

# East Midlands Gateway Phase 2 (EMG2)

Document DCO 6.3A

ENVIRONMENTAL STATEMENT

Technical Appendices

Appendix 3A

# Construction Environmental Management Plan (CEMP)

April 2026

# 03

The East Midlands Gateway Phase 2  
and Highway Order 202X and The East Midlands Gateway  
Rail Freight and Highway (Amendment) Order 202X

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# **The East Midlands Gateway Phase 2 and Highway Order 202X**

## **APPENDIX 3A CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP) (DOCUMENT DCO 6.3A)**

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# Construction Environmental Management Plan

## ENVIRONMENTAL STATEMENT APPENDIX 3A

**Client** Segro Properties Ltd  
**Project** East Midlands Gateway 2 (EMG2)  
**Date** April 2026

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## 1.0 Purpose of the Construction Environmental Management Plan (CEMP)

### Introduction

- 1.1 As explained in Chapter One of the Environmental Statement, the East Midlands Gateway 2 (EMG2) scheme comprises 3 interrelated components. These are the EMG2 Main Site, Highways Works and EMG1 Works. The Chapter explains that there are two concurrent applications for all 3 components: a DCO Application for the EMG2 Main Site and Highways Works, and an MCO Application for the EMG1 Works.

### DCO Application and the CEMP

- 1.2 This Construction Environmental Management Plan (CEMP) sets out the overarching systems and controls that will be adopted during the construction of the EMG2 Works and Highway Works comprising the DCO Scheme to minimise any adverse environmental impacts in accordance with the conclusions of the Environmental Statement and Construction Good Practice. This CEMP provides the framework with which all Phase and construction component-specific Construction Environmental Management Plans (P-CEMPs) required for each component of development by DCO Schedule 2 Requirement 11, must accord.
- 1.3 This CEMP and in turn P-CEMPs, will cover construction-related matters which are set out in the DCO Schedule 2 Requirements, such as construction noise in Requirement 20. The governing document for all DCO Scheme construction activity is the DCO with its requirements (Document DCO 3.1). Where matters are dealt with differently in the CEMP or P-CEMP to the Requirements, it is the DCO Requirements that will take precedence. A document hierarchy explaining the relationship between the DCO, the Requirements and documents produced pursuant to those Requirements is appended to the Guide to the Application (Document DCO 1.3).
- 1.4 The exact number of P-CEMPs will depend on the precise split of components of construction work which has yet to be confirmed. However, P-CEMPs will be provided for:
- The EMG2 Works (potentially split further into the earthworks, drainage, roads and landscaping)
  - Each component of the Highway Works as defined in the DCO and included in Parts 1, 2 and 3 of Schedule 1 of the DCO
  - Each warehouse developed on the EMG2 Main Site.
- 1.5 This CEMP should be read in conjunction with the Construction Management Strategy for the Safeguarding of East Midlands Airport.

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### MCO Application

- 1.6 The EMG1 Works comprised within the MCO Application will not be governed by this CEMP. Instead, they will continue to be governed by the EMG1 DCO. Requirement 11 of the EMG1 DCO will operate to prevent the EMG1 Works commencing until a new construction environmental management plan, drafted in accordance with the principles set out in the already approved construction management framework plan, has been submitted to and approved in writing by the local planning authority and local highway authority respectively. That approach will apply to the construction activities for the development of Plot 16, potentially split further into the earthworks, drainage, roads, landscaping and warehousing.

### Obligations, Compliance and Enforcement

- 1.7 The principles set out by this CEMP and the arrangements established through the P-CEMPs will be incorporated within all construction contracts arising from the development of the scheme and all contractors, their subcontractors and suppliers will be required to comply with the overarching principles and details contained in each P-CEMP.
- 1.8 Any non-conformance with or infringement of either the CEMP or P-CEMP shall be reported to the Project Manager within 24 hours and proposals for rectifying the non-conformance shall be submitted to the Project Manager within 7 days. The management and reporting of non-conformances will be the responsibility of the Environmental Manager.
- 1.9 The contractor shall submit proposals to the Project Manager, before works commence, for the internal and external auditing of compliance with the CEMP and the P-CEMP. Copies of all audit reports are to be provided to the Project Manager within 7 days of the audit. Furthermore, the Project Manager will undertake audits as and when he sees fit.
- 1.10 Failure to rectify a non-conformance within an agreed timescale may result in the relevant works being suspended until the Project Manager is satisfied that the non-conformance has been corrected, or in extreme cases termination of the contract.
- 1.11 The CEMP will remain valid throughout the construction phase of the DCO Scheme.

## **2.0 Description of the Works**

- 2.1 A detailed description of the development is set out in Chapter 3 of the Environmental Statement. In summary the DCO Scheme involves:

#### EMG2 Works:

- Construction of a logistics and advanced manufacturing development and ancillary buildings;

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- Construction of road infrastructure;
  - Construction of a bus interchange;
  - Construction of HGV parking;
  - Upgrading the EMG1 substation;
  - Construction of a Community Park; and
  - Provision of hard and soft landscaping.

#### Highways Works:

- A453 EMG2 access junction works;
- Hyam's Lane works;
- Works to the M1 northbound;
- Construction of link road from the M1 northbound to the A50 westbound;
- Works to the A50 westbound;
- Works to the link road from the M1 southbound and A50 eastbound to M1 Junction 24;
- Works to the M1 Junction 24 roundabout and A453 northbound approaches;
- Improvements to the EMG1 access junction;
- Construction of the Active Travel Link between the EMG1 access junction and the A453 west of Finger Farm roundabout;
- Provision of an uncontrolled crossing of the A453 at the East Midlands Airport signalised access junction;
- Works to the M1 northbound signage on the approach to the M1 Junction 23A;
- Works to Long Holden;
- Works to the A42/A453 Finger Farm roundabout; and
- Upgrade to public footpath L57 to a cycle track.

## 3.0 General Site Management

### **Roles and Responsibilities**

- 3.1 The site-wide coordination and implantation of the principles established in this CEMP through the preparation and agreement of each component-specific Construction Environmental Management Plan (P-CEMP), will be the responsibility of the Developer's Project Manager with the support of the Developer's Environmental Consultant.

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- 3.2 As each contract comes forward an Environmental Manager will be appointed for that Contract; generally this will be a contractor appointment but in some circumstances the Project Manager may undertake this role or appoint others. The Environmental Manager shall ensure that the principles of the CEMP shall be fully integrated into all site procedures, processes and activities, through the preparation and agreement of P-CEMPs and ensure that appropriate environmental management systems, under BS 14000 or similar, are put in place through each P-CEMP.
- 3.3 The Developer's Project Manager will carry out appropriate audits of the contractors' arrangements to ensure full compliance with the P-CEMP. Any infringement of the P-CEMP or any environmental incident shall be immediately reported to the Project Manager. The contractor will be required to fully investigate the issue and take appropriate corrective action.
- 3.4 The key contacts are:
- Developer – Segro
  - Project Manager – TBC (Developer Appointment)
  - Ecological Consultant – FPCR
  - Landscape Consultant – FPCR
  - Engineering Consultant – BWB Consulting
  - Principal Contractor – TBC (Developer Appointment)
  - Principal Designer – PB Safety Consultancy
  - Site Manager – TBC (Contractor Appointment)
  - Environmental Manager – TBC (Contractor Appointment)
  - Health and Safety Manager – TBC (Contractor Appointment)
- 3.5 The key firms and individuals may change as the scheme develops, and each P-CEMP should set out and update as appropriate the list of key contacts.

### **Communications**

- 3.6 The effective implementation of the CEMP through each P-CEMP is intrinsically linked to good communications between the developer and contractors (and their teams) and all the project stakeholders, particularly the Local Authority, and the public.
- 3.7 To promote effective communications during any contract each P-CEMP shall require the following to be implemented at the commencement of each contract:
- The Project Manager will brief the contractor's senior management team on the philosophy and content of the CEMP and details of the relevant P-CEMP, which will generally include the Director responsible for the scheme.
  - The Ecological Consultant shall brief the contractor's senior management team on all ecological aspects of the scheme.

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- The contractor shall be responsible for developing a site-specific induction for all those working or visiting its site. The scope of the induction will be agreed in advance with the Project Manager.
- 3.8 The contractor's monthly progress report shall include reporting on compliance with the P-CEMP.
- 3.9 The contractor will provide a programme to achieve continuous improvement of environmental matters during the contract. The Developer wishes to see positive training on environmental matters on an ongoing basis.
- 3.10 The contractor shall develop an appropriate strategy for communicating with the public both before commencement and during the contract. This must be in accordance with protocol for community liaison to be developed by the Community Liaison Group established prior to the commencement of development pursuant to Requirement 26 and, for any Highway Works on the strategic road network, the details agreed pursuant to Requirement 5 of Schedule 2 of the DCO (Document DCO 3.1).

## 4.0 Components and Logic

- 4.1 This section of the CEMP outlines the different components of works to be carried out and outlines the possible restraints which may have an impact on the way the components are assembled. It sets out how these matters have informed the approach adopted in the preparation of the Indicative Master Programme (see Appendix One).
- 4.2 A P-CEMP must be prepared for each component of development. Where necessary, for example if several contractors are involved in the delivery of a particular component, it may be necessary for multiple P-CEMPs (each specific to individual contractors) to be prepared. Each P-CEMP must accord with the principles set out in this CEMP and must have regard to the details contained in other P-CEMPs for that component of development.
- 4.3 Each P-CEMP must place an obligation on the contractor to ensure that all relevant requirements set out in the DCO have been discharged / approved, prior to work commencing. For example, works cannot start until Requirement 13 (archaeology and built heritage) has been discharged. Each P-CEMP must fully accord with all the details agreed pursuant to all the Requirements where relevant.

### **Key Activities**

- 4.4 The following table provides a summary of the Key Activities:

<b>Key activity</b>	<b>Works No.</b>
Main Site Earthworks and Drainage	Within Works Nos1 to 5
Main Site Roads	2
Main Site Landscaping	5
Main Site Buildings	1
Main Site Bus interchange	3
Main site HGV parking	4
Highway Works	Within Works Nos 6 to 19
Community Park	21

4.5 These activities are described more fully in Schedule 1 of the DCO (Document DCO 3.1) and the relevant works areas are shown on the Works Plans (Document DCO 2.3).

### **Highway Works**

4.6 The Highway Works are to be undertaken in accordance with the detail submitted and approved pursuant to Schedule 2 Requirement 5 of the DCO. These timescales are determined as set out in the Transport Assessment and will take account of the restraints on phasing of the Highway Works set out below.

### **Main Site Earthworks, Drainage, Roads and Landscaping**

4.7 The Earthworks, drainage and landscaping are split into three phases as shown on drawing EMG2-BWB-GEN-XX-SK-CH-SK044 (see Appendix 2).

4.8 In order for works to commence on the EMG2 Main Site a temporary construction access will be formed on the A453 together with the creation of temporary construction access tracks and main site compounds as shown on drawing EMG2-BWB-GEN-XX-SK-CH-SK044 at Appendix 2.

### **Main Site Buildings**

4.9 The Buildings are split into zones as indicated on the Parameters Plan (Document 2.5)

### **Key Restraints Governing the Logical Phasing of Works**

#### **Highway Works**

4.10 The Phasing of the Highway Works will be undertaken in accordance with Requirement 6. Other than complying with the protective provisions that govern highway works in the DCO there are no restraints on commencement of any phases of the Highway Works.

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4.11 Other practical restraints may include:

- Design resources
- Construction resources
- Availability of materials
- The mitigation of delays and disruption to the existing highway network
- Statutory Undertaker imposed restraints
- Other third party-imposed restraints
- Scale of the Scheme

4.12 The importance of managing the phasing of the works to mitigate delays and disruption on the existing highway network is perhaps the most significant practical restraint. Generally, this is best achieved by diverting traffic onto new alignments away from works under construction and controlling the level of interference on the networks at any time. A Construction Traffic Management Plan has been prepared and is attached at Appendix 3. The management of the Highway Works should be undertaken in accordance with this document.

### **Main Site Earthworks, Drainage, Road and Landscaping**

4.13 The Phasing of all components of the works will be undertaken in accordance with details agreed pursuant to Requirement 3 for the Main Site,

4.14 The scale of the Main Site earthworks is such that it would be appropriate to adopt a phased approach so that subsequent activities can commence before all the previous tasks have been completed.

4.15 Landscaping will be installed in accordance with the timings agreed pursuant to Requirement 9.

4.16 The order of the Main Site Earthworks, Drainage, Roads and Landscaping is shown on the Indicative Master Programme (Appendix 1); however, the actual order may change as market needs may dictate, and in accordance with details agreed pursuant to Requirement 3.

4.17 The Main Site Roads (Works No. 2) will generally be constructed concurrently with the development of the adjacent building plateau and in accordance with details agreed pursuant to Requirement 3.

### **Buildings**

4.18 Construction of building units can only be commenced on plots that have a plateau. Buildings will not be occupied until the screening and bunding is in place in accordance with the details to be agreed pursuant to Requirement 3.

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## **Indicative Master Programme**

- 4.19 The Indicate Master Programme contained in Appendix 1 shows how the works may be assembled.
- 4.20 Final assembly of the works will be undertaken following detailed design, selection of materials and the appointment of key contractors and in accordance with phasing agreed pursuant to Requirement 3 for the EMG2 Main Site, and Requirements 5 and 6 for the Highway Works.

## **5.0 Pollution and Contamination**

- 5.1 Pollution and contamination can be pre-existing or caused by construction activities.
- 5.2 Where pre-existing contamination has been found to exist, contractors will be required in accordance with Requirement 22 to undertake remediation measures identified in the geo-environmental assessment, investigations and reports in a suitable and acceptable manner and at such time as is appropriate. These measures must be agreed with the Local Planning Authority before any measures are implemented and verification reports shall be prepared and issued to the Local Planning Authority on completion of the remediation.
- 5.3 A UXO/UXB risk assessment will be undertaken before any intrusive works are undertaken.
- 5.4 In the event that unidentified contamination is uncovered during the works construction must cease on that localised area of land and the contamination must be reported to the Local Planning Authority within 10 working days. Prior to the recommencement of construction on that localised area of land, suitable investigation and risk based land contamination assessment for the discovered contamination must be submitted to and approved in writing by the Local Planning Authority.
- 5.5 The contractor shall plan and execute all works to ensure that hazardous or polluting substances do not cause harm to underlying aquifers, surface water systems, landscaping and associated ecology. Measures to achieve this include, but are not limited to: fuel and chemical storage in bunded areas (See Section 11), designated refuelling areas, use of drip trays, daily inspections of plant and equipment, spill kits and spill response procedures, segregation of clean and potentially impacted materials, control of groundwater and surface water management.
- 5.6 At the commencement of any component of earthworks the necessary permanent drainage basins for that component will be constructed and outfalls into the existing water courses will be provided, in accordance with the drainage strategy contained in the Environmental Statement, the surface water drainage scheme agreed pursuant to Requirement 17 and any approvals required under DCO Article 19.

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- 5.7 Additional settlement and control ponds will be provided as necessary during a component to prevent pollution entering the existing water courses.
- 5.8 The scheme requires significant earthworks which will inevitably increase the risk of pollution to the surface water system. All contractors shall adopt water pollution prevention procedures in line with good practice. In preparing the procedures the contractor shall consider the following as a minimum:
- Published guidance from the Environment Agency
  - Control of water pollution from the construction site and other documents published by CIRIA
  - The site-specific requirements of the EA
  - Arrangements for monitoring water bodies to ensure and demonstrate water quality
  - Fuelling of plant and equipment
  - Maintenance of plant and equipment
  - Storage of hazardous materials
  - Control of concrete truck washout arrangements
  - Flood warnings
  - The landscape and ecological environment
- 5.9 Laboratory PFAS testing shall be undertaken in the event that groundwater / perched water is encountered which requires extraction and disposal / discharge during the construction phase. The test results will be used to inform the appropriate environmental permitting and disposal routes.
- 5.10 All contractors will be required to include water pollution prevention in all inductions and shall arrange update tool box talks at appropriate intervals during the contract.
- 5.11 All incidents involving water pollution shall be immediately reported to the Project Manager.

## **6.0 Measures for Controlling Noise and Vibration**

### **Noise**

- 6.1 Contractors will implement measures to minimise the potential noise disturbance caused by construction traffic and activities.
- 6.2 When planning all activities contractors shall predict the corresponding noise levels and review the likely impacts and what can be done to mitigate and minimise any adverse impacts.

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- 6.3 If construction activities are likely to cause a potential disturbance at sensitive receptors consideration should be given to noise measurements before and during construction. The thresholds set out in Table 7.3 of the Environmental Statement (Document DCO 6.7) should be used to determine the extent of the potential disturbance.
- 6.4 The guidance given in BS 5228-1: 2009+A1:2014 “Code of Practice for Noise and Vibration Control on Construction and Open Sites Part 1: Noise” relating to working methods will be referenced and incorporated, where appropriate and practicable, within the method statement which will form the basis for the implementation of construction works.
- 6.5 As a precaution, check noise monitoring will be undertaken at the start of the different phases of the works to determine whether the noise levels from construction activities are as predicted in the P-CEMP for that phase of work.
- 6.6 At least 28 days prior to any construction works commencing, a construction monitoring protocol will be agreed with the Local Planning Authority. This will establish the frequency, duration and location of the noise monitoring. It will also identify the construction noise thresholds at the appropriate receptor locations and the protocol that shall be followed if these thresholds are exceeded or if any complaints are received.
- 6.7 In planning their work contractors shall consider the following as a minimum with respect to managing the potential effects of noise:
- Phasing of earthworks to prioritise the construction of any bunding (where applicable);
  - Selection of equipment and working methods;
  - Maintenance of equipment;
  - Switching off equipment when not in use;
  - Use of acoustic enclosures and temporary hoardings/screens;
  - Timing and duration of activities;
  - Use of "white noise" reversing warnings on mobile plant;
  - Site personnel being instructed on use of best practicable means;
  - Liaison with residents in advance of works and on an ongoing basis; and
  - Plant to be located as far as reasonably practicable from receptors.
- 6.8 Details of the contractor’s proposals for the use of best practicable means (BPM) to manage construction noise shall be included in each P-CEMP.

### **Vibration**

- 6.9 Contractors will implement measures to minimise the potential vibration disturbance caused by construction traffic and activities.

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- 6.10 When planning all activities contractors should consider the potential for vibration and review the likely impacts and what can be done to mitigate and minimise any adverse impacts. The thresholds set out in Table 7.5 of the Environmental Statement (Document DCO 6.7) should be used to determine the extent of the potential impact.
- 6.11 The guidance given in BS 5228-2:2009+A2:2014 “Code of Practice for Noise and Vibration Control on Construction and Open Sites Part 2: Vibration” will be referenced and incorporated, where appropriate and practicable, within the method statement which will form the basis for the implementation of the construction works.

In planning their work, contractors should consider the following as a minimum with respect to managing the potential impacts of vibration:

- Selection equipment and working methods;
- Timing and duration of activities;
- Site personnel being instructed on use of best practicable means;
- Liaison with residents in advance of works and on an ongoing basis; and
- Plant to be located as far as reasonably practicable from receptors.

### **Working Hours**

- 6.12 Construction work within the development site will be controlled by Requirement 19 and confined to the following:
- 07:00 -19:00 hours Monday to Friday,
- 07:00 -16:00 hours Saturday.
- 6.13 No works will be undertaken on Sundays or public holidays, save in exceptional circumstances only and with prior notification given to the LPA.
- 6.14 Any changes to the above working hours will also be agreed with the LPA, in accordance with Requirement 19..
- 6.15 All delivery vehicles and plant arriving and leaving the site will also comply with the same time restrictions, although site personnel will be permitted to access the site 30 minutes before these hours and exit the site 30 minutes after them. Adherence to the codes of practice for construction working given in British Standard BS 5228 will be required.
- 6.16 Construction work outside the development site will require some out of hours and night working to comply with the requirements of National Highways or for practical and safety reasons.

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## 7.0 Soil Management and Measures for Controlling Emission of Dust

- 7.1 The prevention and minimisation of loss or damage of soil resources requires the adoption of Soil Management measures. Each relevant P-CEMP and in accordance with Requirement 12, should incorporate a Soil Management Plan to be undertaken by a suitably qualified practitioner in accordance with the principles outlined in the Construction Code of Practice for Sustainable Use of Soils on Construction Sites, the measures set out in the Soils and Agricultural Land Quality Report and Soil Resource Management Plan (ES Chapter 15, Appendix 15A and 15C- Document DCO 6.15A and C) and the measures set out in the Landscape and Ecological Management Plan. Each P-CEMP will be required to include details such as:
- Depth and method of topsoil stripping and stockpiling, including separation of topsoil resources of different potential.
  - Methods of stripping and stockpiling of higher quality re-useable subsoil (if appropriate).
  - Identification of landscaping topsoil requirements and assessment of suitability and availability of on-site resources (if appropriate).
  - Means of protection of subsoil from compaction damage and remedial measures (ripping/subsoiling) to remove damage.
- 7.2 Many construction activities increase the risk of dust nuisance. Each P-CEMP will be required to set out the details of a dust management plan setting out the methods to be used to control dust and other emissions to air. These should accord with the principles set out below.
- 7.3 Contractors will plan their activities to reduce the level of risk and mitigate any residual impacts in accordance with 'Institute of Air Quality Management (IAQM) Guidance on Assessment of Dust from Demolition and Construction 2024'.
- 7.4 Generally, the most effective method of dust control is damping using a fine spray. The contractor will fully investigate sources of water and where possible use recycled water. Potable water should not be used.
- 7.5 When sensitive receptors are in close proximity to the site and sources of dust generation the contractor should consider dust monitoring before and during construction. The contractors will be advised to discuss their arrangements with the Environmental Health Officer (EHO).
- 7.6 In accordance with the IAQM (2024) guidance mitigation measures will be adopted and implemented through each P-CEMP in order to minimise impacts from dusts and fine particles. The following mitigation measures are proposed to be included within each P-CEMP are:
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems

- Skips, chutes and conveyors will be completely covered and, if necessary enclosed to ensure that dust does not escape;
- No burning of any materials will be permitted on site;
- Any excess material will be reused or recycled on-site where practicable in accordance with appropriate legislation;
- The Principal Contractor will produce a waste or recycling plan;
- Following earthworks, exposed areas and soil stockpiles will be re-vegetated to stabilise surfaces, or otherwise covered with hessian or mulches;
- Stockpiles will be stored in enclosed or bunded containers or silos and kept damp where necessary;
- Hard surfaces will be used for haul routes where possible;
- Haul routes will be swept/washed regularly;
- Vehicle wheels will be washed on leaving the Application Site;
- All vehicles carrying dusty materials will be securely covered; and
- Delivery areas, stockpiles and particularly dusty items of construction plant will be kept as far away from neighbouring properties as possible.

7.7 In addition, the IAQM (2024) guidance lists recommended mitigation measures for low, medium and high risk sites to dust impacts. The measures deemed relevant for each phase of construction are included in **Appendix 8I: Mitigation (Document DCO 6.8I/MCO 6.8I)**. These will be defined fully in the P-CEMPs, when full details of the construction methodology are known. The Considerate Constructors Scheme will also help to mitigate against any off-site effects.

7.8 Where dust generation cannot be avoided in areas close to neighbouring properties, additional mitigation measures will be put in place, such as: windbreaks, sprinklers, and/or time/weather condition limits on the operation of some items of plant or the carrying out of potentially dust-generating activities.

## 8.0 Control of Emissions from Non-Road Mobile Machinery (NRMM)

8.1 All NRMM should comply with the guidance as set out in the Cleaner Construction for London (CCfL) and Mayor of London (2024) Non-Road Mobile Machinery (NRMM) Practical Guide v.669 (or superseded guidance at the time of construction).

8.2 In certain circumstances the supply of compliant equipment can be limited and retrofit solutions are not available for all types and sizes of machine. Retrofits listed on the Energy Saving Trust

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Website(<https://energysavingtrust.org.uk/service/nonroad-mobile-machinery-certification/>) could be considered.

- 8.3 Use of NRMM will be minimised as much as possible and electric or battery powered alternatives will be used as a preference. If NRMM under 37kW is to be used, use of the equipment will be minimised and kept as far away from sensitive receptors as is practicable. NRMM where the power output is less than 37kW will be fitted with an after-treatment device (DPF) stated on the approved list managed by the Energy Saving Trust; the ongoing conformity of plant retrofitted with suitable after treatment devices, to a defined performance standard, should be ensured through a programme of on-site checks.

## **9.0 Contractors' Facilities including Compound areas, Temporary Buildings and Fencing, Parking areas and Storage of Plant and Materials**

- 9.1 It is likely that more than one contractor will be working on the development at any time, each requiring different facilities located at different locations. It is assumed that only one contractor shall be working on any part of the development at any one time.
- 9.2 Indicative locations of the Contractors' Facilities on the Main Site are shown on the Plans at Appendix 2. It is envisaged that these facilities will also be used as the main compounds for the highway works adjacent to the main site (Works Nos.6,7,15,17 and 18).
- 9.3 Additional facilities may be provided for each area of works.
- 9.4 Each P-CEMP shall include details of the Contractor's facilities including compound areas, temporary buildings and fencing, parking areas and storage of plant and materials.
- 9.5 Each P-CEMP will include a management plan to dispose of foul water from welfare facilities either via a consented connection to the local public foul water sewers, or through removal to an offsite licensed facility.
- 9.6 When preparing details in accordance with this requirement consideration, as a minimum, shall be given to:
- Size and location
  - Separation from other facilities
  - Separating access routes from working areas
  - Separation of the public from access routes and working areas
  - Storage of Plant and Materials
  - Arrangements for removal following completion of construction
  - Publishing details of internal circulation routes within the site. The plans shall show how pedestrian routes will be segregated from plant and equipment routes.

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## 10.0 Procurement

- 10.1 Each P-CEMP will include a requirement for construction materials to be sourced locally where practicable, to minimise the impact of transportation.
- 10.2 Contractors will be required, where practicable, to ensure that pre-fabricated elements will be delivered to site ready for assembly in order to reduce on-site construction waste and reduce vehicle movements as part of the construction process.

## 11.0 Waste Management

- 11.1 Each P-CEMP shall set out details of construction waste management in accordance with the Site Waste and Materials Management Plan Appendix 18E of the Environmental Statement (Document DCO 6.18E). It is inevitable that some waste will be produced during the construction works. Throughout the construction process, all activities will seek to minimise the generation of waste, utilising the waste hierarchy where practicable, to manage waste. The waste hierarchy seeks to reduce waste through elimination, reduction, re-use, recycling through to disposal as the final option. Handling and disposal of waste must be carried out under the 'Duty of Care' Regulations and current legislation.
- 11.2 Waste management procedures shall be developed and will include the following topics:
- Identification of the types of waste that may be generated;
  - Implementation of re-use and recycling strategies;
  - Implementation of waste minimisation strategies;
  - Set up of waste disposal facilities;
  - Control and management of the disposal of different types of waste, utilising local waste management facilities wherever possible;
  - Roles and responsibilities;
  - Monitoring, reporting and auditing of waste produced on site.
- 11.3 Waste can also be controlled through the use of particular construction techniques and use of recycled materials. Each P-CEMP, where relevant, will include a requirement to work with the supply chain to identify and utilise suitable recycled aggregates where they are available within suitable travelling distance to minimise the import of clean aggregates. Each P-CEMP, where relevant, will also include a requirement to explore and utilise prefabricated construction techniques where practical to do so.

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11.4 If unknown made ground deposits are encountered a Material Management Plan (MMP), in accordance with the CL:AIRE DoW CoP, will be prepared which will define how the made ground materials may legitimately and safely be reused as part of the development earthworks. The MMP must be based upon suitable risk assessment that underpins the remediation strategy or/and Design Statement concluding that the objectives of preventing harm to human health and pollution of the environment will be met if materials are reused in the proposed manner and positions. It will also define the method of verification. This has to be reviewed and agreed by an independent Qualified Person registered with CL:AIRE not involved in the project to safeguard the integrity of the Materials Management Plan and its use in practice.

### **Earthworks/Spoil**

11.5 The proposed development will seek to minimise the import and export of material, wherever possible. The re-use of materials around the site, as suitable engineering material or infill material, will be carried out whenever possible, in accordance with details agreed pursuant to Requirement 12.

### **Reduction**

11.6 A number of potential options are available to complement construction waste reduction including maximising off-site fabrication, efficient design specification of standardised components/materials, implementing a just-in-time delivery system to minimise the volume of goods/materials stored on site and therefore exposed to inclement weather conditions and other site damage sources.

### **Re-Use**

11.7 Certain materials may have a relatively high level of re-use (e.g. timber, aggregates, bituminous planings, brick and block-work) within the construction stage operations. Such wastes may arise from spoiled materials, and natural waste from construction processes. Procedures will include:

- Separate skips/receptacles will be provided to receive different types of specific waste which can be re-used on site.
- Licensed waste carriers will be required to identify possibilities of local community re-use of waste materials.

### **Recycling**

11.8 Certain materials may have a feasible recycling value (e.g. timber, aggregates, plastics, glass, and metals). These may arise from similar construction processes as those identified above for re-use.

Procedures will include: -

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- Separate marked skips/receptacles will be provided for the depositing of particular types of waste suitable for efficient recycling; and
  - Discussion with licensed waste carriers in respect to the feasibility/efficiency of specific materials recycling.

## **Disposal**

11.9 It is inevitable that certain materials will have to be removed from site for disposal as they have no re-use/recovery value. Procedures to be considered in preparing a Site Waste Management Plan will include:

- All wastes which require removal from site for final disposal will be subject to an effective management control regime ensuring statutory compliance. The key components of this regime are illustrated below:
  - Appointing competent and suitably registered waste carrier(s);
  - Establishing an effective site waste stream strategy (recycling, re-use, disposal);
  - Providing an effective waste skip strategy to suit the waste stream strategy and which differentiates between hazardous, non-hazardous and inert wastes;
  - Should asbestos be encountered all potentially asbestos containing materials will be disposed of by a suitably licensed contractor in accordance with relevant guidance and legislation;
  - Providing adequate information/training to site operatives in respect of the waste stream strategy; and
  - Implementing an effective audit procedure, to audit the waste disposal regime from source to licensed disposal facility(s). This will include reviewing all relevant Waste Management Licences and Waste Transfer Licences of all waste contractors on the project. In addition, a record will be kept of all Waste Transfer Notes to ensure that all waste movements from the site are properly documented. Non-Conformance Reports would be issued to ensure any deficiencies are corrected.

## **12.0 Storage of Fuel, Oil and other Chemicals**

12.1 Each P-CEMP will set out details for the arrangements for the storage of fuel, oils and chemicals having regard to the location of contractor compounds.

12.2 All fuel, oil and chemicals shall be stored in accordance with the Manufacturer's recommendations and any tanks shall be in accordance with GPP 2 (above ground oil storage tanks) and GPP 22 dealing with spills or subsequent amendments or replacements thereof.

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- 12.3 On-site refuelling will be undertaken in a designated impermeable area to prevent runoff/infiltration.
  - 12.4 Fuel, oil, and chemical storage areas should be covered to prevent the accumulation of rainwater and should be bunded to prevent spills being released into the environment accidentally. Bunded areas should be able to hold 110% of the volume they store and may benefit from a valve to release any accumulated rainwater. An oil separator (interceptor), or other device to remove oil from water, may need to be installed.
  - 12.5 Drip trays are to be used under vehicles, where appropriate to ensure that oil is collected to prevent contaminated runoff.
  - 12.6 All fuel, oil and chemicals will be stored at least 10m away from the top of bank of watercourses.

### **13.0 Development affecting a Watercourse**

- 13.1 Each P-CEMP shall set out details of any watercourse that may be affected by the works. All works affecting a watercourse shall be carried out in accordance with a method statement to be prepared and included in each P-CEMP.
- 13.2 No works within an ordinary watercourse or within the by-law protected strip either side shall commence until approval has been granted, by the lead local flood authority pursuant to Article 19 of the DCO.
- 13.3 No works within a Main River or within the by-law protected strip either side shall commence until an Environmental Permit has been issued by the Environment Agency.
- 13.4 Each P-CEMP shall set out details of any works that affect any floodplain and such works must be carried out in accordance with the mitigation measures detailed in the flood risk assessment (Document DCO 6.13G and 6.13H) unless otherwise agreed in writing with the Environment Agency, the lead local flood authority or the appropriate approving body pursuant to Requirement 16.

### **14.0 Temporary Lighting**

- 14.1 No works within the Main Site are planned to be undertaken in periods of darkness and therefore it is unlikely that task lighting will be required. However, unplanned events can occur for which task lighting may be required for short periods; in this event each P-CEMP shall set out the maximum height of lighting lanterns and the average lux levels.

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- 14.2 The P-CEMP for any component of the highway works shall provide details of requirements for night working and any associated proposals for lighting.
  - 14.3 Temporary lighting will be provided in the contractor's compound for security and safety reasons. Details shall be set out in the P-CEMP including the average lux level.
  - 14.4 Task lighting shall ensure that there is no upward light.
  - 14.5 Lighting will be switched off when not required for safety or security.

## **15.0 Prevention of Debris on Highways**

- 15.1 Each P-CEMP shall include details of the contractor's proposed measure for cleaning vehicles before leaving the site and other measures to ensure mud and other deleterious material is not deposited on the public highway. This shall include arrangements for the use of suction sweepers in accordance with the 'Institute of Air Quality Management (IAQM) Guidance on Assessment of Dust from Demolition and Construction 2012'.

## **16.0 Construction Traffic Management**

- 16.1 A detailed Construction Traffic Management Plan (CTMP) has been prepared and is Appended to and forms part of this CEMP. The CTMP sets out the arrangements and management practices that will be adopted to minimise the impact of traffic on the local road network and will be agreed with the relevant highway authority prior to the commencement of construction-related works. The CTMP is also intended to provide clear guidance to the Principal Contractor (once appointed) and all sub-contractors regarding access routes to the site, maintenance requirements for the existing public road, restrictions to vehicle access, speed limits imposed or the duration of the works, and identification requirements for all vehicles involved in the project.
- 16.2 Each component of the development will require a separate Construction Traffic Management Plan for that specific phase, which will be referenced as a pCTMP (phase).

## **17.0 Protecting Biodiversity Interests**

### **Landscape**

- 17.1 The Landscape Designer will identify existing landscaping or newly planted landscaping that needs to be protected and details shall be set out in each P-CEMP. Protection shall be

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provided in accordance with BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations. Any tree surgery required will be carried out in accordance with BS 3998:2010 Tree Work Recommendations.

### **Ecology**

- 17.2 All P-CEMPs will be prepared in accordance with the Landscape and Ecological Management Plan (LEMP) (Document DCO 6.9J).

### **Habitats – General**

- 17.3 The following principles should be incorporated into each P-CEMP where appropriate.
- 17.4 As a result of the duration of works, each P-CEMP will be informed by an update walkover survey that will ensure that an up-to-date baseline informs the specific construction site management measures during each phase to avoid and/or reduce effects on habitats and species.
- 17.5 Key measures are outlined below and would be expected to be required for each P-CEMP.
- 17.6 Prior to the commencement of construction activity, including that required to bring about the change in levels and establish the development platform, a sturdy fence, as detailed in each P-CEMP will be established on the perimeter of development areas at an appropriate distance to take account of tree root protection zones in line with British Standard BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations. This would where necessary be informed by an up-to-date Arboricultural survey of the phase in question.
- 17.7 No temporary storage of materials, construction of haul routes, or site machinery would be sited within retained habitats as identified in the P-CEMP and access by construction site personnel would be prevented.
- 17.8 An ecological clerk of works will ensure that measures will be implemented to prevent inadvertent damage to retained or created habitats throughout the construction phase particularly where vegetation is to be removed or during works close to retained habitat.
- 17.9 This is to ensure that retained woodland, trees, hedgerows and other vegetation are not adversely affected during the construction process, particularly through compaction of the soil and inadvertent encroachment and damage.
- 17.10 All site personnel will be made aware of the importance of retained vegetation through a briefing prior to commencing work. Movement of earth to facilitate the necessary changes in levels will be undertaken in such a way as not to impact on retained habitats, either through soil compaction or subsidence.

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- 17.11 CIRIA guidance on Environmental Good Practice on site guide will be always adhered to in order to reduce the chance of chemical spills and other pollution events. Relevant spill kits will be kept on site for the rapid treatment of any spillages, with staff trained in their use present when work is underway. Exclusion fencing with a minimum buffer distance of 10m will be established along the routes of watercourses and particular care will be taken in terms of the movement of machinery and storage of materials in proximity to these features. Any temporary construction compounds within 15m of a watercourse will be screened with fencing on sides facing the watercourse, and working lights will be positioned to avoid light spill.
- 17.12 Best practice measures for the industry will be employed according to agreed standards in order to minimise adverse effects on the surrounding area through dust deposition. This will include wheel washes of construction vehicles and dust suppression techniques during periods of dry weather and / or high winds. Measures for the control of dust are considered in greater detail elsewhere in this document.

#### **Habitats – veteran and irreplaceable habitats.**

- 17.13 Where the loss of over-mature or veteran trees is unavoidable, a bespoke compensation strategy will be implemented to conserve ecological function and promote habitat continuity for saproxylic invertebrates, fungi, and associated species.
- 17.14 The following measures will be implemented:
- **Deadwood Monolith Creation:**
    - Large-diameter sections of felled trees will be retained and installed vertically as standing deadwood features (monoliths), or laid horizontally as lying deadwood, at two designated areas within the site's green infrastructure network. Monoliths will be installed at a range of orientations, exposures and moisture conditions to replicate natural deadwood heterogeneity. Priority will be given to installing monoliths close to retained over-mature trees to encourage natural species dispersal.
  - **Stump and Soil Translocation:**
    - The original stumps and surrounding topsoil (top 10–30 cm) from felled veteran trees will be carefully excavated and relocated adjacent to the new monoliths. This will assist in transferring soil fungi, microbial communities, and invertebrates associated with the original tree environment, helping to maintain ecological continuity.
  - **Vertical Log Piles:**
    - Trenches approximately 0.5 m deep will be excavated, filled with vertically stacked branchwood, and lightly backfilled with loose soil, leaving timber ends exposed. These features will be created in semi-shaded locations, ideally near hedgerows or retained trees, to provide a structurally diverse deadwood habitat.
  - **Working Methods and Supervision:**

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- Specialist contractors experienced in handling large, complex timber pieces and veteran material will be engaged. Works will require large machinery (e.g., 360° excavators with grabs) and careful handling to avoid damaging important decay features such as cavities and fungal bodies. All operations will be supervised by an ecologist and arboriculturist.
  - Protection Measures:
    - Low post-and-wire fencing, bollards, or similar barriers will be erected around monolith installation areas to prevent unauthorised access. Interpretive signage will be installed at key locations to explain the ecological value of the installations and promote awareness among future site users.
  - Monitoring and Adaptive Management:
    - All deadwood habitat installations will be incorporated into the Landscape and Ecology Management Plan (LEMP) and subject to routine inspections. Management actions (such as securing leaning monoliths, or enhancing habitat if decay rates differ from expectations) will be implemented as necessary to maintain ecological function over time.
- 17.15 Each P-CEMP will detail the timing, sequencing, and installation methods for the translocation of deadwood features, including monoliths, stumps, and associated soils.
- 17.16 The timing of works will be coordinated with felling operations to minimise the duration that deadwood material is stored before installation, thereby preserving structural integrity and associated ecological communities.
- 17.17 Initial establishment and aftercare management of the deadwood habitats will be detailed in the Landscape and Ecology Management Plan (LEMP), including routine monitoring, protection measures, and adaptive management interventions where necessary.

#### **Habitats - Invasive Non-Native Species and Biosecurity**

- 17.18 Prior to the commencement of each construction phase, an invasive non-native species (INNS) survey will be undertaken within the relevant works areas to identify the presence of any plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Where such species are identified, appropriate biosecurity measures and a site-specific method statement will be prepared and implemented in accordance with relevant legislation and current best practice guidance.
- 17.19 Measures will include, where necessary, marking and avoiding known locations of invasive plant species, restricting vehicle movements within affected areas, and implementing controls to prevent the accidental spread of invasive material through soils, plant, machinery or construction activities. Appropriate cleaning of vehicles, equipment and footwear will be undertaken where required to remove soil or plant material before leaving affected areas.

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- 17.20 Where invasive species are present, soils or spoil containing or likely to contain invasive plant material will be managed separately from uncontaminated material and treated or disposed of in accordance with the agreed method statement. Works in the vicinity of invasive species may be supervised by the Ecological Clerk of Works (ECoW) where necessary.

## **Fauna**

### **Badgers**

- 17.21 The Protection of Badgers Act 1992 consolidates the previous legislation on badgers. It aims to protect the species from persecution rather than being a response to an unfavourable conservation status, as the species is common over most of Britain, with particularly high populations in the southwest.
- 17.22 As well as protecting the animal itself, the 1992 Act also makes the intentional or reckless destruction, damage or obstruction of a badger sett an offence. A sett is defined by Natural England as *“any structure or place which displays signs indicating current use by a badger”*.
- 17.23 In addition, the intentional elimination of sufficient foraging area to support a known social group of badgers may, in certain circumstances, be construed as an offence by constituting ‘cruel ill treatment’ of a badger.
- 17.24 ‘Interim guidance’ issued by Natural England in September 2007 specifically states *“it is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed.”*
- 17.25 Prior to the commencement of any construction a pre-commencement badger survey will be conducted to identify the current status of any setts that have been identified or excavated in the interim.
- 17.26 Given the current baseline a licence will be required prior to the commencement of any phase that affects badger setts (e.g. the Main Site earthworks). This has been applied for with Natural England and a LONI has been granted. This application will be made in full post consent and no construction works undertaken within 30m of any badger sett until this has been granted.
- 17.27 The relevant P-CEMP will detail any specific measures required under that licence including details of exclusion zones around existing, retained and proposed artificial setts and any measures proposed to ensure access to retained habitats is maintained.
- 17.28 Consideration will be given by the Project and Environmental Managers, under advice from the ecologist where necessary, to the normal requirement to conduct licensable activities, such as sett closure, to outside of the period from December to June (inclusive).

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17.29 In the event that any setts are excavated within the application site during the construction period an ecologist will be contacted for advice. Any trenches or holes excavated will be covered or left with a means of escape for Badgers (such as a plank of wood) so that they do not become trapped overnight.

17.30 Careful consideration will be given to the storage of mounds of soil, which could be used by badgers to excavate setts. In particular, the establishment of the landscaped earth bund will require close attention to ensure that badgers are not harmed during its construction. Areas of the bund to be worked on will be inspected every morning. In the event any evidence of use by badgers is noted work in the area will cease while consideration is given to the best way to proceed.

### **Bats**

17.31 All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (“the Habitats Regulations”). These include provisions making it an offence:

- Deliberately to kill, injure or take (capture) bats;
- Deliberately to disturb bats in such a way as to:-
  - be likely to impair their ability to survive, to breed or rear or nurture their young; or to hibernate or migrate; or
  - to affect significantly the local distribution or abundance of the species to which they belong;
- To damage or destroy any breeding or resting place used by bats;
- Intentionally or recklessly to obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).

