

1 INTRODUCTION

1.1 Contents

1.1.1 This Environmental Impact Assessment (EIA) Report (EIAR) (also referred to as an 'Environmental Statement') has been prepared on behalf of Winchburgh Developments Limited (the 'Developer') for Transport Scotland, as the relevant 'Promoter', to support the publication of draft trunk road orders, as required under the Roads (Scotland) Act 1984¹ to construct a new motorway junction on the M9 ('the proposed development') at Duntarvie, Winchburgh in West Lothian, Scotland (the 'site').

1.1.2 The proposed development comprises a new dumbbell grade separated junction (i.e. four slip roads) on the existing M9 motorway, incorporating the existing B8020 road where it passes beneath the M9 motorway at Duntarvie. The purpose of the proposed development is to provide access to the M9 motorway in all directions primarily to serve the proposed Winchburgh Masterplan extension.

1.1.3 This EIAR comprises four volumes:

- Volume 1: Non-Technical Summary (NTS);
- Volume 2: Main Report;
- Volume 3: Technical Appendices; and
- Volume 4: Figures.

1.1.4 This chapter outlines the intended purpose of this document and the process of the EIA on which it reports. It also provides information on commenting on the EIAR and where this document sits in relation to other documents submitted.

1.1.5 This chapter refers to the following Technical Appendices (refer to Volume 3):

- Technical Appendix 1.1: EIA Scoping Report; and
- Technical Appendix 1.2: Consultation and Scoping Responses.

1.1.6 This chapter refers to the following Figures (refer to Volume 4):

- Figure 1.1: Site Boundary; and
- Figure 1.2: Winchburgh Masterplan Area.

1.2 Background to Proposed Development

1.2.1 The proposed development forms part of the Winchburgh Masterplan development (refer to Figures 1.1 and 1.2 in Volume 4), which has received outline planning consent from West Lothian Council (WLC) (application reference: 1012/P/05). The outline planning consent includes development of a 352 hectares (ha) settlement expansion, including residential, commercial, industrial, recreation and retail uses. It also includes community facilities, landscaping and open space. The outline planning application also covered rail and road infrastructure, including a train station, park and ride facilities, a junction to the M9 motorway (i.e. the proposed development), and primary and secondary school provision. Design of the aspects of the development of the Winchburgh Masterplan area is largely covered by the

¹ Her Majesty's Stationery Office (HMSO), 1984. Roads (Scotland) Act 1984.

Planning Act 2008² and is the subject of matters specified in conditions (MSC) planning applications. A specific MSC application for the proposed development is being made, concurrent with the publication of the draft road orders and this EIA Report.

- 1.2.2 Prepared as part of the outline application, the Winchburgh Masterplan Environmental Statement³ (ES) considered the principle of establishing a M9 motorway junction at Winchburgh and the associated potential for significant effects based on a set of assumptions regarding the likely design of the junction. The Winchburgh Masterplan ES did not consider the specific details of the motorway junction as designed for the proposed development.

1.3 Requirement for EIA

- 1.3.1 The development of a new motorway junction includes development of elements of motorway carriageway (such as slip roads and access lanes), and as such constitutes a motorway as identified in paragraph 7(2) of Annex 1 to Directive 2011/92/EU⁴. As an Annex 1 development, EIA is mandatory as part of the consenting process and the requirements of The Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017⁵ (the 'EIA Regulations') apply.

1.4 Project Team

- 1.4.1 The team involved in the project design and EIA process are listed in Table 1.1. Members of the team have been involved throughout the process described below. Technical assessments were conducted by suitably qualified team members, further details of which can be found in the relevant chapters. Project management was overseen by Maeve Fryday (B.A. Hons, MSc.) who has over 20 years EIA consultancy experience and is an Practitioner member of the Institute of Environmental Management and Assessment (IEMA) and project coordination by Sam Edwards who is a Practitioner IEMA member and has 7 years' experience in environmental consultancy.

