examining Authority questioned why there were columns were titled '2038 future baseline' and 'With Operation' in Table 4-40 when the table title indicated that the information presented in the table related to the 2026 Future Baseline and 2026 Construction scenarios during construction of the proposed WWTP.
- 4.1.2 The Applicant has reviewed the data in Table 4-40 and can confirm that the data presented does relate to the 2026 Construction Peak. The Applicant acknowledges that the columns within Table 4-15 should have been labelled '2026 future baseline' and 'With Construction'.
- 4.1.3 The Applicant notes that the delay data reported in Table 4-40 for junction 34 is identical to the delay data reported in Table 4-15, as the assessment of junction 34 has considered the overall construction peak during construction of both the proposed WWTP, the transfer tunnels and shafts, and the Waterbeach pipeline.
- 4.1.4 These matters have been addressed in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. The Applicant notes that there is no equivalent to Table 4-40 in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. This is because there are no junctions on the construction route for the proposed WWTP where a potential capacity issue has been identified on the road network in the 2026 Future Baseline. Consequently, there are no road links that require a detailed assessment of driver delay.

## **5 Table 4-68 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]**

- 5.1.1 The Examining Authority questioned why there were columns were titled '2038 future baseline' and 'With Operation' in Table 4-68 when the table title indicated that the information presented in the table related to the 2026 Future Baseline and 2026 Construction scenarios during construction of the Waterbeach pipeline. The Examining Authority also questioned the figures in the 'Change' and '%' columns in Table 4-68.
- 5.1.2 The Applicant has reviewed the data in Table 4-68 and can confirm that the data presented does relate to the 2026 Construction Peak. The Applicant acknowledges that the columns within Table 4-68 should have been labelled '2026 future baseline' and 'With Construction'. The Applicant also acknowledges that the 'Change' and '%' columns for the AM peak are calculated incorrectly in Table 4-68.
- 5.1.3 These matters have been addressed in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. The Applicant notes that there is no equivalent to Table 4-68 in the revised ES

Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. This is because there are no junctions on the construction route for the Waterbeach pipeline where a potential capacity issue has been identified on the road network in the 2026 Future Baseline. Consequently, there are no road links that require a detailed assessment of driver delay.

## **6 Table 9-5 and Table 9-9 in the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP5-071]**

- 6.1.1 The Examining Authority questioned why the Degree of Saturation (DoS – an expression of how busy a junction entry is, i.e. flow as a function of capacity) in the northbound direction on the B1047 Horningsea Road bridge increased from 40.6% to 44.6% but the corresponding mean maximum queue (MMQ) decreased from 7.3 PCUS to 6.5 PCUs between the 2026 Future Baseline and Construction scenarios in the PM peak hour (Table 9-5 in the TA Part 1). The Examining Authority also questioned why the DoS in the northbound direction on the B1047 Horningsea Road bridge increased from 43.5% to 53.1% but the corresponding mean maximum queue (MMQ) decreased from 7.9 PCUS to 7.7 PCUs between the 2033 Future Baseline and Operation Year + 5 (2033) scenarios in the PM peak hour (Table 9-9 in the TA Part 1).
- 6.1.2 The Applicant has reviewed the supporting junction modelling and can confirm that the increase in the DoS in the northbound direction on the B1047 Horningsea Road bridge between the Future Baseline and ‘With Development’ scenarios is due to the inclusion of the permanent access to the Proposed Development as a fourth arm on the northern half of junction 34. The inclusion of this additional arm in the model requires an extra stage being added to the traffic signal staging plan for the proposed site access. The inclusion of this additional arm will result in the introduction of additional conflicts, which will result in less green time being available to the other arms. This is why the DoS increases on the Horningsea Road bridge NB approach.
- 6.1.3 The Applicant has reviewed the LinSig modelling and can confirm that the modelling is valid. Although on the face of it these modelling results may seem counterintuitive, the reported reduction in MMQ on the Horningsea Road bridge NB approach is correct despite the DoS being marginally higher. This is due to differences in the way in which the northbound traffic signals on the B1047 Horningsea Road at Junction 34 are optimised by LinSig in the Future Baseline and ‘With Development’ scenarios.
- 6.1.4 Junction 34 is formed by two separate, but linked, signalised junctions. The northern junction controls the conflicts associated with the B1047 Horningsea Road and the A14 eastbound off-slip (and the proposed permanent access to the WWTP), while at the southern junction Horningsea Road only loses right-of-way if there is a pedestrian demand over the A14 westbound on-slip.