17.32 The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.

17.33 The offence of damaging (making it worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.

17.34 In accordance with the Habitats Regulations the licensing authority (Natural England) must apply the three derogation tests as part of the process of considering a licence application. These tests are that:

- the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
- there must be no satisfactory alternative; and
- the favourable conservation status of the species concerned must be maintained.

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- 17.35 Survey work has identified the presence of a bat roost within a single tree scheduled for removal as part of the development.
- 17.36 No bat roosts were identified within any other trees within the site during surveys.
- 17.37 A Letter of No Impediment (LONI) has been issued by Natural England, confirming that they are satisfied with the submitted bat mitigation licence application to permit the removal of the roosting tree.
- 17.38 The formal bat licence will be obtained prior to the commencement of any works affecting the roost.
- 17.39 All works will be undertaken in strict accordance with the conditions of the granted licence, including the use of soft-felling techniques under the supervision of a suitably licensed bat ecologist, and the provision of replacement bat roosting features within the site's green infrastructure.
- 17.40 Pre-commencement bat surveys will be completed where required to meet legislative requirements, prior to the production of P-CEMP affecting both mature trees to ascertain whether potential bat roost habitat is present and, in the event that it is, the up-to-date status of bats within any trees.
- 17.41 Where surveys identify that suitable habitat is present within trees and given the often-transitory nature of bat tree roosts, their removal will be carried out according to a precautionary method statement. In brief, this will include precautionary pre-felling nocturnal surveys and / or aerial tree climbing inspections to ensure the sensitive removal of the trees only when it is confirmed to be unoccupied by bats. Providing that no bats are observed the tree will be section felled by experienced arborists under the supervision of an appropriately licensed bat worker.
- 17.42 Where bats are identified roosting within features to be removed during pre-commencement surveys a licence may be required to facilitate the demolition of buildings or felling of trees identified as supporting a bat roost. Where relevant the P-CEMP will detail construction site measures required under a condition of any licence to prevent impacts to roosting bats. This may, depending on the status and nature of any roost identified, have strict season restrictions.
- 17.43 To avoid disturbance to commuting or foraging bats during the construction period, the potential for impacts to bats from the use of floodlighting within any construction areas would be mitigated by the sensitive design of lighting. Measures to reduce impacts within the P-CEMP may include:
- The use of directional floodlighting around construction areas and site compounds to avoid spill onto retained habitats;

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- The use of the lowest intensity possible;
  - The use of low-pressure sodium (as opposed to high pressure) where possible; and
  - The avoidance of lighting that emits high levels of blue/ultra-violet or red/infra-red light.
- 17.44 To enhance roosting opportunities for bats and support biodiversity across the site, a range of bat boxes will be installed at an early stage of the construction programme.
- 17.45 Boxes will include a variety of designs suitable for crevice-dwelling and void-dwelling species and will be mounted on retained mature trees within green infrastructure areas, away from artificial lighting and disturbance.
- 17.46 Installation locations, box types, numbers, and fixing methods will be selected under the guidance of the project ecologist to ensure maximum ecological benefit.
- 17.47 All bat box provision will be incorporated into the Landscape and Ecology Management Plan (LEMP) and subject to appropriate maintenance and monitoring measures post-installation.

#### ***Great Crested Newts (GCN)***

- 17.48 The presence of Great Crested Newts (GCN) within the wider landscape has been confirmed although suitable habitat within the site itself is limited.
- 17.49 GCN are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (“the Habitats Regulations”).
- 17.50 The project is registered under Natural England’s District Level Licensing (DLL) scheme for GCN. This provides strategic compensation for all relevant impacts associated with the development and ensures that the favourable conservation status of GCN will be maintained.
- 17.51 Where relevant, each P-CEMP will detail appropriate working practices and site controls to comply with the requirements of the DLL scheme.
- 17.52 Measures will include, where necessary:
- Identification of working areas and access routes to minimise encroachment into GCN-sensitive habitats;
  - Precautionary working methods during site clearance (e.g., directional vegetation strimming, staged clearance where appropriate);
  - Measures to prevent GCN from accessing active construction areas (e.g., site fencing where required);
  - Protocols for encountering GCN during construction, including halting works and contacting the Site Ecologist for advice.

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## **Reptiles**

- 17.53 No reptiles were recorded during survey work. However, suitable habitat for common reptile species, such as grass snake, is present within parts of the site, particularly associated with grassland margins, scrub, and highway verges. Populations, if present, are considered likely to be localised and at low density.
- 17.54 Construction works that may affect potential reptile habitat include site clearance, vegetation removal, and soil stripping.
- 17.55 The relevant P-CEMP for each phase will detail the precautionary methodologies to minimise risks to reptiles, where instructed by the project Environmental Clerk of Works (ECoW).
- 17.56 The broad principles for precautionary working in suitable reptile habitat, where deemed necessary by the ECoW, will include:
- Vegetation clearance during winter months (November to February), where no suitable hibernation features are present, to discourage reptile use prior to active construction;
  - Staged habitat clearance and passive displacement during the active season (March to October), involving an initial strim to 150 mm followed by a second cut to ground level after an interval of at least 24 hours;
  - Directional clearance toward adjacent retained habitat to allow natural dispersal of any reptiles.
- 17.57 Precautionary measures will be deployed at the discretion of the project ECoW based on assessment of habitat suitability, seasonal conditions, and construction phase risks.
- 17.58 Each P-CEMP will set out site-specific requirements, informed by an up-to-date walkover survey if considered necessary by the ECoW.
- 17.59 As part of the site's green infrastructure delivery, a series of hibernacula will be constructed to provide overwintering and refuge opportunities for a range of wildlife species, including common reptiles, as well as amphibians and invertebrates.
- 17.60 Hibernacula will typically be constructed from site-won materials such as logs, brush, rubble, and soil, and will be located within retained and newly created habitat areas including grassland margins, scrub edges, and woodland fringes.
- 17.61 Structures will be positioned in areas offering a mix of sun and shade to provide suitable thermal conditions and will be designed to ensure stability, shelter, and connectivity with surrounding habitats.
- 17.62 The construction, location, and aftercare of hibernacula will be detailed within the Landscape and Ecology Management Plan (LEMP) and coordinated with the habitat creation strategy.

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## **Birds**

- 17.63 Section 1 of the Wildlife & Countryside Act is concerned with the protection of wild birds. With certain exceptions all wild birds and their eggs are protected from intentional killing, injuring and taking; and their nests, whilst being built or in use, cannot be taken, damaged or destroyed.
- 17.64 Schedule 1 of the Wildlife & Countryside Act 1981 is a list of the nationally rarer and uncommon breeding birds for which all offences carry special (i.e. greater) penalties. These species also enjoy additional protection whilst breeding, as it is also an offence to disturb adults or their dependant young when at the nest.
- 17.65 Wherever possible, clearance of vegetation will be undertaken outside of the bird nesting season (typically taken as March to August inclusive). Where this is not possible a check for nesting birds will be undertaken by an ecologist; in the event that any are identified, an exclusion zone will be established around the nest until the young have fledged. This will be marked clearly with hazard tape and/or Heras fencing. The size of any exclusion area will be determined by the project ecologist, taking into account the species concerned and the activities proposed in proximity to the nest.
- 17.66 Bird surveys have identified the site as supporting a range of breeding birds, including species nesting in hedgerows, trees, and open ground habitats such as arable field margins and grassland.
- 17.67 To ensure compliance with the legislation and avoid committing an offence:
- Vegetation clearance and groundworks will, wherever possible, be scheduled outside the bird breeding season (typically March to August inclusive).
  - Where works during the breeding season are unavoidable, pre-commencement nesting bird checks will be undertaken by a suitably qualified ecologist.
  - If active nests are found, appropriate exclusion zones will be established and maintained until the young have naturally fledged.
  - The extent of exclusion areas will be determined by the ecologist based on the species present and the proximity and nature of construction activities.
- 17.68 Each P-CEMP will set out the procedures to be followed to ensure that no works will result in the disturbance or destruction of active bird nests, including appropriate timing of clearance, site inspections, and mitigation measures as instructed by the project ecologist.
- 17.69 To support the site's ecological value and biodiversity enhancement objectives, a broad range of bird boxes will be installed at an early stage of the construction programme.

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- 17.70 These will include designs suitable for a variety of species, including small passerines (e.g., blue tit, great tit), open-fronted boxes for species such as robin and wren, and sparrow terraces where appropriate.
- 17.71 Boxes will be installed within retained habitats such as hedgerows, woodland edges, and mature trees, at suitable heights and orientations to maximise uptake and minimise disturbance.
- 17.72 The locations, specifications, and numbers of bird boxes will be agreed with the project ecologist and incorporated into the Landscape and Ecology Management Plan (LEMP).

### ***Invertebrates***

- 17.73 Baseline surveys confirmed the presence of a varied invertebrate assemblage associated with habitats such as hedgerows, semi-improved grassland, scrub, ponds, and mature trees.
- 17.74 The design of the project has sought to retain key features of value to invertebrates, including hedgerows, water features, and scattered trees where possible. In addition, specific compensation and enhancement measures will be implemented to ensure the conservation value for invertebrates is maintained and enhanced, including:
- Retention and protection of veteran trees and associated deadwood habitats;
  - Creation of new deadwood features (standing monoliths, log piles) within green infrastructure areas;
  - Establishment of wildflower grassland and structurally diverse vegetation corridors to provide foraging and breeding habitats;
  - Management of ponds and ditches to maintain water quality and marginal vegetation diversity.
- 17.75 Construction activities that could temporarily affect invertebrate populations (e.g., vegetation clearance, soil stripping) will be carefully managed. Where appropriate, measures such as staged clearance, sensitive habitat management, and habitat reinstatement will be employed to reduce impacts.
- 17.76 Each P-CEMP will include reference to protecting and enhancing habitats of value to invertebrates, including minimising disturbance to retained features and ensuring early delivery of green infrastructure planting and habitat creation.

### ***Otter and Water Vole***

- 17.77 Targeted surveys recorded no evidence of water vole presence within the site or its immediate surroundings. However, low-level otter activity was confirmed along the Diseworth Brook tributary, located adjacent to the western site boundary, through the identification of otter spraints.

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- 17.78 Water vole is considered unlikely to be present within the site based on survey findings and habitat conditions. As such, no construction constraints relating to water vole are anticipated.
- 17.79 As a precautionary measure, prior to the commencement of each construction phase, an updated check for otter and water vole will be undertaken by a suitably qualified ecologist where works occur within or adjacent to suitable riparian habitat. The survey will focus on ditches, watercourses and associated banks within and immediately adjacent to the works area. The purpose of these checks will be to confirm that no new water vole burrows, otter resting places, or other evidence of activity have become established since the previous survey. Where evidence of either species is identified, works will be reviewed in consultation with the project ecologist and appropriate mitigation or licensing requirements implemented where necessary.
- 17.80 Although the Diseworth Brook tributary is located off-site and outside the main development footprint, precautionary measures will be employed to protect otter habitat, including:
- Establishment of exclusion fencing and buffer zones at a minimum distance 10 metres from the watercourse margins;
  - Any work within this buffer will require approval and supervision from the project ecologist and ECoW;
  - Sensitive positioning of construction compounds, haul routes, and material storage areas away from the watercourse;
  - Strict adherence to Pollution Prevention Guidelines to avoid water quality impacts.
  - Temporary construction compounds within 15m of the watercourse will be screened with fencing on sides facing the watercourse, and working lights will be positioned to avoid light spill.
- 17.81 To enhance site connectivity for otters, a log holt will be constructed along the Diseworth Brook tributary prior to commencement of main construction works. The design and location of the holt will be agreed with the project ecologist and will be sited to minimise human disturbance and maximise ecological value.
- 17.82 In the event that otters are observed within the construction footprint, works will immediately cease in the affected area and advice sought from the project ecologist. Where necessary, further licences or additional mitigation measures will be put in place.
- 17.83 Each P-CEMP will detail the specific measures relevant to watercourses, including fencing, pollution control, holt installation, and incident reporting procedures, to ensure compliance with legal protections afforded to otter and water vole under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

### ***Other Species***

- 17.84 Survey work has been undertaken for a range of protected and notable species as part of the ecological impact assessment process. Species recorded include badger, bats, otter, and a

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notable invertebrate assemblage, with suitable habitats for birds, reptiles, and amphibians also identified.

- 17.85 In the event that protected species are identified during pre-commencement surveys or construction activities, appropriate measures — including halting works, seeking ecological advice, and where necessary obtaining relevant licences — will be implemented and detailed in the P-CEMP for the affected area.

## 18.0 Protecting Archaeological Interests

- 18.1 Chapter 12 of the ES has identified archaeological receptor AR8 within the EMG1 Works Scheme that will require protection measures in order that preservation in-situ of archaeological remains can be achieved. Protection measures shall take the form of Heras fencing to be installed around receptor AR8 prior to the commencement of the construction phase in order to protect the receptor from any construction-related impacts. The fencing shall be supported by signage in order to inform groundworks of the purpose of the fencing. Protection measures can be removed once construction-related activities have been concluded.

## 19.0 Advisory Signage

- 19.1 Each P-CEMP shall set out details of advisory signage to be provided at each public access point advising of possible hazards including the potential for sudden noise. Signage may be required at the following locations:

- Planned accesses to the works;
- Where public rights of way (PROW) pass adjacent to the site;
- Along substituted PROW;
- At any other location where public access is being achieved, authorised or not, and
- Open bodies of water.

Advisory signage may include:

- Warnings that you are entering a construction site;
- Warnings of deep water adjacent to open bodies of water;
- Advisory signs that a PROW has been closed along with a plan of the substituted route;
- Directional signs along substituted PROW;
- Details on how to register a complaint, and
- Emergency telephone numbers.

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## 20.0 Temporary Surface Water Management System

- 20.1 The arrangements for the temporary management of surface water shall be set out in each P-CEMP.
- 20.2 Before any works are undertaken a Surface Water Management Plan (SWMP) for that phase shall be set out. Where such works affect watercourses the requirements of Section 11 above shall also be followed. The SWMP will set out measures required to prevent an increase in runoff to the receiving watercourse, sewer or drainage system, thereby preventing an increase to downstream flood risk.
- 20.3 Surface water runoff from the EMG2 Main Site will be discharged at 114.4l/s to the A42 culvert, a rate that is below the equivalent greenfield rate, but which is required to comply with National Highways requirements. Other construction areas in the EMG2 DCO order limits will be discharged at the equivalent greenfield QBAR rate or at 2l/s/ha, whichever is greatest, thus mimicking the baseline conditions as far as practicable. The appropriate discharge rate will be confirmed in the relevant P-CEMP.
- 20.4 The excess surface water runoff above the discharge rate will be stored on the construction site, until such time that it can drain into the downstream system. Sufficient storage for the 1 in 100-year storm event with a 40% uplift for climate change applied will be provided (to align with the consenting authorities' requirements).
- 20.5 The SWMP will also identify measures to provide appropriate levels of treatment to runoff discharged from the construction site to protect the condition of downstream waterbodies. Measures shall be adopted in accordance with CIRIA Report C532 "Control of water pollution from construction sites"; or subsequent amendments or replacements thereof. Measures will include:
- Treatment facilities such as basins, swales, and storm fencing, will be used to capture and remove pollutants and suspended sediments prior to runoff leaving the construction sites. Where operational drainage basins and swales are also to be used to manage surface water in the construction phase, they will be rehabilitated at the end of the construction phase.
  - SuDS used in the SWMP will be designed in accordance with CIRIA's The SuDS Manual (C753).
  - The SuDS will be lined to prevent the risk of pollutants infiltrating and entering groundwater.
  - A penstock will be provided on the outfall(s) so that the discharge into the receiving watercourse or drainage system can be stopped in the event of a pollution incident.

- 
- Existing outfalls from the construction sites, including land drainage, that do not form part of the drainage strategy will be stopped up to prevent treatment measures from being bypassed.
  - To avoid the pollution of watercourses from vehicles or accidental spillage, vehicles used on the site will undergo regular inspection and be maintained to reduce the risk of leakages. Vehicle washing areas will be located at least 10m from any surface water bodies in designated bunded impermeable areas. Any runoff from this area will be treated prior to discharge.
  - Concrete will be mixed off site where possible. Where this is not possible, waste water from concrete production and lorry washing will be limited to a designated bunded impermeable area to prevent runoff or infiltration. Any washout will be attenuated, stored and treated alongside the runoff from the wider construction site, until it is of a standard which can be discharged to the local watercourse, subject to any required permit. Areas where concrete works are proposed will be identified in each P-CEMP.
  - To minimise the risk of pollution from any on site concrete production, construction works should be minimised during heavy precipitation and carried out during dry months where practicable. Wheel washing facilities and regular sweeping will be undertaken to prevent the build-up of dust and silt on roads. Wheel washing facilities will be located in a designated bunded impermeable area a minimum of 10m from any surface water bodies. Runoff from the wheel washing area will be attenuated, stored and treated alongside the runoff from the wider construction site, until it is of a standard which can be discharged to the local watercourse, subject to any required permit.
  - . Any potential firefighting water will be captured in the SuDS for removal and disposed of at an appropriate offsite treatment facility.
- 20.6 An Outline Silt Management Plan (SMP) has been prepared and is Appended to and forms part of this CEMP. It sets out measures to minimise the mobilisation of silt in surface water runoff, treat surface water runoff to remove silts and suspended solids, and minimise the release of silts and suspended solids from the construction site. The measures set out in the SMP shall be taken into account in the preparation of each P-CEMP. Regular monitoring of the downstream water quality will be undertaken during the construction phase to ensure that the sediment and pollution control measures are working effectively. Details of the monitoring plan shall be set out in each P-CEMP. A draft water quality monitoring plan is provided in Appendix A of the SMP.
- 20.7 Final testing parameters and locations shall be agreed with the Environment Agency or lead local flood authority as appropriate.
- 20.8 Where the suspended solids are particularly fine, flocculants may be used to help maximise removal. Dosage and type of flocculant will be determined for each phase-specific CEMP and

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permit application. Examples of how the use of flocculants could be applied are included in Appendix A of the Silt Management Plan.

- 20.9 The discharge of treated surface water from the construction site, and use of flocculants, may constitute a water discharge activity and therefore an environmental permit may be required. The permit requirements will be discussed and confirmed with the EA at the appropriate time.
- 20.10 The onsite trenches on the EMG2 Main Site will be open cut, with no need for directional drilling. In the wider area, the preference is to construct the service trenches via open cut trenches as well, but at this stage the use of directional drilling cannot be ruled out completely. This will only be known following further design and stakeholder engagement. If directional drilling is identified as a requirement, then a drilling fluid breakout plan will be prepared as part of the appropriate P-CEMP which will set out measures to ensure that the risk of drilling fluid breakout is managed, and local water quality is protected.

## **21.0 Public Rights of Way**

- 21.1 The existing and proposed Rights of Way are shown on the Access and Rights of Way Plans (Document DCO 2.4).
- 21.2 A combination of appropriate temporary diversions and closures will be implemented before the commencement of any component of works and details shall be set out in P-CEMPs where appropriate.
- 21.3 All permanent routes will be constructed and implemented as soon as practicable.
- 21.4 Details of the strategy for the management of Public Rights of Way shall be set out in each P-CEMP, the details shall include temporary routes and the timing of the provision of access to permanent routes.
- 21.5 Any permanent and temporary stopping up of rights of way must be undertaken in accordance with Article 12 of the DCO and any necessary approvals obtained accordingly.

## **22.0 Traffic Management**

- 22.1 Details of Traffic Management shall be set out in each P-CEMP. This shall have regard to the routing requirements set out in the Construction Traffic Management Plan and any works required to enable construction access to the site.
- 22.2 The development shall be carried out in such a manner so as to ensure that emergency vehicles visiting the development, or adjacent properties are unhindered at all times and provided with free flow passage as far as is practicable.

- 
- 22.3 All works on the strategic road network maintained by National Highways shall be carried out in accordance with the Transport Chapter of the Environmental Statement and the traffic management arrangements agreed with National Highways pursuant to Part 1 of Schedule 13 of the DCO.
- 22.4 All works on the local road network maintained by Leicestershire County Council shall be carried out in accordance with the Transport Chapter of the Environmental Statement and the traffic management arrangements agreed with Leicestershire County Council pursuant to Part 2 of Schedule 13 of the DCO.
- 22.5 The P-CEMP shall set out details of the relevant temporary speed limits that shall be provided in accordance with Article 16 of the DCO.

## 23.0 Birdstrike Management

- 23.1 Consideration should be given to the advice set out in the Birdstrike Hazard Management Plan, Appendix 9K of the Environmental Statement (Document DCO 6.9K). It explains that construction activity on the site is unlikely to result in an increase of bird assemblages over baseline conditions. However, it advises that to ensure there is no risk of increased attraction of birds the following measures should be taken:
- Top soil clearance undertaken in a phased manner;
  - The avoidance of puddling of large areas of water;
  - If temporary water bodies are formed, to enclose these with goose proof fencing together with measures to prevent landing on the water and to ensure vegetation is not established around these features.

## 24.0 Code of Conduct and Site Rules

### Code of Conduct

- 24.1 The Code of Conduct below outlines the expected standards of behaviour and professionalism for all individuals engaged in, or visiting, EMG2 Works or Highway Works. The commitment is to deliver projects safely, efficiently, to the highest quality standards, and with respect for all stakeholders, the environment, and the communities.
- 24.2 This Code draws upon pertinent best practices from major infrastructure developments, including those applicable to Nationally Significant Infrastructure Projects (NSIPs), where robust ethical, safety, and environmental considerations are paramount. Adherence to this Code is a mandatory condition of employment, contract, or site access.

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24.3 The code will apply to all employees, consultants, and temporary staff; all contractors, sub-contractors, and their employees, agents, and representatives; and all visitors.

24.4 The core principles are:

- Safety First: The health, safety, and well-being of all personnel, the public, and the environment are our absolute priorities.
- Integrity and Transparency: We act honestly, ethically, and with fairness in all our dealings, promoting an open and transparent working environment.
- Environmental Responsibility: We are committed to minimising our environmental footprint, protecting natural habitats, and promoting sustainable practices.
- Respect and Inclusion: We treat all individuals with dignity and respect, fostering an inclusive environment free from discrimination, harassment, or bullying.

24.5 Specific conduct expectations will be:

#### Health, Safety, and Welfare

- Zero Harm: Actively contribute to a "zero harm" culture by identifying, reporting, and mitigating hazards and unsafe conditions immediately.
- Personal Responsibility: Take personal responsibility for your own safety and the safety of others.
- Following Procedures: Strictly adhere to all site-specific safety rules, risk assessments, method statements, and permits to work.
- PPE: Always wear appropriate Personal Protective Equipment (PPE) as required by site rules and task assessments.
- Reporting: Report all incidents, near misses, and unsafe acts/conditions promptly to your supervisor or the designated safety representative.
- Substance Abuse: Operate free from the influence of alcohol, illegal drugs, or any substance that impairs judgment or performance. Random drug and alcohol testing may be conducted.

#### Environmental Protection

- Minimising Impact: Work proactively to minimise environmental impact through waste reduction, efficient resource use, pollution prevention, and protection of biodiversity.
- Compliance: Adhere to all environmental permits, licences, and legislation.
- Waste Management: Follow established waste segregation, recycling, and disposal procedures.
- Spill Prevention: Implement measures to prevent spills and contamination, and report any environmental incidents immediately.
- Resource Efficiency: Use energy, water, and materials responsibly.

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#### Professionalism and Respectful Conduct

- Professional Behaviour: Conduct yourselves professionally at all times, reflecting positively on EMG2.
- Respect: Treat all colleagues, contractors, clients, stakeholders, and community members with respect, courtesy, and fairness, regardless of background, gender, race, religion, or any other characteristic.
- No Harassment or Bullying: Harassment, bullying, intimidation, discrimination, or any form of offensive behaviour will not be tolerated.
- Diversity and Inclusion: Embrace diversity and contribute to an inclusive working environment.
- Site Appearance: Maintain a clean, tidy, and organised work area.
- Language: Use appropriate language, avoiding profanity or offensive remarks.

#### Security and Site Access

- Authorised Access: Only access authorised areas of the site. Do not permit unauthorised access to others.
- Site Security: Protect site assets, equipment, and materials from theft, damage, or misuse.
- Identification: Wear visible identification/access passes at all times on site.
- Reporting: Report any suspicious activity or security breaches immediately.

#### Community Engagement and Public Interaction

- Community Awareness: Be mindful of the impact of our operations on local communities, particularly for large-scale projects.
- Public Interaction: When interacting with the public, represent EMG2 professionally and respectfully. Direct all sensitive enquiries or complaints to the designated community relations or project management team.
- Minimising Disruption: Work to minimise noise, traffic, and other potential disruptions to local residents and businesses.

24.6 Any violation of this Code of Conduct will be taken seriously and may result in disciplinary action, up to and including termination of employment or contract, and potential legal action. This Code of Conduct will be reviewed periodically to ensure its continued relevance and effectiveness. All personnel and contractors will be required to read, understand, and acknowledge their commitment to abiding by this Code as part of onboarding and site familiarisation.

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## Site Rules

24.7 A set of site rules will be displayed within the site office to set the minimum standard to be adopted by all contractors and Sub-contractors. These will be based on the following:

- All operatives and visitors must wear appropriate PPE (hard hat, high visibility jacket and protective footwear as a minimum), with further equipment to be determined through method statement/risk assessment.
- All operatives and visitors must receive site induction training, including the environmental induction.
- All power tools using temporary electrics are to be transformed down to 110 volts.
- No operative is to misuse or abuse any mechanical or other equipment.
- Only authorised vehicle routes shall be used.
- Segregated pedestrian routes shall be provided.
- Vehicles used in road deliveries of materials, equipment and waste arisings on- and off-site should be loaded to full capacity to minimise the number of journeys associated with the transport of these items.
- All machinery and plant should be procured to adhere with emissions standards prevailing at the time and should be maintained in good repair to remain fuel efficient.
- When not in use, vehicles and plant machinery involved in site operations should be switched off to further reduce fuel consumption.
- Equipment and machinery requiring electricity should only be switched on when required for use. Procedures should be implemented to ensure that staff adhere to good energy management practices, e.g. through turning off lights, computers and heating/air conditioning units when leaving buildings.
- Operatives must not report for work if under the influence of alcohol or drugs or consume alcohol or drugs at work or during breaks.
- All operatives and visitors must report any potential safety incidents identified and must not continue with an activity that has been identified as a risk, without an appropriate risk assessment being in place.
- The site will operate a permit to dig system, which will be granted following a review by the Principal Contractor of service drawings and cable locator scan of the area.
- Any accident or incident on site, which requires medical treatment or time off, should be reported immediately to the Site Manager.
- A Site Accident and Incident Log will be maintained by the site manager.

24.8 Parking of vehicles shall only be permitted in designated parking areas. Parking on the Public Highway or the Development Roads will not be permitted.

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**Appendix 01 – Indicative Master Programme**

**Appendix 02 – Construction Phasing, Access and Compounds Plan**

**Appendix 03 – Construction Traffic Management Plan**

**Appendix 04 – Silt Management Plan**

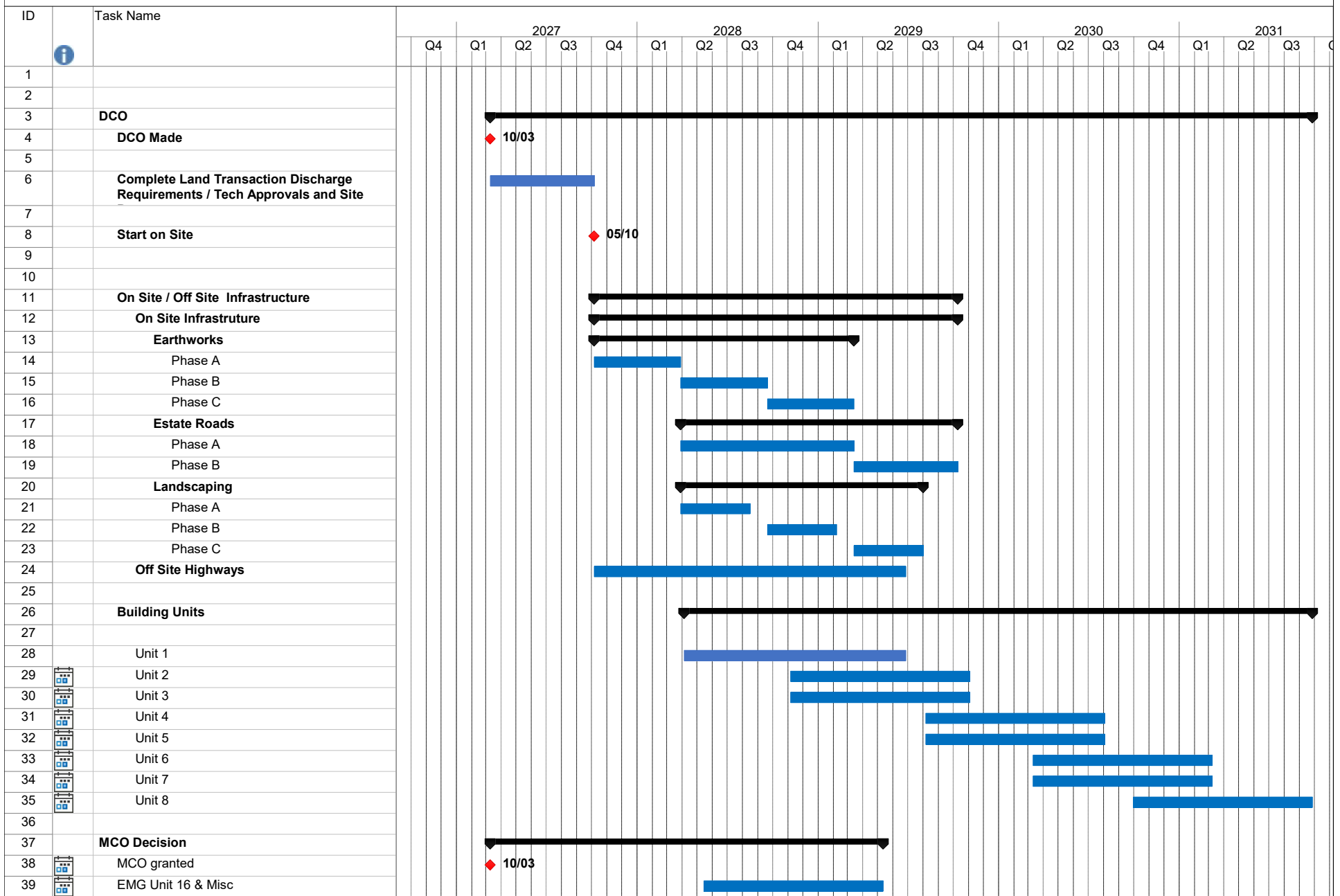
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## **Appendix One**

# **Indicative Master Programme**

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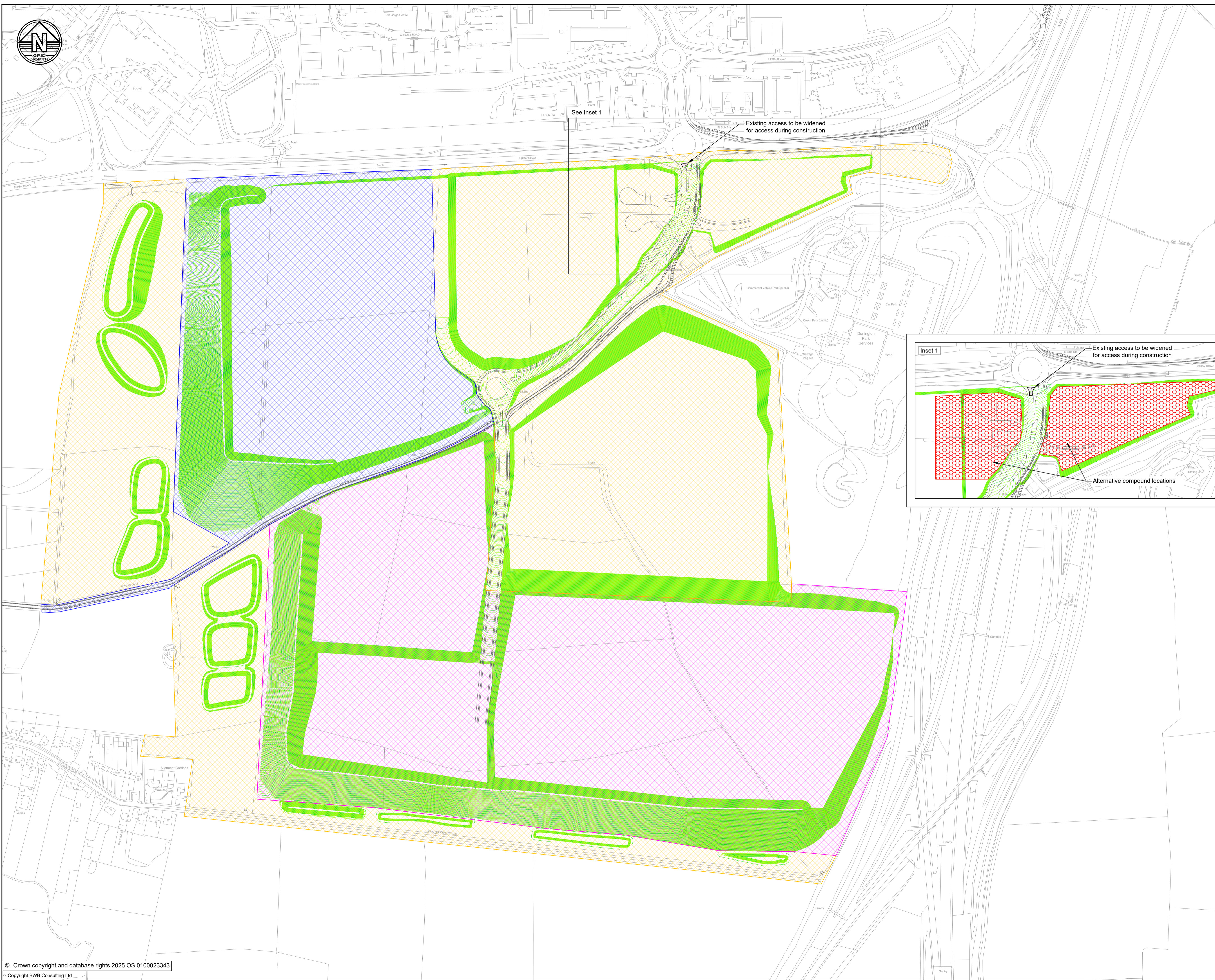
# Outline Planning and Construction Programme - EMG2



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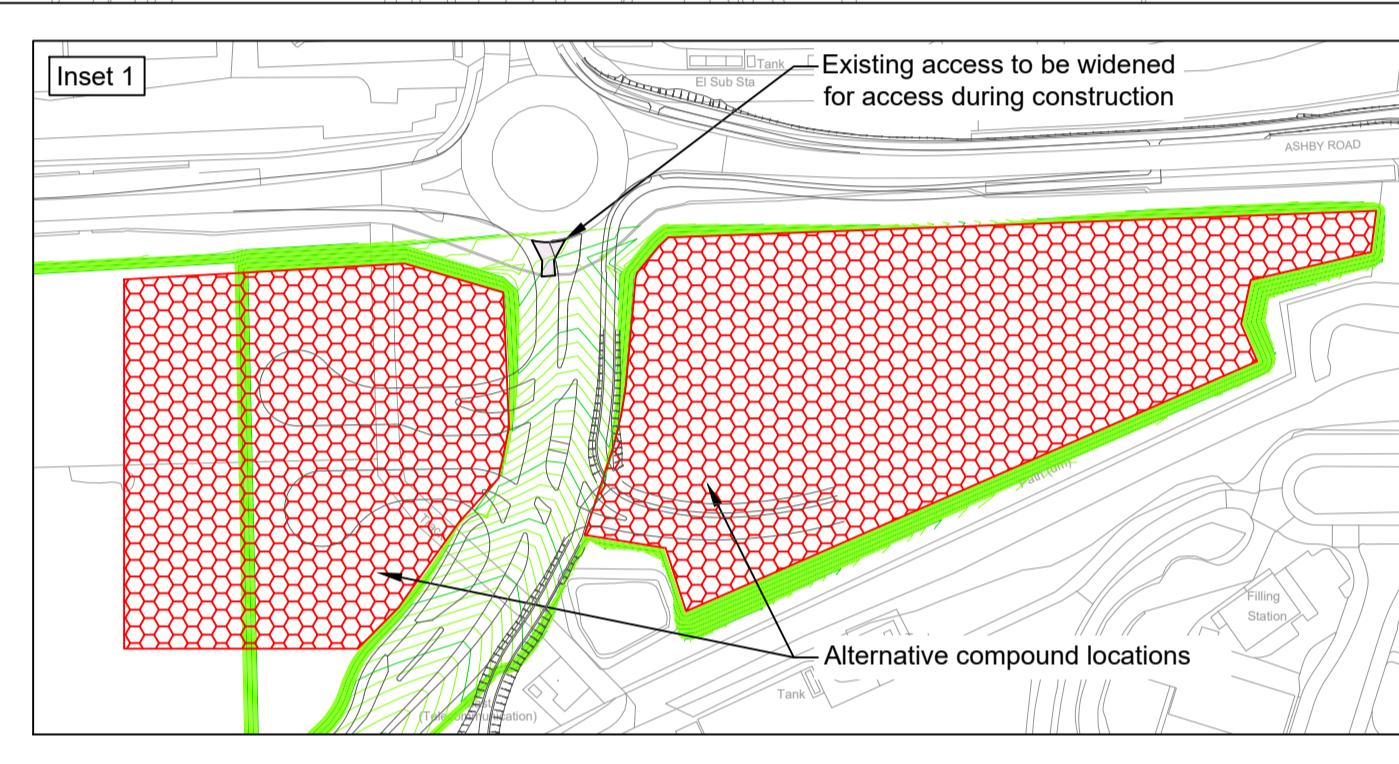
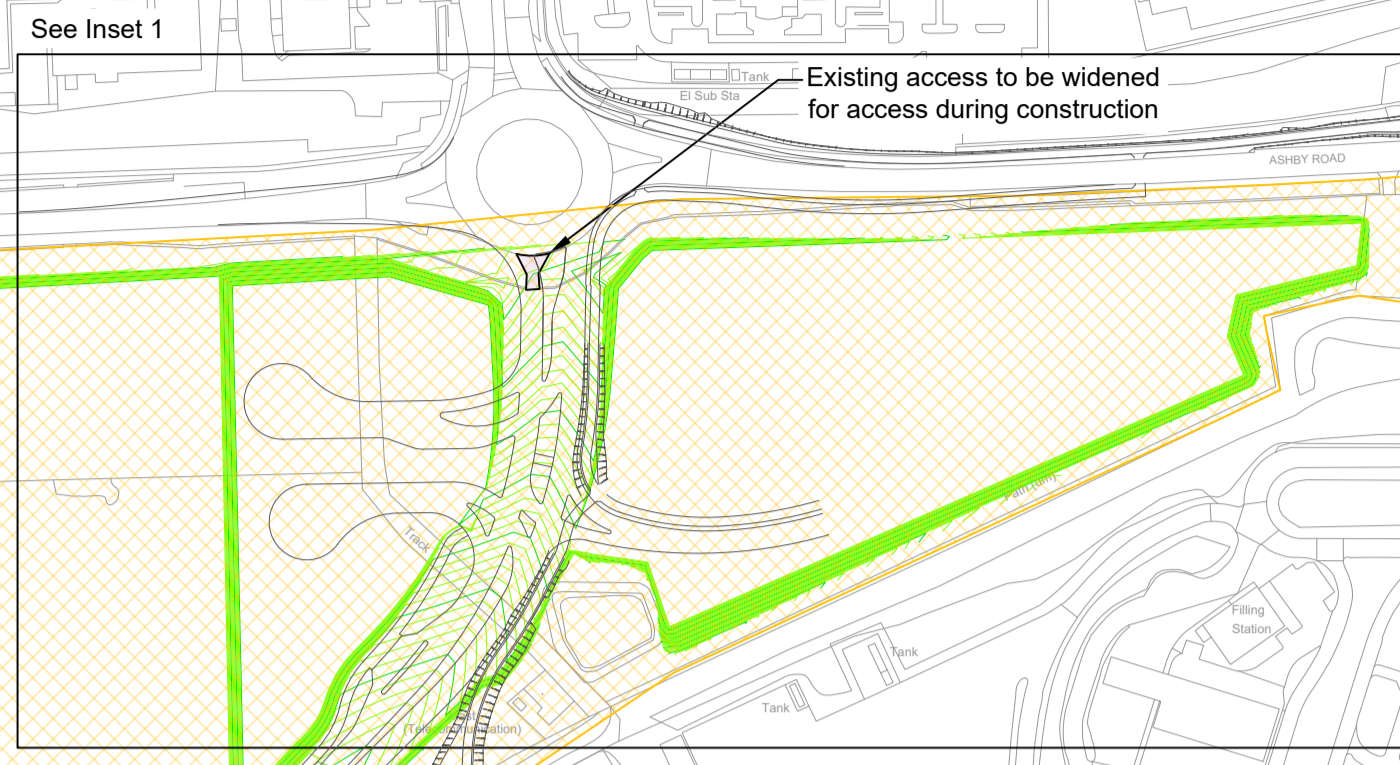
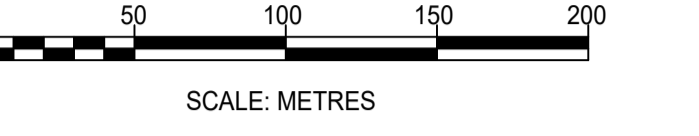
**Appendix Two**  
**Construction Phasing, Access and**  
**Compounds**

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**LEGEND**

	SITE COMPOUND
	PHASE A
	PHASE B
	PHASE C
	EXISTING ACCESS TO SITE
	DRAFT ORDER LIMITS



P04	05.08.25	Alternative access option removed	JFP	DTB
P03	06.06.25	Phase A minor amendment	SRH	SRH
P02	04.06.25	Alternative compound location added	SRH	SRH
P01	13.05.25	Preliminary Issue	JFP	SRH
Rev	Date	Details of issue / revision	Drw	Rev

**Issues & Revisions**

**BWB**  
A GAF GROUP COMPANY

- Birmingham | 0121 233 3322
- Leeds | 0113 233 8000
- London | 020 7407 3879
- Manchester | 0161 233 4260
- Nottingham | 0115 924 1100

www.bwbconsulting.com

Client

**SEGRO**

Project Title

**THE EAST MIDLANDS GATEWAY 2**

Drawing Title

**CONSTRUCTION PHASING, ACCESS AND COMPOUND PLAN**

Drawn:	J.Palmer	Reviewed:	S.Hilditch
BWB Ref:	220500	Date:	13.05.25
Scale:	A1	Scale:	1:2500

Drawing Status

**FOR INFORMATION**

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
EMG2-BWB-GEN-XX-SK-CH-SK044	S2	P04

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**Appendix Three**  
**Construction Traffic Management Plan**

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**SEGRO**

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PC24-004 EMG 2

Construction Traffic Management Plan

Client – (Segro (EMG) Ltd)

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## 1. DOCUMENT ISSUE RECORD

<b>Author:</b>	
<b>Checked:</b>	
<b>Approved:</b>	

Rev	Date	Status	Comment	Author:	Checked:	Approved:
P00	08/11/2024	S0	Draft – Client submission for review	MS	JT	JT
P01	19/11/2024	S1	Draft 1 – Amendments from comments	MS	JT	JT
P02	22/11/2024	S2	Draft 2 for review	MS	JT	JT
P03	14/04/2025	S3	Amendments for Royal Mail section 42 consultation response and Construction Traffic assessments.	MS	JT	JT
P04	05/06/2025	S4	Amended to remove reference to EMG1	MS	JT	JT
P05	04/07/2025	S5	Amended to address NH comments dated	MS	JT	JT
P06	21/08/2025	S6	Amended to incorporate LCC road impact assessment comments.	MS	JT	JT
P07	27/02/2026	S7	Amended to include section on Donington Park	MS	JT	JT
P08	26/03/26	S8	Appendix 3 and 4 added	MS	JT	JT

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  - 4.5 Timing of movements
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- 5. CONSTRUCTION TRAFFIC MANAGEMENT AND TEMPORARY SITE ACCESS.**
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**APPENDICES**

Appendix 1 – Indicative main site access layout plan

Appendix 2 – Construction Traffic calculations

Appendix 3 – Public Communications and Traffic Management Protocol

Appendix 4 – Construction Worker Travel Plan

## 2. INTRODUCTION

### 2.1 Appointment

Taylor Skelton Ltd (TSL) has been appointed by Segro (EMG) Ltd (the Developer) to prepare this Construction Traffic Management Plan (CTMP) report in support of a Development Consent Order (DCO) application for employment development at the site located to the south of East Midlands Airport, and west of Moto Services Donington Park, referred to as East Midlands Gateway 2 (EMG2).

