

A57 Link Roads

TR010034

**9.47 Environmental Management
Plan (First Iteration)
(Tracked)**

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A57 Link Roads Scheme

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9.47 ENVIRONMENTAL MANAGEMENT PLAN (FIRST ITERATION) (TRACKED)

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1. Introduction and Background to Scheme

1.1 Purpose of the Report

1.1.1 This document is the Environmental Management Plan (EMP) (First iteration) for the A57 Link Roads Scheme (previously known as Trans Pennine Upgrade) (hereafter referred to as the 'Scheme'). This EMP (First iteration) has been produced during the Preliminary Design stage and provides the preliminary environmental guidance on how to manage the environmental effects of the Scheme.

1.1.2 An Environmental Impact Assessment (EIA) has been undertaken and an Environmental Statement (ES) (TR010034/APP/6.3) prepared to support the application for the Development Consent Order (DCO), under the Planning Act 2008 (the 2008 Act), to authorise the construction, operation and maintenance of the Scheme. The purpose of the EMP is to manage the likely significant construction effects of the Scheme as identified within the ES) and to demonstrate compliance with environmental legislation.

1.1.3 The general process for the management of environmental effects on Highways England (hereafter referred to as the 'Applicant') Schemes is set out in the Design Manual for Roads and Bridges (DMRB) LA 104, Environment assessment and monitoring¹. More specific advice is provided in the DMRB LA 120 Environment management plans². The standards in DMRB LA 120 has been developed using:

- IEMA, July 2016. EIAG DQD, 'Environmental Impact Assessment Guide to: Delivering Quality Development'; and
- BSI Standards Publication. BS EN ISO 14001, 'Environmental management systems — Requirements with guidance for use'.

1.1.4 The EMP provides an overarching framework for the appointed Principal Designer and appointed Principal Contractor regarding environmental management during Detailed Design, Pre-Construction and Construction stages and ultimately Operation of the Scheme, and identifies the environmental risks associated with the implementation of the Scheme as identified at each stage. The EMP shall provide the following in line with DMRB LA 120:

- a clear audit trail outlining the modifications made from any previous iteration
- identify roles and responsibilities
- identify risks, their associated control measures, compliance and corrective actions
- establish procedures for communication, monitoring, audit mechanisms and reporting of control measures.

¹

- 1.1.5 The predicted environmental effects of the Scheme identified in the ES and the related actions and mitigation measures in the Register of Environmental Actions and Commitments (REAC) (TR010034/APP/7.3) have formed the basis for developing this EMP. Where it is confirmed that an enhancement can be delivered as part of the Scheme it will also be included within the REAC.
- 1.1.6 The EMP will be refined and updated when the design and construction plans are finalised and additional information comes to light, which will ensure any necessary changes to the proposed mitigation and management of environmental effects are captured.
- 1.1.7 Prior to the commencement of construction, the EMP will be made fully comprehensive to form the EMP (Second iteration), taking account of Detailed Design and construction planning and (in the case of the Scheme) the outcome of the DCO process. The EMP (Second iteration) will be maintained and revised during the construction period to take account of any changes in design or external factors such as regulations and standards, any unforeseen circumstances as they arise, such as new protected species, invasive species or new archaeological finds, and any failings in environmental performance identified from routine inspections and audits.
- 1.1.8 The EMP will be managed alongside the appointed Principal Contractor's generic and site-specific environmental management plan and systems, meeting ISO14001 requirements. The EMP (Second iteration) will be implemented during the Construction stage. It is a live document and must be maintained and updated throughout the Construction of the Scheme by the Principal Contractor. Environmental mitigation measures identified must be followed by all parties. At Construction, Commissioning and Handover stage, the EMP (Third iteration) builds on the construction EMP refined at the end of the construction stage to support future management and operation.
- 1.1.9 The preparation of the EMP (Second iteration) and EMP (Third iteration) will be secured through DCO Requirement 4.

Structure of the EMP (First iteration)

- 1.1.10 The structure of the EMP (First iteration) is as follows:
- Chapter 1: provides an overview of the purpose of the EMP, the Scheme and its objectives
 - Chapter 2: describes the roles and responsibility of the Scheme team for environmental management
 - Chapter 3 refers to the REAC. This is a document which demonstrates how the action is to be implemented/ achieved, including details of risk management and the responsible person for the specific actions. The full REAC is provided in a separate document (TR010034/APP/7.3)
 - Chapter 4 provides the details of anticipated consents/permissions required to deliver the EMP

- Chapter 5 provides a confirmation regarding submission of environmental asset data and as-built drawings
- Chapter 6 provides details of maintenance and EMP monitoring activities
- Chapter 7 provides the induction, training and briefing procedures for staff
- Chapter 8 provides the references and glossary

1.1.11 The EMP (First iteration) should also be read alongside the REAC (TR010034/APP/7.3).

1.2 The Scheme

Need for the Scheme

- 1.2.1 The main Trans-Pennine road route between the Manchester and Sheffield City Regions is the trunk road route consisting of the A57, A628, A616 and A61. This route connects the M67 at Mottram-in-Longdendale towards the east of the Manchester City Region with the M1 in the north west of the Sheffield City Region.
- 1.2.2 The Trans-Pennine Upgrade (TPU) was made up of a series of measures announced in March 2015's Road Investment Strategy (RIS) for the 2015-2020³ road period, published by the Department for Transport (DfT). A second RIS (RIS2) has since been published, which covers the 2020-2025 period. The TPU aimed to address longstanding issues of connectivity, congestion, reliability and safety with regard to the strategic Trans-Pennine routes between the M67 at Mottram and the M1 J36 and J35A north of Sheffield. The current Scheme (the A57 Link Roads) was part of this wider package of work.
- 1.2.3 The Scheme has been developed to improve journeys between Manchester and Sheffield. The current A57 around Mottram-in-Longdendale suffers from congestion which limits journey time reliability. This restricts economic growth due to the delays experienced by commuters and business users alike. This has a negative effect on local businesses and employment opportunities. The congestion also results in rat running through smaller towns and villages, as vehicles attempt to reduce queuing times. Much of this heavy traffic travels along local roads, which disrupts the lives of communities, and makes it difficult and potentially unsafe for pedestrians to cross the roads. It is likely that these issues would get worse with time, if significant improvements aren't made.

Scheme location

- 1.2.4 Most of the Scheme is located within Mottram-in-Longdendale, on the eastern edge of the Manchester conurbation adjacent to and within the settlements of Hattersley, Mottram-in-Longdendale, Hollingworth and Woolley Bridge. The Scheme connects the M67 at the west to the A57 Brookfield Road in the east and crosses through surrounding, predominately pasture, agricultural land within

the Harrop Edge and Mottram Moor valley sides and within the River Etherow valley.

- 1.2.5 The Scheme lies mainly within the administrative boundaries of Tameside Metropolitan Borough Council (MBC), up until to the proposed River Etherow Bridge. To the east of this, the Scheme crosses over the boundary with High Peak Borough Council and Derbyshire County Council.
- 1.2.6 A plan showing the key environmental constraints is provided in Annex A of this EMP.

Scheme description

- 1.2.7 A full description of the Scheme can be found in Chapter 2 of the ES (TR010034/APP/6.3).
- 1.2.8 The Scheme includes the following components:
- A new offline bypass of 1.12 miles (1.8 km) of dual carriageway road connecting the M67 Junction 4 to A57(T) Mottram Moor Junction
 - A new offline bypass of 0.81 miles (1.3 km) of single carriageway connecting the A57(T) Mottram Moor to the A57 Woolley Bridge
 - Creation of two new junctions, Mottram Moor Junction and Woolley Bridge Junction and improvement works to the existing M67 Junction 4
 - Creation of five new structures (Old Mill Farm Underpass, Roe Cross Road Overbridge, Mottram Underpass, Carrhouse Lane Underpass and River Etherow Bridge)
 - One main temporary construction compound area, located on agricultural land to the east of the M67 Junction 4
 - Detrunking, including safety measures from the M67 Junction 4 to Mottram Back Moor Junction, to be agreed with Tameside MBC.
 - Safety measures and improvements to the A57 from Mottram Moor Junction to Gun Inn Junction and from Gun Inn Junction to Woolley Bridge Junction, to be agreed with Tameside MBC.
- 1.2.9 In addition to the components listed above, a number of buildings will require demolition in order to construct the Scheme. These are detailed within The Scheme chapter (Chapter 2) the ES and comprise a range of domestic and industrial structures.

Construction programme

- 1.2.10 The construction programme is based on a forecast start of works in autumn 2022, leading to the Scheme opening in spring 2025. The programme has been developed by a team of construction experts who have used past experience and industry benchmark data to both estimate durations and develop the logic for the programme. The construction activities and programme would be subject to modification during both the detailed design and the construction phases. The

timings indicated are a best- estimate, based on the present situation and a worst-case scenario. The construction programme for the main works will have a duration of approximately 28 months. At substantial completion, the works will be completed to a sufficient standard for the Scheme to be opened to live traffic. Some minor works may still be required following substantial completion (e.g. demobilisation and landscaping works), which has been considered in the assessment of the opening year.

1.2.11 The main construction works will be divided into 5 main phases. Pre-phases including early works, site mobilisation, utilities diversions and ecological mitigation and compensation works would also occur. A detailed construction programme will not be available until the Detailed Design stage to confirm the duration of the works.

1.2.12 The dates in this section reflect the assumed construction sequence for the assessment of effects.

Phase 1 – Autumn 2022 to Spring 2023

1.2.13 The first works to be undertaken for the construction of the Scheme include the following activities:

- Early works; including site clearance, site enabling work and environmental mitigation works, mobilisation of compound areas and temporary welfare facilities, as required
- Archaeology trial trenching and test pits
- Properties above Mottram Underpass to be demolished and clearance of any obstructions ready for underpass piling during the later stages of Phase 1
- Old Hall Lane would be closed, and Old Road would be diverted by approximately 50 m to Roe Cross Road just north of the Scheme
- Ground improvement to the land west of the River Etherow most likely using pre-cast concrete piles driven through the weak alluvium.

1.2.14 Based on this construction sequence, it is not expected that there would be any changes to traffic flow on the A57 as a result of the first phase of works.

Phase 2: Spring 2023 to Autumn 2023

- Works for the construction of Mottram Underpass would continue with piling and construction of the reinforced concrete slabs. Commencement of, excavation of the main cutting in the former Mottram Showground, east of Mottram Underpass
- The fill material from the cutting east of Mottram Underpass would be transported to the prepared ground, forming the embankment west of the River Etherow

- Carrhouse Lane Underpass would be constructed to enable the existing lane to be realigned to its new location and completion of the embankment on each side
- Old Mill Farm Underpass would be constructed in advance of the embankment fill material in Phase 4.

1.2.15 To permit these works, traffic would be restricted on Mottram Moor; eastbound traffic would be reduced to one lane but westbound would continue with two lanes. An at-grade plant crossing would be used to move fill from west to east of the Scheme.

Phase 3: Autumn 2023 to Spring 2024

- The construction of Mottram Underpass would be completed during this phase, which would require the temporary realignment of Roe Cross Road
- The junction modifications to M67 Junction 4 would commence. Two lanes of traffic would be maintained during peak hours on the roundabout whilst these works go ahead
- The offline sections of Mottram Moor Junction would be constructed
- The tie-in of the Scheme to Woolley Lane would be completed. There would be no restrictions to the existing road network during peak hours and a single lane maintained during off-peak, with the use of traffic light control to complete these works
- Landscape tree planting would be undertaken in selected areas.

Phase 4: Spring 2024 to Autumn 2024

- The Mottram Underpass main excavation would commence with the material moving west to complete the mainline from the M67 Junction 4 to Mottram Underpass
- Road surfacing and street furniture would be installed along the length of the Scheme
- Mottram Moor Junction completed with diversion of the traffic onto the new junction, with conversion of the existing carriageway into access to the local properties
- Landscaping would continue across the whole Scheme, with final topsoil placed, temporary storage areas removed and attenuation ponds completed, ready for opening.

1.2.16 It is not expected that there would be any restrictions to the existing road network during this phase.

Phase 5: Autumn 2024 to Spring 2025

- The de-trunking works to the existing A57 would be completed
- Over winter planting of replacement trees would take place and planting of other bare root stock, as required.

Construction compound

- 1.2.17 One main compound (Insert 1) would be required for the construction of the Scheme. Access into the compound will be through the existing layby just to the east of the M67 Junction 4 interchange and exit from the compound will be onto the M67 Junction 4 interchange. This will allow the majority of deliveries to and from the office and stores to be made without increasing traffic through the village.
- 1.2.18 The construction compound is expected to accommodate office and welfare facilities, plant and machinery parking, storage facilities, maintenance areas and workshops. The site compound will be constructed, as demonstrated by the yellow shaded area. The top soil bund is shaded green in Insert 1 and is present to shield the compound from the village. Topsoil from the compound area to make a 3 m high bund around the compound area would be used to separate the compound from the back gardens of the residential properties on Hyde Road, Littlefields, Meadowcroft, Ash Close and Four Lanes. The 3 m bund would be made up of 1 m fill material, with 2 m of topsoil on top to ensure the compound office building is sufficiently screened.



Insert 1 Site Compound (extract from Temporary Works Plan (TR010034/APP/2.8))

- 1.2.19 Temporary welfare facilities would also be required adjacent to the two structures, Mottram Underpass and River Etherow Bridge, as shown on the Temporary Works Plans (TR010034/APP/2.8).
- 1.2.20 Following pre-construction species surveys and site clearance, in accordance with the EMP, the establishment of the main construction compound would involve the following activities:
- Defining the boundary using fencing
 - Soil stripping and storing this material in a 3 m high bund around the perimeter of the compound to screen the residential properties and placing and compacting stone for compound base
 - Setting up drainage as required, including perimeter drainage

- Creating access tracks with bound material surfacing if required
- Setting up power requirements including generators
- Setting up offices, welfare facilities and wheel washing
- Installation of security/access gates.

1.2.21 The compound area is classified as temporary land take and would therefore be returned to the previous land use after decommissioning and restored to a condition equivalent to its original (i.e. for use for farming activities), in agreement with landowners.

1.3 Scheme Objectives

1.3.1 The objectives of the Scheme are as follows:

- **Connectivity** – by reducing congestion and improving the reliability of people’s journeys through Mottram-in-Longdendale, Hollingworth and Tintwistle and also between the Manchester and Sheffield city regions
- **Environmental** – by improving air quality and reducing noise levels in certain areas, through reduced congestion and removal of traffic from residential areas. The Scheme is also being designed to avoid unacceptable impacts on the natural environment and landscape in the Peak District National Park
- **Societal** – by re-connecting local communities along the Trans-Pennine route
- **Capacity** – by reducing delays and queues that occur during busy periods and improving the performance of junctions on the route.

1.3.2 The following targets have also been set for the Scheme by the appointed Principal Designer and Contractor

- All arisings from site clearance activities during construction (e.g. vegetation clearance) are to be recycled and used on site elsewhere
- For procurement the of sub-contractors during the construction phase, the following targets will be set
 - Use of Small Medium Enterprises, where possible with a focus on social and minority enterprises
 - Use of Local supply chains within the region local to the Scheme, where possible
- Target a cut/ fill balance to avoid the import and export of materials and prevent the number of vehicles travelling to and from site.
- Ensure all timber, concrete and steel products sourced for the Scheme is certified as legally and responsibly sourced.
- Reduce primary material use through a commitment to achieve the 30% recycled content target for the region, which supports responsible material procurement.

- To support the recycling and recovery aspect of the waste hierarchy, the Principal Contractor has committed to recycle or recover 95% of wastes that leave site, therefore diverting them from landfill. This commitment will be supported through a clearly laid out waste storage area in the site compound with containers for segregated waste types. When wastes are removed they will be managed as closed as possible to site to support the proximity principle.
- Support reductions in carbon emission by adhering to the principles of the certification PAS 2080:2016⁴. This will help the Scheme reduce its carbon emissions across the whole value chain through effective and innovative design, construction and use. It would also ensure that carbon is consistently and transparently quantified at the key stages of the design process.

Highways England objectives

- 1.3.3 Alongside the Scheme objectives, Highways England's Biodiversity Plan, published⁵ in June 2015, details the aims and obligations it has to deliver as part of the Government's RIS, in terms of biodiversity. The Applicant is expected to ensure the design of its road schemes reduces impacts on the environment by delivering a reduction in habitat fragmentation and enhancing biodiversity value. Habitats should be actively managed to ensure broad species diversity and reduced fragmentation.
- 1.3.4 Furthermore, Highways England's Biodiversity Plan, published⁶ in June 2015, details the aims and obligations it has to deliver as part of the Government's RIS, in terms of biodiversity. The Applicant is expected to ensure the design of its road schemes reduces impacts on the environment by delivering a reduction in habitat fragmentation and enhancing biodiversity value. Habitats should be actively managed to ensure broad species diversity and reduced fragmentation.
- 1.3.5 This is further supported by Highways England's Licence (April 2015)⁷ which sets out both statutory directions and statutory guidance issued by the Secretary of State for the Applicant to follow when undertaking their duties when managing the strategic road network. The Applicant is required to act in a manner which has due regard to the environment (paragraphs 4.2g, 4.2h and 5.23) and sustainable development and design (paragraph 5.25). This Licence includes requirements for the Applicant to promote sustainable development through the design and seek to minimise carbon emissions and other greenhouse gases during operation.
- 1.3.6 In accordance with Highways England's Biodiversity Plan 2015, all schemes included within the RIS must demonstrate through core design how biodiversity delivery has been maximised across the Applicant's activities and continue to

⁴

[REDACTED]

progress towards the Applicant's target of delivering a net gain in biodiversity, by 2040.

1.3.7 In addition, the Highways England Delivery Plan 2015-2020 sets out its own approach to meeting the key performance indicators identified within RIS of reducing net loss of biodiversity and more recently in the Highways England Delivery Plan 2020-2025⁸ (RIS2) having a longer- term ambition of ensuring no net loss across the Applicant's activities.

1.3.8 The following performance targets are also identified:

- To mitigate noise in at least 7,500 households in mitigated Noise Important Areas (NIAs), defined by Defra, using funding from the Environment and Wellbeing Fund during the second road period
- Bring links agreed with the Department for Transport and based on their Pollution Climate Mapping model, into compliance with legal NO₂ limits in the shortest timescales possible
- Reduce Highways England's carbon emissions as a result of electricity consumption, fuel use and other day to day operational activities during the second road period, to levels defined by baselining and target setting activities in 2020-21.
- Address flooding and pollution from highway runoff through measures to attenuate and improve flood resilience on the strategic road network and to improve water quality

1.3.9 Finally, Highways England published "The Road to Good Design"⁹ in January 2018, which sets out design principles for delivering projects with the aspiration to '*deliver safer, better, beautiful roads which connect people and connect our country*', which have been considered within the development of the Scheme design. The design has also been developed to respond to the design principles set out in the Road to Good Design published by Highways England in 2018 and DMRB GG 103 'Introduction and general requirements for sustainable development and design'.

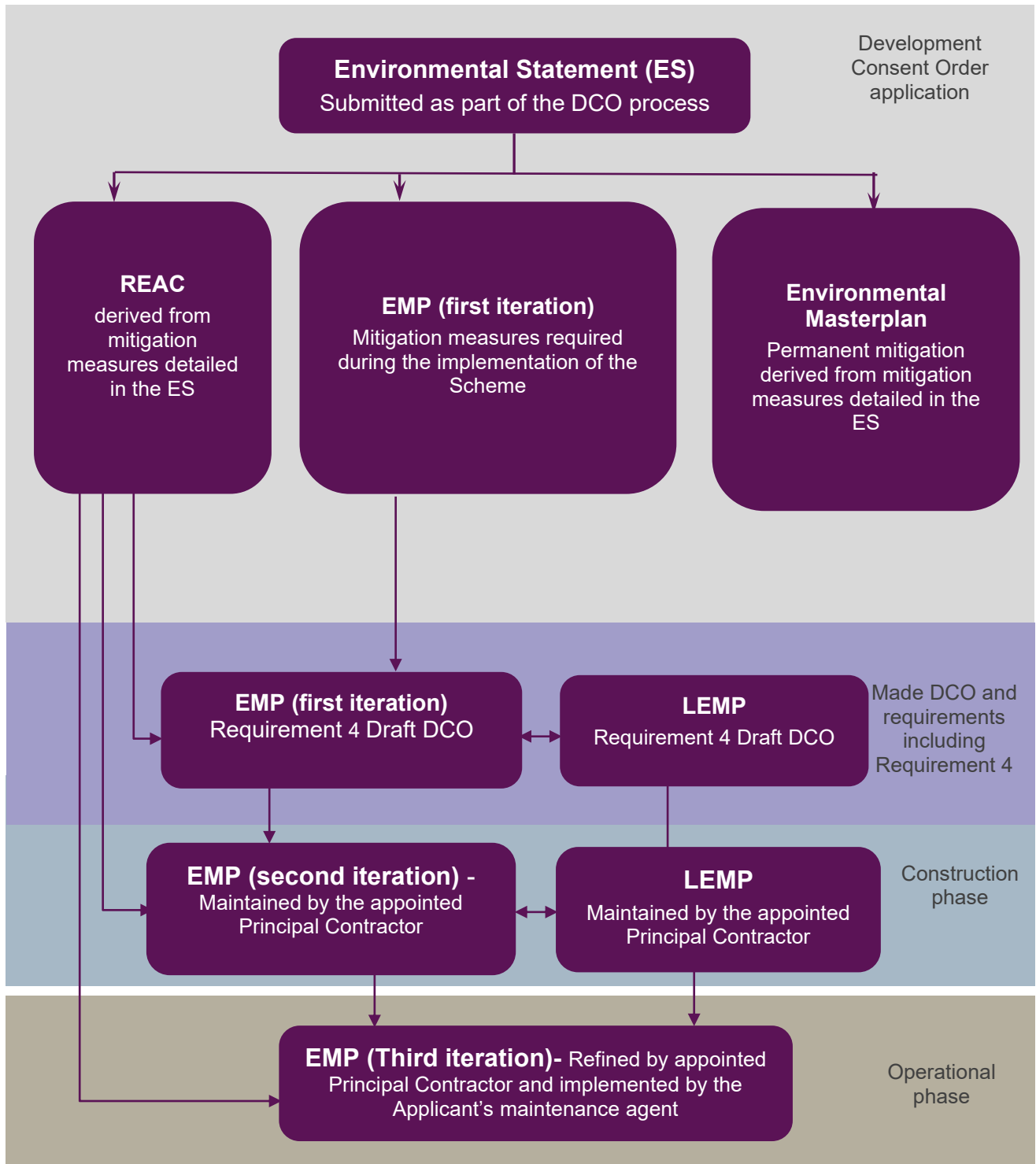
1.4 Environmental Management Approach

1.4.1 To fulfil the aims of the EMP and meet all environmental commitments, it is important to have a clear approach and structure for environmental management that outlines roles and responsibilities, required communication, appropriate hold points and all the mitigation, conditions, consents, licences and good working practices that need to be implemented. To this end, the EMP should set out a clear process whereby all these commitments are properly documented, agreed and implemented throughout the lifespan of the Scheme. This process is outlined in Figure 1.2

⁸

1.4.2 The process of environmental management for the Scheme is outlined below.

Figure 1.1: Environmental Management Process



- 1.4.3 Information on required environmental actions and mitigation commitments contained within the ES, are captured in the REAC (TR010034/APP/7.3) to ensure such items are adequately communicated and addressed during Detailed Design and construction. Where appropriate, such aspects will also be added to design information (e.g. landscape specifications) to highlight issues/protection areas where necessary.
- 1.4.4 This EMP draws together all relevant environmental information relating to the new works. These include, but are not necessarily limited to:
- The actions and both essential and embedded mitigation measures set out in the ES and REAC
 - Any further mitigation measures agreed during the Detailed Design stage
 - Any other requirements relating to licences, permits and consents not included as part of the planning consent
 - Environmental best practice measures.
- 1.4.5 The approach to environmental design and management will be in accordance with the approach and principles provided by the following DMRB standards:
- LD 117 Landscape design
 - LD 118 Biodiversity design
 - LD 119 Roadside environmental mitigation and enhancement
 - LD 120 Environmental management plans
- 1.4.6 The EMP approved in accordance with Requirement 4 of the DCO will draw together all relevant environmental information relating to the Scheme, including, but not limited to:
- Actions and mitigation measures set out in the ES and REAC.
 - Relevant Requirements set out in Schedule 2 of the DCO as granted.
 - Any additional mitigation measures agreed post publication of the DCO.
 - Any other commitments agreed between Highways England and specific landowners or occupiers.
 - Any other requirements relating to licences, permits and consents not included as part of the DCO.
 - Environmental best practice measures including those set out by statutory agencies

Environmental Management Plans and Method Statements

- 1.4.7 Environmental Method Statements and Management Plans are key documents which ensure that the construction-related mitigation measures and actions set out in the REAC (TR010034/APP/7.3) are successfully implemented on site. Environmental Method Statements and Management Plans inform the works and the development of associated task-specific Risk Assessments.

