CHARFIELD, SOUTH GLOUCESTERSHIRE

STROUD DISTRICT LOCAL PLAN REVIEW

EVIDENCE BASE REPS

25 October 2022

EVOKE

CHARFIELD, SOUTH GLOUCESTERSHIRE

STROUD DISTRICT LOCAL PLAN REVIEW EVIDENCE BASE REPS

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1. Introduction

1.1.1. Evoke Transport Planning Consultants Ltd (Evoke) on behalf of CEG and the Charfield Landowners Consortium (CLC) are currently supporting CEG on a live planning application for the development of up to 525 residential units, a reserve site for a 3FE primary school, a neighbourhood centre and employment provision on Land South of Charfield (application reference P19/2452/O). The site is located with South Gloucestershire, within approximately 2km of the boundary with Stroud District and within 3.5km of the M5 J4 ('M5 J14' hereafter).

1.1.2. This note has been prepared by Evoke on behalf of CEG and CLC to respond to the updated technical evidence base documents prepared by Stroud District Council (SDC) during the examination of their Local Plan Review (SDLPR). This follows previous representations s made by CEG and CLC about the Pre-Submission Draft Local Plan for Publication and supporting evidence in relation to the following:

- Policy CP2: Strategic growth and development locations
- Policy CP6: Infrastructure and developer contributions
- Policy CP13: Demand management and sustainable travel measures
- Policy PS34: Sharpness Docks
- Policy PS36: Sharpness New Settlement
- Policy PS37: Wisloe New Settlement
- Policy PS24: Cam North West
- Policy PS25: Cam North East extension
- Delivery Policy EI12: Promoting transport choice and accessibility

1.1.3. The representations made in July 2021 particularly focused on the lack of detail afforded by the SDLPR in relation to M5 J14, regarding the form of the mitigation proposed; the cost of the works; how these major infrastructure improvements will be funded; the level and method of funding from the strategic development sites; and, the timetable for delivery of critical infrastructure to the SDLPR.

1.1.4. There are many aspects within the SDLPR and evidence base which are directly relevant to CEG and CLC in this instance; however, the focus of this note relates to the additional evidence presented regarding M5 J14, where CEG and CLC have been working with key stakeholders including National Highways (NH), South Gloucestershire Council (SGC) and other developers to agree an appropriate scheme to mitigate development in this area over a number of years.

1.1.5. Evoke, on behalf of CEG and CLC have reviewed the following documents submitted as additional evidence to the Local Plan evidence base:

- **EB98 Traffic Forecasting Report Addendum (TFRA), Stroud Local Plan Traffic Modelling** (April 2022), prepared by Mott MacDonald.
- **EB108 Stroud Sustainable Transport Strategy Addendum,** prepared by AECOM on behalf of SDC; July 2022.
- **EB109 Funding and Delivery Plan** (FDP) prepared by AECOM on behalf of SDC. Revision 002, August 2022. The FDP has been prepared to determine the sources of funding for major transport mitigation identified in the SDLP. The FDP informs the IDP and SDLP viability assessment.
- **EB110 Infrastructure Delivery Plan Addendum Report** (IDP) prepared by Arup on behalf of SDC. 2022 Addendum, reference 4.50.09 (2nd August 2022). The IDP 2022 Addendum has been prepared as an update to the previous 2021 version following 'considerable work' since the last version.
- **EB111 Local Plan Viability Assessment** prepared by HDH Planning & Development Ltd. August 2022. Updated assessment to consider the viability of the Local Plan as a whole; including developer contributions and Community Infrastructure Levy (CIL).

- **EB3 Stroud District Local Plan Review: Duty to Cooperate Statement** (October 2021). Describes how the council has worked with other bodies, including neighbouring authorities, organisations and National Highways.

1.1.6. The findings and overall conclusions are summarised through this document.

2. M5 Junction 14

2.1. Traffic Modelling

Need for Junction Mitigation

2.1.1. The TFRA (EB98) considers the impact of the proposed SDLPR allocations on the local and strategic network; and has been updated using the revised 2021 Local Plan. The potential traffic impact of each proposed allocation has been assigned in a district wide SATURN traffic model.

2.1.2. Tables C3 and C4 report on the impact of a 'Do Minimum' scenario, considering background traffic growth only (i.e. no Local Plan growth) and a '2040 Unmitigated Local Plan' scenario, considering the traffic impact of Local Plan growth but no associated mitigation. The results are summarised in terms of forecast maximum Volume/Capacity (V/C); delay in seconds; and, Queue (in pcu values). The M5 J14 results are collated in Table 1 and Table 2 below for the AM and PM peak hours respectively.