This CTMP has been prepared as a supplementary document to the overarching Construction Environmental Management Plan (CEMP). The CEMP will set out the principal environmental management framework for the construction phase of the project, including key commitments, mitigation measures, and monitoring requirements. This CTMP aligns with the objectives of the CEMP and provides specific detail on the management of construction-related traffic to minimise environmental impacts, ensure safety, and maintain local amenity.

This CTMP should therefore be read in conjunction with the CEMP to ensure consistency across environmental and logistical controls during the construction period.

This CTMP document covers the full extent of the Order Limits for the initial stage of the development, including:

- EMG2 Main site roads and earthworks
- M1 corridor gantry and signage works
- M1 Junction 24 mitigation package
- Finger Farm signage works and upgrade
- A453 South minor highway works
- A453 West (The Green) junction mitigation works

Any subsequent construction phases of the development will require a separate phase Construction Traffic Management Plan (pCTMP) to be prepared for that specific element.

Each pCTMP will be produced substantially in accordance with this CTMP and submitted for approval by the relevant highway authority, including National Highways, prior to commencement of works for each phase.

It is anticipated that pCTMPs will be developed during the detailed design stage and prior to the appointment of the Principal Contractor for each phase, or at such other stage as agreed with National Highways and the local highway authority.

## **2.2 Document Objective**

This CTMP details the proposed mitigation measures that have been included within the Preliminary Design of the DCO Proposed Development and will be implemented, so far as reasonably practicable, to mitigate the potential effects of traffic during the construction stage of the development.

This document focuses on the construction phase of the Scheme. Subsequent phases will be covered in separate pCTMP(s) as required and referenced above.

This CTMP sets out the arrangements and management practices that will be adopted to minimise the impact of construction traffic on the strategic and local road networks and will be agreed with the relevant highway authorities, including National Highways, prior to commencement of construction works.

This document also provides clear guidance to the Principal Contractor (once appointed) and all sub-contractors regarding:

- Approved access routes to and from the site
- Maintenance requirements for the existing public roads
- Restrictions on vehicle access and routing

- Speed limits imposed during the works
- Identification and tracking requirements for all vehicles involved in the project

The Principal Contractor will be responsible for implementation of the CTMP and ensuring that all measures are adhered to by subcontractors, suppliers, and the workforce.

Disciplinary measures will be enforced for repeated breaches of the agreed routes or protocols. These may include verbal and written warnings, suspension from site, or termination of contracts.

A separate Workforce Construction Traffic Management Plan (Workforce CTMP) will be produced to manage how construction workers travel to and from the site. This Workforce CTMP will be secured through the relevant Phase Construction Traffic Management Plans (pCTMPs) for each phase of the development.

National Highways will be consulted on the Workforce CTMP prior to final sign-off of each pCTMP. Sufficient time (not less than 1 calendar month) will be built into the programme to allow for full review by National Highways to ensure the Workforce CTMP is acceptable before any pCTMP is approved.

In order to provide vehicular access and facilitate construction of the various elements of the development, there are three types of road network to be considered:

- National Highways-operated motorways
- National Highways-operated trunk roads
- Local authority-operated roads

Public transport operators are unlikely to be significantly affected by the proposals, provided prior notification and consultation are undertaken. The Principal Contractor will inform transport operators and coordinators of any temporary traffic management requirements affecting public transport corridors in advance, to afford sufficient time to plan and re-route services or issue notices as appropriate.

The re-routing strategy is based on the following principles and objectives summarised in table 1.1 below:

Table 1.1 Objectives of the OCTMP	
Objective	Description
A	Provide safe and efficient construction access for the DCO Proposed Development.
B	Ensure that movements of people, plant and materials are achieved in a safe, efficient, timely and sustainable manner.
C	Ensure that any impact to the local communities and tourism industry (In particular East Midlands Airport) is reduced so far as reasonably practicable.
D	Avoid sensitive receptors with effective routing and management of Development traffic.
E	Ensure construction traffic levels do not exceed an acceptable and agreed level during network peak periods.
F	Reduce and control construction vehicle trips where practical to meet option E constraints.
G	Ensure strategies and mitigation measures are implemented and adhered to through continued monitoring, with ongoing review and improvement of the OCTMP.
H	Construction routes have been identified based upon their suitability to accommodate HGV and LGV traffic. For the purposes of assessment HGVs are defined as any vehicle exceeding 3.5t gross weight. As far as reasonably practicable, HGV routes maximise use of the SRN with clear defined constraints for the Local Road Network and sensitive receptors.

A Construction Traffic Management Working Group will be established and meet regularly to discuss, plan, and coordinate upcoming traffic management measures. The working group will convene (monthly during peak construction periods), or as otherwise agreed.

The group will include (but not be limited to):

- National Highways
- Leicestershire County Council
- Local bus operators
- East Midlands Airport (EMA)
- Moto Services
- Police, Ambulance, and Fire services
- The Principal Contractor
- Any other contractors or organisations undertaking works on the local or strategic road networks that may have the potential to interact with the construction activities of EMG2.

The purpose of this group will be to ensure appropriate coordination of works to avoid conflict and to minimise cumulative impacts on the Strategic Road Network (SRN) and Local Road Network (LRN).

Construction information relating to the type and timing of works, associated transport routes, expected hours of construction traffic movements, and key traffic management measures will be published on the scheme website in advance to enable stakeholders and road users to plan their journeys accordingly.

The Principal Contractor will operate a dedicated enquiry and complaints facility for any issues associated with traffic management impacts. All enquiries will be logged and closed out as far as reasonably practicable.

These arrangements will be in addition to any reporting requirements imposed by National Highways and the local highway authority, including timeframes for response and resolution.

### 3. LOCATION AND HIGHWAY NETWORK

#### 3.1 Location

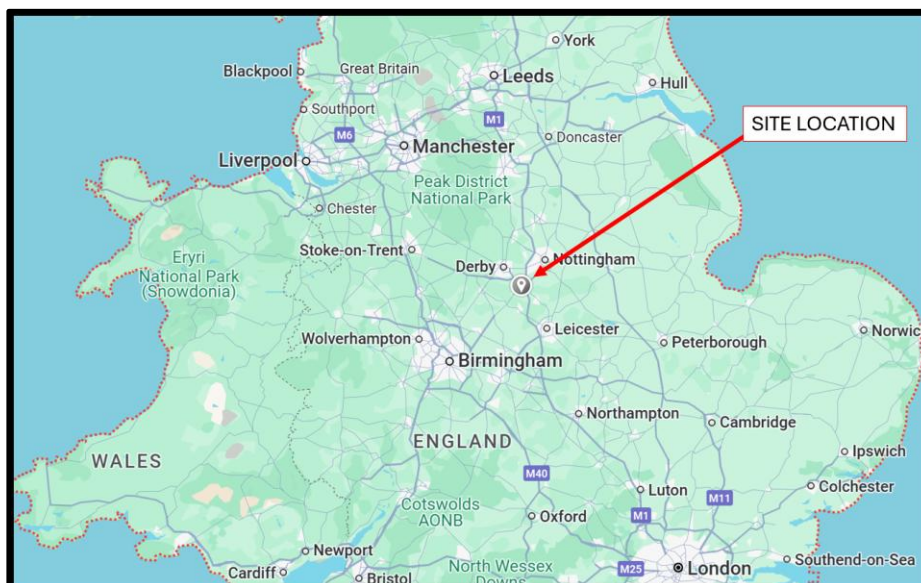


Fig 1

The site is located in the East Midlands, in the “Triangle” formed by the cities of Derby (15 km or 9.3 mi, Northwest), Nottingham (17 km or 11 mi, North East) and Leicester (24 km or 15 mi, South East) see fig 1 and fig 2.

Direct road access to the site access (EMG2) will be along the A453 West which is served by good arterial road links from the M1 (North and South), A42 (North), and A453 (South).

Access to the “Highway works” for the development will be managed through specific traffic management systems tailored to each phase of the works. These systems will evolve as the project progresses to accommodate changing site conditions and ensure safe and efficient access for construction vehicles and workers.

#### **M1**

The M1 is a north-south arterial route stretching the 311km (193 miles) between London and Leeds. The M1 passes Northampton, Leicester, Nottingham, Derby, Sheffield and Wakefield. The nearest point of access in relation to the site for North travelling traffic is Junction 23A northbound exit to finger farm roundabout, where traffic will adjoin the A453 West, and travel 500m to the proposed site access.

M1 Southbound, traffic will exit at J24, and adjoin to A453 South off J24 gyratory. EMG2 Main Site traffic will continue on the A453 South to finger farm roundabout and then then travel West on the A453 for 500m to the temporary site access.

#### **A42**

The A42 is a major trunk road in the East Midlands, it links J23A of the M1 with junction 11 of the M42. It is 15miles (24km) in length.

A42 Northbound traffic will as above, exit North to finger farm roundabout and undertake the same route as M1 Northbound traffic. Note: The M1 North (J23A) and A42 North merge at their respective off slips creating a 3-lane approach to finger farm roundabout.

#### 4. CONSTRUCTION TRAFFIC ACCES AND VEHICULAR MOVEMENTS

##### 4.1 Routing Strategy

Vehicles making deliveries to the Site or removing materials from, will travel by pre agreed designated routes which will be definitively confirmed in the pCTMP.

Whilst the pCTMP will denote assumed routes, the Principal Contractor will be responsible for attaining agreement from the relevant authorities prior to commencement of any phase.

A principal consideration when identifying designated routes will be the minimisation of travel along any road that does not form part of the Strategic Road Network (SRN).

Subject to agreement by the appropriate authorities, it is envisaged that construction vehicles will approach the Site using the M1 (North or South), A42 North, A50 South, or A453 South.

All routes will adjoin the A453 West and travel 500m Westbound to the site access as denoted in figure 3 for EMG2 Main site, or as detailed above will access via the gyratory on the A453 opposite Kegworth Bypass.

No construction access will be taken via Diseworth village, Hyam's Lane or Long Holden?

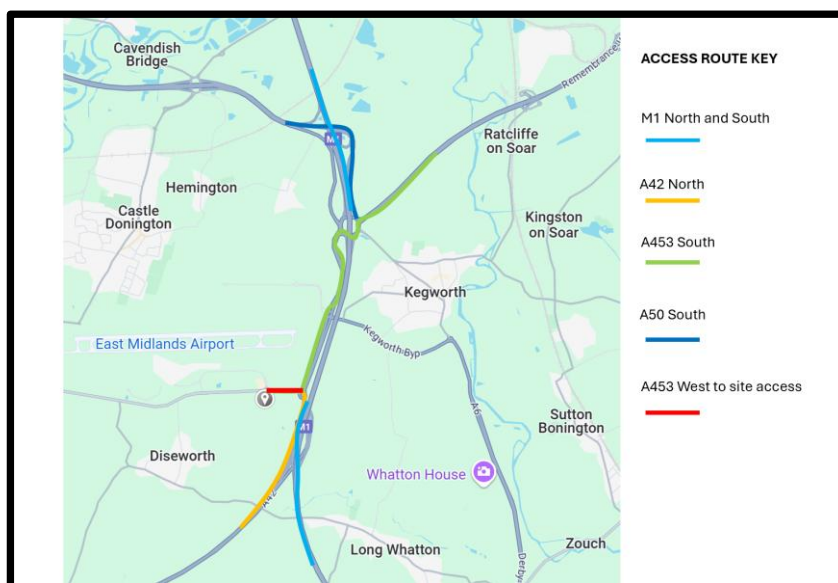


Fig 3.

Where appropriate, the Principal Contractor will provide haul routes through the site for use by construction vehicles, to reduce the need to use of public roads to access different parts of the main site.

The Principal Contractor will consult with the relevant highway authority regarding the layout and positioning of site accesses and undertake swept path analysis to determine suitability as an access/egress for all vehicle types anticipated to be required to visit the site.

#### **4.2 Proposed Construction Traffic Routes and Traffic Management Requirements.**

##### Traffic Safety and Control Officer

Prior to the implementation of any Traffic Management on the Network, the Principal Contractor will appoint a Traffic Safety and Control Officer whose responsibilities will cover:

- Management and implementation of all temporary traffic management measures associated with the Development.
- Checking that all necessary equipment is in place and confirming that it is in working order, and installed in line with the recommendations of the Traffic Signs Manual Chapter 8.
- Management of the Traffic Management layout at site access points.
- Liaison with the relevant authorities, and traffic safety and control officers on nearby schemes which are deemed to have the potential to adversely impact the SRN and LRN associated with this development.
- Arranging for site inspections at regular intervals and checking that equipment is correctly maintained, and in the case of accidents or incidents having replacement signs, cones, bollards, and lights erected without delay.

Note: Traffic Signs Manual Chapter 8 states: “The complexity of traffic management arrangements varies from scheme to scheme, but the primary objective is ~ to maximise the safety of the workforce and the travelling public.

The secondary objective is ~ to keep traffic flowing as freely as possible”.

Traffic management on all highways and roads associated with the scheme will comply with the UK Government’s Code of Practice ‘Safety at Street works and Roadworks’ (DfT, 2013) (Ref. 2) or other relevant legislation and guidance as appropriate at the time of implementation. Traffic management will be agreed with the relevant HA prior to the commencement of works. Traffic management signage will be in accordance with the Traffic Signs Regulations and General Directions (TSRGD) 2016 (Ref. 3) and Traffic Signs Manual Chapter 8 (Ref. 1).

Temporary signs providing route information for contractors will be erected at key locations along the proposed construction traffic routes on the LRN and potentially the SRN.

Lead-in times (generally 3 weeks) shall be built into the construction programme to accommodate the formal approvals and advance notification process for any signage requiring National Highways or LCC consent.

Project information boards will be erected and will include key information for the public and relevant contact details. The design and location of route information signs and information boards will be agreed with Leicestershire County Council (LCC) and National Highways (NH) prior to installation.

The Principal Contractor shall ensure that the following general traffic management procedures are implemented for the duration of construction:

- Drivers of site and construction traffic vehicles will be made aware of access routes and contingency/mitigation measures during the site specific induction. In particular, ‘no construction access’ will be briefed in respect of routes through Diseworth village, Hyam’s Lane or Long Holden.
- Drivers of HGV's and abnormal loads will also be inducted, (drivers induction to be undertaken prior to attendance at site) and traffic routes to and from site will be made clear prior to any traffic movements.
- The contractor will be required to implement induction procedures and promote road safety and awareness – in particular Safe access and egress into traffic management should be briefed to all drivers.
- Where possible, arrangements will be made for site workers to share transport and minimise unnecessary traffic movements locally.

#### 4.3 Abnormal loads

Although A/L deliveries to site will normally be planned for outside normal working hours, it is possible that some abnormal deliveries, e.g. major items of plant and equipment, may require special delivery requirements that would require the activity to be undertaken during the normal operating hours.

In all instances, such deliveries will be planned with appropriate highway authorities and the police and executed in compliance with those requirements.

The Principal Contractor will notify the police, the highway authorities or bridge and structure owners, as appropriate, in moving abnormal loads through the road network.

The Principal Contractor will provide relevant parties with a schedule of abnormal load deliveries prior to the first abnormal load movement being carried out. This schedule will be updated and re-issued to the parties as required throughout the construction period.

#### 4.4 Construction Traffic volume assessment

For detailed construction traffic volume calculations an assessment has been undertaken by BWB Consulting Ltd (BWB) who have produced the report East Midlands Gateway 2 – Construction Traffic Calculations, document number EMG2-BWB-GEN-XX-RP-TR-0013 which is contained in appendix 3 of this document.

For the purposes of the calculation's, vehicles can be classified as follows:

##### Heavy goods vehicles:

For the purpose of this document HGV associated construction traffic includes:

- Workforce Travel on any vehicle 3.5t or greater.
- HGV deliveries of construction materials and equipment.
- HGV deliveries of plant and equipment.
- HGV deliveries of bulk civils materials including aggregate and backfilling materials.

### Construction workers and light goods vehicles:

- Cars, vans and any other vehicles less than 3.5t.

In general, it is envisaged that vehicles transporting construction workers will utilise the same route as the construction traffic. However, the route used by construction workers may vary depending on their point of origin.

It is further anticipated that the Principal Contractor will set out arrangements for managing light goods vehicle movement during the course of the working day. Whilst access to areas (in particular offsite Highway works) will be required for surveys and construction works, general travel for personal reasons, both onto the network, and into local towns and villages should be discouraged.

One way of doing this will be, not only to provide the welfare requirements as denoted in the Construction Management and Design regulations, but also to consider the provision of a “canteen” or “shop” that could be served to discourage unnecessary movements from the site during the course of the day.

Based on the above, the BWB calculations have assessed the peak hour construction traffic separately for EMG2 Works, EMG1 Works, and external highways works (0800 – 0900 in the morning and 1700 – 1800 in the evening). Table 7 in the main report is replicated below, which subsequently summarises the totals of the 3 distinct assessments.

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	17	17	34	3	3	6
LGV	3	3	6	1	1	2
Car	19	4	23	5	29	34
Vans	38	8	45	9	56	65
<b>Total</b>	<b>77</b>	<b>32</b>	<b>108</b>	<b>18</b>	<b>89</b>	<b>107</b>

The details show that there is expected to be a total of 108 two-way construction vehicle movements in the morning peak hour and 107 in the evening peak hour, including both movements by operatives (car and van), LGVs and HGVs.

The construction traffic volumes will be capped at the levels set out in Table 7 of the BWB Report, and the values presented in the Construction Traffic Calculations Technical Note at Appendix 3. The contractor will monitor traffic flows during the construction phase and maintain daily records of all vehicle movements and ensure they are compliant with the above assessment calculations.

#### **4.5 Timing of movements**

Where possible vehicular movements will be constrained to the site working hours:

07:00-19:00 Monday to Friday; and

07:00-16:00 Saturday.

There will be no works on the main site out of these times other than in exceptional circumstances where prior agreement and notification will be given to the local planning authority.

There will, however, be a need for movements outside of this timeframe to facilitate the construction of elements of the scheme that require non-standard working hours to mitigate the impact of the works on the travelling public. Nightworks, and weekend possessions fall into this category. Advance communication in respect of this, will follow the protocol to be determined in the Construction Traffic Management Liaison meeting, but will ordinarily require information placed on the scheme's

website, and circulatory emails to key stakeholders as defined in the communications protocol.

#### **4.6 Royal Mail Coordination and Notification Protocol**

As part of the evolving Construction Traffic Management Plan (CTMP) for East Midlands Gateway Phase 2 (EMG2), it is acknowledged through consultation that Royal Mail's operations are time-critical and rely heavily on predictable access to the local and strategic road network.

In response to Royal Mail's comments during the consultation process, and in recognition of their operational requirements, the Main Contractor will, during the construction phase, provide advance written notification to Royal Mail regarding all relevant traffic management arrangements. This notification will include pictorial aids, annotated maps, and a clear explanation of the traffic scenario, ensuring that Royal Mail has sufficient understanding of traffic management arrangements and any perceived impacts.

The CTMP will incorporate the following Royal Mail mitigation points as a standard protocol that the Principal Contractor will adhere to:

Advance Notice of Disruption: A requirement that during the construction phase Royal Mail is notified by Segro Properties Ltd or its contractors at least one month in advance on any proposed road closures / diversions / alternative access arrangements, hours of working.

Alternative Route Identification: Where road closures / diversions are proposed, Segro Properties Ltd or its contractors should be required to liaise with Royal Mail at least one month in advance to identify and make available alternative highway routes for operational use, where possible.

Ongoing Notification Mechanism: A mechanism will be implemented to inform Royal Mail of any other local highway works that may affect the network, particularly in the vicinity of key Royal Mail operational sites in the area surrounding EMG2.

The above will ensure a coordinated approach and allow Royal Mail to manage its logistics effectively during the construction phase.

#### 4.7 Donington Park Event Coordination Protocol

Donington Park is located in close proximity to the Strategic Road Network serving EMG2 and is a significant generator of periodic high traffic demand associated with major events.

The venue hosts large-scale national and international motorsport events and the annual Download Festival, which typically takes place in June and operates over an extended duration including event build, live event days and egress.

These events generate substantial increases in traffic flows on the M1, A42, A50 and A453 corridors and are commonly supported by coordinated multi-agency traffic management arrangements and routing control.

The surrounding highway network is recognised to operate under materially reduced resilience during such periods, and hence, in advance of major events, the Principal Contractor shall:

- Liaise with Donington Park event management representatives
- Engage with National Highways, Leicestershire County Council and the Police
- Review and implement pre event traffic management strategies
- Adjust construction sequencing where required to avoid network conflict

During the operational period of any major Donington Park event (including set-up and egress periods), no construction works associated with EMG2 shall implement traffic management measures that reduce the operational capacity of the Strategic Road Network or Local Road Network.

This restriction shall include, but is not be limited to:

- Lane closures (daytime or nighttime)
- Full or partial road closures
- Temporary signals
- Any other arrangement that reduces carriageway capacity or materially impedes traffic flow.

Only passive traffic management measures will be permitted, defined as measures that do not reduce available lane capacity or adversely affect traffic movement (e.g. verge-based works clear of the carriageway and advance warning signage).

### **Programme**

The construction programme shall incorporate stand-down periods around confirmed major event dates to ensure:

- No active traffic management remains in place
- No residual restrictions are operational; and
- The network is operating at full available capacity.

Compliance with this protocol shall form a standing agenda item within the Construction Traffic Management Working Group and shall be reviewed periodically to ensure alignment between the EMG2 construction programme and the Donington Park events calendar.

### **5. CONSTRUCTION TRAFFIC MANAGEMENT AND TEMPORARY SITE ACCESS.**

The “temporary” construction site access will be off the current roundabout on the A453 West, directly opposite the Beverley Road spur of the roundabout between Finger Farm and the East Midlands Airport access.

Traffic management will be implemented in both directions to clearly identify the site access and to provide advance warning to road users of vehicles entering, exiting, or turning into/out of the development. The Traffic Management layout shall be prepared by the Principal Contractor and submitted for agreement with Leicestershire County Council, the overseeing authority for the A453 west of Finger Farm Roundabout.

For indicative purposes, fig 4 below details likely traffic management arrangement at the proposed temporary site access to the South of the roundabout.

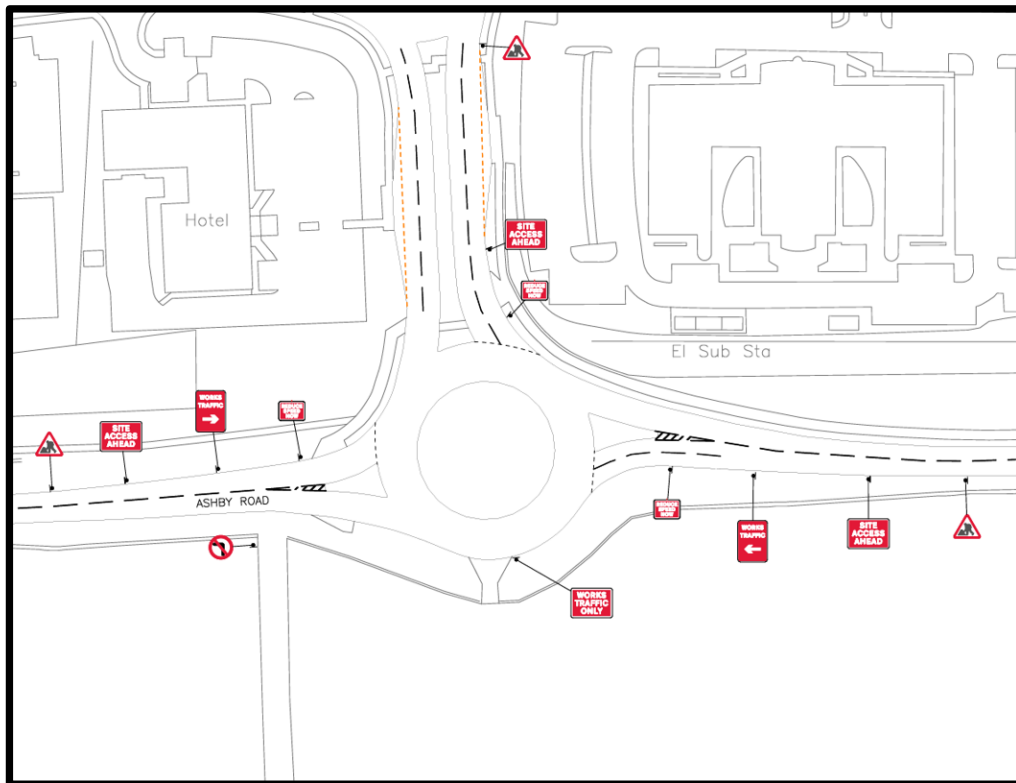


Fig 4.

Note: Traffic Management will be in place until such a time as any permanent works are installed and utilised, including appropriate permanent signage, and an assessment for use by an independent RSA3 Audit (Road Safety Audit).

The main materials storage compound, site welfare facilities, and delivery area, will be accommodated on-site. Additional areas may be required in order to construct the Highway works, whereby satellite office accommodation, and material lay down areas may be additionally required. These will be detailed further in the Contractors CTMP once the Design and methodology are sufficiently developed. Traffic Management associated with access to, and egress from, will be detailed and regularly reviewed in the CTMP.

## 6. NOISE AND ENVIRONMENTAL IMPACTS

The Principal Contractor will consider the design and operation of the construction site from the perspective of minimising noise and environmental impacts throughout the construction phase.

A clear and concise construction signage scheme will be implemented to support internal traffic control, ensuring separation between construction vehicles and pedestrians. Signage will identify the site office, parking areas (including disabled spaces), delivery zones, and pedestrian routes.

Where reasonably practicable, site haul roads and working areas will be planned to minimise impacts on sensitive receptors and reduce noise, vibration, dust, and visual intrusion.

Additional information on noise monitoring and air quality management will be set out in the Construction Environmental Management Plan (CEMP), which will define thresholds and monitoring protocols in line with best industry practice.

While noise from construction plant is unavoidable, the CEMP will include detailed measures to control and mitigate such impacts. These may include:

- Use of noise-reducing equipment (baffles, enclosures, “Hushpods”)
- Specification of white noise reversing alarms
- Correct positioning and boxing-in of generators
- Maximising the use of electric plant where feasible

Vehicle engines shall not be left idling while waiting to access the site or during loading and unloading. Signage will be installed at site entrances, and gatemen or banksmen will monitor and enforce compliance.

Road sweeping will be required to ensure no debris is left on any roads affected by the development, including both the Local Road Network (LRN) and Strategic Road Network (SRN). This is particularly pertinent in wet conditions, when the site is likely to generate mud as a consequence of Construction activities.

The provision for dealing with this will be covered in the CEMP and the CTMP, where consideration will be given to the use of:

- wheel washes,
- long run-off hard standings with rumble strips
- and road sweepers.

All such provisions will be detailed in both the CEMP and the Phase Construction Traffic Management Plan (pCTMP).

## **7. Monitoring and Mitigation**

The CTMP sets out management and mitigation measures to reduce the impact of the development on the Strategic Road Network (SRN), Local Road Network (LRN), local communities, and the environment. This document should be read in conjunction with the CEMP to provide a comprehensive overview of measures and obligations.

Where reasonably practicable:

Construction and delivery vehicles will avoid travelling in convoys on public roads.

Vehicles will not stop or wait in laybys or on the carriageway en-route to or from the site.

Vehicles shall not queue or stack on the public highway. Sufficient on-site capacity will be maintained to allow vehicles to wait and be processed within the site boundary. Additional pull-in refuge lanes will be provided to maintain the free flow of traffic through the gate and avoid congestion on the A453 and the wider network.

The Principal Contractor will establish a robust monitoring protocol to demonstrate compliance with this CTMP. This will include:

- Daily records of all vehicle movements (arrivals and departures)
- CCTV and/or ANPR monitoring of site access points
- Regular audits and reporting of compliance

Monitoring data will be collated and submitted to National Highways and Leicestershire County Council on a monthly basis, or as otherwise agreed with the authorities.

Any repeated failure to adhere to authorised routes or protocols will result in appropriate disciplinary action in line with the Principal Contractor's policies and Subcontractor/Supplier agreements.

Additionally, as requested by Leicestershire County Council, the Principal Contractor will undertake an assessment of the potential impacts of any road closures required during the construction phase. This assessment will be carried out at the appropriate time, prior to any closure being implemented, and the methodology will be agreed with the relevant highway authorities. The findings of this assessment will be shared with both LCC and National Highways to ensure suitable mitigation is identified where necessary.

#### **8. Enforcement of the Construction Traffic Management Plan**

To ensure that the measures outlined in this document can be effectively enforced, it is important to define what would constitute a breach. The CTMP therefore considers that the following would constitute a breach whereby corrective measures would be required:

- Failure to implement or use the agreed traffic management protocol.
- Failure to follow the agreed delivery routes.
- Failure to record deliveries and departures for plant and materials with the proposed monitoring system.
- Failure to keep the construction traffic volumes less than or equal to the traffic management assessment numbers as defined by the BWB report – *East Midlands Gateway Phase 2 – Construction Traffic Calculations*.

Vehicles that are either reported for utilising routes which are not approved, or which are observed to travel along inappropriate routes or in an inappropriate manner, shall be reported to the Principal Contractor for investigation.

The Principal Contractor shall carry out all possible enquiries to identify the relevant company and driver responsible and will take disciplinary action. The step process for this will be covered in the CTMP.



Where any traffic volume thresholds are exceeded, National Highways will be notified immediately and involved in identifying and agreeing mitigation or enforcement measures.

Where there are more than three breaches within a two-week period, the monitoring data will be provided to National Highways and a meeting convened within one week to agree mitigation actions and next steps.

The Principal Contractor shall record all information in a tabulated format and discuss more widely as an agenda item in the Construction Traffic Management Working Group meeting.



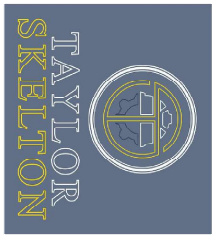
PC24-004 EMG 2

Construction Traffic Management Plan



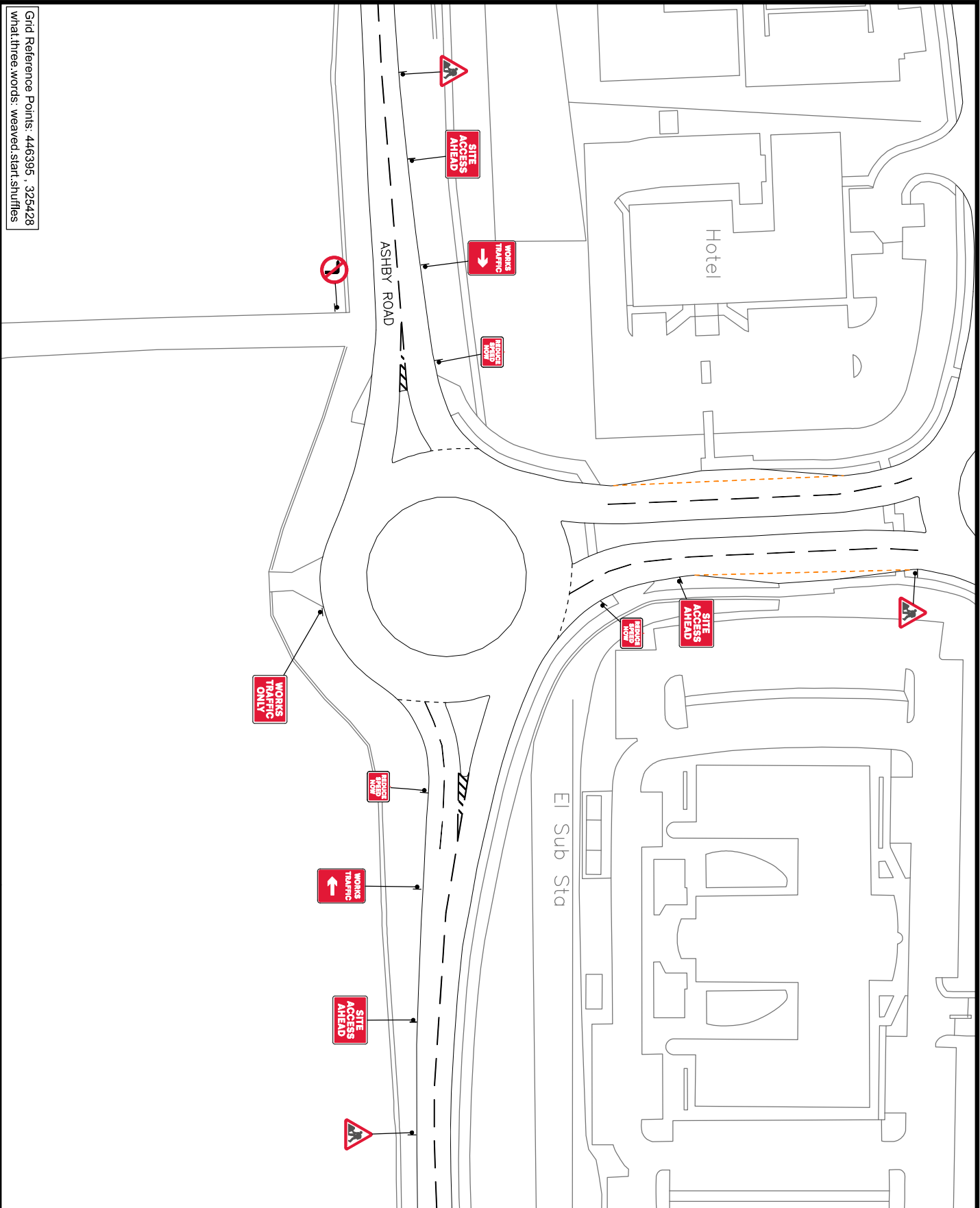
## **APPENDIX 1**

### **Indicative main site access layout plan**



**BILL OF QUANTITIES**

QTY: 2 Ref: 13.9 Schedule 13.9 - Temporary Information	
QTY: 3 Ref: 5.11 Reduce speed now	
QTY: 1 Ref: 6.13 No left turn	
QTY: 3 Ref: 7.001 Road works ahead	
QTY: 1 Ref: 7.201 Works traffic only	
QTY: 1 Ref: 7.203 Works traffic direction left	
QTY: 1 Ref: 7.203 Works traffic direction right	



Grid Reference Points: 446395 , 325428  
What three words: weaved, start, shuffles

Date:	Rev	DRAWN	APPROVED	Drawing Number:	KEY
13.11.24	1	JA	TSM	TSM-1325-REV1	● Sign
Title:				Client Reference:	
Ashby Road, Dismouth, Leicestershire, DE74				EMG2	
21U				Traffic Management:	
				Site Management	
Road Speed:				60mph	

All drawings are drawn to north.

All symbols are drawn with Traffic Signs Regulations & General Layout, December 2016 & Chapter 8. Changes to the road with relevant numbered statement & the statement.

All sign locations are indicative and exact locations will be determined on site.

This may differ on site and are only to be used as a guide.

Drawn by: Advisor Design



PC24-004 EMG 2

Construction Traffic Management Plan



## **APPENDIX 2**

**East Midlands Gateway Phase 2**

**Construction Traffic Calculations**

**EMG2-BWB-GEN-XX-RP-TR-0013**

<b>PROJECT NAME</b>	<b>East Midlands Gateway Phase 2 – Construction Traffic Calculations</b>		
<b>DOCUMENT NUMBER</b>	EMG2-BWB-GEN-XX-RP-TR-0013	<b>BWB REF</b>	220500
<b>AUTHOR</b>	[REDACTED]	<b>STATUS</b>	S2
<b>CHECKED</b>		<b>REVISION</b>	P3
<b>APPROVED</b>		<b>DATE</b>	11.04.25

## 1. INTRODUCTION

- 1.1 BWB Consulting Ltd (BWB) is commissioned by Segro to provide highways and transportation advice on a Phase 2 expansion of the East Midlands Gateway (EMG2) employment development. The site is being proposed for a large B2/B8 industrial development and forms part of the Government's East Midlands Freeport initiative.
- 1.2 This Technical Note presents the methodology used to calculate the traffic generation during the construction phase of the development. It follows the same methodology adopted on other nationally significant employment DCO projects with Segro at East Midlands Gateway (EMG1) and Northampton Gateway, although without the Strategic Rail Freight Terminal element as this is not proposed at EMG2.
- 1.3 A separate Explanatory Note has been produced setting out the assumptions and process adopted in calculating construction traffic. A copy is included in **Appendix 1**.

## 2. CALCULATION METHODOLOGY

- 2.1 The following calculations consider the tonnes of material required to construct various components of the development based on a unit of measurement. The key components being:
  - Roads (EMG2 and EMG1)
  - Off-site highway works (EMG2 site access, EMG1 site access, M1 J24, A453/The Green)
  - Bridges
  - Earthworks (EMG2 and EMG1)
  - Buildings (EMG2 and EMG1)
  - Landscaping (EMG2 and EMG1)
- 2.2 It should be noted that reference to EMG2 relates to the main site south of the A453 and East Midlands Airport, whilst reference to EMG1 relates to works associate with developing Plot 16 at the existing EMG site. The off-site highway works are based on the original PRTM modelling work and current mitigation design which reflect 2025 and 2035 future years. If the mitigation strategy changes as a result of the revised PRTM modelling, then this could affect the construction traffic calculations which would then need reconsidering.
- 2.3 The total number of HGV movements has been calculated based on 18.5T per movement.

- 2.4 The total number of LGV movements has been calculated based on the following percentages of the HGV movements for each construction component i.e. for 'roads (on-site)' the total number of LGVs equates to 20% of the total HGVs.
- Roads (on site) – 20%
  - Roads (off site) – 20%
  - Bridges – 40%
  - Earthworks – 50%
  - Buildings – 20%
  - Landscaping – 400%
- 2.5 The total number of cars and vans varies depending on each construction component and are based on Segro's knowledge of developing other sites. However, it has been assumed that cars have an occupancy rate of 1 person and vans have an occupancy rate of 2 people.
- 2.6 The number of construction days has been calculated at 49 weeks x 5 day = 245 days per year.
- 2.7 To establish daily construction movements, total construction traffic has been divided by the days per year x duration in years. A separate Excel Spreadsheet has been produced containing the detailed calculations, contents of which are included at **Appendix 2**, whilst an extract is shown below. A copy of the Excel spreadsheet can be provided on request. **Table 1** subsequently shows the daily construction vehicle movements across the five-year construction period for each vehicle type. This is broken down by works at EMG2, EMG1 and external highway works i.e. at M1 J24 and A453/The Green based on the current mitigation strategy, which is subject to confirmation using outputs from the revised PRTM modelling.
- 2.8 To give an example, for the 'Roads (EMG2 Main Site)' component, this is expected to be on-going for a total of 367.5 days based on 5 days per week for 49 weeks multiplied by 1.5 years (49 x 5 x 1.5). Across the 367.5 days, there are expected to be a total of 7,750 HGV movements based on the total mass of material required. The daily number of HGVs has been calculated by dividing the total 7,750 HGV movements by 367.5 days, resulting in 21.09 daily HGVs (7,750 / 367.5).
- 2.9 The daily number of LGV movements (4.22) has then been calculated based on 20% of the daily number of HGVs (21.09 x 0.2 = 4.22).

# CONSTRUCTION TRAFFIC CALCULATIONS EAST MIDLANDS GATEWAY PHASE 2



## Construction Traffic Movements (One Way)

Component	Input/Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals						Average Movements per Day						
								HGV	LGV	Car	Vans	Total	HGV	LGV	Car	Vans	Total			
Roads (EMG2 Main site)	m2	15000	0.5000	0.1000	1.0000	0.7500	2.3500	1,750	1,550	15,500	11,625	11,625	36,425	150	367.50	21.09	4.22	42.18	31.63	93.12
Highway Works (EMG2 Site Access)	m2	6700	0.5000	0.1000	0.3000	0.7500	1.2000	3,050	610	1,630	1,630	7,320	1,000	2,450.00	12.45	2.49	7.47	7.47	23.88	
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400	2,000	4,900.00	32.65	6.53	19.59	19.55	73.37	
Highway Works (A453/The Green)	m2	150	0.5000	0.1000	0.3000	0.3000	1.2000	375	195	585	585	2,340	100	245.00	3.98	0.80	2.39	2.35	3.55	
Roads (EMG1)	m2	2300	0.5000	0.1000	1.0000	0.7500	2.3500	80	16	48	48	192	0.20	49.00	1.63	0.33	0.98	0.96	3.92	
Bridges (EMG1)	Beam	2	0.5000	0.1000	0.3000	0.3000	1.2000	230	230	3,000	2,175	6,875	100	245.00	5.32	1.18	11.84	8.16	27.62	
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0100	1,600	800	3,200	3,000	12,000	150	367.50	4.35	1.74	8.16	8.16	22.42	
Buildings (EMG1)	k2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	24,219	114,636	5.00	1,225.00	39.54	7.91	19.77	26.36	93.58	
Buildings (EMG2)	k2	2639038	0.0150	0.0030	0.0075	0.0100	0.0355	4,035	807	2,018	2,691	9,553	1.00	245.00	16.48	3.30	8.24	10.96	38.99	
Landscaping (EMG2)	k2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1292	646	1,292	3,552	2.00	490.00	0.66	2.64	1.32	2.64	7.25	
Landscaping (EMG1)	k2	2639038	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296	1.00	245.00	0.71	0.44	0.22	0.44	1.21	
<b>TOTAL</b>								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>			<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>456.72</b>	

NOTE: Highways works based on single site access and initial highway mitigation pack. This is likely to change based on emerging strategic highway solution.

