TN02 - TWBC additional transport evidence

Site: TWBC Local Plan EIP
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1.0 Introduction

Context

1.1 This technical note (TN) is prepared on behalf of 'Save Capel'. It deals with additional transport evidence submitted during the course of the Examination in Public (EIP) of the Tunbridge Wells Borough Council (TWBC) submission Local Plan ('the Plan').

1.2 The additional evidence submitted primarily comprises a Statement of Common Ground made prepared between TWBC and Kent County Council (KCC) in their role as highway authority ("the KCC SoCG"). The KCC SoCG is dated 28 March 2022 and has document reference number PS_025 (formerly document 3.168).

New Evidence Trail

1.3 The KCC SoCG states that agreements made are based on more detailed evidence including the following reports:

- Addendum Report (September 2021) – "the Addendum Report"
- Local Plan – Transport Assessment Addendum 2 report (October 2021) – "the Addendum Report 2"
- Local Junction Capacity Sensitivity Testing Technical Note (March 2022) – "the Technical Note"

1.4 A review of the Core Documents list (as at 5th May 2022) confirms the following:

- The Addendum Report – not listed
- The Addendum Report 2 – listed with document reference number: PS_023 (formerly document 3.165)
- The Technical Note - listed with document reference number: PS_024 (formerly document 3.167)

1.5 Only 2 of the 3 documents referred to in the KCC SoCG are included in the document list. It is therefore impossible to fully audit the KCC SoCG.

Completeness of the Additional Evidence

1.6 A review of the Addendum Report 2 and Technical Note identifies that the additional transport assessment evidence revolves around the use of different, significantly higher, traffic generation rates per dwelling for planned residential development than those applied in TWBC's transport assessment report ("the Transport Assessment"), which is dated March 2021 (document reference 3.114). The Transport Assessment is the main transport and highways document that tests the impact of the Plan and identifies the effectiveness of mitigation to make the Plan acceptable.

1.7 A review of the Core Documents list (as at 5th May 2022) confirms that there is no update of document 3.114 to reflect the significantly higher traffic generation rates per dwelling that purportedly form the basis of the Addendum Report 2 and the Technical Note, and by consequence, the KCC SoCG.

1.8 In the absence of an updated Transport Assessment, it is impossible to understand how the significantly higher traffic generation rates per dwelling, which TWBC claims are agreed with KCC and National Highways (NH), and ensuing higher development traffic volumes on the road network will affect the operation of the highway network and hence the need for, type and magnitude of mitigation.

1.9 In particular, the following elements of the KCC SoCG are noted:

- Paragraph 3.20. This refers to the strategic modelling work undertaken for the Transport Assessment and that the sensitivity testing (undertaken during the EIP) confirms that the mitigation identified in the Transport Assessment (undertaken pre-submission) can effectively mitigate any [sic] significant impacts from development on the transport network. However, this statement can only be conjecture because in the absence of updating the Transport Assessment, including the strategic modelling (completed pre-submission), with the assessment metrics agreed recently during the course of the EIP, there is no evidence before the EIP to support the statement in paragraph 3.20.

- Paragraph 3.21. This claims that the evidence demonstrates that the highway mitigations are deliverable. Again, this must be conjecture as neither Addendum Note 2 nor the Technical Note provide anything other than vague thoughts about the form that mitigation might take. No consideration is given to the risk (and associated cost and impact on viability) of statutory undertaker apparatus requiring diversion. No consideration is given to cooperation with Tonbridge and Malling Borough Council (TMBC) in order to reach agreement in principle regarding how the Plan impacts on the centre of Tonbridge (identified by TWBC as being cumulatively **severe**) will be mitigated. Inadequate consideration is given to the extent of land required for mitigation to be delivered and consequently the ownership.

- Paragraph 3.18. This refers to the willingness of TWBC to compulsorily purchase (CPO) land for mitigation measures. However, CPO is a long process with an uncertain outcome. No sensitivity analysis is made in the evidence base regarding the impacts that a lengthy CPO process could have on the rate of housing delivery nor the fallback position in the event that the CPO is unsuccessful – which could be for any number of reasons not least environmental impact.

