

**TRANSPORT AND WORKS ACT 1992
TRANSPORT AND WORKS (INQUIRIES PROCEDURES)
RULES 2004**

**NETWORK RAIL (STALYBRIDGE TO DIGGLE
(SADDLEWORTH) ENHANCEMENTS) ORDER**

**ENVIRONMENTAL MANAGEMENT
PROOF OF EVIDENCE
Of
Jim Pearson**

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The Network Rail (Stalybridge to Diggle (Saddleworth) Enhancements) Order
Proof of evidence Environmental Management: Jim Pearson (NR/PoE/JP/4.2)

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1. INTRODUCTION

1.1 Personal Details

1.1.1 My name is Jim Pearson, and I am a Consents and Environment Manager working for Network Rail, currently working in that role in the Trans Pennine Upgrade (TRU) West and East Alliances that covers TRU works from Manchester through to York. Environmental management is my profession with 25 years' experience. I have a BSc in environmental sciences and am a member of the Institute of Sustainability and Environmental Professionals (ISEP).

1.1.2 I have been providing guidance for and review of environmental documentation produced by Atkinsréalis in support of the Transport and Works Act Order (TWAO) application ("the application") and I have written the Code of Construction Practice Part A (CoCP) (**NR17**) that is included with the application documents. I have provided general guidance to the Atkinsréalis environment team as required and provided assurance to Network Rail regarding the Environmental Report that includes:

- Contributing to the review of the Environmental Report (**NR14**);
- Reviewing the general approach to environmental mitigation in design and construction; and,
- Reviewing various general and topic chapters of the final Environmental Report (**NR14**) at each review stage.

2. STRUCTURE AND SCOPE OF THE PROOF OF EVIDENCE

2.1 Evidence for Environmental Management

2.1.1 In consideration of information supplied as part of the Order application in the Environmental Report (ER) (**NR14**) and the Code of Construction Practice Part A (CoCP Part A) (**NR17**), I will provide evidence on the following matters:

- Environmental management requirements;
- Likely environmental effects of constructing and operating the application scheme;
- Measures to be implemented to avoid, reduce or remedy the environmental effects of the application scheme; and,

- Responses to specific objectors concerning environmental matters.
- 2.1.2 My evidence presents the key aspects of environmental design and construction management incorporated into the application scheme and outlines the environmental effects and relevant mitigation by topic.
- 2.1.3 In terms of the matters set out in the Statement of Matters, I address general environmental matters as outlined in section 7 of my proof .
- 2.1.4 I also address the following matters in this proof:
- Environmental Design;
 - Environmental management during construction;
 - Landscape and Visual Amenity;
 - Noise effects during construction (for vibration effects refer to the proof of evidence of Adam Lawrence **NR/PoE/AL/6.2**);
 - Implementation of the Construction Traffic Management Plan and any relevant Highways Agreements with the Highways Authority;
 - Geo-environment;
 - Water environment; and,
 - Air Quality
- 2.1.5 Matters concerning the following environmental disciplines are dealt with in a separate proof as indicated. I make reference to the following disciplines in connection to general environmental management and control as applicable to my proof:
- Heritage including Archaeology (PoE Sandra Honeywell **(NR/PoE/SH/14.2)**);
 - Ecology (PoE Will Horlock **NR/PoE/WH/7.2**);
 - Operational noise effects and Vibration (PoE Adam Lawrence **NR/PoE/AL/6.2**); and,
 - Traffic and Transport (PoE Chris Cary **NR/PoE/CC/5.2**).

3. ENVIRONMENTAL MANAGEMENT AND CONTROL

3.1 Environmental Impact Assessment Screening

- 3.1.1 Subject to certain exceptions, the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 (the Application Rules) require the applicant for an Order to submit an Environmental Statement (ES) in relation to any proposed works that constitute a project of the type outlined in Annex I or Annex II of the Environmental Impact Assessment (EIA) Directive 2011/92/EU, as amended by Directive 2014/52/EU (the EIA Directive). An ES is not required for projects listed in Annex II if the Secretary of State notifies the applicant that an ES is not required because the project is unlikely to have a significant effect on the environment (i.e. a negative EIA screening decision is provided).
- 3.1.2 Under Rules 7(4) and 7(13) of the Application Rules, an EIA screening decision was sought from the Secretary of State in December 2023. The screening decision letter received from the Secretary of State dated 22nd March 2024 ("Screening Decision") confirmed that an EIA is not required for the Scheme (**NR13**). The Screening Decision letter makes reference to consultation responses received from Natural England, the Environment Agency, Historic England and Tameside Metropolitan Borough Council (TMBC) and Oldham Metropolitan Borough Council (OMBC).
- 3.1.3 Specifically, paragraph 6 of the Screening Decision letter included a requirement to conduct a cumulative and combined effects assessment of the Order Scheme in relation to the works that do not require Deemed Planning Permission and other external projects. This assessment has been provided in section 4.1 of this Report.
- 3.1.4 In the absence of there being significant effects to address with the production of an ES, Network Rail reviewed the two screening decisions and concluded it was appropriate to include an Environmental Report (ER) in the Order application that would address in general how environmental risk and opportunity would be managed and provide the mechanism for Oldham and Tameside councils to approve environmental management for the application scheme through the conditions proposed in the Request for Deemed Planning Permission (**NR11**).

3.2 Environmental Report

- 3.2.1 Network Rail submitted an Environmental Report (ER) (**NR14**) with the Order application. The ER (**NR14**) comprises 3 volumes as follows:

- Volume 1: Main text;
- Volume 2: Figures (to support Volume 1 Main text); and,
- Volume 3: Appendices (specialist reports to support the Main text).

3.2.2 The ER identifies the likely environmental effects during the construction and the operational phases of the application scheme, describes the environmental mitigation required for the application scheme and describes the mechanism for securing the environmental mitigation for the elements for which deemed planning permission is sought.

3.2.3 The relevant mitigation for those elements would be secured by suggested conditions included within the Request for Deemed Planning Permission (**NR11**). Mitigation will also be secured through compliance with Network Rail's Contract Requirements - Environment (CRE) (NR/ENV/015). I provide further detail on CRE in section 3.4 of my proof of evidence.

3.3 Code of Construction Practice Part A

3.3.1 The Order application documents also include the submission of the Code of Construction Practice Part A (CoCP Part A) (**NR17**), that outlines the high level environmental controls in relation to the construction phase of the application scheme and then goes on to provide the mechanism for securing the relevant mitigation outlined in the ER (**NR14**) through the future submission of the Code of Construction Practice Part B environmental management documents. These documents are to be submitted to Oldham and Tameside Councils as applicable for their approval (see draft condition 6 in NR11).

3.3.2 The use of the CoCP Part A to secure recommended mitigation as outlined in an Environmental Statement for a TWAO, or as in this case an ER, is well preceded by previous TWAO schemes, with recent examples on the Network Rail (Hope Valley Capacity) Order and also other TRU schemes the Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order, the Network Rail (Church Fenton Level Crossing Reduction) Order and the Network Rail (Leeds to Micklefield Enhancements) Order.

3.3.3 The resulting CoCP Part B environmental control documents that are submitted for approval to the relevant planning authority provides the level of assurance that environmental commitments are being implemented for the deemed planning elements of the application scheme.

- 3.3.4 I explain in section 3.4 how other works included in the Order application that do not require deemed planning permission, are managed in considering environmental risk and opportunity, as would be normal practice for Network Rail construction schemes and is applied in general across the TRU programme of works. This includes the works on the railway between Stalybridge and Diggle that are not contained in the Order application but which form part of the wider Scheme.

3.4 Network Rail's Contract Requirements – Environment

- 3.4.1 In general Network Rail requires design and construction of rail projects to comply with its CRE (ER Volume 3: Appendix 1A (**NR14**)). CRE is effectively an instruction manual to design and construction contractors that contractually obliges them to comply with relevant environmental legislation and other environmental considerations stipulated by Network Rail. CRE has been updated to version 10 since the Order submission with this latest version included in the core documents submission for reference (Core document **NR115**).
- 3.4.2 CRE further requires design and construction contractors to demonstrate a sustainable approach to environmental management for projects conducted on Network Rail infrastructure.
- 3.4.3 For all projects commissioned on Network Rail infrastructure, the contractor must produce an Environmental and Social Management Plan (ESMP) that must demonstrate to Network Rail's satisfaction, how compliance with CRE will be achieved. Network Rail as the employer, then uses the ESMP for audit purposes.
- 3.4.4 As would be normal for construction projects on Network Rail infrastructure, the ESMP is used to manage all environmental requirements whether those defined for a TWAO scheme and captured in an ER and compliance with set conditions or other Permitted Development works described in section 3.5.

3.5 Permitted Development and works requiring separate planning permission

- 3.5.1 The ER does not consider the effects of certain components of the Scheme where the works are carried out as permitted development. These components which are not included within the scope of the ER (**NR14**) are described in the ER Volume 1, Main report, Table 1-2 of that document and described below in section 3.5.2.

Permitted Development Works

- 3.5.2 The Permitted Development components of the Scheme will be delivered in compliance with Network Rail's CRE (ER Volume 3: Appendix 1A (**NR14**)) in considering environmental management, as would be normal practice for such works.