- 6.1.5 Junction 34 operates on MOVA (Microprocessor Optimised Vehicle Actuation), which allows automatic tailoring of traffic signal green times on each arm of a junction in response to the prevailing traffic conditions.
- 6.1.6 In general, the amount of green time available to the B1047 Horningsea Road is greater at the southern junction than at the northern junction, due to the number of conflicts that are managed. Traffic patterns at the junction necessitate more focused coordination of the southbound traffic flow on Horningsea Road, while coordination of the northbound traffic flow is less critical. The northbound queue on the B1047 Horningsea Road bridge at the A14 off-slip can therefore vary, within limits, and is not always a direct function of green time or DoS.
- 6.1.7 The Applicant notes that the same outcome is evident in Table 9-8, Table 9-11, Table 9-14 and Table 9-17 in the updated Transport Assessment Part 1 (App Doc Ref 5.4.19.3) submitted to the Examination on 26<sup>th</sup> March 2024.

## **7 Table 9-4, Table 9-8 and Table 9-10 in the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP5-071] and Table 4-7 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]**

- 7.1.1 The Examining Authority questioned why the traffic flows on the B1047 Horningsea Road in Tables 9-4, 9-8 and 9-10 does not change between the 2026 Future Baseline and 2026 Future.
- 7.1.2 The Applicant has reviewed the data presented in Tables 9-4, 9-8 and 9-10 of the TA Part 1 and can confirm that the traffic flows relate to the section of Horningsea Road to the north of Junction 34, which would not be used by construction traffic associated with the Proposed Development.
- 7.1.3 The Examining Authority also questioned why the traffic flows on Horningsea Road reported in Table 9-4 did not match the traffic flows on Horningsea Road reported in Table 4-7 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046].
- 7.1.4 The Applicant has reviewed the data presented in Table 9-4 of the TA Part 1 and Table 4-7 of ES Chapter 19 and can confirm that there are a number of reasons why the traffic flows on the B1047 Horningsea Road are different. Firstly, the traffic flows in Table 9-4 of the TA are one-way flows (southbound only) while the traffic flows in Table 4-7 of the ES Chapter are two-way flows (northbound and southbound combined). Secondly, the traffic flows in Table 9-4 of the TA relate to the section of Horningsea Road to the north of Junction 34 while the traffic flows in Table 4-7 of the ES Chapter relate to the Horningsea Road bridge over the A14. For this reason, it is not possible to directly compare the traffic flows on the B1047 Horningsea Road in Table 9-4 of the TA and Table 4-7 of the ES Chapter.

- 7.1.5 The Examining Authority also questioned why the traffic flows in Table 9-4 of the TA and Table 4-7 of ES Chapter 19 did not match the corresponding traffic flow diagram in Appendix 19.5 Traffic flow diagrams (p.6-7 for the 2026 Future Baseline and p. 22-23 for the 2026 Construction Peak).
- 7.1.6 The Applicant has reviewed relevant traffic flow diagram in Appendix 19.5 and can confirm that the traffic flows shown on the B1047 Horningsea Road bridge over the A14 in the traffic flow diagrams are consistent with the traffic flows reported in Table 4-7 of ES Chapter 19. However, the Applicant acknowledges that the traffic flows shown on the Horningsea Road north of the A14 in the traffic flow diagrams differ slightly from the traffic flows reported in Table 9-4 of the TA. This is due to small inconsistencies in the traffic flows in the traffic surveys on the northern and southern parts of junction 34. The Applicant has made small adjustments to the traffic flows to remove this inconsistency, which is an accepted practice for the purposes of the junction capacity modelling. It is these adjusted traffic flows that are reported in Table 9-4 of the TA.
- 7.1.7 These matters have been addressed in the updated Transport Assessment Part 1 (App Doc Ref 5.4.19.3) and the revised Traffic Flow Diagrams (Appendix 19.5, App Doc Ref 5.4.19.5) submitted to the Examination on 26<sup>th</sup> March 2024.