Scope of Technical Note

1.10 The remainder of this TN considers the details of the two documents that are available (the Addendum Report 2 and the Technical Note) on face value, drawing out examples of just some of the inadequacies identified in order to demonstrate that the conclusions of the documents cannot be relied on.

1.11 The TN is structured as follows:

- Section 2 provides a brief summary of what the documents purport to show; and

- Section 3 provides examples of some of the inadequacies identified in the documents.

1.12 A conclusion is provided at Section 4 which is that no weight should be placed on the KCC SoCG for the reasons set out in this TN.

2.0 Contents of additional evidence

The Addendum Report

2.1 Unknown

The Addendum Report 2

2.2 The Addendum Report 2 presents a summary assessment of the application of higher traffic generation rates agreed with KCC and NH as being reasonable for use in assessing the impacts of the submission Local Plan. NH is not a signatory to the KCC SoCG and at the time of preparing this TN, were not a signatory to a separate SoCG with TWBC. KCC is a signatory to the KCC SoCG and is so on the basis of the traffic generation rates set out in table 1-1 of the Addendum Report 2.

2.3 The table below provides a comparison of the agreed residential traffic generation rates that form the basis of the KCC SoCG with the evidence previously submitted by TWBC.

Document Reference	Two-way rate per dwelling		Two-way vehicle trips			
			Tudeley Village		East Capel and Paddock Wood	
	Morning peak hour	Evening peak hour	Morning peak hour	Evening peak hour	Morning peak hour	Evening peak hour
3.114	0.29	0.26	812	728	1041	933
PS_023	0.48	0.48	1344	1344	1723	1723
Comparison of 3.114 and PS_023			**532**	**616**	**682**	**790**

Table 2-1: comparison of new traffic rate evidence

2.4 The table above shows that, in comparison to the transport assessment work submitted by TWBC prior to the EIP commencing (set out in document reference 3.114) TWBC is now predicting the following:

- A total 1,344 two-way vehicle movements are expected to arise from the Tudeley Village allocation during the morning peak hour. This is some 532 additional vehicle movements (66% more) compared to what was tested for the submission Local Plan.
- During the evening peak hour 1,344 two-way vehicle movements are expected to arise from the Tudeley Village allocation. This is some 616 additional vehicle movements (85% more) compared to what was tested for the submission Local Plan.
- A total 1,723 two-way vehicle movements are expected to arise from the East Capel / Paddock Wood allocations during the morning peak hour. This is some 682 additional vehicle movements (66% more) compared to what was tested for the submission Local Plan.
- During the evening peak hour 1,723 two-way vehicle movements are expected to arise from the East Capel / Paddock Wood allocations. This is some 790 additional vehicle movements (85% more) compared to what was tested for the submission Local Plan.

2.5 Of particular note is that given that Tudeley Village is only accessible via the B2017, this means a total two-way increase in traffic of 1,344 vehicles on the B2017 during a single hour. Traffic heading west towards Tonbridge arising from development at East Capel and Paddock Wood will add additional traffic to the 1,344 vehicles.

2.6 The remainder of the report provides a brief summary of purported additional strategic model runs. However, it fails to provide anywhere near the level of detail that the Transport Assessment provided.

Tonbridge Town Centre Corridor

2.7 Paragraph 3.4.1 of the Addendum Report 2 states the following:

"The existing traffic volumes and limited capacity cause congestion in the Reference Case. The modelling, as set out in Table 3-5, represents this. Thus, it is not possible to attribute the Local Plan development as the cause of severe congestion impacts overall. Nonetheless the Local Plan developments do add traffic flow to these junctions which in turn has some negative impacts on operation. The space for mitigation in central Tonbridge is limited and the approach to mitigating this should be focused on encouraging significant modal shift or traffic management in Tonbridge town centre. TWBC is aware that TMBC is progressing its LCWIP and TWBC seeks to work with TMBC on improving cycling infrastructure and public transport across the boundary. This will be complimented by significant investment identified in the Local Plan in cycling and bus connections to Tonbridge from Paddock Wood and Tudeley and from Royal Tunbridge Wells. This investment can act as a key driver for wider change in Tonbridge and changes on the Town Centre Corridor can unlock further benefits from this significant investment by developers in Tunbridge Wells Borough."

