

**THE OXFORDSHIRE COUNTY COUNCIL (DIDCOT GARDEN TOWN HIGHWAYS
INFRASTRUCTURE – A4130 IMPROVEMENT (MILTON GATE TO COLLETT
ROUNDAABOUT), A4197 DIDCOT TO CULHAM LINK ROAD, AND A415 CLIFTON
HAMPDEN BYPASS) COMPULSORY PURCHASE ORDER 2022**

**THE OXFORDSHIRE COUNTY COUNCIL (DIDCOT TO CULHAM THAMES
BRIDGE) SCHEME 2022**

**THE OXFORDSHIRE COUNTY COUNCIL (DIDCOT GARDEN TOWN HIGHWAYS
INFRASTRUCTURE – A4130 IMPROVEMENT (MILTON GATE TO COLLETT
ROUNDAABOUT), A4197 DIDCOT TO CULHAM LINK ROAD, AND A415 CLIFTON
HAMPDEN BYPASS) (SIDE ROADS) ORDER 2022**

**THE CALLED-IN PLANNING APPLICATION BY OXFORDSHIRE COUNTY
COUNCIL FOR THE DUALLING OF THE A4130 CARRIAGEWAY,
CONSTRUCTION OF THE DIDCOT SCIENCE BRIDGE, ROAD BRIDGE OVER
THE APPLEFORD RAILWAY SIDINGS AND ROAD BRIDGE OVER THE RIVER
THAMES, AND ASSOCIATED WORKS BETWEEN THE A34 MILTON
INTERCHANGE AND THE B4015 NORTH OF CLIFTON HAMPDEN,
OXFORDSHIRE (APPLICATION NO: R3.0138/21)**

PLANNING INSPECTORATE REFERENCE:

APP/U3100/V/23/3326625 and NATTRAN/SE/HAO/286 (DPI/U3100/23/12)

**Rebuttal proof of evidence of
TIMOTHY ROGER JONATHAN MANN
(Compulsory Purchase Justification)**

1 SCOPE OF EVIDENCE

- 1.1 This Rebuttal Proof of Evidence has been prepared regarding matters relating to the Compulsory Purchase Justification raised by
 - 1.1.1 Mr Chien Xen Ng and Mr Russell Harman on behalf of the Neighbouring Parish Council's Joint Committee (NPC-JC).
- 1.2 The aim of this Rebuttal Proof of Evidence is to respond to a number of points that have not already been addressed in my main proof of evidence, to provide further clarification of my evidence or to correct misapprehensions within evidence presented by other parties. I have sought to avoid unnecessary repetition of matters already addressed at length, with the ultimate intention of assisting the Inquiries. Where I do not respond to a point raised by another party, my lack of response should not be construed nor interpreted as agreement, unless explicitly stated so within this Rebuttal Proof of Evidence.

