

Botley Bypass Phase 3

Construction Environmental Management Plan (CEMP) Main Works

Project Name	Botley Bypass		
Document Reference	MIL_FOR_ENV_004 Botley Bypass CEMP – Main Works		
Project Start Date	March 2025		
Project Duration	2.5 Years		
Prepared By	Angiolina Albertini Environment Manager	Sign: [REDACTED]	Date: 18.11.2024
Reviewed By	Alice Searle Environment Manager	Sign: [REDACTED]	Date: 16/12/2024
Approved By (Document holder)	Senior Project Manager Nathan Kimber	Sign: [REDACTED]	Date: 18/12/2024

Revision Table

Revision	Summary of Changes Made	Revision By	Revision Date:
01	First Revision		

List of Appendices

Appendix	Description	Required Y/N
A	Compound Layout Plan	Y
B	General Site Constraints and Environmental Constraints Map	Y
C	Dust Management Plan (separate document)	Y
D	Refuelling Plan	Y
E	Aspects and Impacts register (separate document)	Y
F	Environmental Emergency Response Plan (separate document)	Y
G	Permits and Consents register (separate Document)	Y
H	Site Waste Management Plan (separate document)	Y
I	Detailed Method Statement for Main Works Construction	Y
J	Drawings to support Main Works CEMP	Y
K	Biosecurity Plan	Y
L	Materials Management Plan	Y
M	Reptile Mitigation Strategy	Y

List of Supporting Documentation

Document Reference	Description	Location
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Dust Management Plan Botley Phase 3 November 2025	Outlines the main risks and mitigations for Botley Bypass Phase 3 regarding dust emissions.	Separate Document applicable to whole site
Site Waste Management Plan	Sets out the waste streams and amounts expected from the main and advanced construction works and the methods in which to follow the waste hierarchy	Separate Document applicable to whole site
Environmental Emergency Response Plan	What actions shall be taken in the event of an environmental incident	Separate Document applicable to whole site
Aspects and Impacts Register	Identifies all aspects and significance	Separate Document applicable to whole site
Materials Management Plan November 2024	Plan for the reuse of materials within the site boundaries to ultimately minimise the creation of waste	Separate Document applicable to whole site
Construction Traffic Management Plan December 2024	Covers traffic movements and restrictions for the duration of the project	Separate Document applicable to whole site
Advanced Work CEMP	Covering the initial vegetation clearance required to begin construction works	Separate Document applicable to advanced works only
Bridge, Outfalls and Culverts CEMP	For works involving construction of bridge and associated outfalls and culverts	Separate Document applicable to bridge works only
Advanced Works FRAP	For advanced vegetation clearance works within 8m of the River Hamble	Separate Document applicable to advanced works only
Bridge Works FRAP	For construction of the bridge, culverts, outfalls and all other works within 8m of the River Hamble	Separate Document in application
Biosecurity Plan Botley Phase 3 Updated November 2024 rev 6	For works around the Hamble	Separate Document applicable to whole site
Rep BS5837 TS AIA TPP AMS MJC-22-0165 Rev8 Botley Bypass Ph3 12 11 24	Arboricultural Report and Method Statement covering Phase 3	Separate Document applicable to whole site
20.0796 Botley Bypass Phase 3 - Ecological Appraisal for Advanced Works - FINAL Rev 1 2024-10-10	Ecological surveys and reporting for scheme	Separate Document applicable to whole site
Botley Bypass Phase 3 Landscape & Ecological Management Plan & Implementation Report December 2024	Management plans for ecology and landscape	Separate Document applicable to whole site
Updated Fisheries Habitat Assessment & Enhancement report J0637/24/08/06 6/12/24 version 2.3	updated fisheries habitat assessment outline enhancement options	Separate Document applicable to Bridge works only
Botley Bypass Phase 3 20.0796 Reptile Mitigation Strategy October 2024	Covering early works onsite to erect reptile fencing and ongoing maintenance	Separate Document applicable to whole site
Discovery Strategy SLR September 2024	Outlines process required should any contaminated materials be found during construction	Separate Document applicable to whole site

Atkins Flood Risk Assessment Nov 2024 updated	Updated FRA covering permanent and temporary works across the site	Separate Document applicable to whole site
HCC Botley Bypass ES Addendum Nov 2024	Addendum to reflect changes to design	Separate Document applicable to whole site
HCC Uplands Farm Estate, land North and East of Winchester Street – Outline Construction Environmental Management Plan	Outline CEMP which includes noise bund area and temporary soil storage area	Separate Document applicable to whole site
WFD Assessment Atkins	Assessment of scheme impact on water Quality	Separate Document applicable to whole site

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1.0 Summary Key Environmental Aspects

Phase 3 of the Botley Bypass scheme is part of a larger delivery of infrastructure designed to alleviate traffic congestion along the A334 Botley high street and the additional congestion from a new housing development and a local secondary school. The scheme was granted planning approval by Hampshire County Council (HCC) in November 2017.

Phase 3 of the Botley Bypass scheme focuses on upgrading the main bypass which is located to the north and east of Botley village and include land to the west of the B3354 Winchester Street. The scope of this scheme is to provide a new single carriageway link between the existing junction at B3354 Winchester Street and the A334 Mill Hill/Station Hill. The total length of the bypass is 1.8km long and 7.3m wide. The single carriageway with a 40mph design speed. A 3m wide shared use foot/cycleway is provided along the southern side.

The 71m long bridge over the River Hamble is a 2-span continuous plate girder steel bridge supported by reinforced concrete abutments with and an intermediate pier on piled foundations. The bridge spans have been positioned such that the River Hamble will flow under the west span and the stream will flow under the east span.

Creation of a new area of fenland habitat to the west of the River Hamble providing ecological and flood compensation for the scheme.

The bridge has been designed to avoid any major construction works within the water courses. However, the bridge crosses an area designated as a Site of Importance for Nature Conservation (SINC) and a designated Conservation Area with this spanning downstream / south of the bridge. The river areas to the south of the bridge are designated as a Site of Special Scientific Interest (SSSI), Solent maritime SAC & Solent & Southampton Water SPA and RAMSAR site. The River Hamble is defined as Main River under the Water Resources Act (1991).

This CEMP covers the main works to be completed as part of Phase 3 of Botley Bypass. This includes the construction of:

- The new single carriageway from Winchester Street to Botley Road including the lighting, drainage, road side barriers and landscaping;
- The shared footway on the northern side of the bypass from the horse corral crossing near Winchester Street to the Newhouse Farm access track junction
- The shared use footway from the Winchester Street junction to a new roundabout on the A334/A3051 at Pinkmead farm;
- A new roundabout towards the south of the new carriageway
- A pedestrian crossing with central refuge island where the bypass crosses the existing Right of Way to the west of the River Hamble
- Landscaping and noise mitigation
- Five balance ponds which shall be used as settlement ponds during the construction phase.
- Temporary outfalls and culverts outside the bridge area

This CEMP will be submitted to support the discharge of Condition 3 of planning permission 17/02023/HCS:

Prior to the commencement of development a detailed Construction Environmental Management Plan (CEMP) shall be submitted to and approved in writing by the Local Planning Authority. The details shall be in accordance with the outline CEMP (Environment Statement Volume 3 Appendix L

dated July 2017) and shall have regard to the protection of existing surface water drains from Botley Rail Depot during construction. The development shall be subsequently implemented in accordance with the approved details.

The main bridge construction including the placement of the piling is covered by Bridge, Outfalls and Culverts CEMP, while the initial vegetation clearance is covered by the Advanced Works CEMP.

The key environmental risks on the project are:

- Waste & Materials Management
- Pollution prevention of ordinary watercourse
- Pollution prevention to ground and drainage
- Surface & Ground Water Management inc. discharges (also covered in Bridge and outfalls cemp)
- Invasive Species specifically Himalayan balsam
- Noise and Air Quality impacts to sensitive receptors
- Reptile exclusion
- Protection of retained trees
- Working within protected habitats

Several environmental opportunities to reduce carbon and resource use exist on the project. A carbon plan will be developed separately to this CEMP and will include the following:

Topic	Summary – Site Specific Controls and Mitigation
Main compound	• Good housekeeping practices • Noise to be kept to a minimum • Designated area within the compound for washing out concrete delivery lorries, concrete pumps and grout lines • CCTV to be installed at site entrances and compounds.
Vehicles and deliveries	• Adherence to Construction Traffic Management Plan • Care for timings and routes to avoid commuting/school hours • Wheel washing facilities, reduction of heavy vehicle such as material transport to and from site, vehicle sharing practices, and timing of vehicle movements. • Inspection of haul road prior to arrival of steel beams • Speed limit set to 15mph across site, 5mph in congested or sensitive areas
Community liaison	• Signage for work progress to be regularly updated
Air Quality & Dust	• Dust monitoring to be completed throughout the duration of works – baseline 3 months prior to construction • Dust suppression and best practices shall be utilised to ensure no negative impact on local residents or landscape. • Wheel washing facilities will be installed at either end of the site where the haul roads meet the public highways • Any mixing of large quantities of concrete or other powdered materials and slurries completed within a sheltered area away and from sensitive receptors where possible. • Revegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable
Cultural Heritage	• Protection of grade II listed buildings at Uplands Farm and gatehouse on Winchester street with site boundary fencing
Ecology & Biodiversity	• Adherence to Biosecurity Plan