2.8 In the KCC SoCG, KCC and TWBC agree that paragraph 111 of the National Planning Policy Framework (NPPF) is pertinent *"….in relation to the development of the TWBC Local Plan on highways, active travel and public transport matters."*

2.9 NPPF paragraph 111 states (as is presented in full in the KCC SoCG):

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe".

2.10 The implications of this are discussed more fully in **Section 3** of this TN.

The Technical Note

2.11 The Technical Note provides the outcomes of stand-alone junction modelling of several junctions agreed with KCC as being most likely to require capacity improvements to accommodate Local Plan growth at the strategic level, based on the outputs of the strategic traffic modelling. **The outputs of the strategic traffic modelling referred to have not been made available to the EIP**.

2.12 It is understood that the strategic traffic modelling referred to makes use of the significantly higher development peak hour traffic volumes agreed with NH and KCC.

2.13 Some mitigation measures are provided where the modelling indicates that impacts might arise from the Local Plan development, and these are costed.

3.0 Failings in the Additional Evidence Provided and Potential Harm

The Addendum Report 2

Traffic Generation

3.1 The KCC SoCG establishes a significant increase in peak hour traffic volumes arising from the draft allocations at Tudeley, East Capel and Paddock Wood compared to the volume of traffic tested by TWBC in the Transport Assessment. The results of the Transport Assessment are linked to the identification of suitable mitigation measures which in turn feed into the viability assessment.

3.2 The agreed traffic rates per dwelling set out in the KCC SoCG result in some 1,214 and 1,406 **extra** vehicle movements from just these three allocations during the morning and evening peak hours compared to what was assessed for the submission Local Plan.

3.3 For context, having regard to the traffic rates per dwelling that TWBC assumed in the Transport Assessment (0.29 and 0.26 per dwelling during the morning and evening peak hours respectively) the rates now agreed with KCC and NH are the equivalent of allocating an additional 1,834-2,639 homes at Tudeley Village and 2,352-3,038 homes at East Capel / Paddock Wood.

3.4 Under these circumstances it is incomprehensible that the Transport Assessment was not repeated as a whole using the significantly higher traffic volumes agreed with KCC and NH.

3.5 Furthermore, it is counter intuitive that such significantly higher peak hour traffic volumes would neither have a significant impact on the road network compared to the traffic volumes that TWBC relied on in the Transport Assessment nor require further mitigation – with associated delivery, environmental and viability impacts. Had TWBC updated the Transport Assessment as a whole, then a comparison could have been made to understand where additional impacts were arising from the significant increase in development traffic volumes.

Tonbridge Town Centre Corridor

3.6 In paragraph 3.4.1 of the Addendum Report 2, TWBC confirms that the modelling undertaken by TWBC shows **severe congestion** (emphasis added) within the Tonbridge Town Centre Corridor. The subsequent response

to this is that "*……it is not possible to attribute* the *Local Plan development as the cause of severe congestion impacts overall. Nonetheless the Local Plan developments do add traffic flow to these junctions…..".*

3.7 It is noted that NPPF paragraph 111 refers to "residual cumulative impacts". It does not concern itself with attributing which specific development causes "significant" impacts to become "severe". Instead, it simply states that in circumstances where cumulative impacts on the road network would be severe, development can be prevented or refused on highway grounds.

3.8 It is therefore incomprehensible that TWBC should be promoting a spatial strategy which they themselves confirm will result in meeting the NPPF paragraph 111 criterion that *"residual cumulative impacts on the road network would be severe*".