Table 1.1: Project Team	
Team member	Role & Responsibility
Winchburgh Developments Limited	Developer.
Sweco	Lead Design Engineer, Transport Consultant and Drainage Consultant. Technical assessment of Road Drainage and the Water Environment.
Ramboll	EIAR production and coordination, including NTS and EIA Scoping. Technical assessment of Landscape and Visual, Ecology and Nature Conservation, Air Quality, and Noise. Design input on environmental issues.
CFA Archaeology	Technical assessment of Cultural Heritage and Archaeology.
Transport Scotland	Roads authority, Promoter. Planning advice.

² HSMO, 2008. Planning Act 2008.

³ Environ (now Ramboll), 2005. Winchburgh Development Initiative – Environmental Statement. August 2005.

⁴ DIRECTIVE 2011/92/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment

⁵ HMSO, 1984. The Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017.

1.5 Purpose of the EIAR

- 1.5.1 This EIAR reports on the findings of the EIA undertaken for the proposed development, in accordance with the EIA Regulations and the DMRB Volume 11: Environmental Assessment⁶ and has been prepared to inform all those with an interest in the scheme (the public, the Scottish Ministers, and organisations with statutory and non-statutory interests in the environment) of the likelihood of significant environmental effects associated with the proposed development. Volume 11 of the DMRB provides guidance on the environmental assessment of roads projects, including details of potential impacts and mitigation measures for a range of topics that are likely to be relevant to such projects.
- 1.5.2 Since commencing this EIAR, the DMRB guidance has been updated. At the time of the DMRB update this project was at an advance stage. In line with the updated guidance; as stated in GG101 Introduction to the DMRB Section 1.3, use of the previous guidance has been retained for this assessment. The approach and methodologies generally replicate the now superseded guidance but checks were made with the updated guidance to ensure there are no implications on the conclusions drawn.
- 1.5.3 Its purpose therefore is to provide the information required by the EIA Regulations (Section 20C, 6)⁵, namely:
- A description of the proposed development including physical characteristics of the whole proposed development and the land-use requirements during the construction and operational phases, the main characteristics (e.g. nature and quantity of the materials used) and an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the development is contained in Chapter 2: Proposed Development Description.
 - An outline of the main alternatives studied, interpreted as how the design of the proposed development has evolved particularly in response to environmental considerations, and an indication of the main reasons for the choice made is contained in Chapter 3: Design Evolution and Alternatives.
 - A description of the aspects of the environment likely to be significantly affected by the proposed development and the interrelationship between the above factors is contained in the technical chapters (Chapters 4-9). A consideration of aspects of the environment unlikely to be significantly affected is contained in Chapter 3: Design Evolution and Alternatives, explaining how environmental considerations fed into the design and proposed operation of the proposed development to 'design out' potential impacts.
 - A description of the likely significant effects of the proposed development on the environment, resulting from the existence of the proposed development, the use of natural resources, the emission of pollutants, nuisances and waste is contained in Chapters 4-9 in the 'Assessment of Likely Effects' sections.
 - A description of the forecasting methods used to assess the effects on the environment is contained in Chapters 4-9 in the 'Assessment Methodology' sections.
 - A non-technical summary of the project, alternatives considered, significant effects and cumulative effects are provided in Volume 1: Non-Technical Summary of the EIAR.

⁶ Department for Transport (DFT), 2008. Design Manual for Roads and Bridges (DMRB) Volume 11: Environmental Assessment.

- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment is contained in Chapters 4-9 in the 'Mitigation' sections, and in Chapter 10: Schedule of Mitigation. An assessment of residual effects following the incorporation of mitigation is contained in the 'Assessment of Residual Effects' sections.
- An indication of any difficulties (including technical deficiencies or lack of know-how) encountered in compiling the required information is addressed in the 'Assessment Methodology' sections in Chapters 4-9, where relevant.

1.6 EIA Process

1.6.1 This section provides an overview of the EIA process, including the processes of Scoping (the scoping request is provided within Technical Appendix 1.1 in Volume 3). Responses from this process and other consultation undertaken are provided at Technical Appendix 1.2 in Volume 3. These responses assisted in the design and site selection of the proposed development, informed the scope of assessments, and assisted in defining the content of the EIAR. The site selection process, in particular how the environmental information generated in the EIA process informed and influenced the site selection as presented for the proposed development, is addressed in Chapter 3: Site Selection and Alternatives.