	• The works site will be inspected by the Ecological Clerk of Works (ECoW) before any plant or machinery track over the unmade ground. • The principle of Check/Clean/Dry will be used for PPE and equipment before working on other parts of the site or off site. • Tree Protections Areas agreed to prior to works commencing with project arboriculturist • Grubbing out of stumps will only take place after the tree protection barriers have been erected. ECoW supervision. Hay bales will be secured where practicable to prevent siltation • ECoW to attend site prior to works beginning to ensure no new live badger setts and all project team members understand the ecological risks on site • The construction works area will be securely fenced using Heras-type fencing. Boundary features should be protected with a fenced 5 metre buffer • 8 no of trees remaining which cannot be removed until bat presence is confirmed • Reptile Exclusion fencing to be installed, supervised by ECoW • Any vegetation clearance during the nesting bird season (March to August inclusive) require absence of active bird nests to be confirmed by a suitably qualified ecologist
Noise & Nuisance	• Noise and vibration monitoring to be utilised 5 x monitoring stations to be set up and baseline monitoring undertaken prior to construction start • Work to set hours as outlined in section 10.4 • Where appropriate, noise barriers will be installed to mitigate disturbance of local residents and ecological receptors. • All staff and operatives are briefed/trained on the requirements to minimise nuisance from site activities • Night works agreed with the client and local EHO as far as possible in advance of the works; • Affected residents will be communicated with as early as possible; • Application of Section 61 consent
Water Management & Pollution Prevention	• Best practices followed to prevent contamination of drainage and soft standing • Storage of materials or other potentially polluting materials shall be stored within 20m from surface water drainage • Adherence to conditions within the Ordinary Watercourse Consent (OWC for Pinkmead) • Fuel and oil to always be stored on hardstanding and not soft ground. Fuel to be stored overnight in a lockable and bunded bowser. • Flow conveyance in the Pinkmead Stream will be maintained through pumping during the construction period. • Silt fences (geotextile material) will be used alongside all exposed ground where there is a pollution risk. • Where practical, every effort will be made to prevent water from entering excavations. • Visual inspections will be undertaken upstream and downstream and at outfalls throughout the duration of the works at agreed frequencies.
Waste & Materials	• Adherence to Materials Management Plan (MMP) and Site Waste Management Plan (SWMP) • Stockpiles will be located at least 30m away from watercourses where practicable • Closed skips for general waste • In the event that suspected fragments of possible ACMs are identified, works should stop at that location and an assessment made with regard to the extent of material present.

	• Potentially contaminated material to be stored to prevent the spread of contamination. Storage on an impermeable surface or membrane and may require covering or bunding. • Topsoil removed from the Hamble valley to be quarantined with minimal compaction using an excavator to place soils • Sealing will occur with bull dozer to reduce rainwater infiltration. • Fen soils are also contaminated with himalayan balsam seeds and will also be treated as per control requirements stipulated in the biosecurity plan
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2.0 Introduction

1.1 Aim of the Environmental Management Plan

Milestone recognises the importance of Environmental Management and the provision of information, instruction, and training in achieving and maintaining a high standard of environmental awareness amongst its employees and subcontractors throughout the duration of works. To this end Milestone has developed Environmental Management Procedures and gained ISO 14001: 2015 accreditation.

This Construction Environmental Management Plan (CEMP) forms part of the Environmental Management System (EMS) for the Milestone Projects Sector and provides information on how the EMS can be used to adequately manage environmental risks on the project in line with Compliance Obligations including licences and consents, the needs of the parent company (M Group Services), and the needs of the client. This Main Works CEMP is also required to discharge Planning Condition 3 for the works at Botley Bypass.

The objectives of the EMS are to:

- Minimise adverse effects of the environment
- Promote good standards of environmental awareness
- Enhance environmental performance
- Maximise the efficient use of energy, fuel and natural resources
- Minimise carbon emissions resulting from the works
- Develop environmental competence and awareness amongst site personnel at all levels
- Establish roles and responsibilities for environmental management
- Prevent nuisance to the community and avoid harm to the environment
- Implement a policy of reuse of waste, with disposal off site being a last resort
- Enable compliance to be maintained with all compliance obligations, including legal, interested parties, and the requirements of 14001
- Highlight and communicate key environmental constraints

This Plan will govern Milestone's approach to environmental management for this Project and any additional environmental objectives and targets as outlined by the Client. The controls detailed within this plan are to be carried out in conjunction with the applicable Environmental Control Procedures detailed within the Milestone Integrated Management System (MIMS), project licences, conditions and method statements to ensure that environmental management is addressed and rigorously incorporated in all decision making.

This Plan will extend through the entire life of the project providing a transparent and verifiable audit trail for sustainable strategies and solutions, and will provide a culture of environmental responsibility, self-regulation, and encourage sustainability.

All suppliers or consultants providing a product or service are required to provide evidence to show how they will control any environmental aspects that may arise from their works, e.g. within a method statement.

1.2 Success Factors

The success of an Environmental Management System is dependent on commitment from all levels and functions of an organisation. Top management are responsible for ensuring that the system outlined in this CEMP is effectively integrated into business processes, strategic direction and decision making.

1.3 Plan, Do, Check, Act model

Continual improvement on this Project is promoted by applying the Plan-Do-Check-Act model to the EMS. This is briefly outlined below:

- Plan – Establish environmental objectives and processes necessary to deliver results in accordance with the Environmental Policy
- Do – Implement the processes as planned
- Check – Monitor and measure processes against the Environmental Policy and Objectives, and report the results
- Act – take actions to continually improve

1.4 Interested Parties

A number of internal and external factors can affect the ability to achieve the intended outcomes of the EMS. A list of Interested Parties and their requirements from an environmental perspective have been identified for this Project. Where needs and expectations become Compliance Obligations, they will be added to the Project Compliance Obligations Register.

The Project Manager is responsible for liaising with the main stakeholders which includes but is not limited to the following interested parties:

- Hampshire County Council (the client)
- M Group Services
- Local Environmental Health Officers
- Local Fisheries Team
- Local Heritage Officer
- Local Arboricultural Officer
- Local Ecologist
- Local Residents
- Road users, pedestrians and cyclists
- Local Commercial Properties
- Landowners
- Environment Agency
- Southern Water
- Local Pressure Groups
- Police
- Fire Service
- Insurers
- Coastguard

2.0 Project Details

2.1 Site Location

Location	Botley, Southampton, SO20 2LA		
Grid reference	(1)	SU 50933 13895	
	(2)	SU 51264 13766	
	(3)	SU 51991 13120	

Compound location			
	Compound location reviewed and approved by Environment Team	YES X	NO ☐

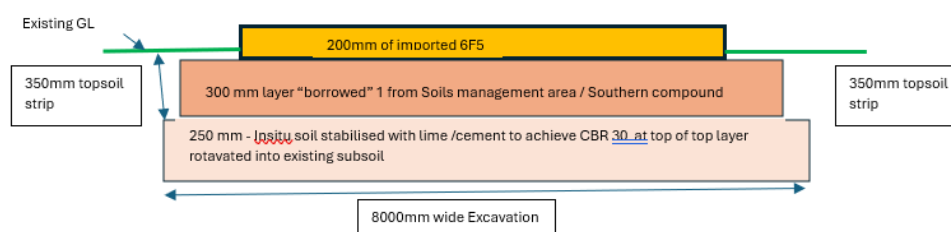
2.2 Proposed Works

Description of works	Works to be completed at Botley Bypass comprise of:
	Main Bypass Construction covered within this CEMP, see construction methodology for further detail, Appendix I Overview shown in figure 2 areas covered within this CEMP illustrated in figures 3-8 Design - A new single carriageway with a total length of 1.8km long and 7.3m wide is being created , including lighting, drainage, road side barriers and landscaping; - A new 3m wide shared use footway on the northern side of the bypass from the horse corral crossing near Winchester Street to the Newhouse Farm access track junction - A new 3m wide shared use footway from the Winchester Street junction to a new roundabout on the A334/A3051 at Pinkmead farm; - An access road on the northern side of the bypass to provide access to Newhouse Farm; - A formal pedestrian crossing with central refuge island where the bypass crosses the existing Right of Way to the west of the River Hamble - Planting and earthworks for landscaping and noise mitigation; - Improvements to the Sherecroft Farm to A334/A3051 Junction including construction of a four arm roundabout at the location of the existing priority junction ,extension of the existing culvert and construction of temporary outfall. - Provisions to connect the proposed 3m wide shared use footway with the existing Rights of Way to the east of the River Hamble and also north of Pinkmead Farm. - Temporary outfall into ditch at Winchester Street Mobilisation - Vegetation removal will take place in February 2025, followed by installation of temporary haul roads and bridges (covered within the Advanced Works CEMP) - Compound Areas Construction

Figure 1 Haul Road layout

The haul road is to be constructed on the south side of the bypass.

The haul road construction is comprised of:



The location of the haul road is shown on the temporary works main drawing.

West of the river the haul road is on the outside of the site boundary.

On the east of the river the haul road is to be constructed on and to the south of the line of the 3m wide pedestrian footway.