Table 1 – Forecast Traffic Impact at the M5 J14 – AM Peak

Junction Location	2040 Do Minimum		2040 Unmitigated Local Plan		Difference compared with Do Minimum
V/C					
	Approach Arm	V/C	Approach Arm	V/C	V/C
M5 J14 Eastern	Overbridge EB	112	Overbridge EB	113	
M5 J14 Western	B4509 EB	83	B4509 EB	113	
A38/B4509	B4509 WB	94	B4509 WB	115	+52
Delay (seconds)					
	Approach Arm	Delay (sec)	Approach Arm	Delay (sec)	Seconds
M5 J14 Eastern	Overbridge EB	342	Overbridge EB	384	
M5 J14 Western	M5 NB Off-Slip	49	B4509 EB	303	
A38/B4509	B4509 WB	73	B4509 WB	357	+580
Queue (pcu)					
	Approach Arm	Queue (pcu)	Approach Arm	Queue (pcu)	Queue (pcu)
M5 J14 Eastern	Overbridge EB	31	Overbridge EB	31	
M5 J14 Western	M5 NB Off-Slip	5	B4509 EB	37	
A38/B4509	B4509 WB	9	B4509 WB	50	+73

Table 2 – Forecast Traffic Impact at the M5 J14 – PM Peak

Junction Location	2040 Do Minimum		2040 Unmitigated Local Plan		Difference compared with Do Minimum
V/C					
	Approach Arm	V/C	Approach Arm	V/C	V/C
M5 J14 Eastern	B4509 WB	80	Overbridge EB	108	
M5 J14 Western	M5 NB Off-Slip*	79	B4509 EB	104	
A38/B4509	B4509 WB	88	B4509 WB	114	+79
Delay (seconds)					
	Approach Arm	Delay (sec)	Approach Arm	Delay (sec)	Seconds
M5 J14 Eastern	Overbridge EB	342	Overbridge EB	384	
M5 J14 Western	M5 NB Off-Slip*	49	M5 NB Off-Slip	303	
A38/B4509	B4509 WB	73	B4509 WB	357	+580
Queue (pcu)					
	Approach Arm	Queue (pcu)	Approach Arm	Queue (pcu)	Queue (pcu)
M5 J14 Eastern	B4509 WB	7	Overbridge EB	31	
M5 J14 Western	M5 NB Off-Slip*	7	B4509 EB	20	
A38/B4509	A38 NB	11	B4509 WB	65	+91

Source: EB98 Traffic Forecasting Report Addendum: Stroud Local Plan Traffic Modelling (Mott Macdonald, April 2022)
**Different link location results are provided for the AM relative to the PM*

2.1.3. According to the analysis, the impact of the SDLPR allocations would result in an increase in V/C from around 80-90% in the baseline (PM); other than the 'Overbridge EB', to over 100% on all arms. V/C is the 'maximum flow volume over capacity ratio'. The SDLPR results in all arms of the junction going 'over capacity' compared with the 2040 'Do Minimum' scenario.

2.1.4. The analysis also shows a +580 second delay across the junction in both the AM and PM Peak periods; which equates to approximately a 9.6 minute increase across the junction overall; compared with the 2040 Do Minimum scenario. Across the junction, an increase in queues (in pcu values) of 73 (AM Peak) and 91 (PM Peak) is expected.

2.1.5. The results from the modelling identify that a substantial upgrade of M5 J14 will be required to accommodate traffic generated by the allocation sites. Sharpness Docks (PS34), Sharpness New Settlement (PS36), Wisloe New Settlement (PS37), Cam North West (PS24), Cam North East extension (PS25) and Land west of Renishaw New Mills (PS47) are all likely to use Junction 14 to access the M5 and the Strategic Road Network. However, no breakdown by development is provided to confirm the number of trips from each SDLPR allocation that are likely to pass through the M5 J14 and this represents a gap in the evidence base.

2.1.6. The FDP (EB109) notes that the modelling assumptions have been carried out in line with DfT TAG Guidance and in agreement with NH and Gloucestershire County Council (GCC). It does not include SGC in this, though elsewhere in the FDP (EB109) it outlines that the mitigation schemes identified through the strategic modelling exercise have been reviewed in terms of: cost; the scale of impact to be mitigated; the origins of the traffic impact and; the interdependencies between schemes in relation to SDC's climate emergency agenda in collaboration with GCC, SDC, NH and SGC. SDC should clarify to the Examiner SGC's current position on the modelling, the assumptions applied and the results. There is no updated Duty to Co-operate Statement and no Statement of Common Ground with the other highway authorities posted on the Examination website. Confirmation is required that the Highway Authorities, including SGC, are agreeable to SDC's approach to M5 J14.

