

# TECHNICAL NOTE



**Job Name:** Sharpness  
**Job No:** 332210067  
**Note No:** 332210067-709-TN03  
**Date:** August 2024  
**Prepared By:** Jemima Odom  
**Subject:** Updated Research on Mobility-as-a-Service

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## 1 Background

- 1.1 Stantec UK Limited (Stantec) has prepared this Technical Note on behalf of Sharpness Development LLP, to provide transport support for the development of Sharpness Vale in the Stroud District of Gloucestershire. This Technical Note has been prepared as a response to queries outlined by the Inspectors appointed to examine the Stroud District Local Plan Review. These queries were raised in a letter dated 4<sup>th</sup> August 2023 which is provided in **Appendix A**. The specific query relating to Mobility-as-a-Service (MaaS) stated:
- 1.2 *“Whilst additional evidence has been submitted regarding the MaaS scheme, this does not provide indicative costs for implementing such a scheme at Sharpness. We therefore have concerns regarding its likely cost, how it would be funded and whether it would be viable. In addition, we are still not clear how a scheme like this has been successfully implemented in the context of a new settlement rather than an urban area where existing public transport options already exist and are well-established”* (Paragraph 21).
- 1.3 The “additional evidence” in the Inspector’s letter referred to what was outlined in Technical Note **332210067-550-TN02** (TN02), which was produced by Stantec in May 2023. TN02 outlined the MaaS concept and how it will be utilised in Sharpness Vale to ensure accessible and sustainable transport is integrated as part of the development.
- 1.4 The Site Promoters issued a response to the Inspector’s letter dated 25<sup>th</sup> September 2023 which is provided in **Appendix B**. This letter summarised the concerns raised by the Inspectors and additional information about MaaS to address these.
- 1.5 This Technical Note outlines information on MaaS that has been published since TN02 was written and builds upon that provided in the Site Promoter’s response letter. MaaS is an emerging, but growing, multimodal transport system platform and so there is continuously new data being released about its application and success.
- 1.6 The information presented is that which is most useful to the implementation of MaaS in the context Sharpness Vale. It will firstly draw upon a case study of MaaS in a rural context, which is reflective of the nature of the Sharpness Vale development. This report will also draw upon the process of implementing a MaaS platform which will enable the requirements, functionality and coverage to be identified. The baseline requirements for a MaaS platform in Sharpness Vale will then be outlined based on this research.

## DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
332210067-550-TN02	-	04/09/24	JO	LS	LS	LS

This report has been prepared by Stantec UK Limited (“Stantec”) on behalf of its client to whom this report is addressed (“Client”) in connection with the project described in this report and takes into account the Client’s particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

- 1.7 It is important to note that the development of Sharpness Vale is by no means contingent on the provision of a MaaS solution as all proposed transport systems will be implemented regardless and MaaS is primarily intended to provide a modern enhancement to user experience and a means to promote adoption of sustainable travel behaviours. MaaS, forming part of the transport offerings at Sharpness Vale, will enable the use of and integrate all transport options provided as part of the development to enable as seamless as possible access to sustainable travel options for future residents, it is however not a requirement of multimodal transport.

## 2 Government Strategy Updates

- 2.1 There is an increasing consensus from Central Government that MaaS is a growing transport system in the UK. In August 2023, The Department for Transport published an official Code of Practice as a response to the growing use of MaaS<sup>1</sup>. The aim of the Code of Practice is to enable the emerging MaaS platforms to grow with any unintended consequences mitigated. It is stated on the Gov.uk website that *“A code of practice will enable us to support MaaS as it grows without introducing regulations at a time that could stifle innovation in this emerging industry. A code of practice will also provide an opportunity to gather further evidence in a structured manner to understand if and where regulation might need to be brought forward in the future.”* This reflects the growing accommodation and encouragement of MaaS systems in the UK from Central Government.
- 2.2 There is also growing consideration of emerging transport systems in rural communities. The DfT’s Rural Strategy entitled “Future of Transport: supporting rural transport innovation” highlights how MaaS will enable rural communities to have improved access to transport and make journeys safer, cheaper and more efficient<sup>2</sup>. This strategy provides insights, recommendations, and strategies to enhance rural transport through technology and innovation. It is primarily aimed at local authorities but also offers valuable insights for transport operators, businesses, and people living in rural areas.
- 2.3 This strategy also outlines nine Principles of Rural Mobility which will help accelerate and embedded innovation and new technologies in the rural transport system. These are:
- *“New modes of transport and new mobility services must be safe and secure by design.*
  - *Innovation in transport should consider the needs of rural transport users and must be available and accessible to all parts of the UK and all segments of society.*
  - *Walking, wheeling, cycling and micromobility must be enabled as the best options for short rural journeys.*
  - *Affordable and accessible public transport and shared mobility must be fundamental to an efficient rural transport system.*
  - *New transport modes and services in rural areas should support a rapid transition to zero emissions and be adapted to climate change.*
  - *Innovation should improve road efficiency and reduce congestion by promoting shared mobility, improving user choice and consolidating freight.*
  - *The marketplace for mobility must be open to stimulate innovation and give the best deal to users, working alongside local authorities to complement existing services.*

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<sup>1</sup> <https://www.gov.uk/government/publications/mobility-as-a-service-maas-code-of-practice/mobility-as-a-service-code-of-practice>

<sup>2</sup> <https://assets.publishing.service.gov.uk/media/652e37b46b66bf0014b757a9/dft-future-transport-supporting-rural-transport-innovation.pdf>

- *New transport services must be designed to operate as part of an integrated system that combines public and private modes with community-led schemes for transport users.*
- *Data from new transport services must be shared where appropriate to improve both choice and the operation of the transport system.”*

2.4 This implementation of specific guidance on MaaS in the UK shows there is a growing shift in embracing MaaS as a transport system and in both urban and rural environments. Given the rural context of Sharpness Vale, it must be ensured that the implementation of MaaS aligns with the Principles of Rural Mobility so that it is executed efficiently and has support from Government and all relevant stakeholders.

2.5 On 29 April 2024 the Department for Transport (DfT) published a Science Advisory Council Paper on Land Use and Transport Planning. This paper highlights the importance of not being limited to UK only examples of successful implementation of sustainable transport approaches and application of associated technology. For this reason, this updated Technical Note highlights an additional international case study example of a successful MaaS solution.