Screening

1.6.2 Screening is the term in the EIA regulations used to describe the process by which the need for EIA is considered by the 'Competent Authority' (in this case Transport Scotland).

1.6.3 Under the Roads (Scotland) Act 1984, the publication of roads order must be subject to an EIA. Therefore, the publication of the draft trunk road orders for the proposed development must be supported by an EIAR, which reports the findings of an EIA.

Scoping

1.6.4 Although not a formal requirement under the EIA Regulations, the Applicant submitted a request for a 'scoping opinion' from Transport Scotland as the Competent Authority in 2014, using the provisions available in the EIA Regulations which applied at that time, for a previous iteration of the proposed development, however a response was never received.

1.6.5 The Applicant submitted a further request for a scoping opinion (refer to Technical Appendix 1.2 in Volume 3) from Transport Scotland in June 2018 for the current proposed development. Requests for inputs to a scoping opinion were also submitted to the following statutory consultees:

- Scottish Environment Protection Agency (SEPA);
- West Lothian Council (WLC): Planning, Environmental Health, and Transport departments;
- Scottish Natural Heritage (SNH);
- Scottish Water; and
- Historic Environment Scotland (HES).

1.6.6 Scoping is the process by which a developer may seek advice from the Competent Authority and statutory consultees on the contents of the EIA and EIAR, including the scope of work and the assessment methodology to be used.

- 1.6.7 This request was accompanied by a 'Scoping Report' (provided in Technical Appendix 1.1, Volume 3) which set out a summary of the proposals; identified the likely significant environmental effects; and proposed scope of the EIA.

Consultee Responses

- 1.6.8 Responses to the Scoping Report from consultees are included in Technical Appendix 1.2 in Volume 3. The consultees were largely content with the proposed EIA scope; however, some key comments were raised in relation to:

- Robustness of the traffic data for use in the air quality and noise assessments (refer to Chapter 8: Air Quality and Chapter 9: Noise) and the methodology of the air quality assessment;
- Selection of noise sensitive receptors for the noise assessment (refer to Chapter 9: Noise);
- Selection of viewpoints for the Landscape and Visual Impact Assessment (refer to Chapter 4: Landscape and Visual);
- Inclusion of Human Health and Well-being and Pedestrians and Others in the EIA scope (refer to 'Environmental Topics Scoped Out' section in this Chapter); and
- Inclusion of additional water related topics, such as flooding, surface water drainage, pollution prevention, engineering activities near the water environment, disruption to existing wetlands, peatlands, borrow pits and ground water abstractions, and flood risk study of the Swine Burn (Chapter 6: Road Drainage and Water Environment).

- 1.6.9 The consultation matrix in Technical Appendix 1.2 in Volume 3 indicates where scoping comments relating to the contents of the EIAR were made, and where in the EIAR these have been addressed. Chapters 4 (Landscape and Visual), 5 (Cultural Heritage and Archaeology), 6 (Road Drainage and the Water Environment), 7 (Ecology and Nature Conservation), 8 (Air Quality) and 9 (Noise) also outline where scoping comments are addressed.

Environmental Topics Scoped Out

- 1.6.10 The Scoping Report proposed that certain issues could be scoped out of the EIA, on the submission of information informing the design and demonstrating that effects arising would not be likely to result in significant environmental effects. Measures included within the design of the proposed development to minimise these effects are listed in Section 2.6 (Construction) and 2.7 (Site Operation and Management) in Chapter 2: Proposed Development Description. Issues suggested to be scoped out of further assessment included vibration, climate change and greenhouse gases (GHGs), major accidents and disasters, human health and well-being, geology and soils, vehicle travellers, and pedestrians and others (cyclists, equestrians and community effects). Scoping these issues out of full assessment within the EIAR does not mean that no information on these issues is provided.
- 1.6.11 This section provides a summary of why these are scoped out of the EIA is as follows (further information is provided within the EIA Scoping Report in Technical Appendix 1.1 and consultation matrix in Technical Appendix 1.2, both in Volume 3).