2.1.7. It should also be noted that NH have an existing VISSIM model for the M5 J14 and B4509/A38 junction which has been available for a number of years, as well as development tracker which is regularly reviewed and updated. An updated model and an associated cumulative impact assessment with a view to delivering an intervention at junction has been prepared by WSP on behalf of NH and is available to SDC and SGC. The VISSIM model presents a detailed understanding of the current operation of the junction and considers the cumulative impact of background traffic growth and a number of potential development sites. SDC are aware of the model as they have been involved in previous Working Group meetings set up by Evoke and attended by NH, SGC, GCC as well as developer representatives.

2.1.8. The development tracker is referenced by SDC in the October 2021 Duty to Cooperate Statement (EB3), however no reference is made to the detailed modelling completed by NH at M5 J14. It is unclear whether the NH VISSIM modelling results (historical or updated) have been considered by SDC (and its consultants), and how the results from the updated NH model and associated cumulative impact assessment will be treated in the context of the FDP (EB109) and IDP (EB110) which have now been submitted to the Examination.

Proposed Mitigation

2.1.9. The IDP (EB110) references an AECOM Mitigation Review which has 'identified a package of measures for three locations' including the M5 J14.

2.1.10. The IDP (EB110) references that the AECOM Mitigation Review has identified mitigation at the junction as a 'new grade-separated junction and signalised approach lanes'.

2.1.11. It should be noted that the AECOM Mitigation Review does not appear to be included within published Examination documents and, as such, cannot be relied upon to support the SDLPR if it cannot be examined. Moreover, there is no further reference anywhere in the newly published documents which provide any further detail, including any drawings showing the mitigation proposals at M5 J14 or alternative schemes that may have been assessed. This critical piece of omitted evidence undermines the confidence in the assessment undertaken of M5 J14, especially because it is not subject to examination.

2.1.12. In the absence of this critical part of the evidence base it is assumed that the proposed mitigation scheme is that taken from the previous March 2021 Traffic Forecasting Report (EB61~~),~~), which in Figure 7.14 and section 7.7.2 indicatively outlines and describes a two-bridge gyratory scheme. The FDP (EB109) notes that for the M5 J14, the mitigation includes:

- Improvement to M5 J14, comprising a new grade-separated junction; and
- Dualling of the B4509 between M5 J14 and A38.

2.1.13. The TFRA (EB98) considers the impact of the 'preferred mitigation', in addition to 'preferred mitigation with Sustainable Transport Measures (STS)'. The forecast maximum delay in seconds is provided in Tables C3 and C4 and is summarised below:

Table 3 – Forecast Traffic Impact at the M5 J14 inc. Mitigation – VC

Junction Location	2040 Do Minimum		2040 Unmitigated Local Plan		2040 Local Plan with Preferred Mitigation		2040 Local Plan with Preferred Mitigation and STS		Difference compared with Do Minimum
	Approach Arm	V/C	Approach Arm	V/C	Approach Arm	V/C	Approach Arm	V/C	V/C
AM Peak									
M5 J14 Eastern	Overbridge EB	112	Overbridge EB	113	Overbridge EB	82	Overbridge EB	80	-144
M5 J14 Western	B4509 EB	83	M5 NB Off-Slip	113					
A38/B4509	B4509 WB	94	B4509 WB	115	A38 SB	67	A38 SB	65	
PM Peak									
M5 J14 Eastern	B4509 WB	80	Overbridge EB	108	Overbridge WB	78	Overbridge EB	77	-92
M5 J14 Western	M5 NB Off-Slip	79	B4509 EB	104					
A38/B4509	B4509 WB	88	B4509 WB	114	A38 SB	79	A38 SB	78	