## 3 Case Study: Go-Hi MaaS App in the Highlands and Island Region of Scotland

### 3.1 Summary

3.1 The Highlands and Islands region of Scotland has implemented a MaaS app which acts as a successful example of MaaS operating in a rural environment. In 2018, the Scottish Government committed to a £2 million investment fund over three years to support the testing of the MaaS concept in Scotland. The aim was to assess the viability of MaaS service in the region. In June 2021, the Go-Hi app was launched by The Highlands and Islands Transport Partnership (HITRANS), after a successful trial. It provided instant access to information on buses, trains, taxis, car hire, car clubs, bicycle hire, air travel, and ferries. It aims to empower travellers with comprehensive information, making it easier for them to choose alternative modes of transportation.

### 3.2 Measurements of success

3.1 The Go-Hi app is considered to have achieved success since its launch and has won the following awards:

- *“The Shared Mobility Award”* at CiTTi Awards 2023. This recognition reflects it’s success within the transport industry in providing access to shared mobility. Specific factors the judges praised were its ambitious scope, overcoming challenges, and contribution to improving transportation for the public<sup>3</sup>.
- *“The Highlands and Islands Enterprise Award for Excellence in Innovation”* at the Scottish Council for Development and Industry (SCDI) Highlands and Islands Business Excellence Awards<sup>4</sup>.
- The *“Most Innovative Transport Project of the Year”* at the Scottish Transport Awards<sup>5</sup>.

3.2 Further success is demonstrated through the fact the app has more than 3,000 unique downloads and registrations, with its popularity continuing to grow. The Highland Council has also adopted the Go-Hi platform to offer alternative mobility options for their own employees,

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<sup>3</sup> <https://gohi.app/news/gohi-wins-shared-mobility-award-citti-awards-2023/>

<sup>4</sup> <https://gohi.app/news/go-hi-wins-scdi-excellence-in-innovation-award/>

<sup>5</sup> <https://gohi.app/news/innovation-award-for-go-hi-at-2023-scottish-transport-awards/>

streamlining travel processes and reducing administration. This real-world adoption by a Local Authority demonstrates the app's practical utility and impact.

- 3.3 This case study demonstrates that MaaS platforms can be successfully implemented in rural environments and can encourage rural communities to travel by sustainable means. This example, when compared to those outlined in TN02 demonstrate that MaaS can be implemented in a variety of UK contexts and is not absolutely suited to cities and urban environments.

## 4 Case Study: Use of DRT by Worcestershire County Council

### 4.1 Summary

- 4.1 Worcestershire County Council (WCC) have adopted the Via platform throughout Worcestershire. Information has been obtained about their implementation of Demand Responsive Transit (DRT) in a webinar hosted by Intelligent Transport, who are a leading information source in the urban public transport sector. The webinar is entitled "*How Worcestershire combines DRT, Planning and MaaS*" and featured Sam Griffiths, Head of UK & Nordics, Via, and Matt Stone, Head of Transport Technology, WCC. The Via app provides an example of a DRT service being successfully implemented in a rural context.

- 4.2 Via is described by Mr Griffiths as "*one unified platform to power end-to-end planning, operation, and optimisation across transport modes*". The planning software tool behind the Via app is called Remix which is used to identify opportunities for DRT across Worcestershire. It identifies gaps in the network and quickly stimulates potential new DRT services.

### 4.2 Measurements of Success

- 4.1 The Via platform was successfully piloted in Bromsgrove and has since been implemented across Worcestershire. Mr Stone identified in the webinar how the Via platform has enabled Worcestershire to use DRT to provide the following outcomes:

- *"Better Connectivity: rural and urban.*
- *Attract new users: more options for passengers.*
- *Cost-effectiveness: optimisation of routes and schedules.*
- *Technology and Innovation: understand how DRT have changed since first introduced.*
- *Integration: ability to integrate with existing public transport networks".*

- 4.2 The mobile phone application (app) also had a high number of downloads. Mr Stone stated "*we were quite surprised by the uptake in terms of usage... we've got over 5000 app downloads. I think we've just hit all 50,000 journeys, and we're seeing continued growth throughout*". This large uptake reflects the platform as being accessible and useful to users.

## 5 International Example – The Reallabor Schorndorf Project, Germany

- 5.1 On 29 April 2024 DfT Science Advisory Council published a paper on Land Use and Transport Planning. This paper states that:

- 5.2 "*In general, there are few examples of new settlements in the UK that have been built fully on sustainability principles, including prioritising sustainable transport modes. There are however some international examples, such as Freiburg in Germany, where a major and sustained investment in public transport, walking and cycling has led to substantial reductions in car travel.*

5.3 *There is a need for better visibility of case studies showing what ‘good’ or ‘different’ looks like, with robust data on how design and planning subsequently influence travel patterns, lifestyles and more generally well-being.”*

5.4 This paper shows that successful international MaaS examples can provide valuable insights for UK applications. The examples used to build a case for MaaS in Sharpness should therefore not be limited by evidence from UK contexts only.

## 5.2 Summary

5.1 This MaaS initiative was implemented in the Baden-Württemberg region in southwest Germany, located in the Black Forest and consisting of rural communities. It aims to enhance rural mobility by integrating various transport services, including local bus and train schedules, electric bikes, and scooters. Like Sharpness Vale, this project offers on-demand shuttle services connecting rural residents to key locations such as train stations, shopping centres, and healthcare facilities.

5.2 The project received €1.2 million in funding from the Baden-Württemberg Ministry of Science, Research, and the Arts from 2016-2019<sup>6</sup>. This investment was used to provide an on-demand bus system and integrate digital solutions to enhance efficiency and sustainability. This amount is not solely attributed to the cost of the associated MaaS platform that was implemented as part of the project but it is incorporated into the overall cost.

## 5.3 Measures of success

- Residents in rural areas have better access to essential services and opportunities, such as healthcare, education, and employment.
- By providing reliable and convenient transport options, the project helps reduce social isolation and improve the overall quality of life for rural residents.
- Improved mobility boosts local economies by making it easier for people to access local businesses and services.

## 6 MaaS Business Models

6.1 There is continuously information emerging about the way MaaS apps can be implemented successfully however there is limited information available on the detailed cost breakdown associated with their implementation. The business model used by Trafi (German based MaaS provider) has been praised for being able to finance itself well. Trafi is considered to have a viable business model when compared to other MaaS platform operators<sup>7</sup>. The operational model for the Trafi MaaS platform should be used as an exemplar of a successful MaaS business model for Sharpness.