4. ENVIRONMENTAL DESIGN

4.1 Mitigation Measures (general)

- 4.1.1 In accordance with the risk mitigation hierarchy, mitigation measures proposed through the ER (**NR14**) prioritise avoiding risks, reducing risks, offsetting the impact and then compensation. Where possible, environmental effects have been avoided through embedded mitigation developed as part of the design of the application scheme. Examples of embedded mitigation are:

- Provision of a new pedestrian footbridge at Greenfield Station (MVL3/28A) to provide a safer pedestrian route to the station to alleviate potential pedestrian access restrictions following alterations to the structure;
- Reuse of materials to be reclaimed from demolished bridges in the reconstruction of others to minimise waste and retain the aesthetic of retained historic elements;
- Employing geogrid or similar materials for temporary construction compounds to help avoid risk of impact to unknown archaeology and to maintain permeability; and,
- Colour and design of bridges and other structures will be sympathetic to the local context to minimise visual impact.
- Various design refinements to minimise the de-vegetation across the application scheme including:
 - Heyrod Hall (MVL3/7): Reduction in working area to avoid tree loss on access track and adjacent bridge;
 - Plevins compound: Constrained land take boundary avoids tree felling in surrounding woodland; and,
 - Uppermill Viaduct (MVL3/31): Reduction in working area

and scope of works at the base of the Viaduct to avoid devegetation of mature woodland.

4.2 Landscaping

- 4.2.1 As defined mitigation for unavoidable vegetation loss, Network Rail proposes draft condition 5 Landscaping and Ecology, that is included in the Request for Deemed Planning Permission (**NR11**). The condition requires Network Rail to submit and gain approval from the relevant planning authorities of Oldham and Tameside as applicable for a Landscape and Ecological Management Plan (LEMP) that will be based on draft landscape plans included in the ER (**NR14**) in Volume 2 Figures: Figures 7.3.1 to 7.3.20 Outline Landscape and Ecological Mitigation and Restoration Proposals.
- 4.2.2 The LEMP will be monitored and maintained for a period of 5 years as is standard for TWAO schemes. However, it should be noted in accordance with biodiversity net gain (BNG) requirements as identified in section 4.3, where habitats required for BNG are contained within the LEMP areas, those habitats shall be monitored and maintained for the period of time required to reach maturity as defined by Defra metric 3.0 Technical Guidance.
- 4.2.3 For specified temporary compound areas and associated accesses within the Scheme that are not subject to deemed planning permission but are associated with the delivery of the works requiring deemed planning permission, Network Rail must return land to the reasonable satisfaction of the landowner in compliance with the draft Order (**NR02**) and Network Rail's CRE.

4.3 Biodiversity Net Gain

- 4.3.1 Network Rail complies with the TRU commitment for Biodiversity Net Gain (BNG) across its schemes from Manchester Victoria to York. BNG is defined as replacing the value of all habitats lost through de-vegetation and then adding 10% enhancement in addition to that replaced.
- 4.3.2 The Request for Deemed Planning Permission (**NR11**) includes draft condition 9 Biodiversity Net Gain, that secures the delivery of this commitment for the DPP elements of the application scheme.
- 4.3.3 Network Rail will comply with BNG metric 3.0 to retain consistency across the TRU programme of works. By default, the intention is to implement habitat

replacement and enhancement immediately local to the location of the Order works but in all events Network Rail will complete all BNG works within the administrative boundaries of Oldham and Tameside councils.

- 4.3.4 In complying with Defra metric 3.0, Network Rail will be producing a Habitat Management Plan (HMP) that will detail the habitats to be maintained and monitored. The Technical Guidance that accompanies metric 3.0 details the length of time each habitat will reach maturity and the HMP for biodiversity net gain, that is the maintenance period, will match these stated timeframes for the specific habitats created. In general maintenance is required for the duration of time the habitat takes to mature as defined in the metric 3.0 Technical Guidance. This may be for a period of up to 30 years. For further information I refer to the proof of evidence of Will Horlock (**NR/PoE/WH/7.2**).
- 4.3.5 As noted in section 4.3.1, Network Rail is committed to BNG across the whole of TRU and can confirm that in addition to draft condition 9 securing BNG for the DPP elements of the application scheme, NR is committed to delivering BNG wherever there is de-vegetation on the application scheme, whether under DPP or Permitted Development.

5. ENVIRONMENTAL MANAGEMENT DURING CONSTRUCTION

5.1 Code of Construction Practice Part A

- 5.1.1 The Environmental Management System (EMS) will be administered through the implementation of the Code of Construction Practice (CoCP) Part A which is included in the Order application (**NR17**). As described in Section 1.3.2 of the CoCP Part A, the CoCP acts as an EMS framework on which all the construction-related incorporated mitigation identified in the Environmental Report (ER) (**NR14**) is tied into the delivery of the application scheme and thus secured.

The CoCP Part A commits to general good environmental practice in delivering the Scheme and has been developed in considering Network Rail's "Contract Requirements – Environment" (CRE) and other Network Rail contractor partner good practice. The CoCP Part A document also considers equivalent documents that have been developed and implemented successfully on previous TWAO schemes.

5.2 Code of Construction Practice Part B

5.2.1 In addition to outlining standard environmental practice, the CoCP Part A outlines the requirement to submit detailed environmental management plans for conditional discharge to Oldham and Tameside councils in advance of constructing the application scheme, Part B of the document. As outlined in Condition 6 of the Request for Deemed Planning Permission (**NR11**), Part B of the CoCP will include the following plans and programmes that must be submitted to and approved by the relevant council:

- 6c(i) an External Communications Programme;
- 6c(ii) a Pollution Prevention and Incident Control Plan (PPICP),
- 6c(iii) a Waste Management and Materials Plan (WMP),
- 6c(iv) a Nuisance Management Plan (NMP) concerning dust, air pollution, hours of operation and temporary lighting; and,
- 6c(v) a Noise and Vibration Management Plan (NVMP) including a construction methodology assessment.

5.2.2 All plans and programmes must be produced in accordance with the provisions outlined in Part A of the CoCP and the mitigation described in the ER that is summarised in Chapter 14 of that document (ER Volume 1: Chapter 14 Summary of Mitigation). All plans and programmes will form part of the delivery contractor's "Environment and Social Management Plan" (ESMP) that is described in section 5.4.1 of my proof of evidence.

5.2.3 In addition to the CoCP Part B requirements of Condition 6, the DPP provides for standalone environmental conditions related to the construction period as follows:

- Condition 7: Construction Traffic Management and Travel Plan;
- Condition 10: Archaeology

5.2.4 The secured mitigation in completeness is detailed in the ER in Volume 1: Chapter 14: Summary of Mitigation, and summarised for delivery purposes into an Environmental Commitments register as described in section 5.3 of my proof.

5.3 Commitments Register

5.3.1 The project team internally manages all incorporated mitigation from the ER, conditions and other environmental commitments through the production of

a Scheme Environmental Commitments Register. The Commitments Register lists all relevant incorporated mitigation identified in the draft Order, ER, CoCP and DPP conditions. The Commitments Register includes line items for each environmental delivery plan and programme and links to the mitigation required to discharge them.

- 5.3.2 The Commitments Register is an internal management tool that allows all environmental mitigation and other commitments to be logged, responsibility for completing assigned, which delivery plan or programme the mitigation item is situated in, timeframe for completion and eventual closing of that item.
- 5.3.3 The Commitments Register is a live document that will be updated in consideration of agreements yet to be made and further mitigation as may be identified. Mandatory compliance with the Commitments Register shall form part of the delivery contractor's Environment and Social Management Plan (ESMP) so that the contractor is contractually obliged to comply with it.
- 5.3.4 Project delivery meetings will be used to discuss the progress of all commitments as identified in the Commitments Register and recommend any corrective actions as may be required.
- 5.3.5 Section 5.4 in general describes how the delivery contractor will internally manage the list of commitments, whether identified in the ER or elsewhere. This does not affect the power or ability that Oldham and Tameside councils have to control or enforce the measures agreed under the Order.
- 5.3.6 An initial draft Environmental Commitments register is included as Appendix A1 to my proof of evidence (NR/PoE/JP/4.3).

5.4 Delivery Contractor Environment and Social Management Plan

- 5.4.1 The ESMP is the internal delivery contractor's document that outlines how environmental risk and opportunity will be managed during the construction phase of the TWAO works. The ESMP will also state how the requirements of the Environmental Report, CoCP, environmental conditions of the Order and any other environmental commitments will be implemented and complied with.

6. MITIGATION AND RESIDUAL EFFECTS

6.1 Heritage and Archaeology

- 6.1.1 In considering heritage assets such as structures with listed building status, and potential archaeology I refer to the proof of evidence of Sandra Honeywell (NR/PoE/SH/14.2).

6.2 Ecology

- 6.2.1 In considering ecology I refer to the proof of evidence of Will Horlock (NR/PoE/WH/7.2).