NOTE: EMG1 proposals not included, potentially add to buildings as per R?

NOTE: EMG3 proposals not included, potentially add to buildings as per R?

Note: This part needs amending to include extra columns for all the lines added above

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M1 J24)	Highway works (A453/The Green)	Roads (EMG1)	Bridges	EW (EMG2)	EW (EMG1)	Building (EMG2)	Building (EMG1)	Landscap (EMG2)	Landscap (EMG1)
Y1	HGV	111,339	49,955	27,110	34,229	10,541	12,445	32,655	3,988	5,322	2,188	4,355	0.61	19,777	16,488	0.66	0.11
Y1	LGV	27,111	14,244	6,022	6,866	2,111	2,445	6,533	0.80	1.18	0.87	2.18	0.31	3,955	3,300	2.84	0.44
Y1	Car	97,033	52,555	23,911	20,577	2,109	7,477	15,599	2.39	11.84	4.08	6.71	1.22	9,899	8,244	1.32	0.22
Y1	Vans	429,639	75,844	27,288	20,577	15,922	7,477	15,599	0.98	8.88	4.08	32.655	4.59	48,188	10,988	2.84	0.44
Y2	HGV	100,477	67,822	-	32,655	2,109	-	32,655	-	-	4.35	2.18	-	39,544	-	0.66	-
Y2	LGV	24,122	17,579	-	6,533	4,222	-	6,533	-	-	0.87	2.18	-	7,911	-	2.84	-
Y2	Car	95,377	75,788	-	19,599	4,218	-	15,599	-	-	0.87	2.18	-	19,777	-	1.32	-
Y2	Vans	104,777	85,122	-	19,599	3,163	-	15,599	-	-	0.87	2.18	-	26,366	-	2.84	-
Y3	HGV	39,544	39,544	-	-	-	-	-	-	-	8.16	-	-	39,544	-	2.84	-
Y3	LGV	7,911	7,911	-	-	-	-	-	-	-	-	-	-	19,777	-	0.66	-
Y3	Car	19,777	19,777	-	-	-	-	-	-	-	-	-	-	19,777	-	1.32	-
Y3	Vans	26,366	26,366	-	-	-	-	-	-	-	-	-	-	26,366	-	2.84	-
Y4	HGV	39,544	39,544	-	-	-	-	-	-	-	-	-	-	39,544	-	2.84	-
Y4	LGV	7,911	7,911	-	-	-	-	-	-	-	-	-	-	19,777	-	0.66	-
Y4	Car	19,777	19,777	-	-	-	-	-	-	-	-	-	-	19,777	-	1.32	-
Y4	Vans	26,366	26,366	-	-	-	-	-	-	-	-	-	-	26,366	-	2.84	-
Y5	HGV	39,544	39,544	-	-	-	-	-	-	-	-	-	-	39,544	-	2.84	-
Y5	LGV	7,911	7,911	-	-	-	-	-	-	-	-	-	-	19,777	-	0.66	-
Y5	Car	19,777	19,777	-	-	-	-	-	-	-	-	-	-	19,777	-	1.32	-
Y5	Vans	26,366	26,366	-	-	-	-	-	-	-	-	-	-	26,366	-	2.84	-
TOTAL																	

**Table 1 – Daily Construction Vehicle Movements by Year**

Vehicle Type	Avg Daily Movements (one-way)				Avg Daily Movements (two-way)			
	Overall Total	EMG2	EMG1	Highway Works	Overall Total	EMG2	EMG1	Highway Works
<b>Yr 1</b>	<b>359</b>	<b>193</b>	<b>84</b>	<b>82</b>	<b>718</b>	<b>385</b>	<b>169</b>	<b>165</b>
HGV	111	50	27	34	223	100	54	69
LGV	27	14	6	7	54	28	12	14
Car	97	53	24	21	194	105	48	41
Van	124	76	27	21	247	152	55	41
<b>Yr 2</b>	<b>325</b>	<b>246</b>	-	<b>78</b>	<b>649</b>	<b>493</b>	-	<b>157</b>
HGV	100	68	-	33	201	136	-	65
LGV	24	18	-	7	48	35	-	13
Car	95	76	-	20	191	152	-	39
Van	105	85	-	20	209	170	-	39
<b>Yr 3</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 4</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 5</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-

2.10 For robustness, the calculations assume that all construction components would start in Year 1. The details in **Table 1** show that peak construction traffic would occur in Year 1 with a total of 718 daily two-way construction vehicle movements, comprising 385 movements for works at EMG2, 169 movements for works at EMG1 and 165 movements for external highway works. **Tables 2** and **3** set out the assumptions made for the timings of arrivals and departures for each vehicle type has been adopted.

**Table 2. Percentage Timings of Arrivals**

Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	6%	10%
07:00-08:00	10%	10%	45%	45%
08:00-09:00	15%	12%	20%	20%
09:00-10:00	10%	10%	5%	5%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	2%	2%
16:00-17:00	4%	6%	2%	2%
17:00-18:00	3%	3%	5%	5%
18:00-19:00	2%	2%	5%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Table 3. Percentage Timings of Departures**

Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	1%	2%
07:00-08:00	10%	10%	3%	2%
08:00-09:00	15%	12%	4%	4%
09:00-10:00	10%	10%	4%	2%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	8%	8%
16:00-17:00	4%	6%	15%	30%
17:00-18:00	3%	3%	30%	30%
18:00-19:00	2%	2%	25%	12%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

- 2.11 The above assumptions were previously agreed for the East Midlands Gateway and Northampton Gateway DCO projects.
- 2.12 **Tables 4, 5 and 6** summarise the peak hour construction traffic for the EMG2 works, EMG1 works and external highway works respectively, based on the worst-case Year 1 construction period, taking into account the above assumptions. The Excel spreadsheet shows the volume of construction traffic across all 13 hours (0600 to 1900 hours) for clarity.

**Table 4. Peak Hour Construction Traffic Generation (EMG2 works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	7	7	14	1	1	2
LGV	2	2	4	0	0	0
Car	11	2	13	3	16	19
Vans	23	5	27	6	35	41
<b>Total</b>	<b>43</b>	<b>16</b>	<b>58</b>	<b>10</b>	<b>52</b>	<b>62</b>

**Table 5. Peak Hour Construction Traffic Generation (EMG1 works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	4	4	8	1	1	2
LGV	1	1	2	0	0	0
Car	5	1	6	1	7	8
Vans	8	2	10	2	12	14
<b>Total</b>	<b>18</b>	<b>8</b>	<b>26</b>	<b>4</b>	<b>20</b>	<b>24</b>

**Table 6. Peak Hour Construction Traffic Generation (External Highway works)**

	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	5	5	10	1	1	2
LGV	1	1	2	0	0	0
Car	4	1	5	1	6	7
Vans	6	2	8	2	9	11
<b>Total</b>	<b>16</b>	<b>9</b>	<b>25</b>	<b>4</b>	<b>16</b>	<b>20</b>

- 2.13 **Table 7** calculates the total peak hour construction traffic for all three sets out works, calculated as a sum of the values in **Tables 4, 5** and **6**.

**Table 7. Peak Hour Construction Traffic Generation (Total)**

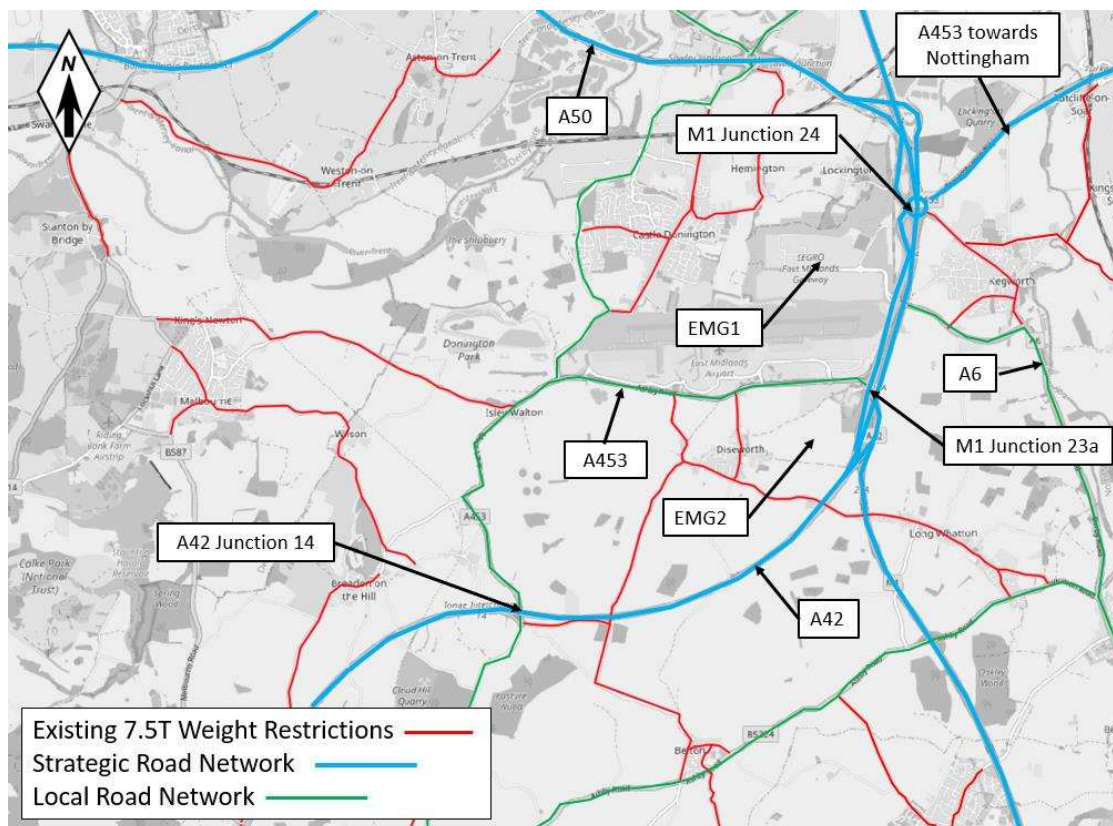
	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
HGV	17	17	34	3	3	6
LGV	3	3	6	1	1	2
Car	19	4	23	5	29	34
Vans	38	8	45	9	56	65
<b>Total</b>	<b>77</b>	<b>32</b>	<b>108</b>	<b>18</b>	<b>89</b>	<b>107</b>

- 2.14 The details show that there is expected to be a total of 108 two-way construction vehicle movements in the morning peak hour and 107 in the evening peak hour, including both movements by operatives (car and van), LGVs and HGVs.

### **3. PROPOSED ASSESSMENT METHODOLOGY**

- 3.1 Whilst peak hour construction movements are expected to be low and do not warrant any further capacity assessment on the surrounding highway network, it is proposed that the peak hour/daily traffic is tested through the Pan Regional Transport Model (PRTM) to provide outputs to inform the ES Chapter, which requires an assessment of AADT construction traffic. Hence peak hour flows will be modelled and a factor will be applied in PRTM to derive AADT movements. This factor will mirror the daily construction vehicle calculations presented in **Table 1**.
- 3.2 The loading points of construction traffic in PRTM can be split by the various locations based on the values in **Tables 4, 5** and **6**. The distribution of construction traffic will be undertaken within PRTM based on the most appropriate methodology, which at this stage is expected to be via a gravity model approach.
- 3.3 The PRTM modelling of construction traffic will provide an indication of the likely increase in traffic across the network, which can be compared against the 2028/2038 forecast base year flows (without development), which are being provided as part of the Stage 1 modelling by AECOM. This will provide an understanding of the percentage increase in traffic which will be detailed in the ES Chapter.
- 3.4 Further details with regard to the routing of construction traffic and measures to limit impacts on the network will be provided in a separate Construction Traffic Management Plan. This includes a commitment to capping construction vehicle movements to those shown in **Tables 4, 5, 6** and **7** and monitoring traffic movements over the construction phase. In addition, consideration can be given to the impacts of lane closures and road space needed to deliver the external highways works, but again this will be covered separately at the appropriate time. HGV route choice will however need to consider existing weight restrictions on the surrounding roads, of which there are a number surrounding the site (as shown on **Figure 1**), which will help limit any impacts along the most sensitive routes and ensure that HGVs use the more strategic routes when travelling to the site. These weight restrictions are already coded into PRTM and was confirmed as part of the Base Model Validation Report.

**Figure 1. Existing Weight Restrictions**



## 4. SUMMARY

- 4.1 This Technical Note presents the traffic generation calculations for the construction phase of the EMG2 development. It follows previous methodologies adopted for other large DCO applications, including at East Midlands Gateway and Northampton Gateway and are based on inputs from an Excel spreadsheet provided by Segro.
- 4.2 The calculations consider each construction component individually and calculate the daily and peak hour construction vehicle movements for cars, LGVs, vans and HGVs across the five-year construction period.
- 4.3 The calculations confirm that peak construction activity would occur in Year 1, with a total of 718 daily two-way construction vehicle movements. When converted to peak hour traffic, there is expected to be a total of 108 movements in the AM peak hour and 107 movements in the PM peak hour (two-way). Whilst peak hour activity is expected to be low, construction traffic is proposed to be tested in PRTM for the purpose of obtaining AADT information for the ES Chapter.

**Appendix 1. Explanatory Note**

## EMG2 Construction Traffic Calculations – Explanatory Note

### 1. Introduction

1.1 This Explanatory Note has been prepared to provide guidance to users reading BWB's Construction Traffic Calculations Technical Note ref: EMG2-BWB-GEN-XX-RP-TR-0013, which calculates the construction traffic forecasts for the East Midlands Gateway Phase 2 project (EMG2). It also provides guidance on navigating the accompanying Excel spreadsheet so that users can understand how the calculations have been derived and any assumptions made.

### 2. Methodology

2.1 The Excel spreadsheet includes two tabs. The 'calculations' tab provides the inputs and assumptions behind the calculations, whilst the 'Daily\_Hourly Flows' tab summarises the data for the purposes of reporting.

2.2 Starting with 'calculations' tab, this firstly lists the various construction components, the quantity of material needed to construct each component and the unit of measurement down the left-hand side.

Component	Input Unit	Quantity					Total	Development Totals				
			HGV	LGV	Car	Vans		HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.3 The volume of HGVs is determined based on a resourced programme with standard elements of work, so in this instance the number of visits needed to deliver the quantity of material to build each particular component and is applied as a factor. The factors reflect historic survey work undertaken by Segro on existing construction sites. As an example, a HGV factor of 0.5 is applied to all highway works.

2.4 This factor is then used to calculate the total number of HGV movements that would be required to deliver the total quantum of material for each construction component.

Component	Input Unit	Quantity					Total	Development Totals				
			HGV	LGV	Car	Vans		HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.5 The total number of LGV movements are then derived as a percentage of total HGV movements, again reflecting historic surveys Segro has undertaken. The following percentages are adopted for each construction component, noting that a higher proportion of LGVs are generated for landscaping purposes compared to highway works. These values reflect one-way movements.

- Roads = 20%
- Highway works = 20%
- Bridges = 40%
- Earthworks = 50%
- Buildings = 20%
- Landscaping = 400%

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.6 The methodology for calculating car and van movements is the same and based on a resource programme with a standard element of works and includes movements from operatives, management, visitors and supervisors, which derives a factor similar to HGVs and LGVs. The factors reflect the following occupancy rates:

- Car = 1 person
- Van = 2 persons

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.7 Finally, total construction vehicle movements are calculated as a sum of HGVs, LGVs, cars and vans.

Component	Input Unit	Quantity	HGV	LGV	Car	Vans	Total	Development Totals				
								HGV	LGV	Car	Van	Total
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7,750	1,550	15,500	11,625	36,425
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3,050	610	1,830	1,830	7,320
Highway Works (M1 J24)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16,000	3,200	9,600	9,600	38,400
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2,340
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.3000	1.2000	80	16	48	48	192
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	2.3500	1,450	290	2,900	2,175	6,815
Bridges	Item	2	800	320	1500	1500	4120	1,600	640	3,000	3,000	8,240
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	1,600	800	3,200	12,000	17,600
Earthworks (EMG1)	m3	150000	0.0010	0.0005	0.0020	0.0075	0.0110	150	75	300	1,125	1,650
Buildings (EMG2)	ft2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48,438	9,688	24,219	32,292	114,636
Buildings (EMG1)	ft2	269098	0.0150	0.0030	0.0075	0.0100	0.0355	4,036	807	2,018	2,691	9,553
Landscaping (EMG2)	ft2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552
Landscaping (EMG1)	ft2	269098	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296
								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,019</b>

2.8 The amount of time to complete each construction component is then set in years and reflects Segro's construction programme for EMG2. The number of years is then converted to working days, assuming 5 day working weeks for 49 weeks ((49 x 5) x no. of years). For example, the number of working days expected to complete the 'Roads (EMG2 Main Site)' component is 367.50 days ((49 x 5) x 1.5).

Yrs	Day	Average Movements per Day				
		HGV	LGV	Car	Van	Total
1.50	367.50	21.09	4.22	42.18	31.63	99.12
1.00	245.00	12.45	2.49	7.47	7.47	29.88
2.00	490.00	32.65	6.53	19.59	19.59	78.37
1.00	245.00	3.98	0.80	2.39	2.39	9.55
0.20	49.00	1.63	0.33	0.98	0.98	3.92
1.00	245.00	5.92	1.18	11.84	8.88	27.82
1.50	367.50	4.35	1.74	8.16	8.16	22.42
1.50	367.50	4.35	2.18	8.71	32.65	47.89
1.00	245.00	0.61	0.31	1.22	4.59	6.73
5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
1.00	245.00	16.48	3.30	8.24	10.98	38.99
2.00	490.00	0.66	2.64	1.32	2.64	7.25
1.00	245.00	0.11	0.44	0.22	0.44	1.21
		<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

- 2.9 The daily number of vehicle movements for each construction component is then calculated by dividing the total number of vehicles across the entire construction programme by the number of working days. For example, daily HGV movements for the 'Roads (EMG2 Main Site)' component is 21.09 calculated as  $(7,750 / 367.50)$ .

Yrs	Day	Average Movements per Day				
		HGV	LGV	Car	Van	Total
1.50	367.50	21.09	4.22	42.18	31.63	99.12
1.00	245.00	12.45	2.49	7.47	7.47	29.88
2.00	490.00	32.65	6.53	19.59	19.59	78.37
1.00	245.00	3.98	0.80	2.39	2.39	9.55
0.20	49.00	1.63	0.33	0.98	0.98	3.92
1.00	245.00	5.92	1.18	11.84	8.88	27.82
1.50	367.50	4.35	1.74	8.16	8.16	22.42
1.50	367.50	4.35	2.18	8.71	32.65	47.89
1.00	245.00	0.61	0.31	1.22	4.59	6.73
5.00	1,225.00	39.54	7.91	19.77	26.36	93.58
1.00	245.00	16.48	3.30	8.24	10.98	38.99
2.00	490.00	0.66	2.64	1.32	2.64	7.25
1.00	245.00	0.11	0.44	0.22	0.44	1.21
		<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>

- 2.10 The daily number of movements is then profiled out for each year of construction based on the length of time that particular component is expected to take. To ensure a worst-case assessment, all components are set to start in Year 1, however in reality components will be staggered, for example a certain amount of earthworks is required before you can start constructing buildings.
- 2.11 Where a particular component is expected to end mid-way through a year i.e. 'Roads (EMG2 Main Site)' has a duration of 1.5 years, the daily values are taken in full for one of the years and divided by two for the other year, to calculate an average. This depends on each component, for example earthworks start early on in the construction programme, so daily movements for earthworks are taken in full for Year 1, whilst road construction would start later, and so daily movements are taken in full for Year 2.

Component	Input Unit	Quantity	Development Totals					Average Movements per Day											
			HGV	LGV	Car	Vans	Total	HGV	LGV	Car	Vans	Total							
Roads (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	23500	7,750	1,550	15,500	11,625	36,425	367.50	21.09	4.22	42.18	31.63	99.12	
Highway Works (EMG2 Site Access)	m2	160	0.5000	0.1000	0.5000	0.5000	1,000	3,000	600	3,000	1,800	7,200	245.00	12.45	2.49	7.47	7.47	29.88	
Highway Works (M124)	m2	33000	0.5000	0.1000	0.5000	0.5000	1,000	16,000	3,200	9,600	8,600	38,400	2.00	490.00	32.65	6.53	19.59	19.59	78.37
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.5000	0.5000	1,000	975	195	585	585	2,340	1.00	245.00	3.98	0.80	2.39	2.39	9.55
Highway Works (M453/The Green)	m2	160	0.5000	0.1000	0.5000	0.5000	1,000	80	16	48	48	192	0.30	49.00	1.61	0.33	0.98	0.98	3.93
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	0.7500	23500	1,450	290	2,900	2,375	6,815	245.00	5.92	1.18	11.84	8.88	32.82	
Bridges	Item	7	800	320	3200	1500	4120	1,600	640	3,000	3,000	8,240	1.50	367.50	4.35	1.74	8.16	8.16	22.42
Earthworks (EMG2)	m3	160000	0.0010	0.0005	0.0020	0.0035	0.0110	1,600	800	3,200	12,000	17,600	1.50	367.50	4.35	1.18	8.71	32.65	47.89
Earthworks (EMG1)	m3	130000	0.0010	0.0005	0.0020	0.0035	0.0110	150	75	300	1,235	1,650	1.50	367.50	4.35	0.31	1.22	4.59	6.73
Buildings (EMG2)	R2	3229174	0.0110	0.0030	0.0075	0.0110	0.0355	48,438	9,688	24,219	32,292	114,636	1.00	1235.00	39.54	7.91	19.77	26.36	93.58
Buildings (EMG1)	R2	200298	0.0110	0.0030	0.0075	0.0110	0.0355	4,936	967	3,018	1,691	6,553	1.00	285.00	56.46	3.90	8.24	10.98	38.96
Landscaping (EMG2)	R2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1,292	646	1,292	3,552	2.00	490.00	0.66	2.64	1.32	2.64	7.25
Landscaping (EMG1)	R2	290698	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296	1.00	245.00	0.11	0.44	0.22	0.44	1.11
<b>Total</b>								<b>85,479</b>	<b>19,270</b>	<b>63,900</b>	<b>78,370</b>	<b>247,918</b>		<b>183.83</b>	<b>34.65</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>	

NOTE1: Highway works based on single site access and initial highway mitigation pack. This is likely to change based on emerging strategic highway solution.  
NOTE2: EMG1 proposals not included, potentially add to buildings as to 7.

**Total. This part needs summing to include extra columns for all the lines added above**

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M124)	Highway works (EMG1 site access)	Highway works (M453/The Green)	Roads (EMG1)	Bridges	E/W (EMG2) E/W (EMG1)	Building (EMG2)	Building (EMG1)	Landscaping (EMG2)	Landscaping (EMG1)	
Yr 1	HGV	111.33	49.95	27.20	34.29	10.54	12.45	32.65	3.98	1.61	5.92	2.18	4.35	0.61	19.77	16.48	0.66	0.11
Yr 1	LGV	27.13	14.24	4.02	4.86	2.13	2.49	6.53	0.80	0.33	1.18	0.87	2.18	0.31	3.95	3.30	2.64	0.44
Yr 1	Car	97.03	52.55	23.91	29.57	21.09	7.47	19.59	2.39	0.98	11.84	1.22	9.89	8.24	9.89	8.24	1.32	0.22
Yr 1	Vans	123.69	75.84	27.28	20.97	15.82	7.47	19.59	2.39	0.98	8.88	4.08	32.65	4.59	13.18	10.98	2.64	0.44
Yr 2	HGV	104.47	67.82	-	32.65	21.09	32.65	-	-	-	-	-	4.35	2.18	4.59	0.66	-	-
Yr 2	LGV	24.12	17.99	-	6.93	4.22	-	6.53	-	-	-	-	1.74	1.09	-	7.91	-	2.64
Yr 2	Car	95.37	75.78	-	19.99	41.18	-	19.59	-	-	-	-	8.16	4.35	-	13.2	-	1.32
Yr 2	Vans	104.71	85.12	-	19.99	31.63	-	19.59	-	-	-	-	8.16	16.33	-	26.36	-	2.64
Yr 3	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 3	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 3	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 3	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2.12 Using the daily number of movements for each year of construction, total movements for works at EMG2, EMG1 and external highway works are calculated.

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M124)	Highway works (EMG1 site access)	Highway works (M453/The Green)	Roads (EMG1)	Bridges	E/W (EMG2) E/W (EMG1)	Building (EMG2)	Building (EMG1)	Landscaping (EMG2)	Landscaping (EMG1)	
Yr 1	HGV	111.33	49.95	27.20	34.29	10.54	12.45	32.65	3.98	1.61	5.92	2.18	4.35	0.61	19.77	16.48	0.66	0.11
Yr 1	LGV	27.13	14.24	4.02	4.86	2.13	2.49	6.53	0.80	0.33	1.18	0.87	2.18	0.31	3.95	3.30	2.64	0.44
Yr 1	Car	97.03	52.55	23.91	29.57	21.09	7.47	19.59	2.39	0.98	11.84	1.22	9.89	8.24	9.89	8.24	1.32	0.22
Yr 1	Vans	123.69	75.84	27.28	20.97	15.82	7.47	19.59	2.39	0.98	8.88	4.08	32.65	4.59	13.18	10.98	2.64	0.44
Yr 2	HGV	104.47	67.82	-	32.65	21.09	32.65	-	-	-	-	-	4.35	2.18	4.59	0.66	-	-
Yr 2	LGV	24.12	17.99	-	6.93	4.22	-	6.53	-	-	-	-	1.74	1.09	-	7.91	-	2.64
Yr 2	Car	95.37	75.78	-	19.99	41.18	-	19.59	-	-	-	-	8.16	4.35	-	13.2	-	1.32
Yr 2	Vans	104.71	85.12	-	19.99	31.63	-	19.59	-	-	-	-	8.16	16.33	-	26.36	-	2.64
Yr 3	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 3	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 3	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 3	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	LGV	7.91	7.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	Car	19.77	19.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yr 5	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2.13 Within the 'Daily\_Hourly Flows' tab, the average number of daily movements (one-way) for each vehicle type across each year are calculated using the values above (left hand side of table). These are then multiplied by two to derive two-way movements (right hand side of table), assuming that any vehicle arriving must then depart.

Vehicle Type	Avg Daily Movements (one-way)				Avg Daily Movements (two-way)			
	Overall Total	EMG2	EMG1	Highway Works	Overall Total	EMG2	EMG1	Highway Works
<b>Yr 1</b>	<b>359</b>	<b>193</b>	<b>84</b>	<b>82</b>	<b>718</b>	<b>385</b>	<b>169</b>	<b>165</b>
HGV	111	50	27	34	223	100	54	69
LGV	27	14	6	7	54	28	12	14
Car	97	53	24	21	194	105	48	41
Van	124	76	27	21	247	152	55	41
<b>Yr 2</b>	<b>325</b>	<b>246</b>	-	<b>78</b>	<b>649</b>	<b>493</b>	-	<b>157</b>
HGV	100	68	-	33	201	136	-	65
LGV	24	18	-	7	48	35	-	13
Car	95	76	-	20	191	152	-	39
Van	105	85	-	20	209	170	-	39
<b>Yr 3</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 4</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-
Car	20	20	-	-	40	40	-	-
Van	26	26	-	-	53	53	-	-
<b>Yr 5</b>	<b>94</b>	<b>94</b>	-	-	<b>187</b>	<b>187</b>	-	-
HGV	40	40	-	-	79	79	-	-
LGV	8	8	-	-	16	16	-	-

- 2.14 In this instance, peak construction traffic is expected to occur in Year 1, as highlighted yellow in the table above. These worst-case values have therefore been adopted when converting daily movements to peak hour.
- 2.15 The following percentage breakdown of arrivals and departures for each vehicle type is assumed, with the traditional network peak periods highlighted yellow. These percentages are based on historic survey work undertaken by Segro.

% Arrivals by Hour				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	6%	10%
07:00-08:00	10%	10%	45%	45%
08:00-09:00	15%	12%	20%	20%
09:00-10:00	10%	10%	5%	5%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	2%	2%
16:00-17:00	4%	6%	2%	2%
17:00-18:00	3%	3%	5%	5%
18:00-19:00	2%	2%	5%	1%
	100%	100%	100%	100%

% Departures by Hour				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0%	0%	1%	2%
07:00-08:00	10%	10%	3%	2%
08:00-09:00	15%	12%	4%	4%
09:00-10:00	10%	10%	4%	2%
10:00-11:00	10%	10%	2%	2%
11:00-12:00	10%	10%	2%	2%
12:00-13:00	10%	10%	2%	2%
13:00-14:00	9%	10%	2%	2%
14:00-15:00	9%	9%	2%	2%
15:00-16:00	8%	8%	8%	8%
16:00-17:00	4%	6%	15%	30%
17:00-18:00	3%	3%	30%	30%
18:00-19:00	2%	2%	25%	12%
	100%	100%	100%	100%

- 2.16 Hourly arrivals and departures for each vehicle type are then calculated by multiplying the daily one-way movements to the percentages above. This has been split by the various locations, EMG2, EMG1 and Off-site highway works as they will have different origin/destination points on the network.

Inbound movements by Hour (EMG2) - Year 1					Inbound movements by Hour (EMG1) - Year 1					Inbound movements by Hour (external highway works) - Year 1				
Hour	HGV	LGV	Cars	Vans	Hour	HGV	LGV	Cars	Vans	Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	3	5	06:00-07:00	0	0	1	3	06:00-07:00	0	0	1	2
07:00-08:00	5	1	24	34	07:00-08:00	3	1	11	12	07:00-08:00	3	1	4	9
08:00-09:00	7	2	11	15	08:00-09:00	4	1	5	5	08:00-09:00	5	1	4	4
09:00-10:00	5	1	3	4	09:00-10:00	3	1	1	1	09:00-10:00	3	1	1	1
10:00-11:00	5	1	1	2	10:00-11:00	3	1	0	1	10:00-11:00	3	1	0	0
11:00-12:00	5	1	1	2	11:00-12:00	3	1	0	1	11:00-12:00	3	1	0	0
12:00-13:00	5	1	1	2	12:00-13:00	3	1	0	1	12:00-13:00	3	1	0	0
13:00-14:00	4	1	1	2	13:00-14:00	2	1	0	1	13:00-14:00	3	1	0	0
14:00-15:00	4	1	1	2	14:00-15:00	2	1	0	1	14:00-15:00	3	1	0	0
15:00-16:00	4	1	1	2	15:00-16:00	2	0	0	1	15:00-16:00	3	1	0	0
16:00-17:00	2	1	1	2	16:00-17:00	1	0	0	1	16:00-17:00	1	0	0	0
17:00-18:00	1	0	3	4	17:00-18:00	0	1	1	1	17:00-18:00	1	0	1	1
18:00-19:00	1	0	3	1	18:00-19:00	1	0	1	0	18:00-19:00	1	0	1	0
	45	11	54	80		28	8	20	29		32	9	17	17

Outbound movements by Hour (EMG2) - Year 1					Outbound movements by Hour (EMG1) - Year 1					Outbound movements by Hour (external highway works) - Year 1				
Hour	HGV	LGV	Cars	Vans	Hour	HGV	LGV	Cars	Vans	Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2	06:00-07:00	0	0	0	0	06:00-07:00	0	0	0	0
07:00-08:00	5	1	2	2	07:00-08:00	3	1	1	1	07:00-08:00	3	1	1	1
08:00-09:00	7	2	2	3	08:00-09:00	4	1	1	1	08:00-09:00	5	1	1	1
09:00-10:00	5	1	2	2	09:00-10:00	3	1	0	1	09:00-10:00	3	1	1	0
10:00-11:00	5	1	1	2	10:00-11:00	3	1	0	1	10:00-11:00	3	1	0	0
11:00-12:00	5	1	1	2	11:00-12:00	3	1	0	1	11:00-12:00	3	1	0	0
12:00-13:00	5	1	1	2	12:00-13:00	3	1	0	1	12:00-13:00	3	1	0	0
13:00-14:00	4	1	1	2	13:00-14:00	2	1	0	1	13:00-14:00	3	1	0	0
14:00-15:00	4	1	1	2	14:00-15:00	2	0	0	1	14:00-15:00	3	1	0	0
15:00-16:00	4	1	1	2	15:00-16:00	2	0	0	1	15:00-16:00	3	1	0	0
16:00-17:00	2	1	4	6	16:00-17:00	1	0	2	2	16:00-17:00	1	0	3	4
17:00-18:00	1	0	13	23	17:00-18:00	1	0	7	8	17:00-18:00	1	0	8	8
18:00-19:00	1	0	13	9	18:00-19:00	1	0	4	3	18:00-19:00	1	0	5	5
	45	11	53	80		28	8	22	30		32	9	19	17

- 2.17 From this, total arrivals and departures can be calculated. This provides the final peak hour construction movements, which are set out in the report ref EMG2-BWB-GEN-XX-RP-TR-0013 and to be used for further assessment.

<b>Inbound movements by Hour (total development) - Year 1</b>				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	6	12
07:00-08:00	11	3	44	56
08:00-09:00	17	3	19	25
09:00-10:00	11	3	5	6
10:00-11:00	11	3	2	2
11:00-12:00	11	3	2	2
12:00-13:00	11	3	2	2
13:00-14:00	10	3	2	2
14:00-15:00	10	2	2	2
15:00-16:00	9	2	2	2
16:00-17:00	4	2	2	2
17:00-18:00	3	1	5	6
18:00-19:00	2	1	5	1
	110	29	98	120

<b>Outbound movements by Hour (total development) - Year 1</b>				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	2
07:00-08:00	11	3	3	2
08:00-09:00	17	3	4	5
09:00-10:00	11	3	4	2
10:00-11:00	11	3	2	2
11:00-12:00	11	3	2	2
12:00-13:00	11	3	2	2
13:00-14:00	10	3	2	2
14:00-15:00	10	2	2	2
15:00-16:00	9	2	8	10
16:00-17:00	4	2	15	37
17:00-18:00	3	1	29	37
18:00-19:00	2	1	24	15
	110	29	98	120

- 2.18 The formulas in-built within the spreadsheet assume that vans have an occupancy rate of 3 people. It has been agreed with the TWG for vans to adopt an occupancy rate of 2 people per van. The values for vans in the tables above have therefore been multiplied by 1.5 to calculate this. These are shown in the tables at the bottom of the excel spreadsheet, with the revised total development construction vehicles shown below.

<b>Inbound movements by Hour (total development) - Year 1 (adjusted for van occupancy)</b>				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	6	18
07:00-08:00	11	3	44	84
08:00-09:00	17	3	19	38
09:00-10:00	11	3	5	9
10:00-11:00	11	3	2	3
11:00-12:00	11	3	2	3
12:00-13:00	11	3	2	3
13:00-14:00	10	3	2	3
14:00-15:00	10	2	2	3
15:00-16:00	9	2	2	3
16:00-17:00	4	2	2	3
17:00-18:00	3	1	5	9
18:00-19:00	2	1	5	2
	110	29	98	180

<b>Outbound movements by Hour (total development) - Year 1 (adjusted for van occupancy)</b>				
Hour	HGV	LGV	Cars	Vans
06:00-07:00	0	0	1	3
07:00-08:00	11	3	3	3
08:00-09:00	17	3	4	8
09:00-10:00	11	3	4	3
10:00-11:00	11	3	2	3
11:00-12:00	11	3	2	3
12:00-13:00	11	3	2	3
13:00-14:00	10	3	2	3
14:00-15:00	10	2	2	3
15:00-16:00	9	2	8	15
16:00-17:00	4	2	15	56
17:00-18:00	3	1	29	56
18:00-19:00	2	1	24	23
	110	29	98	180

Appendix 2. Construction Traffic Flow Calculations Spreadsheet Extract

Construction Traffic Movements (One Way)

Component	Input Unit	Quantity	HGV	LSV	Car	Vans	Development Totals										Average Movements per Day				
							Total	HGV	LSV	Car	Van	Total	HGV	LSV	Car	Van	Total				
Road (EMG2 Main site)	m2	15500	0.5000	0.1000	1.0000	0.7500	2.3500	7.750	1.550	15.500	11.525	36.425	1.50	367.50	12.09	4.22	42.18	31.63	99.12		
Highway Works (EMG2 Site Access)	m2	6100	0.5000	0.1000	0.3000	0.3000	1.2000	3.050	610	1.830	1.830	7.320	1.00	245.00	12.45	2.49	7.47	7.47	29.88		
Highway Works (M1124)	m2	32000	0.5000	0.1000	0.3000	0.3000	1.2000	16.000	3.200	9.600	9.600	38.400	2.00	490.00	32.65	6.53	19.59	19.59	78.37		
Highway Works (EMG1 Site Access)	m2	1950	0.5000	0.1000	0.3000	0.3000	1.2000	975	195	585	585	2.340	1.00	245.00	3.98	0.80	2.39	2.39	9.55		
Highway Works (A453/The Green)	m2	160	0.5000	0.1000	0.3000	0.7500	2.3500	80	16	48	48	192	0.20	49.00	1.63	0.33	0.98	0.98	3.92		
Roads (EMG1)	m2	2900	0.5000	0.1000	1.0000	1.5000	4.120	1.450	290	2.900	2.175	6.815	1.00	245.00	5.92	1.18	11.84	8.88	27.82		
Bridges	Item	2	800	320	1500	1500	4120	1.600	290	3.000	3.000	8.240	1.50	367.50	4.35	1.74	8.16	8.16	22.42		
Earthworks (EMG2)	m3	1600000	0.0010	0.0005	0.0020	0.0075	0.0110	150	800	3.200	3.000	17.600	1.00	245.00	0.61	0.31	1.22	4.59	6.73		
Earthworks (EMG1)	m3	1500000	0.0010	0.0005	0.0020	0.0075	0.0110	150	800	3.200	3.000	17.600	1.00	245.00	0.61	0.31	1.22	4.59	6.73		
Buildings (EMG2)	H2	3229174	0.0150	0.0030	0.0075	0.0100	0.0355	48.438	9.688	807	2.018	114.636	5.00	1.225.00	39.54	7.91	19.77	26.36	93.58		
Buildings (EMG1)	H2	2690988	0.0001	0.0004	0.0004	0.0004	0.0011	4.036	807	2.018	2.691	9.552	1.00	245.00	16.48	3.30	8.24	10.98	38.99		
Landscape (EMG2)	H2	3229174	0.0001	0.0004	0.0002	0.0004	0.0011	323	1.292	646	1.292	3.552	2.00	490.00	0.66	2.64	1.32	2.64	7.25		
Landscape (EMG1)	H2	2690988	0.0001	0.0004	0.0002	0.0004	0.0011	27	108	54	108	296	1.00	245.00	0.11	0.44	0.22	0.44	1.21		
<b>TOTAL</b>								<b>85.479</b>	<b>19.270</b>	<b>63.900</b>	<b>78.370</b>	<b>247.019</b>			<b>143.83</b>	<b>34.05</b>	<b>132.08</b>	<b>156.77</b>	<b>466.72</b>		

NOTE1: highway works based on single site access and initial highway mitigation pack. This is likely to change based on emerging strategic highway solution.

NOTE2: EMG1 proposals not included, potentially add to buildings as sq ft?

Note: This part needs amending to include extra columns for all the lines added above

Year	Type	Overall Total	Total EMG2	Total EMG1	Total External	Highway works (EMG2)		Highway works (EMG1 site access)		Highway works (A453/The Green)		Roads (EMG1)		Bridges		E/W (EMG2)		E/W (EMG1)		Building (EMG2)		Building (EMG1)		Landscape (EMG2)		Landscape (EMG1)		
						Roads (EMG2)	Highway works (EMG2 site access)	Highway works (M1124)	Highway works (EMG1 site access)	Highway works (A453/The Green)	Roads (EMG1)	Bridges	E/W (EMG2)	E/W (EMG1)	Building (EMG2)	Building (EMG1)	Landscape (EMG2)	Landscape (EMG1)										
Yr-1	HGV	111.33	49.95	27.10	6.02	10.54	12.45	3.98	1.63	5.92	2.18	4.35	0.61	19.77	16.48	0.66	0.11											
Yr-1	LSV	27.11	14.24	6.02	6.86	2.11	2.49	0.80	0.33	1.18	0.87	2.18	0.31	3.95	3.30	2.64	0.44											
Yr-1	Car	97.03	52.55	23.91	20.57	21.09	7.47	2.39	0.98	11.84	4.08	8.71	1.22	9.89	8.24	1.32	0.22											
Yr-1	Vans	123.69	75.84	27.28	20.57	15.82	7.47	0.98	0.98	8.88	4.08	32.65	4.59	13.18	10.98	2.64	0.44											
Yr-2	HGV	100.47	67.82	0.150	32.65	21.09	-	-	-	-	4.35	2.18		39.54	0.66													
Yr-2	LSV	24.12	17.59	-	6.53	4.22	-	-	-	-	1.74	1.09		7.91	2.64													
Yr-2	Car	95.37	75.278	-	19.59	42.18	-	-	-	-	8.16	4.35		19.77	1.32													
Yr-2	Vans	104.21	85.12	-	19.59	31.63	-	-	-	-	8.16	16.33		26.36	2.64													
Yr-3	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-		7.91	-													
Yr-3	LSV	7.91	7.91	-	-	-	-	-	-	-	-	-		19.77	-													
Yr-3	Car	19.77	19.77	-	-	-	-	-	-	-	-	-		26.36	-													
Yr-3	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-		39.54	-													
Yr-4	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-		7.91	-													
Yr-4	LSV	7.91	7.91	-	-	-	-	-	-	-	-	-		19.77	-													
Yr-4	Car	19.77	19.77	-	-	-	-	-	-	-	-	-		26.36	-													
Yr-4	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-		39.54	-													
Yr-5	HGV	39.54	39.54	-	-	-	-	-	-	-	-	-		7.91	-													
Yr-5	LSV	7.91	7.91	-	-	-	-	-	-	-	-	-		19.77	-													
Yr-5	Car	19.77	19.77	-	-	-	-	-	-	-	-	-		26.36	-													
Yr-5	Vans	26.36	26.36	-	-	-	-	-	-	-	-	-		39.54	-													
<b>TOTAL</b>																												



PC24-004 EMG 2

Construction Traffic Management Plan



## **APPENDIX 3**

### **Public Communications and Traffic Management Protocol**



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EMG 2

Public Communications and Traffic Management Protocol

Client – (Segro (EMG) Ltd)

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**DOCUMENT ISSUE RECORD**

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## 1. Executive Summary

East Midlands Gateway Phase 2 (EMG2) represents a major programme of strategic and local highway improvements required to deliver safe, reliable and efficient access to this Nationally significant development.