## **8 Table 4-29 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]**

- 8.1.1 The Examining Authority questioned why the traffic flows on the A14 on-slip reported in Table 4-29 in ES Chapter 19 did not match the traffic flows shown in the corresponding traffic flow diagrams in Appendix 19.5 Traffic flow diagrams (p.6-7 for the 2026 Future Baseline and p. 22-23 for the 2026 Construction Peak).
- 8.1.2 The Applicant has reviewed relevant traffic flow diagram in Appendix 19.5 and acknowledges that there are some inconsistencies with Table 4-29 in ES Chapter 19.
- 8.1.3 These matters have been addressed in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) and the revised Traffic Flow Diagrams (Appendix 19.5, App Doc Ref 5.4.19.5) submitted to the Examination on 26<sup>th</sup> March 2024. Please refer to Table 4-36 in the revised ES Chapter and pages 7, 8, 67 and 68 in the revised Traffic Flow Diagrams.

## **9 Paragraph 4.3.7 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]**

- 9.1.1 The Examining Authority questioned where the assessment for the Operation Year 1 (2028) scenario was presented in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046].

- 9.1.2 The Applicant acknowledges that only the Operation Year 1 + 10 (2038) scenario is assessed in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19). There is no assessment for the 2028 Operation scenario was presented in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046].
- 9.1.3 This paragraph has been amended accordingly in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. Please refer to paragraph 4.3.5 in the revised ES Chapter 19.

## **10 Paragraph 4.3.14 in ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046]**

- 10.1.1 The Examining Authority questioned why paragraph 4.3.14 in ES Chapter 19 referred to construction traffic when Section 4.3 of the ES Chapter 19 is concerned with the Operation phase.
- 10.1.2 The Applicant confirms that paragraph 4.3.14 should have referred to operational traffic rather than construction traffic.
- 10.1.3 This paragraph has been amended accordingly in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) submitted to the Examination on 26<sup>th</sup> March 2024. Please refer to paragraph 4.3.12 in the revised ES Chapter 19.

## **11 Appendix 19.6 Junction Capacity Reports**

- 11.1.1 The Examining Authority noted that the 'User and Project Details' for the junction modelling reported in Appendix 19.6 had not been updated.
- 11.1.2 The Applicant acknowledges that the version of Appendix 19.6 that was submitted included 'User and Project Details' that relate to earlier versions of the junction models.
- 11.1.3 This information has been fully updated in the revised Junction Capacity Reports (Appendix 19.6, App Doc Ref 5.4.19.6) submitted to the Examination on 26<sup>th</sup> March 2024.

## **12 Other changes**

- 12.1.1 The detailed review and independent audit undertaken by the Applicant identified a number of other issues with ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19) [REP5-046] and the Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP5-071] submitted at Examination Deadline 5.
- 12.1.2 The Applicant has addressed all of these matters in the revised ES Chapter 19 Traffic and Transport (App Doc Ref 5.2.19), the revised Transport Assessment Part 1 (App Doc Ref 5.4.19.3) [REP5-071], the revised Traffic Flow Diagrams (Appendix 19.5, App



Doc Ref 5.4.19.5) and the revised Junction Capacity Reports (Appendix 19.6, App Doc Ref 5.4.19.6) submitted to the Examination on 26<sup>th</sup> March 2024.

12.1.3 To assist the Examining Authority and other interested parties with the interpretation of the ES Chapter 19 and Transport Assessment Part 1, the Applicant has made the following updates to the documents:

- Inclusion of footnotes on the traffic flow tables in Section 4 of the ES Chapter to assist with cross-referencing to the TA Part 1 (Appendix 19.3) and the Traffic Flow Diagrams (Appendix 19.5);
- Clearer labelling of traffic flow tables in Section 4 of the ES Chapter and Section 9 of the TA Part 1 to indicate whether the reported traffic flows are one-way or two-way and whether the traffic flows are reported in vehicles or PCUs;
- Inclusion of additional traffic flow tables in Section 9 of the TA Part 1 which present the traffic flows in PCUs as well as vehicles;
- Standardisation of scenario names between the ES Chapter and TA Part 1 (where possible).