

Adran yr Economi a'r Seilwaith  
Department for Economy and Infrastructure



Llywodraeth Cymru  
Welsh Government

**The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East of Magor) Connecting Road) Scheme 201-**

**The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East of Magor) Connecting Road) (Amendment) Scheme 201-**

**The London to Fishguard Trunk Road (East of Magor to Castleton) Order 201-**

**The M4 Motorway (West of Magor to East of Castleton) and the A48(M) Motorway (West of Castleton to St Mellons)(Variation of Various Schemes) Scheme 201-**

**The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and the M48 Motorway (Junction 23 (East of Magor) Connecting Road) and The London to Fishguard Trunk Road (east of Magor to Castleton) (Side Roads) Order 201-**

**The Welsh Ministers (The M4 Motorway (Junction 23 (East of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and the M48 Motorway (Junction 23 (East of Magor) Connecting Road) and the London to Fishguard Trunk Road (East of Magor to Castleton)) Compulsory Purchase Order 201-**

**The M4 Motorway (Junction 23 (East Of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East Of Magor) Connecting Road) (Supplementary) Scheme 201-**

**The Welsh Ministers (The M4 Motorway (Junction 23 (East Of Magor) to West of Junction 29 (Castleton) and Connecting Roads) and The M48 Motorway (Junction 23 (East Of Magor) Connecting Road) and The London to Fishguard Trunk Road (East of Magor to Castleton)) Supplementary Compulsory Purchase Order 201-**

**Summary Proof of Evidence**

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**Welsh Government, Landscape and Visual Impact**

**Document Reference: WG 1.8.2**

**Contents**

|    |  |    |
|----|--|----|
| 1  | Author   | 3  |
| 2  | Scope and Structure of this Proof of Evidence                | 3  |
| 3  | Links with Other Evidence                                    | 3  |
| 4  | Initial Development of the Scheme                            | 3  |
| 5  | Consultation   | 4  |
| 6  | Landscape and Visual Impact Assessment (LVIA) Methodology    | 4  |
| 7  | Relevant Guidance  | 5  |
| 8  | Approach to Identification of Baseline Conditions            | 5  |
| 9  | Landscape Character and Context                              | 5  |
| 10 | Legislation and Policy Context                               | 5  |
| 11 | Mitigation and approach to Landscape Design                  | 6  |
| 12 | Construction Phase   | 7  |
| 13 | Approach to Key Elements of the published Scheme             | 7  |
| 14 | Monitoring of Scheme Landscape Mitigation Proposals          | 8  |
| 15 | Assessment of Potential Construction and Operational Effects | 8  |
| 16 | Assessment of Cumulative Effects                             | 9  |
| 17 | Summary of Effects   | 9  |
| 18 | Environmental Statement Supplement                           | 10 |
| 19 | Queries and Objections - Landscape and Visual Impacts        | 10 |
| 20 | CONCLUSIONS  | 11 |

## **1 Author**

1.1 My name is Nicholas John Rowson. I am employed by Atkins Ltd as Principal Landscape Architect. I have practised as a Chartered Landscape Architect since 1983.

1.2 I am the Deputy Environmental Coordinator and lead Landscape Architect for the M4 Corridor around Newport ("the Scheme"), having worked on the Scheme in this role since February 2015.

1.3 I understand my duty to the Inquiry to assist it with matters within my expertise and I believe that I have complied with that duty.

## **2 Scope and Structure of this Proof of Evidence**

2.1 My evidence addresses Landscape and Visual Impacts and the landscape design of the Scheme. I refer in my Proof of Evidence to supporting material contained within the Environmental Statement (ES) (Document 2.3.2) and the ES Supplements (Documents 2.4.4 & 2.4.14).

2.2 My evidence then addresses those objections made but not yet resolved that deal with landscape or visual matters.

## **3 Links with Other Evidence**

3.1 Details of other environmental surveys and assessments undertaken and reported upon in the ES and the ES Supplement are covered in the Proofs of Evidence of others.

## **4 Initial Development of the Scheme**

4.1 The preferred route layout published in July 2014 was developed during the period March 2015 to March 2016.

4.2 Landscape and Visual matters are covered by Environmental Mitigation Plans (EMPs) (Document 2.3.2), and in Chapter 9 of the ES (Document 2.3.2).

- 4.3 Representative viewpoints are shown on ES Figure 9.9. Photography sheets are included in Figure 9.10. In response to comment on the Draft Orders and associated design changes, additional or replacement viewpoints and photomontages have been added, EMPs amended and included in the ES Supplement (Documents 2.4.4 and 2.4.14).
- 4.4 The land required for the published Scheme includes land required for engineering purposes and essential mitigation.
- 4.5 Environmental matters were considered in an iterative design process, ensuring due consideration was given to the historic landscape, existing land use, environmental designations and features of international and national importance.
- 4.6 Environmental commitments, set out in ES Supplement December 2016 (Document 2.4.14) Appendix SR18.1, will further ensure the appropriate design of the Scheme and mitigation of impacts.

