M5 Junction 10 Improvements Scheme

Funding Technical Note TR010063 – APP 9.75

Rules 8 (k)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010







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M5 Junction 10 Improvements Scheme

Development Consent Order 202[x]

Funding Technical Note

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Technical Note

Project: M5 Junction 10 Improvements Scheme

Subject: Funding

1. Introduction

- 1.1.1. This note has been prepared to provide the Examining Authority (ExA) and Secretary of State with a clear statement of the Applicant's funding position sufficient to allow development consent to be granted for the M5 Junction 10 Improvements Scheme (the Scheme) providing within it an indication of how any potential shortfalls of fundings are intended to be met.
- 1.1.2. This note responds to Action Points 22-25, which arose from Issue Specific Hearing 3 on Tuesday 13 and Wednesday 14 August 2024. Here, the ExA asked the Applicant to provide:
 - a) The policy status of the s.106 methodology;
 - A statement giving a narrative around drawing down funds, the timeline for s.106 funds to be confirmed and received, overlayed against the anticipated start date for construction;
 - c) the Applicant's calculations of the cost of the Scheme and the allowances that have been included within this cost; and
 - d) how the Applicant has considered the potential for delays to commencement to affect the assessment of the cost of the Scheme.
- 1.1.3. This note is structured as follows:
 - Section 2 Explanation of the Policy Tests on Funding
 - Section 3 Method for calculating the cost estimate
 - Section 4 Method for securing funding
 - Section 5 Conclusion
- 1.1.4. Section 2 responds to Action Point 22, Section 3 responds to Action Points 24 and 25, and Section 4 responds to Action Point 23.

Policy Tests on Funding

2.1. Overview of the policy tests

2.1.1. The policy tests on funding are set out in the Department for Communities and Local Government document 'Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land' (September 2013) (the CA Guidance).



- 2.1.2. The CA Guidance sets out two tests in relation to funding:
 - a) in relation to funding the acquisition of land and rights, the Applicant is required to demonstrate that there is a reasonable prospect of the requisite funds for acquisition becoming available within 5 years from authorisation (paragraph 9 and 18 of the CA Guidance); and
 - b) in relation to funding for implementing the Scheme, the Applicant is required to provide an indication of how any potential shortfalls are intended to be met (paragraph 17 of the CA Guidance).
- 2.1.3. There is sufficient funding available to acquire all land and rights necessary to deliver the scheme. As such the requirements of the first test are satisfied.
- 2.1.4. However, there is currently a shortfall in relation to completing the scheme. Therefore, as per the second test, the Applicant must provide an indication as to how any potential shortfalls are intended to be met.
- 2.1.5. Guidance as to how the second test should be approached can be found in the Examining Authority's Report and subsequent Secretary of State's decision following the examination of the Manston Airport Development Consent Order 2022. In this case, much like other private funding schemes, there was concern during examination that there was insufficient evidence that the applicant held adequate funds to indicate how an Order that contains the authorisation of compulsory acquisition is proposed to be funded and that, therefore, it was necessary to examine the availability of these funds from other funders. This reasoning can be found at paragraph 212 of the Secretary of State's decision letter and similarly at paragraph 9.8.69 of the Examining Authority's Recommendation Report.
- 2.1.6. The Applicant would point to paragraphs 212-213 of the Secretary of State's decision letter and paragraph 9.8.69-9.8.111 which covers a discussion over the difference between the two tests outlined above, i.e. securing sufficient funds to ensure that the costs for compulsory acquisition, noted as including blight and a 10% contingency, and securing funds for the overall capital expenditure of a project. The Secretary of State at paragraph 213 references that regarding capital expenditure, the test required is that the applicant should provide an indication of how any potential shortfalls are intended to be met (Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land, DCLG, 2013, paragraph 17). This is in contrast to paragraph 9 of that Guidance which sets out that an applicant should be able to demonstrate that there is a reasonable prospect of the requisite funds for acquisition becoming available. This test at paragraph 9 is a higher test with a greater degree of certainty required.
- 2.1.7. This higher test is the reason for requirements and articles like the one found at article 9 of the Manston Airport Development Consent Order 2022 which ensures that sufficient funding is in place to meet the costs of compulsory acquisition including blight claims. In relation to the M5 Junction 10 scheme, the Applicant has sufficient funding through the Homes England grant to meet the requirements of compulsory acquisition and therefore an article drafted on this basis would be superfluous to requirement.
- 2.1.8. What is required in relation to the scheme is that the Applicant can provide an indication on how the current shortfall for full delivery of the proposals are intended to be met. This technical note outlines the Applicant's intention in this regard.