1.4.8 It is expected that some or all of the following Environmental Method Statements and Management Plans will be prepared / finalised, as appropriate, for the Scheme as part of the EMP (Second iteration):

- Soil Resource Plan (SRP)– sets out the areas and type of soil to be stripped, haul routes, the methods to be used, and the location, type and management of each soil stockpile to help protect and enhance soil resources on site. The Outline SRP is contained in Annex C1 of this document. The Outline SRP will be updated to become the Detailed SRP and will be included in the EMP (Second iteration) prior to construction commencing.
- Noise and Vibration Management Plan (NVMP) – outlines how construction noise and vibration will be managed throughout the construction of the Scheme including any noise limits agreed with High Peak Borough Council and Tameside Metropolitan Borough Council. The Outline NVMP is contained in Annex C2 of this document. The Outline NVMP will be updated to become the Detailed NVMP and will be included in the EMP (Second iteration) prior to construction commencing.
- Pollution Prevention Plan (PPP) – sets out best practice pollution prevention guidelines and appropriate control measures to protect from pollution events. The plan will include for activities such as excavation and dewatering, storage of fuels, chemicals and oils, vehicle washing, pollution control and emergency contingency. The PPP will be prepared and included in the EMP (Second iteration).
- Emergency Spillage Response Plan – sets out the procedures for dealing with emergency situations involving loss of containment. The Emergency Spillage Response Plan will be prepared and included in the EMP (Second iteration).
- Emergency Flood Response Plan – sets out the principles of a response to a significant flood during construction to ensure a coordinated response in the event of an emergency situation. The Emergency Flood Response Plan will be prepared and included in the EMP (Second iteration).
Dewatering Management Plan – sets out the approach / method for the removal of water below the existing water table during construction of the Scheme. This plan will be prepared in agreement with the Environment Agency. The Dewatering Management Plan will be prepared and included in the EMP (Second iteration).
- Construction Water Management Plan (CWMP) – outlines how water will be managed during construction. It also identifies arrangements and methods for dealing with surface water arising during construction. The Outline CWMP is contained in Annex C3 of this document. The Outline CWMP will be updated to become the Detailed CWMP and will be included in the EMP (Second iteration) prior to construction commencing.
- Site Waste Management Plan (SWMP) – provides a structured approach to minimising waste production on site and good practice waste management during the construction of the Scheme. The Outline SWMP is contained in Annex C4 of this document. The Outline SWMP will be updated to become the Detailed SWMP and will be included in the EMP (Second iteration) prior to construction commencing.

- Materials Management Plan (MMP) – sets out the relevant regulations and approach for dealing with excavated ground materials as a result of the Scheme. The Outline MMP is contained in Annex C5 of this document. The Outline MMP will be updated to become the Detailed MMP and will be included in the EMP (Second iteration) prior to construction commencing.
- Asbestos Management Plan – sets out the measures in place to manage asbestos that may potentially be present on site to prevent persons being exposed. The Asbestos Management Plan will be prepared and included in the EMP (Second iteration).
- Arboricultural Method Statement – details how construction works will be carried out close to trees without causing damage to the crown or the root system. The Arboricultural Method Statement will be prepared and included in the EMP (Second iteration).
- Community Engagement Plan (CEP)– outlines the methods in which the local and surrounding community will be engaged during construction of the Scheme including contact details for key site management. The CEP is contained in Annex C6 of this document. The Outline CEP will be updated to become the Detailed CEP and will be included in the EMP (Second iteration) prior to construction commencing.
- Nuisance Management Plan (NMP)– sets out how nuisances during construction such as fugitive dust will be dealt with. The Outline NMP is contained in Annex C7 of this document. The Outline NMP will be updated to become the Detailed NMP and will be included in the EMP (Second iteration) prior to construction commencing.
- Ecological Management Plans – sets out how protected species will be managed during construction should they be present. The Ecological Management Plans will be prepared and included in the EMP (Second iteration).
- Biosecurity Management Plan – prevent the spread of invasive species during the constructional stage through ensuring best practice principles are adhered to. The Biosecurity Management Plan will be prepared and included in the EMP (Second iteration).
- Invasive Non-Native Species Management Plan - ensure that these species will either be eradicated prior to any works commencing, or fully avoided during the duration of the works. The Invasive Non-Native Species Management Plan will be prepared and included in the EMP (Second iteration).

1.4.9 Note: the appointed Principal Contractor is to prepare / finalise and include detailed Environmental Method Statements and Management Plans in Annex B, C and D of the EMP (Second iteration) as required.

1.4.10 The REAC identifies the environmental commitments made when undertaking the environmental assessment to address the potential environmental effects of the Scheme. The EMP (First iteration) document will be refined at the Detailed Design stage and included in Section 3 of the EMP (Second iteration) by the appointed Principal Contractor. As the Scheme progresses, all dates and signatures for completed action / commitments shall be completed.

- 1.4.11 Unless otherwise stated, the above documents will be produced by the appointed Principal Designer and / or appointed Principal Contractor during the Detailed Design stage, and each shall be in place prior to the Construction stage commencing. The REAC will clearly state who is responsible for each Environmental Method Statement or Management Plan at each stage. All Environmental Method Statements and Management Plans will be developed to their full detail for the approved EMP (Second iteration) during the Detailed Design and Construction stages in accordance with Requirement 4 of the DCO.
- 1.4.12 All Environmental Method Statements and Management Plans will be further developed to their full detail for the EMP (Third iteration) during the Detailed Design and Construction stages.
- 1.4.13 Environmental Method Statements and Management Plans are live documents that are subject to updating and refinement as required changing needs of the works during construction.
- 1.4.14 In addition, the following Environmental Method Statements and Management Plans will be prepared for the Scheme as standalone documents:
- Archaeological Fieldwork Strategy (which will inform a Written Scheme of Investigation secured under Requirement 4 of DCO)
 - ~~Outline~~ Landscape and Ecological Management and Monitoring Plan (LEMP) (TR010034/EXAM/9.40) (secured under Requirement 4 of the Draft Development Consent Order (TR010034/APP/3.1)).

1.4.15 The Outline LEMP has been submitted as a standalone document for the DCO examination (TR010034/EXAM/9.40). This will be updated to become the Detailed LEMP prior to construction commencing.

1.4.16 Requirement 4 of the draft DCO sets out that relevant local authorities, the local highway authority and the Environment Agency will be consulted on the EMP (Second iteration) on relevant matters before it is submitted to the Secretary of State for Transport for approval. This will include all the Method Statements and Management Plans (whether included in the Annexes or the standalone documents that are committed to by the EMP and REAC).

Evaluation of change process and register

1.4.17 Annex E of the EMP (Second iteration) will provide a copy of the Evaluation of Change Register. The purpose of this document is to provide transparency and support the evaluation of changes in assessment assumptions, project design, or mitigation and monitoring commitments set out in the Environmental Management Plan for the Scheme. This product will help to demonstrate consent compliance. Annex E of this EMP (First iteration) provides an outline table to show the process to follow, together with instructions to indicate inputs required.

2. Scheme Team Roles and Responsibilities

2.1 Competent Expert Statement

2.1.1 The environmental specialists who have authored this report are committed environmental professionals who are appropriately qualified and have a demonstrable knowledge, experience and competence in the environmental management field. They have worked in close collaboration with designers and engineers through the various stages of the Scheme's development to maximise the opportunity to avoid or reduce adverse environmental effects early in the design process and identified mitigation measures to address those effects that cannot be avoided or reduced at source. The production of this EMP (First iteration) report has been overseen by the Environmental Lead for the Applicant, who is a full member of the Institute of Environmental Management and Assessment (IEMA) and a Chartered Environmentalist (CEnv).

2.2 Roles and responsibilities involved in the delivery of the EMP

2.2.1 The site-based roles and responsibilities in relation to environmental management are summarised in Table 2.1 and Table 2.2. The appointed Principal Contractor will be required to delegate responsibilities to experienced onsite personnel within the key areas of the site. The delegation of responsibilities will be clearly identified within relevant Scheme documents and site files.

Project Management Organisation

2.2.2 The Applicant, or the Project Management Consultant appointed by the Applicant, will be responsible for overseeing management of the Scheme. Some of the site supervision roles such as the Engineering Clerk of Works and procurement specialist consultants to supervise, monitor or check the appointed Principal Contractor's Method Statements including sensitive activities, will be delegated where required by the Applicant.

2.2.3 The appointed Principal Contractor has control over the Construction stage of the Scheme however, they have also been involved in the Preliminary Design stage of the Scheme. The appointed Principal Contractor will be required to delegate responsibilities to experienced onsite personnel within the key areas of the site. The delegation of responsibilities will be clearly identified within relevant Scheme documents and site files.

2.2.4 A management structure that includes an organisational chart encompassing all staff responsible for environmental work is to be included within the EMP (Second iteration). This will set out the respective roles and responsibilities with regard to the environment and identify the nominated Construction

Environmental Manager. Illustrative key roles and responsibilities are set out in Table 2.1, below.

Table 2.1 Environmental Management Responsibilities

Role	Main Environmental Responsibilities
The Applicant's Project Manager	Overseeing implementation of whole Scheme and the individuals undertaking specific roles and duties. To be reported to as per contract requirements and internal organisation Environmental Management Systems
Principal Contractor's Construction Project Manager	Responsible for management of the construction phase of the Scheme. Has overall responsibility for the environmental performance of the Scheme. Communication with the Applicant and the relevant statutory environmental bodies on all environmental matters (as they arise).
Principal Contractor DCO Manager	Responsible for overseeing and maintaining the commitments register. Reporting and liaison to the local authorities. Produce and agree a process for implementing the requirements of the DCO with the local authorities. Assessing requirements of changes to the design approved by the DCO. Act as the focal contact for all DCO related queries and requests for information. Provide training and briefings to relevant staff on the implementation of the DCO. Monitor compliance with the DCO requirements. Assist in the review of design and construction methodology changes. Monitor compliances with the DCO. Liaise with the Principal Contractor Planner to enable the efficient running of the construction programme Work with the Principal Contractor Community Liaison Manager to respond to complaints, community liaison, and stakeholder consultations as outlined in DCO.
Principal Contractor's Construction Environmental Manager	Ensuring compliance with environmental legislation, consents, objectives, targets and other environmental commitments, including those arising from the ES Maintaining and updating of all environmental documentation, including refining the EMP and progressing it through the required iterations in accordance with DMRB LA 120 Management of environmental specialists and monitoring compliance of construction activities in line with the Environmental Method Statements and Management Plans and the relevant environmental legislation / licences, reviewing and developing the Environmental Method Statements and Management Plans throughout the construction period, and acting as the focal point of contact for all environmental issues on site Liaison with relevant consultees / stakeholders Accompany statutory authorities on site visits (with Environmental Clerk of Works (ECoW) if necessary) Compiling applications for unexpected authorisations with assistance of ECoW if necessary

Role	Main Environmental Responsibilities
	<p>Identification of key environmental concerns on site as Scheme develops</p> <p>Instruction and confirmation of key requirements of each section on site as job progresses to site personnel</p> <p>Assisting with the delivery of environmental training to the workforce</p> <p>Assisting in review of method statements</p> <p>Investigation of environmental incidents</p> <p>Assessing and checking survey results and updating databases, Environmental Method Statements and Management Plans etc. with any new information</p> <p>Identification of cost savings and best practice activities</p> <p>Ongoing liaison with the appointed Principal Contractor site supervisors, site management team, and general construction workers</p>
Principal Contractor's Environmental Clerk of Works	<p>Supporting the Scheme team in delivering the environmental components of the works during the construction phase</p> <p>Recording the progress of the environmental works</p> <p>Delivering environmental training to the workforce</p> <p>Monitoring and supervising construction activities in relation to environmental aspects</p> <p>Walkover of all activities on the site and ongoing monitoring of works area to ensure compliance with key environmental legislation compliance and control plans</p> <p>Assisting in review of method statements</p> <p>Identification of key environmental concerns on site as Scheme develops</p> <p>Instruction and confirmation of key requirements of each section on site as job progresses to site personnel</p> <p>Monitoring and updating Environmental Manager on the progress of pre-construction surveys</p> <p>Assisting in monthly formal audits with Environmental Manager</p> <p>Assessing and checking survey results and updating databases, Environmental Method Statements and Management Plans etc. with any new information</p> <p>Identification of cost savings and best practice activities</p> <p>Immediate reporting of environmental incidents to the appointed Principal Contractor's Safety Health and Environment (SHE) department</p> <p>Ongoing liaison with the appointed Principal Contractor's site supervisors, site manager, and general construction workers</p> <p>Providing daily updates to Environmental Manager on site progress, compliance, issues, problems, threats, opportunities, successes, etc</p> <p>Accompanying statutory authorities on site visits (with Environmental Manager if necessary)</p>
Environmental Specialists	<p>As required, archaeologists, ecologists, geotechnical engineers, hydrologists, waste management, arboriculturist, noise and vibration, and others as required will be responsible for undertaking pre-construction surveys and watching briefs, as well as providing advice on specific issues (as they arise) throughout the construction phase.</p> <p>Landscape Manager to supervise planting and aftercare.</p>

Role	Main Environmental Responsibilities
Principal Contractor Community Liaison Manager	<p>Communications with the public and interested parties, outreach and education, where appropriate.</p> <p>Key liaison with all of the above and the Applicant's Public Liaison Officer:</p> <ul style="list-style-type: none"> • Maintain and develop Community Relations Strategy. • Maintain comment and enquiries log, disseminate identified comments for response and implementation of action.

2.3 Key Scheme Environmental Contacts

2.3.1 Overseeing management of the Scheme will be directed by the Applicant. The Applicant may delegate some site supervision roles and procure specialist consultants to supervise, monitor or check the appointed Principal Contractor's procedures for sensitive activities where required.

2.3.2 Individual names and contact details for the Applicant and appointed Principal Contractor will be included in the EMP (Second iteration) by the appointed Principal Contractor for the construction stage.

2.3.3 The key Scheme contacts and responsibilities for the Applicant and the appointed Principal Contractor are listed in Table 2.2.

[Note: The details will need to be confirmed and inserted by the Applicant and the appointed Principal Contractor into Table 2.2 prior to commencement of the Construction stage.]

Table 2.2 General site contacts and responsibilities

Role	Scheme Stage requirement	Contact and organisation	Phone and email	Competent Expert Statement
The Applicant's Project Manager	TBC	TBC	TBC	TBC
Principal Contractor Construction Project Manager	TBC	TBC	TBC	TBC
Principal Contractor DCO Manager	TBC	TBC	TBC	TBC
Principal Contractor Environmental Manager	TBC	TBC	TBC	TBC
Principal Contractor Environmental Clerk of Works	TBC	TBC	TBC	TBC

Role	Scheme Stage requirement	Contact and organisation	Phone and email	Competent Expert Statement
Principal Contractor Environmental Specialist(s)	TBC	TBC	TBC	TBC
Principal Contractor Community Liaison Officer	TBC	TBC	TBC	TBC

2.4 Lines of Communication

2.4.1 The appointed Principal Contractor will direct all queries regarding the EMP and actions within it through the Applicant prior to initial contact with statutory consultees (e.g. the Environment Agency, Natural England, Greater Manchester Archaeology Advisory Service (GMAAS), Historic England and relevant Local Planning Authorities). The appointed Principal Contractor will typically then act as the primary contact with statutory consultees leading up to and during the construction phase.

2.4.2 The appointed Principal Contractor will establish and maintain procedures for internal communications between the various levels and functions of the team during construction. Internal communications include:

- Advising of non-conformances to relevant managers
- Communicating environmental commitments to the construction team
- Communicating the environmental policy to the construction team
- Raising awareness of environmental issues to the construction team
- Reporting incidents to relevant managers

2.4.3 The appointed Principal Contractor's Community Liaison Officer will document and respond to any relevant communications from external interested parties during construction. External communications may include, but will not necessarily be limited to:

- Dealing with complaints from members of the public
- Dealing with the media

2.5 Pre-construction detailed Principal Contractor responsibilities

2.5.1 The appointed Principal Contractor is responsible for approving the appointment of the site Environmental Manager, ECoW and any environmental specialists prior to any work starting on site.

2.5.2 The appointed Principal Contractor is responsible for the following prior to construction commencement:

- Developing this EMP
- Defining roles and responsibilities for their own and their key sub-contractors' personnel relating to environmental issues
- Developing and communicating an environmental training plan covering all personnel
- Developing a programme of internal and sub-contractor inspections/monitoring
- Developing Scheme-specific emergency procedures for environmental incidents
- Finalising and implementing a programme for works to allow all preconstruction surveys to be arranged and completed within the required timeframe
- Agreeing a non-compliance reporting procedure with the Applicant to manage any environmental incidents or non-compliance events for the Scheme
- Ensuring all personnel are made aware of all relevant risks and plans
- Developing the required Environmental Method Statements and Management Plans. These will be updated as required up to construction commencement to reflect any new, relevant information provided by the Applicant or other statutory consultees (e.g. further consent conditions, landowner agreements) or through design development, construction planning, preconstruction surveys, etc.

2.5.3 Immediately prior to construction, the Applicant's Employer's Agent (or equivalent) and the appointed Principal Contractor nominated person will undertake a site condition survey of each section of the Scheme. The condition survey will include a photographic record. This will be used to ensure effective reinstatement following completion of the works and provide a 'baseline' to assess any compensation claims with landowners.

2.6 Construction detailed Principal Contractor responsibilities

2.6.1 The appointed Principal Contractor is responsible on site for delivering the construction phase commitments in the ES and REAC, as described within the Scheme design construction models, drawings and specifications, and controlled by this EMP.

2.6.2 The appointed Principal Contractor will implement the procedures set out in this EMP with technical advice from competent environmental specialists.

2.6.3 The appointed Principal Contractor are responsible for all their subcontractors on site and for ensuring these sub-contractors comply with the requirements of the EMP. All sub-contractors are bound to the requirements set out within this EMP and will be given a site induction prior to entering the site.

2.6.4 The appointed Principal Contractor are responsible for ensuring that there are no breaches in legislation and that good practice is followed throughout the duration of the construction.

- 2.6.5 The appointed Principal Contractor must ensure that all on-site works are adequately monitored.
- 2.6.6 The Risk Assessments & Method Statements (RAMS) and Environmental Method Statements and Management Plans will be used to ensure all environmental commitments are delivered on site. The success of implementing the requirements of the RAMS, Environmental Method Statements and Management Plans and delivery of mitigation measures relating to the Scheme will be the responsibility of the appointed Principal Contractor.
- 2.6.7 Any improvements or deviations relating to environmental matters required to the RAMS and/or Environmental Method Statements and Management Plans shall be approved by the Environmental Manager and will be subject to the Applicant's consents, where required. These changes will be communicated to relevant personnel at the first available opportunity. The appointed Principal Contractor will provide feedback and information to the Applicant Project Manager and Environmental Advisor on the progress and success in delivering all mitigation and commitments on site. Time intervals for this will be agreed between all parties and shall be either monthly or fortnightly as a minimum depending on the project stage.
- 2.6.8 The REAC will be updated to demonstrate progress and will be kept by the Scheme for environmental auditing purposes, with updates periodically sent to the relevant management personnel representing the Applicant.
- 2.6.9 All site personnel have the responsibility and authority to halt works in any activity where environmental commitments are not being successfully delivered or where legal requirements are being breached.
- 2.6.10 All site personnel will be encouraged to draw attention to any environmental risk or potential environmental risk arising on site (for example, refuelling being carried out too close to a watercourse or working outside the agreed limits of deviation for any aspect of the works). This approach will be promoted in all site inductions and training.
- 2.6.11 Any incidents or non-compliance with commitments will be recorded using the management processes as per the appointed Principal Contractor's Business Management System (BMS) requirements.
- 2.6.12 The appointed Principal Contractor will also:
- Maintain responsibility for pollution prevention measures being successfully implemented although subcontractors are bound to the requirements set out within this EMP
 - Take all reasonable precautions and undertake all reasonable measures within their control to ensure that all legal requirements are complied with and that there is no unnecessary disturbance from undertaking the works
 - Be available for environmental audits on a monthly basis.

- 2.6.13 The appointed Principal Contractor is responsible for delivering the Scheme environmental training programme, including toolbox talks, throughout the construction works, ensuring all staff are adequately trained to the agreed level prior to starting work on site.
- 2.6.14 The environmental aspects of the works shall be inspected routinely at intervals outlined in the relevant Management Plans and Method Statements as per the processes outlined in the BMS documents.

2.7 Post construction detailed Principal Contractor Responsibilities

- 2.7.1 The appointed Principal Contractor is responsible for correcting defects (as defined under the main construction contract) for 52-weeks following substantial completion. This is known as the 'defects period'.
- 2.7.2 The defects period applies to relevant works following completion of the main construction works and completion of a subsequent 5-year period where the appointed Principal Contractor has responsibility for the correction of any defects for all assets constructed or modified and management of environmental landscaping and planting. This does not include maintenance of the infrastructure; this will be handed back over to the local management team at the end of the scheme.
- 2.7.3 Once the commissioning activities have taken place, the Scheme will be open to traffic. The appointed Principal Contractor will be responsible for any construction defects that arise for a period of 52 weeks substantial completion. After this period the Scheme will be handed over to various asset owners who operate the road network (Highways England, Tameside MBC and Derbyshire County Council, please refer to section 6.3 and Table 6.1). The Applicant proposes that side roads and other rights of way will be handed over to the asset owner after opening, who will be responsible for ongoing maintenance.
- 2.7.4 Following this the Applicant will continue to monitor the effectiveness of the landscape establishment of the environmental works in line with the REAC.
- 2.7.5 Environmental works will be maintained by the Applicant for the 52-week aftercare period, following construction to ensure that they become appropriately established and maintained. This maintenance will then be handed over and carried out by the asset owner. These are outlined in the REAC (TR010034/APP/7.3). Following this the Applicant will continue to monitor the effectiveness of the landscape establishment of the environmental works in line with the REAC.
- 2.7.6 The EMP will be refined to become the Third iteration by the appointed Principal Contractor. The Third iteration of the EMP will contain environmental information needed to support the future maintenance and operation of the Scheme.