These works, delivered both on the Strategic Road Network (SRN) and Local Road Network (LRN), will inevitably involve temporary traffic management measures and short-term disruption.

This Public Communications and Traffic Management Protocol sets out how Segro and the Contractor will manage these impacts, communicate with stakeholders, and maintain public confidence throughout the construction period.

This Protocol has been specifically prepared as a public-facing addition to the technical documents that underpin the project—the Construction Traffic Management Plan (CTMP), the Qualitative Construction Traffic Management Assessment (QCTMA), and the Diversion Route Strategy Report. While those documents focus on regulatory compliance, operational controls and traffic modelling, this Protocol translates their commitments into clear, accessible explanations of what can be expected.

It provides narrative on how construction phases will be managed, how lane closures and diversions will be coordinated, how safety will be upheld, and how residents, businesses and road users will be kept informed.

It is recognised that public consultation and the provision of information is essential to the successful delivery of the project. This Protocol therefore establishes an open, proactive and reliable communication mechanism, ensuring that the public is notified early, updated regularly, and provided with the information needed to understand what is happening, why it is required, and how impacts are being minimised.

## 2. Introduction

### 2.1 Background

East Midlands Gateway (EMG) is a nationally significant logistics and industrial hub with strategic connections to the M1, A50, A453 and East Midlands Airport. Phase 2 of the development requires a series of coordinated off-site highways works across multiple junctions, M1 mainline and slip roads, and local carriageways. These works are essential to support the development, maintain safety standards, enhance junction capacity, and ensure that both construction and operational traffic can move efficiently on the road network.

The off-site works form part of the planning obligations for the EMG2 scheme. They have been assessed separately in the CTMP and the QCTMA, both of which demonstrate that—through a careful combination traffic management measures (narrow-lane running, lane closures and overnight lane or full closures, with controlled diversion routes) the works can be undertaken without causing significant congestion or network impact.

### 2.2 Purpose of this Protocol

The purpose of this Protocol is to provide a comprehensive narrative of the traffic management and communication approach for EMG2. It aims to give residents, key stakeholders, businesses, emergency services and transport operators a clear understanding of:

- what works will take place and where
- how they will be delivered safely and efficiently
- how disruption will be minimised
- what types of closures or diversions may be required
- how the public will be notified and supported
- how this Protocol aligns with the commitments in the CTMP, QCTMA and Diversion Route Strategy.

### 2.3 Relationship with Other Documents

This document does not replace the CTMP, QCTMA or Diversion Route Strategy, it seeks to draw on their content to ensure public communications accurately reflect the constraints, commitments and approved methodologies.

The CTMP provides the formal operating framework for construction traffic and temporary traffic management. The QCTMA demonstrates that network impacts will be limited and manageable. The Diversion Route Strategy sets out safe, high-capacity diversion corridors using the A50, A453 and key SRN junctions.

Together, these documents ensure that this Protocol provides an accurate and reliable tool for public engagement.

### **2.4 Scope and Limitations**

This Protocol is a high-level narrative document intended for public information. It provides broad descriptions of the types of measures that will be used, but does not contain technical engineering detail. Detailed traffic management drawings, phasing diagrams and diversion mapping will be prepared by the appointed Contractor and made available during the construction phase.

## **3. Project Overview**

### **3.1 Summary of Off-Site Highways Works**

The EMG2 off-site works comprise multiple coordinated enhancements to the surrounding road network.

These include improvements to the A453 West, modifications at M1 Junction 24 and Junction 24A, tie-ins and widening on the A50, junction enhancements on local access routes including Hyam's Lane and The Green, and a focused package of active travel and signage enhancements.

These involve (but are not limited to) new road construction, bridge construction, resurfacing, carriageway reconfiguration and widening, drainage upgrades, signs and signals, and landscaping.

The QCTMA identifies the specific work packages (Works 6–18), each with its own unique set of constraints, requirements and traffic management needs. This Protocol ensures that these packages are communicated to the public in a coherent and understandable way.

### **3.2 Objectives**

The overarching objectives of the Traffic Management for the off-site highway works during construction are to:

- maintain safe, reliable and efficient movement on both the SRN and LRN during construction
- minimise congestion and prevent network instability during peak hours
- ensure residents and businesses retain access at all times
- deliver each work package in a coordinated manner
- ensure public communication is timely, accurate and transparent.

### **3.3 Work Locations**

All work locations (highway components) are illustrated through clear, public-friendly diagrams provided by in Appendix A of this report.

## **4. Principles of Managing Disruption**

### **4.1 Protection of Network Capacity**

The QCTMA demonstrates that, by employing narrow-lane running and limiting closures to off-peak periods, EMG2 can be constructed without significant daytime congestion. Therefore, a key principle of delivery is the protection of daytime network capacity. Wherever possible, all lanes will remain open during peak hours, with lane narrowing in place as necessary. This allows motorists to continue using the route with minimal delay, while creating a safe working area for construction teams.

### **4.2 Safety Management**

Safety is the foundation of all traffic management design. Segro and the appointed contractor will ensure compliance with Chapter 8 of the Traffic Signs Manual, and all relevant regulations. Measures will include appropriately sized working zones, protective barriers, temporary lighting where required, advance signage, speed reductions and clearly defined access points for construction vehicles. Safety audits will be undertaken at relevant stages.

### **4.3 Minimising Local Impacts**

A key commitment is to minimise direct effects on local communities. This includes maintaining access during all phases, scheduling noisy or disruptive work during suitable hours, timing closures to avoid school traffic and community events, and ensuring diversions avoid LRN village routes unless absolutely unavoidable. Where impacts are anticipated, targeted communication will be provided well in advance.

#### **4.4 Working Hours and Noise Controls**

Consistent with the CEMP, the works will typically be undertaken during daytime working hours where practicable. However, certain activities—such as planing, surfacing and white-lining—must be carried out during overnight periods to protect network capacity and ensure safety. These activities will have lighting control measures, plant noise mitigation with direct notifications to nearby properties issued in advance where appropriate.

#### **4.5 Coordination with Authorities**

A seamless interface between Segro, the Contractor, National Highways, Leicestershire County Council and emergency services is central to this Protocol. All phases of traffic management will be reviewed and approved by the relevant authorities, and all diversions will be coordinated to avoid conflict with other regional works.

### **5. Traffic Management Strategy – High Level**

#### **5.1 General Approach**

The traffic management strategy for EMG2 is based on a combination of narrow-lane running during the day and carefully timed lane or full closures overnight. This approach maintains daytime traffic capacity while enabling safe and efficient construction activities. Construction traffic will follow designated access routes agreed within the CTMP, supported by driver inductions, signage and monitoring.

#### **5.2 Phasing Plan**

The works will be delivered in structured phases. Each phase will include clear start and end points with defined traffic management arrangements, and a consistent level of public communication. Phases will be planned to avoid cumulative disruption, ensuring adjacent junctions or links are not restricted simultaneously.

To support a clear understanding of how the EMG2 off-site highways works will be delivered, this Protocol includes a high-level summary of the principal highway components that form the basis of the construction phasing strategy.

These components—identified as Work Numbers 6 to 18—represent the individual elements of the infrastructure improvement required across both the Strategic Road Network (SRN) and Local Road Network (LRN).

The works locations are denoted on Drawing “Components of the Proposed Development” included in Appendix A of this document.

The detailed construction durations and precise sequencing of these components will ultimately be defined by the appointed Contractor; however, the table below provides a structured overview of each work element, its anticipated traffic management requirements, and the expected impacts on both the SRN and LRN. This information will aid stakeholders, residents and road users to understand the likely nature and extent of highway impact associated with the component.

Work No.	Description	Traffic Management Requirement	SRN Impact	LRN Impact	Duration (Weeks)
6	A453 EMG2 Access	Narrow lanes (day), overnight lane closures for tie-ins	None during peak (06:00-20:00), minor off-peak	Local access maintained	20
7	Hyam’s Lane	Local traffic signals, single-lane closures at night	None	Localised impact only	5
8	M1 N/B Alterations	Narrow lanes (day), overnight lane closures for resurfacing & barriers	None during peak, minor overnight impact	None	16
9	M1 N/B A50 Link	Overnight lane closures, speed reductions	None during peak, temporary off-peak impact	None	14
10	A50 W/B Merge	Narrow lanes (day), overnight closures for resurfacing	No capacity reduction	None	20
11	M1 S/B A50	Narrow lanes (day), overnight closures	None during peak, temporary off-peak impact	None	16
12	Junction 24 Minor Works	Off-peak lane closures for kerbing & surfacing	None during peak, minor off-peak	None	4
13	EMG1 Access Improvements (A453)	Narrow lanes (day), overnight closures for resurfacing & tie-ins	None during peak, minor off-peak	Local access maintained	14
14	EMG2 Active Travel	Footpath diversions, no road closures	None	Minor pedestrian impact	12
15	A453 EMA Junction Uncontrolled Crossing	Lane narrowing, reduced speed, off-peak lane closures	None	Minor impact to local junction users	2
16	A453 The Green Junction Improvements	Narrow lanes (day), overnight closures for major interventions	None during peak, minor off-peak	Local access	3

Work No.	Description	Traffic Management Requirement	SRN Impact	LRN Impact	Duration (Weeks)
				main-tained	
17	Long Holden Works	Phased lane narrowing, overnight closures for kerbing & resurfacing	None	Local access only	4
18	Finger Farm Roundabout Signage Works	Localized shoulder closures, no lane reductions	None	None	4

### 5.3 Closures and Restrictions

Closures will be used only when necessary and will be planned to minimise inconvenience. Narrow-lane running will retain peak capacity - lane closures will typically take place only overnight. Full closures will be restricted to activities that cannot be undertaken safely while traffic is flowing. Speed reductions may apply within TM zones to protect workers and motorists. The QCTMA demonstrates that this approach results in minimal queuing during off-peak works.

*Refer to Appendix B for component TM phasing drawing.*

### 5.4 Diversion Routes

Diversion routes will follow the Diversion Route Strategy, making use of high-capacity corridors such as the M1, A50 and A453. Only diversions approved by National Highways and LCC will be used. Signage will provide clear guidance, and VMS boards will supplement fixed signs for major closures.

*Refer to Appendix C for component diversion route drawing.*

## 6. Public Communications Protocol

The Public Communications Protocol provides the framework for how information relating to the EMG2 off-site highways works will be conveyed to residents, businesses, road users, local authorities and other stakeholders. This section expands on the principles already set out and provides a detailed, narrative explanation of how communication will be planned, structured and executed throughout the delivery of the works. Its purpose is to ensure that information is consistently clear, accessible, and aligned with the commitments made in the CTMP, QCTMA and Diversion Route Strategy Report.

### **6.1 Communications Objectives**

The overarching objective of the communications strategy is to maintain a well-informed community throughout the duration of the project. Construction projects of this scale can generate understandable anxiety regarding travel disruption, safety, local access and potential inconvenience. A transparent and proactive approach to communication therefore plays a vital role in building confidence and reducing uncertainty.

To achieve this, Segro and the appointed Contractor will adopt a communications strategy that delivers information in a timely, accurate and easily understood manner. Communication materials will explain why the works are necessary, outline the measures taken to minimise disruption, describe how safety and access will be prioritised, and provide clear instructions on alternative routes or travel options where closures or restrictions are required.

The communications strategy will also promote consistency between all project communication vehicles, and ensure all public messaging will reflect the commitments and limitations described in the CTMP and QCTMA to ensure accuracy and avoid conflicting or confusing information being circulated among stakeholders.

### **6.2 Stakeholders**

Effective communication relies on a clear understanding of who is affected and how. Stakeholders for the EMG2 highway works cover a broad spectrum and include residents in nearby towns and villages, local businesses, parish councils, freight and logistics operators, public transport providers, emergency services, schools, and community groups.

Each stakeholder group has different expectations, concerns and needs. For example, residents require early notice of closures affecting daily life, while logistics operators benefit from detailed information about diversion suitability for HGVs. Local authorities and emergency services require early notification of any access restrictions and may need to incorporate information into their operational planning.

Communication will therefore be tailored to ensure relevance to each group. This includes direct engagement with parish councils, targeted communication to businesses affected by specific phases of work, and advance technical briefings to National Highways and LCC. This ensures each stakeholder receives information in a form that is both meaningful and actionable.

*Refer to Appendix D for the table of key stakeholders – note this list is not exhaustive and is under regular review and subject to update.*

### **6.3 Communication Channels**

Communication will be delivered using a multi-channel approach to maximise reach and ensure inclusivity. Many stakeholders rely on digital communication, but some—particularly vulnerable or older residents—may prefer printed materials. The communications strategy therefore uses multiple formats to ensure no group is left without access to information.

The primary vehicle for information will be the project website, which will host the latest updates, closure schedules, diversion routes, frequently asked questions and points of contact. This will be complemented by email newsletters distributed to subscribed stakeholders and printed letters delivered directly to affected properties prior to each phase of work commencing. Social media updates may also be used to reinforce messages and provide short, urgent updates when and where required.

Advance signage and VMS (variable message sign) boards placed on the highway will notify motorists of upcoming restrictions and closures, while press releases will be used for significant milestones or phases involving larger changes to the network. A designated Public Liaison Officer appointed by the Contractor will act as the central point for enquiries, and will be available to provide clarification, escalate concerns and ensure that feedback is reflected in subsequent communications or brought to working groups for consideration.

### **6.4 Frequency of Updates**

The frequency of communication is an important component of the Protocol. Clear expectations will be set so the public understands when and how often they will receive information. As a minimum frequency, Segro and/or the appointed Contractor will publish major updates two weeks before the start of each construction phase. This ensures that residents and road users have sufficient time to understand upcoming changes and plan accordingly.

Throughout active periods of work, monthly updates will be provided—either digitally or through the project website, summarising progress, confirming whether the programme remains on schedule, and outlining any upcoming adjustments. Where urgent or unexpected changes occur, such as those caused by adverse weather, supply chain issues or emergency incidents, immediate updates will be issued using digital channels and roadside VMS where applicable.

At the completion of each phase of work, a closing update will be published to confirm that restrictions have been lifted, with new information on any subsequent phases.

## **7. Complaints, Enquiries and Community Response**

The ability for the public to make enquiries or raise concerns is an essential component of good community relations. This section establishes the process through which Segro and the appointed Contractor will receive, manage and respond to feedback throughout the delivery of the EMG2 highway works.

### **7.1 Enquiry Management**

A dedicated enquiry management system will be implemented to ensure that all communications from the public are recorded, acknowledged and addressed in an organised and consistent manner. Enquiries may be submitted through several channels, including email, telephone, the project website, or written correspondence. All contact points will be clearly advertised on the project website and in public communications.

Upon receiving an enquiry, the Public Liaison Officer (appointed by the Contractor) will acknowledge receipt promptly and determine the appropriate route for resolution. Straightforward queries such as requests for closure dates or diversion information will be answered directly. More complex concerns, may take longer to resolve and revert, but the initial response will advise of timescales so the enquirer is duly aware. The same applies in respect of procedure and timescales to National Highways “HAIL” incident/information recording process, should any be raised with the Contractor, or similar Local Authority procedures.

### **7.2 Response Times**

Segro and the Appointed Contractor commit to responding to all enquiries within defined timeframes to demonstrate professionalism and maintain public trust. An initial acknowledgement will be issued within 48 working hours of receiving an enquiry. A substantive response will then be provided within five working days unless further investigation or consultation is required. In such cases, the enquirer will be updated regularly until a full response is issued.

### **7.3 Issue Logging and Tracking**

A structured logging system will be maintained to ensure transparency and accountability. Each enquiry or complaint will be recorded with key details including the type of issue, the location affected, the date received, the response provided, and any follow-up action required.

This will allow Segro and the appointed Contractor to track patterns and identify recurring issues that may indicate the need for changes to the traffic management arrangements or communication approach.

Regular reviews of the enquiry log (both internally and at the Traffic Management working group) will also help to identify trends such as repeated concerns about signage clarity or confusion over diversion routes which can then be addressed through revised communications or operational adjustments.

#### **7.4 Escalation Process**

Not all issues can be resolved immediately or at site level. An escalation process will therefore be in place to ensure that complex, sensitive or unresolved matters receive prompt and appropriate attention from senior members of each organisation if resolution is not possible or deemed acceptable at site level.

*Prior to commencement of the scheme the Contractor will define an escalation process with named individuals responsible for resolution.*

#### **7.5 Feedback Integration**

Feedback from the public is not simply a matter of record—it directly informs improvements to both communication and operational delivery. The project team will regularly assess feedback trends and use them to refine messaging, adapt signage, clarify diversions or adjust the timing of closures where practicable.

### **8. Responsibilities and Governance**

A clear governance structure is vital to the safe and effective delivery of the scheme. The roles and responsibilities of each party involved in EMG2 are to be defined (pre-start) to ensure accountability, clarity of decision-making and proper oversight of both communication and traffic management activities.

### **8.1 Client Responsibilities**

Segro, as the project delivery client, has overall responsibility for the delivery of the off-site highways works. This includes ensuring compliance with all planning obligations, overseeing the implementation of this Protocol, approving all public-facing communication materials, and maintaining high-level engagement with National Highways, Leicestershire County Council, NWLDC, and key stakeholders.

Segro will oversee the appointed Contractor and ensure that traffic management is designed and delivered in accordance with regulatory requirements and that all stakeholders receive consistent, reliable and accurate information throughout the project.

### **8.2 Contractor Responsibilities**

The appointed Contractor will be responsible for implementing this Protocol, coordinating the overall traffic management strategy, liaising with the TM contractor, and ensuring that communication materials are consistent with the CTMP, QCTMA and Diversion Route Strategy. They should in collaboration with Segro produce public-facing documents, manage stakeholder engagement, and oversee the distribution of updates. The Contractor will also play a central role in resolving enquiries, managing escalation processes and ensuring that communication remains aligned with the progression of the works.

### **8.3 Overseeing Authority Roles and Approvals**

Both National Highways and Leicestershire County Council play critical roles in approving and overseeing traffic management arrangements. Their responsibilities include reviewing TM proposals, ensuring they meet safety and capacity requirements, and coordinating these works with other projects on the network to avoid cumulative impacts. The Contractor will work in a collaborative manner, with the authorities and provide all information within the timeframes required for review and granting of road space booking subject to network occupancy constraints.

#### **8.4 Decision-Making Framework**

A structured decision-making framework will guide how traffic management changes, phasing adjustments or emergency responses are implemented. Decisions will be made collaboratively between the Contractor and the relevant authority with input sought where required. This ensures changes are assessed for safety, feasibility, regulatory compliance and impact on the travelling public before being implemented.

### **9. Risk Management and Mitigation**

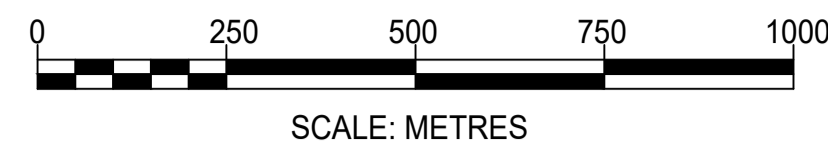
Risk management is critical in ensuring that the works progress safely, efficiently and with minimal disruption. The CTMP and QCTMA identify several key risks associated with off-site highway works, including unexpected congestion, severe weather, incidents on the SRN, impacts from other regional works, and equipment or material supply issues.

Mitigation measures include sequencing works to avoid simultaneous restrictions on adjacent links, using real-time traffic monitoring and VMS messaging to respond quickly to emerging issues, planning closures during off-peak hours, and coordinating with regional traffic control centres to ensure awareness of wider network pressures.

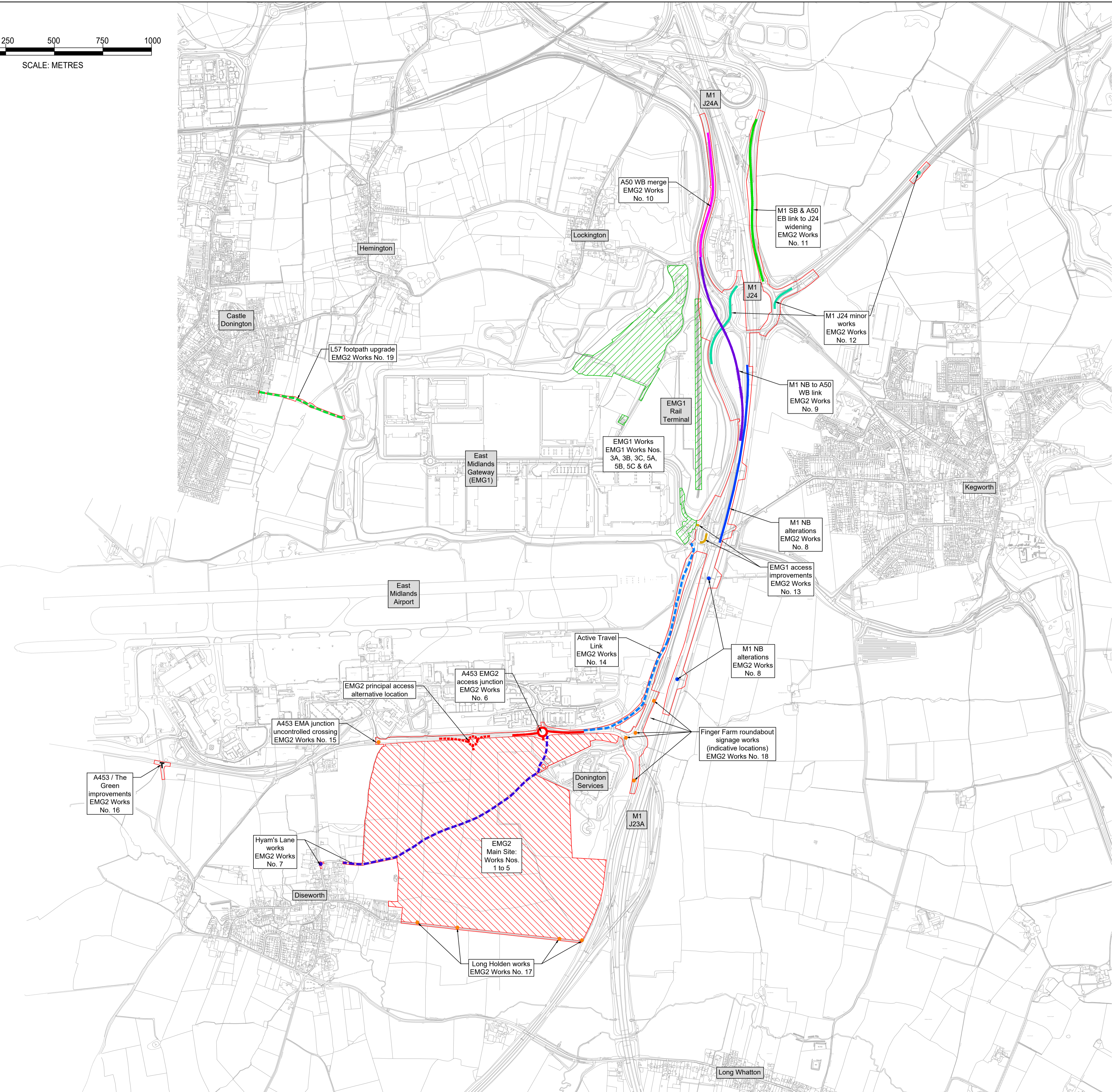
Contingency plans will be enacted when required to adjust diversion routes, delay closures or reschedule activities in the event of significant disruption or weather events. Where changes are unavoidable, clear and immediate communication will ensure the public is well informed.

## Appendix A

### Components of the Proposed Development



SCALE: METRES



**Legend**

- DRAFT EMG2 DCO order limits
- DRAFT EMG1 MCO order limits

The Scheme is comprised of components (1) to (7):  
 The Highway Works are comprised of components (3) to (7):

(1) "EMG2 Main Site"  
▨ The Commercial and Employment  
— A453 EMG2 access junction works

(2) "EMG1 works"  
▨ Changes to EMG1

(3) "J24 improvements"  
— M1 NB works  
— M1 NB to A50 WB link  
— A50 WB merge  
— M1 SB & A50 EB to J24 link widening  
— Minor works (signing and lining)

(4) "Active travel works"  
- - - - Active Travel link  
- - - - Hyam's Lane works  
- - - - L57 footpath upgrade

(5) — "A453 / The Green improvements"

(6) — "EMG1 access improvements"

(7) ● Other works as described

Rev	Date	Details of issue / revision	SRH	SRH
P05	28.01.25	Minor Amendment	SRH	SRH
P04	10.01.25	Works 18 & 19 added	SRH	SRH
P03	05.12.24	Various updates	SRH	SRH
P02	02.12.24	Works nos. added	SRH	SRH
P01	15.11.24	Issued for comment	SRH	SRH
Rev	Date	Details of issue / revision	Drw	Rev

ISSUES & REVISIONS



**THE EAST MIDLANDS GATEWAY  
 PHASE 2 AND HIGHWAY ORDER 202[ ]  
 AND  
 THE EAST MIDLANDS GATEWAY RAIL  
 FREIGHT INTERCHANGE AND  
 HIGHWAY (AMENDMENT) ORDER 202[ ]**

Drawing Title  
**COMPONENTS OF THE  
 PROPOSED  
 DEVELOPMENT**

Scale	1:10,000	Drawn	S. Hilditch
Size	A1	Reviewed	S. Hilditch
Regulation	<b>5(2) (0)</b>	Document	<b>2.7 / MCO2.7</b>

Drawing Status  
**CONSULTATION DRAFT**

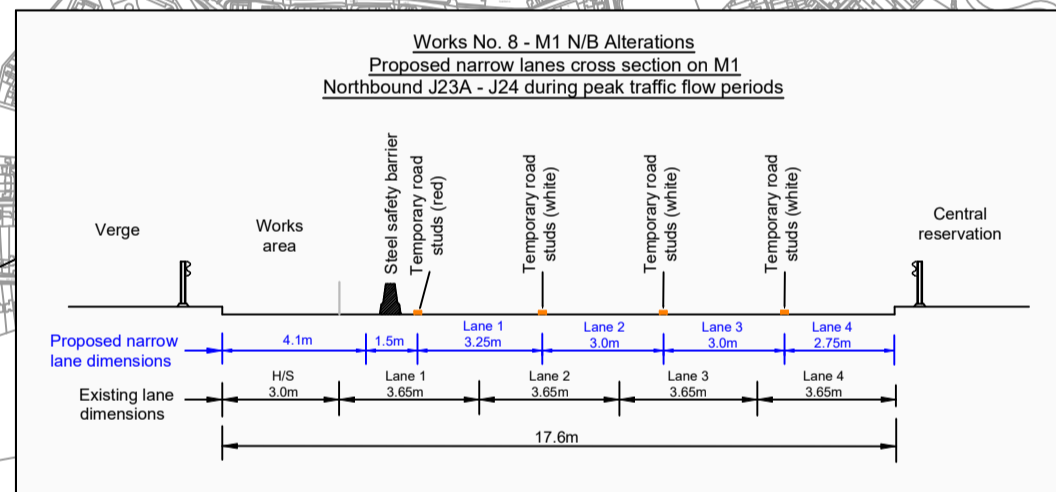
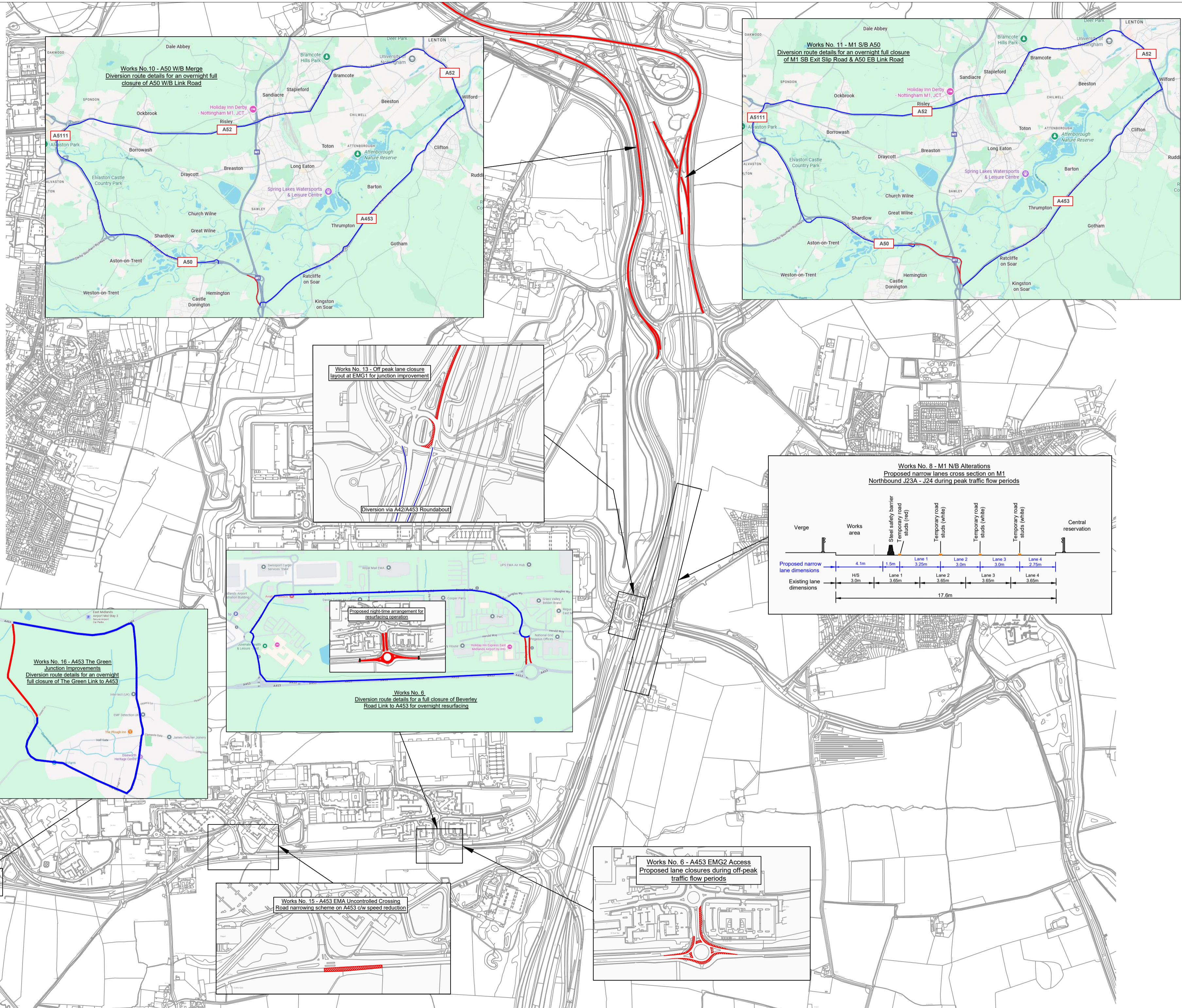
Drawing No.	Revision
<b>EMG2-BWB-GEN-XX-SK-CH-SK023</b>	<b>P05</b>

Appendix B  
Phasing Diagrams

Notes:

KEY

- █ ROAD CLOSED AREA
- █ DIVERSION ROUTE



REV:	DESCRIPTION:	BY:	DATE:

CLIENT:  
**SEGRO**

PROJECT NAME:  
East Midlands Gateway Phase 2

DRAWING TITLE:  
Traffic management overview

DRAWN: AJC    CHECKED: TT    DATE: Dec 25

SCALE: NTS    REVISION:

DRAWING NO: TS - EMG2 - TMA01

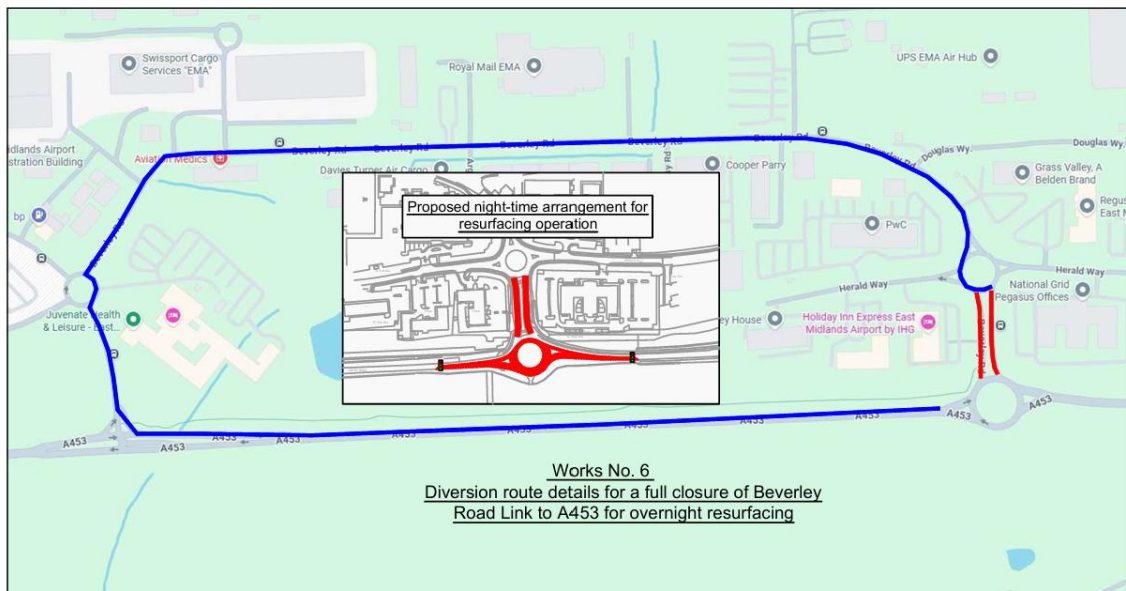
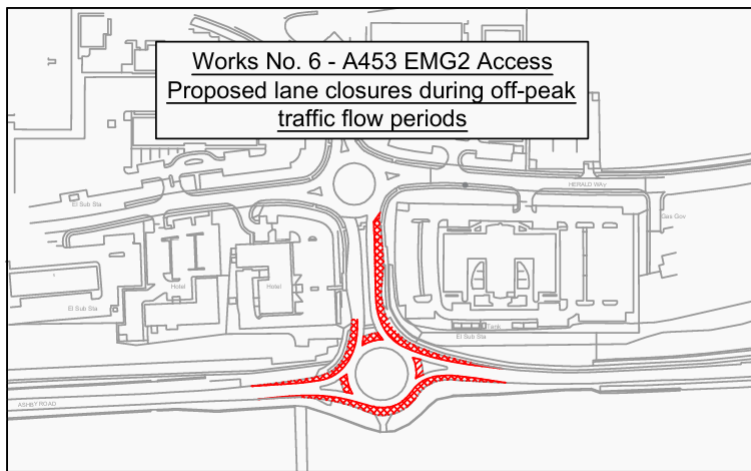
## Appendix C

### Phasing Diagrams and narrative

## Works No. 6 – A453 EMG2 Access

### What Stakeholders will notice

- Narrower lanes during daytime working hours
- All lanes kept open during peak periods
- Reduced speeds through the works area
- Short periods of overnight lane closures for final road connections with diversion routes
- Clear advance signs before any overnight closures
- Access to nearby businesses and properties maintained at all times



## Work No. 7 – Hyam’s Lane

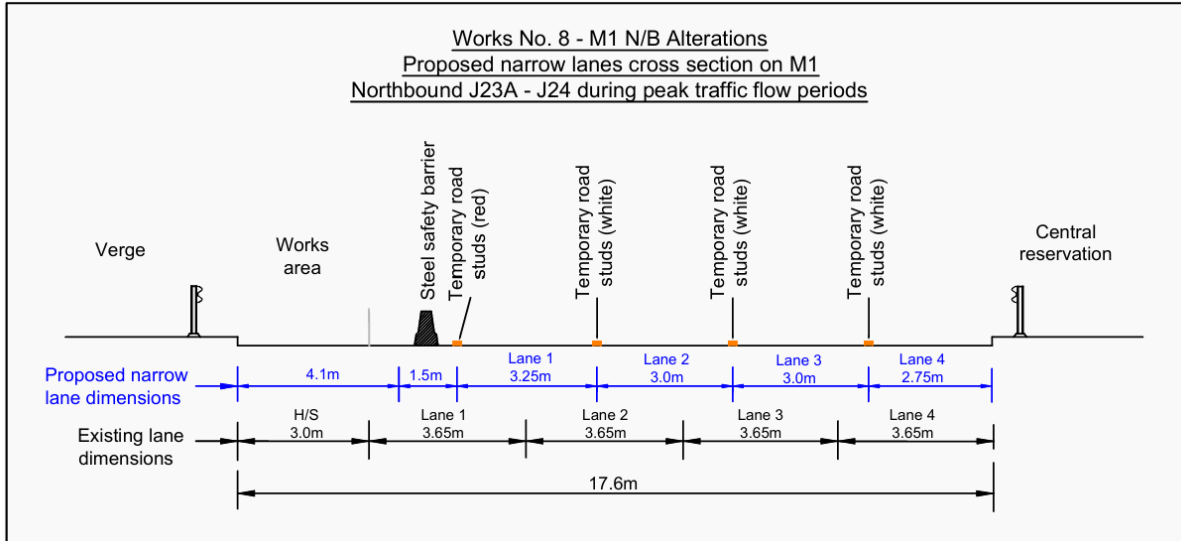
### What Stakeholders will notice

- Temporary traffic signals during the day
- Single-lane working controlled by signals
- Short overnight closures for specific construction activities
- Local access maintained for residents and businesses
- Minimal impact beyond the immediate area

## Work No. 8 – M1 Northbound Alterations

### What Stakeholders will notice

- Narrower lanes during daytime travel (as below diagram)
- Reduced speed limits through the works
- All lanes available during peak daytime periods
- Overnight lane closures for resurfacing and safety barrier works
- Clear motorway signs in advance of overnight closures



## Work No. 9 – M1 Northbound A50 Link

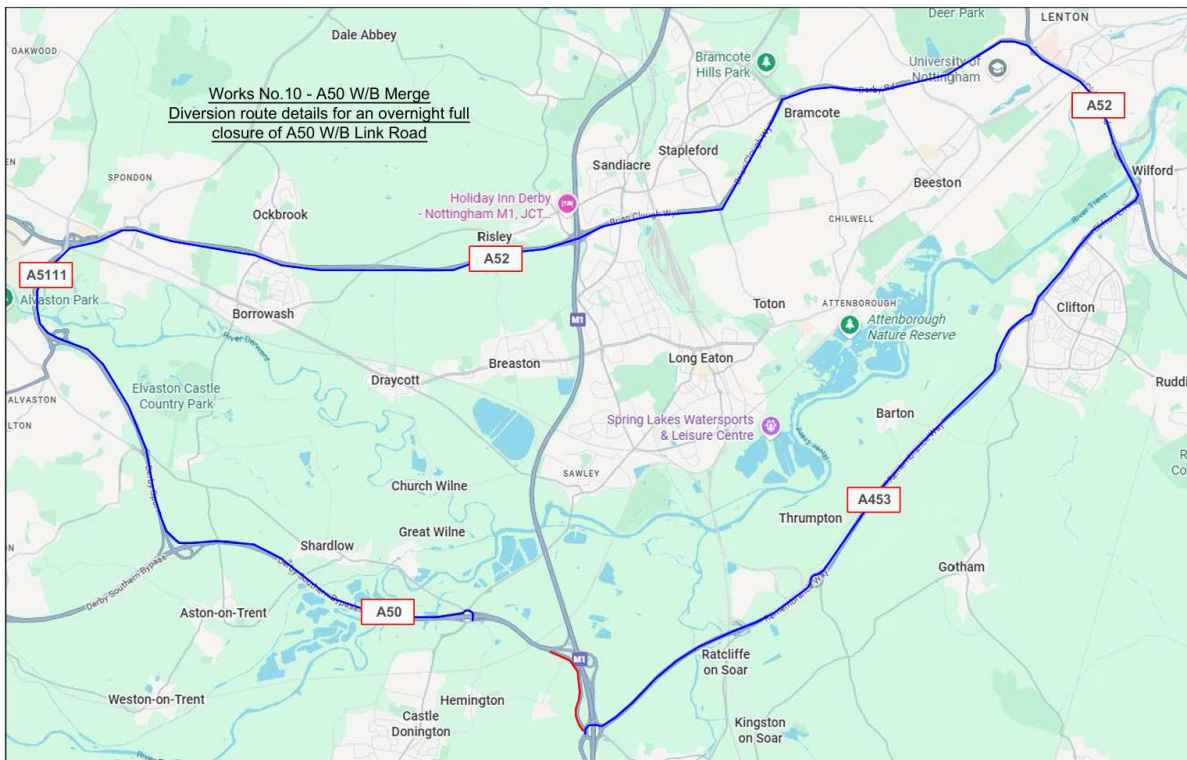
### What Stakeholders will notice

- Normal traffic conditions during daytime peak hours
- Reduced speeds through overnight work zones
- Overnight lane closures while works are carried out
- Clearly signed diversion routes during closures
- No impact on local roads

## Work No. 10 – A50 Westbound Merge

### What Stakeholders will notice

- Narrower lanes during daytime travel
- No reduction in the number of lanes during busy periods
- Reduced speeds through the works area
- Overnight closures for resurfacing works
- Signed diversion routes during overnight closures as depicted below