6.3 Landscape and Visual Amenity

Mitigation

Construction

- 6.3.1 Various measures to protect landscape features during the construction of the application scheme are detailed in the ER in Volume 1: Section 7.3: and this includes:
- Temporary compounds are considered features in the landscape and would accordingly site materials sensitively, sites would be kept tidy, lighting of compounds kept to the minimum necessary for security and safety and any vegetation loss will be minimised (as required in compliance with the CoCP Part A section 3 General Site Options, and CoCP Part B environmental management documents as described in section 5.2.1, that must be submitted to and approved by the relevant local authority; and,
 - Protecting existing valued trees and woodland adjacent to the application scheme in accordance with BS5837:2012 (as required in compliance with draft condition 4 Pre Commencement, that must be submitted to and approved by the relevant local authority).

Operation

- 6.3.2 Substantial optioneering has been undertaken to identify suitable designs for all the relevant work components of the application scheme to limit visual and landscape impacts and effects. This includes design of temporary and permanent works to limit loss of trees and woodland as far as practicable. The full detail of required vegetation removal can be reviewed in the ER (NR14) in Volume 2 Figures (part 1 of 3) Figures 8.1.1 to 8.1.20. Examples of avoiding tree loss on the Scheme are given in section 4.1.1 of my proof.

- 6.3.3 In considering the landscape effects of the application scheme in operation, the mitigation is secured for the deemed planning elements via draft condition 5 Landscaping and Ecology as described in section 4.2.1 of my proof with the requirement to produce a LEMP to be submitted to and approved by the relevant local authority, that shall be based on draft proposals submitted in the ER (Volume 2 (part 2 of 3): Figures 7.3.1 to 7.3.20: Outline Landscape and Ecological Mitigation and Restoration Proposals). The LEMP will detail hard and soft landscaping works, compensate for the loss of mature vegetation, provide habitat connectivity and be designed to integrate the application scheme elements into the receiving landscape.
- 6.3.4 Works carried out on land under temporary possession during the construction period that are permitted development, must comply with the draft Order and return land to the reasonable satisfaction of the relevant landowner, also required as set out in CRE Section 8.3 (Connecting Communities with the Environment), now updated to Section 8.14 Improving the wellbeing of communities in CRE version 10 (core document **NR115**). Such areas within the Order boundary will be shown on the relevant LEMP as submitted to the relevant planning authority for approval.

6.4 Arboriculture

Mitigation

Construction

- 6.4.1 The ER reports on Arboriculture in section 8 with reference made to Tree Protection plans in the ER in Volume 2 Figures (part 1 of 3): Figures 8.1.1 to 8.1.20.
- 6.4.2 The requirement to protect trees and woodland adjacent to the application scheme is secured through the implementation of condition 4 Preliminary Works, and condition 5 Landscaping and Ecology, that must be submitted to and approved by the relevant planning authority.
- 6.4.3 Tree protection plans that shall be submitted to the relevant local authority in compliance with Condition 4: Preliminary Works, shall be based on draft plans submitted in the ER (Volume 2 Figures (part 1 of 3): Figures 8.1.1 to 8.1.20: Tree Protection Plans).

- 6.4.4 Works carried out on land under temporary possession must be returned back to the landowner's reasonable satisfaction as described in section 6.3.4 of my proof.

Operation

- 6.4.5 The embedded mitigation to eliminate the need to remove valued trees and woodland through application scheme design is described in section 4.1.1.
- 6.4.6 For further detailed technical information on tree removal and habitat effects I refer to the proof of evidence of Will Horlock (NR/PoE/WH/7.2).

6.5 Noise and Vibration

Construction

- 6.5.1 The ER reports on mitigation related to the control of noise and vibration during construction in Volume 1 Main report: Section 9.3 Mitigation and Consideration of Control measures.
- 6.5.2 Controls to minimise noise and vibration effects are secured through Condition 6 Code of Construction Practice Part B: 6(c)(v) Noise and Vibration Management Plan (NVMP), that must be submitted to and approved by the relevant local planning authority.
- 6.5.3 Standard methods to reduce noise and vibration to the lowest practicable levels will be in compliance with BS5228 "Best Practicable Means" (BPM) and will include measures such as:
- Accurate and reliable advanced notice of specific works to residents that will also be detailed in the CoCP Part B: 6(c)(i) External Communications Programme, that must be submitted to and approved by the relevant local planning authority;
 - Modern plant is used and construction techniques consider BPM;
 - Site hoardings are of solid design where benefit from noise reduction is established; and,
 - Comprehensive site briefings ensure there is appropriate site behaviour in minimising any unnecessary noise.
- 6.5.4 The NVMP will systematically predict the noise levels that will occur during the works and then when any site-specific mitigation is recommended beyond the standard mitigation identified above in section 6.5.3.

6.5.5 The NVMP will also consider the potential for construction works to cause cosmetic damage from vibrational effects, most typically during any required piling in the proximity of residential property. Should predicted vibration levels be higher than the trigger level set out in section 9.3.10 of the ER, then dilapidation surveys before and after works will be offered to affected residents. For technical detailed information on the potential effects caused by vibration I refer to the proof of evidence of Adam Lawrence (**NR/PoE/AL/6.2**).

6.5.6 Works carried out on land under temporary possession during the construction period that are permitted development, will comply as applicable with management and mitigation requirements as set out in CRE Section 6.6 Noise and Vibration, (in updated version 10 CRE, section 8.8 Noise, Vibration, Odour and Lighting (core document **NR115**)).

Operation

6.5.7 In considering the operational effects of Noise and Vibration particularly at the new Mossley Station but also in other areas of the Scheme, I refer to the proof of evidence of Adam Lawrence (**NR/PoE/AL/6.2**).

6.6 Traffic and Transport

6.6.1 In considering the effects of Traffic and Transport on the network, I refer to the proof of evidence of Chris Carey (**NR/PoE/CC/5.2**). I deal with the management structure in place that ensures controls are applied across the scheme.

General construction traffic management

6.6.2 The Construction Traffic Management and Travel Plan (CTMP) (NR11 draft condition 7) is a pre-commencement condition and must include the following detail to be submitted to and approved by the relevant planning authority:

- Construction access routes;
- Access and egress precautions and protection onto any public highway;
- Relevant mitigation from chapter 10 of the ER;
- Further detail on the movement numbers of personnel and construction vehicles;
- Prohibited routes and any specified time restrictions;
- monitoring of vehicles for compliance with the CTMP;

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- Management of nuisance with specific reference to the control of mud, dust and grit on the public highway; and,
- Details of site parking.

6.6.3 It is likely that Network Rail will utilise the option to employ draft condition 3 Stages of Development in managing the submission of the CTMP. This will mean various stage CTMP documents will be submitted for conditional approval to the relevant local authority during the delivery of the Scheme as the detail of the management of a particular area will only come forward during, rather than all in advance of the start of construction.

Implementing the Order traffic powers: Highways Management Group

6.6.4 The Order if granted gives Network Rail various powers to carry out works within streets and to implement traffic regulations under the following Articles:

- Article 10: Power to execute street works;
- Article 11: Power to keep apparatus in streets;
- Article 12: Power to stop up streets;
- Article 13: Powers to alter the layout of streets;
- Article 14: Powers to temporarily stop up streets;
- Article 15: Access to works;
- Article 19: Replacement and closure of footpath level crossings; and
- Article 43: Traffic regulation.

6.6.5 It is proposed by Network Rail to establish with each of Oldham Borough Council and Tameside Metropolitan Borough Council a Highways Management Group (HMG) the objective of which will be to oversee Network Rail's carrying out of the construction of street works and the implementation of traffic regulations within each Council's area. It is proposed that such HMGs will be established through a highways agreement with each Council. These HMGs would then meet periodically in advance of and throughout the construction period of the Order Scheme.

6.6.6 It proposed by Network Rail that the HMGs will be used as the mechanism for informing the highway authorities in good time regarding the programme of intended works and the confirmed use of the Order street powers to conduct those works.

6.6.7 Where the Order powers require Network Rail to either consult or seek consent from the highways authority, the HMG is identified as the mechanism

to track all these requirements and each Council's response to such consultations or consent request. .

- 6.6.8 The further advantage of managing the Order street powers through a HMG is it allows the highways authority to coordinate Network Rail's requirements alongside other demands on the network.
- 6.6.9 In regards the requirement to submit and have approved the CTMP in compliance with draft condition 7 of the deemed planning permission, the HMG can be used to track and discuss commitments made in the CTMP that are required via the mitigation outlined in the ER.

6.7 Geoenvironment

- 6.7.1 The management of land that potentially has contamination has been conducted in accordance with standard Network Rail requirements as required for Permitted Development works. This requires compliance with CRE (ER Volume 3: Appendix 1A) and particularly section 6.2 of CRE that requires an initial hazard review of each site that may or may not then result in a Preliminary Risk Assessment (PRA) including the development of the conceptual site model. It should be noted CRE has been updated to version 10 with contaminated land requirements described in section 8.2.1 rather than section 6.2 (Core document **NR115**). This work has been completed for all sites as can be reviewed in the ER in Volume 3 Appendices: Appendix 11A, that includes a baseline report with the conceptual site model.