2.8 Communication

- 2.8.1 The appointed Principal Contractor will direct all queries regarding the EMP and actions within it through the Applicant, prior to initial contact with statutory consultees.
- 2.8.2 The appointed Principal Contractor will act as the primary contact with statutory consultees leading up to and during the construction phase.
- 2.8.3 The appointed Principal Contractor will establish and maintain procedures for internal communications between the various levels and functions of the team during construction. Internal communications include:
- Advising of non-conformances to relevant managers
 - Communicating environmental commitments to the construction team
 - Communicating the environmental policy to the construction team
 - Raising awareness of environmental issues to the construction team
 - Reporting incidents to relevant managers.
- 2.8.4 Through this process, the appointed Principal Contractor will be responsible for capturing the following within the EMP:
- a description of the main difficulties encountered in delivery of measures to mitigate and manage the environmental effects
 - the main uncertainties involved in the forecasting of measures to mitigate and manage the environmental effects
- 2.8.5 The appointed Principal Contractor will also document and respond to any relevant communications from external interested parties during construction. External communications may include, but will not necessarily be limited to:
- Dealing with complaints from members of the public; and
 - Dealing with the media.
- 2.8.6 The appointed Principal Contractor will maintain an ongoing liaison with the statutory/regulatory bodies during the construction phase. Table 2.3 outlines the proposed communication framework and should be used as an example when defining the communication processes within the detailed Environmental Method Statements and Management Plans.

Table 2.3: Outline Communication Processes

Stakeholder	Outline Communication Processes
The Applicant's Project Manager	<p>The appointed Principal Contractor Project Director will be responsible for involving the Applicant in any safety and / or environmental meetings (as required).</p> <p>The minutes of the meetings will be issued to the Applicant where appropriate and a copy will be retained on site.</p>
Statutory and Non-Statutory Bodies	<p>Consultation with the statutory and non-statutory bodies will be undertaken as required. This will ensure that all the relevant parties have an opportunity to input to the operation of the site in order to minimise adverse environmental impacts.</p>
The Public	<p>The public shall be kept informed of any operations and developments that may influence them. This may include temporary loss of amenities, changes to pedestrian or vehicle access routes or vegetation clearance.</p> <p>Any such notification will set out the nature of the operations and the times at which they are to be carried out through the Applicant's Public Liaison Officer or the appointed Principal Contractor's Community Liaison Officer.</p> <p>Social media, letter drops and newsletters may be used to keep local residents informed of progress on construction and any new operations that are to be carried out. The Applicant's Scheme web-page provides up-to-date project progress and community liaison information. Before and during construction, the web-page would continue to provide updates regarding the pre-construction and construction activities, details of areas affected by construction, and mitigation in place to reduce adverse effects.</p> <p>The information provided will also include details of contacts within the Scheme team (should any issues arise).</p>
Construction Staff	<p>Construction staff shall be kept up to date on all operational matters that may have an impact on the safety and environmental factors on site.</p> <p>The site induction will form the basis for all relevant information provided to construction staff and will be supported at regular intervals by toolbox talks, especially where new or particularly sensitive operations are about to commence.</p> <p>Briefings to staff will be provided to update them on any changes in working methods and procedure.</p> <p>Audits and reviews of the effectiveness of the method statements will highlight any corrective measures and subsequent feedback to construction staff will serve as a means of regulating and ensuring best working practice.</p>

2.8.7 Weekly construction team meetings will be held where environmental issues will be discussed and reported, as necessary.

2.8.8 Internal communications will be carried out through the use of toolbox talks with the site and site meetings, which will include sub-contractors.

2.9 Reporting

2.9.1 The following reports will be provided to the Applicant on the agreed basis as part of the monthly contract Progress Report:

- Monthly environmental reports of key issues
- Waste management volumes and recycling figures
- Carbon calculator submitted using the Applicant's template
- Environmental incidents and near misses.

2.9.2 These will form part of the agenda at formal monthly contract Progress Meetings between the Applicant and the appointed Principal Contractor.

3. Record of Environmental Actions and Commitments

3.1 Introduction

- 3.1.1 The REAC refers to sections of the ES (TR010034/APP/6.3) which contain detailed information on the assessment and mitigation of impacts and sets out the mitigation committed for the Scheme as part of the ES.
- 3.1.2 A REAC (TR010034/APP/7.3) has been submitted as a standalone document with the DCO application. This identifies the environmental mitigation commitments (both embedded and essential), to address potential environmental effects of the Scheme which are identified in each topic chapter of the ES. In accordance with the DMRB LA 120, the REAC forms part of this EMP (First iteration), and therefore the two documents should be read in conjunction with each other.
- 3.1.3 When the EMP (Second iteration) is prepared by the Principal Contractor in advance of construction, the REAC table will be incorporated into this section (Section 3) of the document. It will reflect the all mitigation for the consented Scheme.
- 3.1.4 Any remaining items from the REAC which relate to the post construction and operational stage of the Scheme will be part of the EMP (Third iteration). The REAC acts in part as a connection between the ES and the EMP in all its forms, i.e. iterations 1 - 3 through the lifecycle of the project.
- 3.1.5 The REAC is a live document and as such will be updated as the Scheme progresses and will be finalised at the end of construction on completion of the Scheme, where it will inform the development of, and be included within, the EMP (Third iteration) to support the future management and operation of the Scheme.

3.2 REAC requirements

- 3.2.1 In accordance with DMRB LA 120 the REAC will include:
- Clear and specific description of the action
 - The objective of the action
 - How the action is to be implemented/achieved
 - The source of the action, including references for source documentation e.g. environmental statement
 - Naming of the person responsible for the action
 - Achievement criteria and reporting requirements
 - The project stage, date or implementation and achievement
 - Details of any monitoring required and corrective action.

3.2.2 The REAC is a working document and will be updated by the Environmental Manager as the Scheme progresses. It will be finalised at the end of construction on completion of the Scheme, as Section 3 of the EMP (Third iteration). This will be the main vehicle for passing essential environmental information to the Applicant's Maintenance Agent, Tameside MBC and Derbyshire County Council (CC), who will be responsible for the future maintenance and operation of the Scheme.

4. Consents and Permissions

4.1 Introduction

4.1.1 The appointed Principal Contractor will be required to obtain and implement all permits, consents and licences necessary before and during the construction phase. The appointed Principal Contractor will need to manage the submission and approval of those required prior to the commencement of any site works. Table 4.1 provides an anticipated list which will need to be reviewed and updated prior to construction commencing and, as required, as the Scheme progresses.

4.2 Consents and Agreements Position Statement

4.2.1 The Consents and Agreements Position Statement (TR010034/APP/5.5) sets out the Applicant's intended strategy for obtaining consents and associated agreements needed to implement the Scheme. It identifies at a high-level what consents are expected to be needed for the Scheme, together with how those consents will be obtained.

4.2.2 The principal consent for the Scheme will be a DCO itself, a draft version is submitted as part of this application (TR010034/APP.3.1). The DCO process provides development consent for the works and enables land acquisition and temporary possession, along with many consents and powers to be dealt with at the same time. However, the DCO application may need to be supplemented by other applications because:

- a. A specific consent cannot be contained in the DCO
- b. A consenting authority declines to allow a consent to be contained within the DCO
- c. It is not desirable, or it is inappropriate, to include a consent within a DCO due to the stage of design development meaning the detail required is unavailable.

4.2.3 Table 4.1 provides details of the anticipated consents / permissions required to deliver the EMP. The table will be refined for the EMP (Second iteration) to confirm permissions required and / or obtained. At the completion of the Scheme it will be refined further for the EMP (Third iteration) to cover developments through the Detailed Design and construction planning phase, and throughout the construction phase, in order to capture all relevant items.

Table 4.1: Anticipated consents and permissions required for the Scheme

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
Flood Risk Activity Permit (FRAP) – Environment Agency	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	Required for: Erecting any temporary or permanent structure in, over or under a Main River. Any activity within 8m of the bank of a main river, or 16m if it is a tidal main river. Any activity within 8m of any flood defence structure or culvert on a Main River, or 16m on a tidal river. FRAPs will be required for the River Etherow	Consent applications need to be supported by Detailed Design drawings, construction method statements, and an environmental risk assessment.
Ordinary Watercourse Consent – Tameside Metropolitan and High Peak Borough Councils	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	Required for works with the potential to impeded flow in any ordinary watercourse. Consent will be required for the proposed new culverts on 10 ditches.	Consent applications need to be supported by Detailed Design drawings and a construction method statement.
License for temporary dewatering (small scale dewatering in the course of building or engineering works) – Environment Agency	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	An abstraction license is required unless exempted. Exempted if: <ul style="list-style-type: none"> • Lasting less than 6 consecutive months from commencement of first abstraction • Has no potential to cause impact at any conservation site • Has no potential to cause damage to protected species • Is immediately discharge to a soakaway • Is less than 100 m³/day • If within 500 m of a conservation site, 250 m of a spring, well or borehole used to supply water for a lawful use, the volume restriction is reduced to 50 m³/d from 100 m³/day. 	This permit will be applied for by the appointed Principal Contractor.

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
Permit for discharge from excavations – Environment Agency or Water Company	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	<p>A permit to discharge is not required from the Environment Agency if the discharge is to foul sewer, however the discharge conditions must be agreed by the water company.</p> <p>However, a discharge permit is usually needed if the discharge is from an excavation to surface water. The permit is made to the Environment Agency if the discharge is to a main river and to the lead local flood authority if into a non-main river. A site can be exempted if the following is true:</p> <ul style="list-style-type: none"> • have a short term, temporary discharge of uncontaminated water which is wholly or mainly rainwater, from an excavation to surface water (such as pumping water out of excavations on a building site) • complies with all the conditions listed in the relevant guidance document <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	This permit will be applied for by the appointed Principal Contractor.
Permit for discharge – Environment Agency/ Lead Local Flood Authority	Environmental Statement, Chapter 13: Road drainage and the water environment (TR010034/APP/6.3)	New outfall structures as part of the highway drainage may require Environmental Permit or a Land Drainage Consent if connecting into a Main River or Ordinary Watercourse respectively. Consent will be required for both the temporary works and the permanent outfall structure. The requirements for the permit or consent will be agreed in full consultation with the Environment Agency and/or Lead Local Flood Authority at the detailed design stage of the scheme.	This permit will be applied for by the appointed Principal Contractor.
Section 61 – Noise (Control of Pollution Act 1974)	Environmental Statement, Chapter 11: Noise and vibration (TR010034/APP/6.3)	If required, details to be included in the EMP (Second iteration) by the appointed Principal Contractor.	The requirement for (and details of if required) a s61 is to be agreed with relevant LPA by the appointed Principal Contractor prior to the start of the construction phase

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
Removal of trees	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Removal of trees will be permitted under the DCO with exclusion of vegetation noted as being retained on the Environmental Masterplan (TR010034/APP/6.4).	
Removal of hedgerows	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Removal of hedgerows will be permitted under the DCO with exclusion of vegetation noted as being retained on the Environmental Masterplan (TR010034/APP/6.4).	Two hedgerows within the study area were assessed to meet the criteria of 'important hedgerow' in accordance with the Hedgerows Regulations 1997 (H18 and H24). Approximately 42 m of hedgerow H24 falls within the DCO boundary of the Scheme; hedgerow H18 is situated immediately north-east of the DCO boundary.
Temporary footpath closures	Environmental Statement, Chapter 12: Population and Human Health (TR010034/APP/6.3)	Temporary closure orders under the Road Traffic Regulations Act from Tameside Metropolitan Borough Council/Derbyshire County Council – closures will be required for PRoW LON/35/10, PRoW LON/50/10, PRoW LON/51/10, PRoW LON/52/10, PRoW LON/88/60, and PRoW LON/90/10.	Temporary closures will be authorised by the DCO but notification of works is required. Temporary footpath closures are identified on 2.4 Streets, Rights of Way and Access Plans (TR010034/APP/2.4).
Licence to carry out works affecting bats under Wildlife and Countryside Act 1981 (as amended) – Natural England	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Consent will be required for any works with potential to damage or disturb bats or their roosts. A 'letter of no impediment' will be submitted to Natural England prior to the DCO application being determined to agree acceptance of the licence in principal. An application for the final licence being submitted to Natural England after the DCO application has been approved.	Demolition of structures with confirmed bat roosts will required license to be in place prior to demolition. Details of the structures proposed for demolition can be found in Chapter 2: Description of the Scheme of the ES (TR010034/APP/6.5).
Licence to carry out works affecting badgers under Wildlife and Countryside Act 1981	Environmental Statement, Chapter 8: Biodiversity (TR010034/APP/6.3)	Consent will be required for any works with potential to damage or disturb badgers or their setts. A 'letter of no impediment' will be submitted to Natural England prior to the DCO application being determined to agree acceptance of the licence in principal.	The permanent closure and destruction of eight setts is required as these setts are located within the DCO boundary and cannot be avoided.

Scheme Delivery Requirements and Issuing Authority	Relevant Document	Details	Notes
(as amended) – Natural England		An application for the final licence being submitted to Natural England after the DCO application has been approved.	<p>Details can be found in Appendix 8.2 of the ES, Confidential Badger Survey report (TR010034/APP/6.4)</p> <p>Note: The locations of these setts are confidential and details of the locations of these setts should only be shared with the necessary parties involved with the consenting and construction of the Scheme.</p>

4.3 Recording

- 4.3.1 A register of environmental permits and a record of all consents, licences, etc. relating to construction activities will be maintained by the appointed Principal Contractor and made available for audit by the Applicant.
- 4.3.2 Any conditions related to each consent, permission or agreement can be found within the REAC (TR010034/APP/7.3) where appropriate.

5. Environmental Asset Data and As Built Drawings

5.1 The Applicant's Environmental Information System

5.1.1 The Applicant's Environmental Information System (EnvIS) consists of specific environmental data supplied by service providers, the Applicant and other bodies which is collated and displayed in the Highways Agency Geographic Information System (HAGIS). This data is used to assist in managing the environment, within and surrounding the strategic road network, and in the review and reporting of the environmental performance of both service providers and the Applicant.

5.1.2 The aim of EnvIS is to assist the Applicant and service providers, in designing and managing the strategic road network in an accurate, consistent and environmentally sound manner. Specifically, it aims to achieve the following key strategic and operational objectives:

- enable consistent and accurate recording and retrieving of specific environmental data about the strategic road network
- assist in the review and reporting of environmental performance of both the Applicant and service providers
- improve understanding of the environmental issues and opportunities that must be considered at different stages of trunk road and motorway management
- in line with ensuring a value for money approach, assist in the prioritisation of environmental management actions based on an understanding of the condition of the Element and environmental objectives
- assist in the handover of environmental data from designers to network management agents (and vice versa) and the transfer of environmental data from an outgoing network management agent to its successor
- assist designers and network management agents in the collection of environmental data and use this information to develop specific environmental management programmes and strategies, including EMPs

5.1.3 Further to the adherence to the Applicant's EnvIS, the appointed Principal Contractor will adhere to the Highways England Asset Management Development Group – Asset Data Management Manual Part 2 – Requirements and Additional Information which sets out the Applicant's asset data requirements to achieve both its corporate objectives as well as its asset management objectives.

5.2 Collection and submission of EnvIS data

5.2.1 The appointed Principal Contractor is responsible for identifying, recording, updating and auditing the EnvIS data on an ongoing basis. This should be stored in the appointed Principal Contractor's own system, as-and-when elements are identified, removed, or implemented as part of the Scheme improvements.

5.3 Submission of EnvIS data

- 5.3.1 EnvIS data is submitted in accordance with the interface file specifications set out in the environment data section within the Asset Data Management Manual. The appointed Principal Contractor shall ensure that the data is in a compatible format to enable supply of data to the maintenance contractor.
- 5.3.2 For designers, the frequency of EnvIS data submission (to the Applicant), shall be in line with the end point of the following milestones:
- Development phase (Preliminary Design) – Environmental Statement Publication - environmental data resulting from statutory or non-statutory assessment of the environmental implication of a proposed project. Designers collect and submit EnvIS data for all Elements that have influenced or are influenced by the Preferred Route
 - Development phase (Construction Preparation) – Detailed Design drawings - environmental data detailing the final specification of the Scheme. Designers collect and submit EnvIS data detailing all Elements associated with the planning and design of the Scheme and planned environmental management actions that will be undertaken during the construction period and of the existing Elements likely to be affected.
 - Construction phase (Construction) – As Built Drawings – environmental data detailing the completion of the Scheme prior to handover. Designers collect and submit EnvIS data detailing all Elements associated with the construction of the Scheme and planning environmental management actions that are required to be undertaken by the network managing agent as part of operating and maintaining the network area.
- 5.3.3 For the EMP (first iteration), EnvIS data has been submitted through the publication of the ES. This included the submission of all species surveys results undertaken to inform the ES.
- 5.3.4 EnvIS data for the Detailed Design stage will be submitted for all elements associated with the planning and design of the Scheme. This will have updated previous data arising from the Preliminary Design including any survey information / data that has already been provided e.g. species surveys.
- 5.3.5 Towards the end of the construction phase of the Scheme and prior to handover, EnvIS data detailing the completion of the Scheme will be collected by the appointed Principal Contractor and submitted. The data will detail all elements associated with the construction of the Scheme and planned environmental management actions that are required to be undertaken by the Network Management Agent as part of operating and maintaining the Network Area.
- 5.3.6 Consultation will be held with the Managing Agents to ensure that the agreed data in the correct format forms part of the handover package of information. The Managing Agents will then 'upload' this additional information as part of their standard submission to the Applicant.

5.3.7 The Evaluation of Change Register, identifying changes to the design as part of the change control process, will be provided by the appointed Principal Contractor in Annex E of the EMP (Second iteration) and submitted as part of the EnvIS process prior to handover.

[Note: This section should be updated at the next milestone stage (Development phase (Construction Preparation)) to detail the submission arrangements for the future EnvIS data]

5.4 As built drawings

5.4.1 In line with the Construction (Design and Management) Regulations a health and safety file will be produced for handover at the end of the Scheme. This will include pre-construction information, construction process details and Scheme plans including as built drawings.

5.4.2 As built drawings produced at the Preliminary Design stage by the appointed Principal Contractor and will be issued to the Applicant by the appointed Principal Contractor via Business Collaborator.

5.4.3 The following relevant engineering and environmental plans have been provided as follows:

- DCO boundary for the Scheme (Figure 2.1, TR010034/APP/6.4)
- Scheme General Arrangement (Figure 2.2, TR010034/APP/6.4)
- Environmental Constraints (Figure 2.3, TR010034/APP/6.4)
- Environmental Masterplan (Figure 2.4, TR010034/APP/6.4)
- Location Plan (TR010034/APP/2.1)
- Land Plans (TR010034/APP/2.2)
- Works Plans and DCO Schedule 1: Work Plan Schedule (TR010034/APP/2.3 and 3.1)
- Streets, Rights of Way and Access Plans (TR010034/APP/2.4)
- Scheme Layout Plans (TR010034/APP/2.6)
- Engineering Drawings and Sections (TR010034/APP/2.7)
- Temporary Works Plans (TR010034/APP/2.8)
- Culverts and Drainage Plans (TR010034/APP/2.12)

5.4.4 In addition, the following relevant DCO plans have been submitted:

- Nature Conservation Sites and Features Plan (TR010034/APP/2.9)
- Historic Environment Sites and Features Plan (TR010034/APP/2.10)
- TPOs and Hedgerows Regulations 5 (2)(o) (TR010034/APP/2.13)

5.5 Species survey drawings

5.5.1 During the Preliminary Design stage, Extended Phase 1 Habitat surveys have been undertaken for the whole site. In addition, the following ecological surveys have been undertaken

Table 5.1: Ecological Surveys undertaken to date

Survey	Date undertaken
NVC survey	July 2017
Biodiversity metric condition assessments	August and September 2020.
Hedgerow survey	October 2020
Watercourse and standing water body (ponds and lakes) walkover survey	March 2020
River Corridor Survey	May and June 2018
River condition survey	2020
Aquatic macroinvertebrate survey	October 2020
Predictive System for Multimetrics pond survey	August 2020
Great crested newt survey	April, May, and June 2017
Breeding bird surveys	March to July 2020
Reptile surveys	May to September 2017
Kingfisher survey	March 2020
Barn owl surveys	June and October 2020
Bat roost inspection survey	Throughout 2017 and 2018
Bat emergence surveys	Throughout 2017 and 2018
Bat activity surveys	Carried out in October 2019 and between March and September 2020
Bat tree surveys	Carried out between July and September 2020 and between January and February 2021 (for hibernation) by Ecus Ltd on behalf of the Applicant
Otter surveys	April and September 2020
Water vole surveys	April and September 2020
Badger walkover survey	February 2020 (updated walkovers throughout 2020 and 2021)
Badger camera survey	October-November 2020
Badger bait marking survey	Throughout March 2020
Arboricultural survey	September and October 2020

5.5.2 Reports and plans for these surveys are contained in the Figures and Appendix sections of the ES (TR010034/APP/6.4 – 6.5).

6. Details of maintenance and EMP monitoring activities

6.1 General requirements

6.1.1 The ES and REAC propose certain requirements for environmental monitoring to ensure the identified mitigation measures and actions can be tracked and closed out when completed. Some of these are specific, e.g. noise monitoring, others are more general, e.g. covered by routine inspection/audit or confirmation by the construction team that an element of the Scheme design has been completed as outline in the relevant Management Plans and Method Statements.

6.1.2 A summary of the monitoring requirements for the Scheme for those aspects where a monitoring requirement is identified will be set out in the EMP (Second iteration), based on recommendations and commitments that are outlined in the ES.

6.2 Detailed requirements

6.2.1 The details of specific monitoring and reporting requirements for the Scheme are still to be developed. These details will be confirmed during Detailed Design with the delivery arrangements included in this section of the EMP (Second iteration).

6.3 General asset maintenance requirements

6.3.1 The Applicant's Maintenance Agent, Tameside MBC and Derbyshire County Council (CC) will be responsible for the maintenance of the Scheme once operational. New assets shall be assessed, and maintenance requirements determined in accordance with requirements of the respective contract documents. Table 6.1, below, sets out high-level maintenance responsibilities for each asset.