Chainages are shown in Figures 3 to 8

Section 1 Ch340-680

- Topsoil Strip
- Install outfall drainage
- Cut and fill general earthworks – including forming of ponds and bund to back of verge level.
- Install carriageway drainage
- Install filter drains
- Install capping subbase kerbs and gullies
- Install street lighting ducts
- Surfacing and landscaping

Section 2 Ch720-1140

- Topsoil strip
- Excavate and fill the earthworks
- Excavated materials to be modified by lime after placing in verge and bund.
- Install the filter drains
- Excavate and install the road box carried drains.
- Install the gullies prior to the kerbs
- Install kerbs top up the filter drains fill and complete subbase.
- Lay up to binder course.
- Complete the bund works including topsoil and installing the acoustic fencing

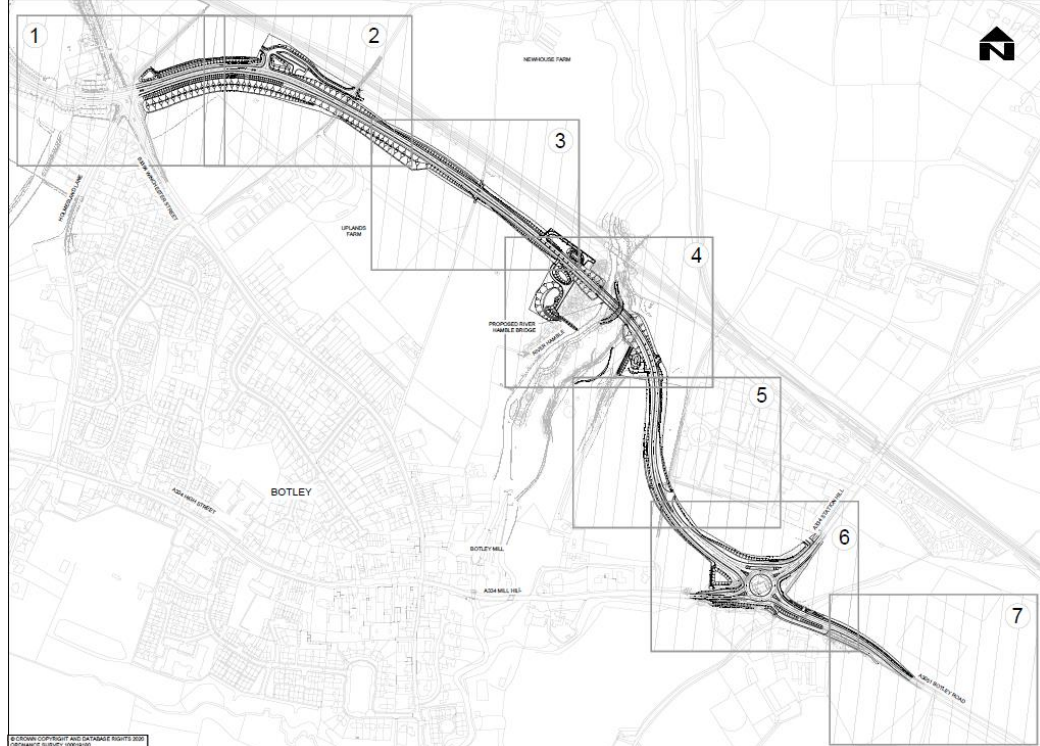
Section 3 Ch 1400-1720

- Haul road to be constructed partly on the pedestrian footpath / cycleway.
- Excavate / fill carriageway including road box from Ch 1400 – Ch 1620.
- Fill material to be modified for moisture content by adding lime at deposition site.
- Areas of fill under the road box to be raised using capping material.
- Install main capping leaving strip along each edge for filter drains.
- Install cross drainage for Hoe Lane accommodation works
- Excavate from capping level to install the filter drains
- Excavate and install the carriageway drainage.
- Top up capping.
- Install first layer of subbase and install gullies prior to kerbs.
- Complete road construction to binder course level.
- Remove haul road – Recycled capping on haul road to be used as fill on the embankment areas either side of the river.
- Construct footpath / cycleway including street lighting near the roundabout.

Culvert & Outfalls

- Installation of 2 no outfalls; Winchester Street and A334 and extension of culvert at Pinkmead Farm

Figure 2 Overview of Site (Area Breakdown)



Areas covered under Main Works CEMP

Figure 3

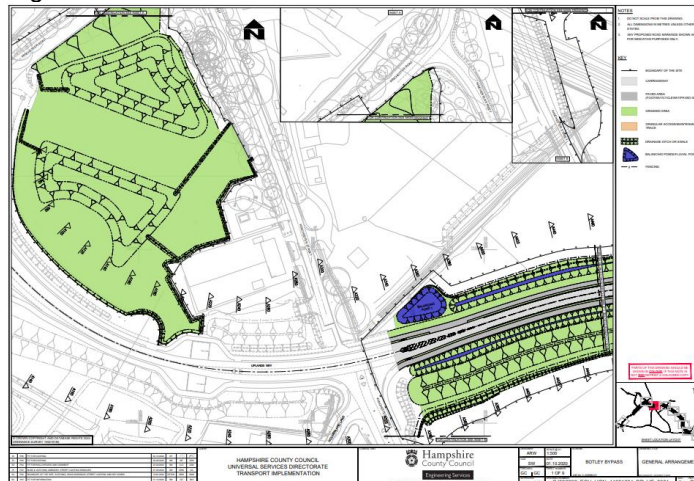


Figure 4



Figure 5



Figure 6

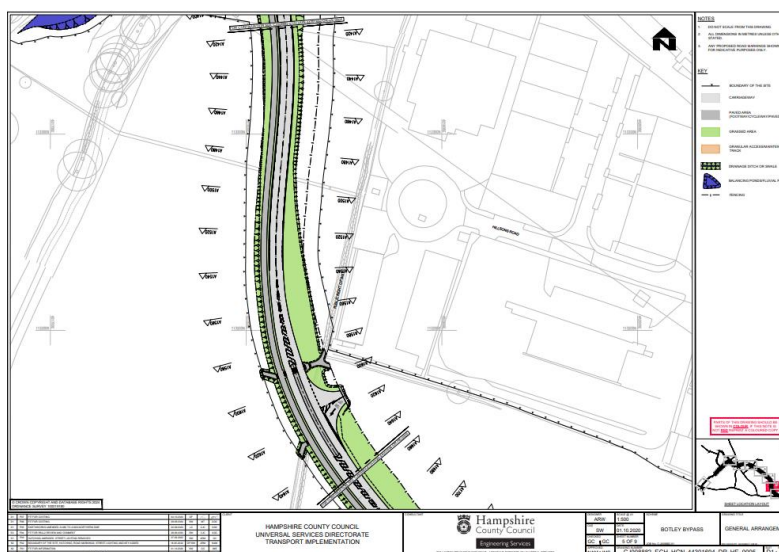
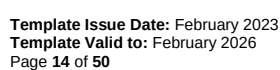
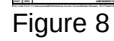
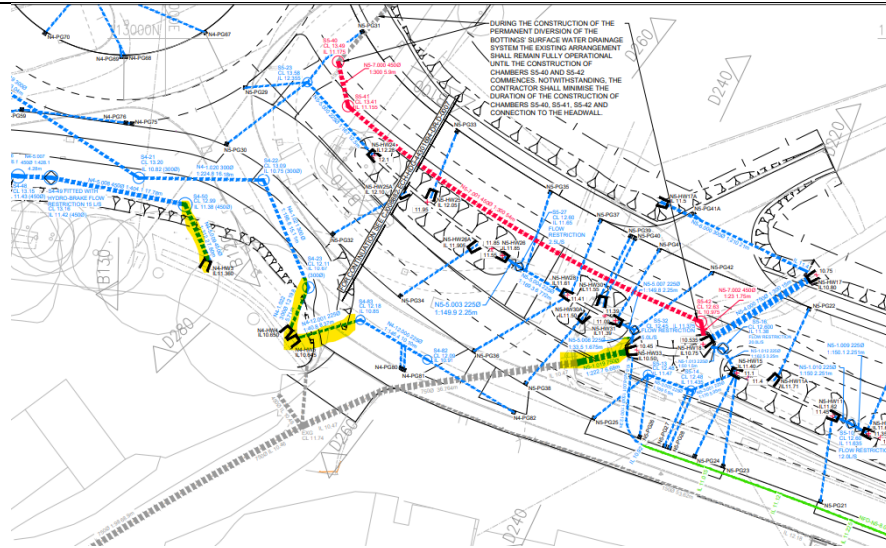


Figure 7





Hamble Bridge Crossing (for more specific information refer to the Bridge, Outfalls and Culverts CEMP):

Construction of a new bridge to carry the bypass over the River Hamble valley to link up with the A334/A3051 junction to the east. The proposed structure will have two spans, each being 34m in length, over the River Hamble and adjacent tributary stream, supported by embankments and abutments at either end, and a central pier. Other features will include:

- A 3.0 m wide shared use footway along the southern side of the bridge;
- Standard safety parapets on either side of the carriageway and safety fencing on the embankments
- Creation of a new area of fenland habitat to the west of the River Hamble providing ecological and flood compensation for the scheme
- Haul roads installed from Winchester Road and the bridges west abutment
- Installation of main outfalls, including 3no temporary outfalls into Hamble and fish pass
- Installation of two temporary bridges

Advanced Works (for more specific information please refer to Advanced Works CEMP)

Works entail an initial period of advanced vegetation clearance and reptile fencing work prior to commencement of construction in May 2025. Environmental management of these works are set out within the Advanced Works CEMP. Construction works are scheduled to be completed in 2027.