Mitigation

Construction

- 6.7.2 The ER in general addresses geoenvironmental issues via a Phase 1 desk study and an initial conceptual site model. The appraisal work described in section 6.7.1 results in a recommendation for precautionary mitigation for what is considered moderate to low risk across the application scheme for components addressed in the ER in Volume 1 Main text: Table 12.2. Main elements of mitigation are outlined in the ER in Table 11-1 of the Volume 1 Main Report during the construction period and includes:
- Additional site and ground investigation at the new Mossley Station to discount the potential risk of ground gas accumulation in lift shafts or if not discounted, detailed design mitigates the risk;

- Moderate to low risk of asbestos in made ground will require pre-construction sampling regime at various sites to substantiate and then manage the occurrence or discount the potential risk.

6.7.3 Further generic mandatory requirements include:

- Acquisition of coal authority permit as may be applicable that will determine gas and groundwater sampling requirements during works further to a coal mining risk assessment as part of the PPICP (Condition 6(c)(ii)) as may be required;
- Dust generation suppression and protection of controlled waters will be controlled via Condition 6 CoCP Part B 6c(iv) Nuisance Management Plan and 6c(ii) Pollution Prevention and Incident Control Plan that must be submitted to and approved by the relevant local authority;
- Re-use of excavated material in accordance with the CL:AIRE Definition of Waste Development Industry Code of Practice, that requires sampling and testing to categorise as fit for re-use;
- Piling risk assessment as may be required, for example in consideration of legacy coal mining risk as identified in the ER in Volume 3: Appendix 11A, in compliance with Environment Agency guidance “Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention” (core document **NR101**).

6.7.4 Standard site and ground investigation design requirements in advance of the delivery of the works would identify any land with contamination. In that case, in accordance with section 6.2 of CRE (updated CRE version 10 in section 8.2.1 (core document **NR115**)), the assessment would be re-visited and identify if any further contaminated land assessments were required or that the contamination was in an isolated area and could then be managed in accordance with waste legislation when removed from site.

Operation

6.7.5 As identified above in section 6.7.1, should the process lead to an identification of specific ground conditions that has the potential to affect proposed infrastructure in relation to the new Mossley Station site, this may then require designs to be revised, for example using concrete and service pipes appropriate for any chemically aggressive ground conditions.

6.8 Water Environment

Mitigation

Construction

- 6.8.1 The CoCP Part A (**NR17**) identifies the mandatory protection measures that must be employed across the application scheme. This includes management of surface flooding during the construction phase during periods of heavy rainfall.
- 6.8.2 The relevant protection measures will be included in the Pollution Prevention and Incident Control Plan (PPICP) that is required by condition (CoCP Part B: 6c(ii) PPICP, that must be submitted to and approved by the relevant local authority.
- 6.8.3 The PPICP will include details around controls during flood events that all fall within flood zones 2 and 3 as designated by the Environment Agency:
- Temporary land take for Scout West Compound;
 - Heron Lane Road to Heron Lane Compound;
 - Egmont Street Road to Plevins Compound; and,
 - Lee Side Road (Diggle Access and Diversion Works) to Diggle Rail Hub and Office Compound.
- 6.8.4 The relevant PPICP for the sites identified in section 6.8.3 will comply with the Environment Agency's flood warning service and provide mitigation in terms of site layout and being able to secure the site during flood conditions.
- 6.8.5 The PPICP would also consider and provide mitigation for inundation events and surface runoff principally in the form of appropriate site drainage.
- 6.8.6 Protection of watercourses such as during works at the Huddersfield Narrow Canal is required in compliance with the PPICP. This would include careful siting of fuel storage and refuelling facilities, as well as ensuring mitigation is in place for any work in watercourses, for example using silt curtains to minimise silt mobilisation.
- 6.8.7 As outlined in section 6.7.3, a piling risk assessment as may be required in compliance with Environment Agency guidance "Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention" (core document **NR101**). This will protect groundwater resource. The Environment Agency's Pollution Prevention Guidance Notes (PPG) were withdrawn in 2015 but are still considered good

practice to follow and that will be the case in completing the PPICPs that must be submitted to and approved by the relevant local authority.

Operation

6.8.8 Agreement will be sought with the relevant authority in considering works in or within eight metres of a watercourse, whether permanent works, for example culvert extensions or new outfalls, or temporary works under the relevant authority protective provisions as described in the draft Order (**NR02**) at Schedule 17:

- Part 3: For the protection of the Environment Agency (main river e.g. River Tame);
- Part 4: For the protection of Lead Local Flood Authorities (ordinary watercourse); and,
- Part 5: For the protection of the Trust (canal, e.g. Huddersfield Narrow Canal).

6.9 Air Quality

Mitigation

Construction traffic

6.9.1 The impacts on air quality from the addition of construction traffic are assessed as negligible as reported in the Environmental Report in Volume 3, Appendix 13A. Nevertheless, it is identified as good practice that traffic would not be routed to and from the Scheme via the Tameside Air Quality Management Area (AQMA). This requirement would be detailed in the CTMP, draft condition 7 in the deemed planning that would require to be approved by the relevant local authority. The actual routing of construction traffic will be finalised in a Highways Management Group consisting of the scheme project team and the highways authority.

Civils construction dust management

6.9.2 The risk from dust soiling has been assessed as high for construction activity in general, medium for track works and low for earthworks. The risk rating applies directly to civil works at the new Mossley Station opposite the residential receptors on Manchester Road but is applied conservatively across the whole scheme. The Nuisance Management Plan (NMP) (CoCP Part B condition 6(c)(iv)) is the mechanism by which mitigation for the

potential for dust mobilisation is implemented, this plan must be submitted to and approved by the relevant local authority.

- 6.9.3 The Environmental Report in Volume 1 Main Report, section 13.3.12 identifies the range of measures that will be in place and included in the NMP to suppress the generation of construction dust, as taken from the Institute of Air Quality Management (IAQM) Construction Dust Guidance.
- 6.9.4 During very dry conditions, standard suppression techniques may need to be supplemented by misting or watering down works. In all events, the mitigation will be designed to suppress the generation of dust and respond to changing site conditions and weather changes as they occur.
- 6.9.5 During wet conditions, there is a risk that construction dust in the form of mud might be transported by construction site vehicles onto the public road. The NMP, in addition to the CTMP, will detail the measures to avoid this happening including the design of drop off arrangements to avoid unsealed areas and specific wheel washing facilities inside the compound before vehicles egress onto the public road.
- 6.9.6 Despite the best efforts at stopping mud getting onto the public highway, as a back-up, the NMP and CTMP will detail the provision of road sweepers as and when required to clean public roads.

Light Pollution during Construction Works

- 6.9.7 Work connected to the railway is often conducted at night for safety when trains are prohibited from operating on the network. This requires work sites to be artificially lit to create a safe working environment. As identified in the CoCP Part A (**NR17**), lighting of sites will consider the potential for nuisance and will be low-level by preference or if tower lighting is necessary, will be positioned directionally to illuminate the work site and not incidentally adjacent residential properties.

Operational Emissions at the new Mossley Station

- 6.9.8 The new station will be designed to minimise building emissions of particulate dust where practicable to do so. Low emission solutions will be considered in the station design.
- 6.9.9 Illumination of the new station will be required during the hours of darkness whilst train passengers are using the facilities. Detailed design of the station will include a consideration of potential light pollution and avoid potential glare outside the station area. Car parks will be illuminated by low-level directional

lighting. The design must be in compliance with Network Rail's "Lighting Design in Stations" (NR/GN/CIV/200/08), specifically section 2.11 "Managing the Effects of Obtrusive Light" (core document **NR84**).

7. STATEMENT OF MATTERS

7.1 Item 4: Proposals to comply with the Equalities Act 2010

7.1.1 Emma Clarke (**NR/PoE/EC/2.2**) deals directly with compliance with the Equalities Act 2010 and Public Sector Equality Duty (PSED) in section 5.4 of her proof of evidence. Compliance is demonstrated in completing Diversity Impact Assessments (DIAs) at both Mossley and Greenfield Stations. The DIAs considered discrimination and the needs of people who are disadvantaged or suffer inequality as required by PSED, with recommendations captured within the design. The project has developed the preferred solution through collaborative relationships with relevant 3rd parties.

7.1.2 This has led to recommendations particularly at Mossley and Greenfield Stations including:

- pedestrian segregation from vehicles
- improved traffic management
- diversionary routes and suitability and accessibility; and,
- the description and type of signage proposed for the upcoming works.

7.1.3 In considering the PSED during the construction period, the Code of Construction Practice Part A (**NR17**) outlines in Section 2.3.5 that risks to the public will be managed in accordance with the guidance in HSG151 "Protecting the Public" (Health & Safety Executive (HSE), 2009).

7.1.4 Furthermore, in section 5.2 of my proof of evidence, I list the environmental plans that must be submitted for approval to the relevant planning authority in compliance with condition 6 Code of Construction Practice Part B. These plans, also discussed in response to objection 175 in sections 8.11.4 and 8.11.5 of my proof, identify the mechanisms by which the potential environmental effects of the Scheme on both the general public and the wider environment are addressed and minimised.

7.1.5 In considering accessibility across the Scheme, I refer to the proofs of evidence of Emma Clarke **NR/PoE/EC/2.2** (Engineering) and Chris Carey **NR/PoE/CC/5.2** (Traffic and Transport).

7.2 Item 6: Environmental Effects of the Scheme: Item a) designated and non-designated green spaces

- 7.2.1 I refer to the proof of evidence of Mike Gradwell (NR/PoE/MG/15.2) who considers the subject of designated and non-designated green spaces.