Table 4 – Forecast Traffic Impact at the M5 J14 inc. Mitigation -Delay

Junction Location	2040 Do Minimum		2040 Unmitigated Local Plan		2040 Local Plan with Preferred Mitigation		2040 Local Plan with Preferred Mitigation and STS		Difference compared with Do Minimum
	Approach Arm	Delay (sec)	Approach Arm	Delay (sec)	Approach Arm	Delay (sec)	Approach Arm	Delay (sec)	Seconds
AM Peak									
M5 J14 Eastern	Overbridge EB	342	Overbridge EB	384	Overbridge EB	36	Overbridge EB	36	-422
M5 J14 Western	M5 NB Off-Slip	49	B4509 EB	303					
A38/B4509	B4509 WB	73	B4509 WB	357	A38 SB	6	A38 SB	6	
PM Peak									
M5 J14 Eastern	B4509 WB	60	Overbridge EB	222	Overbridge EB	30	Overbridge EB	30	-226
M5 J14 Western	M5 NB Off-Slip	73	M5 NB Off-Slip	145					
A38/B4509	A38 NB	129	B4509 WB	338	A38 NB	7	A38 NB	6	

Table 5 – Forecast Traffic Impact at the M5 J14 inc. Mitigation - Queue

Junction Location	2040 Do Minimum		2040 Unmitigated Local Plan		2040 Local Plan with Preferred Mitigation		2040 Local Plan with Preferred Mitigation and STS		Difference compared with Do Minimum
	Approach Arm	Queue (pcu)	Approach Arm	Queue (pcu)	Approach Arm	Queue (pcu)	Approach Arm	Queue (pcu)	Queue (pcu)
AM Peak									
M5 J14 Eastern	Overbridge EB	31	Overbridge EB	31	Overbridge EB	13	Overbridge EB	12	-33
M5 J14 Western	M5 NB Off-Slip	5	B4509 EB	37					
A38/B4509	B4509 WB	9	B4509 WB	50	A38 SB	0	A38 SB	0	
PM Peak									
M5 J14 Eastern	B4509 WB	7	Overbridge EB	31	Overbridge EB	9	Overbridge EB	9	-16
M5 J14 Western	M5 NB Off-Slip	7	B4509 EB	20					
A38/B4509	A38 NB	11	B4509 WB	65	A38 NB	0	A38 NB	0	

Source: EB98 Traffic Forecasting Report Addendum: Stroud Local Plan Traffic Modelling (Mott Macdonald, April 2022)
**Different link location results are provided for the AM relative to the PM*

2.1.14. According to the TFRA (EB98), the impact of the preferred mitigation would result in the junction operating within its theoretical capacity. The mitigation would result in a -226 to -446 second delay reduction in the peak periods compared with the 2040 'Do Minimum' scenario, with a -16 to -33 reduction in queues (pcus).

2.1.15. The FDP (EB109) states that the SDLPR growth accounts for 14% of impact, with the remaining 86% background growth which is understood to include economic, population and car ownership growth as well as growth from neighbouring local authority development. This calculation, it states, uses 'combined user classes, the average of the peak hour flows, and the average of highway links on the mitigation package networks.' Whilst set out, this paragraph is unclear and there is a need for the Inspectors to have greater clarity as to how assumption and calculation have been derived and details of the breakdown are provided given that this evidence is fundamental to the financial contributions proposed and delivery of the SDLPR.

2.1.16. Alongside the above, no timescales appear to have been provided for the delivery of the M5 J14 infrastructure. It is important that the SDLPR, particularly with regards to Policy CP6, establishes a clear timetable for when these key infrastructure works will be completed to ensure development will come forward in line with these works.

2.2. Proposed Mitigation Costs

2.2.1. The FDP (EB109) estimates that the cost of the 'preferred mitigation' would be £27,246,837. The FDP (EB109) notes that the costs have been prepared by AECOM and includes 'contingency and optimism bias' but not 'land costs'. The FDP (EB109) states that *"…following discussions with SDC, it is understood that land costs are likely to be minimal in the context of overall costs, and/or there is a reasonable prospect of land being made available for the scheme by a promoter".* Land requirements are discussed further at Section 2.5 of this note.

2.2.2. No breakdown of costs is provided (even between the B4509 dualling and the M5 J14 improvements) which would allow the reader to understand if the cost forecast is reasonable. No out turn year is stated, or details of when the costing exercise was completed. The level of optimisation bias has not been stated. In the current construction market with significant inflation, these details are important context in considering the soundness of the FDP (EB109) and also the delivery and viability of the SDLP overall.

2.2.3. The FDP (EB109) identifies that the M5 J14 costs is a total cost based on a previously considered scheme of the type included in the Traffic Forecasting Report (EB61), which was provided by NH. Evoke has historically undertaken extensive modelling work on the junction and options for improvement and led a Working Group on improvements at M5 J14. The Group identified that a scheme similar to that shown in the TFR (EB61) could cost in the order of c.£57m albeit at 2018 prices Further detail on the breakdown of costs and mitigation proposed is therefore considered important in reviewing the soundness of the FDP (EB109), IDP (EB110) and viability of SDLP overall.