Table 6.1: Existing and new assets including responsibility

Asset type	Description	New or Existing	Owner
Highways	Road restraint system (RRS) on the dual carriageway	New	Highways England
Highways	Traffic Signs	New/existing	Highways England Tameside MBC Derbyshire CC
CCTV	CCTV for the underpass	New	Highways England

Asset type	Description	New or Existing	Owner
CCTV	CCTV for Mottram Bypass and the Gun Inn interchange	New	Highways England
CCTV	Woolley Bridge junction traffic signals CCTV	New	Derbyshire CC
Drainage	Chamber	New/existing	Highways England Tameside MBC Derbyshire CC
Drainage	Headwall	New/existing	Highways England Tameside MBC Derbyshire CC
Drainage	Flow controller	New/existing	Highways England Tameside MBC Derbyshire CC
Drainage	Ponds	New	Highways England (pond 1 and 2) Tameside (pond 3)
Lighting	Chamber	New/existing	Highways England Tameside MBC Derbyshire CC
Lighting	Throughout	New/existing	Highways England Tameside MBC Derbyshire CC
Traffic signals and associated technology	Traffic signals and detectors (loops or radar, tbc10) at Mottram Moor, M67 J4 and the Gun Inn interchange	New	Highways England owned though Transport for Greater Manchester (TfGM) will maintain and operate
Traffic signals and associated technology	Traffic signals and detector loops at Woolley Bridge junction	New	Derbyshire CC
Geotechnical assets	Earthworks	New/Existing	Highways England Tameside MBC Derbyshire CC

¹⁰ From a maintenance perspective the aspiration is radar based to avoid carriageway maintenance

Asset type	Description	New or Existing	Owner
Underpass	Underpass on the A57	New	Highways England
Underpass	Section above the underpass – flora	New	Tameside
De-trunked A57	The old section of the A57	Existing	Tameside
Carrhouse Lane underpass	Underpass that serves Carrhouse farm	New	Tameside
Old Mill farm underpass	Underpass that serves Old Mill farm	New	Highways England
River Etherow Bridge	Bridge	New	Tameside
Access track	Track used for access to maintain pylons and other assets adjacent to the A57 dual carriageway	New	Highways England
M67 through-link	The through-link of M67 J4	New	Highways England

6.3.2 Further details regarding maintenance responsibilities and requirements will be included in the EMP (Third iteration) prior to the Scheme opening.

6.4 Inspections and monitoring processes

6.4.1 The inspection and monitoring process will be detailed in full in Annex F of the EMP (Second iteration) by the Appointed Principal Contractor, ahead of the construction phase. Typical requirements are summarised below:

- The appointed Principal Contractor will carry out formal Health Safety Environment and Quality (HSEQ) inspections of all work areas at least every 7 days.
- The appointed Principal Contractor will implement a protocol for identification of near miss/good practice reporting.
- Inspections and Observations shall be categorised and distributed. The Inspections and Observations will detail realistic timescales for actions, and these will be monitored by the site team. Action Leaders will be appointed to discharge any corrective actions.
- Data from inspections shall be used for trend analysis purposes to allow pin-point targeting of recurring issues.

6.4.2 As a minimum, the following inspections will be completed:

- Weekly Inspections by a nominated employee from the appointed Principal Contractor
- Weekly Inspections carried out by appointed sub-contractor(s)

- Site Set Up Audit by the Environmental Manager
- Monthly HSEQ scored inspection by internal independent inspector or appointed senior member of the Principal Contractor's project management team

6.4.3 The appointed Principal Contractor will ensure that competent persons undertake all other statutory inspections at required intervals. Guidance and forms for other statutory inspections, e.g. Provision and Use of Work Equipment Regulations 1998, Lifting Operations and Lifting Equipment Regulations 1998, copies of which the appointed Principal Contractor should make available.

6.4.4 In addition to the above, the appointed Principal Contractor shall monitor health, safety and environmental standards and performance as follows:

- The appointed Principal Contractor's Supervisors will monitor their work area environmental conditions and performance daily.
- Monthly reviews of risk assessments/method statements will be undertaken to ensure compliance, monitored through the Applicant's Business Collaborator.
- Sample checks of compliance with method statements, work package plans, work briefings and Permits to Work will be undertaken.
- Sample checks of sub-contractors/ appointed Principal Contractor's briefing of own team on method statements will be completed through the use of stop shift audits.
- Sample checks will be performed on the training of staff by sub-contractors/ appointed Principal Contractor.
- Spot checks and environmental audits of sub contractors' inspections and documentation (including registers) verifying compliance will be undertaken.
- Periodic audits checks and inspections will be completed by the HSEQ Team.

6.4.5 Each sub-contractor must ensure their line managers, Supervisors or Health, Safety and Environmental Advisors monitor the health, safety and environmental standards of their activities as a normal part of their duties. In addition, each contractor should ensure that a formal and recorded safety and environmental inspection is carried out every week. Inspection records should include confirmation that previous remedial actions have been carried out. These reports will be copied to the Scheme Document Controller and will be reviewed at the monthly safety meeting.

6.4.6 The works areas will be registered with the Environment Agency Floodline Warnings Direct Scheme which will provide constant monitoring of flood risk.

6.5 Auditing

6.5.1 The appointed Principal Contractor's HSEQ Manager accompanied by the appointed Environmental Manager and internal independent ISO Auditor, will conduct an audit to examine Health, Safety and Environmental systems and

performance standards following mobilisation of the site. This will be undertaken on a 6-monthly basis.

6.6 Additional inspection and monitoring

6.6.1 Any consent/licence/permit monitoring inspection requirements shall be added into this section and the appropriate Environmental Method Statements and Management Plans within the annex.

6.7 Procedures in the event of failure to comply with the EMP

6.7.1 Any persons who disregard the safety, health or environmental rules and arrangements detailed in this plan will, in the first instance, receive a written warning from the appointed Principal Contractor or nominated person; subsequent misdemeanours will provoke the removal of the person from site. The appointed Principal Contractor reserves the right to remove from site instantly any person whose acts, or omissions, in his/her opinion constitute serious danger to people or property.

6.7.2 The appointed Principal Contractor may give reasonable directions to any contractor sharing the site for the purposes of construction (regardless of contractual arrangements) in order for them to comply with duties under Regulation 15(3)(a) of CDM 2015 to issue reasonable directions to contractors.

6.7.3 The relevant emergency procedures will be outlined by the appointed Principal Contractor and contained in Annex D of the EMP (Second iteration).

6.8 Review and close out reporting

6.8.1 The EMP can be reviewed as often as is necessary to include the significant changes in equipment, risk, and scope of works, circumstances, people or other organisational change.

6.8.2 Suitability and performance against the EMP will be reviewed to ensure that it remains valid and reflects the arrangements for managing current activities on site.

6.8.3 Sustainability and Environmental performance will be reviewed throughout the contract and discussed as appropriate at the following meetings:

- Scheme Board meetings
- Construction Management Team meetings
- HSEQ Co-ordination meetings
- HSEQ Workforce Committee meetings

6.8.4 Performance reviews shall identify trends in accidents and incidents highlighting areas that will be targeted for improvement.

- 6.8.5 The appointed Principal Contractor will complete sub-contractor's performance reviews at least every 3 months using the appointed Principal Contractor's commercial management system. Relevant members of the construction team should be consulted during each review. Close out reports will be prepared in accordance with the appointed Principal Contractor's Management System requirements.
- 6.8.6 All archiving will be carried out in accordance with the appointed Principal Contractor's archiving requirements.

7. Induction, training and briefing procedures for staff

7.1 General management

- 7.1.1 The process for the induction, training and briefing procedures for staff will be detailed in full in the EMP (Second iteration), ahead of the Construction stage. Typical requirements are summarised in this Chapter.
- 7.1.2 All personnel on site will be made aware of the company Environmental Policy by the appointed Principal Contractor, the relevant Environmental Legislation, the REAC and the relevant Environmental Method Statements and Management Plans included in the EMP. The team will be briefed on the following topics as a minimum / as appropriate:
- Company Environmental Policy
 - General environmental awareness
 - Waste management
 - Working in or near watercourses
 - Surface water pollution and control
 - Ecology/European Protected Species
 - Spills and emergency response procedures
 - Dust management
 - Vibration management
 - Noise management
- 7.1.3 Specific training needs will be identified and provided for all personnel involved in work activities that have the potential to result in an adverse impact on the environment. The training will include reference to the importance of adhering to the contents of the EMP and the potential consequences of departure from specified method statements. Environmental training in the form of toolbox talks will also be undertaken on site, evidence of which (along with all other training) will be maintained on record as part of the appointed Principal Contractor's management system.

7.2 Site inductions

- 7.2.1 Prior to commencing work on site, all personnel will undergo a site induction, where the appointed Principal Contractor will communicate the environmental objectives, requirements and responsibilities to the workforce.
- 7.2.2 The appointed Principal Contractor will compile and communicate Environmental Site Rules which will detail site personnel's obligations while on site. This will help introduce accountability for personnel working on the Scheme.

7.2.3 The site induction and training will cover relevant parts of the following areas to a level of sufficient detail for the workforce:

- Environmental site rules
- Spill kit use and locations
- Emergency spill procedures
- Energy management
- Invasive species
- Asbestos
- Waste management
- Biodiversity protection
- Biodiversity enhancement
- Public interface
- Sustainability procedures

7.2.4 In addition, the site induction will include other beneficial advice and procedures to support all site workers, promoting a safe and healthy working environment, such as:

- First aid and accident procedures
- Fire and emergency procedures
- Mental health and wellbeing provisions (e.g. monthly communications and events on health, details of 'mental health first aiders' and wellbeing issues)
- Occupational health provision

7.2.5 All site personnel will be encouraged to report all unsafe events, practices and conditions as well as any exemplar site practices.

7.3 Evaluation of training effectiveness

7.3.1 As part of the appointed Principal Contractor's procedures, the Scheme shall appoint specific Management Environmental Representatives and Leaders to drive improvement in a number of areas and evaluate training effectiveness. These champions shall be appointed in the following areas:

- Resource Efficiency Leader
- Waste Reduction and Recycling Leader
- Health and Wellbeing Leader
- Mental Health First-Aiders
- Occupational Health

7.4 Internal training

7.4.1 The appointed Principal Contractor will develop an internal expert knowledge transfer scheme with environmental awareness sessions. All members of staff

employed on the scheme shall attend. The session shall cover topics including but not limited to:

- Setting in the environment
- Legislation relevant to the scheme
- Ecological impacts
- Environmental risks
- Archaeological awareness and risks (although it is understood that there is low archaeological potential within the site)

8. References and glossary

8.1 References

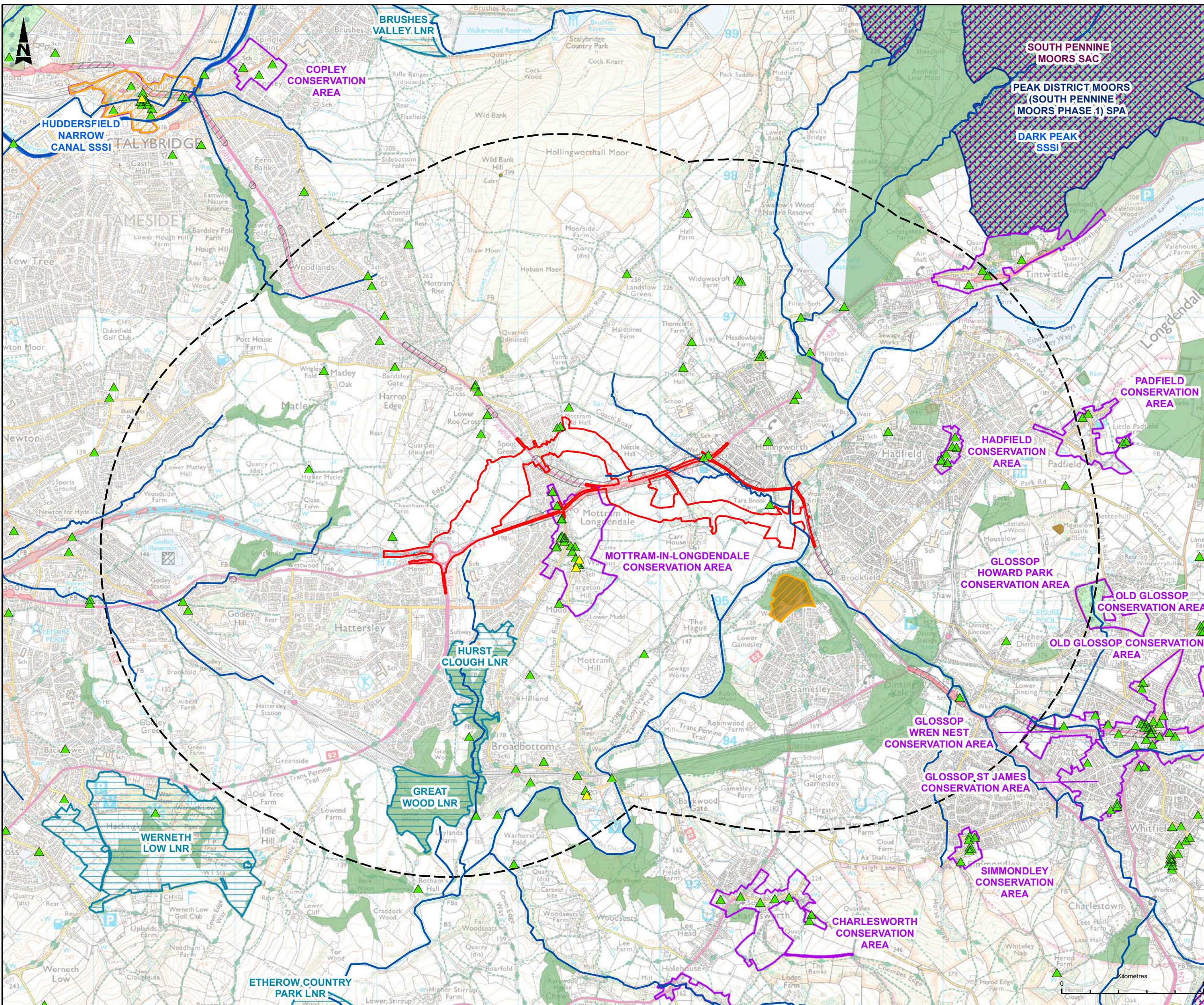
- 8.1.1 BSI (1996, as amended) BS EN ISO 14001: Environmental Management
- 8.1.2 Highways Agency (2020) DMRB LA 104 Environmental assessment and monitoring
- 8.1.3 Highways Agency (2010) Interim Advice Note (“IAN”) 84/10 Environmental Design and Management Section 10 Environmental Information System –EnvIS (IAN 84/10)
- 8.1.4 Highways Agency (2020) LA 120 Environmental management plans
- 8.1.5 IEMA (2008) Environmental Management Plans: Practitioner Best Practice Series, Volume 12
- 8.1.6 Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

8.2 Glossary and abbreviations

Term	Meaning
BMS	Business Management System
BSI	British Standards Institution
CDM	Construction Design and Management
CEP	Community Engagement Plan
CWMP	Construction Water Management Plan
EMP	Environmental Management Plan
DCO	Development Consent Order
DMRB	The Design Manual for Roads and Bridges
ECoW	Environmental Clerk of Works
EIA	Environmental Impact Assessment
EnvIS	Environmental Information System
ES	Environmental Statement
FRAP	Flood Risk Activity Permit
HSEQ	Health Safety Environment and Quality
IEMA	Institute of Environmental Management and Assessment
LEMP	Landscape and Ecological Management Plan
MMP	Materials Management Plan
NMP	Nuisance Management Plan
NVMP	Noise and Vibration Management Plan
PPP	Pollution Prevention Plan
RAMS	Risk Assessment and Method Statement
REAC	Register of Environmental Actions and Commitments
SHE	Safety, Health and Environment
SRP	Soil Resource Plan
SWMP	Site Waste Management Plan
TBC	To Be Confirmed

Annexes

ANNEX A: CONSTRAINTS MAP



- LEGEND**
- DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY
 - 2KM STUDY AREA
 - SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)
 - SPECIAL PROTECTION AREAS (SPA)
 - SPECIAL AREAS OF CONSERVATION (SAC)
 - LOCAL NATURE RESERVES (LNR)
 - LOCAL WILDLIFE SITES
 - SCHEDULED MONUMENTS
 - REGISTERED PARKS AND GARDENS
 - HERITAGE AT RISK
 - CONSERVATION AREAS
 - AIR QUALITY MANAGEMENT AREAS
 - NOISE IMPORTANT AREAS
 - RIVER NETWORK
- LISTED BUILDINGS**
- ▲ GRADE I
 - ▲ GRADE II*
 - ▲ GRADE II

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Description	Status	Revision	Issue Date
DCO SUBMISSION	A4	P02	24/05/21
Drawn	SD	Checked	BT
Reviewed	LY	Authorised	MR
Drawing Suitability	DCO SUBMISSION		
	A4		

highways england

Scheme Name: A57 LINK ROADS

Drawing Title: FIGURE 2.3 ENVIRONMENTAL CONSTRAINTS

PNS Ref. No: TR010034/APP/6.4

Drawing Number	Originator	Volume
HE551473	BBA	EGN
A57_AL_SCHEME	DR	LE
Location	Type	Number
		020300

Scale: 1:25,000 | Original Size: A3 | Rev: P02

ANNEX B:RELEVANT MANAGEMENT PLANS

All Environmental Method Statements and Management Plans will be produced in response to the statutory process by the appointed Principal Contractor for the Scheme as part of the EMP (Second iteration)

Annex B.1: Soil Resource Plan

A57 Link Roads

TR010034

**7.2 Environmental Management Plan
Annex B1: Outline Soil Resource Plan**

APFP Regulation 5(2)(a)

Planning Act 2008 Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

January 2022

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1. Introduction

1.1 Scheme location

1.1.1 The Scheme lies east of Manchester and mainly within the administrative boundaries of Tameside Metropolitan Borough Council (TMBC), up until the proposed River Etherow Bridge. To the east of this, the Scheme crosses over the boundary with High Peak Borough Council (HPBC) and Derbyshire County Council (DCC).

1.2 The Scheme

1.2.1 The A57 and A628 between Manchester and Sheffield currently suffer from heavy congestion creating unreliable journeys, which limits journey time reliability. This restricts economic growth due to the delays experienced by commuters and business users alike.

1.2.2 The Scheme to improve has been developed Journey time between Manchester and Sheffield, and has evolved over more than 50 years, as different improvements have been explored.

1.2.3 The Scheme includes the following components:

- A new offline bypass of 1.12 miles (1.8km) of dual carriageway connecting the M67 Junction 4 to the A57(T) Mottram Moore Junction.
- A new offline bypass of 0.81 miles (1.3km) of single carriageway connecting the A57(T) Mottram Moore Junction to the A57 Woolley lane Junction.
- Creating two new junctions, Mottram Moore and Woolley Bridge Junction improvement works to the existing M67 Junction 4.
- Creation of five new structures (Old Mill Farm Underpass, Roe Cross Road Overbridge, Mottram Underpass, Carrhouse Lane Underpass and River Etherow Bridge).
- One main temporary construction compound area located on agricultural land to the east of M67 Junction 4.
- Detruncking, including safety measures from the M67 Junction 4 to Mottram Moor Junction, to be agreed with TMBC.
- Safety measures and improvements to the A57 from Mottram Moor Junction to the Gunn Inn Junction and from the Gun Inn Junction to Woolley Lane Junction to be agreed with TMBC.

1.2.4 The Scheme is a Nationally Significant Infrastructure Project (NSIP) and this Outline SRP has been developed in support of National Highways' application for a Development Consent Order (DCO) to authorise construction, operation and maintenance of the Scheme. An Environmental Impact Assessment (EIA) has been carried out for the Scheme and is reported in the Environmental Statement (ES), which has been submitted to support the DCO application¹.

¹

1.3 Aim of the Soil Resource Plan

- 1.3.1 This Outline SRP is based on the commitments set out in the ES for the Scheme, and specifically those detailed within the Environmental Management Plan (EMP) (First iteration) (APP-183) and Register of Environmental Actions and Commitments (REAC) (REP1-037), which details the requirement for a Soil Resource Plan (SRP) to be developed in order to:
- limit the permanent removal of soils during earthworks and foundation construction.
 - provide instruction on how to maintain the quality of stockpiled soils, prevent erosion and how to protect soil structure during earthwork activities; and
 - detail the method of reinstatement of soils to their original quality.
- 1.3.2 This Outline SRP sets out the principles and procedures that will be developed during the Detailed Design stage, as this document is developed into a final management plan.
- 1.3.3 An EMP (Second iteration) will be produced by the appointed Principal Contractor to manage environmental effects during the construction phase of the Scheme, at which stage the REAC will be combined so they become a single document. This will broadly follow the EMP (First iteration) and will reflect the mitigation measures set out in the REAC requirements. All environmental management plans, including this SRP, will be included in Annex C.
- 1.3.4 The SRP is applicable to soils that are currently under agricultural or landscaping use that are to be restored at the end of the construction period.
- 1.3.5 It was stated in Chapter 9: Geology and soils of the ES (APP-065) that the agricultural soil in the area affected by the Scheme is in Agricultural Land Classification (ALC) Grades 4 and 5 (poor and very poor quality) and so there is no best and most versatile (BMV) land requiring special protection. However, it is recognised that all affected soils have local agricultural value.
- 1.3.6 The land temporarily acquired for construction shall be restored to a condition equivalent to its original, following an aftercare period which would typically be five years. During this time problems with compaction, surface stones, drainage and settlement shall be rectified. This shall be achieved by means of a SRP following the best practice set out in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.
- 1.3.7 There is no mitigation for the permanent loss of agricultural soils, apart from conserving the soils that are stripped and using them elsewhere on the Scheme.
- 1.3.8 On the flood compensation area beside the River Etherow the topsoil shall be stripped and stockpiled before being replaced on the lowered ground surface. The resulting quality of this land will be poorer than before; the ALC grade being reduced from Grade 4 to Grade 5, making it suitable only for rough grazing and hay making.
- 1.3.9 The aim of this SRP is to provide a reference on soil management for site operators on the safeguarding of soil resources and ensure protection, conservation, appropriate reinstatement and aftercare.
- 1.3.10 Other types of land such as contaminated ground, embankment fill, etc. are not considered in this SRP.

1.4 Policy and legislation

- 1.4.1 The Site Waste Management Plans Regulations 2008 (now rescinded) required all construction projects exceeding £300k in value to produce a Waste Management Plan (WMP). Under the new voluntary code for waste management, the Definition of Waste: Development Industry Code of Practice, a Materials Management Plan (MMP) must be produced. These two documents are also required under the appointed Principal Contractor's Management System and form separate management plans to this Soil Management Plan.
- 1.4.2 The topsoil management shall adhere to Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites².

1.5 Sources of information

- 1.5.1 The following sources of information have been used in developing this SRP:
- British Standard 3882 Method of placement: 2015 Specification for topsoil
 - The Department for Food and Rural Affairs (Defra) 2009 Code of Practice for sustainable use of soils on construction sites
 - The University of Cranfield. Soil Survey Field Handbook: Describing and sampling soil profiles (Hodgson, 1997)
 - A57 Link Roads Environmental Statement, available through the Planning Inspectorate project document library: [TR010034-000603-A57 Link Road Examination Library Published.pdf \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/tr010034-000603-A57-Link-Road-Examination-Library-Published.pdf)
 - British Society of Soil Science (BSSS). Professional Competence Scheme Document 2 'Agricultural Land Classification of England and Wales' (2011)
 - Natural England (2012). 'Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049)'
 - Minister of Agriculture Fisheries and Food (MAFF) (1988). Agricultural Land Classification of England and Wales. Revised Guidelines and Criteria for Grading the Quality of Agricultural Land. Available from: [Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land - ALC011 \(naturalengland.org.uk\)](https://www.naturalengland.org.uk/ALC011)
 - Defra's Interactive Magic Map (2020). Available from <https://magic.defra.gov.uk/MagicMap.aspx>

2. Intrusive soil survey and Testing

2.1 Method

- 2.1.1 Intrusive ground Investigation surveys will be undertaken by the appointed Principal Contractor during the Detailed Design and pre-construction stage, ahead of the Construction stage commencing.
- 2.1.2 This testing method will be developed and undertaken in advance of construction works. At that time, this section will be updated when the detailed SRP is produced.