7.3 Item 6: Environmental Effects of the Scheme: Item b) trees, habitats and protected species

- 7.3.1 I refer to the proof of evidence of Will Horlock (NR/PoE/WH/7.2) who considers the effects on ecology and biodiversity.

7.4 Item 6 Environmental Effects of the Scheme: Item c) flood risk and drainage

- 7.4.1 Chapter 12 of the ER in Volume 1 presents an appraisal of the impacts of the Order Scheme on the Water Environment. The appraisal is supported by ER Volume 3 reports Water Framework Directive (WFD) Screening (Appendix 12A), Flood Risk Assessment (FRA) (Appendix 12B) and Surface Water Assessment (Appendix 12C).

Risk of flooding from main rivers

- 7.4.2 The majority of the Scheme is not at risk of fluvial flooding from main rivers as it is primarily located in flood zone 1 designation as identified in the requisite **sequential test**.
- 7.4.3 In considering the 7 sites on the Scheme that do fall within flood zones 2 and 3, the **exception test** was conducted and identified 4 sites at risk within flood zone 3 as identified for protection measures in section 6.8.3 of my proof of evidence. Noting the geographical constraints in the area, the intention to avoid flood zone 3 where practicable to do so and in consideration of the wider sustainability benefits of the Scheme, the two criteria of the Exception Test are considered to have been met as described in the ER in Volume 1: section 12.2.3.

Risk of Flooding from Ordinary Watercourses and Surface Water Flooding

- 7.4.4 The ER in Volume 1: section 12.2.8 describes three new permanent works that would be at risk of flooding from ordinary watercourses and surface water flooding without embedded design features:

- The new Mossley Station will be constructed on elevated platforms making it less susceptible to surface water flooding. I refer to the proof of evidence of Keith Gardner (**NR/PoE/KG/3.2**) who describes the permanent drainage requirements at the station to mitigate flood risk;
- Greenfield Station Platform 2 secondary means of escape will be constructed on elevated platforms above ground level, making it less susceptible to surface water flooding;
- The new Oldham Road Footbridge (proposed MVL3/27B) is a structured asset located above ground level making it less susceptible to surface water flooding.
- In conducting upgrades to railway infrastructure Network Rail consistently addresses the design of rail drainage, both in replacement and new drainage. The infrastructure by default benefits from natural attenuation through ballast. For any additional drainage outfalls within the Order Scheme area, Network Rail would comply with protective provisions afforded to the relevant statutory stakeholders as described in section 6.8.8 of my proof of evidence.

7.4.5 My proof of evidence deals with the ongoing risk of surface water flooding during inundation events in the construction period in section 6.8 that will require adherence to condition 6(c)(ii) Pollution Prevention and Incident Control Plan (PPICP) that must be submitted to and approved by the relevant planning authority.

7.4.6 The risks of flooding from groundwater, artificial sources and elsewhere are considered low during the construction period and will be managed in compliance with the PPICP.

7.5 Item 6 Environmental Effects of the Scheme: Item c) noise and vibration

7.5.1 My proof of evidence considers the mitigation that is required during the construction period for works that will occur adjacent to residential properties in section 6.5.

7.5.2 The effects will be managed by applying Best Practicable Means (BPM) to minimise the impacts of noise and vibration in accordance with BS5228-1 and BS5228-2.

7.5.3 Draft condition 6(c)(v) requires a Noise and Vibration Management Plan (NVMP) to be submitted to and approved by the relevant planning authority that will contain the description of BPM applicable to the Scheme.

7.5.4 Works on the railway are inevitably tied to the requirement for trains not to be running in consideration of safety for key periods of construction activity. This

results in possession work, often during night-time periods. Network Rail and its contractors are routinely used to working during these time periods and will adhere to the BPM described in the NVMP.

- 7.5.5 For further information and detail on Noise and Vibration effects I refer to the proof of evidence of Adam Lawrence (**NR/PoE/AL/6.2**).

Item 6 Environmental Effects of the Scheme: Item c) air quality

- 7.5.6 My proof of evidence considers the effects on air quality from the construction scheme in section 6.9. The ER identifies the potential effects of increased particulates from the addition of construction traffic as negligible.
- 7.5.7 Visible dust noticeable from construction schemes in general during very dry periods is considered high risk for this Scheme on that basis.
- 7.5.8 In terms of preventing the generation of visible dust, the principal mechanism for addressing this potential is through compliance with the Pollution Prevention and Incident Control Plan (PPICP) as draft condition 6(c)(ii) that must be submitted to and approved by the relevant planning authority. The PPICP, amongst other control measures, will detail the setup of compounds that ensures HGV deliveries do not occur on unsealed services and that wheel washing of vehicles occurs on egress from site as may be applicable to prevent dust and mud escaping site.
- 7.5.9 The principal mechanism for controlling the visible dust as it might be produced is in the implementation of the Nuisance Management Plan (NMP), required as draft condition 6(c)(iv) that must be submitted to and approved by the relevant planning authority.
- 7.5.10 The various control methods are listed in the CoCP Part A (**NR17**) as submitted in the Order application at section 9.3.2. These mitigation measures are also listed in section 13.3.12 of the ER Volume 1 Main Text that would be included in the NMP as submitted for approval to the relevant planning authority.
- 7.5.11 Though the PPICP addresses preventing dust generation in the first instance, the NMP will detail the requirement for road sweeping and washing of public roads should the escape of dust and mud be unavoidable.
- 7.5.12 The indirect effect of the operation of the new Scheme is to run electrified trains through the route. Though air emissions are mostly caused by road emissions in general, the removal of diesel-powered trains and replacement with electric

vehicles can be considered negligible beneficial and in considering emissions from the rail line alone a major benefit of electrification.

Item 6 Environmental Effects of the Scheme: Item c) landscape character

7.5.13 My proof of evidence considers mitigation for landscape effects in section 6.3.

7.5.14 In terms of the evaluation of the impacts, a high-level qualitative appraisal has been conducted to evaluate the likely impacts on various receptors resulting from the relevant elements of the Order Scheme, as described in the ER in Volume 1: Section 7.2. This considered the context of the site as illustrated in Volume 2: Figures 7.1.1 to 7.1.6. The landscape character areas were also taken into account as illustrated in Figures 7.2.1 to 7.2.3.

Effects during Construction

7.5.15 The ER reports that construction activities may lead to temporary, localised impacts such as increased noise, movement and visual disruption due to plant and machinery. These impacts are likely to affect residents, pedestrians, public rights of way and road users. These effects are experienced in the context of an existing operational railway and are assessed as short-term, localised and reversible, that is negligible to minor adverse.

7.5.16 These types of effects are managed by compliance to the Code of Construction Practice Part A (NR17) requirements in section 3 General Site Operations and stated in the ER in Volume 1: section 7.2.9.

7.5.17 Compliance with draft condition 4 Preliminary Works, as outlined in my proof of evidence in section 6.4 Arboriculture, ensures that vegetation removal is considered and defined in addition to detailing vegetation that will remain and be protected. This will assist in minimising the vegetation removal to the minimum required to complete construction activities.

Effects during Scheme operation

7.5.18 The Order Scheme results in permanent changes to the landscape through the introduction of new structures, fencing and planting. These impacts are assessed as being limited in extent to the immediate surroundings and seen in the context of an existing operational railway.

7.5.19 Once the Scheme is completed, most visual impacts are assessed as neutral, with views mostly returning to baseline conditions with the removal of temporary features such as compounds and plant for structures, noting in compliance with condition 5: Landscaping and Ecology, a LEMP that must be

submitted to and approved by the relevant planning authority, will detail replanting on the Order scheme.

- 7.5.20 Small adverse impacts remain in areas where there will be permanent tree removal combined with visible infrastructure at Plevins compound and Oaklands Road compound.
- 7.5.21 The most notable residual impact will be at the new Mossley Station where receptors on Manchester Road opposite the station will be subject to a medium adverse impact due to the location of the new station and loss of vegetation that alters the local landscape character. The medium adverse impact will be addressed by the detail of the relevant LEMP (condition 5), station design and consideration of light spill as detailed in section 6.9.9 of my proof and compliance with condition 8 Materials, where the external finish of the station must be submitted to and approved by the relevant planning authority, as I detail in section 8.4.5 of my proof of evidence.

Item 6 Environmental Effects of the Scheme: Item d) heritage assets

- 7.5.22 I refer to the proof of evidence of Sandra Honeywell (**NR/PoE/SH/14.2**) who considers the effects on heritage assets.

8. OBJECTIONS AND REPRESENTATIONS

8.1 Introduction

- 8.1.1 This section of the environmental proof of evidence addresses objections to the application scheme which are relevant to specific areas of the Environmental Report (**NR14**). I will deal with all environmental-related objections except in the following cases:

- Heritage and Archaeology (Sandra Honeywell **NR/PoE/SH/14.2**);
- Noise and Vibration: Adam Lawrence (**NR/PoE/AL/6.2**) is the expert witness for items concerning vibration during construction and operational issues overall);
- Traffic and Transport (Chris Carey **NR/PoE/CC/5.2**); and,
- Ecology (Will Horlock **NR/PoE/WH/7.2**).