2.3 Project duration

Activity	Start date	Completion
Mobilisation	February 2025	May 2025
Main works incl Bridge	May 2025	May 2027

Activity	Ch330- Ch 1100	Ch 1100- Ch 1380 Bridge	CH1380- Ch 1800	Roundabout
Haulroad	April 2025	May 2025	May 2025	
Enabling Works	Mar 2025 -May 2025	Mar 2025-May 2025	Mar 2025-May2025	April 2025-May 2025
Earthworks	May 2025- Jan 2026	July 2025-Oct 2026	July 2025-Nov 2025	May 2025 – Jan 2027
Drainage	Jun 2025 – Feb 2026	June 2025-Oct 2026	July 2025-Oct 2025	Mar 2025-May2025
Roadworks	Sept 2025-Mar 2026	Oct 2026-Dec 2026	Nov 2025-Dec 2026	July 2025-Nov 2025
Surfacing	Oct – Mar 2026	Dec 2026 – Mar 2027	Augus 2026-Mar2027	Nov 2026 - Mar 2027
Seeding	April 2026- April 2027	April 2027	Apr 2027	Apr 2027

2.4 Working Hours

Monday-Friday	0800-1800
Saturday	0800-1300
Sunday & Public Holidays	None
Night Working	Night works may be required for the bridge beam lift and transport – to be confirmed Any other Night works shall only take place in exceptional circumstances and only Monday-Friday following the advance written agreement of Hampshire County Council and Environmental Health Officers of Eastleigh Borough Council and Winchester City Council

2.5 Key Project Contacts

Milestone	Regional Director	Sean Murphy	07774 612497
	Project Director	James Poole	07989 480956
	Senior Project Manager	Nathan Kimber	07876 575135
	Construction Manager	Nigel Steer	07969177526
	Environmental Manager	Angiolina Albertini	07745 644470
	Sustainability Manager	Nicole Turley	07876 873459
	Health, Safety and Wellbeing Advisor	Chris Booth	07823 354265
	Health, Safety and Wellbeing Manager	John Bowers	07974 429706
	Community Relations Officer		
Client (HCC)	Client Manager	Michael Spoor	
	Senior Site Supervisor	Mark Fairley	
	County Arboriculturist (Contractor)	Mark Carter	
	Senior Ecologist	Simon Mason	
	EIA Manager	Kate Symonds	03707795317
Supply Chain	Ecological Clerk of Works	Bluejay Ecology	
	Specialist Emergency Response	Adler and Allan	0800 592 827
Regulators	Environment Agency	24-hour hotline	0800 807 060
		Non-emergency enquiries	08708 506 506
	Natural England	National Nature Reserves line	0300 060 6000

	Local Authorities	Eastleigh Borough Council Environmental Health	023 8068 8000
		Winchester City Council Environmental Health	01962 840 222

3.0 Leadership Roles and Responsibilities

3.1 Leadership

Top Management, for the purposes of this CEMP, shall include the Project Manager, Commercial Manager and Environmental Manager. They are responsible for demonstrating leadership and commitment to the EMS by:

Commitment	Action
Taking accountability for the effectiveness of the Environment Management System	• Responsibility for Significant Aspects and Impacts (see separate Appendix E) • Monitoring and checking EMS during site inspections • Reviewing EMS at Monthly Business Review meeting
Ensuring that the Environmental Policy and Environmental Objectives are established and are compatible with the strategic direction and context of the organisation	• Including Environment as a strategic focus in the Business Plan • Assisting with communication of Policies and objectives • Reviewing EMS at Monthly review meetings • Ensuring Environmental matters are considered in decision making
Ensuring the integration of the Environment Management System requirements into the organisations business processes	• Responsibility for Significant Aspects and Impacts (see separate Appendix E) • Monitoring and checking EMS during site inspections • Reviewing EMS at Monthly Business Review meeting
Ensuring that the resources needed for the Environment Management System achieves its intended outcomes	• Environmental resources to be reviewed monthly at the Monthly review meetings • Environmental resources considered during the bid and planning stages
Directing and supporting persons to contribute to the effectiveness of the Environment Management System	• Ensuring mandatory environmental training is completed • Ensuring adequate resources are available
Promoting continual improvement	• Driving and sharing best practice with other business units • Reviewing continual improvement at Monthly review meetings
Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility	• Responsibility for Significant Aspects and Impacts (see separate Appendix E) • Monitoring and checking EMS during site inspections • Reviewing EMS at Monthly review meetings

3.2 Milestone Infrastructure Ltd Environmental Policy

Milestone's Environment Policy Statement is managed issued and updated by the Head of Sustainability. The Environment Policy Statement shall be communicated to employees working for or on behalf of Milestone Infrastructure Ltd. A copy of the Policy Statement can be viewed on the

MIMS system. Alternatively, a copy can also be viewed on Environment, Health and Safety (EHS) noticeboards and a reference to the policy is included in the visitors induction pack.

3.3 Roles and Responsibilities

Clear definition and communication of environmental roles and responsibilities are required to facilitate effective environmental management.

It is essential that all disciplines and functions work as an integrated team during design and construction to enable compliance with this CEMP, contractual requirements and relevant legislation.

All Milestone employees are responsible for supporting the EMS which is embedded into MIMS and accredited to ISO 14001: 2015. Specific environmental roles and responsibilities are detailed within this section.

Role	Key Responsibilities
Senior Project Manager	- Overall senior management responsibility for the Environmental Management System (EMS) - Ensuring compliance with the principles of ISO 14001 is implemented across the Business Providing adequate resources to implement the EMS effectively
Commercial Manager / Quantity Surveyor	- Compliance with Milestone's Sustainable Procurement Policy - Ensuring compliance with the Milestone Restricted Materials Register - Communicating Milestone policies such as The Sustainable Procurement and Environmental Policies to the supply chain during pre-start meetings - Requesting pre-construction information at bid stage Considering environmental resource at bid stage
Construction Manager and Supervisors	- Ensuring the requirements of MIMS are delivered via this CEMP and that environmental control measures are actioned appropriately - Ensuring compliance with the CEMP - Implementing relevant MIMS Environmental Procedures on site - Complying with the requirements of this CEMP and briefing it to Milestone employees or those working on behalf of Milestone - Managing sub-contractor and supply chain environmental performance - Reporting performance for Environmental KPI's on a monthly basis - Obtaining and recording Duty of Care information - Training Milestone staff or sub-contractors - Applying for licences and legal consents and ensure that the conditions of such consents are adhered to - Ensuring that their area of works is managed in accordance with the principles of good environmental practice
Environmental Advisor / Manager	- Responsible for the day to day co-ordination of the EMS - Checking that all licences and legal consents are obtained and that the conditions of such consents are adhered to - Reviewing environmental information in plans and documents - Reporting information relating to environmental objectives and targets - Undertaking internal environmental audits - Delivering training, awareness and assessing competence - Reviewing non-conformances and ensuring corrective and preventative actions are completed - Assisting with emergency preparedness and emergency response - Identifying significant environmental aspects and impacts - Providing advice, support and assistance to all Project personnel to enable them to manage their environmental and sustainability responsibilities
Ecological Clerk of Works Arboriculturist	Oversee the works and any ecological and Arboricultural mitigation in accordance with the CEMP, Ecological Assessment and supporting

	documentation listed at the start of this document. Ecologist must be suitably experienced and a member of CIEEM • Ensure adherence to the required working methodology and site monitoring requirements as specified by permits and consents • Ensure compliance with any applicable wildlife legislation
All Employees	• Familiarise themselves with the Environmental Policy • Co-operate with the company in fulfilling its compliance obligations • Co-operate with the company to prevent pollution • Conform to requirements of this CEMP • Monitor their workplace for potential threats to the environment

4.0 Planning

4.1 Environmental Aspects and Impacts (see Appendix E for full register)

An **Environmental Aspect** is defined as an element of the project that can interact with the environment. A significant environmental aspect is an environmental aspect that has, or can have, a significant environmental impact.

An **Environmental Impact** is defined as any change to the environment, whether adverse or beneficial, resulting from an aspect of the project.

An **Environmental Risk** is defined as a change to the environment which has potential adverse effects.

An **Environmental Opportunity** is defined as a change to the environment which has potential beneficial effects.

The Aspects and Impacts Register shall be updated following a significant change in risk to the environment from activities related to this Project as determined by the Environment Advisor/Manager and Project Manager. This will also include reviews triggered by changes to compliance obligations associated with work activities. An annual review of the register will also be undertaken as part of the annual management review of the EMS.

The Aspects and Impacts Register is available on the projects shared drive.

4.2 Compliance Obligations

Milestone Infrastructure maintains a Legal Register which details all legal and other legislative requirements applicable to the environmental aspects and impacts of the company's activities. This register is regularly reviewed by the Head of Sustainability and updated by the Legislation Update Service, The Compliance People.

The environment advisor is responsible for disseminating relevant new information to the contract team via:

- Emailing an update
- Discussion at monthly contract meetings
- Discussion at the annual Management Review

Non-legal obligations will be communicated in the same manner. Current non-legal environmental obligations on this project include:

Requirement	Owner
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KPI's as discussed in Section 5.

All

4.3 Environmental Authorisations, Permits and Consents

Projects, sites or individual works packages may require environmental authorisations, permits or consents to operate. This is determined based on the scope of works and any pre-construction information.

Compliance with the conditions of Environmental Authorisations, Permits and Consents is to be assessed during site inspections and audits.

The Permits and Consents Register for this contract is a live document that should be updated following the attainment of any new authorisations, permits or consents. The Environmental Manager is responsible for reviewing this document to ensure it is updated and check for any impending renewals.