3. Method for Calculating the Cost Estimate

3.1. Overview

3.1.1. The Applicant's calculation of the cost of the Scheme is set out, at a high level, at paragraph 2.1.4 of the Funding Statement (APP-036). These costs are taken from the July 2023 Scheme Cost Estimate for the preliminary design. The Funding Statement concludes that the likely total cost for the Scheme will be £293,209,909. This sum is made up of costs relating to construction, preliminaries, design, land, inflation, risk strategic risk and a post completion allowance. The design and therefore scheme cost includes the treatment of biodiversity net gain; which has been outlined in Chapter 2 of the Environmental Statement. The design also includes measures to reduce the impact of carbon in the construction and operational stages and this will remain a focus of further design development and construction methodology. The methodology used to calculate these costs is described below.

3.2. Cost estimate – Construction, prelims and design

- 3.2.1. To calculate the costs for construction, preliminaries and design, quantities were measured and priced in accordance with the Method of Measurement for Highways Works (MMHW). This is the industry standard estimating guidance document for cost plans and estimates across highways schemes. The Applicant commissioned AtkinsRealis to undertake the cost estimate for the Scheme. AtkinsRealis used industry standard estimating software, CostX®, which allows for the calibration and quantification of design information. The software also has the functionality required to compose Bill of Quantities.
- 3.2.2. To ensure the estimates were realistic, the costs represented in the Funding Statement were benchmarked against two other similar, recent schemes. The scheme was benchmarked against seven different cost items (i.e. earthworks, pavements etc). The benchmarking revealed that the cost estimate for the Scheme aligned with the costs from two other schemes in the AtkinsRealis internal database. This confirms that the Funding Statement provides a comparable indication of the cost to deliver the works.

3.3. Cost estimate – Land

- 3.3.1. The property cost estimate represents the assessment of likely compensation payments relating to the compulsory acquisition of land interests in, and rights over, land and the temporary possession and use of land. In line with the compensation code, all potential heads of claim were considered including potential claims under Part 1 of the Land Compensation Act 1973, Section 10 of the Compulsory Purchase Act 1965 and s152(3) of the Planning Act 2008.
- 3.3.2. The budget for the acquisition of land and property has been calculated using valuation principles and has been subject to a peer review process. Consideration has been given to the value of the property (either subject to acquisition or in respect of the diminution in value associated with rights being sought), injurious affection, severances and disturbance. The assessment also considers agreements to temporarily occupy land subject to temporary possession. The assessment of other losses (including disturbance) reflects the likely loss of income to businesses in line with the Compensation Code (including agricultural business losses) which may result from the scheme.
- 3.3.3. Overall, the Funding Statement estimates that the total cost relating to land will be £24,579,173. It is important to recognise that a significant amount of land and property has already been acquired by voluntary agreement. This allows for greater certainty in respect of the further acquisition costs predicted and reduces risk of overspend associated with the ongoing negotiations and required acquisitions with the completed acquisitions to date falling in line with the anticipated values. The Applicant considers that



this further demonstrates sufficient funding is currently in place to satisfy the costs associated with the requirement for compulsory acquisition where necessary.