VIBRATION EFFECTS

- 1.6.12 Vibrations generated by road traffic, and especially vibrations from heavy goods vehicles (HGV), does not normally result in perceptible vibrations at distance greater than 20-30 m away from major roads. Noise sensitive receptors in the study area are located at significantly

greater distances than 30 m. On this basis, operational vibration has been scoped out from the noise assessment. Should it be required as part of the construction method for the new motorway slip roads, piling can generate ground vibrations that may be perceptible at receptors up to approximately 100 m. The nearest noise sensitive receptor, Duntarvie Castle, is located at least 120 m away from the likely locations of any proposed piling works.

- 1.6.13 Vibrations generated during construction have a minimal potential to be perceptible, and therefore they were not considered in the scope of this EIA. Further information is available in Chapter 9: Noise for further information.

CLIMATE CHANGE AND GHGs

- 1.6.14 In the context of the EIA process climate change is considered both in relation to the contribution of the proposed development to increasing or decreasing gaseous emissions with global warming potential (GWP), and in relation to climate change adaptation. Emissions associated with the proposed development will be limited to temporary and short-term emissions of exhaust gases from vehicles and construction plant, and is not considered likely to be significant in terms of GWP. With regard to climate adaptation no potential for significant impacts have been identified. The proposed development would not result in significant adverse effects on air quality, or climate change during the construction or operational phases. As such, this issue is scoped out of the EIA and no assessment of climate change is proposed as part of the EIA Report.
- 1.6.15 Furthermore, the Air Quality assessment (Chapter 8: Air Quality) does not identify any significant adverse effects in relation to air quality.
- 1.6.16 As described in Chapter 6: Road Drainage and Water Environment, the road drainage and water environment assessment modelled the pre-development and post-development scenarios with a 35% uplift to account from climate change (in line with relevant guidance⁷). The assessment concluded that there are no significant adverse effects arising as a result of the proposed development.

MAJOR ACCIDENTS AND DISASTERS

- 1.6.17 Given the predominantly rural context of the proposed development, the relevant types of accidents/disasters would include: severe weather events, including high winds, high rainfall leading to flooding, or extreme cold leading to heavy snow and ice loading; wild fire; traffic related accidents; and mass movement associated with ground instability. Severe weather resilience is a core component to the network design, and includes consideration of flooding resilience, overhead line design and vegetation management to reduce the risk of unplanned power cuts. In the event of an unplanned power cut, significant effects are considered unlikely. Effects are likely to be short-term and essential services e.g. medical facilities, are required to have some form of backup generation. A maintenance schedule for the proposed development will be implemented once built to ensure that the junction is regularly checked for potholes, debris, etc. in the road that could potentially lead to road disasters.
- 1.6.18 As noted in paragraph 1.6.16 above, a 35% climate change allowance (in line with relevant guidance⁷) was applied to the modelled pre-development and post-development scenarios. The road drainage and water environment assessment (Chapter 6: Road Drainage and Water

⁷ SEPA, 2019. Land Use Planning System (LUPS-CC1) - Climate change allowances for flood risk assessment in land use planning, v1, April 2019 [online]. Available at: https://www.sepa.org.uk/media/426913/lups_cc1.pdf (Accessed 21 August 2019).

Environment) concluded that there are no significant adverse effects arising as a result of the proposed development in relation to flooding.

- 1.6.19 Therefore, the proposed development is unlikely to cause any significant accidents and/or disasters.