2.2.4. To provide certainty for the Inspectors, SDC needs to clarify the precise nature of the proposed mitigation works at M5 J14; including scheme drawings, costings, land take and extent of work, in addition to whether agreement has been made with NH, SGC, GCC and any other stakeholders to take this scheme forward; so that the impacts of the proposals can be understood.

2.3. Scheme Funding

Methodology

2.3.1. The IDP (EB110) notes that highway mitigation in the form of a new junction at Junction 14 has been tested as part of the transport model. A scheme to widen the A38 and the approach from the B4509 are also included within the highway mitigation.

2.3.2. It is noted within the FDP (EB109) that the mitigation scheme is unlikely to receive Road Infrastructure Strategy (RIS) funding within the timescales of the SDLPR. The IDP (EB110) therefore identifies that it is expected that development within the vicinity of the junction would provide financial contributions towards addressing capacity issues in this location.

2.3.3. Despite not potentially meeting the timeframes for RIS, SDC should still seek to work with NH and SGC to bid under other infrastructure funding mechanisms where the opportunity presents itself and there should be wording to this effect in relevant policy.

2.3.4. The IDP (EB110) states that the FDP (EB109) has been produced by AECOM to determine how these measures could be delivered to support the SDLPR, including contribution costs for a number of proposed allocations. The funding and delivery calculation process is summarised within the FDP (EB109) at Figure 2 and comprises four steps.

2.3.5. Whilst the methodology for allocating funding is outlined, there are key parts of the methodology which have not been set out or justified by SDC. These include:

- Use of strategic transport model - It is assumed that this refers to the SATURN model; however, it is not clear (as above) whether SGC agree to the methodology used through this model;
- NTEM growth - It is not clear what NTEM datasets have been used;
- Neighbouring Authority Growth - There appears to be no calculation as to anticipated neighbouring authority growth. Whilst It has been previously explained in these Representations that SGC do not appear to have provided any indication as to this growth. The Inspectors require clarification and confirmation about how Neighbouring Authority Growth has been calculated and where this information has been sourced should be provided; and
- Threshold for contributions - Strategic sites have been considered as capable of contributing to strategic mitigation packages and, according to para 5.15 of the FDP (EB109) this involves sites over 150 dwellings or 5 hectares of employment. There appears to be no basis for this threshold, which could lead to omission of a significant amount of development and trips which would lead to development falling just under the threshold not needing to contribute to the M5 J14 scheme. Clarification on why this threshold has been applied is required. It is considered that all developments that result in trips at the junction should contribute to the intervention on a pro rata basis using a clearly defined contributions mechanism.

2.3.6. As noted above, it is not clear whether any detailed modelling, such as use of NH's VISSIM model, has been undertaken. For a significant transport improvement, and where specific funding models and contribution methodology are being set out, with attempted justification, a more detailed modelling analysis of the M5 J14 would be expected; particularly considering that NH already have a detailed model set up for the junction which SDC are aware of and have completed their own cumulative impact assessment with updated modelling. The work by NH relating to an updated assessment has been ongoing since early 2022 and the work has been shared by NH with SDC and SGC.

2.3.7. The IDP (EB110) references that *"…when considering economic growth and the amount of development occurring in neighbourhood authorities, it is anticipated that Stroud Local Plan Review growth would account for 20% of the impact on the Junction 14 package."* The FDP (EB109) continues that the remaining 80% would be accounted for by neighbouring authority developments. The calculation and the developments that sit behind this assertion by SDC is not provided or clearly evidenced. This is a significant omission the Inspectors need to rectify.

2.3.8. The FDP (EB109) states that "…*there is limited information or certainty available as to the location of strategic development to the north and south of the district*". It then states that "*whilst specific details in relation to the location, scale and nature of the development are unknown, it is clear that South Gloucestershire and Gloucester will be required to deliver material levels of housing and employment growth up to 2040 to meet housing and economic growth targets. Development in these areas will be required to contribute towards the funding of strategic mitigation, and offer a 'reasonable prospect of funding availability, albeit with limited specific detail at this stage".*

2.3.9. Again, SDC do not provide clear or evidenced justification for the assumed 20%/80% split, and it is not clear whether this impact has been agreed with NH, GCC and importantly SGC. Both the calculation (for example number of trips which supports the 80% / 20% split, and how this breaks down across sites) and position of key stakeholders on this matter should be clarified.