3.4. Cost estimate – Inflation

- 3.4.1. In order to calculate inflation, a spend profile was developed which reflected the Scheme's programme schedule and, using the BCIS General Civil Engineering Indices, inflation was calculated to be £18.7 million. The base date used for the estimate in the spend profile is Q2 2022 and inflation has been calculated using a spend profile from Q3 2022 until the end of construction. The Scheme's design has not changed since Q2 2022 in a way that would materially affect costs.
- 3.4.2. To ensure that the estimate for inflation is realistic, the Applicant tracks the BCIS General Civil Engineering Indices on a quarterly basis. As part of this ongoing monitoring, the inflation indices were reviewed in December 2023 and inflation was recalculated to be £18,690,547. This is marginally lower than the allowance made in the Funding Statement of £18,732,636 and as such the Applicant is confident that it's assessment of inflation remains suitable

3.5. Cost estimate – Risk

- 3.5.1. In order to manage risk, a risk register was developed at an early stage of the project and has been consistently monitored and updated on a monthly basis. Additionally, a Quantified Cost Risk Assessment (QRA) was undertaken at the time that the cost estimate was finalised (i.e. Q3 2022). The QRA concluded that, using a probability ratio of 80%, an appropriate risk allowance against the base cost of the Scheme would be 10.4%. However, an AtkinsRéalis risk estimator working on behalf of the Applicant and carrying out the QRA recommended that a risk allowance of 18% should be used (equating to £33.8 million for pre-mitigation risks). This recommendation was based on the estimator's professional experience and was in line with the benchmarked percentages of comparable complex projects. Consequently, a decision was made when finalising the cost estimate to retain this 18% risk allowance.
- 3.5.2. It should be noted that this is a conservative estimate of risk, as post-mitigation risk estimates would be around 25% lower. As such, the risk allowance is considered adequate by the Applicant and will be updated by the ECI Contractor in May 2025.

3.6. External verification

- 3.6.1. In addition to adopting the methodology described above, the Scheme has been subject to several external reviews. For example:
 - a) an external assurance review was undertaken by Homes England in 2022; and
 - b) a further review was undertaken by Homes England through its HIF IPA Gate 0 review in April 2023.
- 3.6.2. In respect of (a), Homes England appointed Turner Townsend to provide an independent assurance review of the Scheme on 10 May 2022, with the project team. The conclusion and recommendations of the review were issued to the Applicant in a report on 17 June 2022. This report confirmed that the M5 J10 scheme was in a good state for the stage of the project it was reviewed against.
- 3.6.3. The external verification referred to above was done on an iterative basis and was conducted on cost estimates prepared prior to the July 2023 Scheme Cost Estimate for the preliminary design, however, the Applicant considers that the external review and oversight on its calculation of the Scheme's costs demonstrates that reliability that can be placed on the existing July 2023 Scheme Cost Estimate.



3.7. Next steps regarding cost estimating

- 3.7.1. The Applicant's intention is that it will instruct detailed design to start in advance of the formal start of Stage 2 (Detail design and construction) of the Scheme. This will provide programme and cost certainty entering the construction phase.
- 3.7.2. The Scheme's X22 budget was approximately £293m. The first X22 target cost submission will be in October 2024. This will include savings identified to date through value engineering and efforts to drive down the costs of the Scheme through its design and programming.
- 3.7.3. For example, in respect of value engineering, National Highways has given the Applicant confirmation that the MS4 gantries will not be required. The Applicant is pursuing discussions with National Highways and will confirm in the minutes of that meeting. It is anticipated that the removal of MS4 gantries from the Scheme (£10m) and other changes would (pending acceptance) save a total of £15m from the construction, preliminaries and design costs and would correspondingly reduce the Scheme's inflation and risk costs.
- 3.7.4. Once the Stage 2 contract is in place, the works will be undertaken under a target cost contract which will give further cost certainty. The target cost will be developed over the next 9 months or so and will be reviewed and challenged. The Applicant will not proceed to Stage 2 without agreeing a target cost that is within budget.
- 3.7.5. Consequently, the Applicant considers that it will be possible to implement cost savings through value engineering and greater certainty will be provided on the Scheme's costs moving towards Stage 2 of the Scheme, with a target cost contract being used to fix a target cost within budget.