6.2 Trafi are the developer for the MaaS app covering the Solent area, which was identified in TN02. Portsmouth City Council undertaking a procurement exercise in October 2020 on behalf of the Solent Transport Partnership (Hampshire County Council, Portsmouth City Council, Southampton City Council and Isle of Wight Council) to award a contract for delivery of the platform. £2.4 million was allocated to fund the development, launch and operation of the platform until Summer 2024, when it was anticipated that the app will be financially self-sufficient<sup>8</sup>.

6.3 Trafi offer a number of services and can be approached directly about them and the design of a system to suit a particular context, for example, by a city or other entity that intends to explore a potential MaaS app and solution to fit a particular context and application.. This is called their

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<sup>6</sup> <https://www.reallabor-schorndorf.de/>

<sup>7</sup> <https://sifted.eu/articles/trafi-series-b>

<sup>8</sup> <https://www.thebidteam.com/maas-platform-worth-2-4m-wanted-by-solent-transport/>

“White Label App” service and a demo can be requested on their website<sup>9</sup>. They also offer additional packages – one of which is a Mobility Intelligence platform for transport bodies to gain insights into travel patterns in their city for example. Another service is sharing of the technology used in their MaaS apps with clients who want to implement their own MaaS system, as opposed to getting Trafi to develop and implement a bespoke app for them.

- 6.4 During the development of Sharpness Vale and as more transport movement systems are set to come on-line the Sharpness Development LLP will engage with Trafi to identify a potential solution for Sharpness Vale that provides an integrated and unified platform for users.

## 7 Implementing a MaaS Platform

- 7.1 There is growing evidence and advice on how a MaaS platform can be successfully developed<sup>10, 11</sup>. The key steps involved have been outlined based on the process undertaken by existing MaaS operators. The key steps are:

### 1. Definition of MaaS Concept:

- Identification of a target market and an understanding of user needs. Determination of the specific audience to be served by the MaaS app. Consideration of factors like demographics, travel patterns, and pain points.
- Decision on what problems the MaaS app will solve and clear definition of the project purpose and goals.

### 2. Liaison with Stakeholders

- Existing and future transport providers and local authorities need to be onboard
- Software developer needs to be appointed to build the app or appropriate ‘of the shelf’ product identified

### 3. Testing and Quality Assurance:

- Rigorous testing of the app. Checking of bugs, usability issues, and performance bottlenecks.
- Conduction of beta testing with real users to gather feedback for initial refinement of functionality.

### 4. Launch and Marketing:

- Launch of MaaS app on app stores. Promotion through social media, partnerships, and local events.
- Collaboration with transportation agencies, local governments, and other stakeholders.

### 5. Continuous Improvement:

- Monitoring of app performance, user feedback, and usage patterns.
- Regular updates of the app with new features, improvements, and bug fixes.

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<sup>9</sup> <https://www.trafi.com/white-label-product>

<sup>10</sup> <https://www.rst.software/blog/building-a-mobility-as-a-service-maas-app-from-a-to-z>

<sup>11</sup> <https://thinksmobility.com/insights/blog/the-future-of-mobility-is-here-heres-all-you-need-to-know-about-maas/>

7.2 There are also steps more related to the technical building of an app. These will mostly be undertaken by an app developer, but all Stakeholders would need involvement in these processes. These processes involve:

- Technology Stack and Architecture
- Data Integration and APIs (Application programming interface)
- User Experience (UX) Design
- Routing and Algorithms
- Payment Integration
- User Profiles and Personalisation

## 8 Implementation of MaaS in Sharpness

8.1 To determine the functionality of the MaaS app, there is need to determine the requirements of it. For this purpose, we have considered who is likely to use the app and by what mode and purpose. The requirements of a MaaS app that could be developed to support the uptake of transport offerings associated with Sharpness Vale are shown in **Table 6.1**. As the Sharpness Vale development progresses this will be used as a basis for identifying and costing a functional Maas platform for Sharpness Vale.

6.1 Requirements of a MaaS app

Journey Distance	Mode	MaaS Functionality	Purpose	Destination	Stakeholders
Short (0-1km)	Walking	Journey planner/map	Shops, neighbourhood facilities, school	Internal	No stakeholders – but need to consider those who can't walk (e.g. wheelchairs and prams)
Medium (1-5km)	Escooter	Book and unlock vehicles	Shops, neighbourhood facilities, station	Internal and to existing community	Operator e.g. voi
	Ebike	Book and unlock vehicles	Shops, neighbourhood facilities, station		Operator e.g. beryl
	Local Bus	Book tickets, access timetable and live journey updates	College, supermarket		Existing bus providers (e.g. Stagecoach)
Long (5km+)	Train	Book tickets, access timetable and live journey updates	Commuting and leisure	Gloucester	Network rail, rail operator

	Express Coach	Book tickets, access timetable and live journey updates		Gloucester and Bristol	Operator
	Hire Car	Book and choose vehicle		Places further afield	Operator (e.g. Enterprise)

**9 Coverage**

9.1 The MaaS app would be available for use by all residents of the Sharpness Vale Development and those who live and work in the surrounding settlements and existing and future employment nodes. It will encompass all the new travel modes that will be implemented as part of the development and existing local transport provided by Bus Operators. The services and potential extent of these within the Sharpness development are shown in **Figure 7.1**.



Figure 7.1 Transport Services to be provided by MaaS app within the site



- 9.2 The app would also enable residents to access transport to places further afield. A diagram of the transport services to places outside the site, such as Bristol, Gloucester, and Stroud, is shown in the diagrams provided in **Appendix C**.