Level of Contributions

2.3.10. The following table provides a summary of information taken from both the IDP (EB110) and FDP (EB109) in relation to the proposed SDLPR allocation sites which have been identified as being expected to contribute:

Table 6 – Summary of Funding and Contribution Requirements (IDP and FDP)

Allocation Reference (IDP)	Allocation Name (IDP)	No. of Units (IDP)	Contribution Requirement M5 J14 (IDP)	Proportion of Funding Allocated to SDLPR Allocations (FDP)	Contribution Requirement M5 J14 (FDP)
PS34	Sharpness Docks	300	£872,219	16%	£850,000
PS36	New Settlement at Sharpness	2,400	£1,851,506	34%	£1,800,000
PS37	New Settlement at Wisloe	1,500	NOT INCLUDED	11%	£580,000
PS47	Land West of Renishaw New Mills	N/A (employment)	NOT INCLUDED	40%	£2,140,000
		TOTAL	£2,723,725	TOTAL	£5,370,000
	Total Scheme Cost M5 Junction 14 (FDP)	£27,246,837	10.0%		19.7%

2.3.11. Table 6 considers the contribution requirements noted in the IDP (EB110), which equates to £2,723,725. This is equivalent to 10% of the listed cost of the junction improvements (rather than 20% as suggested elsewhere within the IDP). The contribution requirements noted in the FDP (EB109) equates to £5,370,000, equivalent to 19.7% of the listed cost.

2.3.12. In addition, the IDP (EB110) contains a detailed section for each policy. In regard to M5 Junction 14 it notes *"..the Aecom Funding and Delivery Plan identifies that it may be appropriate to secure contributions from development at Sharpness Docks towards the Junction 14 and A38 corridor packages of mitigation"*. No further discussion is made in relation to the other proposed allocations.

2.3.13. Through the Examination process, there is a need for SDC to clarify the total contribution costs for each proposed allocation; and to also clarify why contributions are not being sought from the following developments, in addition to a 'per dwelling tariff' approach for smaller schemes which might come forward as windfall development:

- Policy PS24: Cam North West;
- Policy PS25: Cam North East extension;
- Policy PS37: New Settlement at Wisloe; and
- Policy PS47: Land West of Renishaw New Mills

2.4. Land Requirements

2.4.1. It is known to all parties with an interest in highway improvements that, for any significant junction improvements at the M5 J14, third party land will need to be acquired in addition to that under current control of NH. It is understood that the land surrounding three quarters of the junction is under control of the Tortworth Estate, promoters of Buckover Garden Village, located within South Gloucestershire.

2.4.2. The FDP (EB109) states *"following discussions with SDC, it is understood that land costs are likely to be minimal in the context of overall costs, and/or there is a reasonable prospect of land being made available for the scheme by a promoter".*

2.4.3. However, the Local Plan Viability Assessment (EB111) states that *"…some uncertainties were also raised with regard to Buckover Garden Village (in South Gloucestershire). Extensive sensitivity testing has been carried out and the Council will continue to engage with the promoters of the Strategic Sites."*

2.4.4. From the available evidence is it unclear whether SDC has assessed the extent of the improvements proposed and the impact on third party land as well as the costs of land acquisition. Also, the Inspectors will need to be certain that SDC has held discussions with the promoters of Buckover Garden Village; and if reasonable agreement has been made in relation to the land required for highway improvements. This requirement applies whether or not the garden village is confirmed as an allocation within a future Local Plan relating to SGC.

2.5. Duty to Cooperate

2.5.1. The October 2021 Duty to Cooperate Statement (EB3) states that *"National Highways, South Gloucestershire Council, Gloucestershire County Council and Stroud District Council have also met with a Developer Group consisting of promoters of housing growth proposals in South Gloucestershire (and latterly Stroud District) periodically since 2017 to discuss planned growth arising from both emerging development plans relating to South Gloucestershire and Stroud and speculative planning applications for housing and their likely impacts on M5 Junction 14 and adjoining roads and to identify potential mitigation measures and delivery mechanisms."*

2.5.2. As an opening comment it is noted that the Duty to Co-operate, or a specific Statement of Common Ground, in respect to the updated evidence base and the approach being proposed by SDC towards M5 J14 has not been produced. An update of some description should be available to the Inspectors.

2.5.3. It is agreed that discussions were previously ongoing surrounding the potential for improvements at the M5 J14. The 'Working Group' was formed by Evoke (previously Systra) who organised and invited key stakeholders; including SDC, who attended on occasions.