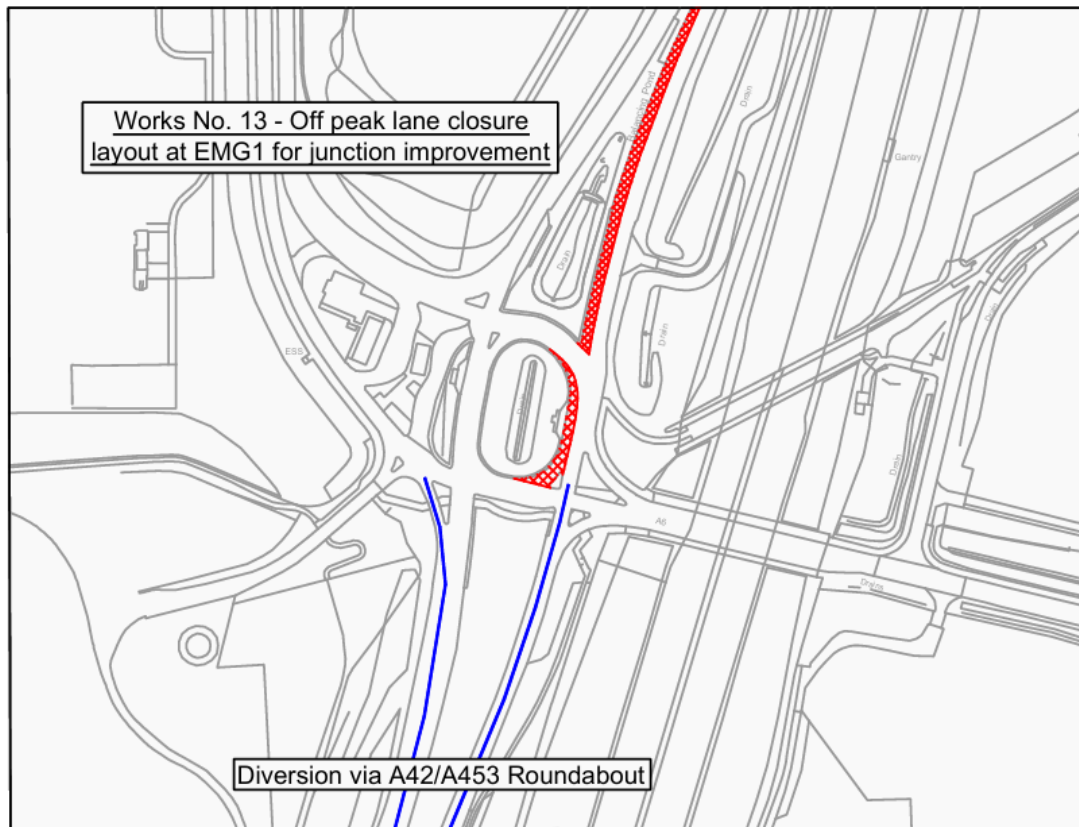




## Work No. 13 – EMG1 Access Improvements (A453)

### What Stakeholders will notice

- Narrower lanes during daytime travel
- Normal peak-hour traffic flow maintained
- Reduced speeds through the works
- Overnight lane closures for resurfacing and final connections
- Continued access to EMG and surrounding roads



## Work No. 14 – EMG2 Active Travel Works

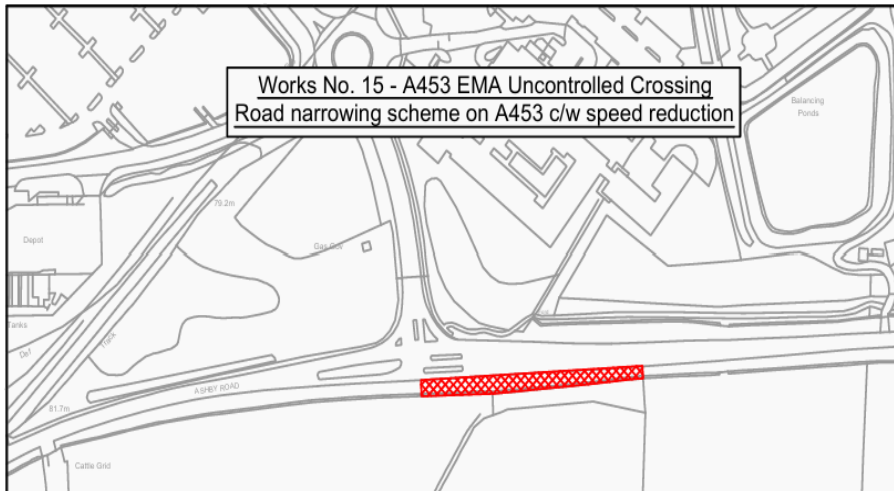
### What Stakeholders will notice

- No road closures
- Occasional footpath diversions near the carriageway
- Clear signage for pedestrians and cyclists
- No impact on vehicle traffic

## Work No. 15 – A453 EMA Junction Uncontrolled Crossing

### What Stakeholders will notice

- Narrowed lanes near the crossing
- Temporary speed reductions
- Short off-peak lane closures if required
- Minor, short-term changes to traffic flow



## Work No. 16 – A453 The Green Junction Improvements

### What Stakeholders will notice

- Narrow lanes during daytime hours
- Reduced speeds through the junction
- Overnight closures for major construction activities
- Local access maintained at all times
- Clear signs warning of overnight works



## **Work No. 17 – Long Holden Works**

### **What Stakeholders will notice**

- Phased lane narrowing as works progress
- Reduced speeds through the works
- Overnight closures for kerbing and resurfacing
- Local access maintained throughout
- Short-duration works in each phase

## **Work No. 18 – Finger Farm Roundabout Signage Works**

### **What Stakeholders will notice**

- Localised works near the road edge
- No lane closures or reductions
- Minimal disruption to traffic
- Improved signage once works are complete

## Appendix D

### Table of key stakeholders

## KEY STAKEHOLDER SCHEDULE

Stakeholder Category	Organisation Name	Role / Reason for Inclusion	Level of Engagement
Upper-Tier Local Authority	Leicestershire County Council	Local Highway Authority and strategic transport coordination	Coordinate
Upper-Tier Local Authority	Derbyshire County Council	Cross-boundary transport and network coordination	Inform
Upper-Tier Local Authority	Nottinghamshire County Council	Regional transport interface and network awareness	Inform
District / Borough Council	North West Leicestershire District Council	Local Planning Authority and community liaison	Coordinate
District / Borough Council	Charnwood Borough Council	Adjacent planning authority	Inform
District / Borough Council	Erewash Borough Council	Adjacent planning authority	Inform
District / Borough Council	South Derbyshire District Council	Adjacent planning authority	Inform
Parish / Town Council	Castle Donington Parish Council	Local community representation	Consult
Parish / Town Council	Kegworth Parish Council	Local community representation	Consult
Parish / Town Council	Lockington & Hemington Parish Council	Local community representation	Consult
Parish / Town Council	Long Whatton & Diseworth Parish Council	Local community representation	Consult
National / Statutory Body	National Highways	Strategic Road Network authority	Coordinate
National / Statutory Body	Environment Agency	Environmental regulation and flood risk management	Inform
National / Statutory Body	Natural England	Ecology and biodiversity protection	Inform
National / Statutory Body	Historic England	Heritage and archaeology interests	Inform
Emergency Services	Leicestershire Police	Emergency response and network resilience	Coordinate
Emergency Services	Leicestershire Fire & Rescue Service	Emergency access and response planning	Coordinate
Emergency Services	East Midlands Ambulance Service	Emergency route continuity	Coordinate
Emergency Services	East Midlands Airport Fire Service	Aviation emergency coordination	Coordinate
Utilities / Statutory Undertaker	Severn Trent Water	Water and wastewater infrastructure protection	Inform
Utilities / Statutory Undertaker	National Grid Electricity	Electricity transmission assets	Inform
Utilities / Statutory Undertaker	National Grid Gas	Gas transmission infrastructure	Inform
Utilities / Statutory Undertaker	Cadent Gas	Local gas distribution network	Inform
Utilities / Statutory Undertaker	BT Openreach	Telecommunications infrastructure	Inform
Utilities / Statutory Undertaker	Virgin Media O2	Telecommunications and fibre networks	Inform
Airport / Aviation	East Midlands Airport	Operational access and resilience	Coordinate
Rail Authority	Network Rail	Rail infrastructure safeguarding	Inform
Freight & Logistics	Freight and logistics operators	HGV routing awareness and coordination	Inform
Community & Interest Groups	Local Residents	Community awareness and engagement	Consult
Community & Interest Groups	Local Business Forums	Business access and continuity	Consult
Landowners / Businesses	Adjacent landowners	Access and boundary considerations	Consult
Landowners / Businesses	Tenant businesses	Operational continuity and servicing	Consult



PC24-004 EMG 2

Construction Traffic Management Plan



## **APPENDIX 4**

### **Construction Worker Travel Plan**

## REPORT

# SEGRO EMG2 Construction Workers Travel Plan

Client: SEGRO

Reference: PC6158-ITP-XX-XX-RP-XX-0004

Status: A4/C01

Date: 16th April 2026

**SEGRO**



by Haskoning

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Document title: SEGRO EMG2 Construction Workers Travel Plan  
Reference: PC6158-ITP-XX-XX-RP-XX-0004  
Status: A4/C01  
Date: 30 March 2026  
Project name: SEGRO EMG2  
Project number: PC6158  
Author(s): PC

Drafted by: PC

Checked by: ST

Date: 30 March 2026

Approved by: SM

Date: 16 April 2026

Classification: Project related

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## 1 Introduction

### 1.1 Purpose

ITP by Haskoning (ITP) has been appointed by SEGRO Properties Ltd (SEGRO) to prepare a Construction Worker Travel Plan (CWTP). This document is provided in support of SEGRO's Development Consent Order (DCO) application for a second phase of East Midlands Gateway Logistics Park.

The first phase of East Midlands Gateway (EMG1) is a nationally significant infrastructure development comprising a rail freight terminal and warehousing. It was authorised by the East Midlands Gateway Rail Freight Interchange and Highway Order 2016 (SI 2016/17) (the EMG1 DCO) and is substantially complete. This second phase is referred to in this document as 'East Midlands Gateway 2', 'EMG2' or the 'EMG2 Project'.

SEGRO has made two concurrent applications for the three component parts. The first is for a Development Consent Order for the EMG2 Works and the Highway Works (referred to as the DCO Application or the DCO Scheme). The second application is for a material change to the existing EMG1 DCO for the EMG1 Works (referred to as the MCO Application or the MCO Scheme). This is set out in Table 1-1.

Table 1-1: EMG2 Project Components

Main Component	Details	Works Nos.
<b>DCO Application/DCO Scheme</b>		
EMG2 Works	Logistics and advanced manufacturing development located on the EMG2 Main Site south of East Midlands Airport and the A453, and west of the M1 motorway. The development includes HGV parking and a bus interchange. Together with an upgrade to the EMG1 substation and provision of a community park.	DCO Works Nos. 1 to 5 as described in the draft DCO (Document DCO 3.1).  DCO Works Nos. 20 and 21 as described in the draft DCO (Document DCO 3.1).
Highway Works	Works to the highway network: the A453 EMG2 access junction works; significant improvements at Junction 24 of the M1 (J24 Improvements), works to the wider highway network including the Active Travel Link, Hyams's Lane Works, L57 Footpath Upgrade, A6 Kegworth Bypass/A453 Junction Improvements and Finger Farm Roundabout Improvements together with other works.	DCO Works Nos. 6 to 19 as described in the draft DCO (Document DCO 3.1).
<b>MCO Application/MCO Scheme</b>		
EMG1 Works	Additional warehousing development on Plot 16 together with works to increase the permitted height of the cranes at the EMG1 rail-freight terminal,	MCO Works Nos. 3A, 3B, 5A, 5B, 5C, 6A and 8A in

improvements to the public transport interchange, site management building and the EMG1 Pedestrian Crossing.

the draft MCO (Document MCO 3.1).

Requirement 11 of the draft DCO requires that no part of the authorised development is to commence until a Construction Environmental Management Plan (CEMP) has been produced and agreed and that the CEMP should include a Construction Traffic Management Plan.

A Construction Traffic Management Plan (CTMP) has been prepared by Taylor Skelton and is provided as an appendix to the Transport Assessment (Document 6.6A). The CTMP sets out detailed measures for the management of construction-related HGV traffic, with the aim of minimising environmental impacts, ensuring highway and pedestrian safety, and protecting local amenity. The EMG2 CTMP that: ‘a *Construction Workforce Travel Plan (CWTP) will be prepared for each relevant Phase Construction Traffic Management Plan (pCTMP), aligned with the construction activities undertaken during that phase. It will be the responsibility of the Principal Contractor to implement the CWTP for each phase of construction*, working with the EMG2 CWTP Coordinator.

This document sets out the construction worker transport-related requirements to form part of the pCTMP. This CWTP therefore sets out the proposed approach to promoting sustainable means of travel for workers during the construction phase of the DCO Scheme and will be reviewed and updated with each relevant pCTMP. The CWTP forms a core part of the construction-phase activity and aligns with SEGRO’s wider sustainability commitments and the Responsible SEGRO framework, which prioritises low-carbon growth and sustainable commuting.

This CWTP establishes a structured framework to promoting sustainable means of travel during the construction phase of the DCO Scheme. This includes defining measures to manage single-occupancy vehicle (SOV) trips, coordinate workforce arrivals and departures, and provide safe, efficient, and sustainable access routes throughout the construction period. The CWTP also identifies responsibilities for the Principal Contractor and subcontractors, governance arrangements for coordination, and monitoring mechanisms to ensure compliance with DCO requirements.

The MCO application provides for additional warehousing development on Plot 16 to which a different arrangement at EMG1 will apply. Accordingly, this CWTP only applies to the DCO Scheme.

## 1.2 Related Documents

The CWTP is part of an integrated suite of transport documents for EMG2. It sits beneath, and is consistent with:

- A Transport Assessment (TA) prepared by BWB, which describes in detail the proposed vehicle access, and any potential highway impacts (Document 6.6A).
- A Sustainable Transport Strategy (STS) prepared by ITP which sets out strategic interventions for the EMG2 Main Site at the operational phase. This includes details of new pedestrian and cycling infrastructure, a high-specification bus interchange, and an electric Gateway Shuttle service designed to provide reliable last-mile connectivity from first occupation (Document 6.6C).
- A Framework Travel Plan (FTP) prepared by ITP which establishes a long-term sustainable commuting strategy, site-wide governance, and formal mode-share targets for the operational phase of EMG2 (Document 6.6C).

- A Construction Traffic Management Plan (CTMP) prepared by Taylor Skelton, which sets out specific detail on the management of construction-related traffic to minimise environmental impacts, ensure safety, and maintain local amenities (DCO Document 6.6A, Appendix 16).
- A Qualitative Construction Traffic Management Assessment (QCTMA), prepared by Taylor Skelton, which defines HGV routing, access arrangements, construction programme logistics, traffic management procedures, and highway safety mitigation (DCO Document 6.6A, Appendix 16).
- Environmental Statement (ES) which assesses environmental impacts of travel and informs the CWTP measures (Document 6.1 – 6.23)

### 1.3 Site Context

Regionally, the DCO Scheme is positioned between the key settlements of Loughborough (approximately 15 km to the south-east), Nottingham (approximately 25 km to the north-east) and Derby (approximately 25 km to the north-west). The DCO Scheme falls within the East Midlands Freeport, specifically the East Midlands Airport and Gateway Industrial Cluster (EMAGIC) which has been developed to drive economic regeneration across the East Midlands.

The wider EMAGIC cluster complements two other proposed developments within the East Midlands Freeport, the Ratcliffe-on-Soar Power Station site in Nottinghamshire, which was granted a Local Development Order planning status in July 2023; and the East Midlands Intermodal Park (EMIP) in South Derbyshire. The site context is illustrated in Figure 1-1.

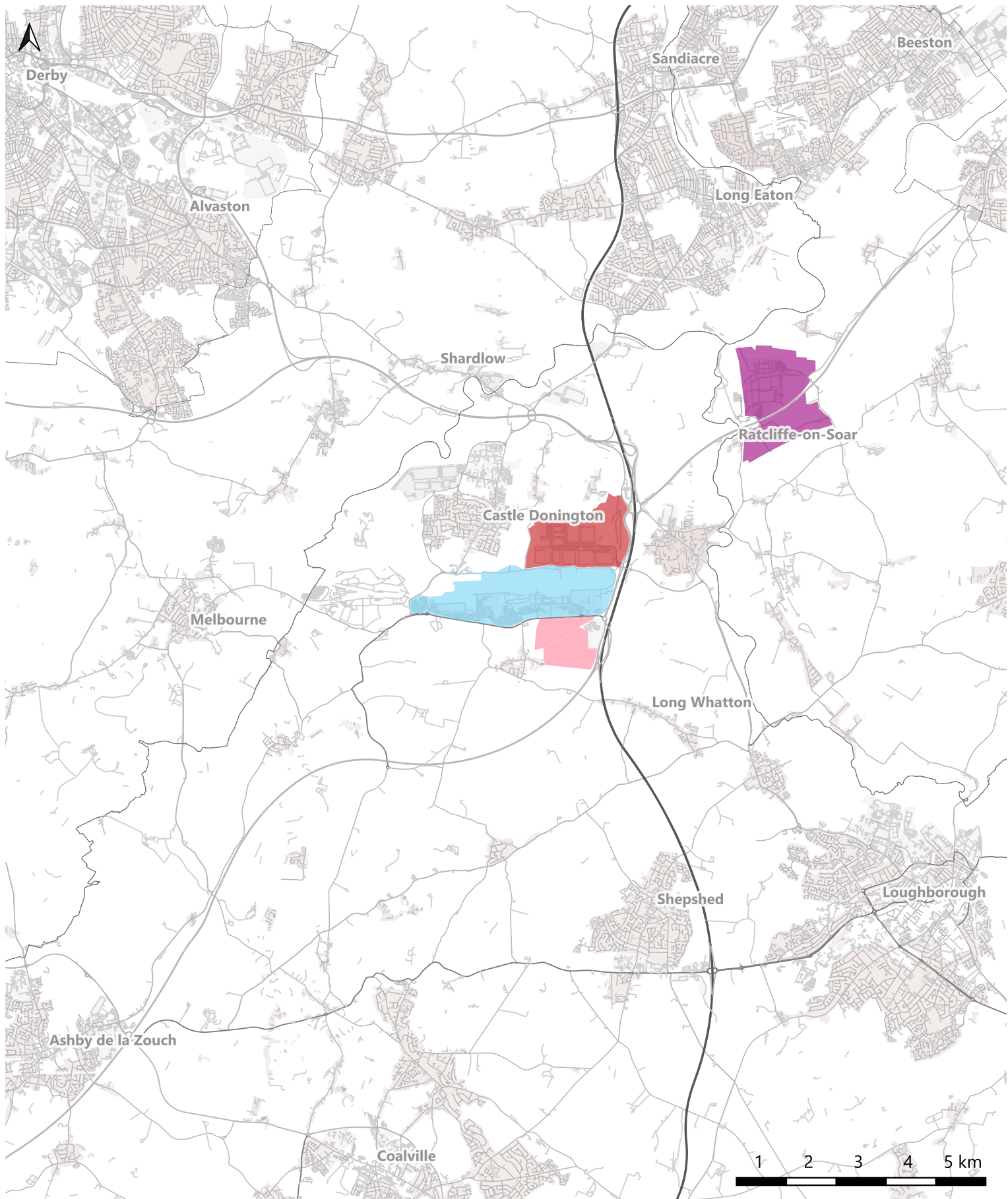
The location of the DCO Scheme within the East Midlands Freeport and the wider EMAGIC cluster provides important context for the CWTP, as it reflects both the scale of construction activity and the need to manage workforce travel demand in a manner that supports sustainable growth and local network performance during construction.

### 1.4 Objectives

The objectives of this CWTP are to:

- Manage construction worker vehicle trips, particularly during highway peak periods.
- Ensure construction workers use only authorised access routes and designated parking areas.
- Promote shared travel modes including contractor-led minibuses, crew vans and vehicle sharing, supported by the existing EMG1 vehicle share platform, which will extend to EMG2.
- Encourage use of public transport, where feasible, recognising the presence of high-frequency commercial services such as skylink Derby, skylink Nottingham and skylink Express already operating, for those construction workers based within the East Midlands.
- Support safe, practical active travel options for local workers by aligning with existing pedestrian and cycling infrastructure.
- Provide clear governance arrangements to ensure contractors comply with CWTP measures.
- Establish monitoring and review processes, ensuring construction-phase travel is transparent, evidence-based and responsive.

These objectives collectively ensure that construction activity does not undermine EMG2's long-term sustainable transport ambitions and contributes positively to local network performance and safety.



Prepared PC      Reviewed SM      Date Sep 24

Client SEGRO

Key	
<span style="display:inline-block; width:15px; height:10px; background-color:red; border:1px solid black;"></span>	East Midlands Gateway 1
<span style="display:inline-block; width:15px; height:10px; background-color:lightcoral; border:1px solid black;"></span>	East Midlands Gateway 2 Main Site (Proposed)
<span style="display:inline-block; width:15px; height:10px; background-color:lightblue; border:1px solid black;"></span>	East Midlands Airport
<span style="display:inline-block; width:15px; height:10px; background-color:purple; border:1px solid black;"></span>	Ratcliffe-on-Soar Power Station (Consented)

Project East Midlands Gateway Phase 2

Figure title EMG2 Site Context

Revision A

Date Sep 2024

Project number P-PC6158

Figure number Figure 1-1

## 2 Construction Overview

This section provides an overview of the forecast construction phases, workforce characteristics and patterns, and the access controls that will operate throughout the EMG2 build programme.

### 2.1 Construction Phasing and Workforce Demand

Construction of the DCO Scheme will be undertaken in a series of phases, with full build-out anticipated by the early 2030s. This means that if consent is granted in 2027, the first construction workers could be on-site from that year, for an approximate 5-year period. Further detail on construction phasing will be provided through the CTMP and associated documents. This information will inform the timing and approach to engagement with the Principal Contractor and any third-party contractors, ensuring that information on site access arrangements and available travel options is communicated in a timely and proportionate manner as contractors mobilise and demobilise over the course of the construction programme.

Workforce numbers have been derived from the daily construction vehicle movement calculations as set out in the CTMP. These movements have been converted into an estimated site headcount using occupancy assumptions of one person per car and two people per van, as agreed by BWB, Taylor Skelton and National Highways. On this basis, it is anticipated that construction of the DCO Scheme will require an approximate peak workforce of 344 personnel per day. This figure includes all roles associated with the Principal Contractor, site management, QHSE functions and the wider construction workforce. This workforce represents the primary audience that the CWTP seeks to influence, with the aim of promoting sustainable travel to and from the site. The full methodology for estimating construction workforce headcounts is available in A1.

As illustrated in Table 2-1, workforce demand is expected to vary over the course of the construction programme. Staffing levels are anticipated to peak during the principal structural construction phases, before reducing during fit-out and finishing works. The figures presented are indicative and may be subject to change as the programme develops; however, they provide a reasonable estimate of likely workforce requirements.

Table 2-1: Construction Workforce Estimated Headcount

Build Year	Construction Workforce Headcount
1	344
2	305
3	72
4	72
5	72

Notwithstanding this variability, the overarching principles and measures set out in this CWTP are intended to apply for the full duration of the construction period. The approach has been designed to remain sufficiently flexible to respond to changes in workforce scale, composition and working practices as the DCO scheme progresses. At this stage, the broad construction programme is understood to be 2027 to 2031. This programme has been used as a reasonable basis for the assumptions and measures set out in this CWTP and will be kept under review as further detail becomes available.

## 2.2 Workforce Characteristics, Working Patterns and Travel Implications

The construction workforce will comprise a mix of site management and supervisory staff, skilled trades, civil engineering operatives and specialist subcontractor teams, with workforce size and composition varying throughout the construction period in response to the nature and intensity of works.

As is typical for large-scale construction projects, the labour force is expected to be drawn from a wide geographic catchment rather than the immediate local area, reflecting the specialist and often short-term nature of construction roles. Furthermore, the nature of construction typically requires operatives to travel to site with specialist equipment, tools etc. As a result, construction worker travel has a greater potential to be vehicle based. This creates an increased requirement to develop measures to actively manage construction-related travel demand and to provide clear, targeted travel information. Such measures are particularly important for workers who may be unfamiliar with local access routes, site arrangements and available transport options.

Requirement 19 of the draft DCO outlines the working hours during which construction can take place as 07:00 and 19:00 hours on weekdays and 07:00 and 16:00 hours on Saturdays and not at all on Sundays nor on public holidays, unless otherwise agreed in writing by the local planning authority. Outside the above periods the following working is permitted:

- (a) pre-planned construction works to highway infrastructure requiring possessions where first notified to the local planning authority and local residents;
- (b) emergency works; and
- (c) works which do not give rise to noise or vibration which cause an adverse impact at the boundary of the main site.

With the exception of the clauses above, construction traffic movements on to site would not be permitted prior to 07:00 and off site after 19:00 on weekdays and 16:00 on Saturdays. This does not preclude travel on the wider highway network outside of these periods.

It is forecast that construction working hours will typically commence earlier than standard office hours, with worker arrivals occurring during the early morning period and departing after the evening peak period.

Construction worker travel times will be actively controlled through the provision of clear travel information and agreed measures relating to access routes, arrival and departure times, parking arrangements, detailed in Section 3.

### 3 Workforce Site Access Arrangements

This section provides a summary of construction-phase travel characteristics, network sensitivities and the specific access controls that apply to construction workers.

#### 3.1 Designated Access Point

Construction workers will access the DCO Scheme compound at the EMG2 Main Site via the designated construction access point, which will be via the temporary construction entrance on the A453 west, located opposite the Beverley Road spur. This access arrangement is physically separated from EMG1 operational routes in order to prevent interaction with live logistics activity.

Clear routing instructions will be issued to all contractors and reinforced through site workforce induction procedures to ensure that construction workers do not use unauthorised local roads or airport-related routes. Parking will be permitted solely within the designated construction compound, with no tolerance for parking on local roads, verges or estate roads.

Compliance will be enforced through a permit-based access system, with parking permits issued only to pre-registered vehicles. Daily gate checks will be undertaken to verify vehicle compliance, supported by weekly off-site sweeps of surrounding local roads to identify any potential unauthorised parking associated with the site. Any identified instances of non-compliance will be managed through the processes set out in Section 6.2.

This controlled access and parking strategy is intended to prevent overspill parking and safeguard the safe and efficient operation of the local and strategic road network. The approach to controlled access and parking would apply to the construction workforce for the duration of the construction period.

#### 3.2 Workforce Approach Routes

In general, it is envisaged that vehicles transporting construction workers will utilise the same route as the construction HGV traffic. However, the route used by construction workers may vary depending on their point of origin. As such, all construction workers would be expected to follow the approved routes below:

- M1 (north or south) – A453 West – EMG2 construction access.
- A42 north – J23A – A453 West – EMG2 construction access.
- A453 south – Finger Farm Roundabout – A453 West – EMG2 construction access.

To protect local communities and maintain operational resilience at EMG1/EMA, the following routes would be prohibited (unless for genuine trips, e.g. employees with an origin at these locations) and compliance will be reinforced through inductions, daily briefings and on-site signage:

- Diseworth village.
- Hyam's Lane.
- Long Holden.
- Any airport-related internal roads not designated for construction access.

### **3.3 Internal Circulation, Parking and Permit Management**

Parking will operate on a permit-only basis within the designated construction compound. Employees arriving through shared vehicles with other workers will receive priority allocation on permits to support and encourage workers to share vehicles the DCO scheme.

A maximum of 221 parking spaces will be provided during the construction phase to accommodate workers and visitors. This comprises 201 spaces for workers arriving by car and van, with a further 20 spaces for visitors. The maximum parking provision has been informed by the assessed inbound and outbound car and van movements set out in the Transport Assessment for Year 1, when construction activity is expected to be at its most intensive, resulting in the highest workforce levels and vehicle demand at the site.

It is recognised that 221 spaces represents a maximum scenario and that there will be opportunities during construction phases to reduce parking provision, depending on workforce location, site headcount and travel behaviour. Accordingly, parking provision will be kept under review by the Principal Contractor, CWTP Manager, Leicestershire County Council and National Highways at each stage of the project, as greater certainty emerges regarding workforce catchment, construction staffing levels, mode share and the potential for more sustainable travel options.

All construction worker parking will be contained within the EMG2 Main Site designated construction compound only. Parking permit controls will be enforced by the Principal Contractor, and any employees not parking within marked bays in the construction compound, e.g. on local roads, verges or estate roads will be subject to the enforcement and corrective measures set out in section 6.2.

The Principal Contractor will undertake regular monitoring of parking on and offsite to maintain compliance and identify emerging issues. Car park monitoring will be undertaken by the Principal Contractor and reported to the EMG2 CWTP Manager to ensure parking demand, compliance and allocation remain under continuous review.

Pedestrian routes within the compound will be clearly delineated to maintain separation from construction plant and HGV movements.

### **3.4 Emergency and Essential Access**

Emergency vehicles will retain unrestricted access via authorised construction routes at all times. Essential visitors (e.g., HSE inspectors, utility providers, client representatives) will use the same controlled entry points and will be allocated visitor parking within the compound.

## 4 Management

The developer will appoint a CWTP Manager and it will be their responsibility to work with the Principal Contractor to oversee the implementation and management of the CWTP and the measures set out in Section 5. The Principal Contractor will appoint a Construction Worker Travel Plan Coordinator (CWTPC), who will deliver worker inductions, manage parking permit requests, organise shared-transport arrangements and report workforce and travel data to the CWTP Manager. The CWTPC will liaise with subcontractors to ensure they follow the same requirements under the oversight of the Principal Contractor. Weekly coordination meetings between the CWTP Manager and the Principal Contractor's CWTPC will review workforce forecasts, parking demand, compliance trends and shared-transport usage. Standardised travel-related materials will be issued by the CWTP Coordinator, with contractors responsible for cascading updates through briefings, noticeboards and digital channels.

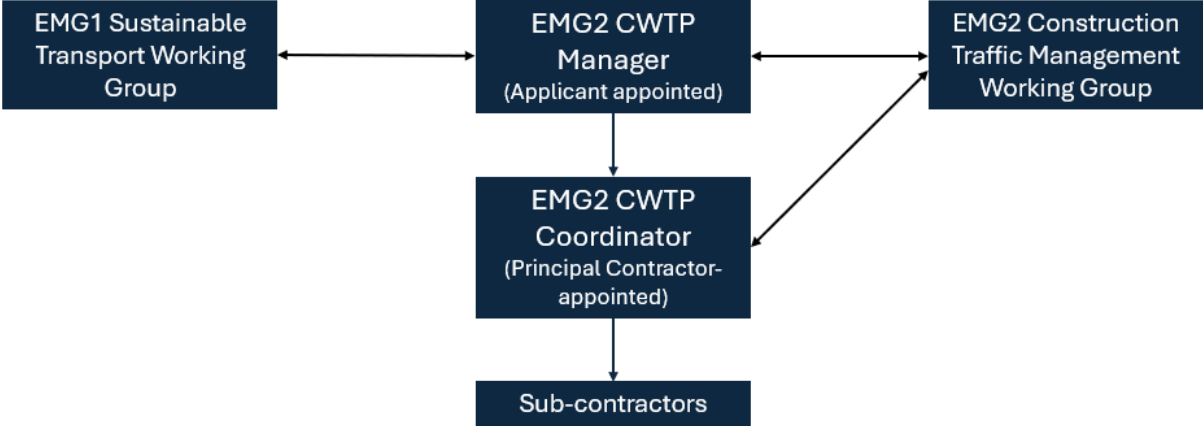
A Construction Traffic Management Working Group, as outlined in the CTMP, will be established and meet regularly to discuss, plan, and coordinate upcoming traffic management measures. The working group will convene monthly during peak construction periods, or as otherwise agreed. The purpose will be to ensure appropriate coordination of works to avoid conflict and to minimise cumulative impacts on the Strategic Road Network (SRN) and Local Road Network (LRN). Where appropriate, construction worker transport provision will be considered at these meetings if any issues arise. The group will include (but not be limited to):

- National Highways
- Leicestershire County Council
- Local bus operators
- East Midlands Airport (EMA)
- Moto Services
- Police, Ambulance, and Fire services
- The Principal Contractor
- Any other contractors or organisations undertaking works on the local or strategic road networks that may have the potential to interact with the construction activities of EMG2.

The EMG1 Sustainable Transport Working Group comprises representatives from SEGRO, the local authorities, National Highways, and EMG1 occupiers, and meets to promote and coordinate accessibility to the site by sustainable modes of transport. The EMG2 CWTP Manager will attend meetings of the EMG1 Sustainable Transport Working Group to share updates with local stakeholders on workforce travel arrangements and construction activity at EMG2. This provides a mechanism to share forward information on anticipated peaks in workforce activity, programme changes, or other periods of heightened travel demand, allowing stakeholders to plan accordingly and coordinate responses where necessary.

The governance structure for the management of the CTWP is set out in Figure 4-1. Toward the end of the construction programme, relevant responsibilities will transition to the operational EMG2 Site Wide Travel Plan Coordinator to ensure consistency and retention of any best practice once the site becomes occupied.

Figure 4-1: EMG2 CWTP Governance Structure



## 5 Measures

This section of the CTWP provides an outline for managing how the construction workforce accesses EMG2. It sets out the measures required to control arrivals, parking and routing, and ensures construction-phase travel does not adversely affect the surrounding road network or neighbouring operational sites. The CWTP measures focuses on enforceable, proportionate controls that reflect the temporary and transient nature of construction works.

### 5.1 Arrival and Departure Management

The Environmental Statement and Transport Assessment for the DCO Scheme assessed a worst-case scenario of all employees travelling by vehicle, with a car share ratio of 2.0 employees per van, and one employee per car and Light Goods Vehicle. Applying these worst-case assumptions (agreed with National Highways through the EMG2 Transport Working Group), the resultant peak daily Light Vehicle (LV) trips are summarised in Table 5-1.

Table 5-1: Traffic Volumes

Vehicle	Morning Peak Hour			Evening Peak Hour		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
LGV	3	3	6	1	1	2
Car	19	4	23	5	29	34
Vans	38	8	45	9	56	65
<b>Total LVs</b>	<b>60</b>	<b>15</b>	<b>75</b>	<b>15</b>	<b>86</b>	<b>101</b>

To ensure compliance with the assessed worst-case scenario for LV trips during the peak hours (Table 5-1), and manage the potential for cumulative transport impacts the Principal Contractor would be required to establish a resource forecast for the number of employees that could be travelling to site. The resource forecast would enable the Principal Contractor to identify any potential exceedances and would be regularly reviewed during construction and reported to the Transport Working Group. This resource will assist the Principal Contractor to actively forecast and manage workforce travel demand to remain within the agreed peak-hour caps. This will be achieved through a range of measures, such as managing workforce resource levels, limiting parking permits for peak periods and shared-transport arrangements.

In addition to the proactive measures to forecast vehicle movements, daily logs of all construction-related vehicles, as set out in the CTMP, will be used to monitor peak-hour arrivals and departures.

Where the monitoring or forecasts identify an exceedance, or the potential for exceeding the agreed peak-hour caps, additional measures will be implemented, such as restrictions on parking permits, adjustment of shift patterns, increased provision of shared-transport vehicles.

Welfare requirements as noted in the CMTP and design regulations should be adhered to as well as consideration of provision of a “canteen” or “shop” that could be served to discourage movements from the site during the course of the day.

## 5.2 Shared Vehicles

A key measure to reduce the number of SOV trips will be the use of shared transport. Shared transport could include contractor-arranged crew vans and minibuses or private vehicle ‘car-sharing’.

The Principal Contractor will ensure all construction workers are made aware of shared-transport arrangements, including preferential parking for those who offer or provide lifts to colleagues.

Compliance will be enforced through the parking permit system, with priority permits issued to shared-transport vehicles and designated bays allocated within the construction compound. The Principal Contractor will undertake routine monitoring of permit use and parking behaviour to ensure compliance. Any misuse of shared-transport permits or failure to comply with parking requirements will be addressed through the enforcement and disciplinary measures set out in Section 6.2.

The Principal Contractor will, with the support of the CWTP Manager, support workers to identify colleagues who work similar shifts, or working patterns to offer or provide a lift to support shared journeys to the site.

In addition to these contractor-led arrangements, the existing EMG1 vehicle share platform<sup>1</sup> will be extended to cover the EMG2 construction workforce, to enable another avenue for workers to identify a vehicle share partner. It is acknowledged that this will be a supporting mechanism to facilitate vehicle sharing.

Incentives will be provided to encourage greater vehicle sharing, such as a free drink or snack from the on-site canteen or reward vouchers.

## 5.3 Public Transport

Several high-frequency commercial bus services provide a realistic public transport option for some construction workers across a range of shift patterns, including early morning and non-standard working hours, who may live, or temporarily be based near, the bus routes (Table 5-2 and Figure 5-1). These services operate on a 24-hour basis, with frequencies of approximately every 15 minutes from Derby, Leicester and Loughborough, and every 20–30 minutes from Nottingham.

Table 5-2: Existing Bus Service Routes, Frequencies and Hours of Operation

Service	Operator	Route	Frequency <sup>2</sup>	Hours of operation
skylink Derby- Leicester	Kinchbus	Leicester – Loughborough – Kegworth – EMG – EMA1 – Castle Donington – Derby	4 buses per hour	24/7
		EMG1 – Loughborough	4 buses per hour (09:00-21:00)	24/7

<sup>1</sup> Liftshare (2026). SEGRO East Midlands Gateway Liftshare. Available at: <https://liftshare.com/uk/community/emg> (Accessed: 24 February 2026).

<sup>2</sup> Feb 2026 typical bus service frequencies

Service	Operator	Route	Frequency <sup>2</sup>	Hours of operation
			3 buses per hour (05:00-09:00) 2 bus per hour (21:00-00:00) 1 bus per hour (00:00 – 05:00)	
skylink Express	trentbarton	Nottingham – Clifton – non-stop to EMG1	2 buses per hour	4:00am-11:00pm
skylink Nottingham	trentbarton	Nottingham – Long Eaton – Castle Donington – EMA – EMG1	3 buses per hour (2 buses per hour at EMG)	24/7
		EMA – Diseworth – Long Whatton – Coalville	1 bus per hour	4:30am-7:00pm
Airway 9	Diamond Bus	Horningslow – Burton – Ashby – Melbourne – EMA – EMG1	1 bus per hour <sup>1F3</sup>	4:15am-10:30pm
my15	trentbarton	Ilkeston – Stapleford – Old Sawley – Castle Donington - EMA	2 bus per hour	5:00am-midnight
Nottsbus DRT	Nottinghamshire County Council and trentbarton	West Rushcliffe Zone <sup>4</sup>	Flexible	7:00am-midnight

The closest bus stop serving the skylink Derby, skylink Nottingham, skylink Express and Airway 9 is located on Beverley Road, opposite the EMG2 construction worker site entrance at Hunter's Roundabout. This means that bus services will be accessible for construction workers travelling from key employment locations in the East Midlands – Nottingham, Derby, Leicester – and as a result could represent a viable option for a proportion of the construction workforce, subject to individual origins and final site access arrangements, as well as individual requirements for carriage of equipment etc.

Workers arriving by bus must use authorised walking routes between the bus stops on Beverley Road, across the A453 and to the EMG2 construction worker entrance.

East Midlands Parkway train station is located five miles to the north-east of the EMG2 Main Site, and provides direct services to Leicester, Loughborough, Derby and Nottingham, as well as longer-distance connections to London St Pancras and Sheffield. This offers a potential opportunity for construction workers travelling from a wider labour catchment.

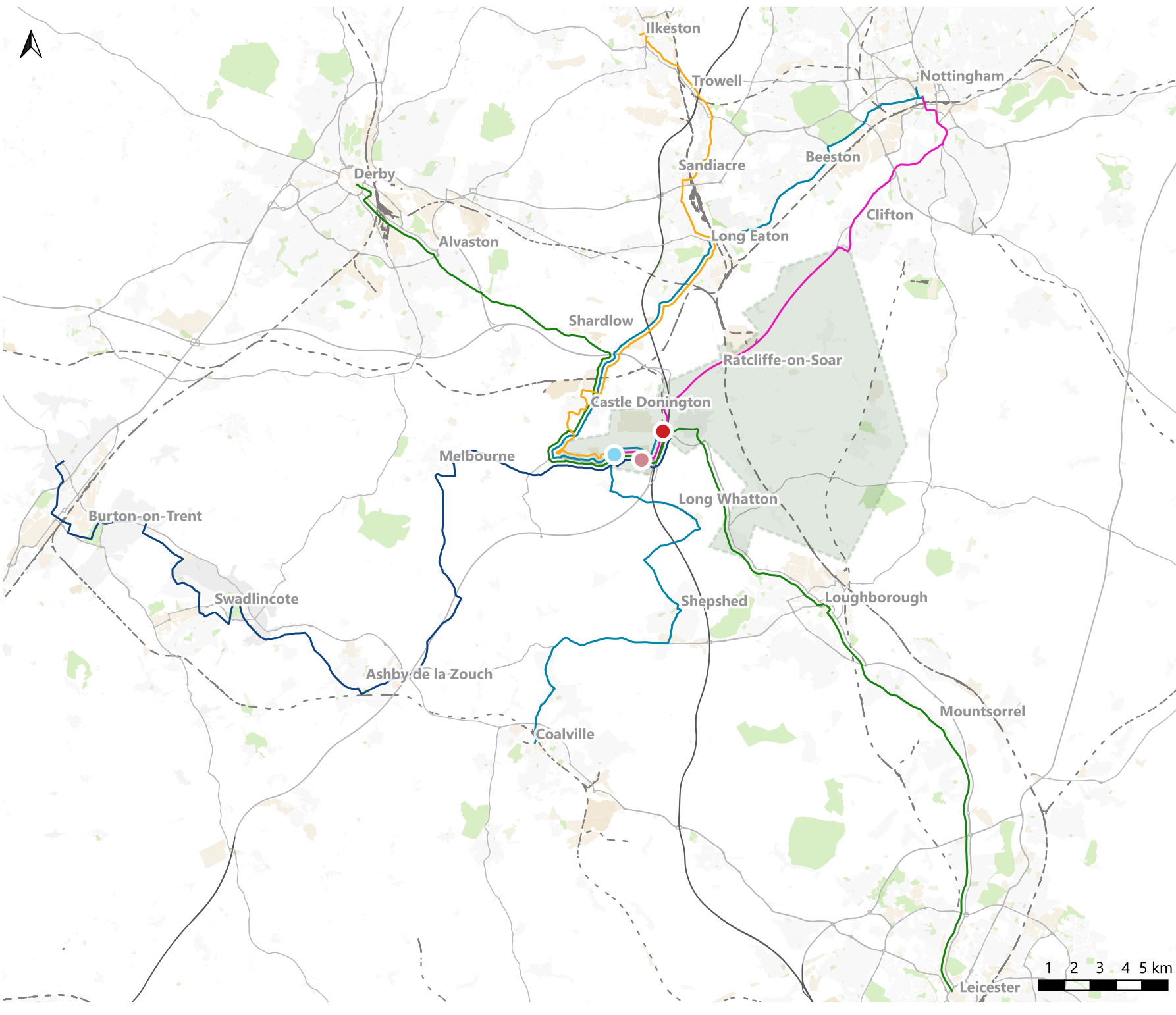
<sup>3</sup> Does not serve EMG on Sundays between 07:25 – 17:05

<sup>4</sup> Nottsbus On Demand operates in four zones in Nottinghamshire, the West Rushcliffe Zone covers EMG1 and EMA with the zone map available here <https://www.nottinghamshire.gov.uk/media/5081614/z4-west-rushcliffe-zone-leaflet.pdf>



Following appointment, the Principal Contractor will review the likely origin of the construction workforce and assess demand for rail-based access to the site. Where sufficient demand is identified, the Principal Contractor will provide, or facilitate, a contractor-led minibus connection between East Midlands Parkway station and the site at shift changeover times. This measure will be kept under review as workforce profiles and travel patterns develop during construction.

To support workers to use the bus and rail to travel to the site, information will be provided on the bus and rail routes, timetables, operating hours and affordable ticket options via welfare-area noticeboards and staff inductions.