### 10 Conclusion

- 10.1 This Technical Note has addressed concerns outlined by the Planning Inspector regarding the viability of a MaaS scheme in the rural context of Sharpness. Evidence has been provided of examples of viable and successful MaaS schemes that operate in a variety of contexts, including rural. These examples show that MaaS can not only be implemented successfully, but can provide a means of bringing benefits to rural communities, such as reducing accessibility inequalities and reducing carbon footprints, which in rural communities, are often higher. It is however not possible to obtain detailed implementation or operational cost data associated with the examples provided. Where cost information is known it has been provided. During the development of Sharpness Vale the Sharpness Development LLP will engage with MaaS providers to develop a cost model for a solution that meets the local requirements.
- 10.2 This technical note has also demonstrated a high-level process for implementing a MaaS solution at Sharpness. There is a need for engagement with MaaS App Developers to identify requirements and create the software to suit desired functionality and future transport operators to determine how a MaaS will be implemented and used. The key stakeholder, scope of service and coverage for a MaaS service for Sharpness has been identified.
- 10.3 It is important to note that the development of Sharpness Vale is by no means contingent on the provision of a MaaS solution as all proposed transport systems will be implemented regardless and MaaS is primarily intended to provide a modern enhancement to user experience and a means to promote adoption of sustainable travel behaviours. MaaS, forming part of the transport offerings at Sharpness Vale, will enable the use of and integrate all transport options provided as part of the development to enable as seamless as possible access to sustainable travel options for future residents, it is however not a requirement of multimodal transport.

# TECHNICAL NOTE



## Appendix A Letter from Inspectors

# Stroud District Local Plan Review Examination

**Inspectors:** Victoria Lucas LLB MCD MRTPI and  
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Mr Mark Russell  
Head of Planning Strategy and Economic Development  
Stroud District Council

Sent by email

4 August 2023

Dear Mr Russell

## Stroud District Local Plan Review Examination

1. We wish to extend our thanks to the Council and all other participants for their contributions to the recent hearing sessions for the Examination of the Stroud District Local Plan Review (the Plan). We indicated at the end of June that we would need to take some time to consider the additional evidence submitted during the hearing sessions, before providing our thoughts on the way forward for the remainder of the Examination.
2. We now consider it expedient for us to express our current thoughts, particularly regarding our fundamental concerns on issues surrounding the Strategic Road Network (SRN) and the Sharpness new settlement. We also have concerns regarding the new settlement at Wisloe which we will consider first.

### Wisloe new settlement and other soundness issues

3. Our concerns relate to the provision of the pedestrian and cycle bridge over the motorway. As a critical piece of infrastructure, we would require the evidence to clearly demonstrate that this is both viable and deliverable. During the hearing session it became apparent that the projected costs for this piece of infrastructure and timescales for delivery had not been recently agreed with National Highways. We therefore have concerns that the costs for implementing this scheme may be higher than anticipated which could affect the overall viability of the site.
4. The evidence shows that the provision of this bridge is essential to ensure there is a sustainable pedestrian and cycle route to and from the nearby railway station and to other local services and facilities. Without it, the sustainable accessibility of this new settlement is of concern. However, we feel that additional evidence on this issue, could potentially alleviate our concerns. Such evidence would need to demonstrate outcomes from further discussions with National Highways setting out agreed project costs and timescales and provide updated viability evidence for the site. We recognise that this would presumably take some time to achieve.
5. In addition to this, whilst we have a number of other soundness concerns with the Plan, we are confident that it is likely that these could be addressed by main modifications. However, these do not detract from our fundamental concerns over the soundness of the Plan, to which we now turn.

### Strategic Road Network (SRN)

6. You will recall that at the start of the Examination, we held a focussed session to discuss issues relating to the SRN. This included discussion on Junctions 12 to 14 of the M5 motorway. The evidence base clearly identifies the need for improvements to all three junctions during the plan period. Those at Junction 13 appear to be specifically required to accommodate the site allocation under Policy PS20, whilst larger strategic junction improvements are necessary for Junctions 12 and 14 to accommodate the planned growth in the District. Indeed, the need for such improvements was not disputed by relevant parties. We focus our concerns in this regard on Junctions 12 and 14.
7. We fully recognise that issues with the capacity and safety of the SRN cannot be resolved by the District of Stroud alone. It is very much a wider regional concern that requires a more strategic resolution. Notwithstanding the engagement that has been held between the Council and key SRN stakeholders, we are concerned that the

evidence does not clearly set out when the improvements would be required during the plan period and how they would be funded and secured. We consider convincing evidence on these points to be fundamental to the soundness of the Plan.

8. At the end of the focussed session, we asked the Council to discuss a way forward on the SRN issues with relevant statutory stakeholders (specifically neighbouring Councils, the Highway Authority and National Highways) and to agree a project timetable with measurable outcomes. We were quite clear that simply agreeing to continue to talk about this issue would not address our concerns. We therefore provided the Council with the opportunity to prepare further evidence in connection with our concerns.
9. In response to this, the Council submitted the document Strategic Road Network – Agreed Next Steps. We wrote a brief letter in response to the Council dated 6 June 2023 stating that we were not convinced that the statement addressed our fundamental concerns. Whilst we appreciate the efforts of the parties involved in the process of producing the document, it does not include any timescales or measurable outcomes and commitments.
10. As regards the issue of funding, the Transport Funding and Delivery Plan (July 2022) (TFDP) sets out a methodology that calculates the financial contributions that specific developments within Stroud District would contribute towards the identified SRN schemes. We have concerns regarding this methodology, specifically the lack of justification for the apportionment method used which uses growth from Stroud alone as a proxy for growth in neighbouring areas and the lack of agreement with neighbouring Councils as to predicted growth within their areas.
11. Neighbouring Councils and the County Council have also made it clear that at the present time they are unable to clarify the quantum or location of future growth that will take place in their areas due to the early stage of their Local Plans. Whilst we appreciate that Stroud District Council wish to proceed with the adoption of their Plan, the approach proposed by the Council to attempt to deal with the SRN infrastructure requirements is inadequate. At this stage, we are neither satisfied that the methodology provides justified outcomes nor is it accurate in terms of presenting a pattern of future growth on which decisions about the funding of strategic infrastructure can be based.
12. During the hearing session held on 23 March 2023, which focused on Strategic Transport Infrastructure (Matter 11), it was acknowledged by the parties present that the costs for the M5 Junction 12 and

Junction 14 improvement schemes are, in reality, likely to be significantly higher than the costs identified in the TFDP. The significant increase in costs makes it unrealistic for these schemes to be funded solely from developer contributions. Accordingly, and as acknowledged by the Council and other parties present at the session, some form of external government funding would need to be attained. No such funding bids are currently in preparation or actively being sought.