3.9 In response, TWBC offers no mitigation to address this situation, which they themselves confirm will result in severe impacts when considered cumulatively with Plan traffic. Moreover, without fully cooperating with the adjacent planning authority of Tonbridge and Malling Borough Council (TMBC), it would be impossible for mitigation to be delivered. As noted by TWBC, at this point in the examination process, such discussions with TMBC have not been undertaken and no acceptable mitigation has been identified.

3.10 In the absence of mitigation, the cumulatively severe impacts of Plan development on the centre of Tonbridge would lead to refusal of planning permission and hence failure to deliver the Plan.

The Technical Note

Costings

3.11 The Technical Note has neither page numbers nor paragraph references. Below is an extract from what is believed to be paragraph 3 on page 2 which states:

"The high-level cost estimates are outlined in Sweco's TAA Rev2 report dated 22.10.2021. They exclude costs associated with the diversion of statutory undertakers' apparatus and detailed design. However, it is not proportionate at the strategic Local Plan making stage to go to this level of detail, which will be addressed at planning application stage."

3.12 It may be reasonable at this stage not to obtain detailed diversion costings from statutory undertakers. However, to exclude all reference to potential diversion costs is a significant flaw in costing for civil engineering works.

3.13 It is entirely possible and reasonable to undertake a high level search to identify the location and type of statutory undertakers' apparatus to understand how this might be affected by potential mitigation measures. An experienced civil engineer would then be able to provide a view on the need (or otherwise) to divert apparatus and provide a reasonable estimate of the cost of doing so.

3.14 By omitting the cost of potential statutory undertakers' apparatus diversions, TWBC has potentially omitted £millions of costs from the viability assessment.

Information on the alignment between strategic modelling and local junction modelling

3.15 To understand how a failure to accurately align strategic and local junction modelling might affect the forecast performance of the road network, just one example has been considered below.

3.16 Referring to Table 1-1 of the Addendum Report 2, it is forecast that the Tudeley Village draft allocation in itself would result in 980 vehicles departing the allocation area during the morning peak hour and 392 during the evening peak hour. Having regard to the existing road network, these would travel either east or west along the B2017.

3.17 The table under the first paragraph under Heading 3 of the Technical Note is reproduced below:

	AM Peak						
	Reference Case 2038			Local Plan scenario without highway mitigations			Loc high
	Arm V/C	Flow pcu	Average Junction V/C	Arm V/C	Flow pcu	Average Junction V/C	Arm
A26 Woodgate Way (N)	95	1,267	87	84	1,115	93	
B2017 Tudeley Road (E)	84	893	87	108	1,124	93	
A26 Woodgate Way (SW)	87	1,054	87	93	1,037	93	
Tudeley Lane (W)	56	233	87	65	231	93	
	PM Peak						
	Reference Case 2038			Local Plan scenario without highway mitigations			Loc high
	Arm V/C	Flow pcu	Average Junction V/C	Arm V/C	Flow pcu	Average Junction V/C	Arm
A26 Woodgate Way (N)	88	1,130	77	105	1,151	90	1
B2017 Tudeley Road (E)	39	436	77	26	326	90	
A26 Woodgate Way (SW)	87	1,160	77	100	1,328	90	
Tudeley Lane (W)	30	158	77	37	174	90	

3.18 The junction of the A26 / B2017 lies to the west of Tudeley Village. The approach to the junction from Tudeley Village is labelled "B2017 Tudeley Road (E)". As can be seen from the table above, during the morning peak hour, in the unmitigated local plan scenario, an increase of 231 (1,124 less 893) vehicles is expected to arrive at this point. During the evening peak hour, in the unmitigated local plan scenario, 110 fewer vehicles are expected to arrive at this point.