3. Pre-construction and during construction work

3.1 General approach

3.1.1 Construction is planned to commence in Spring 2023 due to the suitability of the ground conditions at this time of year. Soil moisture during the summer months is most likely to be below field capacity and field drains are not likely to be flowing. It is the appointed Principal Contractor's intention to commence with pre-earthworks drainage works as one of the first activities. The condition is expected to be a heterogenous topsoil horizon to 0.30 m bgl.

3.2 Outline

3.2.1 The objective is to restore temporarily used land to its previous quality. Soil handling works should be carried out in accordance with guidance provided in other available management plans for the Scheme, including the Environmental Management Plan and consider ecological requirements and service installations. Surface water/ drainage management during the construction phase will be managed as per the Temporary Works Drainage Strategy.

3.2.2 The upper (approximately) 30 cm within the temporary land take area should be treated (stripped, stockpiled and replaced) as a loamy topsoil. Once the topsoil has been stripped and stored, the compound and access road can be levelled with stone cover to provide a firm, temporary working surface.

3.2.3 Any isolated areas not likely to be affected within the temporary land take (i.e. close to hedgerows) shall be fenced off. Exclusion zones should be considered around any hedgerows and beneath tree canopies, if present.

3.2.4 Restored land will be subject to an agreed aftercare period, during which time any problems with settlement, drainage and noxious weeds will be rectified.

3.3 Communication

3.3.1 Prior to the development and use of the construction compound, the following topics should be discussed with the landowner:

- The control of plant and animal diseases by retaining soil within the area of origin wherever reasonably practicable; and
- The location of known drains and any areas of potential surface water/ drainage issues during wet seasons to avoid whilst topsoil stockpiling

3.4 Soil stripping

3.4.1 Any vegetation taller than 1.0 m will be cut and removed from the site (in-line with the Precautionary Method of Working and Site Waste Management Plan), immediately before soil stripping.

- Topsoil must be kept in reasonably sized bunds for the duration of the required storage time.

- Topsoil must be dry when stripping is carried out (as a general rule when the material is below the plastic limit and not after heavy rainfall (i.e. >1 mm within 24 hours). If a 3 cm ribbon of soil cannot be formed by rolling it out by hand or if the ribbon cracks, then the soil is not sufficiently dry to strip. The soils can be deposited into temporary windrows prior to storage in bunds in order to dry out.
- Soil beneath the topsoil bund areas does not require stripping.
- Bunds will be located away from stripped areas in order to prevent the migration of material back to the bare area.
- Protection measures should be used to isolate bunds to protect them from vehicles/ pedestrians potentially compacting the soils.

3.5 Topsoil storage

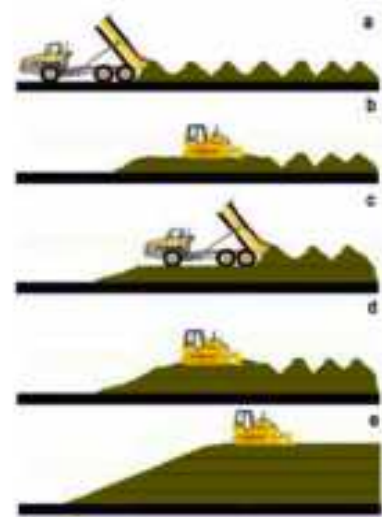
- It is anticipated the material will be stored for up to two years.
- The number of bund and the bund locations are outlined in the Temporary Works Plans (REP1-006), which have been submitted to support the DCO application.
- Tracked vehicles should be used to move the materials to the bund locations to reduce soil compaction and should be placed loosely on the bund.
- Once the bund is complete, the side and top of the bund should be firmed to reduce water infiltration.
- Grass mix should be sown onto the completed bunds if they are to remain in-situ for a period greater than six months.
- Once the soil has been stockpiled the compound can be laid down.

Soil stockpiling

Soil should be stored in an area of the site where it can be left undisturbed and will not interfere with site operations. Ground to be used for storing the topsoil should be cleared of vegetation and any waste arising from the development (e.g. building rubble and fill materials). Topsoil should first be stripped from any land to be used for storing subsoil.

Method 1 – Dry non-plastic soils

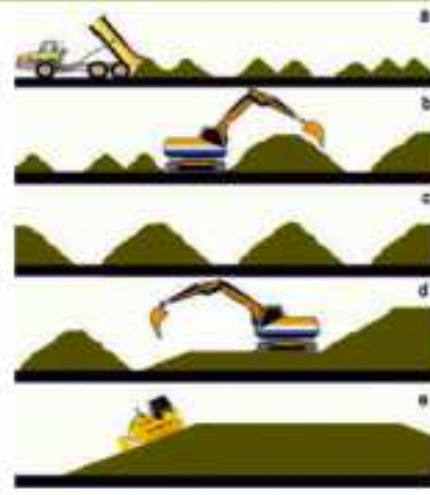
The soil is loose-tipped in heaps from a dump truck (a), starting at the furthest point in the storage area and working back toward the access point. When the entire storage area has been filled with heaps, a tracked machine (excavator or dozer) levels them (b) and firms the surface in order for a second layer of heaps to be tipped. This sequence is repeated (c & d) until the stockpile reaches its planned height. To help shed rainwater and prevent ponding and infiltration a tracked machine compacts and re-grades the sides and top of the stockpile (e) to form a smooth gradient.



Method 2 – Wet plastic soils

The soil is tipped in a line of heaps to form a 'windrow', starting at the furthest point in the storage area and working back toward the access point (a). Any additional windrows are spaced sufficiently apart to allow tracked plant to gain access between them so that the soil can be heaped up to a maximum height of 2m (b). To avoid compaction, no machinery, even tracked plant, traverses the windrow.

Once the soil has dried out and is non-plastic in consistency (this usually requires several weeks of dry and windy or warm weather), the windrows are combined to form larger stockpiles, using a tracked excavator (d). The surface of the stockpile is then regraded and compacted (e) by a tracked machine (dozer or excavator) to reduce rainwater infiltration.



Reference: Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.

3.6 Bund monitoring

3.6.1 Bunds should be inspected bi-annually, with the following conditions to be monitored/ maintained:

- The bunds should be weed-free
- Materials are monitored visually and any potential issues (i.e., instability, cross-contamination due to wash-off etc) are noted and escalated
- The quantity being stored has not exceeded the design proposal
- Testing may be required at the end of the storage period to ensure the soils are still fit for purpose. Any stockpiled excavated materials that fail to meet requirements may be considered as waste.

4. Post-construction and operation

4.1 Compound site clearance and replacing of soil

4.1.1 Once the Scheme has been completed, temporary buildings and services should be removed, along with any the stone and or geotextile layers. All temporarily used land should then be restored.

4.1.2 In preparation for the replacement of the topsoil, each bund should be sampled (throughout the depth of the bund) and tested to the agreed testing methods to be developed as stated in section 2.1 of this Outline SRP.

4.1.3 To protect soil quality:

- The soils should only be moved when they are dry/ below their plastic limit, to prevent compaction of the underlying soil.
- Herbicide such as glyphosate should be sprayed on the soil approximately 10 days prior to placing the soil back.
- Validation soil samples should be collected from the ground surface of the compound area and at locations along the temporary land take areas. Samples will be collected in near surface soils targeting high risk areas and tested for a standard suite of analysis to identify any potential pollution which may have occurred since baseline.
- The site will be litter picked to remove any remaining construction waste and stones larger than 100 mm diameter and the material treated as waste.
- The surface of the subsoil should be inspected to ensure that all construction material has been removed and that the site is in a state fit to receive the topsoil.
- If significant soil structural damage, or damage to existing land drains has occurred, install a suitably designed agricultural land drainage scheme into the subsoil and fill the trench with permeable back fill to the top of the subsoil.
- Remove compaction in the subsoil prior to replacing the topsoil unless the presence of utilities prevent deep cultivation in which case shallow harrowing is an alternative.
- Soils should be replaced with minimum vehicular movements to avoid re-compacting the loosened surface. Restoration should start at the furthest point from the exit to ensure that soils once deposited are not run on by earth moving machinery.
- Care should be taken to minimise compaction of the soil by carefully controlling traffic movement along defined routes and working only in dry conditions. If there are any wet patches on the haul roads, they should be covered with temporary metal tracks.
- Replace topsoil to its full depth, maintaining and tying into the original contours on either side of the disturbed area to allow surface water flow.

4.2 In-situ soil restoration

4.2.1 Once the soils have been restored, the works should be completed by:

- Loosening the soil to a suitable depth, to tie the topsoil and subsoil together. This can only be carried out in dry conditions and special care will be required to avoid damage to services and shallow drains if they are present.
- Soil loosening should be carried at an angle to the line of any drains and where possible, extended into the undisturbed soil on either side of the working area. The depth of working and the type of equipment used will be determined by the depth of compaction, which should be assessed by a suitably qualified person.
- The area will be observed, and any remaining construction waste and large stones will be removed. Any material removed during this stage will be disposed of correctly following the Waste Management Plan.
- If available, agricultural equipment should be used to loosen and aerate the topsoil and to provide connection with the subsoil.
- A seed bed should be established with secondary cultivation equipment such as discs, tines and press, as agreed with the landowner to help stabilise soil structure.

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Annex B.2: Noise and Vibration Management Plan

A57 Link Roads

TR010034

**7.2 Environmental Management Plan
(First iteration)**

**Annex B2: Noise and Vibration
Management Plan**

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

January 2022

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Abbreviations

Term	Definition
BPM	Best Practicable Means
BS	British Standard
CoPA	Control of Pollution Act
DCO	Development Consent Order
dDCO	Draft Development Consent Order
DMRB	Design Manual for Roads and Bridges
ES	Environmental Statement
EMP	Environmental Management Plan
NVMP	Noise and Vibration Management Plan
REAC	Register of Environmental Actions and Commitments

1. Introduction

1.1. Objective

- 1.1.1. This Outline Noise and Vibration Management plan (NVMP) sets out a framework to be used by the appointed Principal Contractor when preparing the detailed NVMP for the A57 Link Roads Scheme prior to the commencement of works. It is based on the commitments set out in the ES for the Scheme, and specifically those detailed within the Environmental Management Plan (EMP) (First iteration) (APP-183) and Register of Environmental Actions and Commitments (REAC) (REP1-037), which details the requirement for a NVMP to be developed.
- 1.1.2. The Scheme is a Nationally Significant Infrastructure Project (NSIP) and this Outline NVMP has been developed in support of National Highways' application for a Development Consent Order (DCO) to authorise construction, operation and maintenance of the Scheme. An Environmental Impact Assessment (EIA) has been carried out for the Scheme and is reported in the Environmental Statement (ES). The ES and other DCO documents prepared to support the application are available through the Planning Inspectorate project document library: [REDACTED]
- 1.1.3. In order to minimise the potential for noise and vibration nuisance, this Outline NVMP details the measures that the appointed Principal Contractor will be required to adopt to control and limit those emissions at residential properties and other sensitive receptors in the vicinity of the Scheme. This Outline NVMP applies to all construction activities occurring on the Scheme.
- 1.1.4. This Outline NVMP will be updated by the appointed Principal Contractor into a detailed NVMP prior to commencement of works in accordance with Requirement 4 in Schedule 2 of the draft Development Consent Order (dDCO) (REP1-041). The detailed NVMP will be one of a number of management plans that will be annexed to the EMP (Second iteration) under Requirement 4.

2. Noise and vibration

2.1. Introduction

- 2.1.1. This section will be updated by the appointed Principal Contractor for the purposes of the final version. It will set out the purpose of the final NVMP and set out the processes that will be adopted to minimise nuisance through the management, control and reporting of construction noise and vibration in accordance with relevant legislation, regulations and contractual requirements.
- 2.1.2. This Outline NMVP plan identifies the key items which will be included in the final NMVP as follows:
- Roles and responsibilities at project and site-specific levels
 - The approach to construction noise and vibration management
 - Section 61 Control of Pollution Act (CoPA) 1974 consent process
 - Noise and vibration control measures
 - Noise and vibration monitoring
 - Communication and complaints arrangements
 - Reporting requirements.

2.2. Relevant legislation

[The appointed Principal Contractor will need to update this section prior to construction and provide an overview of the key legislation that the Scheme has to comply with.]

Control of Pollution Act 1974

- 2.2.1. The CoPA 1974 gives local authorities powers for controlling noise and vibration from construction sites and other similar works. These powers may be exercised either prior to, or during the works.
- 2.2.2. Best Practicable Means (BPM) will be applied during construction works to reduce noise and vibration impacts as far as is reasonably practicable.

Best practicable means

- 2.2.3. The BPM for noise control will be applied during construction works to minimise noise (including vibration) at neighbouring residential properties and other sensitive receptors arising from construction activities.
- 2.2.4. BPM are defined in section 72 of CoPA and section 79 of the Environmental Protection Act 1990.

2.3. Management of site activities

Main roles and responsibilities

- 2.3.1. In relation to the control and management of noise and vibration, the appointed Principal Contractor shall establish the main roles and responsibilities of site personnel to ensure the proposed control measures are being implemented during the construction activities. These will be set out in Section 2 of the EMP (Second iteration) and within the detailed NVMP.

Section 61 compliance

- 2.3.2. The appointed Principal Contractor will be responsible for developing a monitoring programme to ensure compliance with any Section 61 consents. Specific actions required to ensure compliance will be included within the detailed REAC at the Detailed Design stage.

Working hours

Normal working hours (NWHs)

- 2.3.3. Normal Working Hours will be defined as per Action reference GEM1.4 in Table 2-1 of the REAC (REP1-037). All works will be undertaken during NWH only, unless otherwise consented.

Start-up and close down periods

- 2.3.4. To maximise productivity within the NWH hours; a period of up to one hour before core working hours is allowed for the start-up of activities as per Action reference GEM1.4 in Table 2-1 of the REAC (REP1-037).

Additional working hours

- 2.3.5. Any additional working hours or out of hours working, will be identified within the Section 61 CoPA application which will require approval from the relevant local authority as per Action reference NV1.31.4 in Table 2-1 of the REAC (REP1-037).

Consultation

- 2.3.6. Consultation will be carried out with the environmental health departments of the local authorities regarding the management of noise and vibration during construction of the Scheme.
- 2.3.7. The implementation of a Community Engagement Plan will ensure that local residents and other affected parties are kept informed of the progress of the works, including when and where the noisiest activities would be taking place and how long they are expected to last. Communication mechanisms include newsletters, newspaper and radio announcements, and communications from the appointed Principal Contractor.

2.4. Noise and vibration control

Noise control strategy

2.4.1. The general principles of noise management, considered as BPM, are given below:

2.4.2. Control at source:

- Equipment – newest, well maintained equipment with lower noise emissions
- Equipment – controlling plant and machinery noise e.g. by retrofitting controls
- Equipment - indirect methods of controlling noise e.g. acoustic screens
- Equipment - indirect methods of controlling noise e.g. using alternative construction methodologies; selection of quieter tools/machines; application of quieter processes.

2.4.3. Control across site by:

- Administrative and legislative control
- Control of working hours
- Control of delivery areas and times
- Careful choice of compound location
- Physically screening site
- Control of noise via contract specification of limits
- Noise monitoring to check compliance with noise level limits, cessation of works until alternative method is found
- Use of vehicles, plant and equipment that generate lower levels of noise or vibration should be selected over alternatives that produce higher levels of noise or vibration as far as reasonably practicable
- Many of the activities which generate noise can be mitigated to some degree by careful operation of machinery, use of tools and the management of personal behaviours. This may best be addressed by toolbox talks and site inductions.

2.4.4. Mitigation will be considered in the following order:

- BPM as identified above
- Specific noise and vibration control measures as identified below
- Where, despite the implementation of these measures, there are residents who would still be affected (e.g. shift workers, elderly, sick or disabled residents, etc.), the possibility of an offer of temporary relocation may be considered, if appropriate. These residents would be identified prior to works taking place. The recommendations of BS 5228: 2009+A1:2014 'Code of practice for Noise and Vibration Control on Construction and Open Sites', will be implemented, together with the specific requirements of this management plan.

2.5. Specific noise and vibration control measures

- 2.5.1. To mitigate and understand the noise and vibration impact of the proposed works and to effectively implement controls, a noise and vibration specialist with relevant competences and resources, will be appointed. The noise and vibration specialist will be required to undertake or coordinate the preparation of noise and vibration risk assessments for all works that require a prior consent under Section 61 of CoPA.
- 2.5.2. Regular site inspections are to be undertaken to ensure that suitable and appropriate mitigation measures are being implemented to reduce noise and vibration emissions
- 2.5.3. The appointed Principal Contractor will consult with the Environmental Health Departments at the relevant Local Planning Authorities prior to the commencement of construction works. From this, guidance will be obtained on their requirements for managing and controlling noise and vibration from construction works, including communication preferences for updates during the construction phase.
- 2.5.4. The appointed Principal Contractor is a member of the Considerate Constructors Scheme that is recognised by industry and the Government for encouraging firms to be sensitive to the environment.
- 2.5.5. Piling methods will be selected to carefully minimise noise and vibration impacts at receptors. Although the Applicant's preference is to use a rotary bored method at all piling locations, which results in low levels of vibration, it may not be possible due to the ground type or other engineering constraints. The piling methods that will be used for the Scheme will be confirmed during the detailed design stage.
- 2.5.6. Alternative piling methods such as vibratory piling or the Giken method will be considered at locations where methods producing the lowest levels of vibration are not feasible at certain locations. Methods that generate high levels of vibration such as percussive piling shall be avoided as far as practicable.
- 2.5.7. In proximity to the proposed Mottram Underpass, the use of percussive piling should be avoided unless geologically essential. If the use of percussive piling cannot be avoided, the following measures should be considered to lessen the impact of noise:
 - Pre-boring to reduce the duration of impulsive sounds and vibration
 - Enclosing the pile driving system in an acoustic shroud,
 - Preventing metal-to-metal contact during hammer strikes by introducing a non-metal dolly between the hammer and the driving helmet
 - Appropriate measures to minimise disturbance from 'other' sources of piling noise, such as the screeching of pulleys or guides, clanking of locking Kelly bars and ringing of piles
 - Consideration of working hours required for piling and the acceptability of these to local residents
 - Reducing the energy input per hammer strike, which would decrease vibration but increase the duration of the piling

- Setting noise and vibration control targets, accompanied by monitoring for compliance

2.5.8. In addition to specific requirements of the relevant local authority, the following more specific control measures will be adopted:

- The equipment and construction plant will comply with relevant EC Directives and corresponding UK legislation on noise emissions.
- Plant certified to meet the current EU legislation and should be not be louder than the noise levels provided in Annex C and D of BS 5228-1
- The methodology / technique for noisy operations will be carefully considered to ensure that noise is kept to a practicable minimum. This includes the reduction of the level of the working platform used in the construction of the Mottram Moor Link Road so that the cutting slopes provide additional screening of noise
- Undertaking only one noise-generating operation in sensitive areas at one time.
- Without prejudice to the other requirements of this section, the appointed Principal Contractor shall comply with the recommendations set out in BS 5228:2009 + A1:2014 Code of practice for noise and vibration control on construction and open sites, Part 1: Noise.
- Vehicles and mechanical plant, and their exhausts, will be fitted with effective exhaust silencers and maintained in a good and effective working order and operated in a manner to minimise noise emissions.
- All ancillary pneumatic percussive tools should be fitted with mufflers or suppressors as recommended by the manufacturers which should be kept in a good state of repair
- Machines in intermittent use will be shut down or throttled down to a minimum during periods between working.
- The site compound and static machines be sited as far as is practicable from noise sensitive buildings
- Consideration will be given to the 'off network' haulage routes that fall within the footprint of the Scheme, with specific reference made to the predicted number of vehicle movements to and from temporary welfare and storage sites, and location of the off network routes.
- Where demolition and other breaking out activities are necessary, percussive or impact breaking equipment / methods will only be used where other less noisy techniques are not reasonably practicable.
- Care would be taken when loading and unloading vehicles to avoid unnecessary noise.
- The speed of vehicle movements will be required to be reduced.
- Ensure that operations are designed to be undertaken with any directional noise emissions pointing away from noise-sensitive receptors.
- All generators and compressors will be "sound reduced" models fitted with acoustic linings / sealed acoustic covers where appropriate.
- Drop heights will be minimised when loading vehicles with rubble.

- Vehicles will be prohibited from waiting within the site with their engines running or alternatively, located in waiting areas away from sensitive receptors.
- Vehicles will not be permitted to wait or queue on the public highway with engines running
- Local hoarding, screens or barriers will be erected to shield particularly noisy activities. The relevant locations include the boundary of the construction compound and work sites close to sensitive receptors. The appointed Principal Contractor has indicated the planned use of a 3 m bund along the perimeter of the compound.
- Piling will be carried out with the method that minimises both noise and the transmission of vibration to sensitive receptors.
- Hours of operation will be strictly enforced, and will be in line with the Section 61 application agreed with the local authority and enforceable under this agreement.
- Wherever practicable, fabrication will be undertaken off site.
- As far as reasonably practicable noise from reversing alarms will be controlled and limited. Broadband reversing alarms will be used where possible.
- Plant and equipment liable to create noise and/or vibration whilst in operation will, as far as reasonably practicable, be located away from sensitive receptors.
- Where practicable, plant and materials will arrive on site during normal working hours.
- Where practicable plant will be left in position at the end of the day, thus minimising vehicle trips and minimising the required 'start up' and 'close down' durations.
- Cleaning of concrete mixers to not be undertaken by hammering the drums.

2.6. Noise monitoring

- 2.6.1. Noise monitoring will take the form of either unattended long-term noise monitoring, or short-term attended noise monitoring. The decision to use either type of monitoring will be based on the nature and location of the works being undertaken, and subject to discussion and agreement with the Local Planning Authority.

Unattended continuous noise monitoring

- 2.6.2. Noise monitors utilised will be Class 1 IEC 61672-1:2013 compliant. All monitoring equipment will be calibrated in accordance with either the relevant standards or the manufacturer / supplier recommendations as appropriate, but it is anticipated that this will be at least annually.
- 2.6.3. Unattended monitoring is considered to be required only when a risk of SOAEL exceedances is present at a given location. A maximum of 5 unattended noise monitors are envisaged at any one time during the construction programme. The following locations have been identified as potential sites for noise monitoring as works progress and the potential of disturbance arises:

- Four Lanes
- Old Hall Lane / Old Road
- Tollemache Close
- Meadowcroft / Littlefields
- Carrhouse Lane
- Woolley Bridge

2.6.4. Noise monitors may be set up at other locations in consultation with the relevant local authority.

Attended noise monitoring

2.6.5. To supplement the agreed unattended noise monitoring, attended noise measurements will be carried out on a risk-based approach. A programme of attended noise monitoring would be developed by the appointed Principal Contractor in consultation with the relevant local authority, for example at the commencement of a new significant activity. Any of the locations identified above (paragraph 2.6.3) may be subject to attended noise monitoring. However, attended monitoring is likely to focus on other areas with potential for adverse effects, such as A57 Hyde Road, Lodge Court, and Edge Lane.