13. We are aware that it usually takes many years to bid for and secure appropriate funding for such strategic road infrastructure, so it is clearly not a quick process. As things stand, there are no current realistic plans for how and when the improvements to Junction 12 and Junction 14 would be funded or delivered. Based on the evidence, we have significant concerns as to whether the SRN infrastructure improvements required to accommodate the planned growth would be delivered during the plan period.
14. We are mindful of the Council's desire to have a Plan in place and recognise the contribution towards sustainable development objectives that having an up-to-date Plan in place would make, not least by increasing the supply of housing and employment opportunities which are important Government objectives. However, such growth must be planned and delivered sustainably. Part of that consideration involves ensuring that the necessary infrastructure will be in place to support that growth.
15. In response to our request at the focussed session held on 23 March 2023, the Council produced a note indicating which site allocations they considered could be delivered without triggering the need for the mitigation schemes to be delivered at M5 Junctions 12 and 14 (SLP-AP-002, Appendix 2, dated 12 May 2023). The note also usefully sets out those sites which would trigger the need for the mitigation works to be delivered. In relation to Junction 12 these are identified as: G1 (South of Hardwicke), G2 (land at Whaddon) and PS30 (Hunts Grove Expansion). For Junction 14 these are identified as: PS34 (Sharpness Docks), PS36 (New Settlement at Sharpness) and PS37 (New Settlement at Wisloe).
16. We note the concerns raised by National Highways to the Council's approach in determining this list of sites. Whilst we acknowledge these concerns, the Council's list usefully emphasises the fact that the delivery of the Plan's spatial strategy for growth, which includes the creation of two new settlements, is dependent upon the SRN infrastructure improvements at Junctions 12 and 14.

17. National policy emphasises the need for development, including new settlements, to be supported by necessary infrastructure. The Planning Practice Guidance (PPG) sets out how a Plan can demonstrate that it can deliver strategic matters, through identifying how infrastructure can be funded and brought forward, and where existing infrastructure cannot meet forecast demands how these can be addressed. Also, whilst acknowledging that there may be uncertainty regarding securing funding for strategic infrastructure, the PPG states that it must be demonstrated that there is a reasonable prospect that proposals can be developed within the timescales envisaged.
18. Based on our concerns as expressed above, we do not at this stage have confidence that necessary improvements to M5 Junctions 12 and 14 will be funded and delivered during the plan period. We therefore cannot conclude that there is a reasonable prospect that the relevant site allocations will be delivered and, therefore, that the spatial strategy as a whole is sound.

#### Sharpness new settlement

19. In relation to Sharpness, the proposal in the Plan seeks to build a sustainable settlement based on garden city principles and the prioritisation of transport by means other than the private car has been put at the heart of the development's ethos. However, whilst a significant amount of evidence has been submitted regarding the provision of a passenger train service and bespoke Mobility as a Service transport scheme (MaaS), we have serious concerns relating to the viability and deliverability of these schemes.
20. Specifically, the cost of providing a passenger train service has not been audited or agreed with Network Rail or the relevant Train Operating Company (TOC). The costs therefore may well be subject to change. In response to suggestions that the scheme would not meet the criteria to apply for external funding, the developer has said that it would be self-funded by the development. However, this leaves limited flexibility should costs rise as is often the case with infrastructure projects. Furthermore, the developer advised that any subsidy for the railway service would end after 3 years at which point it would be expected to be self-funding. We are not convinced that this would allow a sufficient timeframe for a new service to be established. In addition, the train service would call at Gloucester and would not extend to Bristol, which is an important economic centre. Given that the service would need the agreement of Network Rail and the TOC we are also concerned about the lack of recent engagement. We therefore have concerns that the train service is not viable or deliverable whether it is self-funded or not.

21. Whilst additional evidence has been submitted regarding the MaaS scheme, this does not provide indicative costs for implementing such a scheme at Sharpness. We therefore have concerns regarding its likely cost, how it would be funded and whether it would be viable. In addition, we are still not clear how a scheme like this has been successfully implemented in the context of a new settlement rather than an urban area where existing public transport options already exist and are well-established.
22. Taking these issues together, they call into question whether the sustainable accessibility of the site can be achieved. Should both the train service and the MaaS scheme not be delivered as proposed within the Plan then what would remain would be a large new settlement where the use of the private car for external journeys would likely become the default option for the majority of residents. This outcome would fundamentally conflict with the Plan's overall vision, its spatial strategy and the garden city ethos for new settlements.

#### Way forward

23. We have carefully considered various possible alternative ways forward, including whether an early review of the Plan would be acceptable or whether pausing the Examination to allow for the preparation of further evidence on the SRN and new settlement issues would be productive. However, we believe that our concerns are so fundamental to the Plan as a whole that this would not be something that could be appropriately addressed by an early review of the Plan. Moreover, recognising our concerns about how long it would be likely to take to progress this additional evidence, particularly in relation to the successful securing of external funding bids and determining when the infrastructure would be delivered, we seriously question the usefulness of allowing a delay to the Examination which could be for an extensive period.
24. Given the issues that we have identified regarding the SRN and the new settlements, this potentially means that a significant proportion of the Plan's allocated sites may not have a realistic or reasonable prospect of being delivered within the plan period. The lack of an immediate solution to the SRN issue is a significant constraint and on this basis we recognise that it is possible that Stroud District may not be able to meet its Objectively Assessed Need for housing in full.
25. However, before reaching a conclusion as to whether or not this is the case (and if so the extent of the shortfall), the Council would be likely to need to consider whether it could allocate omission sites to make up some or all of the shortfall. Inevitably, this would be a lengthy process as considerable additional evidence would be



required, including the assessment of cumulative impacts on the SRN. This work would also need to be agreed with key SRN stakeholders including National Highways. The outcomes of this work cannot be predicted at this time and the process would likely cause significant delays to the Examination process. It could also ultimately result in a fundamentally different spatial distribution of development which would be likely to require further extensive consultation and assessment. It would not be appropriate for this to be dealt with through an ongoing Examination.