3.8. Timing of works

3.8.1. The Applicant recognises that there is the potential for changes to the Scheme programme. On a simplified basis, applying the BCIS General Civil Engineering Indices, a one-year shift in the Scheme's programme would add approximately £5m to the costs (based on a cost of £180m relating to construction, prelims and inflation, but excluding land, design and risk as these would not 'shift'). A two-year shift in the programme would add approximately £9.5m to the Scheme's costs. GCC does not intend to delay the start of the scheme as the contractual funding Availability Period from Homes England is to 30 September 2027 by which time all HIF grant funding must be incurred and claimed. The GDA requires construction of the Scheme to be completed by 30 December 2027.

3.9. Summary

- 3.9.1. Overall, the Applicant is confident that its calculation of the Scheme's cost estimates, as presented in the Funding Statement, are appropriate and robust. For example:
 - a) In terms of the estimated cost for construction, preliminaries and design the Applicant has applied a 'bottom-up' estimating methodology, with quantities measured and priced in accordance with the Method of Measurement for Highways Works (MMHW). This is the industry (DMRB) standard estimating guidance document for cost plans and estimates across highways schemes.
 - b) In terms of the estimated cost for land a significant amount of land has already been acquired voluntarily and within the allowed budget. This provides confidence that the remaining properties can be acquired within the identified budget, either voluntarily or through compulsory acquisition if necessary.
 - c) In terms of the estimated cost for inflation inflation has had a significant impact on the Scheme, however the allowance made in 2022 is proving to be robust as indicated by the re-calculation carried out in December 2023.



- d) In terms of the estimated cost for risk the Applicant's allowance for pre-mitigated risk is highly robust at 18% when compared to other projects at this stage and is higher than the 10.4% allowance recommended by the QRA. The post-mitigated risk allowance is 25% lower than the pre-mitigated risk allowance.
- e) In terms of external verification an external cost assurance review facilitated by Homes England in 2022 concluded that the M5 J10 was in a good state for the stage of the project it is being reviewed against.
- f) In terms of ongoing cost savings the Applicant is confident that, subject to confirmation, there is approximately £15m to be saved from construction costs as a result of current value engineering and expects additional savings to be identified as the project continues through detailed design.

4. Method of Securing Funding

- 4.1.1. As set out in the Funding Statement, Gloucestershire County Council (GCC) entered a Grant Determination Agreement with Homes England in October 2020 to secure HIF funding for several highway schemes, including the Scheme, for a total sum of £249.131 million. Of the total funding secured under the GDA, the grant funding available to the Scheme is £212.071 million (with other grant funding allocated to delivery of other schemes). The Applicant intends to obtain the remaining funding of £81 million from developer contributions, secured through s.106 agreements.
- 4.1.2. GCC has been consulting on a contribution methodology for calculation of s.106 contributions to be obtained from development, which has been developed in line with the s.122 CIL tests, and the resultant contribution amount since September 2023. The consultation closed in May 2024 and GCC responded to developers in a meeting on 18 July 2024. While the methodology is still to be agreed, GCC is proposing to continue to work with the developers to reach an agreed position. The Applicant will look to secure the methodology using the upcoming review of GCC's local developer guide and position it as a guidance in terms of how GCC, as highway authority, will look to apply JCS policy INF7 in determining s.106 contributions from developments that are dependent on the scheme to secure appropriate highway mitigation. This will be justified on the basis that there is no other mitigation capable of resolving the harm to the local highway network from the upcoming development, which is further evidenced by the County Council's GC3M modelling work. In the longer term, the Applicant will look to have the policy included in the emerging SLP.
- 4.1.3. The existing funding apportionment methodology uses the DCO SATURN traffic model and "select link analysis" to determine the level of dependent development traffic from the respective sites at the slips road of the M5 Junctions 10 and 11. This was considered to be the best proxy for the degree of benefit that arose from traffic switching from the existing heavily congested routes to and from Junction 11, to the new south facing slips at Junction 10. Following the meeting of the 18th of July, it has been agreed with the site promoters' representatives that the Applicant would investigate an alternative option that might better meet the tests. This will again be based on select link analysis, but this time at those locations where Gloucestershire County Council's GC3M model shows would be severely congested with dependent development, but without the Junction 10 scheme. This work will also include a geographic "area of influence" to determine the area over which contributions will be levied more widely; this will establish the proportion of other growth which is not associated with A4 and A7. This work is ongoing and is expected to report in September 2024
- 4.1.4. The Applicant is currently developing a revised methodology, however, to provide an indication of the contributions that may be levied against developments reliant on the benefits of the scheme, the Applicant has provided a table below apportioning contributions. The Applicant would stress that these figures are based on a previous