3.19 The junction modelling results for the eastern end of the B2017 (at its junction with the A228) are presented in the table under the first paragraph under Heading 5 of the Technical Note and are reproduced below:

	AM Peak						
	Reference Case 2038			Local Plan scenario without highway mitigations			Loca highv
	Arm V/C	Flow pcu	Average Junction V/C	Arm V/C	Flow pcu	Average Junction V/C	Arm
A228 Maidstone Road (N)	109	1,139	96	112	1,227	101	7
B2017 Badsell Road (E)	105	611	96	113	644	101	8
A228 Maidstone Road (S)	87	767	96	91	790	101	7
B2017 Badsell Road (NW)	71	498	96	74	544	101	1
	PM Peak						
	Reference Case 2038			Local Plan scenario without highway mitigations			Loca highv
	Arm V/C	Flow pcu	Average Junction V/C	Arm V/C	Flow pcu	Average Junction V/C	Arm
A228 Maidstone Road (N)	81	763	86	105	1,100	105	8
B2017 Badsell Road (E)	60	463	86	103	665	105	5
A228 Maidstone Road (S)	95	959	86	113	932	105	7
B2017 Badsell Road (NW)	97	642	86	97	614	105	2

3.20 The junction of the A228 / B2017 lies to the east of Tudeley Village. The approach to the junction from Tudeley Village is labelled "B2017 Badsell Road (NW)". As can be seen from the table above, during the morning peak hour, in the unmitigated local plan scenario, an increase of 46 (544 less 498) vehicles is expected to arrive at this point. During the evening peak hour, in the unmitigated local plan scenario, 28 fewer vehicles are expected to arrive at this point.

3.21 Aggregating the unmitigated local plan scenario for junctions, during the morning peak hour, in the unmitigated local plan scenario, an increase of 277 vehicles is expected arrive at the junctions at either end of the B2017. During the evening peak hour, in the unmitigated local plan scenario, 138 fewer vehicles are expected to arrive at the junctions at either end of the B2017.

3.22 These figures of 277 and (-138) bear no resemblance to the Addendum Report 2 forecasts of 980 and 392 during the morning and evening peak hours respectively. This equates to a shortfall of 703 vehicles departing the Tudeley Village allocation during the morning peak hour and 530 vehicles during the evening peak hour (assuming that it is accepted that locating 2,800 new dwellings at Tudeley Village will result in fewer vehicles using the B2017 than in the scenario without the 2,800 new swellings).

3.23 This is plainly nonsense and any mitigation measure designed on the basis of these results should have no weight placed on it.

4.0 Conclusion

4.1 It is concluded that at this stage no weight should be placed on the KCC SoCG, or the documents that underpin it, because:

- Documents referred to in the SoCG are not available for audit;
- The extensive pre-submission traffic modelling, which underpins the transport and highways mitigation of the Plan, has not been updated to accord with the traffic generation rates now agreed through the KCC SoCG. The new rates that underpin the KCC SoCG are 66% and 85% higher during the morning and evening peak hour respectively than those used in the pre-submission Transport Assessment;

- The additional junction modelling work is clearly flawed. Just one example of this is that in the absence of any mitigation, the provision of 2,800 new dwellings at Tudeley Village which is accessed via the B2017 will result in a reduction in vehicle movements on the B2017 during the evening peak hour;
- Despite recognising that traffic impacts in the centre of Tonbridge will be cumulatively severe with the Plan in place, no mitigation is proposed to alleviate this neither has TWBC cooperated with TMBC to identify in principle the mitigation needed;
- The risk of statutory undertaker apparatus diversions is explicitly ignored. The cost associated with any diversions could be extensive and have a material impact on infrastructure costs and hence viability;
- There is insufficient detail to identify the land requirements needed for infrastructure interventions; and
- No sensitivity testing is provided to understand the impacts that a potentially lengthy, and not guaranteed to be successful, CPO process would have on housing delivery.

4.2 It is apparent from the above that the assessment work forming the new evidence has been rushed through during the course of the EIP as evidenced by the significant omissions and flaws in the documents provided. This is not surprising given the very late agreement with KCC regarding traffic forecasts for planned development, which is an initial input to transport modelling and assessment work. This late agreement during the EIP to significantly higher development traffic volumes effectively negates the pre-submission Transport Assessment and the associated mitigation measures developed therefrom. This in turn undermines the robustness of the Plan.

4.3 Under these circumstances, the Inspector is respectfully requested to reconsider continuing with the EIP.