- 8.1.2 Network Rail is currently actively engaging with all those who have raised objections and representations to the application scheme in an attempt to address issues raised.

8.2 Objection 01: Ms Rendle

Noise and vibration, construction dust and disruption to family life, communication during the works, absence of environmental impact assessment

- 8.2.1 Ms Rendle (Obj01) expresses concern at the potential environmental impacts living close to the works.
- 8.2.2 I discuss noise and vibration effects during construction in section 6.5 of my proof of evidence.
- 8.2.3 The effects from Noise and Vibration will be minimised using “Best Practicable Means”. Controls to minimise noise and vibration effects are secured through compliance with the Code of Construction Practice (CoCP) Part A (NR17) section 8, and then under planning condition 6(c)(v) Noise and Vibration Management Plan (**NR11**), that will be submitted to and approved by the relevant local planning authorities before construction works commence
- 8.2.4 The Noise and Vibration Management Plan will include a requirement to communicate clearly with residents about construction works in the area. This commitment is also captured by compliance with Condition 6(c)(i) External Communications Programme that requires Network Rail to submit and have approved by the local planning authority how communication with local residents will be managed including a complaints procedure as detailed in The CoCP Part A (**NR17**) Community Consultation and Engagement (sections 2.4.10 to 2.4.17).
- 8.2.5 In compliance with Condition 6(c)(iv) Network Rail must submit a Nuisance Management Plan to the relevant planning authority for approval that will include the controls for managing dust generation should that occur during the construction works. Further details on relevant protection measure are included in sections 6.9.2 to 6.9.7 of my proof of evidence.
- 8.2.6 Network Rail submitted an Environmental Impact Assessment (EIA) screening request to the Transport Infrastructure Planning Unit (TIPU) stating the Order Scheme did not require a formal EIA to be conducted. TIPU agreed with this position and as a result, a formal EIA has not been produced. However, as outlined above, the Order includes the submission of NR14 Environmental Report, that appraises the environmental effects and identifies mitigation that is required.

8.3 Objections 39, 57, 66, 68, 76, 84, 92, 95, 96, 99, 125, 132, 143, 145, 172, 174, 189, 213, 216, 231, 232, 240, 243

Noise and Vibration during construction

- 8.3.1 Various objectors raise issues around noise and vibration effects during the delivery of the works. I refer to my response to Ms Rendle (Obj01) to provide answer to those concerns as outlined in 8.2.3 to 8.2.4 of my proof of evidence.

8.4 Objections 66, 75, 169, 195

Visual intrusion from the location of the New Mossley Station for residents opposite the station on Manchester Road.

- 8.4.1 Various objectors raise concerns over the visual appearance of the new Mossley Station from their properties on Manchester Road.
- 8.4.2 I consider visual intrusion issues in general in section 6.3 of my proof of evidence.
- 8.4.3 The views of the relocated station from houses on Manchester Road are discussed in the NR14 Environmental Report, Volume 3 Appendices: Appendix 7A. This is covered on Page 133 of Appendix 7A with the views from Manchester Road denoted by viewpoint VP26 as can be seen in NR14 Environmental Report, Volume 2 Figures: Figure 7.4.3 Landscape and Visual Viewpoint Locations. In addition, proposed planning condition 5 Landscaping & Ecology at 5(d) requires “hard landscaping” to be considered as part of submitting Landscape and Ecological Management Plans (LEMPs) for the Council. This will consider amongst other items station appearance and lighting of the station with the proximity of residents in Manchester Road in consideration.
- 8.4.4 The LEMP will detail realised hard landscaping areas, particularly the use of planters on the green strip in front of the station building and potentially in other areas where space allows.
- 8.4.5 As outlined in section 6.9.9 of my proof, the design must be in compliance with Network Rail’s “Lighting Design in Stations” (NR/GN/CIV/200/08), specifically section 2.11 “Managing the Effects of Obtrusive Light” (core document **NR84**). This deals with the potential nuisance to residents on Manchester Road of the appearance of the station.
- 8.4.6 On the basis of incorporated design features at the station and specific opportunities to include hard landscaping features as described in sections 8.4.3 to 8.4.5, I do not consider visual intrusion to be an issue.

- 8.4.7 In addition, the appearance of Mossley Station is the subject of draft condition 8 Materials, where finishing and their colour must be submitted to the relevant planning authority for their approval.

8.5 Objection 57, 145,

Operational light pollution from the new Mossley Station

- 8.5.1 Various objectors raise concerns that there will potentially be light pollution from the new Mossley Station to residents on Manchester Road.
- 8.5.2 I consider air quality issues in general in section 6.9 of my proof of evidence.
- 8.5.3 The control of potential light pollution from the new location of Mossley Station is managed through compliance with Network Rail's Contract Requirements Environment (CRE) (NR/L2/ENV/015) that can be reviewed in the Environment Report (NR14) Volume 3 Appendices: Appendix 1A. In CRE in section 6.3 Emissions to Air (since updated to section 8.2.3 in CRE version 10 (core document **NR115**)), the designer is required to consider possible emissions and design in accordance with ALARP (as low as reasonably practicable).
- 8.5.4 In addition, Network Rail requires the designer to comply with "Lighting Design in Stations" (NR/GN/CIV/200/08). In the case of considering the effects of lighting on the surroundings, the designer must comply with section 2.11 Managing the Effects of Obtrusive Light (core document **NR84**).
- 8.5.5 In general, the detailed design will seek to minimise the wattage output of lighting and have time-sensitive functionality so that lighting is only in operation when rail users are on the platform. By safety design, lighting must not be diffuse in consideration of the requirements for train drivers to be able to appropriately retain their required sightlines.
- 8.5.6 I conclude this item is not an issue, appropriately managed in accordance with "Lighting Design in Stations" as outlined in section 8.5.4 and 8.5.5.

8.6 Objection 57, 68, 76, 84, 92, 95, 96, 99, 125, 132, 143, 174, 187, 189, 194, 196, 201, 202, 213, 216, 218, 222, 228, 231, 232, 240,

Air quality concerns during the construction period

- 8.6.1 Various objectors raise concerns that the construction of the scheme will generate various grades of dust pollution, both particulates from combustion and visible construction dust during dry conditions.

8.6.2 Environmental impacts from the construction works are managed in accordance with the Code of Construction Part A (**NR17**), which describes general environmental management principles to reduce the impacts from construction noise and other nuisance such as mud and dust. The controls for managing emissions from vehicle and construction plant are detailed in section 9.2 of the CoCP Part A. The control of visible dust during dry conditions is detailed in section 9.3 of the CoCP Part A. In addition to the requirements detailed in the CoCP Part A, Network Rail is required to submit various environmental management plans to the relevant planning authority for approval by condition as Part B to the Code of Construction Practice.

8.6.3 The proposed planning conditions can be reviewed in submission document, the Request for Deemed Planning Permission and Statement of Proposed Conditions (Deemed Planning Permission (**NR11**)). I refer directly to proposed planning condition 6 Code of Construction Practice Part B and the requirement to submit to the planning authority for their approval, amongst other documents, 6(c)(iv) Nuisance Management Plan that will address general nuisance including dust management.

8.6.4 In addition to standard avoidance measures, the CoCP Part A in section 9.3.2 also requires preparedness of the contractor during extreme dry conditions to employ dust suppression measures in the form of using water to dampen down works.

8.6.5 During wet conditions, site and road sweeping is employed to avoid transporting mud onto the highway as detailed in the CoCP Part A in section 9.3.2.

8.7 Objection 57, 145, 207, 246,

Flooding Brookfields

8.7.1 Various objectors highlight that the area of Brookfields is subject to flooding that has a high-water table. I refer to the proof of evidence of Keith Gardner (**NR/PoE/KG/3.2**) who describes the design of drainage for the station, both during construction and operation. Mr Gardner explains how new drainage will be installed in the vicinity of the new Platform 2.

8.7.2 I discuss general pollution prevention management in section 6.8 of my proof of evidence and the item of flooding and control in general in section 7.4.

8.7.3 The delivery contractor must prepare a Pollution Prevention and Incident Control Plan (PPICP) in compliance with condition 6(c)(ii) to be submitted to and approved by the relevant local planning authority. Amongst other items,

the PPICP will detail the measures to manage water ingress to works and controlled water egress with temporary drainage.

8.8 Objection 103, 184, 185, 203, 205

Construction compounds and post-works restoration

- 8.8.1 Various objectors express concern that areas of land designated for a construction compound may be left in an unsuitable state when the project is completed.
- 8.8.2 The draft Order (NR02) requires in general that all land used temporarily is restored to the reasonable satisfaction of the landowner (Article 31(5)).
- 8.8.3 In addition, in compliance with deemed planning and condition 5 Landscaping and Ecology, should there be temporary use of land within the Order boundary, how the land is to be restored must be detailed in a Landscape and Ecological Management Plan (LEMP) that must be submitted to and approved by the relevant planning authority in compliance with condition 5.
- 8.8.4 The landscape effects generated by building the Scheme are appraised in the ER in Volume 1 Main Report, section 7 Landscape and Visual Amenity. In addition to replacement of land to the reasonable satisfaction of the landowner, further mitigation is identified in the ER in Volume 2 Figures: Figures 7.3.1 to 7.3.20 Outline Landscape and Ecological Mitigation and Restoration Proposals. These figures show indicative and recommended landscape requirements in key areas of the scheme, principally the compound areas to be used. The recommended detailed landscaping for the areas identified in Figures 7.3.1 to 7.3.20 must be submitted to and approved by the relevant planning authority in the form of a LEMP in compliance with condition 5 Landscaping and Ecology.