26. Agreeing to a considerable delay or pause in the Examination process could also cause other issues as some existing evidence could become outdated, requiring more delays to allow for updates. At this time, we are not convinced that a significant delay to the Examination would be genuinely more effective than stepping back several stages in the plan making process to allow for adequate time to engage on the SRN and other issues, in order to achieve successful outcomes and consider the implications for the spatial strategy and for meeting the District's OAN.
27. Consequently, whilst we recognise the need for pragmatism in the examination of local plans and the desirability of an up-to-date plan for Stroud District being found sound as soon as possible, we think it only fair to advise you that we currently consider that withdrawal of the Stroud District Local Plan Review from this Examination may well be the most appropriate way forward. Given that the Plan's spatial strategy needs to be supported by necessary infrastructure provision and we have raised fundamental concerns about this issue, we seriously question how such matters could be addressed by alternative means.
28. Given that the relevant hearing sessions regarding the SRN, spatial strategy and site allocations have now been held and that these all relate to our fundamental concerns regarding soundness, there seems little merit in resuming the remainder of the hearing sessions after the summer break. This is because they would not change our views on the soundness issues that we have raised in this letter as they cover other matters that do not go to the heart of our concerns.
29. We recognise that you may need some time to consider your response to this letter and, therefore, we are setting no deadline for it. However, we will not reach final conclusions on the way forward for the Examination until we have had the chance to consider your response to this letter. It would therefore be helpful if you were able to give us a broad indication of the likely timescale for us to receive a full response as soon as possible. We have asked the Programme Officer to post a copy of this letter on the Examination website, but

we are not inviting, nor envisage accepting, comments on it from any other Examination participants.

30. We appreciate that the Council will be extremely disappointed by this letter. However, we trust that you recognise that we have not reached these initial conclusions lightly and have done so only after careful consideration of the evidence.

Yours sincerely

*Victoria Lucas and Yvonne Wright*

Inspectors appointed to examine the Stroud District Local Plan Review

# TECHNICAL NOTE



## Appendix B Response from Site Promoters



# STROUD DISTRICT COUNCIL

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29 August 2023

Dear Ms V Lucas and Ms Y Wright,

Thank you for your letter dated 4 August 2023.

Council officers have today now had the opportunity to brief lead Members of the Council and we provide this initial response to the substantive points raised in your recent letter.

We note with concern the indication that the Council should consider withdrawing the draft Stroud District Local Plan (the draft Plan) primarily as a result of issues relating to the delivery of improvements to the M5 motorway junctions 12 and 14.

It is our understanding that Government expects Inspectors to deal with examinations pragmatically with a focus upon addressing shortcomings in draft plans to ensure that they can be adopted and communities can benefit from up to date local plans (see letter from the Chief Planner to Planning Inspectorate dated 6 March 2023).

With this expectation in mind, it is considered that there are a number of options to explore fully and pragmatically before considering the withdrawal of the Plan and the loss of the benefits that an up-to-date plan would deliver to the community.

These are:

- a. A pause in the Examination to allow further investigation of whether there is a reasonable prospect of delivery of infrastructure schemes that could mitigate the impact of housing that would generate traffic affecting M5 junctions 12 or 14.
- b. A pause in the Examination to allow further investigation of the extent to which housing needs could be met by allocations that would not generate traffic which would materially affect M5 junctions 12 or 14;
- c. Further consideration of the extent to which the draft Plan could be amended and adopted to allow for an early review.

Before we address these options further, it is considered important to draw to your attention the full context of the housing delivery proposed in the draft Plan.

As your letter records, the Council has provided a breakdown of the allocations which are likely to generate traffic which may affect M5 junctions 12 and 14, the delivery of which has a relationship with improvements works coming forward (see SLP AP-002 Appendix 2).

These allocations are G1 - South of Hardwicke, G2 - Land at Whaddon and PS30 - Hunts Grove Expansion, PS34 - Sharpness Docks, PS36 - New Settlement at Sharpness, PS37 - New Settlement at Wisloe.

That same document sets out the housing trajectory from sites the delivery of which does not have a relationship with the M5 improvement works i.e. the supply unaffected by constraints relating to the M5 junctions.

This shows a cumulative total of 8632 dwellings coming forward over the plan period. This can be compared with the total housing need identified in the plan for the 20-year period 1 April 2020 to 31 March 2040 (640 pa over 20 years) of 12,600 units. Thus, the trajectory demonstrates that nearly 70% of the housing need for the plan period can be delivered without any reliance upon the sites related to the M5 improvement works.

Further, the trajectory demonstrates that by the end of 2027/28 i.e. five years from now, these housing sites are expected to deliver 6518 units. That represents some 52% of the total twenty-year housing need met within the first eight years of the plan period i.e ten years of need is expected to be met within the first 8 years of the draft Plan period by sites that are not reliant upon the M5 improvement works coming forward).

That same trajectory demonstrates that by the end of 2029/30, sites which do not have a relation with the M5 improvements works are expected to have delivered 7224 units or some 57% of total housing need for the plan period within the first 10 years of the Plan.

Whilst you recommended changes to the housing trajectory during the hearing sessions held during May to June 2023, the substantive changes related mainly to those large strategic sites affected by the M5 constraints. The Council intends to produce updated housing trajectories (with and without the sites impacting upon the M5 junctions 12 and 14) and will submit this with the other proposed work set out below.

The Council believes that this context means that even without the sites which have a relationship with the M5 improvements works coming forward or without identifying additional omission sites for inclusion, the draft Plan is likely to provide a sound basis for meeting housing needs in the immediate 5 to 10 years.

This forms an important context for the consideration of the issues that you identify in your letter and for determining the way forward for the Examination which the Council would ask you to take into account carefully.

### **The M5 Improvement Works**

In respect of the M5 improvement works, we note that the NPPF requires infrastructure and housing delivery to be aligned (NPPF paragraph 11). Further, footnote 37 of the NPPF explains that:

“The delivery of large-scale developments may need to extend beyond an individual plan period, and the associated infrastructure requirements may not be capable of being identified fully at the outset. Anticipated rates of delivery and infrastructure requirements should, therefore, be kept under review and reflected as policies are updated.”

It follows that the NPPF anticipates that schemes may come forward for allocation notwithstanding that associated infrastructure requirements may not be fully identified. What needs to be established is that there is a reasonable prospect of the associated infrastructure requirements being delivered to enable sites to come forward.

As your letter recognises, issues with the capacity and safety of the SRN cannot be resolved by Stroud District alone. It is very much a wider regional concern that requires a more strategic resolution. Key to this, is securing a commitment from all strategic partners, i.e. National Highways and the Local Highways Authorities, namely Gloucestershire County Council and South Gloucestershire Council. The Council considers that an adopted Stroud Local Plan, with a clear timeline for early review, provides a clear impetus for all parties to commit resources and strive for a solution. It also enables progress to be made on the forthcoming South Gloucestershire Local Plan and Gloucester, Cheltenham, Tewkesbury Joint Spatial Plan, the Examinations for which will undoubtedly cover the need for strategic infrastructure delivery.