2.5.4. Despite a number of schemes for mitigation being reviewed by the developer team (including for CEG CLC, Bloor Homes and Buckover Garden Village), no agreement was made in terms of mitigation at the junction. Various options were considered, and none of these are understood to be that taken forward by SDC (according to the limited information available as described above).

2.5.5. As SDC attended meetings with NH, they are aware of NH's current VISSIM model of the M5 J14. From discussions with NH and SGC they are also aware of the work completed by NH to update the model and cumulative impact assessment for M5 J14, which is with SDC and SGC for review. No reference to this modelling has been made in the development of a suitable mitigation scheme for the junction.

2.5.6. Under commitments for future work and collaboration, SDC state *"The parties agree to work together and with National Highways and developers to determine appropriate infrastructure at M5 Junction 14 and associated roads, safeguard land to enable the intervention, detail the triggers and timing for interventions, and devise a funding and delivery strategy for identified improvements."*

2.5.7. CEG and the CLC welcome the opportunity to cooperate with SDC on improvements at the junction but would need to be included within these discussions. At this stage we do not consider that there is sufficient evidence of effective joint working on cross-boundary strategic matters such as M5 J14 with South Gloucestershire or Developers as stated.

2.6. Charfield Rail Station

2.6.1. The Stroud Sustainable Transport Strategy Addendum (EB108) comments on the reopening of Charfield Station, stating that it would *"help to improve capacity and resilience of both the strategic and local highway networks, and also provide a sustainable transport connection between a key*

employment/residential area at Charfield (following SGC Local Plan development) and locations within Gloucestershire and Stroud District".

2.6.2. The Strategy (EB108) notes that Charfield Station is expected to come forward alongside a strategic development site in the SGC Local Plan.

2.6.3. It should be clarified that the station is coming forward separately to any strategic development site, including the CEG and the CLC development.

2.6.4. A planning application for the station was submitted to SGC in September 2022 and the Sustainable Transport Strategy (EB108) should be updated to reflect this latest position, along with any updated analysis of the predicted impact on the SDC network including M5 Junction 14.

2.6.5. Within Table 5-1, the Sustainable Transport Strategy Addendum (EB108) notes a 7.5% reduction in background trips between destinations on the Bristol-Birmingham Line. The report states that the station would have *"…limited impact on background traffic on the SDC network and as such Charfield/Renishaw has been included in the network"*.

2.6.6. Whilst not certain and SDC should clarify, it is understood that this sentence should read 'Charfield/Renishaw has not been included in the network'; and also SDC should provide justification as to how limited the impact will be and from where this assertion has been derived.

3. Summary

Overview

3.1.1. Evoke on behalf of CEG and the CLC have prepared this Representation to respond to the additional evidence prepared by SDC to support the SDLPR. Representations were previously made by CEG and CLC in July 2021 to the SDLPR.

3.1.2. Based on a review of the additional evidence submitted it is considered that there remains a lack of detail and more importantly evidence in regard to the form and delivery of the substantial improvement required at M5 J14 to support the SDLPR allocations. This therefore undermines the soundness of the FDP (EB109) in particular and subsequently the IDP (EB110), as well as the policies listed at Paragraph 1.1.2. The evidence base now before the Examination is deficient in relation to:

- The form of the mitigation proposed;
- The cost of the works including a breakdown;
- How these major infrastructure improvements will be funded;
- How thresholds for contributions have been derived; and
- How the level of funding anticipated from the strategic development sites has been calculated and thresholds for requiring contributions.

3.1.3. There are also discrepancies between the contribution levels proposed in the FDP (EB109) compared to the IDP (EB110) for M5 J14 that need to be explained.

3.1.4. It is acknowledged that a Duty to Cooperate Statement (EB3) was provided by SDC dated October 2021 which details previous discussions with SGC and NH. What this does not identify, and what is not clear from the other evidence submitted is whether SGC now agree with the modelling assumptions in the TFRA (EB98), the preferred mitigation and scheme costs at M5 J14, and the approach to, and level of contributions proposed from the SDLPR towards the M5 J14 improvement. Also SDC has not engaged with SGC working group on the proposals for M5 J14 in the SDLP.

3.1.5. The evidence base and in particular the Duty to Cooperate Statement (EB3) also falls silent on the work completed by NH in regard to M5 J14, which includes considering in detail (using a microsimulation model) the cumulative impact of development on the highway network. It is essential that the plan evidence base uses the recently completed NH model and cumulative impact assessment to ensure that the most up to date information is offered to assist the Inspectors' assessment. Given the availability of this detailed work and SDC's input, it's counterintuitive not for SDC to use it. At the very least there needs to be a further update to the submitted evidence base to assess the implications of the NH model and its outputs on mitigation/costs.