8.9 Objection 130: A Fletcher

Landscape issues from compounds

- 8.9.1 A Fletcher (Obj 130) comments on the landscape issues caused by the location of several compounds.
- 8.9.2 I deal with the subject of landscape and visual amenity in section 6.3 of my proof of evidence.
- 8.9.3 The CoCP Part A (NR17) outlines embedded mitigation in consideration of the potential visual effects of the location of compounds, in section 3.3 Site Layout. This will include the erection of suitable compound hoarding to

minimise visual intrusion and siting of office cabins and materials with adjacent residents in consideration.

- 8.9.4 In general compounds will be managed in accordance with mitigation outlined in the ER in Volume 1 Main Report, section 7.3.3 Embedded mitigation during construction. This will include siting storage areas to minimise visual intrusion, policies to keep sites well maintained and tidy, and minimising vegetation loss especially in considering the perimeter areas of the site where it might be possible to retain trees to act as a visual screen.
- 8.9.5 On completion of works I refer to my evidence outlined in sections 8.8.3 and 8.8.4 concerning the requirement to return land to the satisfaction of the landowner and specific landscaping requirements as identified in the ER in Volume 2 Figures: Figures 7.3.1 to 7.3.20 Outline Landscape and Ecological Mitigation and Restoration Proposals.
- 8.9.6 Mr Fletcher refers to three specific areas in highlighting the visual importance to the Saddleworth area.

Land between Oldham Road and Chapel Road, north east of Greenfield Station. (plot 13-027)

- 8.9.7 I refer to the proof of evidence of Emma Clarke (**NR/PoE/EC/2.2**) who identifies the requirement to use plot 13-027 during the construction of the works and further confirms that only a small section of the plot might require revegetation in observing the mitigation to minimise vegetation loss as stated in section 8.9.4 above. It should be noted that plot 13-027 will not be used as a compound but only if necessary for access during temporary works.
- 8.9.8 The views of the works in this area are considered in the ER in Volume 3: Landscape and Visual Appendix 7A in Table 6-3 Appraisal of Visual Impacts. Viewpoints VP48 and VP49 are applicable in Table 6-3. The conclusion is there is a small visual change in considering the temporary works required and this is temporary and reversible. The overall magnitude of impact is considered to be neutral.
- 8.9.9 It is accepted that the Environment Report in Volume 2 Figures: Figure 7.3.13, identifies the area as “Greenfield Compound”, but it can be seen on that figure that the area is denoted for “existing vegetation to be retained and protected” and this reflects the status of the area only potentially being required for temporary works, rather than a fixed compound.
- 8.9.10 In all events any vegetation removal on plot 13-027 will be returned to the reasonable satisfaction of the landowner as required by the draft Order

(NR02) at Article 31(5) and must then be included in the LEMP to be submitted to and approved by the relevant local authority.

- 8.9.11 I refer to the commitment to Biodiversity Net Gain in section 4.3 of my proof of evidence, noting the habitat value of all vegetation removal must be offset and 10% value added to that replacement. This principle would apply to plot 13-027 should vegetation removal be required.

Compound area north of Uppermill Viaduct between Brownhill Lane and the access road to the former Saddleworth Station (plot 16-049)

- 8.9.12 I refer to the proof of evidence of Keith Gardner (**NR/PoE/KG/3.2**) who describes the requirement to use plot 16-049 to support the works in the Uppermill viaduct area and how vegetation removal will be kept to the minimum for the required function.

- 8.9.13 The views of the works in this area are considered in the ER in Volume 3: Landscape and Visual Appendix 7A in Table 6-3 Appraisal of Visual Impacts. Viewpoints VP52 is applicable in Table 6-3. The conclusion is the localised removal of vegetation to support the works is minimal, temporary and reversible. The overall magnitude of impact is considered to be neutral.

- 8.9.14 Plot 16-049 is identified in the ER in Volume 2 Figures: Figure 7.3.16: Outline Landscape and Ecological Mitigation and Restoration Proposals. The restoration of this plot requires detailed landscaping to be submitted for approval to the relevant local authority in the form of a LEMP in compliance with Condition 5 Landscaping and Ecology.

Temporary road between Harrop Court Road and Boat Lane Diggle

- 8.9.15 I refer to the proof of evidence of Emma Clarke (**NR/PoE/EC/2.2**) who describes the requirement to construct a temporary access to the businesses and residents on Harrop Court Road.

- 8.9.16 The views of the works in this area are considered in the ER in Volume 3: Landscape and Visual Appendix 7A in Table 6-3 Appraisal of Visual Impacts. Viewpoints VP66 and VP69 are applicable in Table 6-3. It is noted that some trees will need to be removed to facilitate the required access for residents and properties. The conclusion is there is a barely perceptible change in considering the temporary works required and this is temporary and reversible. The overall magnitude of impact is considered to be very small adverse.

- 8.9.17 In all events any tree removal on the route will need to be considered in returning land to the reasonable satisfaction of the landowner as required by the draft Order (NR02) at Article 31(5) and must then be included in the LEMP to be submitted to and approved by the relevant local authority.
- 8.9.18 The construction works required are to facilitate the access only and I consider this acceptable in the context of the setting of the national park and noting the temporary effects that are reversible and secured by mitigation in the form of a LEMP that must be approved by the relevant local authority.

8.10 Objection 146: C Garner

Communication with residents during the works

- 8.10.1 C Garner (Obj 146) asserts communication with residents needs to be clear and detailed.
- 8.10.2 Network Rail is required to liaise with residents during all works to the railway whether that be maintenance or in this case construction works in this Order. The project will make use of the Network Rail Communications team to manage this requirement.
- 8.10.3 The Code of Construction Practice Part A (**NR17**) as submitted with the Order application, outlines the high-level requirement for Community Consultation and Engagement in sections 2.4.10 to 2.4.17. This includes the requirement to inform residents of specific works a minimum of 14 days in advance of those works, and that the Network Rail 24-hour helpline will be in operation, with the principal contractor responsible for managing any queries and complaints that the helpline receives.
- 8.10.4 Draft condition 6(c)(i) External Communications Programme must be submitted to the relevant planning authority for approval before works can commence. In addition to including the detail of communication as outlined in section 8.9.2, the External Communications Programme will also identify the work Network Rail Communications will perform in engaging with the community in terms of further information events in advance of works.
- 8.10.5 The requirements to appropriately inform residents of future works is also a fundamental deliverable in the Noise and Vibration Management Plan (draft condition 6(c)(v)) that must be submitted to and approved by the relevant planning authority.

8.11 Objection 175: V Pearson

8.11.1 V Pearson (Obj175) states that no Health Impact Assessment has been undertaken despite clear risks to mental health and wellbeing in consideration of the Equality Act 2010. I refer to the evidence of Keith Gardner in respect of the construction works in the vicinity of Brookfields, and the limited extent to which Archer Street and nearby roads will be used to access the Mossley station construction site.

8.11.2 As set out in Section 3.2 of the Statement of Case (NR30), an Environmental Impact Assessment (EIA) screening decision for the Order Scheme was sought by Network Rail from the Secretary of State for Transport. The screening decision received from the Secretary of State for Transport dated 22 March 2024 (NR13) confirmed that an EIA is not required for the Order Scheme. Accordingly, a full EIA for the Order Scheme, including a health impact assessment, has been determined by the Secretary of State for Transport as not being required for the purposes of the application for the Order. In addition, in providing this screening decision, the Secretary of State did not require the Environmental Report (**NR14**) to include further detail specifically in relation to the topic of human health impacts, see paragraph 6 of NR13.

8.11.3 Though an EIA is not required for the Order Scheme an Environmental Report (NR14) has been produced and submitted with the Order application. The Environmental Report appraises the environmental effects of the Order Scheme, recommends environmental mitigation as required and secures it via the Request for Deemed Planning (**NR11**) and the Code of Construction Practice Part A (NR17). In particular the Code of Construction Practice (CoCP) will act as an environmental management framework for construction. It sets out the relevant measures and standards to be followed throughout the construction period with particular reference to the protection of residents in proximity to the scheme during the construction period detailed in section 2.3 Health and Safety. Section 2.3.5 of the CoCP Part A (**NR17**) identifies that risks to the public will be managed in accordance with the guidance in HSG151 “Protecting the Public” (Health & Safety Executive (HSE), 2009).