**Key**

*Public Transport*

- Airway 9
- my15
- skylink Derby
- skylink Express
- skylink Nottingham
- DRT West Rushcliffe Zone
- Railway

*Interchanges*

- EMG1 Bus Interchange
- EMG2 Bus Interchange
- EMA Bus Interchange

Client  
**SEGRO**

Project  
**East Midlands Gateway  
Phase 2**

Figure title  
**Existing Bus Services**

Revision  
**A**

Figure number  
**Figure 5-1**

Project number  
**P-PC6158**

Date  
**Mar 2025**

## 5.4 Active Travel

Active travel (e.g. walking and cycling) access will be permitted only where safe, authorised routes are available. No reliance is placed on walking or cycling as a significant mode during the construction phase.

Walking will only be practical from the neighbouring village of Diseworth and cycling is only likely to be practical from the nearby villages of Castle Donington, Kegworth, Hemington and Lockington. As the construction workforce is likely to be drawn from a much larger catchment, it is unlikely that many will be able to use this as a regular commuting method.

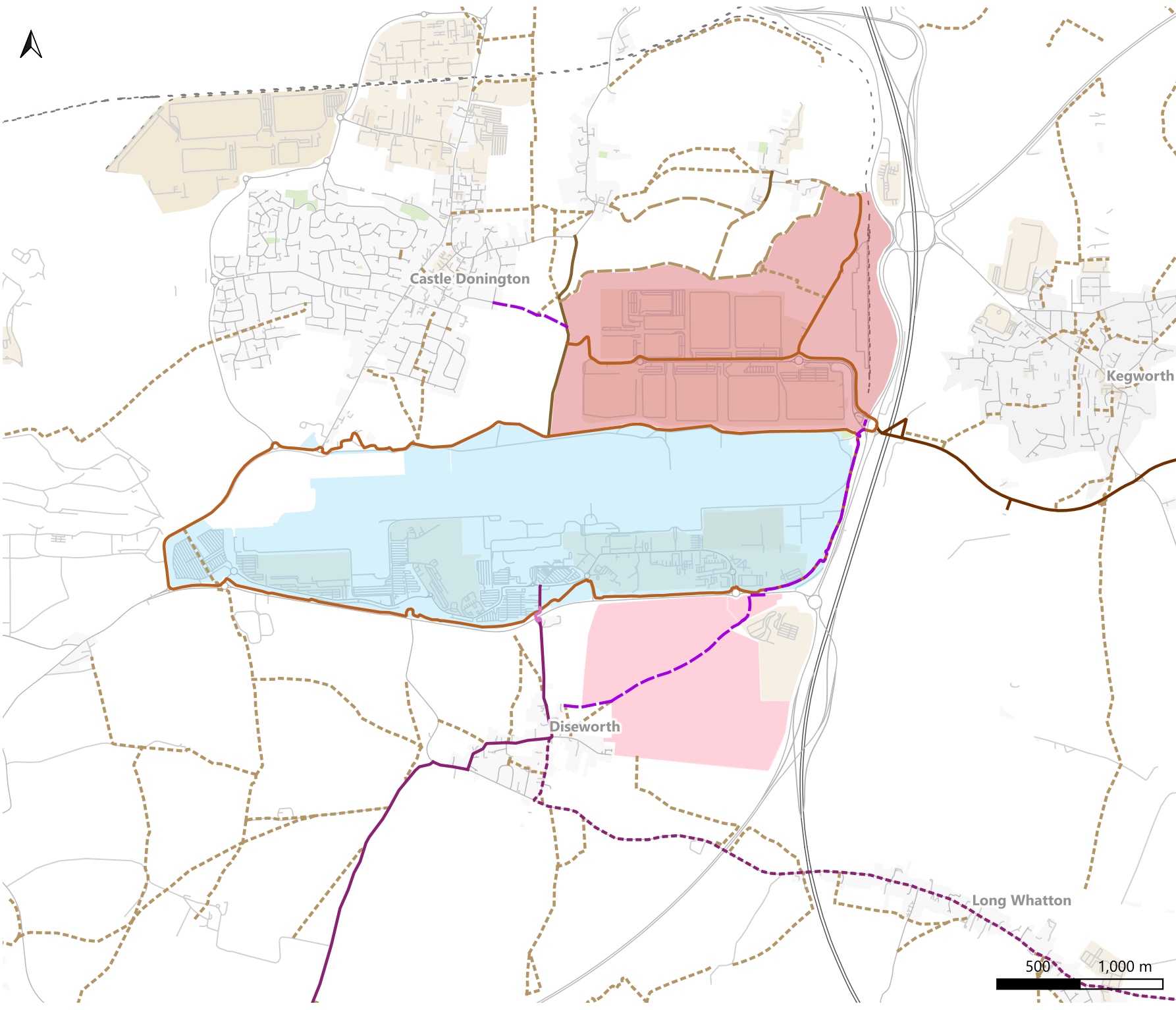
The existing active travel routes have been set out in Figure 5-2, most of which will be unaffected by the DCO Scheme works, except Hyam's Lane and the L57 footpath when works commence to upgrade these routes. Full details of the existing walking and cycling connection are detailed in the EMG2 Sustainable Transport Strategy.

## 5.5 Engagement

Clear communication is essential to ensure workers understand and comply with construction-phase travel expectations. Key transport-related information will be supplied to the Principal Contractor by the EMG2 CWTP Manager on the local bus and rail routes and EMG2 shared vehicle options.

This will be supplemented by information on Principal Contractor-led transport provision, including the detail on required routes, parking rules, arrival times and shared-transport options. The Principal Contractor will cascade this information to all contractors working on-site as part of pre-arrival induction materials and as part of the on-site induction. On-site information will be provided on welfare-area noticeboards, site maps and daily briefings. The Principal Contractor would be required to ensure messaging reaches subcontractors with the same consistency as directly employed staff.

Travel information and inductions will emphasise the simplest and most reliable ways to reach the site, ensuring that compliant routes and modes are the easiest for workers to follow. Table 5-3 in Section 5.6 summarises the CWTP measures.



**Key**

*Active Travel*

- NCN On Road Cycleway
- NCN Traffic Free Cycleway
- NCN Link Route
- Shared Use Footway/Cycleway
- Private Road Permissive Path
- Quiet Lane
- Proposed Improvement
- Public Bridleway
- Public Footpath

*Rail*

- Railway

*Developments*

- EMG1
- EMG2
- EMA

\* NCN = National Cycle Network

Client  
**SEGRO**

Project  
**East Midlands Gateway  
Phase 2**

Figure title  
**Active Travel Infrastructure  
Context**



## 5.6 Action Plan

The action plan in Table 5-3 outlines the range of measures that could be delivered, with final measures to approved by relevant stakeholders.

Table 5-3: Construction Worker Travel Plan Measures

Category	Measure	Responsibility
Shared Vehicles	Priority parking will be allocated for shared vehicles within the construction worker compound.	CWTP Manager & Principal Contractor's CWTP Coordinator
	Allocation and enforcement of parking permits linked to vehicle occupancy.	CWTP Manager & Principal Contractor's CWTP Coordinator
	Use of contractor-arranged crew vans and minibuses as the preferred travel mode.	Principal Contractor's CWTP Coordinator & subcontractors
	Incentives to encourage vehicle sharing, such as refreshments or vouchers.	Principal Contractor's CWTP Coordinator
	Parking capacity within the construction worker compound will be managed on a permit-only basis, with a maximum provision of 221 parking spaces.	CWTP Manager & Principal Contractor's CWTP Coordinator
	Use of the EMG1 vehicle share platform as a supporting mechanism alongside internal arrangements.	CWTP Manager & Principal Contractor's CWTP Coordinator
Public Transport	Promotion of local bus services serving EMG2, including routes, timetables and ticket options.	CWTP Manager & Principal Contractor's CWTP Coordinator
	Communication of authorised walking routes from the closest bus stop to the construction worker access point.	Principal Contractor's CWTP Coordinator
	Review of demand for a minibus connection to East Midlands Parkway station.	Principal Contractor's CWTP Coordinator
Active Travel	Restriction of walking and cycling to safe, authorised routes only.	CWTP Manager
Engagement	Pre-arrival travel information and induction materials.	CWTP Manager & Principal Contractor's CWTP Coordinator
	On-site reinforcement through noticeboards, site maps and briefings.	Principal Contractor's CWTP Coordinator & subcontractors
	Consistent communication to subcontractors.	Contractors

Category	Measure	Responsibility
Reducing Trips	Provision of on-site welfare facilities, including consideration of a canteen or shop.	Principal Contractor's CWTP Coordinator
Monitoring	<i>Daily</i> record keeping of the number of construction worker vehicles arriving on-site, split by arrival and departure hour.	Principal Contractor's CWTP Coordinator
	<i>Monthly</i> collation of the construction worker headcount on-site to maintain a sound understanding of the size of the workforce.	CWTP Manager & Principal Contractor's CWTP Coordinator
	Collation of anonymised construction worker home postcodes <i>by construction phase</i> to determine the workforce catchment.	CWTP Manager & Principal Contractor's CWTP Coordinator
	Collation of the number and type of construction worker roles <i>by construction phase</i> .	CWTP Manager & Principal Contractor's CWTP Coordinator

## 6 Monitoring & Enforcement

### 6.1 Monitoring

Monitoring will be undertaken throughout the construction period to ensure that travel behaviour remains controlled and responsive to change.

Monitoring enables early identification of emerging issues, such as overspill parking, changes in shift patterns or unanticipated increases in workforce levels. Where issues are identified, the Principal Contractor will implement corrective measures in accordance with the CWTP, and the enforcement provisions as set out in 6.2.

The Principal Contractor will provide weekly data to the CWTP Manager, including approximate mode share, workforce numbers, shared-transport usage and parking demand. The CWTP Manager will carry out routine site checks to verify compliance with routing, parking and arrival-time requirements. This information will be compiled into a monthly monitoring report.

The monthly monitoring report will be shared with National Highways and Leicester County Council. National Highways and Leicester County Council will be invited to review the monitoring information and provide comments, which will be considered by the CWTP Manager and Principal Contractor and used to inform any required corrective actions.

To support this, workforce postcode data could be collected (anonymised) where appropriate to understand the construction catchment and target shared-transport or bus solutions effectively.

### 6.2 Enforcement, Compliance and Corrective Measures

Enforcement ensures the reliability of the CWTP. All workers will receive a mandatory travel and access induction covering:

- Approved and prohibited routes.
- Site access procedures.
- Parking rules.
- Safety requirements.

Compliance with agreed controls, including workforce numbers, parking provision and peak-hour vehicle caps, will be actively managed by the Principal Contractor through the parking permit system, resource management and controlled arrival and departure windows. Parking permits will be issued within defined limits to ensure that agreed caps are not exceeded.

Where monitoring identifies a risk of exceeding agreed caps, immediate measures will be implemented, including restriction or withdrawal of parking permits, increased shared-transport provision, and adjustment of workforce attendance arrangements.

To ensure that the final CWTP is effectively enforced, it is important to define what would constitute a breach. The following actions would constitute a breach of the CWTP, whereby corrective measures would be required:

- unauthorised parking,
- exceedance of the agreed vehicle numbers at peak times (see Table 5-1)
- use of prohibited routes, or
- exceeding agreed parking or arrival-time limits

Any identified breaches will be addressed through the contractor disciplinary processes, with repeated or serious non-compliance resulting in removal from site. The CWTP Manager may issue verbal or written warnings to the Principal Contractor or subcontractors and require specific corrective actions to ensure continued compliance with the CWTP.

### **6.3 Contingency Measures**

Where monitoring indicates that travel behaviour is causing congestion, unsafe movements or pressure on parking capacity, additional measures would be proposed. These may include tighter arrival windows, expanded shared-transport provision, temporary restrictions on permits for specific teams or enhanced communication to address particular behaviours. If monitoring indicates that public transport could feasibly replace some vehicle trips, the CWTP Manager may introduce short-term incentives such as taster bus tickets or trial travel passes to encourage mode shift.

The CWTP Manager will determine the appropriate intervention in consultation with Principal Contractor's CWTPC. Contingency measures will remain in place until monitoring confirms that conditions have stabilised.

## A1 Daily Vehicle Movements and Headcount by Year

The construction workforce headcount has been derived directly from the daily construction vehicle movement data set out within the CTMP and summarised in A1 Table 1 and A1 Table 2 below. The approach translates forecast daily one-way construction workforce vehicle movements into an estimated number of people on site, using agreed and consistently applied vehicle occupancy assumptions.

The CTMP provides forecast average daily one-way movements for construction workforce vehicles, disaggregated by vehicle type and by construction year. These movements represent trips made by cars and vans associated with the construction workforce and exclude HGV movements, which relate to materials delivery rather than personnel. To convert these vehicle movements into workforce numbers, the following occupancy assumptions have been applied – cars are assumed to carry one person per vehicle, while vans are assumed to carry two people per vehicle – reflecting crew-based travel typical of construction activities.

Using this approach, workforce headcount is calculated by applying the relevant occupancy assumption to each vehicle type and summing the resulting number of people. By way of example, in Year 1 the CTMP identifies an average of 97 daily one-way car movements and 124 daily one-way van movements associated with the construction workforce. Applying the agreed occupancies results in 97 workers travelling by car and 248 workers travelling by van, giving a total estimated daily workforce of approximately 344 personnel. This figure represents the peak daily construction workforce and includes all personnel associated with the Principal Contractor, site management, quality, health, safety and environmental functions, and the wider construction labour force.

The same calculation method has been applied across all construction years and workstreams, with workforce levels varying in line with the forecast intensity of construction activity. Higher workforce numbers are anticipated during the principal structural phases, reducing during later fit-out and finishing works. The methodology is transparent and conservative, assuming all workers travel by private vehicle using agreed occupancy assumptions, and ensures consistency between the CTMP, the TA and this CWTP.

A1 Table 1: Daily Vehicle Movements by Year

Vehicle Type	Average Daily Vehicle Movements (one-way)			
	Overall Total	EMG2	EMG1	External Highway Works
<b>Year 1</b>	<b>221</b>	<b>128</b>	<b>51</b>	<b>41</b>
Car	97	53	24	21
Van	124	76	27	21
<b>Year 2</b>	<b>200</b>	<b>161</b>	-	<b>39</b>
Car	95	76	-	20
Van	105	85	-	20
<b>Year 3</b>	<b>46</b>	<b>46</b>	-	-
Car	20	20	-	-
Van	26	26	-	-
<b>Year 4</b>	<b>46</b>	<b>46</b>	-	-
Car	20	20	-	-
Van	26	26	-	-
<b>Year 5</b>	<b>46</b>	<b>46</b>	-	-
Car	20	20	-	-
Van	26	26	-	-

A1 Table 2: Daily Headcount by Year

Vehicle Type	Average Daily Headcount			
	Overall Total	EMG2	EMG1	External Highway Works
<b>Year 1</b>	<b>344</b>	<b>204</b>	<b>78</b>	<b>62</b>
Car	97	53	24	21
Van	247	152	55	41
<b>Year 2</b>	<b>305</b>	<b>246</b>	-	<b>59</b>
Car	95	76	-	20
Van	209	170	-	39
<b>Year 3</b>	<b>72</b>	<b>72</b>	-	-
Car	20	20	-	-
Van	53	53	-	-
<b>Year 4</b>	<b>72</b>	<b>72</b>	-	-
Car	20	20	-	-
Van	53	53	-	-
<b>Year 5</b>	<b>72</b>	<b>72</b>	-	-
Car	20	20	-	-
Van	53	53	-	-

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## **Appendix Four Silt Management Plan**

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**SEGRO Logistics Park  
East Midlands Gateway  
Phase 2 (EMG2)**

# **Outline Silt Management Plan (SMP)**

**June 2025**

The East Midlands Gateway Phase 2  
Development Consent Order 202X and The East Midlands Gateway  
Rail Freight and Highway (Amendment) Order 2025

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## APPENDICES

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APPENDIX B - SILT MANAGEMENT PLAN, OUTLINE DESIGN

APPENDIX C - PRELIMINARY SITE INSPECTION CHECKLIST

# 1.0 Introduction

## 1.1 Purpose of Document

1.1.1 This outline Silt Management Plan (SMP) has been prepared to manage and control on site surface waters during earthworks, with recommended measures to avoid uncontrolled surface water runoff to surrounding areas and to inhibit potential pollution resulting from the discharge of silt containing surface waters into the site surface water drainage system, and subsequently into the wider hydrological system. The following is included within this SMP:

- An introduction to the study area and development proposals;
- The identification of sensitive surface water receptors within the study area and the surrounding vicinity;
- Description of typical measures that will be applied during the earthworks phase, in order to mitigate the potential of silt reaching any of the identified sensitive receptors; and
- The inclusion of a surface water site inspection checklist, to ensure consistent and consecutive monitoring of any silt throughout the earthworks.

## 1.2 Site Details

1.2.1 The study area of this SMP comprises the land upon which the **EMG2 Works** and **Highway Works** are to be constructed pursuant to the DCO Application. These components of the **EMG2 Project** are described in more detail within the Construction Environmental Management Plan (CEMP), **Document DCO 6.3A**. The corresponding Parameters Plan is presented within **Document DCO 2.5** and the **Highway Works** General Arrangement Drawings are provided as **Document DCO 2.8**.

1.2.2 It is understood that the silt management techniques for the **EMG1 Works** of the MCO Application will comprise those which are stated within the Silt Management Plan appended to the CEMP that was previously approved with the EMG1 DCO.

## 1.3 Proposed Development

1.3.1 Details of the proposed development pertaining to each component of the DCO Application are summarised below:

### **EMG2 Works:**

1.3.2 Development for a comprehensive logistics and advanced manufacturing development with supporting and co-located office and other ancillary functions, together with an upgrade to the EMG1 substation and the provision of a community park. The **EMG2 Works** will comprise the DCO Works Nos. 1 to 5 and 20 to 21. (Components Plan - **Document DCO/MCO 2.7**):

### **Highway Works:**

- 1.3.3 A package of highways works is proposed including access to the EMG2 Works, improvements around Junction 24 of the M1 and some minor works on the local highways networks / pedestrian cycle routes. The **Highway Works** will comprise DCO Works Nos. 6 to 19 (Components Plan – **Document DCO 2.7**). The Highways Plan General Arrangement is presented as **Document DCO 2.8**.
- 1.3.4 Throughout the earthworks pertaining to the DCO Application, areas that are non-paved and / or non-vegetated are prone to surface water runoff with high silt loads. Therefore, silt mitigation measures are recommended throughout the construction phase to limit the volume of potential silt laden run-off.
- 1.3.5 The proposed development at the **EMG2 Works** requires cut and fill procedure to form a series of flat development platforms (**Document DCO/MCO 6.14M**). **EMG2 Main Site** plateau level plans indicate the creation of several plateau levels (zones) across the site, ranging from 66.750 m AOD in the far southern area to 89.000 m AOD in the far north eastern area. This cut will include the stripping of site topsoil and shallow soils, thus disturbing the natural in-situ strata. Additionally, 3 No. landscape bunds with up to 12.0 m fill are proposed along the western edge of the **EMG2 Works**, to provide a visual obstruction between the development and the nearby town of Diseworth.
- 1.3.6 It is anticipated that the proposed development at the **Highways Works** will comprise minimal cut and fill earthworks, and therefore the risk of silt laden run-off is considered to be lower than that at the **EMG2 Works**. Despite this, sensitive receptors to potential silt laden run-off at the **Highway Works** has been considered within **Section 2.3** and measures outlined in **Section 3.0** applicable to the **EMG2 Works** would be effective and should be applied to the **Highway Works**.

## 1.4 Concepts of silt management

- 1.4.1 Silt management concepts relate to the implementation of mitigation measures initially targeted at preventing the erosion of soils resulting in silt laden runoff during the earthworks (for example, the use of hydroseeding on material stockpiles), and then subsequently targeted at the treatment, volumetric reduction and migration limitation of silt laden run-off.
- 1.4.2 The two predominant methods to mitigate and treat potential silt laden run-off on a construction site comprise either the creation of temporary drainage, or the modification of site permanent drainage. This outline SMP focuses on the creation of temporary drainage throughout the site earthworks phase. **Appendix A** (courtesy of Frog Environmental) provides deployment guides for the silt management techniques discussed below.
- 1.4.3 **Section 1.5** below sets out the existing and permanent drainage at the **EMG2 Works** and **Highway Works**.

## 1.5 Existing and Proposed Drainage

### EMG2 Main Site

- 1.5.1 The Flood Risk Assessment for the **EMG2 Works** completed by BWB Consulting (**Document DCO/MCO 6.13I**) has informed the existing and proposed drainage at the site, summarised below.

### Existing Drainage

- 1.5.2 A public surface water sewer is present in the eastern vicinity of the **EMG2 Works**, running parallel to the adjacent piped watercourse located between Donnington Services and the Diseworth Brook to the east and south of the site, respectively. This sewer outfalls just upstream of the A42 culvert.
- 1.5.3 A minor watercourse and a series of field / drainage ditches are present in the south eastern corner of the **EMG2 Works**. The associated outfall is via a piped connection which outfalls to a larger pipe, running parallel to the A42 with its outfall to the Diseworth Brook beneath the A42 road bridge.
- 1.5.4 It is understood that no further drainage exists at the site. This is due to the nature of the **EMG2 Works**, comprising open agricultural fields with vegetative cover. The stripping of this vegetative cover and topsoil across the site as part of the earthworks is anticipated to reduce the rate of infiltration, and therefore simultaneously increase the rate of surface run-off. Disruption to the predominantly cohesive material underlying the site is anticipated to increase the likelihood that the surface run-off is silt laden during the construction phase.

### Permanent Drainage

- 1.5.5 A series of Sustainable Drainage Systems (SuDS) basins, referred to as 'Detention Basins' are proposed along the far western **EMG2 Works** perimeter, each sized for a 1 in 100 year + 25% critical storm event. In this area of the site, the basins are interconnected by a proposed surface water sewer with the indicative flow direction of surface water to the south.
- 1.5.6 The proposed detention basins continue along the southern site perimeter, interconnected by surface water sewers and swales. Two below ground attenuation tanks, each sized for a 1 in 100 year + 25% critical storm event, are proposed in the centre of the southern site area to accommodate the additional storing of water from the associated catchment areas. In the southern site area, the indicative flow direction of surface water is to the east / south east, towards the proposed downstream proprietary treatment system providing the final stage of treatment to surface water prior to discharge from the site. Discharge of this surface water is proposed via a surface water outfall to a ditch upstream from M1 highway drainage.

### Highway Works

- 1.5.7 The Flood Risk Screening for the **Highway Works** completed by BWB Consulting (**Document DCO/MCO 6.13J**) has informed the existing and proposed drainage across the works, summarised below. It is uncertain where the existing drainage outfalls.

## Existing Drainage

- 1.5.8 The **Highway Works** is positively drained (water is directed away from the Highway by gravity), for example the existing M1 kerb drainage. In the event of exceedance of the existing highway drainage, relatively shallow surface water would likely remain on the highway at nominal depths.

## Proposed Drainage

- 1.5.9 The proposed development of the **Highway Works** will introduce new impermeable surfaces. The additional surface water run-off will be directed into the existing highway drainage, accommodated through the addition of new surface water storage infrastructure / basins constructed in the location of the works.
- 1.5.10 This is proposed to allow the additional runoff to be stored at the location it is generated and drain into the downstream drainage network when capacity is available. Therefore, the downstream network is able to be retained and will ensure that the existing conditions are preserved. There is also option of enhancing the available storage within the existing downstream highway basins, to accommodate for the additional runoff from the development.

## 2.0 Source, Pathway, Receptor Relationship

2.0.1 The below section assesses the potential sources, pathways and sensitive receptors of potential silt pollution at the **EMG2 Works** and **Highway Works**, specific to the earthworks phase. This assessment has informed the appropriate mitigation measures recommended throughout the earthworks to significantly slow or inhibit the silt pathways.

2.0.2 As discussed within **Section 1.3**, the proposed earthworks at the **Highways Works** are anticipated to be on a notably smaller scale than that of the **EMG2 Works**. Therefore, it is considered that the likelihood of a potentially complete silt source, pathway, receptor linkage is low.

### 2.1 Potential Sources of Silt

2.1.1 The predominant sources of silt pollution to the surface water receptors pertaining to the DCO Application / Scheme are anticipated to originate from the general earthworks pertaining to the development outlined within **Section 1.3**, including:

- The movement of materials and machinery around the site;
- The stockpiling of materials on-site; and
- Cut and fill operations.

2.1.2 A combined geo-environmental and geotechnical intrusive ground investigation at the **EMG2 Main Site** was scoped, specified and managed by Fairhurst, with the site work carried out by Structural Soils Ltd between September 2022 and October 2022. The ground conditions encountered during the investigation are summarised within **Table 1** below.

**Table 1: Ground Conditions – EMG2 Main Site, 2022**

Stratum	Depth to base of stratum (m bgl)	General Description
Topsoil	0.10 – 0.85	Firm to very stiff brown/reddish brown CLAY with silt, sand and gravel of quartzite, mudstone, siltstone, sandstone, flint and quartz.
Made Ground	0.20 – 3.00, encountered locally	Variable, but cohesive dominant. Generally CLAY with subordinate sand and gravel of siltstone, mudstone, limestone, quartzite, sandstone, brick, glass, concrete and ceramic tile.
Oadby Member	1.70 – 16.40	Stiff to very stiff greyish brown/dark grey CLAY with subordinate silt, sand and gravel of mudstone, siltstone sandstone, quartz, flint and chalk with occasional cobbles.

Glaciofluvial Deposits	0.40 – 17.30	Variable interbedded cohesive and granular soils:  Cohesive deposit: firm to very stiff CLAY with variable silt, sand and gravel content.  Granular deposit: medium dense to very dense gravel with variable CLAY, silt and sand content.
Gunthorpe Member	1.40 – 18.50	MUDSTONE interbedded with siltstone and sandstones.
Diseworth Sandstone	Unproven, discontinuous across the site	Very weak to medium strong fine to medium grained SANDSTONE. Discontinuous, appearing as discrete SANDSTONE strata interbedded with mudstone and siltstone.

2.1.3 The findings of two Preliminary Sources Study Reports (PSSRs) completed by BWB for the Junction 24 improvements (**Document DCO/6.14E**) and the construction of highway infrastructure to facilitate access to the **EMG2 Works (Document DCO/MCO 6.14F)** pertaining to the **Highway Works** has informed the ground conditions for this part of the DCO Application, presented below.

**Table 2: Junction 24 Improvements Ground Model**

Stratum	Top Depth (m bgl)		Base Depth (m bgl)	
	Min	Max	Min	Max
Topsoil	Ground Level		0.10	0.80
Made Ground	Ground Level		0.40	11.30
Fill / Possible Fill	Ground Level		0.70	1.80
Superficial Deposits	Ground Level		0.70	6.80
Mercia Mudstone (weathered)	Ground Level		Not Proven	
Mercia Mudstone	8.23	11.80	Not Proven	

**Table 3: Highway Improvements (EMG2 Works Access) - Central and Eastern Area**

Stratum	Typical Profile	Description
Hardstanding	0.00 m to 0.30 m	N/A
Made Ground	0.30 m to 0.80 m	
Mercia Mudstone Group (Clay)	0.80 m to 3.50 m	Brown or reddish brown silty very sandy clays.
Weathered Mercia Mudstone Group (Siltstone)	3.50 m to 6.00 m (base not proven)	Gravelly clayey sand and slightly gravelly, sandy silty clay with frequent lithorelicts.

**Table 4: Highway Improvements (EMG2 Works Access)- Western Area**

Stratum	Typical Profile	Description
Hardstanding	0.00 m to 0.30 m	N/A
Made Ground	0.30 m to 0.80 m	
Oadby Member or Glaciofluvial Deposits	0.30 m to 0.90 m	Slightly sandy silty gravelly clay or slightly silty slightly gravelly sandy clay.
Mercia Mudstone Group (Clay)	0.90 m to 5.80 m	Reddish brown silty clay.
Weathered Mercia Mudstone Group (Siltstone)	5.80 m to 10.00 m	Gravelly clayey sand and slightly gravelly silty clay with frequent lithorelicts.

2.1.4 Due to the predominantly cohesive nature of the ground conditions across the DCO Application, as outlined above, the general earthworks (including cut and fill, stockpiling of materials and the movement of the materials and machinery around the site) is likely to create the potential for silt laden run-off, requiring appropriate consideration and mitigation management.

## 2.2 Potential Silt Pathways

2.2.1 Plausible pathways for silt pollution to impact the sensitive receptors identified in **Section 2.3** below include direct surface run-off, surface run-off via on site land drains and run-off via the proposed surface water drainage network.

## 2.3 Sensitive Receptors to silt and surface water flows

2.3.1 The hydrogeological regime of the **EMG2 Main Site** and **Highway Works** has been reviewed utilising publicly available information, such as the Environment Agency (EA) Flood Map for Planning Online Portal, supplemented by the findings of the Flood Risk Assessment / Screening Documents completed by BWB and appended to **Chapter 13: Flood Risk and Drainage (Documents DCO/MCO 6.13I and 6.13J)**.

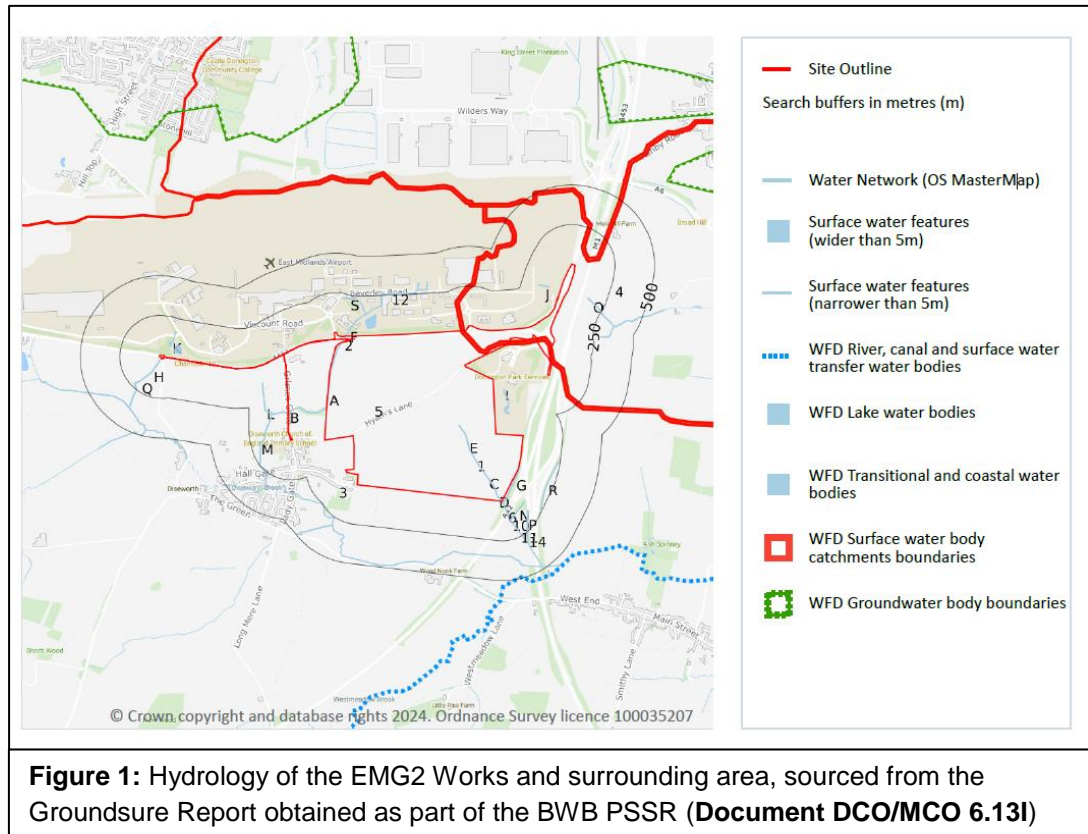
2.3.2 Sensitive surface water receptors within the development boundaries of the EMG2 Works and the immediate surrounding vicinity are presented below. Figure 1, sourced from the Groundsure Report obtained as part of the BWB PSSR (**Document DCO/MCO 6.13I**) is presented below, to show these features:

### EMG2 Works (on-site)

- The Hall Brook, which outfalls from the East Midlands International Airport (EMIA) and flows alongside the westernmost boundary of the **EMG2 Works** for around 450 m before being diverted west and subsequently south to enter the nearby village of Diseworth; Existing drainage ditch transecting the centre of the **EMG2 Works**, and outfalls in the south eastern corner, just north of Long Holden (a road located to the south of the **EMG2 Works**); and
- The existing surface water drainage and foul water sewers.

### EMG2 Main Site (off-site)

- The Diseworth Brook, located to the south west of the **EMG2 Works**, with its associated flood zones located approximately 240 m south;
- The Long Whatton Brook (rename of the Diseworth Brook, where it passes beneath the A43 and M1 embankments to the immediate east of the **EMG2 Works** and is joined by the Westmeadows Brook), flowing towards the east to join the River Soar; and
- The River Soar – A Main River which flows approximately >2 km east of the **Works**.



2.3.3 Sensitive surface water receptors within the development boundaries of the **Highway Works** and the immediate surrounding vicinity are presented below. Figure 2, sourced from the Groundsure Report obtained as part of the BWB PSSR (**Document DCO/MCO 6.13J**) is presented below, to show these features:

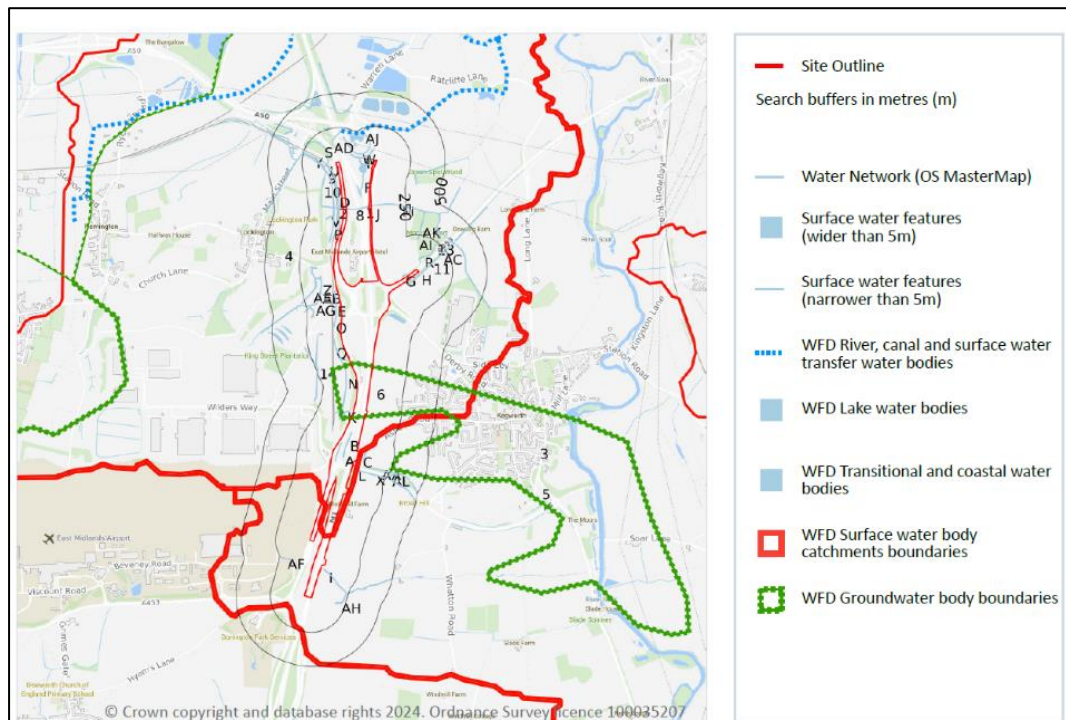
### Highway Works (on-site)

- The existing surface water drainage along the perimeters of the road networks (uncertain outfall point).

### Highways Works (off-site)

Due to the distance covered by the Highway Works, reference has been made to the individual components based on the 'Components of the Proposed Development' Plan (**Document DCO/MCO 2.7**):

- The River Soar – A Main River which flows approximately >1.80 km east of DCO Works No. 12 (M1 J24 minor works);
- Unnamed river / drainage ditch, located approximately 795 m east of DCO Works No. 12, within northern Kegworth (M1 J24 minor works);
- Unnamed river / drainage ditch flowing through Lockington, located approximately 595 m west of DCO Works No. 10 (A50 westbound merge);
- Unnamed tributary of the River Soar, which flows beneath Whatton Road), located approximately 265 m east of DCO Works No. 8 (M1 northbound alterations);
- Diseworth Brook, flowing beneath the M1, located approximately 195 m south of the northernmost DCO Works No. 16 (M1 northbound signage alterations); and
- Long Whatton Brook (tributary of the River Soar), flowing beneath the M1, located approximately 250 m south of the northernmost DCO Works No. 16 (M1 northbound signage alterations).



**Figure 2:** Hydrology of the Highway Works and surrounding area, sourced from the Groundsure Report obtained as part of the BWB PSSR (**Document DCO/MCO 6.13J**)

## 2.4 Surface Water Baseline Monitoring

2.4.1 Fairhurst carried out surface water sampling and testing at the **EMG2 Works** in October 2024. In total, four surface water samples were obtained from water features, such as streams and irrigation ditches, within the **EMG2 Main Site** and surrounding area. The water samples were then submitted for laboratory chemical analysis, the results of which should be utilised and referenced throughout the earthworks phase as surface water baseline data. This sampling strategy and associated findings are presented within the Fairhurst EMG Phase 2, Derby Technical Note (**Document DCO 6.14D**).

## 3.0 Silt Control Measures

- 3.0.1 The below section presents the specific measures which are recommended during the earthworks in order to break the potentially complete silt pathways previously identified. These measures comprise the treatment, slowing and capturing of silt-laden surface run-off.
- 3.0.2 This is an outline Silt Management Plan, and the measures presented below pertaining to the **EMG2 Works** may also be utilised during the wider development area (including the **Highway Works**). However, it is recommended that a specific silt management plan is developed for each component of the development to thoroughly assess and mitigate the risks.
- 3.0.3 **Appendix B** of this report presents an outline Silt Management Plan (SMP) markup overlying the BWB Consulting Concept Drainage Strategy (Drawing No. EMG2-BWB-WAT-ZZ-M2-CD-0501\_Main Site Conceptual Drainage Strategy) for the **EMG2 Main Site**.

## 3.1 Construction Working Areas

### Management of Earthworks

- 3.1.1 The size and extent of all working areas across should be reduced as much as practically possible as the weather requires during the earthworks, to reduce the potential for silt-laden surface runoff, particularly in times of increased precipitation. This may include imposing constraints on working in wet weather conditions.
- 3.1.2 The proposed site levelling at the **EMG2 Main Site** comprising a topsoil / shallow soil strip to achieve the eight plateau zones displayed within the preliminary earthworks cut and fill plan, (**Document DCO/MCO 6.14M**), as well as any levelling proposed as part of the **Highway Works**, should be minimised as much as practically possible. The site strip should be carefully managed in general accordance with a phased site strip plan, which enables the development of specific areas of the site, whilst maintaining surface cover on the other areas to encourage infiltration, and thus minimise surface run-off. Landscaping of any proposed soft landscaped areas should be completed as soon as possible, to mitigate silt-laden run-off from newly completed parts of the development.
- 3.1.3 Due to the presence of shallow groundwater (perched water) encountered during the 2022 ground investigation at the **EMG2 Main Site** (for example, 1.25 m bgl within Made Ground and 3.85 m bgl within Glaciofluvial Deposits), the corresponding Ground Investigation Report (**Document DCO 6.14B**) recommended the implementation of appropriate dewatering measures during excavation. This should also be considered for the **Highway Works** to facilitate access to the **EMG2 Main Site**.
- 3.1.4 The BWB PSSR for the M1 J24 Improvements ((**Document DCO/6.14E**) anticipates potential groundwater between 3.40 m bgl and 17.00 m bgl, utilising available British Geological Survey (BGS) historical borehole log findings along the line of the M1. Therefore, dewatering during excavation may also be considered.

- 3.1.5 The cohesive nature of the superficial deposits and bedrock across the DCO Application decreases the likelihood of any groundwater infiltration as such, but instead increases the likelihood that surface water (precipitation) will pool, particularly on the more impermeable clay lenses. Site management personnel are to ensure that all discharge generated during dewatering is visually free of silt through consistent monitoring. This should be maintained throughout the earthworks and recorded appropriately according to a site inspection checklist (such as the checklist presented within **Appendix C**).

### **Management of Machinery and Material Movement**

- 3.1.6 Prior to any works commencing at the site, designated machine and dumper tracking routes are to be agreed. These routes should avoid tracking near to any identified sensitive receptor. Where possible, machinery should avoid surfaced roads, and only make use of specific designated crossing points. This is with the intention to minimise the movement of any site plant on and off nearby roads, in turn minimising the tracking of excess materials onto surrounding road surfaces.
- 3.1.7 The earthworks should allow for the provision of a road sweeper on site, and within the surrounding road network (such as Hyam's Lane which transects the **EMG2 Main Site**) to minimise the potential of any silt being tracked off the site. The frequency and duration of the road sweeper visits should be assessed by on site management personnel, but should generally be increased in times of bulk earthworks and wet weather conditions.

## **3.2 Stockpiling of Material**

- 3.2.1 Consideration should be given to the location of stockpiled material throughout the earthworks phase, where designated stockpile zones should be located as far as possible from any sensitive receptors identified. Access routes to the stockpiles should be via a surfaced road, to minimise machinery tracking on unsurfaced ground when moving the material.
- 3.2.2 Prevention measures should be put into place to minimise the potential mobilisation of silt from the stockpiled site material, predominantly through aeolian erosion and subsequent deposition into sensitive receptors. The following measures are recommended:
- Stockpiles should be stored in bunds no greater than 2 m in height;
  - All stockpiles should be sufficiently compacted incrementally with use of a mechanical excavator bucket to ensure adequate consolidation of material;
  - All stockpiles should be temporarily covered with the use of a seal to minimise the generation of silt-derived dust. This seal may be in the form geotextile or plastic covers secured to the ground and stockpile, or via hydroseeding techniques to produce an 'anchor' via plant roots, consolidating the material; and
  - Where the above measures are unsuccessful in reducing the generation of silt from stockpiled material, then the use of silt fencing should be considered.

## **3.3 Temporary Plot Drainage**

- 3.3.1 The below section presents the silt management measures which are recommended for the **EMG2 Main Site**, in conjunction with the development of temporary plot drainage. These measures aim to treat, slow and capture any silt suspended within the site run-off, before

reaching the permanent SuDs basins, and can also be applied – with context – to the wider development.

- 3.3.2 The concept of these measures may be applied to the **Highway Works**, whereby all works should be planned with a temporary surface water design in place for each phase of the construction.