iteration of the methodology but would argue this strongly indicates towards a resolution regarding the shortfall in funding. The below apportioned the worst case assumption of the shortfall in funding, being £81 million. It should be noted that various routes to reducing this gap are being reviewed by the Applicant as noted above. The Applicant would further point out that the current position between National Highways and Gloucestershire County Council is that a notice to proceed will be dependent on funding being in place for the SRN elements of the scheme which the below demonstrates can be secured via s106 commitments prior to close 2025. Lastly, the £81million shortfall incorporated postcompletion costs which would not necessarily be required to be committed to or secured prior to commencement of construction. The Applicant would further acknowledge that the date whereby £26,392,044.80 can be levied against the safeguarded land is unknown and the applicant is acutely aware of the need to obtain funding for this prior to the 2027 deadline imposed by the HIF funding. However, the Applicant considers that the measures described above to reduce the funding gap, added to the fact that adequate funding will be in place to allow a notice to proceed measure to go through for the SRN means that there is a clear methodology for how GCC can be complete by December 2027. The Applicant will provide an update as to its revised methodology at Deadline 5, and within this update will further elaborate as to how the remaining £26,392,044.80 will be funded and its significance as to the planned construction start of the scheme.

Table 1 - Provisional apportionment of remaining funding gap between developers using existing methodology

Provisional apportionment of remaining funding gap between developers using existing methodology						
Developer Sites		Planning Application	Expected Completion of Section 106 Agreements	Provisional Apportionment		
	Elms Park	16/02000/ OUT	2025	£ 28,389,085.54		
Site A4	Home Farm	23/00354/ OUT	2025	£ 1,180,430.30		
	HBD North and South and Nema	23/01874/ OUT 23/01875/ OUT 24/01875/ OUT	2025	£ 18,333,096.85		
Site A7	St Modwens	22/01107/ OUT 22/01817/ OUT	2025	£ 5,099,812.85		
Other	Safeguarded Land	N/A	N/A	£ 26,392,044.80		

*Section 106 already completed securing a contribution of £2,501,935.35 under previous methodology.