8.11.4 I set out in in section 5.2 of my proof of evidence the various environmental management documents that must be approved by the relevant planning authority before construction starts as part of a CoCP Part B submission. This will include the following documents that will address the potential effects on the general public in addition to the wider environment:

- Condition 6(c)(i): External Communications Programme

- Details the requirements to communicate with residents in advance of construction works and to handle any enquiries and complaints via the Network Rail helpline in a timely manner
 - Condition 6(c)(iv): Nuisance Management Plan
 - Details the requirements and measures to minimise the generation of dust, reduce light spill during periods when works lighting will be required and how mud and dust will be prevented from escaping the site through the use of suppression techniques, wheel washing construction vehicles and roadsweeping as may be required.
 - Condition 6(c)(v): Noise and Vibration Management Plan
 - Details the methods to reduce the effects from noise and vibration of construction activities in accordance with BS5228 and Best Practicable Methods (BPM).
- 8.11.5 In addition to the plans listed above, that must be submitted to and approved by the relevant planning authority before construction commences, the CoCP Part B must also include the following plans that will protect the amenity enjoyed by residents in addition to managing the effects from construction activity:
- Condition 6(c)(ii): Pollution Prevention and Incident Control Plan ; and,
 - Condition 6(c)(iii): Waste Management & Materials Plan.

8.12 Objection 238: L Thompson

- 8.12.1 L Thompson (Obj 238) is concerned that there will be pollution from the use of compounds.
- 8.12.2 The general protection of the environment during the establishment and use of compounds is described in the Code of Construction Practice Part A (**NR17**) in section 7 Water Resources. Section 7 outlines measures to control surface runoff and site drainage, as well as re-fuelling precautions and storage of potentially polluting substances.
- 8.12.3 A detailed Pollution Prevention and Incident Control Plan (PPICP) will be prepared and submitted for approval to the relevant planning authority in compliance with Condition 6(c)(ii).

8.13 Objection 226: C Jones

- 8.13.1 C Jones (Rep 04) questions the appearance of overhead line and fencing.

8.13.2 The appearance of the railway in general is authorised by Network Rail's Permitted Development rights and the current upgrade should be viewed in the context of there being an existing railway. However, what can be stated is modern electrification design (MK3 series) includes for sleeker less intrusive gantry design that is spaced further apart than older electrification designs at approximately 55m. This facilitates some flexibility in specific gantry location dependent on potential visual intrusion. I refer to the proof of evidence of Sandra Honeywell (**NR/PoE/SH/14.2**) who considers electrification infrastructure in connection to the setting of listed structures where this flexibility can be utilised directly.

8.13.3 Whilst safety and security must be the principal consideration for the fencing design when considering exclusion from an electrified railway, Network Rail can and does vary design where it is possible to do so in consideration of any sensitive visual receptors, for example the colour of palisade fencing.

8.14 Representation 04: Saddleworth Parish Council

8.14.1 Saddleworth Parish Council (Rep 04) enquiries as to the plan for compounds when their use comes to an end.

8.14.2 I refer to my evidence in section 8.8 of my proof that outlines how compounds will be restored to the reasonable satisfaction of the landowner or in addition will be the subject of a LEMP that must be submitted to and approved by the relevant local planning authority.

8.15 Representation 06: P Garner, 10: T Meadows

8.15.1 P Garner (Rep 06) and T Meadows (Rep 10) request that there be good communication with residents and a 24-hour helpline.

8.15.2 I refer to my evidence in section 8.10 confirming communication requirements with local residents and clarification that the Network Rail 24-hour helpline will be utilised.

8.16 Representation 07: P Casey Developments

8.16.1 The plan for reinstatement of temporarily owned land in the vicinity of Printworks Road is questioned.

8.16.2 I refer to section 8.8 where the restoration of land to the reasonable satisfaction of the landowner is described and also that specific compound areas will require a LEMP to be submitted to and approved by the relevant planning authority.

- 8.16.3 In addition, Network Rail is liaising with P Casey Developments to agree a Statement of Common Ground (SoCG). Further detail is contained in the proof of evidence of Nigel Billingsley (**NR/PoE/NB/8.2**).

8.17 Representation 08: Environment Agency

- 8.17.1 The Environment Agency (EA) provided comment on flood risk, biodiversity and contaminated land in their representation (Rep 08). In a post-representation exchange of letters between Network Rail and the EA (letter from the EA 20 February 2026), the EA was content to remove any further comment on flood risk and biodiversity, noting the explanation of the controls in place was sufficient.
- 8.17.2 In considering the further comments from the EA on contaminated land, the EA stated this was sufficient in relation to the submission of the TWAO information in the ER and the further clarification from Network Rail in their letter sent on 13 January 2026. However, the EA wanted the comment to stand in terms of the requirements going into implementation.
- 8.17.3 The EA wanted the process for managing the potential occurrence of contaminated land to be clear.
- 8.17.4 The Environment Agency has raised contaminated land and controlled waters as a key issue and requirement. This is based on historical landfills and previous industrial land use within proximity to the scheme. To support the TWAO application, a Geoenvironmental chapter and technical appendix were provided within the Environmental Report (ER) (submission document **NR14**) which considered the risks from contamination to the design, construction and operation of the works, including from historical landfills and previous industrial land use.
- 8.17.5 Appendix 11A in Volume 3 to the ER includes a comprehensive Preliminary Risk Assessment (PRA) and conceptual site model for each site, summarised risk in the ER main report at Chapter 11, particularly Table 11-1.
- 8.17.6 For each intervention within the Trans Pennine Upgrade (TRU) W2B Scheme, where risks of mobilising or exposure to existing contamination, Appendix 11A outlines a PRA was undertaken, including the development of a conceptual site model. These were presented as the Geoenvironmental Technical Appendix to the Environment Report (ER Volume 3, Appendix 11A). The PRAs considered both the risk to human health and to controlled waters.

- 8.17.7 The outcome of the PRAs were used to determine appropriate mitigation measures (ER Volume 1 main text section 11.3) to ensure pollutant pathways are not created by the works. These mitigation measures included ground investigation and further risk assessment where this was deemed appropriate. The requirement for a foundation works risk assessment (formerly known as a piling risk assessment) was also included as a general mitigation measure in the Geoenvironmental chapter of the Environment Report with this requirement to be implemented through the CoCP Part B PPICP (condition 6(c)(ii)), a condition imposed on the scheme to be approved by the relevant local authority.
- 8.17.8 In addition, the Geoenvironmental chapter also stated that ‘the potential effects of the design, construction and operation of the works being undertaken on all sites, both Permitted Development and Deemed Planning Permission (DPP), will be managed in accordance with the requirements included in NR/L2/ENV/015’, Network Rail’s Contract Requirements Environment (CRE), that all contractors must comply with. For land that potentially contains contamination, the requirements of CRE (NR/L2/ENV/015) include responsibilities on designers to undertake PRAs, where required based on an Initial Hazard Review, and, if unacceptable risks are identified, to include sampling and chemical testing into the scope for ground/trackbed investigations. Depending on the findings of any ground investigations, further quantitative risk assessment and remediation may be required. This is generally in line with an iterative approach to contaminated land risk assessment as given in Land Contamination Risk Assessment (LCRM).

Potential for Groundwater Monitoring

- 8.17.9 I agree with the Environment Agency that a Foundation Works Risk Assessment (FWRA)/Piling Risk Assessment (PRA) should be undertaken where there are potential contamination sources, though noting the starting point from the desk-based assessment concluded the risks to controlled waters was moderate to low.
- 8.17.10 Nevertheless, the conceptual site model for each intervention/works drives the need for further assessment in advance of any construction works. An FWRA/PRA is only required if piling or foundation works might interact with a contamination source or sources or affect an existing contaminated groundwater plume. If the FWRA/PRA identified a residual risk or if ground investigation identified significant contamination which would push the risk up to high, then that could trigger the need for a groundwater monitoring programme. Based on the desk-based assessment to date for the scheme, it

is not considered reasonable to expect a groundwater monitoring programme to be required for any of the interventions assessed. However, as per the information supplied in this response, additional assessment required in compliance with the mitigation described may produce the need to do this.

8.17.11 The CL:AIRE guidance on Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention (this is a 2025 updated version of the previous Environment Agency guidance document: core document **NR101**) discusses groundwater monitoring as being potentially required to verify that the piling and any mitigation measures are working as expected. This guidance also states that:

8.17.12 'Groundwater monitoring may be necessary where the overall risks to groundwater are greatest, taking account of the level and mobility of contamination, hydraulic and contaminant flow rates, engineering techniques applied and environmental setting. Groundwater monitoring will generally only be required on areas of Principal Aquifer, or within Source Protection Zones (SPZs), unless there are specific issues of local concern that justify monitoring in other locations.'

8.17.13 The work outlined in this section will all be required in compliance with Network Rail's CRE section 6.2 Contaminated Land (CRE version 10 section 8.2.1 (core document **NR115**)).

8.18 Representation 11: T Sharif

Construction noise and air quality

8.18.1 T Sharif (Rep 11) identifies noise and air quality during construction as items that need managing.

8.18.2 I refer to section 8.8 of my proof that describes the measures in place to minimise and manage levels of noise and vibration and air quality.

9. WITNESS DECLARATION

9.1.1 I hereby declare as follows:

- (i) This proof of evidence includes all facts which I regard as being relevant to the opinions that I have expressed and that the Inquiry's attention has been drawn to any matter which would affect the validity of that opinion.
- (ii) I believe the facts that I have stated in this proof of evidence are true and that the opinion expressed are

correct.

- (iii) I understand my duty to the Inquiry to help it with matters within my expertise and I have complied with that duty.