Below is a list of potential permits & consents required for the project works, details of these will be contained within the live Permits and Consents Register once applied for:

Permit/Consent	Details
Flood Risk Activity Permit – activities within 8m of River Hamble (covered in Bridge works CEMP)	To be applied for
Environment Agency Discharge Consent (covered in Bridge works CEMP)	Discharge into the River Hamble – in application
Environment Agency Abstraction Licence (covered in Bridge works CEMP)	For dust suppression – to be applied for
Environment Agency Impoundment Licence (covered in Bridge works CEMP)	May not be required – depending on flow restrictions
Ordinary Watercourse Consent (covered in Bridge works CEMP)	Temporary Discharge into Fish Pass
Ordinary Watercourse Consent Applicable to Main Works CEMP	Temporary for small extension of culvert
Natural England Bat Mitigation Licence (covered in Bridge works CEMP)	For the removal of confirmed roosts within the Hamble Valley
Section 61	Cover planing operations at Pinkmead Farm Jan/Feb 2027

5.0 Environmental Objectives and Targets

5.1 Milestone Objectives and Targets

Milestone have Environmental Objectives and Targets which are reported to M Group Services. The Site Manager(s)/Agent(s) are responsible for reporting data to the Environment Advisor/Manager on a monthly basis, including (where applicable) electricity readings, fuel consumption, water consumption, environmental incidents, materials use, waste tonnages and recycling rates. The Environmental Advisor/Manager is responsible for reporting this data via the Environment Reporting Hub.

Milestone currently has the following objectives and targets related to the Environmental policy:

KPI	2022 target	Coverage	Data source	Data published
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Compliance	Reduce Environmental Incident Frequency Rate <0.2	All contracts	Optimus	Milestone Environmental Reporting Hub
Training	95% of staff to have received mandatory training	All contracts	Training database (MGS)	Env Training Dashboard (MGS)
Circular Economy	98% of waste to be diverted from landfill	All contracts	Waste dashboard	Milestone Environmental Reporting Hub
	30,000t of materials recycled via permits	All contracts	Permit data	Milestone Environmental Reporting Hub
Carbon	10% reduction in carbon intensity	All contracts	Oracle data	Carbon Dashboard

5.2 Client or Contractual Targets

Project environmental performance will be reported and discussed at the monthly progress meeting with the client. Submission of sustainability metrics to the client shall be implemented as agreed.

The following data will be reported on a monthly basis:

- HVO (litres used and CO₂e).
- Water use.
- Electricity use (kWh).

6.0 Support

6.1 Resources

Top Management are responsible for the provision of appropriate resources to establish, implement, maintain, and continually improve the EMS. Resources and requirements are discussed monthly at the Project Management meeting.

6.2 Competence and Training

Training is an essential part of MIMS. It is vital that all personnel are aware of their responsibilities under law, the Project and MIMS. Any person performing tasks for or on behalf of Milestone that have the potential to cause significant environmental impacts must be adequately trained and deemed competent by site management. Training will be assessed on the basis of appropriate education, training or experience and documented in the Business Training Matrix.

All Milestone staff with responsibilities for on-site work activities will attend the Milestone Environmental Training Scheme (METS). The training takes approximately 4 hours and provides an overview of key Environmental considerations, legislation, and Environmental Policies and Procedures. The Environment Advisor/Manager shall be responsible for organising and delivering environmental training.

Attendance at training briefs/induction will be recorded in writing and the records held centrally by the Site Manager. At the start of the Project the Site Manager will review training requirements of site staff and operatives and any training identified will be arranged.

Environmental issues for the attention of subcontractors shall be communicated in a variety of methods, including environmental briefings, toolbox talks and information on site notice boards.

6.3 Awareness

The Project Management Team are responsible for ensuring that persons doing work under Milestone's control are aware of:

- The Environmental Policy
- The significant environmental aspects and impacts associated with their work
- Their contribution and the effectiveness of the EMS
- The implications of not conforming with the EMS requirements, including not fulfilling the Compliance Obligations such as the requirements of any consents, licenses or relevant legislation (see Appendix G).

Site specific environmental constraints will be identified during the site induction and included in TBTs and daily briefings. Specific environmental/ecological risks will be managed through targeted TBTs and briefings when relevant to the construction works. TBTS will be issued monthly. Hold points will be identified within the construction programme where environmental briefings or supervision is required.

Attendance at training briefs/induction will be recorded in writing and the records held centrally by the Site Manager. At the start of the Project the Site Manager will review training requirements of site staff and operatives and any training identified will be arranged.

Environmental issues for the attention of subcontractors shall be communicated in a variety of methods, including environmental briefings, toolbox talks and information on site notice boards.

6.4 Communication

6.4.1 General

The Environmental Manager is responsible for internal communication with regards to the EMS. Communications will primarily be delivered at the weekly Project Review Meetings. Senior Management are responsible for responding to relevant communications on the EMS and retaining documented information as evidence of communications as appropriate.

Any consultation with relevant Statutory Environmental Bodies and other interested parties shall be identified and undertaken as determined by the relevant MIMS Environmental Procedure.

6.4.2 Internal Communications

Information relating to the Environmental Management System will be communicated internally to the various levels and functions of the business via routes including but not exclusive to:

- Project progress meetings
- Client meetings
- Site Tours

6.4.3 External Communications

Information relating to the EMS will be communicated externally to interested parties via routes including but not exclusive to:

- Project Review meetings
- Environmental reporting
- Newsletters and external communications as appropriate

6.5 Documentation and Document Control

The IMS determines the documentation required to ensure the delivery and effectiveness of Milestone's Integrated Management System (MIMS) and the requirements of ISO14001.

6.5.1 Creating and Updating Documented Information

All documents required by the EMS shall include a record of the revision status and identify any changes from the previous document within the revision record. All current versions of documents required by the EMS shall be available on the shared drive. Only live active documents shall be published and made available on the shared drive to prevent unintended use of obsolete documents.

6.5.2 Control of Documented Information

Environmental Documentation required for this Project will be included in the Site Folder and held electronically on the shared drive. The Site Manager will ensure that hard copies of all Waste Transfer Notes and Waste Exemptions notices are held on site and forwarded to the Environment Manager and the client as required. The Site Manager will update Milestone's SWMP on a regular basis and ensure that Waste Carrier Licence details and checks on tipping facilities are completed to ensure legal compliance.

7.0 Operation

7.1 Operational Planning and Control

Procedural environmental controls are considered during the activity planning phase, or where applicable during the design phase. Communication of requirements is achieved via relevant environmental documentation such as CEMPs, CPPs and ERAs.

The environmental processes and procedures applied to this contract are defined in MIMS.

7.2 Emergency Preparedness and Response

An Environment Emergency Response Plan has been produced for this Project. This plan details information on all stores, bulk storage vessels, drums or containers intended for storing oils, chemicals or other potentially polluting materials.

Site staff involved with emergency response will be familiar with and have access to the site plan, information on materials on site and their health, safety and pollution risks, appropriate spill response equipment and training in incident response procedures.

The Site Manager will maintain a record of the equipment and materials on site to deal with pollution incidents, including absorbent materials, drain mats or covers, pipe blockers, booms pumps (as applicable), over drums (as applicable).

All environmental incidents and near misses shall be logged on the Environmental, Health and Safety database known as Optimus. Optimus incident notifications are received via email and a text message on receipt of notification of an incident at the Customer Service Centre (CSC). For Intermediate and Significant incidents, the Environment Advisor/Manager will complete an Environmental Incident Notification (EIN) and forward it for further distribution to the Environment Team and wider business.

The Callout personnel for 24 hour coverage shall be arranged by the Project Manager to take control of and investigate out of hours incidents. The names and contact numbers of these personnel shall be displayed on site and relayed to site personnel during the induction process and are detailed in the Environment Incident Control Plan.

Milestone will consult with relevant stakeholders on the appropriate course of action in the event of:

- A substance has entered a drain or watercourse, soaked into the ground or been released into the atmosphere, ground or water in breach of permit conditions

- An unexpected discovery of protected species or habitats
- An unexpected discovery of archaeological importance
-

Spill response training will be undertaken within three months of works commencing on site to ensure that the plan is appropriate, and that staff are prepared to deal with an environmental incident.

Major incidents and environmental breaches are to be escalated to a member of Senior Management, usually the Business Director.

8.0 Performance Evaluation

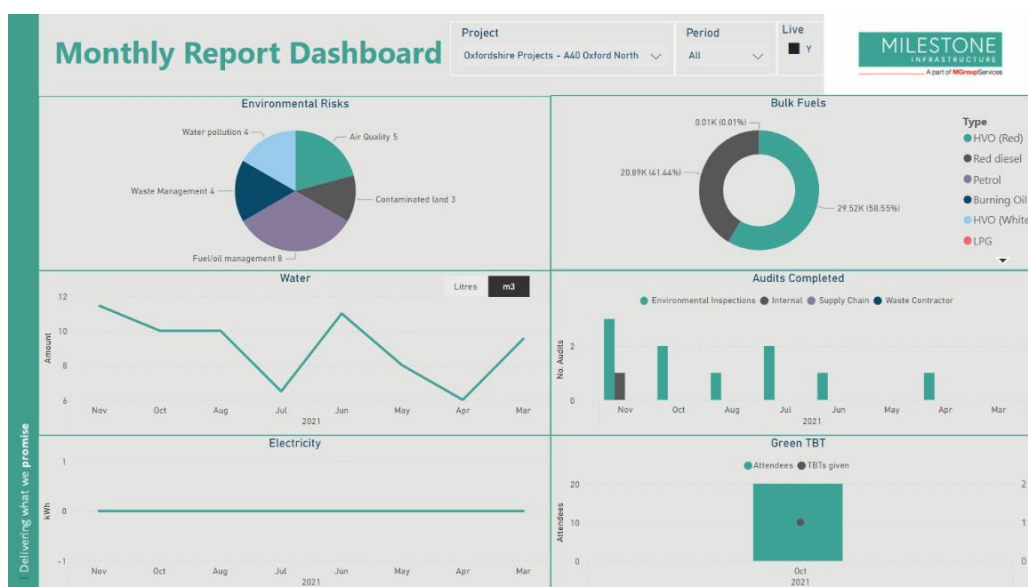
Continuous monitoring of environmental issues and controls on this Project will establish compliance of employees and contractors within the requirements of MIMS, this Environment Management Plan, client requirements and compliance obligations.