## **5 Consultation**

- 5.1 Consultations were held with statutory bodies. Landscape and visual matters formed part of the information available at the Public Information and Draft Orders Exhibitions.
- 5.2 I presented on landscape matters to the Design Commission for Wales (DCfW) in October 2015.
- 5.3 Following publication of Draft Orders I have attended meetings with officers of Monmouthshire County Council and Natural Resources Wales (NRW).

## **6 Landscape and Visual Impact Assessment (LVIA) Methodology**

- 6.1 In accordance with best practice, a scoping exercise was undertaken and a Scoping Report published in August 2015.

6.2 The approach to EIA is set out in ES Chapter 5. Chapter 9 covers the Landscape and Visual Impact topic.

6.3 Mitigation measures were incorporated into the published Scheme through its design, engineering and environmental discipline collaboration and contractor buildability input.

## **7 Relevant Guidance**

7.1 Details of the relevant guidance and methodologies used are described in LVIA Section 9.3 of the ES (Document 2.3.2).

## **8 Approach to Identification of Baseline Conditions**

8.1 Details of the landscape and visual Baseline Studies are described in LVIA Section 9.3 of the ES (Document 2.3.2).

8.2 A site based assessment was undertaken in summer 2015 to validate the desk study findings.

8.3 I note that Newport Council (SUP0192) and NRW (OBJ0268), agree with the findings of the LVIA.

## **9 Landscape Character and Context**

9.1 Landscape character and context are set out and described in LVIA Section 9.4 of the ES (Document 2.3.2).

## **10 Legislation and Policy Context**

10.1 Due account was taken of relevant legislation and policy when preparing the LVIA and EMPs, through a review of topic specific published documents as set out in section 9.2 and appendix 9.1 of the ES (Document 2.3.2)..

## **11 Mitigation and approach to Landscape Design**

- 11.1 The approach to mitigation and landscape design for the Scheme is set out in LVIA Section 9.5 of the ES (Document 2.3.2).
- 11.2 I consider mitigation measures, for example, the location of drainage lagoons, woodland, tree, scrub and grassland planting etc., take account of and implement objectives in EU, UK and Welsh policy, the Scheme objectives and best practice guidance documents.
- 11.3 In review with the NRW and local authority landscape architects, a consensus emerged that the Levels would be best served by a predominantly grassland landscape scheme, allowing views into the Levels and reducing shading of reens and ditches.
- 11.4 The landscape design seeks to integrate the Scheme, where appropriate, into the historic landscape; provide views of the levels; create landscape distinctiveness at key points, ensure structures are visually suited and that the Usk Crossing is of a design worthy of celebration.
- 11.5 The overarching principle across the levels was to minimise the loss of SSSI land.
- 11.6 The design seeks to provide biodiversity enhancement, enhancing the SSSI landscape and providing new reens and ditches.
- 11.7 The EMPs indicate the type and purpose of each landscape area in sufficient detail to determine the extent of essential mitigation land required and understand how the landscape will look. Detailed design would allow both landscape objectives and principles to be more fully met.
- 11.8 Severed land, not considered viable for its previous use, has been taken as essential mitigation.
- 11.9 Where possible drainage lagoons have been located on the northern side of the Scheme.

- 11.10 Where mature vegetation is lost, the Scheme design establishes new woodland planting; also providing essential mitigation for loss of dormouse habitat.

## **12 Construction Phase**

- 12.1 The EMPs do not show construction phase work outside the footprint of the Scheme. Temporary construction land will be restored to its condition before work commenced (Commitment 104).
- 12.2 Landscape and visual impacts of the construction work and the potential for mitigation are addressed in LVIA Section 9.7 of the ES (Document 2.3.2).

## **13 Approach to Key Elements of the published Scheme**

- 13.1 The River Usk Crossing would be a major intervention in the landscape, with views ranging from receptors in close proximity to the bridge to distant views from Wales and England.
- 13.2 This bridge has been through considerable design review and development. The approach and resultant design has been the subject of independent review by the DCfW.
- 13.3 NRW in their response to the Draft Orders agreed with the landscape and visual impact assessment of the new River Usk crossing.
- 13.4 I consider that visually the new bridge would in general be beneficial, particularly in medium to distant views where the scale, form, design and location within the landscape can be more fully understood.
- 13.5 Other key elements include other bridges and junctions on the Scheme, where materials and design were suited for visual impact mitigation, and the Scheme across the Levels where a no-dig and minimum footprint approach was adopted to minimise SSSI loss.