2 FUNDING AND DELIVERABILITY

- 2.1. In Mr Ng's Proof of Evidence at paragraphs 15 to 19, he states that the HIF1 Scheme is unlikely to be financially viable within the current funding envelope, highlighting inflation and risk allowances. It is acknowledged that the total estimated scheme cost has increased, and I have covered this in my Proof of Evidence (paragraph 5.19, Table 3). Commercial viability is generally not relevant for planning purposes. However, as Mr Ng's evidence is directed at the Planning Inquiry and the NPC-JC removed its objection to the Orders on 21 February 2024, it would appear that the viability related content of his Proof of Evidence is not intended by Mr Ng to relate to the Orders Inquiries. Nevertheless, for completeness I have sought to address these matters in this rebuttal proof of evidence.
- 2.2. In Mr Ng's Proof of Evidence at paragraphs 16 and 54, he concludes that an overall inflation allowance of around £62m is required. My Proof of Evidence at paragraph 5.11 notes that an allowance of £59.31m has been made for inflation, which is similar, particularly in light of the assumptions Mr Ng has made within his calculations.
- 2.3. In Mr Ng's Proof of Evidence at paragraphs 17 and 55 to 57, he is correct in stating that a contingency fund of approximately £52.251m is included. However, he appears to be advocating the sole use of a top-down approach using Reference Class Forecasting (RCF). While I do not have specific expertise in RCF, I have taken advice from OCC's commercial manager and I understand it to be an established method for accounting for the systematic underestimation of cost and schedule overrun in projects. RCF is more reliable at the earlier stages of the project (where cost estimates are less mature) and this method should transition to bottom-up Risk Assessment, Quantitative Risk Assessment (QRA) as the project progresses. QRA involves the use of costed risk registers, which are developed once a project progresses beyond the concept stages. In the specific instance of HIF1, the preliminary design is complete, and OCC is correctly transitioning to the bottom-up Risk Assessment QRA for the current stage of Scheme development and supplementing this with the application of Optimism Bias. Furthermore, the base costs of the Scheme elements have developed as the designs have matured together with extensive input from consultants and early contractor involvement (ECI).
- 2.4. OCC has developed the risk, uncertainty and Optimism Bias allowances using guidance from the HM Treasury Green Book, Supplementary Green Book Guidance and Scottish Transport Analysis Guide (STAG) Technical Database relating to Risk and Uncertainty, led by the commercial and risk practitioners team within OCC, including the Chartered Commercial Manager, who lead the work to calculate inflation and Optimism Bias; the Risk Manager, who undertook the risk analysis and quantification; and the Chartered Commercial Lead, who oversees the commercial team.
- 2.5. OCC has produced a detailed risk register and continues to carry out regular reviews and remove risks which have not materialised. In addition, OCC identifies and includes new risks and includes sensitivity analysis all as part of the Quantitative Cost Risk Analysis (QCRA) process, which is a widely used technique designed to assess cost certainty and provide an appraisal of potential outturn cost of a project. The QCRA calculations are indeed assessed at P80 level, which Mr Ng agrees is typical (proof para. 17; P80 describes the confidence level of the probability of the cost not being exceeded), to provide a conservative forecast for inclusion in the cost estimate. Due to the process described in paragraphs 2.3 to 2.5, and entirely as expected, the contingency allowance for quantified risk and Optimism Bias has reduced from £52.251m and is currently £46.852m (see Table 3 on p.15 of my proof, final column: QCRA + Optimism Bias = £46.852m).

- 2.6. Mr Ng, in paragraph 19 of his Proof of Evidence, rightly points out that the Scheme is unlikely to be deliverable within the current funding availability period. This is addressed in paragraph 5.43 and 5.44 of my Proof of Evidence, which states that completion of the Scheme is now estimated to occur during January 2028.
- 2.7. In Mr Harman's Proof of Evidence at section 2, he notes that commercial viability is generally not relevant for planning purposes. However, as Mr Harman's evidence is directed at the Planning Inquiry and the NPC-JC removed its objection to the Orders on 21 February 2024, it would appear that the viability related content of his Proof of Evidence is not intended by Mr Harman to relate to the Orders Inquiries. Nevertheless, for completeness I have sought to address these matters in this rebuttal proof of evidence.
- 2.8. In Mr Harman's Proof of Evidence at paragraph 2.3, he discusses risk apportionment, and makes assumptions about procurement evaluation and risk. In actual fact, the quality and cost split at tender for the two contracts already let was 70% (quality) to 30% (cost), which is substantially different to Mr Harman's assumption (30% Health & Safety Record and Project Specific Methodology, 10% Technical Submission and 60% Cost (cheapest)) and controls the impact of cost on the outcome of the process. It should also be noted that OCC generally has control over risk allocation and this is set out within the tender documentation. Mr Harman concludes that there will be a final outturn cost exceeding £400million, possibly circa £500million, yet he does not provide any evidence to support this.
- 2.9. In Mr Harman's Proof of Evidence at paragraphs 2.4 and 8.4, he states that it is likely that AECOM will be awarded a Professional Services Contract and further commissions. It is to be noted that of the three contracts that OCC intends to let for the next stage of Scheme design, the two that have already been let (Culham River Crossing and Clifton Hampden Bypass) were won by Graham Construction Limited, not AECOM.
- 2.10. In Mr Harman's Proof of Evidence at paragraph 2.5, he states that the contractor is likely to be contracted on an NEC Option 3 Contract (Target Price), and in paragraph 8.5 he states that 'the contract is a winner'. In actual fact, the detailed design of the two elements of the Scheme that have so far been procured (Culham River Crossing and Clifton Hampden Bypass) has been via the New Engineering Contract (NEC) 4, Professional Services (PSC) Option A Priced Contract with Activity Schedule (fixed price) contract. The NEC suite of contracts is widely accepted as the industry standard, and the risks associated with it are well understood. The contracts have been developed with support from commercial, legal and procurement experts from OCC and its partners, and will use experienced practitioners to manage the contracts.
- 2.11. In Mr Harman's Proof of Evidence at paragraph 2.6, he says that Government will face a number of challenges to recover money from house developers, with a continual rise in inflation and the impact on labour and material costs. In my opinion, the process of negotiating and obtaining Section 106 funds from developers of future housing parcels for future infrastructure provision is not relevant to the delivery of the HIF1 Scheme. In particular, Mr Harman's paragraph 8.2 goes on to state that the HIF Recovery Scheme will not be fruitful due to increased build costs related to inflation, the introduction of zero carbon legislation for homes, and a possible housing market downturn. Mr Harman also states that this will put additional pressure on the HIF Commercial Viability. However, although an element of the funding for the HIF1 Scheme does come from Section 106 funds, as noted in my proof of evidence (Table 2 in paragraph 5.16), all Section 106 funding not already held has been underwritten by OCC (see Table 3 of the 15 March 2022 Cabinet Report, ref CD.I.3), so there is no risk of a reduction in Section 106 receipts impacting the overall budget and viability.