2.7. Vibration control strategy

- 2.7.1. The appointed Principal Contractor will use BPM to control groundborne vibration and any consequent groundborne noise. The appointed Principal Contractor will undertake vibration risk assessments and identify where significant impact thresholds are expected to be exceeded. The relevant thresholds for determining significant impacts (for both building damage risk and human disturbance) will be sourced from relevant standards and guidance including BS 5228 Code of practice for noise and vibration control on construction and open sites. Part 2: 2009+A1:2014 Vibration, BS 7385 Parts 1 and 2, and BS 6472 Part 1, and the DMRB. Where relevant, other stakeholder imposed threshold values will also be complied with, particularly in the case of buried utilities infrastructure.
- 2.7.2. Peak Particle Velocity (PPV) magnitudes in excess of 1 mms^{-1} external to a building will be used as an indicator of a potential significant impact on occupants of a residential building (although higher levels will be tolerated in certain circumstances).
- 2.7.3. The appointed Principal Contractor will use BPM to control vibration levels so that the PPV measured at the base of any building in accordance with BS 7385 does not routinely exceed a level of 5 mms^{-1} (or 3 mms^{-1} for vulnerable buildings). Where these levels are predicted to be exceeded a more detailed assessment in accordance with the guidance provided in BS 7385 Parts 1 and 2 will be undertaken to further inform the level of risk of damage which may result in the commissioning of an appropriate defects survey.
- 2.7.4. Works expected to generate component PPVs above 1 mms^{-1} within buildings will be notified to the relevant local authority in the relevant Section 61 application along with enhanced monitoring proposals.

- 2.7.5. In addition, The appointed Principal Contractor will apply any appropriate measures to protect medical, scientific and commercial premises, or properties that merit increased protection due to their structure or status that are especially sensitive to vibration.
- 2.7.6. Vibratory rolling will be minimised where practicable within 20m of sensitive receptors to avoid perceptible vibration.

2.8. Vibration monitoring

- 2.8.1. Vibration impacts generated by the works will be managed on a risk-based approach as outlined above. Vibration monitoring may be undertaken during significant vibration generating construction activity.
- 2.8.2. Vibration monitoring will take place in proximity to any impact piling activities that occur close to the proposed Mottram Underpass and where specified by the design. The following locations have been identified as potential sites for vibration monitoring as works progress and the potential of disturbance arises:
- Old Road
 - Tollemache Close
- 2.8.3. Additional vibration monitoring locations may be established at other locations in consultation with the relevant local authority.

2.9. Section 61 applications and compliance

Development of Section 61 consent applications

- 2.9.1. For noise and vibration, the appointed Principal Contractor will seek formal consent in accordance with Section 61 of the Control of Pollution Act 1974 to their proposed methods of work and to the steps proposed in order to minimise noise and vibration nuisance. Formal consent will be sought for any out of hours working and for any daytime works which have potential to generate significant effects.
- 2.9.2. The appointed Principal Contractor will consult on minimising nuisance through the proposed noise and vibration control measures with the relevant local authority through the development of the EMP (Second iteration).
- 2.9.3. Section 61 applications will contain the key construction working methods and the proposed mitigation measures, a plant list and information on the predicted noise and vibration levels generated by the works.

2.10. Communications

Stakeholder communication

- 2.10.1. The appointed Principal Contractor will maintain and develop a Community Engagement Plan in consultation with stakeholders.

Complaints

- 2.10.2. All complaints received will be recorded. All complaints will be investigated, and feedback will be given to the complainant. Where necessary, corrective actions will be implemented. The relevant local authority will be advised of any justified complaint, actions taken to investigate, and any actions found necessary to put in place.

Records

- 2.10.3. Documentation and records will be produced, filed and maintained to record the activities and processes used to manage noise and vibration.

Annex B.3: Construction Water Management Plan

A57 Link Roads

TR010034

**7.2 Environmental Management Plan
(First iteration)**

**Annex B3: Outline Construction Water
Management Plan**

APFP Regulation 5(2)(a)

Planning Act 2008 Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

January 2022

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1. Introduction

1.1 Purpose of document

- 1.1.1 This Outline Construction Water Management plan (CWMP) sets out a framework to be used by the appointed Principal Contractor when preparing the final CWMP for the A57 Link Roads Scheme prior to the commencement of works.
- 1.1.2 The Scheme is a Nationally Significant Infrastructure Project (NSIP) and this Outline CWMP has been developed in support of National Highways' application for a Development Consent Order (DCO) to authorise construction, operation and maintenance of the Scheme. An Environmental Impact Assessment (EIA) has been carried out for the Scheme and is reported in the Environmental Statement (ES). The ES and other DCO documents prepared to support the application are available through the Planning Inspectorate project document library: [REDACTED]
- 1.1.3 This Outline CWMP is based on the commitments set out in the ES for the Scheme, and specifically those in the Environmental Management Plan (First iteration) (APP-183) and the Register of Environmental Actions and Commitments (REAC) (REP1-037).
- 1.1.4 The CWMP is one of a number of management plans that must be included in the EMP as required by Requirement 4 in Schedule 2 of the draft Development Consent Order (DCO).
- 1.1.5 The principal purpose of a CWMP is to set out how construction works will be managed in a way that minimises the risk of adverse effects on receptors in the water environment. Receptors include watercourses, lakes, groundwater bodies and surface water features and associated habitats and species. The CWMP will also cover management of flood risks to (and generated by) the Scheme.

1.2 Overarching guidance

- 1.2.1 All construction activities due to the Scheme will be undertaken in accordance with the relevant best practice guidance. These include the 'Guidance for Pollution Prevention (GPPs) and CIRIA C532 'Control of Water Pollution from Construction Sites' (refs 1 and 2). In particular the Scheme will follow the good environmental practice guidance detailed in GPP5: 'Work and maintenance in or near water' (ref. 3).

2. Receptors

2.1 Introduction

2.1.1 This section of the CWMP will set out the receptors in the surface water environment potentially exposed to the effects of construction activities. In accordance with the source, pathway receptor model, the relevant pathways and receptors will be assessed in order to develop suitable and effective control measures. This will allow specific hotspots for surface water pollution and contamination to be identified efficiently, including those area liable to flooding, thereby reducing risk of adverse effects on surface waters.

2.2 Surface water feature

2.2.1 This section of the CWMP will map and list in summary form the surface water features that are receptors to the Scheme. The River Etherow, Hurtsclough Brook and Glossop Brook (Main Rivers), Tara Brook and a number of smaller unnamed watercourses (Ordinary Watercourses) are the principal surface water receptors.

2.3 Groundwater feature

2.3.1 This section of the CWMP will map and describe the groundwater that is a receptor to the Scheme. The Manchester and East Cheshire Carboniferous Aquifers Water Framework Directive water body is the underlying groundwater body.

2.4 Areas of fluvial and surface water flood risk

2.4.1 This section of the CWMP will summarise flood risks associated with the Scheme. It will provide sufficient spatial context for people planning works in high risk areas to ensure minimal effects on the surface water environment, and to implement effective and safe responses to flood events. It will be informed by the Scheme Flood Risk Assessment (APP-056) and subsequent updates of that document.

3. Management Plan

3.1 Introduction

3.1.1 This section of the CWMP will set out the details of how construction activities will be managed to protect the surface water environment from adverse effects. Key components of this plan are briefly set out below.

3.2 Regulation of construction activities affecting the surface water environment

3.2.1 Authorisation to undertake temporary and permanent works in the Main River, bylaw distance of the Main River, ordinary watercourses and (where appropriate) floodplain will be sought under the appropriate protective provisions for the protection of the Environment Agency (EA) and drainage authorities (for this Scheme, Tameside Metropolitan Borough Council and Derbyshire County Council). Drafts of these protective provisions are set out in Schedule 9 parts 3 and 7 of the draft Development Consent Order (REP1-041). These permissions will set out how any adverse effects of construction activities on the water environment will be managed.

3.3 Methods of work

3.3.1 Methods of works for construction activities with the potential to affect the surface water environment will be prepared. These will include instructions on how these activities will be undertaken in a way that effectively manages their potential adverse effect on surface waters. These methods of work will be informed by a) the guidance set out in the CWMP, and b) the implementation of best practice by the Principal Contractor.

3.4 Fluvial and surface water flood risk

3.4.1 Authorisation for temporary or permanent works will be sought from the relevant regulatory body (as set out in section 3.2 above).

3.4.2 The information supporting applications for all works in Flood Zone 3 (shown in Figure 13.4 of the Environmental Statement (APP-148)), or areas known to be vulnerable to surface water flooding will describe how the effects of flood risk to (and generated by) the Scheme will be managed effectively. Measures will include:

- Registering with EA Floodline Warnings Direct and implementing an appropriate response strategy.
- Having signs to clearly demarcate the flood zone extent.
- Ceasing works during flood events in areas of know flood risk.
- Not storing any hazardous materials or concrete washout facilities in areas prone to flooding.
- Removing all waste immediately and having spill kits nearby.

3.5 Abstraction from surface waters

3.5.1 If construction activities require abstraction of water from surface sources, assessments will be completed and, where exemptions do not apply, licences sought from the EA (ref. 6).

3.6 Abstraction from groundwater

3.6.1 It is expected that abstraction of groundwater will be required as part of the construction activities and groundwater drainage during the operational phase of the Scheme. This section will outline the locations where dewatering is likely to be required and associated mitigation measures and monitoring that will be implemented.

3.6.2 Licences for these abstractions (where exemptions do not apply) will be sought from Tameside Metropolitan District Council and the Environment Agency (ref. 6).

3.7 Discharge to surface waters

3.7.1 If construction activities involve discharge of water to surface (or ground) authorisation will be sought from the Environment Agency and Tameside Metropolitan District Council in accordance with advice on (and exemptions from) environmental permits (ref. 5).

3.7.2 In particular, guidance from the regulatory position statement on excavations to surface water (ref.6) will be followed when undertaking dewatering activities.

3.8 Sewage effluent

3.8.1 The appointed Principal Contractor will manage the disposal of foul and sewage effluents appropriately. It will be preferable to connect to a local foul sewer system, but if this is not possible then a local package treatment works will be deployed, and appropriate authorisation will be sought.

3.9 Managing surface water runoff

3.9.1 Rainfall onto construction sites will generate 'dirty' (most often sediment laden) surface water runoff. Wherever practical clean and dirty runoff will be kept separate to minimise the volume of dirty water. Appropriate water treatment measures (e.g. attenuation) will be implemented to ensure runoff returned to natural surface waters does not cause pollution or damage the water environment. Where appropriate, methods of works will set out how surface water will be managed. Dynamic risk assessments will be undertaken for temporary/unplanned works; appropriate methods of work will be developed and implemented.

3.10 Pollution prevention measures

3.10.1 Best practice and guidance will be applied to prevent pollution. Where appropriate, pollution prevention guidelines will be adhered to (e.g. ref 1).

- Fuel will be handled and stored in accordance with the Control of Pollution Regulations.

- The run-off of silt and contaminants will be controlled by minimising land disturbance and digging earthworks to retain, filter and cut off flows of surface water.
- Maintenance of plant, vehicles and equipment will be carried out at least 20 m from any watercourse or drain where possible. Spill kits, drip trays and drain seals will be used where this is not possible.

3.11 Water use minimisation measures

3.11.1 The Scheme will apply the water use minimisation hierarchy. The highest reasonably practicable option will always be adopted. The hierarchy is as follows (from most to least preferred option):

- Eliminate
- Substitute
- Reduce
- Reuse
- Recycle
- Disposal

3.12 Monitoring

3.12.1 Monitoring will be developed by the appointed Principal Contractor and would comprise regular visual inspection of construction sites and receiving watercourses to assess the effectiveness of mitigation measures to avoid and minimise pollution risk to the water receptors.

3.12.2 Groundwater levels will be monitored during any periods of dewatering along with water quality of any discharged groundwater. The groundwater monitoring strategy will be developed during the Detailed Design stage by the appointed Principal Contractor in consultation with the Environment Agency.

3.13 Long term maintenance and management of drainage network

3.13.1 To achieve an efficient and effective maintenance regime, a catchment-based approach will be developed by National Highways, targeting all detention ponds, sediment catchpits and all ditches along the whole road catchment rather than individual sediment catchpits/ditches.

3.13.2 Based on industry guidance (ref 6.) the following cyclic regime is proposed:

- Sediment catchpits – Clear/empty silt and debris from catchpits annually.
- Ditches – Clear ditches by removing material that could impair operation – every 5 years.
- Balancing / attenuation ponds – Clear silt and all material that could impair operation – every 10 years.

3.13.3 The long-term management and maintenance regime of drainage assets including sediment catchpits, ditches, and attenuation ponds will be developed

by National Highways and contained within the Environmental Management Plan (Third iteration) which relate to the post construction and operational stage of the Scheme. The EMP (Third iteration) will comprise a cyclic maintenance of drainage assets to:

- Prolong asset life
- Deliver sustained performance
- Keep assets safe for customers

3.13.4 Highways England has a legal obligation under the Highways Act 1980 and the Infrastructure Act 2015 to maintain its assets appropriately.

4. Emergency measures

- 4.1.1 The works will follow an Emergency Spillage Response Plan and an Emergency Flood Response Plan developed by the appointed Principal Contractor before the start of construction and secured under Requirement 4 of the DCO (REP1-041).

5. References

1	[Redacted]
■	[Redacted]
■	[Redacted]
■	[Redacted]
■	[Redacted]
■	[Redacted]

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Annex B.4: Site Waste Management Plan

A57 Link Roads

TR010034

**7.2 Environmental Management Plan
Annex B.4 - Outline Site Waste
Management Plan**

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
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1. Introduction

- 1.1.1 This Outline Site Waste Management plan (SWMP) sets out a framework to be used by the appointed Principal Contractor when preparing the detailed SWMP for the A57 Link Roads Scheme prior to the commencement of works.
- 1.1.2 The Scheme is a Nationally Significant Infrastructure Project (NSIP) and this Outline CWMP has been developed in support of National Highways' application for a Development Consent Order (DCO) to authorise construction, operation and maintenance of the Scheme. An Environmental Impact Assessment (EIA) has been carried out for the Scheme and is reported in the Environmental Statement (ES). The ES and other DCO documents prepared to support the application are available through the Planning Inspectorate project document library: [REDACTED]
- 1.1.3 This Outline SWMP is based on the commitments set out in the ES for the Scheme, and specifically those detailed within the Environmental Management Plan (First iteration) (APP-183) and Register of Environmental Actions and Commitments (REAC) (REP1-037).
- 1.1.4 An EMP (Second iteration) will be produced by the appointed Principal Contractor to manage environmental effects during the construction phase of the Scheme, at which stage the REAC will be combined so they become a single document. This will broadly follow the EMP (First iteration) and will reflect the mitigation measures set out in the REAC requirements.
- 1.1.5 In December 2018, the Government published the Resources and Waste Strategy for England. The strategy aims to put sustainable resource management at the centre of its ambitions on resources and waste. This includes the preservation of material resources by minimising waste, promoting resource efficiency and moving towards a Circular Economy.
- 1.1.6 The strategy provides longer-term policy direction in line with the United Kingdom's 25 Year Environment Plan, the United Kingdom's goals for improving the environment.
- 1.1.7 Drafting and adhering to a SWMP ensures measures are taken during the design stage to support the Circular Economy and move waste up the waste hierarchy, both of which support the ambitions of the Resources and Waste Strategy. During the construction stage, a SWMP ensures the Scheme it is written for records all relevant waste Duty of Care information, helping to prevent waste crime from occurring, which protects human health and the environment.
- 1.1.8 This outline SWMP supports Chapter 10 Material assets and waste of the ES (APP-066) and has been prepared to demonstrate how waste generated during the Scheme will be minimised and controlled to reduce impacts during the construction phase.
- 1.1.9 Preliminary information included in this outline SWMP will be updated and used by the Principal Contractor to develop the SWMP at Detailed Design stage. The detailed SWMP will be included within Annex C of the Scheme's EMP (Second iteration).

- 1.1.10 The detailed SWMP will ensure that all waste streams are dealt with appropriately and as sustainably as possible. It will identify the types of waste to be produced by the Scheme and forecast the amounts to be generated (see **Table 1**). In Chapter 10: Material assets and waste of the ES (APP-066), the material assets used, and waste generated through construction of the Scheme were estimated from the available design information (contained in the Bill of Quantities). These quantities have been included in Table 1; however they will be updated at the Detailed Design stage as the design and construction programme becomes more advanced.
- 1.1.11 Throughout construction, quantities of waste produced will be recorded and the SWMP updated accordingly (see **Table 2**).

2. Waste Hierarchy

- 2.1.1 The EU Waste Framework Directive 2008/98/EC (WFD, 2008) sets out the basic concepts and definitions in relation to waste management. Article 4 of the directive sets out five steps for dealing with waste, ranked according to environmental impact - the 'waste hierarchy'.
- 2.1.2 Prevention, which offers the best outcomes for the environment, is at the top of the waste hierarchy, followed by preparing for reuse, recycling, other recovery and disposal, in descending order of environmental preference. These principles will be applied in waste prevention and management for the Scheme.
- 2.1.3 The waste hierarchy aims to ensure delivery of the best environmental outcome, by gaining the maximum benefits from material assets and generating the minimum amount of waste.
- 2.1.4 The mitigation section of ES Chapter 10 details specific measures that will be carried out on the Scheme, following the priority order of the waste hierarchy. The sections below set out generic steps that can be taken to follow the waste hierarchy.

Waste Prevention

- 2.1.5 Prior to the start of any works, primary aims will be to avoid the creation of waste. Actions taken during the detailed design phase and prior to construction have the greatest potential to reduce waste.
- 2.1.6 The appointed Principal Designer and Principal Contractor will work together to seek to optimise material efficiency, in accordance with the Waste and Resources Action Programme (WRAP) design out waste principles. Such efficiencies may include:
- use of standardised components and prefabricated materials
 - avoidance of using hazardous materials, which could become hazardous wastes
 - specifying materials for design which generate limited wastes
 - prioritising use of secondary or recycled materials over primary materials
 - consideration of the life cycle for all materials used.

2.1.7 Waste prevention will also be achieved by putting measures in place to minimise and/or reduce the potential for waste such as:

- ensuring only correct amounts of materials are delivered
- use of 'just in time' deliveries onto the Scheme to reduce storage requirements and minimise the potential for accidental damage or weather damage
- maintaining good communication with suppliers and trades people (ensuring returns are acceptable, and no abortive works are undertaken)
- management of subcontractors to ensure they adhere to appropriate waste minimisation procedures (consider penalties for non-compliance)

2.1.8 These waste prevention measures will be detailed in full and secured by the detailed SWMP.

Preparing for reuse

2.1.9 Once waste generation has been prevented or minimised wherever possible, then opportunities for the reuse of excavated materials will be considered. Opportunities may include:

- the reuse of road surfacing, paving, concrete and rubble in temporary haul roads or as make-up for the new road layout
- use of soil improvement techniques to improve the engineering properties of excavated materials to increase their potential for retention on the Scheme
- seeking opportunities to reuse unsuitable or surplus excavated materials outside of the DCO boundary on local developments concurrent to the construction phase of the Scheme.

2.1.10 An environmental permit or a registered exemption under the Environmental Permitting (England and Wales) Regulations 2010 or management in accordance with the CL:AIRE Definition of Waste: Code of Practice (DoW CoP) will be required to enable reuse of suitable excavated materials in accordance with the current waste regulatory framework (both on or outside of the Scheme's redline boundary).

Recycle

2.1.11 Following best endeavours to prevent generation of waste and promote the reuse of excavated materials, waste may still be generated as a result of the Scheme. In this case, recycling of waste will be considered to allow use either on or off the Scheme.

2.1.12 To promote recycling of waste during construction it will be segregated onsite (through provision of containers for plastics, cardboard, timber, metal, and rubble) and/or by waste management contractors at offsite waste sorting facilities.

3. Proximity Principle

- 3.1.1 As part of their construction assessment, the appointed Principal Contractor will include the option of using local facilities for waste management, in line with the Proximity Principle, which is to manage waste as close to the point of generation as possible, so as to reduce the carbon footprint of managing waste from the Scheme.

4. Waste targets

- 4.1.1 As identified in ES Chapter 10, there are several targets already in place for the Scheme, these include:
- 99% of the excavated soil to be reused onsite, which would reduce the need for materials and generation of waste to be managed or disposed of offsite and would ensure the Scheme achieves a cut/fill balance
 - a commitment to achieve, at minimum, 30% recycled content in material assets used on the Scheme
 - a commitment to recycle or recover 95% of wastes that leave site, therefore diverting them from landfill
- 4.1.2 At detailed design or during construction further targets and/or Key Performance Indicators may be added to those above.

5. Waste storage onsite

- 5.1.1 Wastes will require segregation on the Scheme. To facilitate this:
- an appropriate number of segregation areas will be established.
 - at these areas, waste streams will require segregation into separate containers and be removed to a suitably licensed waste facility.
 - each container will require clear labelling, indicating the type of waste contained within
 - waste must be stored in a safe and controlled manner, without causing harmful impacts to human health and the environment. Containers used to store waste must prevent leaks or spills.

Hazardous Waste

- 5.1.2 Although contaminated soil from excavations are not expected, if any is encountered, risks to human health and controlled waters from encountering it will be mitigated by the Principal Contractor as detailed in the EMP.

6. Waste licensing and transport

- 6.1.1 The reuse or treatment of waste onsite will require an environmental permit or a registered exemption under the Environmental Permitting (England and Wales) Regulations 2010 or management in accordance with the CL:AIRE DoW CoP.

- 6.1.2 Wastes requiring off-site management shall be transported from the Scheme by a waste carrier registered under the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991.
- 6.1.3 The appointed Principal Contractor and registered carrier will complete descriptions of each load of waste removed using either a Waste Transfer Note or a Hazardous Waste Consignment Note, as appropriate.
- 6.1.4 Where multiple loads of waste, having identical physical and chemical characteristics, are to be removed from site, the Environment Agency may agree to such movements being covered by a single Waste Transfer Note or Hazardous Waste Consignment Note, where they are all transferred to the same permitted facility.