8.1 Monitoring, Measuring, Analysis and Evaluation

8.1.1 General

Environmental performance will be measured and reported monthly. Performance measures contribute to the business Objective and Targets. Issues will be reported at a regular SHEQ or operational meeting.

An environmental dashboard similar to the below will be shared with the project and client monthly.



8.1.2

Evaluation of Compliance

Milestone shall take periodic evaluations of environmental requirements by completing environmental inspections and audits. Regular inspections will be undertaken by the Site Manager and Environmental Advisor. Any non-conformances will be shared with the site team and client.

8.2 Internal Audit

8.2.1 Internal Audit Programme

The aim of an Environmental Audit is to assess compliance with processes and documentation as set out in the Integrated Management System.

In addition, where local process or documents are in use they will be assessed for suitability. This audit will determine if relevant components of the EMS are implemented and determine whether the requirements of this Environment Management Plan are effective.

Internal ISO 14001 Environmental audits shall be scheduled and undertaken in accordance with the central audit schedule. Records of audits undertaken shall be held electronically. Audits are undertaken by a member of the Milestone Environment Team. All audit reports are to be sent to the Environment Advisor, Site Manager, Project Manager, Business Director and Sustainability Manager. All corrective actions are managed and recorded on the Procore system. Any observations or non-conformances will be actioned in advance of a subsequent audit taking place.

8.2.2 Environmental Inspections

The aim of an Environmental Inspection shall be to assess and inspect environmental compliance. Environmental Inspections are to be undertaken by the Environmental Manager after project commencement. All inspections should be completed and findings recorded using the Health Safety Environment Inspection template on Procore.

Any compliance issues identified will be raised and communicated as necessary.

8.2.3 Client Internal Inspection Programme

The Environmental Manager will complete joint inspections with the client where requested.

8.2.4 Non-conformances and Corrective Actions

Any non-conformances or corrective actions shall be identified through near miss environment reporting, environment incident reporting, environmental inspections, and environmental audits. All non-conformances and corrective actions shall be recorded electronically on the Procore system.

Any required actions shall be appropriate to the scale of the anticipated or actual environmental impact. The Environment Advisor/Manager shall determine if change is required to the Business EMS and associated documentation.

The Environment Advisor/Manager is responsible for ensuring that the required actions are implemented following a non-conformance or corrective action.

As a minimum any actions raised on the Procore system should:

- Identify the root cause of the issue or non-conformance
- Identify the actions required to mitigate any associated environmental impact (corrective action)
- Identify the actions required to prevent recurrence on the nonconformity (preventative action)
- Identify the person who is responsible for completing the action
- Identify a timeframe for the action to be completed by

The Environment Advisor shall hold responsibility for:

- Raising the non-conformance
- Identifying the root cause
- Identifying any associated environmental impacts
- Identifying any requirements to prevent reoccurrence
- Assigning responsibility for undertaking any identified action
- Identifying an appropriate deadline for undertaking any required action

The results of the inspections and audits will be reported to the Business Manager and any person required to carry out corrective actions.

Any corrective actions recorded must be closed out within the given timeframe. Those items not closed out completely shall be carried forward to the next inspection until they are closed out. If the deficiency persists or is a serious breach, then the Business Director shall be notified directly by the Environmental Advisor/Manager.

8.3 Management Review

The purpose of this review will be to ensure the continuing suitability, adequacy and effectiveness of the Project's EMS, and compliance with the CEMP.

Minutes of Monthly Business Review meetings are to be retained and will record findings from the review process and responsibility for implementing change. The frequency at which the EMS review is held may be increased by the agreement of the Business Director.

9.0 Improvement

9.1 General

Opportunities for environmental improvement will be identified during internal reviews such as audits. Where appropriate this information will be added to the Aspects and Impacts Register.

9.2 Non-conformity and Corrective Actions

Non-conformances will be identified and managed as per Section 8.2.4 above. Any lessons learnt will be shared and evaluated at Sector Monthly Review meetings.

9.3 Continual Improvement

This Project aims to continually improve environmental performance by:

- Driving, trialling, and sharing best practice and innovations
- Implementing goals and targets outlined in the Business Plan

10.0 Detailed Environmental Controls

Note: This section is to be read in conjunction with the Project Aspects and Impacts Register

10.1 Pollution Prevention

Standard Requirements

- All site staff shall receive a tool box talk on the spill response and incident reporting procedure prior to commencing work onsite.
- Any fuels, oils or hazardous materials will be appropriately stored and kept in bunded areas to prevent pollution of surface and ground waters.
- Spill kits will be provided on site for the duration of the works and construction staff trained in their correct application.
- Static plant equipment such as compressors, generators, and tower lights will be equipped with drip trays.
- Fuels, oils, materials (hazardous and non-hazardous) or plant shall not be stored closer than 20m from any watercourse.
- No refuelling of any machinery shall take place within 20m of any watercourse.

- In the event of a pollution incident the Environment Agency will be contacted immediately. The EA's 24 hour incident hotline number is: 0800 807060.

Project Specific Requirements

Environmental Risk	Controls to be Implemented
Material, stockpiles, and equipment storage	Site compounds and stockpiles will be located at least 30m away from watercourses where practicable, and if closer then protection measures in addition to those discussed will include (to be agreed with HCC): - Stockpiles to be bunded to prevent any silt run off - Stockpiles to be covered by a waterproof membrane - Daily checks Project Manager to ensure stockpiles and compound are secure and any possible means of pollution are identified, reported and actioned. - Liquids to be stored in bunded areas and locked away where possible All waste to securely contained
Refuelling	Plant nappies are to be used during refuelling within designated areas across the site. Designated areas will be a minimum of 20m away from watercourse and will contain suitable spill prevention measures including spill kits and drip trays. Spill training prior to construction will be provided to relevant members of staff.
Fuel and oil storage	Fuel and oil to always be stored on hardstanding and not soft ground. Fuel to be stored overnight in a lockable and bunded bowser. Spill kit bins will be available, and easily accessible in key areas. These will be fully stocked and contain a variety of materials, including bags for any waste. Items to be contained within a fully stoked spill kit can be found within the Environmental Emergency Response Plan for Phase 3 of Botley Bypass. A spill response action sheet will be available on site.
Plant and on-site vehicles	Plant will be regularly inspected for leaks and regularly maintained to ensure good condition. All maintenance is to take place off site if possible or only at designated areas in the site compound. Site plant that are compatible with biodegradable hydraulic oils shall use this while working in or over watercourses. Daily hired plant cannot be guaranteed however, appropriate measures shall be taken to protect erodible earthwork surfaces. Any vehicle or plant that is considered a pollution risk is to be removed from site or repaired in an area at least 20m from drainage or a watercourse. Suitably stocked and maintained spill kit on all operational vehicles.
Wash down of tools – Himalayan balsam	With the known presence of Himalayan balsam on site, washing down of hand tools and plant is considered a biological hazard and therefore all plant and tools will have a designated wash down area which should be a minimum of 20m away from site drainage or watercourses. Wash down water shall be isolated, collected and suitably treated on site before being discharged. This shall either be via existing supply or added back into areas that have known presence of Himalayan balsam. Brushes and boot scrapers will be available to remove soil and seeds from boots and tools. For further details refer to the Biosecurity Plan.
Mud and dust	Measures for this are described in the Dust Management Plan (Appendix C) and within Section 10.3. The main points of this document include:

	- Vehicle and plant movements on site will be kept to a minimum and wheel washing facilities/dust suppression will be in place and located away from surface waters. - Bare ground to be kept to a minimum and covered where possible. If being left for longer periods of time will be allowed to regrow and may be reseeded. Dust suppression shall also be used when necessary. - Stockpiles will be covered or suppressed where there is a risk of dust pollution. - A programme of dust monitoring will be implemented.
Rainfall collection	Harvest from compound roof
Welfare grey water	Welfare units to be positioned across the site including at the access points of the Public Rights of Way and either side of the rivers at a suitable distance away from the water courses. Grey water from these units shall be collected and treated on site before going into foul drainage.
Concrete works	Waste concrete, slurry or wash water from concrete or cement activities must not be directly discharged, intentionally or unintentionally, into the watercourses or drainage on site. Any watery concrete within the bund will be then treated with a mix such as DryAdd and disposed of as waste. A designated area within the compound will be provided for washing out concrete delivery lorries, concrete pumps and grout lines. These will consist of a small skip lined with an impermeable membrane. Concrete washout shall be pumped into the skip and will be allowed to harden in the skip before being removed for recycling. The washout liquid will be treated to allow safe reuse or discharge. Loose cement and/or concrete will be cleared as quickly as possible.
Road sweeper disposal point	Temporary designated bunded area left to dry before removal off site.
Site security	The site will remain secure during the entire works and only staff members authorised on site shall be allowed. The site will be secure to prevent vandalism that could lead to a pollution incident. CCTV to be installed at site entrances and compounds. Fuel tanks will be locked while not in use. Daily checks by the Project Manager shall be completed on the compound area to ensure the site is secure.