- 2.12. In paragraphs 6.1-6.3, Mr Harman refers to 'Primary Design Risks' and suggests that many design changes to the Scheme will be required due to stakeholder objections. It is key to note that the objections that he refers to in paragraph 6.1 are objections to the Orders, and that NPC-JC has now withdrawn its objections to the Orders and confirms that its evidence is not pertinent to the Orders Inquiries. However, as noted in the evidence of Mr Aron Wisdom and Mr Steven Moon, there has been extensive stakeholder engagement and negotiations are ongoing with affected parties. The possibility of design changes is accounted for in financial terms by way of the optimism bias and quantified risk elements of the contingency budget, which are set out in my proof of evidence (Table 1 in paragraph 5.3).
- 2.13. In Mr Harman's Proof of Evidence at section 7, he states that dividing the Scheme into three separate contracts will attract coordination issues. This is correct and has been accommodated within the scopes of the detailed design and construction contracts via contract and scope clauses requiring coordination in relation to design matters, health and safety issues, shared working areas and general cooperation.
- 2.14. In Mr Harman's Proof of Evidence at section 7, he also refers to Network Rail in connection with the Appleford Sidings Bridge. Network Rail does not control the Heidelberg sidings and, therefore, will not have control of the possessions required to construct the Appleford Sidings bridge. This is addressed by Mr Karl Chan in paragraphs 3.4 and 3.5 of his rebuttal proof of evidence.
- 2.15. In Mr Harman's Proof of Evidence at paragraphs 7.3 and 8.3, he states that the estimated Scheme construction duration is 4 years, which appears to be due to assumptions that: 1) the Clifton Hampden Bypass element of the Scheme will be delivered after the other two contracts, and 2) because changes to the Scheme, brought about by stakeholder engagement, will result in the need for a revised planning application. As noted at paragraph 2.12 above, OCC carried out extensive stakeholder engagement, which informed the preliminary design included in the planning application and, therefore, does not anticipate the need for such changes. I have set out the estimated programme in my Proof of Evidence, paragraph 5.44. It is anticipated that all three contracts will run in parallel.
- 2.16. In Mr Harman's Proof of Evidence at section 8, he refers to there being a high probability of all the risks he identified within his document materialising, and of costs escalating as a result of a number of listed issues. OCC maintains a detailed risk register that is controlled by a risk consultant. I have set out in my evidence the allowances for risk (including the methodology for its calculation), Optimism Bias and inflation included within the cost estimate, which OCC believes is adequate.

3 STATEMENT OF TRUTH AND DECLARATION

- 3.1 I confirm that, insofar, as the facts stated in my rebuttal evidence are within my own knowledge, I have made clear what they are and I believe them to be true and that the opinion I have expressed represent my true and complete professional opinion.
- 3.2 I confirm that my rebuttal evidence includes all facts that I regard as being relevant to the opinions that I have expressed and that attention is drawn to any matter which would affect the validity of those opinions
- 3.3 I confirm that my duty to the Inquiry as an expert witness overrides any duty to those instructing or paying me, and I have understood this duty and complied with it in giving my evidence impartially and objectively, and I will continue to comply with that duty as required.
- 3.4 I confirm that, in preparing this rebuttal evidence, I have assumed that same duty that would apply to me when giving my expert opinion in a court of law under oath or affirmation. I confirm that this duty overrides any duty to those instructing or pay me, and I have understood this duty and complied with it in giving my evidence impartially and objectively, and I will continue to comply with that duty as required.
- 3.5 I confirm that I have no conflicts of interest of any kind other than those already disclosed in this rebuttal evidence.

TIMOTHY MANN

19 March 2024