7. Waste documentation and monitoring

- 7.1.1 The appointed Principal Contractor will ensure that all waste management is undertaken in accordance with the current waste regulatory framework, following appropriate 'duty of care' procedures and that waste management subcontractors are operating under the appropriate procedures and or licences, in accordance with Section 34 of the Environmental Protection Act 1990. This includes:
- preventing unauthorised or harmful treatment, placement or disposal of waste
 - preventing the escape of waste from their control
 - ensuring the transfer of waste is only to an authorised person or a person for authorised transport purposes where there is a written description of the waste to avoid a contravention of any environmental permits.
- 7.1.2 Detailed records will be kept onsite and reviewed periodically (biannually as a minimum). These records include:
- the SWMP, updated throughout construction when required.
 - environmental permit, registered exemption or CL:AIRE DoW CoP documentation.
 - copies of licences, registration numbers and/or permit numbers obtained from each waste contractor
 - waste transfer notes and/or consignment notes to include all the following details:
 - the type of waste
 - list of waste (LoW) code
 - type of container waste is in
 - name of company collecting the waste
 - carrier licence number and vehicle registration
 - date, time and location where the waste was collected
 - waste transfer and or consignment note number

- amount (by estimated volumes and calculated weight where applicable) of material
- name of the licensed facility to which the waste has been transferred (including contact details and licence number)
- details of checks and or audits carried out on waste management procedures and details of any changes implemented as a result

7.1.3 A register of all named waste carrier and management facilities will be recorded within the SWMP during the construction stage (**Table 3** provides an example of the record sheet that will be used). No waste carrier or management facility will be used unless they are listed in the SWMP and their licensing and documentation checked and verified.

8. Materials Management Plan

8.1.1 Material excavated from the Scheme will also be recorded and managed using a Materials Management Plan (MMP) which will form part of the EMP (Second iteration). An Outline MMP has been prepared and included as Annex C5 of the EMP (First iteration) (APP-183). The MMP shall be developed in accordance with the CL:AIRE DoW CoP and detail:

- where material is excavated from and the amount (by estimated volumes and calculated weight where applicable) of material
- any treatment and or remediation undertaken
- the verification sampling and analysis undertaken to demonstrate chemical and geotechnical suitability for reuse
- mitigation measures implemented to minimise the amount of material removed from the Scheme
- the final placement of materials (including reuse on and offsite or disposal)

9. Roles and responsibilities

9.1.1 Clear staff responsibilities will be defined for the SWMP. Reference will also be made to the roles and responsibilities defined in the EMP, these are included in Chapter 2 of the EMP (First iteration) (APP-183) and will be updated for the EMP (Second iteration).

9.1.2 The environmental manager appointed by the Principal Contractor will be responsible for updating and distributing the SWMP.

9.1.3 The environmental manager will ensure that the SWMP is communicated to staff, through site inductions and toolbox talks, to ensure that procedures are implemented.

10. Training and Awareness

- 10.1.1 All subcontractors and staff will be made aware of the SWMP and their responsibility to ensure compliance with it, during their induction. Copies of the SWMP will be available in all site offices and/or compounds.
- 10.1.2 Additional training, toolbox talks, or briefings will be undertaken periodically to inform staff of any updates to the SWMP, current legislation requirements and to provide feedback following reviews and audits, particularly where there have been any issues identified.

Table 1 – Forecast Site Waste

Waste stream	LoW code	Forecast amount m ³	Forecast amount (breakdown) m ³					
			Reused onsite	Reused offsite	Recycled onsite	Recycled offsite	Recovered offsite	Landfilled
Soil & stones	17 05 04	531,543	531,543					
Soil & stones	17 05 04	2,143				2,035.85		107.15
Mixed waste	17 09 04	575				546.25		28.75
Mixed municipal waste	20 03 01	381				361.95		19.05
Plastic	17 02 03	171				162.45		8.55
Timber	17 02 01	529				502.55		26.45
Mixed metals	17 04 07	286				271.7		14.3
Paper and cardboard	20 01 01	25				23.75		1.25

Quantities provided by the appointed Principal Contractor for outline design. See paragraph 1.1.10 in Section 1 of this Outline SWMP for details.

Table 2 – Actual Site Waste (example table)

Waste stream	LoW code	Actual amount m ³	Actual amount (breakdown) m ³					
			Reused onsite	Reused offsite	Recycled onsite	Recycled offsite	Recovered offsite	Landfilled

Table 3 – Register of waste carriers and management facilities (example table)

Waste details		Waste carrier/broker			Management facility		
Waste stream	LoW code	Name	Registration No	Expiry date of registration	Facility name	Licence or permit No	Conditions of licence checked?

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Annex B.5: Materials Management Plan

A57 Link Roads

Scheme Number: TR010034

**7.2 Environmental Management Plan (First
iteration)**

**Annex C.5 - Outline Materials
Management Plan**

APFP Regulation 5(2)(a)

Planning Act 2008

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1. Introduction

1.1 Purpose

- 1.1.1 This Outline Materials Management Plan (MMP) sets out a framework to be used by the appointed Principal Contractor when preparing the detailed MMP for the A57 Link Roads Scheme prior to the commencement of works.
- 1.1.2 The Scheme is a Nationally Significant Infrastructure Project (NSIP) and this Outline MMP has been developed in support of National Highways' application for a Development Consent Order (DCO) to authorise construction, operation and maintenance of the Scheme. An Environmental Impact Assessment (EIA) has been carried out for the Scheme and is reported in the Environmental Statement (ES). The ES and other DCO documents prepared to support the application are available through the Planning Inspectorate project document library: [REDACTED]
[REDACTED]
- 1.1.3 It has been prepared to describe how material resources will be managed in accordance with best practice requirements. The appointed Principal Contractor will use this Outline MMP as a framework for producing the detailed Materials Management Plan (MMP) for use during the construction of the Scheme.
- 1.1.4 This Outline MMP is based on the commitments set out in the ES for the Scheme, and specifically those detailed within the Environmental Management Plan (First iteration) (APP-183) and Register of Environmental Actions and Commitments (REAC) (REP1-037).
- 1.1.5 An EMP (Second iteration) will be produced by the appointed Principal Contractor to manage environmental effects during the construction phase of the Scheme, at which stage the REAC will be combined so they become a single document. This will broadly follow the EMP (First iteration) and will reflect the mitigation measures set out in the REAC requirements.
- 1.1.6 The purpose of the MMP is to describe the procedures by which site generated materials will be managed during the construction of the Scheme in accordance with the current regulatory regime and the requirements of the CL:AIRE Definition of Waste: Code of Practice (DoWCoP).
- 1.1.7 This Outline MMP will be updated by the appointed Principal Contractor into a detailed MMP prior to commencement of works in accordance with Requirement 4 in Schedule 2 of the draft Development Consent Order (dDCO) (REP1-041). The detailed MMP will be one of a number of management plans that will be included in Annex C to the EMP (Second First iteration) under Requirement 4.
- 1.1.8 The appointed Principal Contractor will take all reasonable steps to ensure that materials are handled efficiently and managed appropriately. Procedures will be adopted by the appointed Principal Contractor during construction to control the use of materials and further reduce any impact. An MMP Verification Report (as required by DoWCoP) will be produced to demonstrate compliance with the MMP and record material use.
- 1.1.9 An Outline Site Waste Management Plan (SWMP) is provided as Annex C4 of the EMP (First iteration), which describes how waste will be managed in line with legal and best practice requirements.

1.2 Structure of the Materials Management Plan

1.2.1 This Outline MMP includes:

- Section 1: provides an introduction, description of the purpose of this document and roles and responsibilities in its implementation.
- Section 2: details the estimated quantities of earthworks materials expected to be generated by the Scheme and the material resources required for construction.
- Section 3: outlines how materials will be assessed to confirm they are suitable for use in the Scheme.
- Section 4: details procedures for the management and tracking of materials.

1.3 Project team roles and responsibilities

1.3.1 This Outline MMP provides the framework to be used as a basis from which to develop the MMP (construction stage). The appointed Principal Contractor will confirm exact roles and responsibilities however, key likely roles and responsible are summarised in Table 1-1. These will be set out in Section 2 of the EMP (Second iteration) and within the detailed MMP.

Table 1-1: MMP specific roles and responsibilities during construction

Role	MMP responsibility
Principal Contractor's Construction Project Manager	<ul style="list-style-type: none"> • Approval for sign off of the MMP for the relevant phase of works. • Ensure that all controls specified within the MMP are implemented by employees and sub-contractors.
Principal Contractor's Environmental Manager	<ul style="list-style-type: none"> • Ensure that all materials and waste elements of the EMP are complied with during construction, including implementation and updating of the MMP, communication the requirements of the MMP to all parties involved and the collation of tracking and verification data required under the MMP and producing the Verification Report and submitting to CL:AIRE • Undertake site inspections to monitor compliance with the environmental licences/consents for the works and the measures within the MMP. • Implementation of the SWMP throughout the construction of the Scheme.
Qualified Person (registered with CL:AIRE)	<ul style="list-style-type: none"> • Review of MMP and supporting documentation and submission of declaration to CL:AIRE.

1.4 Design decisions

1.4.1 Decisions made in the Detailed Design stage of the Scheme will impact on the quantity and types of materials used.

1.4.2 In general, the following measures will be implemented during the design and construction phases of the Scheme, where technically, financially and environmentally practicable:

- Design-out and prevent waste arising
- Re-use excavated earthworks materials within the Scheme
- Recycle demolition materials arising from the construction of the Scheme and reuse within the Scheme whenever possible
- Divert waste from landfill through offsite recycling and recovery.
- Use recycled and secondary materials in the construction of the Scheme.

- 1.4.3 Construction of the Scheme will require excavation in the form of cuttings for the highway and reuse of material to form embankments. The design aims for a 'cut and fill' balance as far as practicable. This will reduce the requirement to import fill materials and remove materials from site as waste.
- 1.4.4 Opportunities will be sought to maximise the use of site won materials through the re-use, recycling and recovery of site won materials in line with the waste hierarchy.
- 1.4.5 It has been assumed, that all fill will be sourced from excavations within the Scheme.
- 1.4.6 During the Detailed Design stage and construction of the Scheme, the contractor will make decisions regarding to efficient material resource use and management and record those decisions appropriately as described in Section 4 of this MMP.

2. Earthworks materials

2.1 Overview

- 2.1.1 A variety of different materials will be required for the Scheme. The Scheme has been and, through detail design will continue to be, designed to reduce the volumes of both the waste materials generated and the imported construction materials, where practicable, by reusing or recycling the available existing materials within the Scheme.
- 2.1.2 This Outline MMP provides estimates of the quantities of earthworks materials arising during construction of the Scheme, the likely cut and fill balance and any surplus requiring alternative management.

2.2 Earthworks balance

- 2.2.1 The Scheme has been designed to maximise the reuse of site won materials and to reduce the quantity of imported materials required. In addition, the design seeks to reduce the volume of material requiring removal from site.
- 2.2.2 In Chapter 10: Material assets and waste of the ES (APP-066), the material assets used, and waste generated through construction of the Scheme were estimated from the available design information (contained in the BoQ). These quantities will be updated at the Detailed Design stage as the design and construction programme becomes more advanced. As such, Chapter 10 of the ES was based on the preliminary Scheme cut, fill and surplus quantities which arise from the earthwork figures are as follows:
- Cut: 533,686m³
 - Fill: 531,543m³

- Removal off site: 2,143m³

2.2.3 2,143m³ of material will require removal from site and is comprised of three types of material including clay, mudstone and limestone. Measures will be taken to reduce the volume of material requiring removal off site. These measures include:

- Highway alignment changes to reduce cut volumes.
- Changes to landscape earthworks cross section and slope design to utilise site-won materials through detailed design.
- Changes to cut slope design and cross sections at locations in deep cutting to reduce cut volumes.
- Utilisation of excavated limestone materials in pavement construction.

2.3 Classification of materials

2.3.1 The appointed Principal Contractor will develop a geotechnical and chemical specification/s for material suitable to be reused on site, in accordance with the Specification for Highway Works³. Testing will be undertaken during construction to confirm that the materials used meet the specification requirements.

2.3.2 Any site won materials requiring off-site disposal (i.e. not meeting the specification/s or surplus to requirements) will be characterised in accordance with the Environment Agency's Technical Guidance WM3. The management of such waste will be governed by relevant waste legislation and recorded in the SWMP.

2.3.3 Materials unsuitable for reuse on site will be managed in accordance with the Outline SWMP in Annex C4 of the EMP (First iteration).

2.3.4 The specification/s will be derived so the reused materials are suitable for their intended use and do not pose a significant risk to end site users or controlled water receptors. The earthworks specification will also set out a verification system ensuring that only materials found suitable for use will be classed as acceptable for construction works.

2.4 Land contamination

2.4.1 There is potential for unsuitable materials to be encountered during construction works due to levels of contamination. Details of areas of concern with respect to land contamination are presented in ES Chapter 9 Geology and soils (APP-065). In addition, unexpected contamination may be encountered during construction.

2.4.2 To date, no significant sources of contamination have been identified on site. However, any required remediation works will be undertaken during construction followed by a verification process set out in a remediation implementation and verification plan. Verification may involve monitoring or targeted investigations to confirm that the remediation works have achieved the objectives. On completion of the works, a verification report will be prepared. The remediation strategy, remediation implementation and verification plan and verification report will feed into the detailed MMP.

Unexpected contamination

- 2.4.3 Areas of unexpected contamination may be encountered during construction. An action plan will be developed to set out procedures and responsibilities when unexpected contamination is encountered. This will form part of the contingency plans identified in the MMP. As a minimum the action plan should allow for assessment of encountered contamination in liaison with a suitably qualified land contamination specialist, revision of health and safety measures, identification of a designated storage area within the site compound, sampling and testing of the potentially contaminated materials part of materials classification process and verification process.

3. Materials management on site

3.1 Materials storage and segregation options

- 3.1.1 The contractor will store excavated soils and earthworks materials on site in stockpiles with location and volume recorded. Movement of soils into and out of stockpiles will be recorded via the tracking system
- 3.1.2 Demolition materials that are to be recycled for use onsite shall be separated at source and stored separately both before and after the recycling process.

3.2 Reporting and auditing

- 3.2.1 The effectiveness of the MMP depends upon enforcement on site by the Environmental Manager and Site Materials and Waste manager. Responsibility for the formal recording of material movements lies with the Site Materials and Waste Manager.
- 3.2.2 The contractor will maintain a record of all materials that come to site. The quantity of re-used, recycled and secondary aggregate should be recorded, alongside details of the supplier, the producing facility and records that demonstrate that the material meets all relevant technical and regulatory requirements.
- 3.2.3 The contractor will continually review the types of surplus materials being produced and amend the site set up to minimise wastage rates and maximise reuse or recycling.

3.3 Movement and Tracking System

- 3.3.1 The movement and reuse of materials within the site will be tracked via the tracking system that will include (but not be limited to):
- Annotated plans of the site identifying excavation areas, stockpile locations, any treatment areas and placement locations
 - Inspection and testing procedures and records used to verify materials are suitable for reuse on site
 - Tracking forms and control sheets to record the movement of materials, including delivery tickets if materials are moving between sites

- Duty of Care documentation for any materials removed from site as waste (as recorded in the SWMP).

3.4 Review of the MMP

- 3.4.1 The contractor will review the MMP and update it accordingly. In the case of any significant design changes or significant changes to the volume of materials to be reused (e.g. $\pm 10\%$) the MMP will be updated and redeclared to CL:AIRE.
- 3.4.2 In the absence of significant design or other changes, the contractor will review the MMP at least once every ~~six~~ four months during the construction of the Scheme.
- 3.4.3 Minor changes to the MMP and its implementation will be captured via the Verification Report.

3.5 Site inspections

- 3.5.1 The site manager or nominated deputy will undertake a daily inspection of the construction areas including all areas used for materials management. Any issues will be recorded in the daily log along with any corrective action taken.

3.6 Training

- 3.6.1 The contractor will incorporate the MMP requirements into the site induction and provide on-site instruction of appropriate separation, handling, recycling, re-use and return methods to be used by all parties at all appropriate stages of the Scheme.
- 3.6.2 The contractor will ensure that all personnel working on the site, including subcontractors, are inducted and understand the requirements of the MMP in relation to the work they are undertaking.

3.7 Supporting documentation

- 3.7.1 The following provides a non-exhaustive list of the expected documentation requirements to support the completion of an MMP for the Scheme:

- Invasive Species Management Plan
- Earthworks Strategy
- Remediation Strategy including a verification plan
- Earthworks Specification
- Cut/Fill requirements and earthworks movements plan
- Tracking System
- Qualified Person Declaration
- Verification Report Plan
- Soils Handling Management Plan

- 3.7.2 The supporting documentation referenced will be prepared separately and references incorporated into the MMP as it becomes available. The MMP will be reviewed and updated during detailed design of the Scheme.

- 3.7.3 No excavation works will commence on site before the detailed MMP has been written and agreed by all relevant parties.

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Annex B.6: Community Engagement Plan

A57 Link Roads

TR010034

**7.2 Environmental Management Plan
Annex B6: Outline Community Engagement
Plan**

APFP Regulation 5(2)(a)
Planning Act 2008 Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

January 2022

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1. Introduction

- 1.1.1. The route between the Manchester and Sheffield city regions currently suffers from heavy congestion which creates unreliable journeys. This restricts potential economic growth, as the delivery of goods to businesses is often delayed and the route is not ideal for commuters, limiting employment opportunities. Much of this heavy traffic travels through local roads, which disrupts the lives of communities and makes it difficult and potentially unsafe for pedestrians to cross the roads. These issues will only get worse over time if significant improvements aren't made.
- 1.1.2. At the western end of the A57/A628 Trans-Pennine route, we're going to create two new link roads:
- Mottram Moor Link Road – a new dual carriageway from the M67 junction 4 roundabout to a new junction on the A57(T) at Mottram Moor
 - A57 Link Road – a new single carriageway link from the A57(T) at Mottram Moor to a new junction on the A57 in Woolley Bridge.
- 1.1.3. This scheme is classed as a 'Nationally Significant Infrastructure Project' which need consent to build by way of a Development Consent Order (DCO).
- 1.1.4. There has been considerable communication and consultation, both statutory and non-statutory in respect of the Scheme. Background on the consultation can be found in the A57 Link Roads Consultation Report which is held on the Planning Inspectorate website, as submitted with the DCO application.
- 1.1.5. Over a number of years, the Scheme has been developed following consultation with a range of stakeholders, and more detailed assessments of traffic, engineering, buildability and environmental factors.
- 1.1.6. The Outline Community Engagement Plan (CEP) will set out the steps to be undertaken by National Highways to make sure that those living in the vicinity of the scheme are informed of activities and developments relating to its construction.
- 1.1.7. This Outline CEP sets out:
- The approach for delivering joined up communications and engagement.
 - Communications and engagement with identified stakeholders and customer groups.
 - How we will work with all parties involved with the scheme collaboratively to deliver customer focused communications and engagement.
- 1.1.8. The objectives of the Outline CEP are:
- To ensure our customers feel informed and know where to go for information.
 - To continuously improve the customer experience by providing clear

and timely information to allow customers to plan their journeys.

- To ensure stakeholders can engage and work with us to promote the benefits of the scheme and work through any challenges.
- To ensure everyone working on the scheme understands the importance of their contribution to customer service and that we put the customer at the heart of everything we do.
- We drive a lasting legacy and leave the community better placed for the future through engagement with local schools, charities and community groups.

1.1.9. This Outline CEP will form the basis of the CEP to be prepared by National Highways as part of its National Highways into Construction Environmental Management Plan (CEMP) to be prepared under Requirement 4 of the DCO and approved thereunder by the Secretary of State.

2. Engagement and communication team

- 2.1.1. National Highways' appointed Principal Contractor has a Community Liaison Manager who will maintain and develop the Community Relations Strategy throughout development and delivery of the Scheme. This will focus on customer experience, stakeholder's engagement, communications, correspondence and opportunities to support the local community.
- 2.1.2. The Community Liaison Manager will assist in developing the detailed CEP, and maintain a comment and enquiries log, disseminate identified comments for response and implementation of action.
- 2.1.3. Through all our communications and engagement activities, the Community Liaison Manager will aim to tell the wider story of the Scheme, to demonstrate the environmental, safety, economic and social benefits that it will bring to the area and the lasting legacy it will leave.

3. Our customers

- 3.1.1. The geographic and economic location of the Scheme means it impacts a wide range and number of customers.
- 3.1.2. The statutory and non-statutory activity to support the DCO application requires communication and engagement with key bodies including the relevant local authorities.
- 3.1.3. The Scheme falls within or near or is closely connected to the area of the following local authorities:
- Tameside Metropolitan Borough Council
 - Derbyshire County Council
 - High Peak Borough Council
 - Peak District National Park Authority.
- 3.1.4. Our customers and stakeholders have been categorised by National Highways as follows:
- Road users
 - Non road users (pedestrians, cyclists, and horse riders)
 - Local government
 - Transport
 - Political representatives
 - Media
 - Emergency services
 - Statutory
 - Operational
 - Vulnerable road users
 - Local businesses
 - Landowners and occupiers
 - Local residents
 - Local community users.
- 3.1.5. We want to ensure that our customers receive information in an accessible way and to help them plan safe and reliable journeys.
- 3.1.6. Within this scope, there is an over-arching awareness of the need to ensure that communication methods are utilised fully and adapted to the needs of the following protected characteristics:
- Age

- Disability
- Gender reassignment
- Race
- Religion or belief
- Sex
- Sexual orientation
- Marriage and civil partnership
- Pregnancy and maternity.

4. Our approach to customer engagement and communication

- 4.1.1. The CEP aims to ensure that the benefits of the Scheme are well known and understood by local, regional and national stakeholders.
- 4.1.2. We aim to ensure that our customers, stakeholders, local businesses, roadusers, landowners and communities are given the facts, opportunities, and reassurance they need to plan their journeys.
- 4.1.3. The Scheme webpage and social media channels will be used to inform customers of road closures in advance, diversion routes and to promote the benefits of the Scheme. Social media will be monitored daily (Monday to Friday) and comments from the public will be responded to promptly.
- 4.1.4. All customers and stakeholders can get in contact at any time during development and delivery of the Scheme, if they have any questions or concerns either by calling the National Highways Customer Contact Centre on [REDACTED] or by email at A57LinkRoads@highwaysengland.co.uk.
- 4.1.5. Correspondence will be logged and managed by the National Highways project support staff, who will forward on any correspondence that requires a response to the Scheme Community Liaison Manager, who will manage the development of an answer with the appropriate specialists.
- 4.1.6. Customer responses are marked each month by National Highways Public Liaison Officer for the North West using the Road Investment Programme scorecard which looks at ensuring all responses adhere to such matters as tone of voice, style guide, and customer service.
- 4.1.7. The National Highways Engagement Van will be located at a number of locations prior to the start of works to highlight how customers can access the website and how they can contact us if they have any questions.
- 4.1.8. A number of channels and platforms have been identified as methods of engaging pre/during/post construction. The list will be reviewed and developed as further opportunities arise.
- 4.1.9. Table 4.1 sets out the proposed channels for informing customers and stakeholders of construction plans, progress or related information.