SOCIO-ECONOMIC, PEOPLE AND COMMUNITIES, HUMAN HEALTH AND WELL-BEING

- 1.6.20 The Winchburgh Masterplan ES (which includes the proposed development) assessed the socio-economic effects of the Masterplan, such as job creation, education and community facilities, and did not conclude any significant adverse effects. The proposed development is required to fully realise the Masterplan which would have likely beneficial effects with regards to human health and wellbeing. The detailed design of the proposed development would not affect any of the conclusions of the Winchburgh Masterplan ES.
- 1.6.21 Human health has been considered within the Air Quality (Chapter 8: Air Quality) and Noise (Chapter 9: Noise) assessments. Both assessments concluded that there are no significant adverse effects in relation to air pollutants or noise levels associated with the proposed development. Therefore, the current and future local residents would not be significantly affected by the construction or operation of the proposed development. Additionally, the proposed development connects Winchburgh to the M9 motorway, increasing access to nearby settlements such as Edinburgh, which have potential economic and recreational opportunities for the current and future residents.
- 1.6.22 Furthermore, the proposed development incorporates access routes for non-motorised users (NMU) (i.e. pedestrians, cyclists, equestrians) to travel north-south of the M9 motorway which maintains the connectivity of the NMUs to the local area for recreational and other purposes.
- 1.6.23 Therefore, the proposed development is unlikely to cause any significant adverse effects on socio-economic, people and communities, human health and well-being.

GEOLOGY AND SOILS

- 1.6.24 The proposed development is not located within any geologically designated or sensitive sites. However, the proposed development has the potential to give rise to some small-scale local impacts on geology and soils during the construction phase of development through the earthworks process. Construction phase impacts can include the removal and disruption of local soils. Soils on the site include poorly drained and freely drained forest soils. These soils are underlain by sedimentary sandstones, siltstones and limestones of the sedimentary West Lothian Oil Shale Formation. According to the British Geological Survey website⁸, glacial till ("diamicton") lies to west and north of the underpass, and again to the east after the M9 motorway crosses Swine Burn. Lacustrine (lake) deposits and covers most of the area south and east of the underpass. Soils on the site are not locally or regionally important and the potential quantities of soil to be removed are likely to be relatively small therefore removal or disturbance would not have a potentially significant effect and does not require detailed assessment in the EIA.
- 1.6.25 The full volume of earthworks will be re-used for the proposed development (e.g. landscaping) and the remaining volume will be stored within the wider Winchburgh Masterplan site and then re-used for the construction of the Winchburgh Masterplan development. Management of soils will be addressed in the Environmental Management Plan (EMP).

⁸ British Geological Survey, 2019. Home [online]. Available at: <http://www.bgs.ac.uk/home.html>

- 1.6.26 Therefore, the proposed development is unlikely to cause any significant adverse effects on geology and soils.

VEHICLE USERS

- 1.6.27 A Transport Assessment has been prepared in consultation with relevant authorities to assess the likely impacts of the development on transport in and around Winchburgh. The proposed development will increase traffic flows within Winchburgh and in some areas of the surrounding West Lothian area. The majority of impacts within Winchburgh can be mitigated against by encouraging trips by sustainable means such as walking, cycling and public transport whilst residual traffic impacts are effectively mitigated by provision of the new motorway junction.
- 1.6.28 The new junction will provide direct access to the strategic road network thereby avoiding significant flow increases in Kirkliston and Broxburn. In addition, there will be no public rights of way lost, and although parts of three will be re-routed, this effect is not considered to be significant.
- 1.6.29 It is therefore concluded that despite increases in traffic flows, the proposals will have an overall beneficial effect on sustainable travel and the choice of travel options in Winchburgh.

PEDESTRIAN AND OTHERS (CYCLISTS, EQUESTRIANS AND COMMUNITY EFFECTS)

- 1.6.30 Throughout designing the proposed development, it was considered important to address requirements of other road users (including but not limited to pedestrians, cyclists and equestrian users, collectively known as NMU). These have primarily been accommodated for through the overall design of the elements of the proposed development which modify the existing B8020 (Beatlie Road) and serve to incorporate the NMU crossings as an integral part of a motorway junction. In accordance with DMRB HD 42/17, a 'Walking, Cycling and Horse-Riding Assessment and Review' (WCHAR) report⁹ has been prepared as part of the Stage 3 Report and provides more detail of the NMU requirements. The proposed development would provide sufficient access routes for NMUs to travel north-south of the existing M9 motorway and would therefore not restrict NMUs from using the local area for recreation and other purposes. A consultation process was held between Tuesday 12 March 2019 and Friday 22 March 2019. The consultation looked specifically at proposed new NMU routes along the B8020 between the north and south scheme extents and asked for aspirational facilities which the stakeholders would like to see and what would encourage active travel through the junction and to the wider area. Further information is provided in Chapter 3: Site Evolution and Alternatives in Volume 2.
- 1.6.31 Therefore, the proposed development is unlikely to cause any significant adverse impacts on pedestrians and others.