3.1.6. In light of the above, Evoke consider that there has been no effective joint working on cross-boundary strategic matters with SGC, and that impact of the SDLPR allocations (and potential windfall sites) on M5 J14 and the neighbouring local authority area have not been appropriately considered.

Key Issues

3.1.7. Overall, on review of the further evidence base published to support the SDLPR Examination, the key issues are as follows:

- Traffic Modelling:
  - The TFRA (EB98) identifies an approximately 5-minute delay on the M5 Junction 14 and approaches with the inclusion of SDC growth (with no mitigation). However, the IDP references a 20% impact only; with the remainder coming from other local authorities. There

is no clarity on how impact has been defined and whether the approach adopted is reasonable for example would a 20% impact relate to a 5+ minute delay.

- The FDP (EB109) states that SDLP growth accounts for 14% of impact, with the remaining 86% background growth. However, the calculation used to establish this is unclear and should be fully explained to the Inspectors.

- Proposed Mitigation Costs:
  - The AECOM Mitigation Review cannot be located and does not appear to be included within the recently published Examination documents. It can only be assumed that the modelling uses the mitigation briefly set out in the previous March 2021 TFR (EB61) which shows a two-bridge gyratory solution. It is requested that As part of the evidence base, the AECOM Mitigation Review should be provided and with further detail including drawings and breakdown of costings submitted as without these documents it is not possible to consider whether the FDP (EB109) and therefore allocations within the IDP (EB110) are sound. Respondents to the SDLPR should be afforded the opportunity to comment on its findings when presented.
  - The scheme has been costed at around £27.3 million, though previous cost analysis has considered a junction of that described above as costing in the region of £57 million (2018 prices). To assist the Inspectors, SDC should provide the scheme proposed and a justification for the costs, along with a breakdown for analysis.

- Scheme Funding:
  - It is not clear whether SGC have agreed to the modelling assumptions used, as well as the impact of SDLPR allocations compared with potential growth from other boroughs (listed as a 20% / 80% split).
  - SDC need to use the NH's VISSIM model for M5 J14 to consider the cumulative impacts and funding model. The model has been available for a number of years and has recently been updated to ensure that the most up to date information is used to assist the Inspectors' assessment. SDC are aware of this model and assessment and at the very least there needs to be a further update to the submitted evidence base to consider the implications of the new model on the finding of SDLPR and the proposed mitigation/costs at M5 J14.
  - The funding contribution requirements have been set out, though a number of processes are unclear; including NTEM growth forecasts, calculations in relation to neighbouring authority growth; agreement from neighbouring local authorities relating to these numbers; and, justification as to the basis for the use of a 150-unit threshold (under which strategic transport contributions are not required).
  - There is no evidence provided regarding the 20% impact from SDC compared with 80% from other authorities and the IDP (EB110) appears to confirm that there is little certainty as to details, nature and location of strategic development to the north and south of the district. To assist the Inspectors and other stakeholders, SDC should provide the calculations behind the 20%/80% split.
  - The IDP (EB110) contribution requirements equate to 10% of the listed cost of the junction improvements (rather than 20% as suggested elsewhere within the IDP). The contribution requirements noted in the FDP equate to £5,370,000, which equates to 19.7% of the listed cost. For viability and planning obligation reasons, SDC should clarify the total contribution costs for each proposed allocation.

- Land Requirements:
  - SDC has not confirmed whether the extent of the improvements proposed at M5 J14, has considered the impact on third party land; if this has included discussions with the promoters of Buckover Garden Village; and, whether reasonable agreement has been made in relation to this land (whether or not the garden village is confirmed as an allocation within a future Local Plan relating to SGC).
- Duty to Cooperate:
  - SDC has not used NH's VISSIM model to assess the M5 J14 or referenced this in their evidence.
  - It is not clear whether the modelling (where it has a direct impact), contribution methodology and scale of impacts (e.g. 80%/20% for M5 J14) has been shared or agreed with SGC. What has been agreed with SGC should be provided to the Inspectors as part of the Examination documents.
- Charfield Station:
  - It should be clarified by SDC that Charfield Station is coming forward separately to any strategic development site. A planning application for the station was submitted to SGC in September 2022 and the Sustainable Transport Strategy (EB108) should be updated to reflect this latest position, along with any updated analysis of the predicted impact on the SDC network.