In the event of a pause in the Examination, the Council would propose working further with stakeholders.

The Council's Next Steps paper SLP-AP-005 sets out an overview of the activities required to progress the matter of M5 junctions 12 and 14 infrastructure delivery. Your letter, and our proposed course of action, provides the opportunity to seek substantive agreement and commitment on key points, with clear direction on the urgency of the matter. We believe that your letter draws into sharp focus the need for all those producing growth options for Development Plans which will generate traffic affecting these junctions to work together in a timely manner.

Demonstrating a reasonable prospect of infrastructure delivery requires the agreement of roles and responsibilities, including the Scheme Promoter role, scheme costs, funding route and private sector apportionment. The Council proposes to convene senior level meetings with National Highways, South Gloucestershire Council and Gloucestershire County Council, to obtain in principle agreement on key points. This strategic level approach will enable Officers to progress more detailed matters.

The Council proposes to undertake further investigation with relevant stakeholders to gain greater certainty as to the likely overall costs for schemes at M5 motorway junctions 12 and 14 with the objective of reaching an agreed position with stakeholders. The scale of the schemes required in each location is already agreed, as is set out in the relevant Statements of Common Ground: SG10 National Highways Strategic Matters SoCG.

A scheme drawing at preliminary design stage exists for Junction 14. Immediately prior to the Matter 11 Hearing, National Highways provided comments on the Council's cost estimate on the basis of their requirements for key parameters such as highway possessions, depth of surfacing and National Highways' view that the junction would require two new bridge structures, rather than the retention of the existing bridge. At that point, all parties agreed that external funding would be required to deliver the infrastructure. The Council considers that there is a reasonable prospect of utilising the existing drawing to agree a broad cost estimate for this scheme, with appropriate ranges and contingencies reflecting the stage of design, utilising National Highways' experience in delivering schemes on its own network to its own requirements.

As stated, the scale of scheme required for M5 Junction 12 has been tested in the SDLP evidence base, which correlates to previous studies undertaken by National Highways. This is set out in more detail in the Council's Matter 11 Representation: SDCM1. It is understood that recent improvement works have been carried out at this location, suggesting that survey information required to form the basis of design work is likely to be available. It is therefore feasible that a preliminary design for M5 Junction 12 could be produced relatively easily, and agreed.

With senior level commitment to resourcing and responsibilities by all stakeholders, it is reasonable to state that a broad cost estimate appropriate for this stage of the process, for both M5 junctions 12 and 14, is likely achievable on a relatively short timescale to assist the progression of the Examination.

The Council has agreed that public funding is likely to be required to deliver infrastructure of the scale envisaged with development contributions providing part of the funding for schemes. National Highways has agreed that the current Industry Standard would be 15% private funding of the total cost of the scheme. The Council proposes to identify the potential sources of external funding and the likely timescale for the award of such funding to enable delivery of the improvement schemes. The Council has identified that potential sources of potential external funding include:

- DfT Major Road Network fund.
- DfT Local Growth Fund.
- DCLG Housing Infrastructure Fund. Whilst this is now closed for bidding, the delivery timescale of the Plan is such that it is not unreasonable to anticipate that funding opportunities with similar aims to provide infrastructure to unlock housing will become available in future.
- DLUHC Levelling Up Fund.

The Council considers that agreement between stakeholders on the likely external funding routes to be progressed is achievable within a relatively short timescale.

The Council proposes to discuss the mechanism for contribution to funding by the private sector with stakeholders, notably Gloucestershire County Council, South Gloucestershire Council and neighbouring planning authorities. The challenges relating to the status of neighbouring plans have been well documented through this Examination process. Notwithstanding this, growth calculations in the strategic model have been agreed with all parties. This provides a solid basis to apportion costs. The Council has presented a pragmatic and mathematically sound method of identifying apportionment between draft Plan sites, and external development. This includes robust assumptions on the scale of sites which may contribute, in order to avoid overestimating the chances of external sites contributing.

Notwithstanding this, there are other mechanisms and sensitivity testing which could be undertaken to provide confidence that private sector contributions totalling 15% of the agreed scheme cost would be reasonably achievable without rendering development unviable. A top down approach of identifying the total cost of schemes, and a 15% requirement for private funding, would identify the total likely liability for developments. An assumed level of contributions proposed from draft Plan sites has already been incorporated in viability testing. Without prejudice to a fair and proportionate apportionment of cost based on impact, sensitivity testing can be undertaken examining the likely level of cost which could be accommodated by development in Stroud, and this can also include sensitivity analysis of the funding implications for development outside of the District. This would demonstrate the level of “contingency” between the robustly calculated level of funding which would be proportionate for development outside of Stroud District, and the minimum level of funding from those sources which would be needed to deliver the M5 junction 12 and 14 improvements. This sensitivity analysis is highly relevant to understand and make judgments about whether there is a reasonable prospect of development supporting the private funding contribution to deliver the M5 Improvement schemes.

This exercise could commence immediately, with place holder calculations on total scheme costs used to begin discussions. It is suggested that an additional month would be required following agreement of total scheme costs, i.e. this exercise would be likely to be concluded in four to five months.

Thus there is substantial and important work that can be done on a relatively short timescale which will deliver further evidence relevant to the judgment to be made as to the prospects of the M5 junction improvements coming forward. The Council considers that it would be prudent and pragmatic to allow this work to be undertaken and the outputs of it taken into account prior to making any final judgment as to the way forward for the Examination.

The Council believes that there is a good prospect of agreement being reached with key stakeholders on a benchmarking of costs, a review of the apportionment method, the development of a funding package to industry standards and more detail on trigger points and delivery timescales can be achieved.

The Council proposes to provide you with a document setting out the detail of this work with relevant milestones, within 10 working days of the date of this letter i.e by the 12<sup>th</sup> September 2023. In overall terms, we believe this work can be completed within six months. This includes:

- 1-2 months for high level meetings and strategic decision-making;
- 3-4 months for scheme development and cost benchmarking, with progress made on other matters during this time;
- A further 1 month to conclude apportionment agreements.