Other Consultation

- 1.6.32 In 2010, an Appropriate Appraisal was prepared that set out access strategy scenarios for the Winchburgh Development. This document enabled Transport Scotland to consider the strategic importance of the development and conclude that a new junction at Duntarvie on the M9 motorway was justified as a key element of the access strategy. Subsequent consultation with Transport Scotland has been ongoing in relation to the development of the preliminary design of the junction, approval of Departures from Standard and the statutory procedures required.

⁹ Sweco, 2019. Walking, Cycling and Horse-Riding Assessment and Review, March 2019.

1.6.33 In addition to the EIA Scoping process (refer to Technical Appendix 1.2 in Volume 3), the Developer and Sweco (the 'transport consultant') have had ongoing consultation with Transport Scotland with regards to the arising proposed development. A response to Transport Scotland's comments on the EIA are included within Technical Appendix 1.2 in Volume 3.

1.7 Impact Assessment Methodology

1.7.1 Each technical chapter (Chapters 4-9) describes the topic specific methodology used. However, they will all follow the same basic structure, which is as follows:

- Scope of Assessment: Consultation undertaken and the agreed scope of the assessment is described. Any areas where there is agreed to be no potential for significant environment effects are described and discounted from further assessment.
- Assessment Methodology: The topic specific methodology for identifying the existing and future baselines and its sensitivity, potential effects and their magnitude, and significance arising from these effects are outlined. This refers to both the data sources and survey methods used in establishing the sensitivity of the baseline environment and the criteria used to assess the magnitude of change as a result of the proposed development. Each chapter describes how the magnitude of change interacts with the sensitivity of the baseline environment to determine significant effects and non-significant effects.
- Baseline Conditions: The baseline is described and its importance or sensitivity to change outlined. The baseline environmental conditions are typically established through a combination of desk-based research, site survey, and empirical studies and projections. The baseline environment can be taken as the current site conditions, or as a future baseline making assumptions about anticipated environmental trends assuming no development at the site. Each chapter describes the baseline used for the purposes of the impact assessment.
- Assessment of Likely Effects: This section identifies the likely significant effects on the environment that may arise as a result of the construction and operation of the proposed development. Effects may be direct, indirect or cumulative. Within these categories, they may also be short, medium or long-term, permanent or temporary, adverse (negative) or beneficial (positive). Direct effects are changes to the baseline arising directly from activities that form part of the proposed development, for example a physical change to patterns of surface water runoff as result of landscaping would be considered a direct effect. Indirect (or secondary) effects are those that arise as a result of a direct impact, for example the direct effect on patterns of surface water runoff could have secondary impacts on flood risk.
- Assessment of Cumulative Effects: Cumulative effects are the additional changes that result from multiple effects of the proposed development in conjunction with each other ('intra-project' effects), or the combined effect of the proposed development with other developments taken together ('inter-project' effects)¹⁰. The Winchburgh Masterplan will be considered in assessing the cumulative impacts of the proposed development and thus Ramboll envisage there will be no issues arising from 'inter-project' cumulative impacts. Cumulative effects arising from 'intra-project' effects will be considered and addressed in each technical chapter where appropriate.

¹⁰ DRMB LA104 Environmental assessment and monitoring (page 7) defines cumulative effects as: impacts that result from incremental changes caused by other present or reasonably foreseeable actions together with the project.

- Mitigation: Where likely significant effects are predicted, mitigation measures to reduce or offset the effects are proposed, where possible, in the relevant technical chapter.
- Additional Good Practice Measures: Where non-significant environmental effects are predicted, although there is no statutory requirement to reduce or offset the effects, good practice in addition to that outlined in the 'Mitigation by Design' section in Chapter 2: Proposed Development Description is provided.
- Assessment of Residual Effects: Residual effects, i.e. those that remain following the implementation of mitigation (in addition to those measures identified as part of the proposed development described in Chapter 2: Proposed Development Description), are assessed to demonstrate how the mitigation has been effective at avoiding, reducing or offsetting likely significant environmental effects. Each technical chapter distinguishes between 'significant' and 'not significant' residual effects for the purposes of the EIA Regulations.
- Summary: Provides a short summary of the chapter.