£ 79,394,470.34*



- 4.1.5. It is intended that the s.106 agreements will be agreed with developers at the planning committee stage. The current planning applications for sites A4 and A7 are expected to be determined in November 2024, assuming that the s.106 negotiations have advanced to a stage in October where planning officers are confident a recommendation can be made to the respective planning committees. These s.106 agreements would be expected to be completed in 2025. A s.106 agreement has already been completed in respect of 266 residential units at the Swindon Farm development for a contribution of £2,501,935.35 towards the M5 Junction 10 scheme, (s.106 agreement payments are indexed in accordance with the All In Tender Price Index published by the Building Cost Information Service of the Royal Institute of Chartered Surveyors). In addition, the emerging SLP is expected to be submitted in April 2026, which will potentially allocate the Safeguarded Land or other sites in the area if the plan is subsequently adopted.
- 4.1.6. In terms of the timing of payments under the s.106 agreements, the Applicant's Notice to Proceed system requires that the Applicant can demonstrate an ability to afford to complete the works. The Applicant recognises that while it is normal for s.106 payments to be phased, there is no impediment (other than viability) for payments to be front ended where it is necessary. In this respect the Applicant notes that viability is a matter for the developers and the LPA in the context of a range of factors; however, the developments cannot be mitigated without M5 J10 and would need to be a factor in any negotiations.
- 4.1.7. If a phased payment system is adopted, the phasing of the development and timing (triggers) of s.106 commitments will need to be arranged in order to satisfy the Applicant's Notice to Proceed requirements by the required date, which is something that GCC and the LPA are working with the developers to align.
- 4.1.8. If the DCO is made, the Applicant will continue to seek voluntary acquisition of the required land, however, will continue to compulsorily acquire the required land if necessary to allow the Scheme to commence by its required timeline in accordance with the HIF funding agreement. and the Applicant will regardless only be able to compulsorily acquire land within the 5-year window from authorisation. This will provide the Applicant sufficient time to work with project partners (such as Homes England, National Highways, Cheltenham Borough Council, Tewkesbury Borough Council and developers) to look at alternative options to address the funding gap if required.
- 4.1.9. With regard to Community Infrastructure Levy (CIL) funds, it is also possible that these could be used to assist with the funding gap. The Applicant is aware that the LPA's holds £15m in CIL funds and it is expected that more than £20m more will flow from the upcoming developments.] Moreover, the Applicant recognises that it would need to avoid charging developers twice for the same infrastructure, which could limit the scope of CIL funding. The most recent CIL Infrastructure List recognises the M5 scheme as one for which CIL funding can be applied.
- 4.1.10. Consequently, it is important to separate the question of commitment of funds from cash flow. The above has established that the funding gap could be secured from section 106 contributions. The Applicant has until June 2030 to draw down on the land required for compulsory acquisition and before this point will need to be able demonstrate sufficient commitment of funds to pass the Notice to Proceed requirements. This allows sufficient time to secure further s.106 commitments. The Applicant fully expects that the expected level of development in the region dependent on the Scheme will ensure that sufficient s.106 contributions can be committed to prior to this date. It would look to ensure that the timing of those s.106 payments is made as early as possible but provided that the commitment to pay is secured the Applicant is committed to pursuing further options whereby bridging loans could be established with other government agencies to be secured against committed s.106 contributions to allow for security of cash flow throughout the project i.e. effectively to forward fund the scheme delivery.



4.2. Application of the policy tests – Acquisition

4.2.1. Turning to the first policy test under the CA Guidance, the Applicant can demonstrate that there is a reasonable prospect of the requisite funds for acquisition becoming available within 5 years from authorisation. The Funding Statement estimates that the total cost relating to land will be £24,579,173, however a significant amount of land has already been acquired by voluntary agreement and therefore the remaining cost of acquisition will be much lower than this. The Applicant has secured funding of £212.071m under a Grant Determination Agreement with Homes England for the delivery of the Scheme, which is more than sufficient to satisfy the remaining costs associated with acquisition.

4.3. Application of the policy tests – Implementation

4.3.1. As described above, the Applicant intends to meet this shortfall using developer contributions, which will be determined in line with a contribution methodology and secured by s.106 agreement. What is important is that a commitment is provided in time for the Applicant to meet the requirements of the Notice to Proceed and it is not necessary for all funds to be delivered up front. In light of this the Applicant may look to other sources of funding, including the possibility of CIL. It is considered that this is sufficient to provide an indication of how any potential shortfalls are intended to be met by the Applicant, which is a much lower threshold than certainty.

5. Conclusion

5.1.1. As noted above, the Applicant's cost estimate for the Scheme is robust and appropriate. It is possible that these costs may be reduced and in any case, it is not necessary for all funds to be available at the point of commencement. In respect of the policy tests for funding, the Applicant meets the test for acquisition as it has more than enough funds to carry out the necessary acquisition. In respect of the implementation, the Applicant considers that its approach to s.106 funding is a sufficient indication of how the funding gap will be met, while other sources of funding (such as CIL) may help meet this threshold.

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