In considering this letter and the way forward, it is also considered important to take into account whether withdrawing the draft Plan risks losing the momentum that has built up towards securing strategic infrastructure solutions. A certain impetus has developed to date as a result of the draft Plan and the Examination process. A timely pause in the Examination, spurred on by your letter, will be likely to encourage partners to work constructively to avoid similar situations arising for the next development plans to come forward for examination in the region.

As a result, we consider that a pause in the Examination is justified to allow further investigation of whether there is a reasonable prospect of delivery of infrastructure schemes that could mitigate the impact of housing that would generate traffic affecting M5 junctions 12 or 14.

### **Potential Further Sites**

In the light of the uncertainties relating to the M5 Improvements and the outcome of the work relating to them, the Council proposes a parallel workstream in which it will explore the potential for additional housing capacity to come forward from existing sites and further sites to be identified which are not currently within the draft Plan but which could be considered to be appropriate deliverable sites without a relationship to the M5 improvement works.

This workstream would identify additional housing sites which could potentially come forward in the event that the issues relating to the M5 improvement works cannot be overcome.



Given that the draft Plan already includes sufficient sites which are unaffected by the constraints presented by the M5 improvements until 2030 (see above), this work would be focussed upon deliverability in the latter half of the housing trajectory.

A detailed list of tasks and timelines will also be provided to you within 10 working days, and this will include:

- An assessment of the potential for additional housing supply from existing allocated sites;
- An assessment of potential from other sites already taken through the Sustainability Appraisal process, but not included in the final draft Plan;
- Public consultation on any additional sites taken already through the Sustainability Appraisal process;
- Updating the Infrastructure Delivery Plan to take account of any additional sites or housing capacity;
- Updating viability and deliverability evidence.

This workstream would then tie in to considerations in relation to the M5 improvement works and could allow additional sites to be included in the draft Plan to address uncertainties regarding the delivery and/or timing of those works.

### **Wisloe New Settlement**

We note that your concern regarding the viability and deliverability of the pedestrian and cycle bridge over the motorway. This is in addition to the delivery of the Wisloe new settlement being related to M5 Improvement Works in any event.

We believe that further work on this issue is capable of alleviating your concerns relating to agreeing scheme costs and resolving viability and deliverability matters.

A detailed list of tasks and timelines will be provided to you within 10 working days, but will include:

- Meetings between the site promoters and National Highways to agree the design, costs and arrangements for construction of the bridge;
- Reviewing the scheme masterplan and phasing of delivery, taking into account the requirement for the bridge to be completed during an early phase;
- Updating viability appraisals to demonstrate that the scheme remains viable.

It is considered likely that your site-specific concerns here could be resolved well within the timescales required to address the M5 improvement works.

### **Sharpness New Settlement**

We note that you have concerns relating to the viability and deliverability of the provision of a passenger train service and bespoke Mobility as a Service transport scheme (MaaS).

We believe that further work on this issue is capable of alleviating your concerns. The site promoter has an experienced team working on these matters and the Council considers that a pause would allow them to engage closely with the relevant transport bodies in a collaborative manner. The Council would support the further work needed to alleviate concerns, ensuring proportionality with the stage of the planning process, i.e. Local Plan.

A detailed list of tasks and timelines will be provided to you within 10 working days, but will include:

- Meetings between the site promoters, Network Rail and train and coach operating companies to agree the costs of the proposed services, the deliverability of the necessary infrastructure and funding arrangements;
- Reviewing the scheme masterplan and phasing of delivery, taking into account the requirement for public transport provision to be in place from an early stage;
- Updating viability appraisals to demonstrate that the scheme remains viable.

Again, it is considered likely that your site-specific concerns here could be resolved well within the timescales required to address the M5 improvement works

### **Early Review**

Given that the draft Plan identifies sufficient sites to meet more than half the plan period's needs in the first 10 years of that period, the option of committing to an early review is also available.

It would, for example, be open to the Council to propose an amendment to the draft Plan to prevent the sites with a relationship to the M5 works from coming forward until those works are committed/delivered and for the Council to commit to early review.

This option would ensure that the community has the benefit of a local plan which allocates site sufficient to meet needs over the period until a new and further plan is in place.

That further plan would be produced in circumstances where there would be a greater level of certainty regarding the costs and deliverability of the M5 improvements works, the availability of external funding, the extent to which growth in South Gloucestershire depends upon these works and the apportionment of costs as between the districts.

The Council considers that this too is a pragmatic option that it should be given time to explore in the context of the further matters set out above. The Council also notes that early reviews have been allowed/agreed at other examinations and accepted by Inspectors.

### **The Way Forward**

We would like to reiterate our commitment to delivering a sound Local Plan for our communities in a timely fashion. The Council is committed to seeking to resolve outstanding issues relating to the draft Local Plan in a pragmatic fashion, in order to deliver benefit to the local community.

We believe that the draft Plan already contains proposals which are likely to deliver the housing this area needs in the short to medium term. We do not believe that withdrawing the draft Plan and going back several stages is appropriate, nor that this would be beneficial for our communities. Withdrawal of the draft Plan would not assist with the proper planning of land uses and infrastructure in the District in the short to medium term. The Council considers that, conversely, it would be a significant setback to the chances of timely delivery of infrastructure.

In this letter the Council has advised how it intends to address the issues raised with Sharpness and Wisloe new settlements as well as an approach to addressing the issues relating to M5 junctions 12 and 14.

The Council proposes to provide you with a document setting out the detail of this work with relevant milestones within 10 working days. In overall terms, we believe this work can be completed within six months.

This will allow the Council to work positively with other parties allowing the Examination to continue, with all other soundness concerns with the draft Plan to be addressed by main modifications.

The Council hopes that you will consider the matters above and this further information carefully before you reach your final conclusions on the way forward.

Yours sincerely



Kathy O'Leary  
**Chief Executive**

# TECHNICAL NOTE



## Appendix C Transport Services Provided Between the Site and Places Further Afield



**Key:** Peak Period Bespoke Coach Services to:

- Gloucester and environs
- Cam & Dursley and Stroud
- Bristol and environs
- Rail Services to Cam & Dursley and Gloucester

**Vehicles:**

- 16 / 33 Seater Mini-Coach
- 53 Seater Single-deck Coach
- 78 Seater Double-deck Coach
- Train – shows number of cars required on multiple unit