1.8 Structure of the EIAR

1.8.1 The remainder of the EIAR is structured as follows.

Chapter 2: Proposed Development Description

1.8.2 This chapter describes the site (i.e. location and surroundings, designations, environmental features, and its current use) and the proposed development. It addresses key design considerations (such as principles followed to design the proposed development) and describes the various components of the proposed development including the new build design, landscape proposals and access arrangements.

1.8.3 Measures to be followed during the construction phase and during the operational phase site management are also addressed. In particular, these sections outline environmental considerations and mitigation built into the proposed development to minimise environmental impacts.

Chapter 3: Design Evolution and Alternatives

1.8.4 The Developer has adopted an EIA process which is closely aligned to the design process to avoid likely significant adverse effects through the design evolution of the proposed development. Key issues identified from planning policy, the scoping and consultation process, and baseline environmental studies were collated in order to establish constraints and parameters to inform the design strategy and process. Further details on alternatives considered and the mitigation achieved through the design evolution are provided in this chapter. In particular, the process to identify the 'Mitigation by Design' described in Chapter 2: Proposed Development Description is discussed.

Technical Chapters (4-9)

1.8.5 The technical chapters of the EIAR (Chapter 4-9) are focussed on describing and assessing the likely significant effects remaining following the design process. These cover the issues remaining for the EIA following consultation and baseline characterisation of the application site. Their structure is summarised under section 1.7 'Impact Assessment Methodology' of this chapter.

- 1.8.6 For this project the key issues were identified as:
- Chapter 4: Landscape and Visual;
 - Chapter 5: Cultural Heritage and Archaeology;
 - Chapter 6: Road Drainage and the Water Environment;
 - Chapter 7: Ecology and Nature Conservation;
 - Chapter 8: Air Quality; and
 - Chapter 9: Noise.
 - Chapter 10: Schedule of Mitigation
- 1.8.7 This chapter is to summarise the mitigation measures proposed throughout the EIAR to avoid, reduce, or offset impacts which would otherwise give rise to significant residual environmental effects. As the main aim of the design process was to design out potential for environmental effects as far as possible any specific commitments of the design are laid out, and mitigation proposed in the technical chapters.
- 1.8.8 The majority of the pre-construction and construction phase mitigation would be delivered through the implementation of an EMP. Prior to commencement of the works the contractor will be required to prepare and implement an EMP to ensure that all potential environmental effects during the construction phase are addressed and appropriate controls set in place. Method statements for construction activities will need to be prepared in accordance with the objectives and mitigation measures contained in the EMP.

1.9 Commenting on the EIAR

- 1.9.1 An electronic version of the draft road orders and this EIAR will be available to download from the Transport Scotland website¹¹.
- 1.9.2 A copy of the EIAR will be made available at Transport Scotland for review:
- Transport Scotland
c/o Trunk Road and Bus Operations (TRBO)
Buchanan House
58 Port Dundas Road
Glasgow
G4 0HF*
- 1.9.3 Any person wishing to express an opinion on the EIAR should write to Transport Scotland at the above address. Formal representations are invited until six weeks after the advertised date of publication.
- 1.9.4 This EIAR is available at a cost of £350 in hard copy format (including postage and packaging) or on CD-ROM (price £10). A Non-Technical Summary of the Environmental Statement is available free of charge from the Applicant on request.

¹¹ Transport Scotland, 2018. Transport Scotland website [online]. Available at: <https://www.transport.gov.scot/> (Accessed on 20/07/2018).

Please contact:

Ramboll

5th Floor

7 Castle Street

Edinburgh

EH2 3AH

0131 297 2650

1.10 Draft Orders Publication Documentation

1.10.1 The documentation that is submitted as part of the publication of the draft trunk road orders includes:

- Mainline Road Orders; and
- Side Road Orders.