10.2 Water Pollution & Discharges Standard Requirements

- Any fuels, oils or hazardous materials will be appropriately stored and kept in bunded areas to prevent pollution of surface and ground waters.
- Spill kits will be provided on site for the duration of the works and construction staff trained in their correct application.
- Static plant equipment such as compressors, generators, and tower lights will be equipped with drip trays.
- Fuels, oils, materials (hazardous and non-hazardous) or plant shall not be stored closer than 20m from any watercourse.
- No refuelling of any machinery shall take place within 20m of any watercourse.
- The washing-off of tools in the river shall not be permitted.
- Silty water shall be prevented from entering drainage system or surface water channels through silt fences, sandbags or similar features.
- In the event of a pollution incident the Environment Agency will be contacted immediately. The EA's 24-hour incident hotline number is: 0800 807060.

Project Specific Requirements

Environmental Risk	Controls to be Implemented
Drainage	Storage of materials or other potentially polluting materials shall be stored within 20m from surface water drainage (see Section 10.1 for distances for stockpile, fuel and oil distances from site drainage). If works are being completed within 10m of surface water drainage, drains shall be covered to protect them from a potential pollution event. Once works have been completed the drain/s will be visually inspected to ensure no pollution occurred. Works affecting water course and drainage will also be highlighted with the site-specific RAMS.
Compliance with Ordinary Watercourse Consent/Permits	Permits must be in place prior to the works commencing near ordinary watercourse. Works will be conducted in line with the consents and within summer months to avoid the need for over pumping. Should any adverse findings be discovered during monitoring, instructions on mitigation methods can be found within the Environmental Emergency response Plan for the site (Appendix F). For operational details while working around the River Hamble and Fish Pass refer to the Bridge works FRAP documentation, Ordinary Watercourse Consent and Bridge and Outfalls CEMP
Flooding	Further detail is captured within the Bridge Works CEMP, however main points are below: Updated Flood Risk Assessment by Atkins (2024). These include: • Overnight storage of materials and equipment outside of the floodplain (see Section 10.1). • The rain forecast shall be informally monitored to ensure water levels within the watercourse remain as expected. If water levels are seen to be rising and more rain is occurring / forecast, the site should be cleared, and the working area evacuated. • Flow conveyance in the Pinkmead Stream will be maintained through pumping during the construction period. If the pump capacity is insufficient to deal with the higher watercourse flows, the flood water will be allowed to flow through the (part-constructed, part-remaining) culvert / through the works site. • Where in-channel working is required (e.g. on Pinkmead Stream), it will be undertaken during low flow conditions to reduce any impact on flow regime or hydromorphology. If over pumping is required, the duration will be kept to a minimum to reduce impacts on aquatic species and hydromorphology • Restriction of vehicular movements across newly installed drainage infrastructure with monthly inspections on asset condition to be documented. See Environmental Emergency Response Plan (EERP) for actions taken during a flood risk alert/warning and a flood event.
Groundwater	Groundwater levels may rise and fall over the duration of the works and during excavation perched groundwater may be encountered. Avoidance of polluting groundwater will be completed through pumping excess water to the settlement ponds on site through a temporary pipe from the cut and embankment French drains and will not be pumped directly to ground.

	During construction periods settlement ponds will be installed for the collection of groundwater prior to discharge into water course. Pollution prevention techniques discussed in Section 10.1 will ensure no materials, plant or stockpiles are located within close proximity to the areas close to the watercourses where ground water is highest. Works will be in accordance with Construction of the new drainage assets, good site practice and the Environment Agency Groundwater Protection: Principles and Practice (GP3); CIRIA guidance 532 and Groundwater Control: 515
Silt	In order to prevent run off of silt into drainage the following controls shall be met. • Land disturbance will be kept to a minimum and disturbed areas will be stabilised as soon as possible in accordance with BS6031:1981 Code of Practice for Earthworks. • The amount of exposed ground will be kept to a minimum. • Where possible vegetation shall be stripped as close to the date works are required within that area. • Where practical, stripped areas will be reseeded as soon as possible depending on the time of year. If this is not an option exposed ground may be covered with a geotextile mat or surrounded by a bund as conditions dictate. • Any stockpile in place for an extended period of time will be allowed to re-vegetate naturally. • Any short term stockpiles within 30m will be sealed or covered where necessary. This will be through the use of hessian/geotextile membrane to prevent erosion. Additionally, the toe-ends of sloping ground will be protected with sandbags to prevent erosion and slumping. • Earthworks ditches will be dug, where required. This is particularly important towards Botley Road junction. These will be minimum gradients and, where required, straw bales or clean stone will be installed to act as weirs/filter medium. • Cut-off drains will be installed around the working areas to intercept and divert uncontaminated surface run off away from the area of works and towards the sites balance ponds. • If required cut off trenches will be installed up hill of soil management areas to divert flows away from potential sources of silt pollution. • Silt fences (geotextile material) will be used alongside all exposed ground where there is a pollution risk. • Where practical, every effort will be made to prevent water from entering excavations. • Visual inspections will be undertaken upstream and downstream and at outfalls throughout the duration of the works at agreed frequencies. • Wheel washing facilities will be installed at either end of the site where the haul roads meet the public highways. For further information see the Dust Management Plan.
Existing discharge point (P11203) Botley Rail Depot	An existing discharge point (P11203) is present from both the Botley Rail Depot and residential septic tanks which is located north-east of the site and discharges into the fish pass and then to the River Hamble (see figure below). To ensure we are not causing pollution as part of our works, visual inspections will be completed both upstream and downstream of the works.

Standard Requirements

- No fires will be permitted onsite.
- Vehicles and plant will be well maintained and regularly serviced. All vehicles shall comply with MOT emission standards.
- Haul roads shall be damped down where necessary and kept clean of dirt and soils.
- Dust suppression shall be used on cutting, grinding and drilling activities (wetting or vacuum extraction).
- Speed limits shall be used on haul roads.
- Visual monitoring will be carried out on a daily basis.
- Stationary vehicles shall not be left to idle.

Environmental Risk	Controls to be Implemented
Dust (for sensitive receptors including ecological SINCS)	A Dust Management Plan outlining mitigation principal in line with the Institute of Air Quality Management (IAQM) Guidance Jan 2024 has been developed and all works will be completed in line with this plan. The plan will be accessible to all stakeholders. Key points include: Stakeholder Engagement - Community Engagement and display of contact details for any AQ and dust issues during construction. A complaints system will be available. - If there is potential for cumulative effects from other developments contact will be made to ensure dust movement is mitigated. Site Inspections - The Site Management Team and Environmental Advisor will undertake regular inspections to assess and inspect environmental compliance. The frequency of site inspections will be increased when activities with a high potential to produce dust and emissions are being carried out, and during prolonged dry or windy conditions Site Layout - A site layout plan accessible to all will show main dust causing activities with regards to the most sensitive receptors.

- The works will be planned so where practicable, works causing the largest amount of dust pollution will be completed away from sensitive receptors.
- Barriers along the site boundary, where appropriate, will be used to mitigate the spread of dust to local residents and ecological receptors.
- The compound layout will be designed to mitigate dust as much as possible.

Site Maintenance

- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport
- Mud tracked onto the highway will be avoided as reasonably practicable
- All fencing, barriers and scaffolding should be regularly cleaned using wet methods
- Vehicle and plant movements on site will be kept to a minimum and wheel washing facilities/dust suppression will be in place and located away from surface waters.
- Bare ground to be kept to a minimum and covered where possible. If being left for longer periods of time will be allowed to regrow and may be reseeded. Dust suppression shall also be used when necessary.

Materials management

- Stockpiles will be covered or suppressed where there is a risk of dust pollution. Where possible stockpiles to be stored in areas least exposed to wind
- Any mixing of large quantities of concrete or other powdered materials and slurries are to be completed within a sheltered area away and from sensitive receptors where possible.
- Revegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable

Site Monitoring

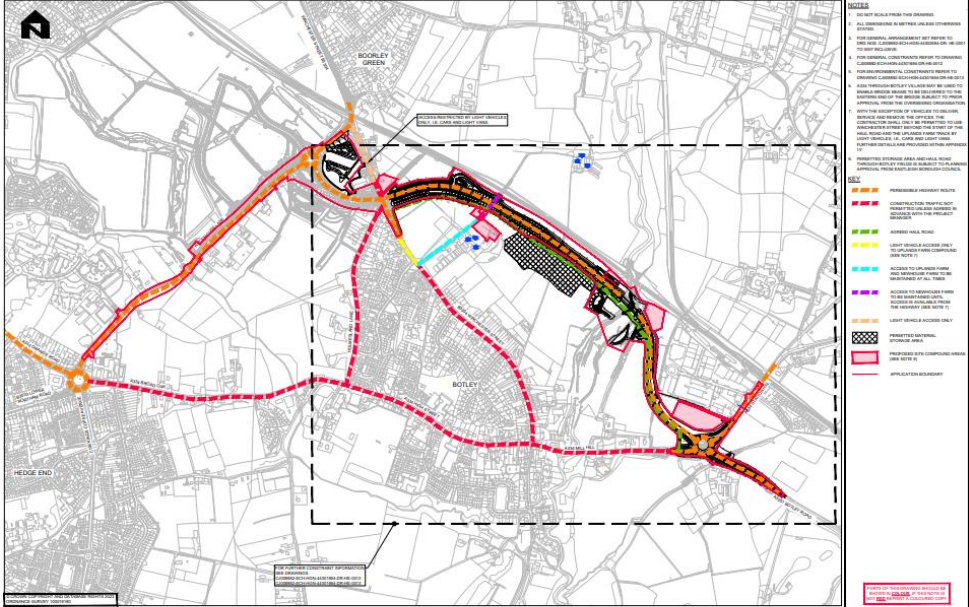
- Baseline to be set up 3 months prior to works commencing at 5 locations
- Visual inspections on daily basis to focus on:
 - (a) monitoring for conditions likely to increase the risk of dust release.
 - (b) visual assessment of any dust release.
 - (c) monitoring of any visible surface soiling.
- Inspections recorded in site diary to include weather and location of visual increase

If visual dust monitoring around the perimeter of the site indicates a problem or the dust monitors are triggered, the contractor will respond as follows:

1. STOP work and contact Site Agent/Project Manager immediately.
2. Damp down working area before recommencing work.
3. Review working methods to ensure best practicable means are being used.
4. Review weather forecasts to confirm whether additional control measures are required.
5. Record on Optimus reporting system. All incidents are investigated, and appropriate corrective action taken.