## **14 Monitoring of Scheme Landscape Mitigation Proposals**

14.1 LVIA Section 9.5 of the ES (Document 2.3.2) commits to a five year landscape aftercare period. The Environmental, Landscape and Ecology Aftercare Plan for the Scheme is set out in ES Chapter 18 (Document 2.3.2) and by commitments 117, 130 and 161 of Appendix SR18.1 of the ES Supplements (Documents 2.4.4 & 2.4.14).

## **15 Assessment of Potential Construction and Operational Effects**

15.1 The assessment of landscape and visual impacts during construction are set out in ES Section 9.7 (Document 2.3.2). The assessment of potential operational effects and their impact is set out in ES Section 9.8 (Document 2.3.2).

15.2 Construction effects will include:

- Loss of existing landscape features and land;
- Visual intrusion of the works themselves;
- Unmitigated construction work, e.g. embankments
- Construction traffic and plant, e.g. lorries moving fill and large cranes to construct the River Usk Crossing;
- Plant, compound and vehicle lights during hours of darkness, and;
- Landscape and visual impact of temporary works

15.3 Operational effects will include:

- Moving traffic on the Scheme;
- Lighting on the Scheme;
- Visual and physical impact of large structures, and;
- Visual and physical impact of equipment associated with the operation of the Scheme, e.g. signage.

15.4 The LVIA considers day and night time conditions for the Scheme once operational and consideration of the mitigation at Year 1 and Year 15 after opening. I consider that the Scheme provides an appropriate level of mitigation.

## **16 Assessment of Cumulative Effects**

16.1 Assessment of the cumulative landscape and visual effects of the Scheme is contained within ES Chapter 17 (Document 2.3.2).

16.2 The landscape assessment presented in Chapter 9: included the consideration of all potential impacts on landscape character and landscape quality and as such, no additional cumulative effects are considered likely to occur beyond those identified in the chapter.

## **17 Summary of Effects**

17.1 The effects of the Scheme on both the landscape and views are summarised in LVIA Section 9.15 (Document 2.3.2).

17.2 I recognise that the Scheme will have a permanent effect on the landscape and visual appearance of the Gwent Levels Landscape of Outstanding Historic Interest and on the landscape at the Castleton and Magor extents of the Scheme.

17.3 Landscape impacts at Year 1 range from Neutral to Large Adverse. Year 15 impacts are similar.

17.4 Visual impacts are greatest at Year 1. By Year 15 planting will be achieving, or starting to achieve, the intended visual mitigation.

17.5 I would however note: In some situations, e.g. viewpoint 9, at Church Crescent, the landscape mitigation, whilst effective for the direct visual impacts, (will have an adverse effect by changing the existing wider views.

17.6 In early discussion with statutory consultees, it was agreed that to attempt to screen the Scheme completely with tree and woodland planting across the Levels would, itself, have an adverse impact on the historic landscape

both physically and visually. It would also have adverse impacts on the ecological quality of the drainage network through shading, and would potentially result in unnecessary loss of SSSI land. Visual mitigation, therefore, has been balanced with avoiding such impacts.

17.7 The Scheme will be constructed in accordance with the design set out in the ES, ES Supplements and design documents (Commitment 95 of the ES Supplements Appendix SR18.1 (Documents 2.4.4 & 2.4.14)), temporary construction work removed and the land restored on completion of the works (Commitment 104).

17.8 LVIA Section 9.4 assesses the existing levels of visible illumination during the hours of darkness.

17.9 A lighting strategy for the Scheme would light only junctions and river crossings, avoiding lighting river channels (Commitment 134).

## **18 Environmental Statement Supplement**

18.1 Design development in response to comments and objections are explained in more detail in Ben Sibert's Proof of Evidence (WG 1.5.1). These include changes to the Docks junction, changes to the Magor junction and raising of the River Usk Crossing.

18.2 These changes to the published Scheme have been reassessed using the same LVIA methodology as for the published ES. Consequential amendments in impact have been set out in the ES supplements.

18.3 In my opinion, these Scheme developments have not increased the landscape or visual impact and in some cases have reduced the impact to the benefit of the Scheme, for example, the lowering of the Magor junction.

## **19 Queries and Objections - Landscape and Visual Impacts**

19.1 I address in my Proof those objections to the Scheme pertaining to potential impacts on the landscape or visual aspects. I would note that

many of these are generic and do not identify specific landscape and/or visual impacts.

19.2 Objections in general are concerned with the impact of the Scheme on the Gwent Levels historic landscape, on the SSSI's, on the Gwent Wildlife Trust Magor Nature Reserve and on tranquillity.

19.3 I consider these are appropriately addressed through the design and LVIA process, as set out in the published orders, through design development, as published in the ES supplementary statements, or through the Commitments Register in the appendices to these.

## **20 CONCLUSIONS**

20.1 I consider the land take for landscape and visual mitigation and for other mitigation measures is essential to deliver the necessary Scheme mitigation, consistent with Welsh Government Scheme objectives.