Table 4.1: Proposed engagement channels

Product	Product summary	Target Audience
A57 Link Roads web page	<p>National Highways scheme webpage will be used to communicate information about the Scheme, such as why the works are happening, when they will be taking place and the diversion routes. When required, webpage bulletins will be issued to highlight significant changes to the website content.</p> <p>Where possible, stakeholder websites will also be used to communicate information about the scheme.</p>	All
Bi-monthly newsletters	<p>Bi-monthly scheme wide newsletters providing an overall update on the scheme will be shared by email (or post where requested)</p> <p>Customers will need to sign up to alerts to receive a copy.</p>	All
Local and community briefings	<p>Quarterly briefings arranged (either online or at existing meetings) to provide updates on the Scheme and developments.</p>	Local authorities Parish councils Community/ resident groups
Engagement van	<p>The Highways England engagement van will be located, prior to the start of works, in key locations around the Scheme to raise awareness of the Scheme.</p>	Local residents Communities Road Users
Social media	<p>Social media will be used, working with local government and community groups, to maximise the reach of communication, specifically to reach pre-existing communities that may not be aware of the Scheme.</p>	Local residents Communities Road Users

Product	Product summary	Target Audience
Information boards and signs	Where work is taking place in areas of public use, a notice will be placed in a safely accessible location, such as on existing information boards or fencing or use signage.	Local residents Communities Road Users
Direct mail	Leaflets or letters will be sent at least one week before works start in any local area. These will include explanation of works, timings and duration as well as contact details.	Properties 50m from the works and directly affected properties
Community deposit points	Using the same venues as we displayed consultation materials and the DCO application, ask for those venues (mainly libraries and community centres) to display Scheme updates (either letters, signs or newsletters)	Local residents Communities
Media	Regular media releases to local and national newspapers and other media outlets	All
Outreach and education	Ongoing engagement with schools, colleges and community groups	All

5. Stakeholder engagement

- 5.1.1 Stakeholder mapping is pivotal to delivering an effective strategy. The mapping of stakeholders using purely the influence / interest model assumes the level of engagement our stakeholders want/needs/expects.
- 5.1.2 Stakeholder engagement will be tailored to each stakeholder's requirements and to ensure the engagement encourages two-way dialogue, meeting agendas will be proposed in advance of meetings. Meeting minutes and actions will be shared following the meetings for comments and updates.
- 5.1.3 To ensure we deliver on all stakeholder commitments, a stakeholder commitments log will be maintained and regularly reviewed.
- 5.1.4 The Scheme and its construction will have an impact on affected landowners, necessitating land acquisition both permanent and temporary. Landowners, lessees, tenants, occupiers and those with an interest in the land affected are therefore a significant group of stakeholders.
- 5.1.5 Those who are not directly affected by the Scheme but may still have an interest in it will be engaged through the monthly newsletters, webpage and social media.

6. Evaluation

- 6.1.1 The success of our CEP will be regularly reviewed to ensure we are achieving our objectives and improving our communications approach.
- 6.1.2 We will gather qualitative feedback via evaluation forms to help us measure and improve our communications.
- 6.1.3 We will request feedback from stakeholders to help us measure and improve our engagement.
- 6.1.4 This information helps us analyse impact, review lessons from completed activities and inform future planning as well as share insight with other communications teams within National Highways.

Appendices

Appendix A. Community Engagement Plan stakeholders

[To completed before Scheme delivery after an integrated team mapping session. Contact details will be included in the Stakeholder Tracker]

Host local authorities
District, town and parish councils
Businesses
Communities

Emergency services

Environmental bodies

Health

Non motorised users (NMUs)

Residents/landowner

Road users

Transport

Utilities

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Annex B.7: Nuisance Management Plan

A57 Link Roads

TR010034

**Environmental Management Plan
(First iteration)**

Annex B7: Nuisance Management Plan

APFP Regulation 5(2)(q)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

January 2022

Infrastructure Planning Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A57 Link Roads Scheme Development Consent Order 2021

Annex B7 OUTLINE NUISANCE MANAGEMENT PLAN

Regulation Number:	Regulation 5(2)(q)
Planning Inspectorate Scheme Reference	TR010034
Application Document Reference	TR010034/APP/7.2
Author:	A57 Link Roads Scheme Project Team, Highways England

Version	Date	Status of Version
Rev 1.0	January 2022	Outline draft 0.1

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1. Introduction

- 1.1.1 This Outline Nuisance Management Plan (NMP) sets of the framework to be used by the appointed Principal Contractors when preparing the detailed NMP for the A57 Link Roads Scheme (hereinafter referred to as the ‘Scheme’) prior to the commencement of works.
- 1.1.2 The Scheme is a Nationally Significant Infrastructure Project (NSIP) and this Outline NMP has been developed in support of National Highways’ application for a Development Consent Order (DCO) to authorise construction, operation and maintenance of the Scheme. An Environmental Impact Assessment (EIA) has been carried out for the Scheme and is reported in the Environmental Statement (ES). The ES and other DCO documents prepared to support the application are available through the Planning Inspectorate project document library: [REDACTED]

1.2 Objective

- 1.2.1 This Outline NMP is based on the commitments set out in the ES for the Scheme, and specifically those detailed within the Environmental Management Plan (EMP) (First iteration) (APP-183) and Register of Environmental Actions and Commitments (REAC) (REP1-037), which details the requirement for a NMP to be developed.
- 1.2.2 In order to minimise the potential for nuisance from dust and emissions to air, this Outline NMP details the measures that the appointed Principal Contractor would be required to adopt to control and limit nuisance at residential properties and other sensitive receptors in the vicinity of the Scheme. This Outline NMP applies to all construction activities related to the Scheme.
- 1.2.3 This Outline NMP will be updated by the appointed Principal Contractor into a detailed NMP, as appropriate and necessary, prior to commencement of works in accordance with Requirement 4 in Schedule 2 of the draft Development Consent Order (dDCO) (REP1-041). The detailed NMP will be one of a number of management plans that will be annexed to the EMP (Second Iteration) under Requirement 4.
- 1.2.4 An EMP (Second iteration) will be produced by the appointed Principal Contractor to manage environmental effects during the construction phase of the Scheme, at which stage the REAC will be combined so they become a single document. This will broadly follow the EMP (First iteration) and will reflect the mitigation measures set out in the REAC requirements. All environmental management plans, including this NMP, will be included in Annex C.

2. Dust and Emissions to Air

2.1 Introduction

- 2.1.1 This section will be updated by the appointed Principal Contractor for the purposes of the detailed version. It will set out the purpose of the detailed NMP and set out the processes that will be adopted to minimise nuisance through the management, control and reporting of dust and emissions to air during construction in accordance with relevant legislation, regulations and contractual requirements.
- 2.1.2 This Outline NMP plan identifies the key items which will be included in the detailed NMP as follows:
- Roles and responsibilities at project and site-specific levels
 - The approach to dust and emissions management during construction
 - Dust and emissions control measures
 - Inspections and Monitoring
 - Communication and complaints arrangements
 - Reporting requirements.

2.2 Relevant Legislation

[The appointed Principal Contractor will need to update this section prior to construction and provide an overview of the key legislation that the Scheme has to comply with.]

Environment Act 2021

- 2.2.1 The Environment Act 2021 gained royal assent in November 2021. The Act will deliver cleaner air for all by requiring the government to set targets on air quality, including for fine particulate matter (PM_{2.5}), the most damaging pollutant to human health. The Act introduces a legally binding duty on the government to bring forward at least two air quality targets by October 2022. The first is to reduce the annual average concentrations of PM_{2.5} in ambient air. The second air quality target must be a long-term target (set a minimum of 15 years in the future), which will encourage long-term investment and provide certainty for businesses and other stakeholders.
- 2.2.2 The Act requires the Councils and other relevant public bodies to work together more closely to tackle local air quality issues, and it will be easier for local authorities to impose restrictions on smoke emissions from domestic burning, which pollutes our towns and cities. The government will also be required to regularly update its National Air Quality Strategy (AQS).
- 2.2.3 The Bill gives the government the power to compel vehicle manufacturers to recall vehicles and non-road mobile machinery if they do not comply with

relevant environmental standards, ensuring illegally polluting vehicles are taken off the road quickly.

Part IV of the Environment Act 1995

2.2.4 Part IV of the Environment Act 1995 set out the responsibilities of local authorities in the UK to review air quality in their area and designate an Air Quality Management Areas (AQMA) if improvements are necessary. Where an AQMA is designated, local authorities are required to work towards achieving the AQS objectives by developing and implementing an air quality action plan describing the pollution reduction measures.

2.2.5 Part IV of the Environment Act 1995 is amended by The Environment Act 2021 to enable greater cooperation at local level and broaden the range of organisations that play a role in improving local air quality and require regularly review of the AQS at least every 5 years, and to publish an annual statement to Parliament on progress towards achieving air quality standards and objectives.

Clean Air Act 1993

2.2.6 Clean Air Act 1993 makes provisions on prohibition of dark smoke emissions from chimneys, industrial and trade premises and prohibition on emission of dark smoke from burning materials on construction sites, as well as provisions for only allowing burning of authorised fuels in smoke control areas.

2.2.7 Clean Air Act 1993 gives the power to the Secretary of State to make regulations on the control of certain forms of air pollution including regulations about motor fuels, the sulphur content of oil fuels for furnaces and engines and cable burning.

2.2.8 The amendments to the Clean Air Act 1993 by The Environment Act 2021 will allow local authorities to take more effective actions to reduce pollution from domestic burning.

Environmental Protection Act 1990

2.2.9 The Environmental Protection Act 1990 makes provision for the improved control of pollution to the air, water and land by regulating the management of the control of emissions. The Act places the duty on local authority to inspect their area to detect any statutory nuisances and investigate the complaints where it is reasonable practicable.

2.2.10 Environmental Protection Act 1990 is amended by The Environment Act 2021, which enable the local authorities to take more substantive action against those who repeatedly emit smoke and harm to human health by extending the system of statutory nuisance to private dwellings in Smoke Control Areas.

The Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018

- 2.2.11 The Regulation, as amended for EU exit, sets out emission standards and type-approval procedures for engines to be installed in non-road mobile machinery. These Regulations make provision in connection with Regulation (EU) 2016/1628 of the European Parliament and of the Council on requirements.

Health and Safety at Work Act 1974

- 2.2.12 Health and Safety at Work Act makes provisions for protecting others against risks to health or safety in connection with the activities of persons at work, and preventing the unlawful acquisition, possession and use of dangerous substances, and controlling certain emissions into the atmosphere.

Control of Substances Hazardous to Health Regulations (COSHH) (SI 2002/2677)

- 2.2.13 COSHH is the law that requires employers to prevent or reduce exposure for employees, contractors and other people to hazardous substances by providing control measures, information, instruction and training for employees and others.

2.3 Management of Site Activities

Main roles and responsibilities

- 2.3.1 In relation to the control and management of dust and emissions to air, the appointed Principal Contractor shall establish the main roles and responsibilities of site personnel to ensure the proposed control measures are being implemented during the construction activities. These will be set out in Section 2 of the EMP (Second iteration) and within the detailed NMP.

Consultation

- 2.3.2 Consultation will be carried out, where necessary, with the environmental health departments of the local authorities regarding the management of dust and emissions to air during construction of the Scheme.
- 2.3.3 The implementation of a Community Engagement Plan (CEP) will ensure that local residents and other affected parties are kept informed of the progress of the works. Communication mechanisms include newsletters, newspaper and radio announcements, and communications from the appointed Principal Contractor. An Outline CEP has been included in Annex C7 of the EMP (First iteration).

2.4 Control Measures

2.4.1 Table 2-1 sets out activities, and examples of the works and associated risks of emissions from site activities that could give rise to poor air quality and the risk level in accordance with DMRB LA 105 – Air Quality. Table 2-2 sets out examples of the specific controls that will be applied. The measures that are set out in Table 2-2 are considered appropriate for a high-risk site as identified in the Dust Risk Assessment, presented in Chapter 5 Air Quality of the Environmental Statement (REP2-006).

2.4.2 The appointed Principal Contractor shall observe the requirement to use Best Practical Means (BPM) by providing for and adopting all necessary means to prevent a statutory nuisance occurring from the site.

Table 2-1 – Summary of Key Construction Activities and Sources of Dust from Each Activity and Risk Level

Activity	Dust type and risk	Risk level*
General Site Operations	Potential for fugitive dust/ PM ₁₀ arising from general site operations	High
Muck away/ trackout	Potential for fugitive dust/ PM ₁₀ arising from activities on site including stockpiles, and movement of vehicles on haul roads and off site	High
Demolition	Potential for fugitive dust/ PM ₁₀ arising from demolition of the a number of existing buildings	High
Excavation	Potential for fugitive dust/ PM ₁₀ arising from earthworks	High
Construction	Potential for fugitive dust/ PM ₁₀ arising from construction of the new roads, Old Mill Farm Underpass, Mottram Underpass, Carrhouse Farm Underpass, River Etherow Bridge and Roe Cross Road overbridge	High

*The risk level can be High or Low according to DMRB LA105 guidance (Table 2.58b) depending on the distance of the sensitive receptor to the construction activities. For projects with a large construction dust risk potential such as this one, the risk level is high where receptors are within 100 metres, and low where they are within 100 – 200 metres.

Table 2-2 – Control Measures to be Implemented During the Construction Activities and Residual Risks

Activity	Control	Residual Risk
General Site Operations	Control of Dust Emissions from General Site Operations: <ul style="list-style-type: none"> Implement a no burning policy on site 	Low

Activity	Control	Residual Risk
	<ul style="list-style-type: none"> • Equipment that is likely to generate excessive quantities of dust will be enclosed, shielded or where appropriate fitted with dust extractors, filters or scrubbers, which shall be maintained in accordance with manufacturer's specifications • Keep the number of material handling operations to a minimum • Undertake cutting and grinding operations using equipment and techniques which suppress and reduce dust emissions • Where appropriate, erect and maintain windbreaks, netting screens or semi-permeable fences to effectively reduce dust emissions from working areas and/or to screen sensitive location • Where necessary employ water sprays to control dust generated during earthworks • Minimise drop heights of soils and excavated material into vehicles • Sheet vehicles taking soils and friable material from site at all times • Avoid site runoff of water or mud • Damping down of surfaces prior to their being worked • Control of dust emissions from materials storage/ stockpiling and handling areas • Store aggregates, sand and spoil with adequate protection from the wind and, where practicable, within buildings • Storing dusty materials away from site boundaries and in appropriate containment (e.g. sheeting, sacks, barrels etc.). • Maintain slopes of stockpiles, tips and mounds at an angle not greater than the natural angle of repose and avoid creating sharp changes of shape • Aim to minimise any double handling of soils and other friable materials • Minimise the amount of excavated material stockpiled and dampen the surfaces of stockpiles of dry friable materials by controlled application of water sprays or alternatively, shroud or screen stockpiles • Maintain handling areas to reduce the risk of dust emissions using static misting systems, bowsers and other watering methods as necessary to reduce or prevent dust emissions. <p>Control of Dust Emissions from Haul Roads and Vehicle Movements on Site:</p>	

Activity	Control	Residual Risk
	<ul style="list-style-type: none"> • Enforcing speed limits for vehicles on unmade surfaces and site haul roads to minimise dust entrainment and dispersion • Sheeting vehicles carrying dusty materials to prevent materials being blown from the vehicles whilst travelling • Ensure all vehicles switch off engines when stationary <p>Control of Exhaust Emissions from Vehicles and Plant/ Equipment:</p> <ul style="list-style-type: none"> • Select a suitable supplier in accordance with the Procurement Policy • Select and procure plant and equipment with the least potential for dust and other pollutant emissions, allowing for economic constraints and practicability • Use plant and equipment powered by mains electricity or battery powered whenever practicable • Request the power output and EU staged emissions classification of the equipment. Where equipment is under 37kW output no action is required, but where it is above 37 kW output the supplier is informed of the need to fit Diesel Particulate Filter (DPF) device • Use low emission fuels such as ultra low sulphur fuels for all non-road mobile machinery (NRMM) • Use plant fitted with catalysts, DPF and similar devices as listed by the Energy Saving Trust for NRMM with a power output greater than 37kW. Ensure the process for managing this is detailed in the contractor's relevant plans and procedures • Ensure project suppliers' commercial vehicles comply with the necessary legislative requirements including Regulation (EC) No 715/2007 • Ensure that no vehicle or equipment emitting visible black smoke from its exhaust system other than during ignition is used on any construction site or public highway • Ensure that combustion engines are not left running unnecessarily • Ensure that all vehicles and equipment engines and exhaust systems are maintained so that exhaust emissions do not breach statutory limits set for vehicle/ equipment type and mode of operation. 	

Activity	Control	Residual Risk
	<ul style="list-style-type: none"> Ensure all vehicles and equipment are maintained in accordance with manufacturer's specifications and statutory requirements. 	
Muck away/ trackout	<ul style="list-style-type: none"> Locate haul roads and access points as far away as practicable from sensitive receptors Undertake wet cleaning of any large-scale concrete hard standing. Restrict dry sweeping to small areas only Inspect haul road condition at least weekly and repair as soon as possible if damage is identified Apply water to site roads (including haul roads) using bowsers at an appropriate rate to effectively suppress dust Maintain unpaved roads and verges in a compacted condition Regular water-spraying and sweeping of unpaved and paved roads to minimise dust and remove mud and debris Provide easily cleaned hard standings for vehicles Using wheel washes, shaker bars or rotating bristles for vehicles leaving the site where appropriate to minimise the amount of mud and debris deposited on the public highway Ensuring any temporary site roads are no wider than necessary to minimise their surface area 	Low
Demolition	<ul style="list-style-type: none"> Fully sheet all vehicles carrying loose or potentially dusty material to or from the working areas Use effective water suppression during demolition operations Screen buildings where dust producing activities are taking place with debris screens or sheeting, where appropriate 	Low
Excavation	<ul style="list-style-type: none"> Ensure regular cleaning of hard standings using wet sweeping methods Fully sheet all vehicles carrying loose or potentially dusty material to or from the working areas Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment Avoid carrying out earthworks during dry weather if reasonably practicable having regard to programme, or provide and ensure appropriate use of water sprays to control dust 	Low

Activity	Control	Residual Risk
	<ul style="list-style-type: none"> Re-vegetate earthworks and exposed areas/ soil stockpiles to stabilise surfaces as soon as practicable 	
Construction	<ul style="list-style-type: none"> Avoid scabbling (roughening of concrete surfaces) if possible Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust generation 	Low

2.5 Inspections and Monitoring

- 2.5.1 A daily construction report log will be completed on a daily basis for each area where work is being undertaken by the Site Supervisor and recorded within the daily diary. The site will also be inspected by the Environment Manager (or delegate) at least weekly.
- 2.5.2 On identification of a non-conformance where inspections, surveillance, or auditing identify a failure to implement this management plan and/ or a substantiated complaint is received, a full review of working practices will be undertaken to ensure corrective and preventative measures are implemented.
- 2.5.3 Inspection will also be undertaken in the event that a complaint is received. When investigating an incident, the following information will be gathered:
- Wind direction and strength
 - Weather conditions
 - Operations at the site at the time of the exceedance
 - Any abnormal operations both inside the worksite and outside (by both the contractor and/or others)
 - Any air quality controls being applied
 - Identification of additional controls required

2.6 Communications

Stakeholder communication

- 2.6.1 The appointed Principal Contractor will maintain and develop a Community Engagement Plan in consultation with stakeholders.

Complaints

- 2.6.2 All complaints received will be recorded, investigated and corrective actions implemented and feedback given to the complainant. The relevant local authority will be advised of any justified complaint, actions taken to investigate and any actions found necessary to put in place.

Records.

- 2.6.3 Documentation and records will be produced, filed and maintained to record the activities and processes used to manage dust and emissions to air.

3. References and glossary

3.1 References

- Clean Air Act 1993 (as amended)
- Control of Substances Hazardous to Health Regulations 2002 (as amended)
- Environment Act 1995 (as amended)
- Environmental Protection Act 1990 (as amended)
- Health and Safety at Work Act 1974 (as amended)
- Highways Agency (2019) DMRB LA 105 Air Quality
- Regulation (EC) No 715/2007 of the European Parliament and of the Council 2007
- Regulation (EU) 2016/1628 of the European Parliament and of the Council 2016
- The Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 (as amended)

3.2 Glossary and abbreviations

3.2.1 The Glossary and abbreviations used in this document are provided in Table 3-1 below.

Table 3-1 – List of Glossary and Abbreviations

Term	Definition
AQMA	Air Quality Management Area
BPM	Best Practicable Means
COSHH	Control of Substances Hazardous to Health Regulations
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridges
DPF	Diesel Particulate Filter
EC	The European Commission
EU	The European Union
NMP	Nuisance Management Plan
ES	Environmental Statement
LA	Local Authority
LAQM	Local Air Quality Management
mph	Mile Per hour
NRMM	Non-Road Mobile Machinery
PM _{2.5}	Fine Particulate Matter with an average aerodynamic diameter not exceeding 2.5 micrometers
PM ₁₀	Particulate Matter with an average aerodynamic diameter not exceeding 10 micrometers
REAC	Register of Environmental Actions and Commitments

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ANNEX C: ENVIRONMENTAL METHOD STATEMENTS

To be produced in response to the statutory process by the appointed Principal Contractor for the Scheme as part of the EMP (Second iteration)

ANNEX D: EMERGENCY PROCEDURES AND RECORD OF ANY ENVIRONMENTAL INCIDENTS

To be produced prior to construction by the appointed Principal Contractor. This section should include:

- *Confirmation of procedures in the event of an environmental emergency. A record of environmental incidents (in table format) if occurred to include the following information:*
 - *Date and location of the incident*
 - *Details of the reporting procedure followed*
 - *Description of the incident and relevant legislation*
 - *Remedial actions*
 - *Lessons learnt*
 - *Details of any contact with enforcing bodies.*

ANNEX E: COPY OF EVALUATION OF CHANGE REGISTER

Table E-1 - Evaluation of Change Register

Change reference	Confirmation of the design/assumption change	List of Actions affected	Evaluation of the change	Nature of the change (material/non-material)	Actions required	Person responsible	Objective/outcome and reporting requirements	Detail of any monitoring required	Date and signature for completion of Action
<i>1, 2, 3, etc.</i>	<i><u>Describe the design / assumption change (e.g., in comparison to the original information included within the ES or EMP).</u></i>	<i><u>Use the Action references set out in Section 1 of the REAC.</u></i>	<i><u>Describe how the change affects the actions listed.</u></i> <i><u>Consider impacts in respect to relevant legislation.</u></i>	<i><u>Clarify whether the change materially affects the assessment conclusions.</u></i> <i><u>For material changes please seek legal advice.</u></i>	<i><u>Specify whether any remedial action is required.</u></i> <i><u>Specify whether any legislative action is required – i.e. does the change represent a departure from consent.</u></i>	<i><u>Refer to Tables in Section 2 of the EMP</u></i>	<i><u>Set out the criteria for determining the success of the action.</u></i> <i><u>This should be specific and measurable.</u></i> <i><u>Confirm how this will be reported, and who this information will be provided to.</u></i>	<i><u>Clarify the monitoring requirements (if any).</u></i> <i><u>Set out the nature, purpose and duration of the monitoring.</u></i>	<i><u>Required to certify that the Action has been completed.</u></i>

Note: Table provided to show description of Evaluation of Change ~~process Register~~, together with instructions to indicate inputs required. To be refined for the Second iteration EMP, as applicable, in response to the statutory process stage and changes in actions

ANNEX F: FINAL ENVIRONMENTAL INVESTIGATION AND MONITORING REPORTS

To be produced prior to construction by the appointed Principal Contractor. This section should include:

- Copies of relevant reports (relating to protected species/ habitats and cultural heritage investigations, and any environmental monitoring reports) or cross reference to the locations of these easily if accessible elsewhere.*

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