### **Temporary Settling Basins – EMG2 Main Site**

- 3.3.3 As outlined within **Section 1.5**, the permanent detention basins / below ground tanks along the western and southern site boundaries of the **EMG2 Main Site** are to accommodate the necessary storm water storage at the site post development.

- 3.3.4 However, during the earthworks, it is recommended to excavate out a temporary settling basin / pond for each Plot, to enable the treatment, slowing and capturing of silt from any silt-laden run-off upstream of the permanent SuDs basins. This subsequently will reduce the likelihood and volume of silt-laden runoff entering the permanent drainage network. Silt management methods recommended for use within each Plot are discussed below.

#### Temporary Settling Basins - Construction

- 3.3.5 During construction of the temporary settling basins within each Plot, the plateau levels should be temporarily adjusted such that runoff is directed straight into the basins. Consideration should also be given to the adoption of temporary soil bunds around each Plot to prevent any exceedance flows from bypassing the deployed silt treatment measures.

- 3.3.6 Each settling basin will need to be stabilised to prevent them from becoming a source of silts. As outlined within Table 1, the ground conditions beneath the site are predominantly cohesive. Therefore, stabilisation of the fines within this material will reduce the likelihood of erosion and thus silt generation.

#### Temporary Settling Basins – Silt Mitigation Measures to be Deployed

- 3.3.7 The inflow of run-off into each temporary settling basin should be controlled via scour protection methods or a headwall. This will act to reduce the rate of erosion via hydraulic methods, and thus subsequently reducing the volume of silt generation.

- 3.3.8 The headwall within each temporary basin can then facilitate secondary protection by the installation of a rock bund which surrounds the perimeters of the headwall. This will prevent silt from being drawn into the bed, and thus reduce the volume of potential silt in suspension.

- 3.3.9 A sluice gate, or similar, should be installed within each of the temporary settling basins to ensure that each basin can be closed off from the wider drainage system, in the case of emergencies. The condition of the gates should be monitored throughout the earthworks by on site personnel, to ensure they remain sufficient. In the event of any silt bypassing the recommended surface water management then proposed measures should be implemented and the sluice should be closed immediately to prevent any potential silt pollution. The sluice should remain closed until the silt mitigation measures have been corrected accordingly.

- 3.3.10 Each Plot temporary settling basin should have a sediment forebay to dissipate the energy of the incoming run-off and to allow for the sediment to settle (desilt) before entering the drainage

network. If required, the runoff which enters into each of the temporary settling basins may be treated through the use of a flocculant to remove the bulk loading of silt.

Temporary Drainage Channels

- 3.3.11 Temporary drainage channels should be constructed within each Plot to direct the treated run-off from the individual temporary settling basins into the permanent SuDs, located along the western and southern site perimeters. The treated run-off should be moved within the drainage channels via pumping or by gravity, with further flocculent addition if required.
- 3.3.12 All temporary drainage channels should be appropriately lined to prevent them from becoming the source of silts.

Outfall into Permanent SuDs Basins

- 3.3.13 The permanent SuDs basins are intended to provide the final polishing treatment of the silt-laden run-off. All SuDs basins should be lined with a series of FlocMats and SiltMats, appropriately scaled to suit the needs on site.
- 3.3.14 In the event that the SuDs basins require desilting and reconditioning post construction, consideration should be given to the use of dewatering bags to simultaneously pump and treat the water.

## 4.0 Monitoring Procedures and Records

- 4.0.1 The site conditions and silt management measures implemented should be monitored throughout the earthworks of the DCO Application by on site management personnel. A 'Site Inspection Checklist' should be completed on a weekly basis to ensure that a comprehensive record of the effectiveness of the system is maintained. A preliminary inspection checklist pertaining to the **EMG2 Main Site** (applicable to **Highway Works**) is presented within **Appendix C**, with the designated inspection locations (subject to agreement) presented within **Appendix B** of the Silt Management Plan. The frequency of the inspection should be increased in periods of wet weather conditions and during times of bulk earthworks. This should include the inspection of designated monitoring points, such as those provided below:
- Inspection of all temporary settling basins and temporary drainage channels to monitor for silt-laden runoff entering the permanent drainage basins;
  - Maintenance, cleaning and replacement of erosion protection measures, such as FlocMats, SiltMats, sluice gates and use of flocculant (if required);
  - The monitoring of the general conditions of the site with respect to silt management, and the identified sensitive receptors at strategic locations to assist in identifying any alterations required to the implemented protection methods throughout the duration of the earthworks.
- 4.0.2 The site inspection checklist is a live document, and should be reviewed and updated when required to reflect any changes to the site conditions and operations during the earthworks. This also applies to the silt management methods implemented throughout the site, where changes to mitigation measures may be required to ensure their adequacy.
- 4.0.3 The measures and guidance set out in this document may be applied to the wider construction phase; however, it is recommended that a specific silt management plan is completed for each Plot.

# APPENDICES

# **APPENDIX A- SILT DEPLOYMENT GUIDES (FROG ENVIRONMENTAL)**

# Floc Mat<sup>®</sup> Deployment Guidance

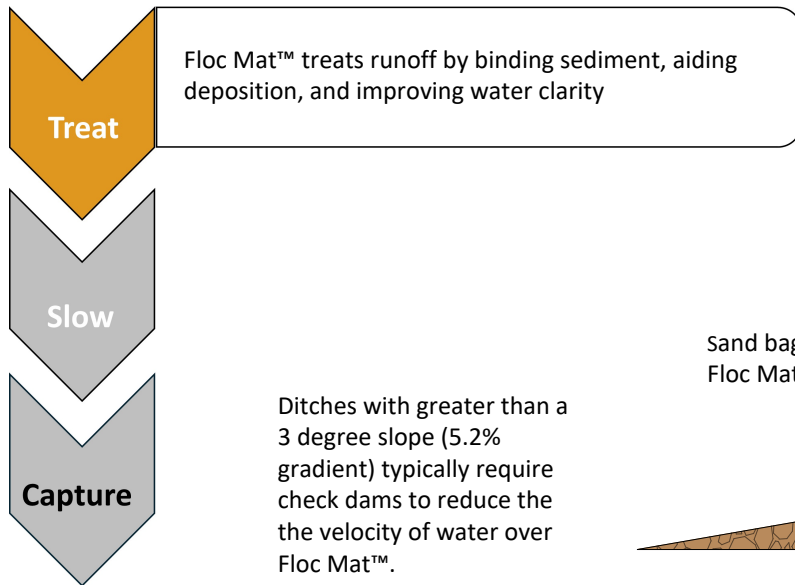
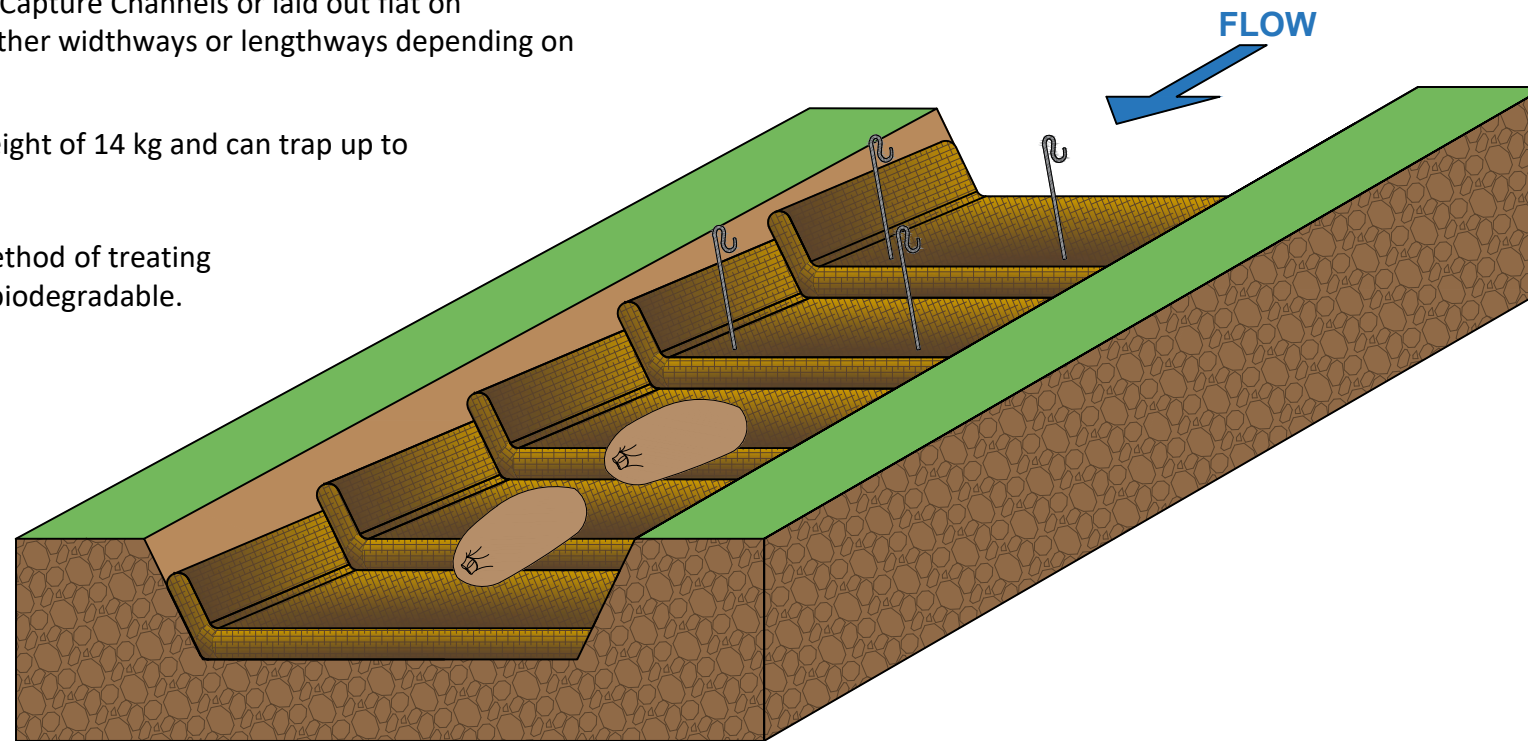
Designed by Frog Environmental, Floc Mat is an environmentally-friendly water treatment and silt capture mat that treats muddy water and prevents silt pollution.

The mat fibres are coated with Clearflow Gel Flocculant, an environmentally safe product that is highly effective at treating fine silt and clay particles on construction sites.

Floc Mats can be deployed in ditches and Silt Capture Channels or laid out flat on dispersion fields. The mats can be installed either widthways or lengthways depending on ditch profile and lining.

Each mat measures 2 x 1 metres, has a dry weight of 14 kg and can trap up to 50kg of silt.

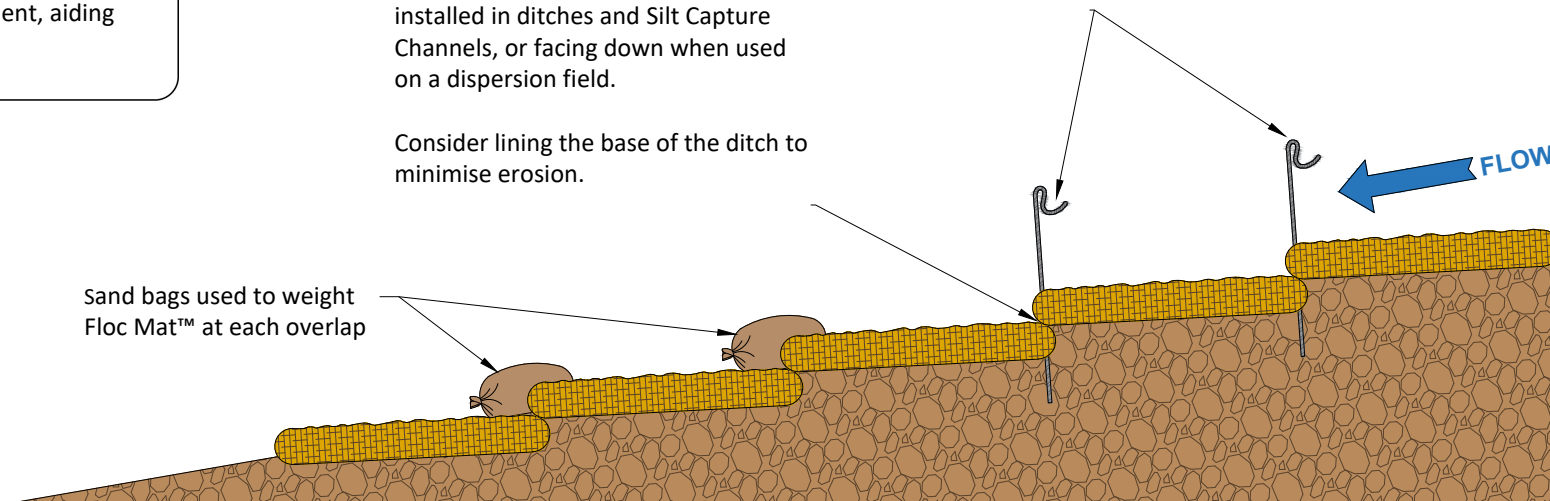
Floc Mat is a low carbon and cost effective method of treating construction site run off. The product is fully biodegradable.



For effective deployment, the edges of Floc Mat<sup>™</sup> should overlap by approximately 15cm. Ensure the sticky side of the mat is facing up when installed in ditches and Silt Capture Channels, or facing down when used on a dispersion field.

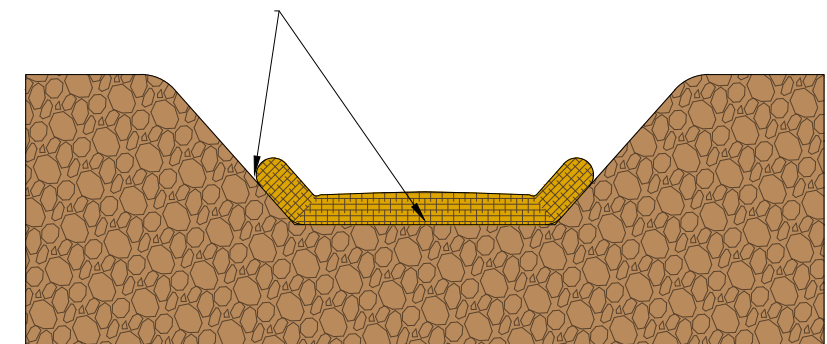
Consider lining the base of the ditch to minimise erosion.

Metal stakes can be used to hold Floc Mat<sup>™</sup> in position (soft beds only). Ensure site has permission to use stakes prior to staking



2D Side Elevation

Ensure Floc Mats<sup>™</sup> are moulded to the profile of the ditch. This will allow water to flow on top of the mat rather than flowing underneath or around the sides.



2D Cross Section

The use of flocculants on construction sites requires permission from the environmental regulator. Proceeding with deployment of a flocculant without regulatory permission is not advised.

Drawing Ref: FM-PD-02v1

Revision: v1

Scale: Drawings not to scale



Drawings are for guidance only, not for construction purposes. Ensure risk has been assessed prior to deployment of products supplied by Frog Environmental. Further advice available by contacting us at [www.frogenvironmental.co.uk/contact-us](http://www.frogenvironmental.co.uk/contact-us)

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# In-ditch Polishing Point

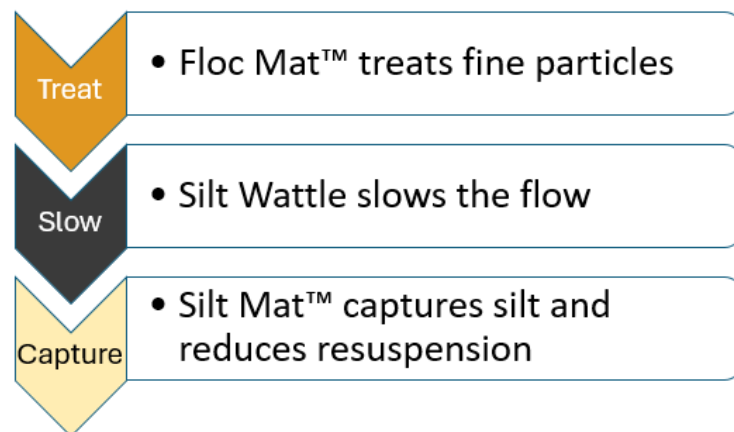
Frog Environmental's Floc Mat<sup>®</sup>, Silt Wattle and Silt Mat<sup>™</sup> combine to make a Silt Treatment Point which manages fine mobilised silt particles, typically generated by clayey subsoils.

In-ditch Polishing Point works passively and does not require pumps to generate flow, making them a low carbon water treatment option.

The treatment points can be deployed in ditches, swales or areas where silty water is present. Multiple points can be used to provide a scalable approach for treating silty surface water.

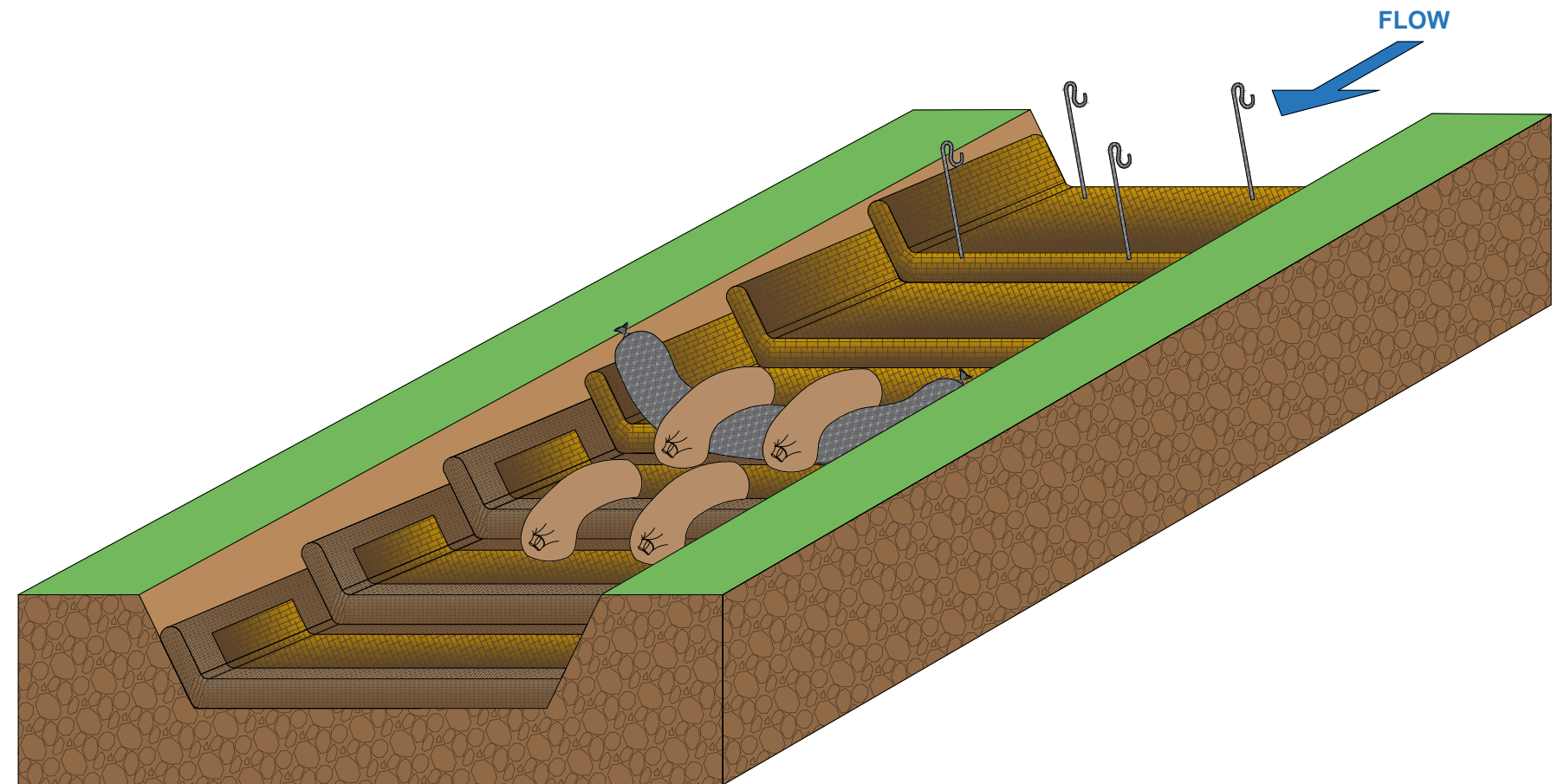
Every site is different, for advice on optimal placement for treatment points, contact our technical team.

## Three of Frog Environmental's products perform different functions at the treatment point:



## Key deployment tips

- Consider lining the base of the ditch to minimise erosion.
- The edges of the mats should overlap by approximately 10cm.
- Ensure mats mould to the profile of the ditch to allow water to flow on top of mat rather than underneath or around the sides.
- Ditches with greater than a 3 degree slope (5.2% gradient) typically require check dams to reduce the velocity of water.
- Maximum water depth flowing over mats should be no more than 20cm.



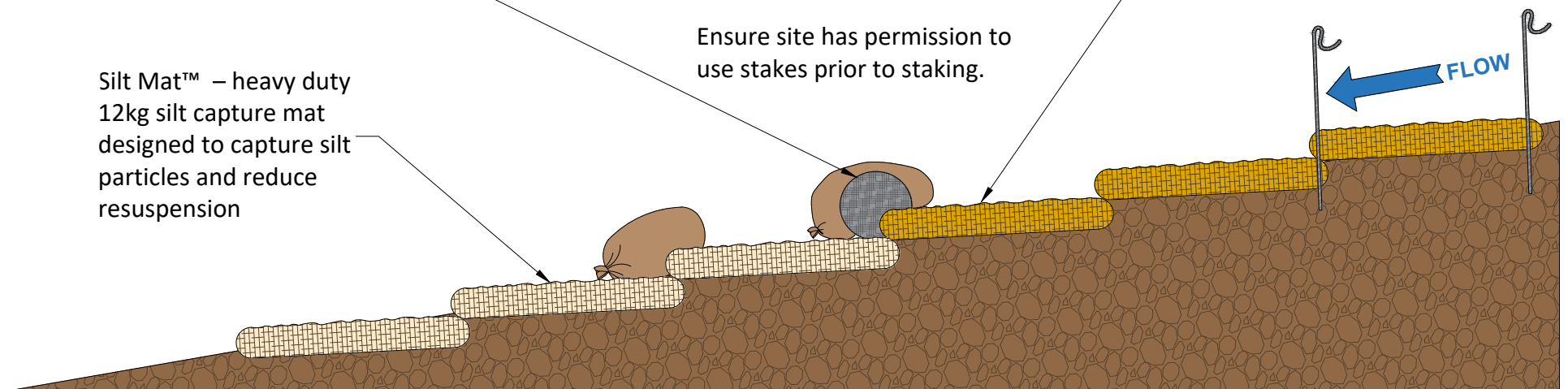
Silt Wattle - a permeable barrier that moulds to the shape of the ditch, slows the flow and improves treatment

Metal stakes can be used to hold the mats in position (soft beds only). Alternatively, use sandbags on hard beds. Use two sandbags on the leading edge of the mat.

Floc Mat<sup>™</sup> - a heavy duty silt treatment mat containing anionic Gel Flocculant to bind particles

Silt Mat<sup>™</sup> - heavy duty 12kg silt capture mat designed to capture silt particles and reduce resuspension

Ensure site has permission to use stakes prior to staking.



2D Side Elevation

Drawing Ref: STP-TD-01v1

Revision: v1

Scale: Drawings not to scale



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# Gel Flocculant Deployment Guidance

## Gravity-fed in-ditch sandbag check dam

Designed by Frog Environmental, using Clearflow Gel Flocculant, this system is used on construction sites to perform separation of fine silts and clayey soils from surface water run-off.

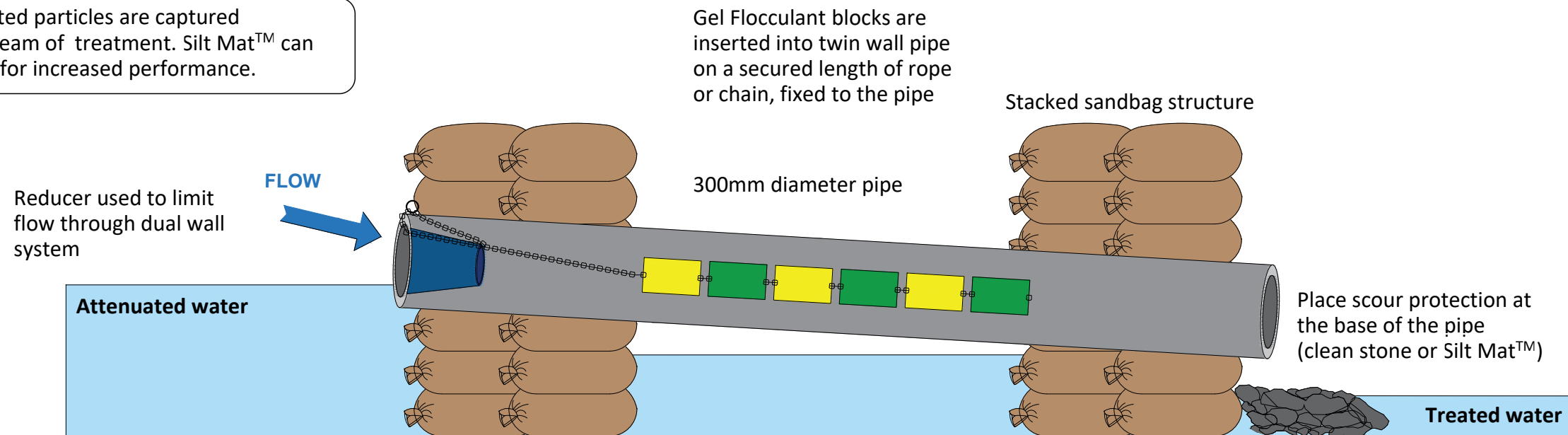
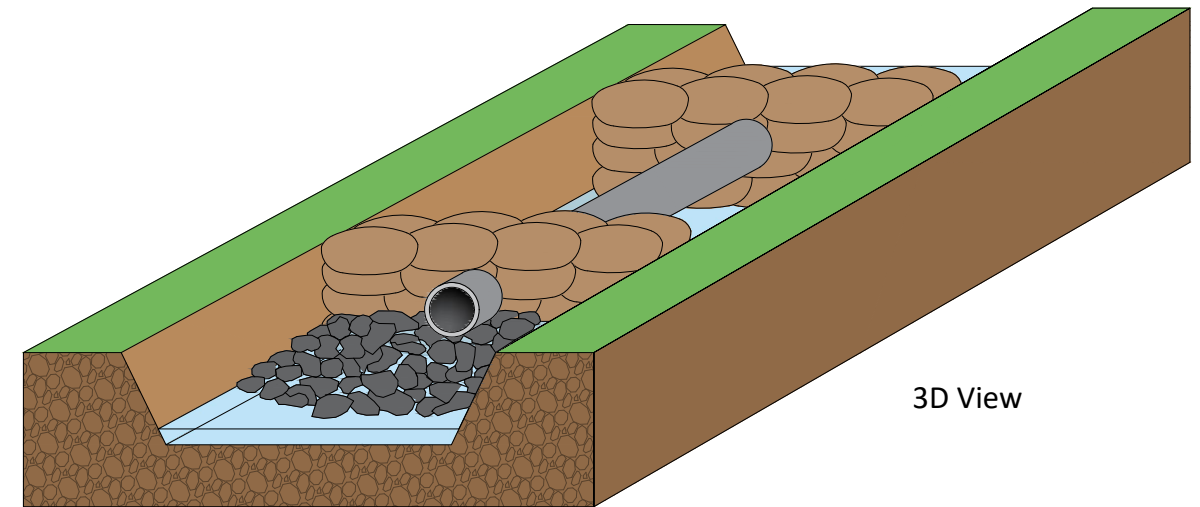
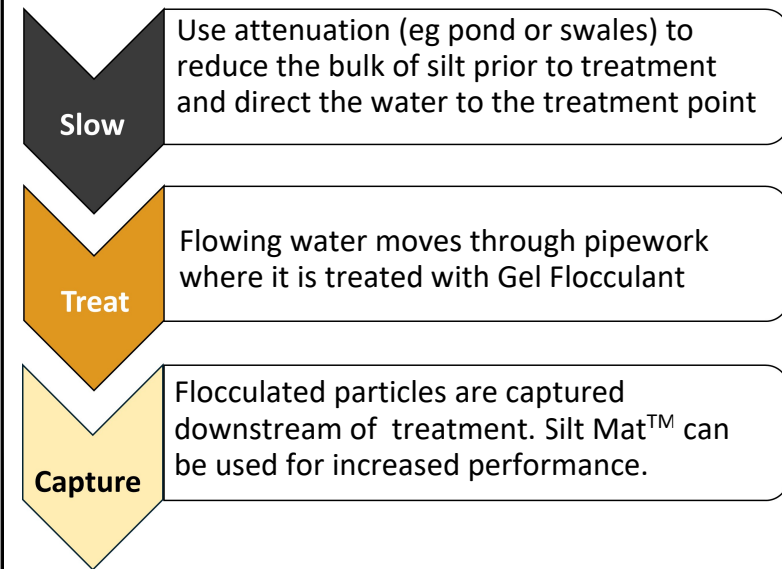
This deployment guide shows how Gel Flocculant can be installed as a low carbon water treatment solution in pipework, negating the need for pumps.

Gel Flocculant is left in situ 24/7, activating on contact with flowing water. This ensures a continuous cost-effective 'rain ready' approach to the management of water quality on site.

Depending on flow rates and silt loading, each block can last up to 120 days and treats water at 200 litres per minute.

Regulatory approval is required prior to the deployment of Gel Flocculant on a construction site. Contact our technical team for specification support, settlement tests and management calculations.

Prior to deployment, consult your Surface Management Plan to confirm your site-specific deployment locations.



2D Side Elevation

Drawing Ref: GF-PD-12v1

Revision: v4

Scale: Drawings not to scale



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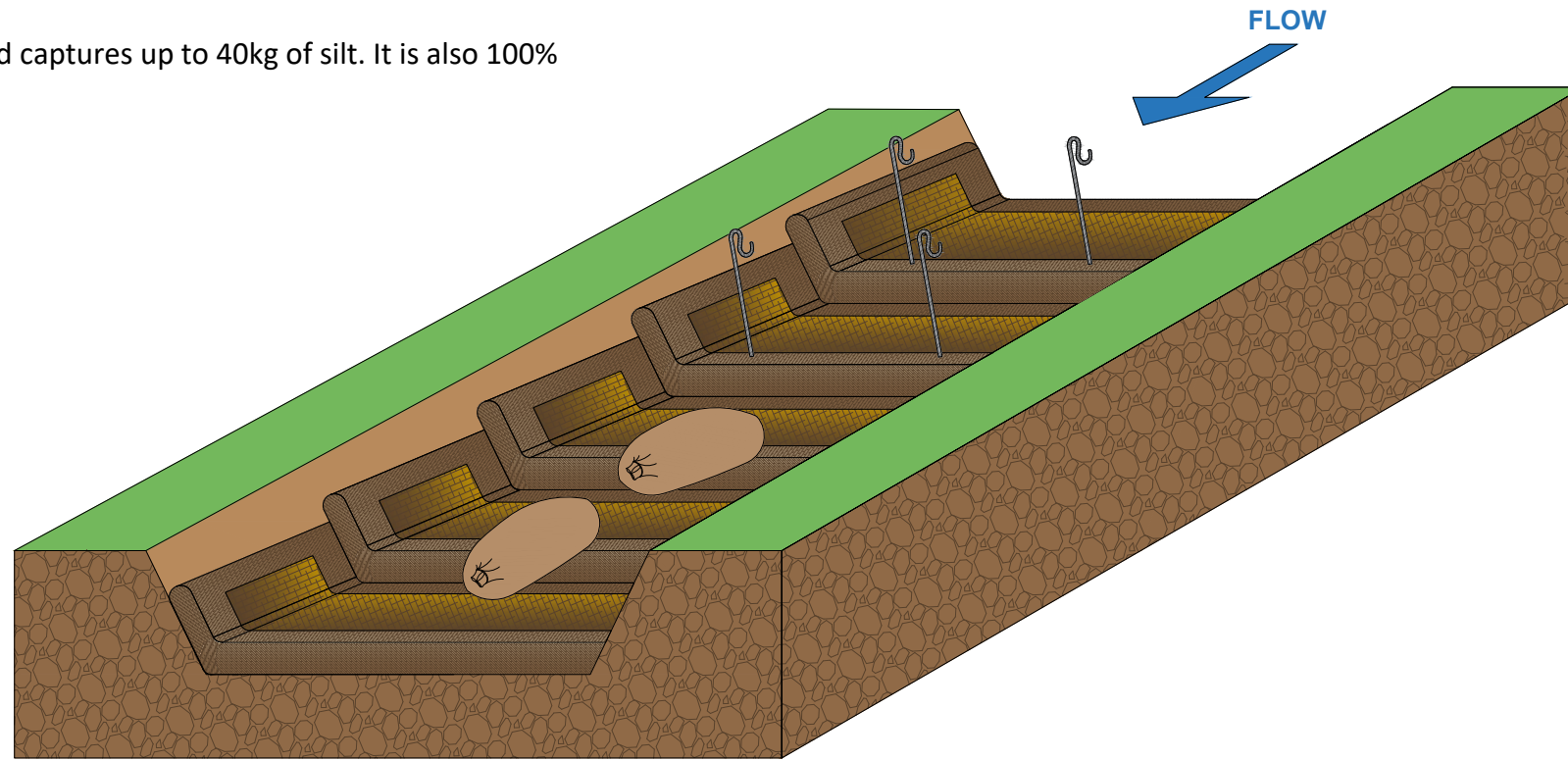
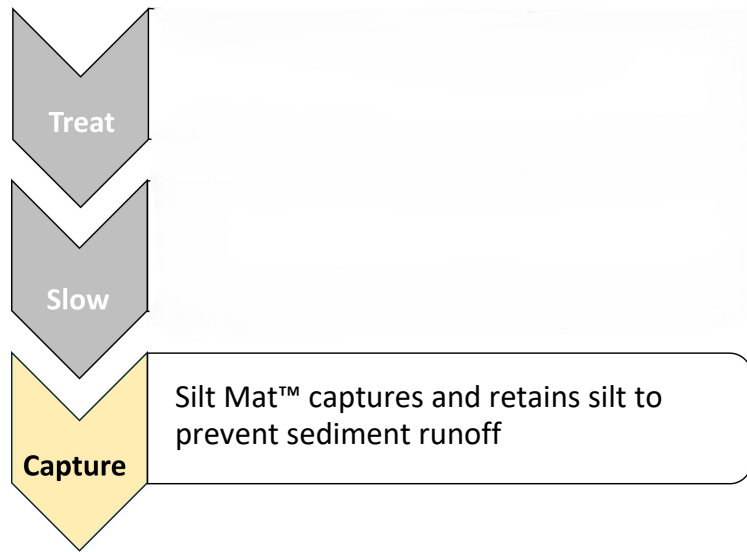
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# Silt Mat™ Deployment Guidance

Designed by Frog Environmental, Silt Mats™ are a simple, yet effective solution which can be laid in ditches to increase friction and trap silt particles. They also help stabilise the ditch and control erosion.

The mats can be installed either widthways or lengthways along the channel depending on ditch profile and lining.

Silt Mat has a dry weight of 12kg, measures 2m x 1m and captures up to 40kg of silt. It is also 100% biodegradable for easy disposal.



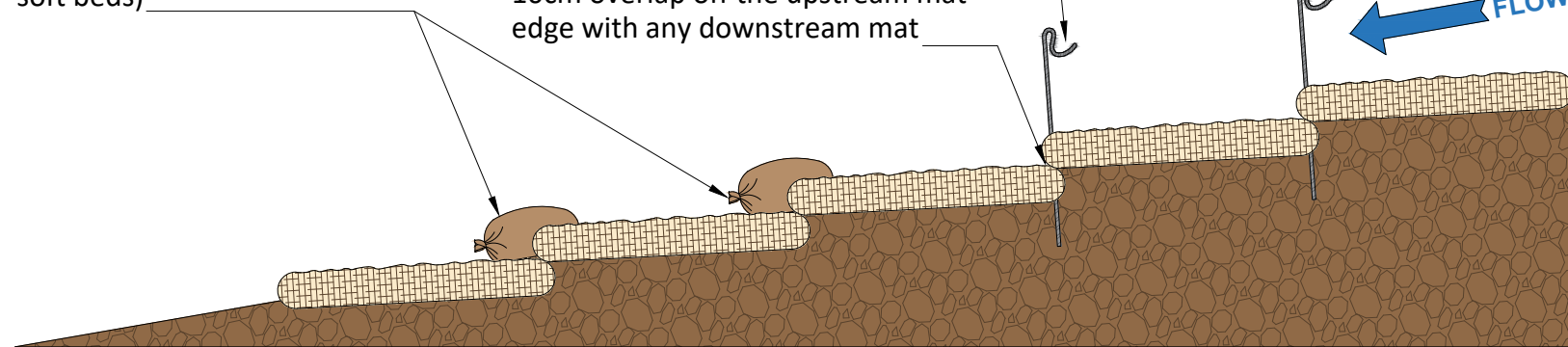
Ditches with greater than a 3' degree slope (5.2% gradient) typically require check dams to reduce the velocity of water

Metal stakes used to hold Silt Mat™ in position (soft beds only). Ensure site has permission to use stakes prior to staking.

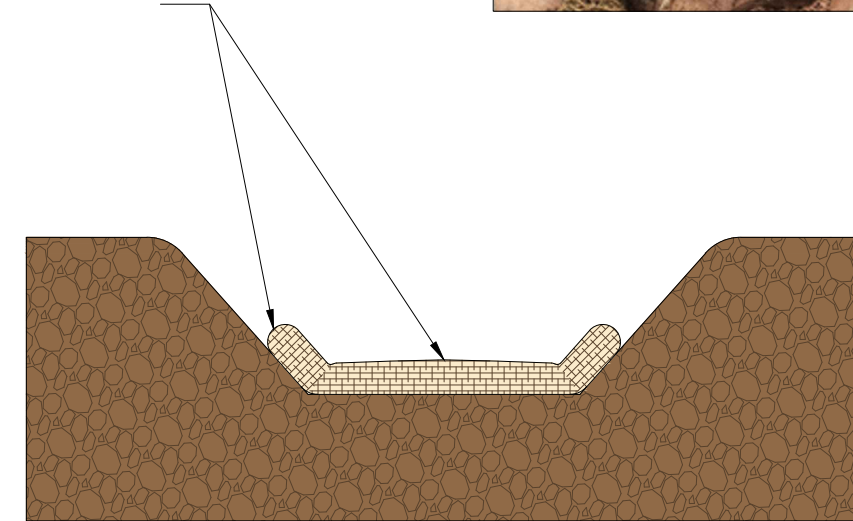
Ensure mats mould to the profile of the ditch and that their corners are elevated up the sides of the ditch to encourage water to flow on top of the mat rather than escaping underneath or at the sides

Sand bags used to weight Silt Mat™ at each overlap (hard or soft beds)

The mat needs to be in contact with the ditch surface and sides, with a 10cm overlap off the upstream mat edge with any downstream mat



2D Side Elevation



2D Cross Section

Drawing Ref: SM-PD-05v1

Revision: v1

Scale: Drawings not to scale



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# **APPENDIX B – SILT MANAGEMENT PLAN, OUTLINE DESIGN**



# **APPENDIX C – PRELIMINARY SITE INSPECTION CHECKLIST**

# SITE INSPECTION CHECKLIST

## SITE: East Midlands Gateway Logistics Park, Phase 2 (EMG2 Project)

Name of personnel undertaken inspection: .....

Date of inspection: .....

Current weather conditions: .....

Description	Comments	Action Required?	Signature
<b>General Site Conditions</b>			
Are the site roads clean and relatively clear of mud / silt?	<i>(e.g. describe the visual appearance of roads and control measures in place)</i>	<i>(eg. If no, increase the frequency of road sweeper visits)</i>	
Is there any tracking over unsurfaced areas, causing silt movement?	<i>(e.g. describe the type of tracking, designated vehicle zones, and visual appearance of surfaces)</i>	<i>(e.g. if yes, potential increase or change in control measures to reduce silt-laden run-off from these areas)</i>	
Is there any dewatering of excavations occurring on site? Does the water look visually clear of silt?	<i>(e.g. describe the activity and location. If water is silt-laden, control measures, and disposal of silt, if present)</i>	<i>(e.g. are control measures sufficient? If no, potential replacement, increase or change of measure or inspection frequency)</i>	
Are control measures in place to prevent silt-laden run-off from stockpiles and unsurfaced areas?	<i>(e.g. note the general condition of stockpiles and control measures and if they are adequate)</i>	<i>(e.g. are control measures sufficient? If no, potential replacement, increase or change of measure or inspection frequency)</i>	
Is there any site run-off?	<i>(e.g. note the location, direction, receptor and visual appearance. Note any control measures)</i>	<i>(e.g. are control measures sufficient? If no, potential replacement, increase or change of measure or inspection frequency)</i>	

**Designated Monitoring Points** \*Note these are likely to change location throughout the earthworks phase, dependent on the schedule of the works. Each plot should be monitored.

<p><b>M1</b></p> <p>What is the water condition of the temporary settling basin? Are the sluice gates in tact / effective?</p>	<p><i>(e.g. visual observations, any discolouring or visible silt in basin. Note condition of the control measure)</i></p>	<p><i>(e.g. is the control adequate? In good condition? May need replacing, or additional control)</i></p>	
<p><b>M2</b></p> <p>What is the condition of the sediment forebays in each Plot?</p>	<p><i>(e.g. visual observations, note condition of the control measure and if it is serving its purpose)</i></p>	<p><i>(e.g. is the control adequate? In good condition? May need replacing, a change to the levels, or additional controls)</i></p>	
<p><b>M3</b></p> <p>What is the water condition of the SuDS basin? Is there any visual evidence of silt?</p>	<p><i>(e.g. visual observations, any discolouring or visible silt in basin, condition of soil bunding)</i></p>	<p><i>(e.g. If visibly silted up, is a change in control measure / site inspection frequency necessary?)</i></p>	
<p><b>M4</b></p> <p>What is the water condition of the south eastern outfall (headwall) / defender?</p>	<p><i>(e.g. visual observations, any discolouring or visible silt in basin)</i></p>	<p><i>(e.g. If visibly silted up, is a change in control measure / site inspection frequency necessary?)</i></p>	
<p><b>M5</b></p> <p>What is the water condition of the Hall Brook to the west of the site?</p>	<p><i>(e.g. visual observations, any discolouring or visible silt in basin)</i></p>	<p><i>(e.g. If visibly silted up, is a change in control measure / site inspection frequency / surface water sampling necessary?)</i></p>	

**General notes and actions to be taken after site inspection:**

**Completion Record**

<b>Position</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>
Site Manager			