Operations

- Ensure there is an adequate water supply on-site for effective dust or particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
- Ensure that equipment is readily available on-site to clean any dry spillages. These should be cleaned using wet cleaning methods and as soon as reasonably practicable after they occur.

Movement of plant in around the site	A Construction Phase Traffic Management Plan (CTMP) to be created to detail traffic management measures and access to and from the site. This will include wheel washing facilities, reduction of heavy vehicle such as material transport to and from site, vehicle sharing practices, and timing of vehicle movements. Prior to arrival of steel beams the haul road will be inspected to ensure it is at optimal condition to receive abnormal loads. - Speed limit set to 15mph across site, 5mph in congested or sensitive areas - On-site plant will be chosen carefully to avoid plant that are likely to generate excessive quantities of dust. Should this be unavoidable enclosing, shielding or provision of filters will be employed. - Material deliveries entering and leaving the construction site will be covered by a fixed cover or appropriate sheeting suitable for the purposes of preventing materials and dust spillage. - Construction traffic is not permitted through Botley high street AQMA without prior agreement from HCC Permissible routes within the local area are depicted in figure 10 Figure 10 Permissible routes  The map shows the Botley Bypass area with various routes highlighted in different colors. A legend on the right side of the map defines the route types: Permissible & Restricted Routes (orange), Permissible & Restricted Routes (green), Permissible & Restricted Routes (blue), Permissible & Restricted Routes (red), Permissible & Restricted Routes (yellow), Permissible & Restricted Routes (purple), Permissible & Restricted Routes (brown), Permissible & Restricted Routes (pink), Permissible & Restricted Routes (grey), Permissible & Restricted Routes (white), Permissible & Restricted Routes (black), Permissible & Restricted Routes (dark blue), Permissible & Restricted Routes (dark green), Permissible & Restricted Routes (dark red), Permissible & Restricted Routes (dark yellow), Permissible & Restricted Routes (dark purple), Permissible & Restricted Routes (dark brown), Permissible & Restricted Routes (dark pink), Permissible & Restricted Routes (dark grey), Permissible & Restricted Routes (dark white), Permissible & Restricted Routes (dark black).
Emissions from Construction Plant	Emissions from construction plant have been set out also within the Dust Management Plan. Key points include: - Where workable non-Road Mobile Machinery (NRMM) to use HVO fuel; - The use of diesel- or petrol-powered generators will not be permitted outside core hours; fuel cell, mains electricity or battery powered equipment shall be used where practicable; - Where possible, vehicles and plant shall be electrically powered. - Construction plant and vehicle exhausts to be directed away from the ground and be positioned at a height to facilitate appropriate dispersal of exhaust emissions. - Completion of daily checks on plant and any servicing required to be undertaken.

10.4 Noise & Vibration

Standard Requirements

- Where night works are taking place, letter drops shall be undertaken in accordance with the specification.
- Any compressor brought onsite will be silenced or sound reduced models fitted with acoustic enclosures.
- All pneumatic tools will be fitted with silencers or mufflers.
- All plant items will be properly maintained and operated according to manufacturer's recommendations in such a manner as to avoid causing excessive noise.
- All plant will be sited so that the noise impact at nearby sensitive properties is minimised.
- If noise complaints are received, the Construction Manager shall keep records of the complaint and demonstrate to the complainant that Milestone Infrastructure have made all practicable efforts to ensure noise levels are limited as much as possible. The Construction Manger shall also, if practical, change the method of working or utilise alternative plant to further reduce noise levels.
- The Site Supervisor shall ensure that the peak particle velocity and frequency generated from any operation during the associated works does not present risk of damage to any structure.
- Stationary vehicles shall not be left to idle.

Project Specific Requirements

Environmental Risk	Controls to be Implemented
Nuisance (day-time works)	Sensitive receptors surrounding the site include residential areas along the B3354, A334, commercial offices at Bottings Industrial Estate and Pinkmead Farm and Sherecroft Farm. Botley High Street (A334) is a Noise Important Area, a Noise and Vibration Monitoring Plan (N&VMP) will be created to manage the risk to sensitive receptors. Where reasonably practical, works will seek to avoid and reduce noise (including vibration) from construction activities to minimise potential disturbance to local residents and sensitive receptors. This will include: • Careful selection of routes and programming for the transport of construction materials, spoil and personnel. • Regular maintenance of plant • Switching off plant and equipment when not in use • Using silenced compressors, generators and fans • Management of works timing/duration, removing or minimising the need for working overnight and at weekends where possible • Good community engagement • Ensuring that all staff and operatives are briefed/trained on the requirements to minimise nuisance from site activities • Initial baseline monitoring to be undertaken and levels set - then continuous monitoring to ensure compliance • White noise reversing warnings to be used during any night-time works. • Completed works during agreed upon working hours (0800-1800 Monday to Friday, 0800-1600 Saturday). Additional hours to be agreed Temporary rehousing may be required for residents located in near proximity to the site. Should this or additional noise insulation be necessary this will be conducted in accordance with Section 13.4 of the Construction Code of Practice (CCoP).

	Where appropriate, noise barriers will be installed to mitigate disturbance of local residents and ecological receptors. Where possible, all compressors and generators will be "sound reduced" models fitted with properly lined and sealed acoustic covers which should be kept closed whenever the machines are in use, and all ancillary pneumatic percussive tools should be fitted with mufflers or suppressers of the type recommended by the manufacturers and should be kept in a good state of repair. (instagrid generators to be utilised where possible) The loading and unloading of vehicles (e.g., materials delivery, scaffold, skip use, etc.) should be carried out with care to minimise noise. Additionally, where loading/unloading is being completed in particularly sensitive areas designated times shall be adhered to where necessary e.g.: unloading only during sociable hours.
Night-time works	Road closures may be required to complete some operations safely, and due to traffic flow restrictions some closures are only likely to be granted overnight, typically 20:00 to 06:00. To minimise the potential impact of night works the following measures will be implemented where practicable: • Night works will be agreed with the client and local EHO as far as possible in advance of the works; • Affected residents will be communicated with as early as possible; • Day shifts will be maximised, and only works which cannot be completed during the day will be completed at night; • Noisy activities will be completed as early as possible in the night shift, with a target of completing the noisiest activities first (e.g. breaking out, saw cutting, road planing); • Noisy activities will commence closest to residential properties and move away as the shift progresses; • Low-noise models of plant and equipment will be utilised wherever practicable; • Communication will be sent to nearby residents in advance of planned night works; • Any complaints will be responded to, and additional measures implemented where practicable. To minimise disturbance to local sensitive receptors and to ensure best practices are being completed on site works will be undertaken in accordance with an approved Section 61.
Public interaction	All local receptors including the public, residents and nearby businesses will be kept informed throughout the duration of the works. Information shall include the nature, scale and timings of works as well as who to contact if they are disturbed. The Site Manager is responsible for the notification to residents that may be affected by potential disruptive activities.

10.5 Contamination & Hazardous Substances

Standard Requirements

- Soil arisings will be tested in accordance with WM3 technical guidance. If this has not been done in advance of commencing on site the Construction Manager must coordinate the testing via the Environment Team.
- No soil arisings will leave site without contamination testing results.

- Hazardous soils shall be removed by a licensed waste carrier and accompanied by a hazardous waste consignment note.
- All containers of hazardous material (including oils and paints) shall be stored in a bunded area in accordance with COSHH requirements.
- Hazardous waste must not be mixed with non-hazardous.
- Any used spill kits are to be disposed of as hazardous waste.
- If any evidence of contamination is encountered onsite (i.e. discoloured soils, unexpected odours, fibrous texture to the soils, presence of underground tanks, and evidence of waste pits) works shall halt and the Environment Manager contacted immediately.

Project Specific Requirements

Environmental Risk	Controls to be Implemented
Contaminated soils	Although the risk of contaminated soils is minimal a Discovery Strategy had been produced. The key controls are: • Should contamination be found a weekly report detailing progress and how contamination has been dealt with will be provided • Regular briefings and awareness training will be carried out during the construction regarding the potential or encountering different types of contamination, including the presence of asbestos • If evidence of contaminated material is identified, then work should stop immediately and an assessment made. Where excavation volumes are low (e.g. 5m³) or the contaminated material does not contain free phase hydrocarbons, the excavated horizons can be stockpiled on an impermeable barrier, contained within a bund and covered with polythene sheeting. Otherwise the material is to be left in-situ and covered over with arisings removed from the excavation, or with polythene sheeting placed over the material to prevent infiltration. The material will then be tested and removed or reused as appropriate. Refer to section 10.6 for Waste Management • In the event that suspected fragments of possible ACMs are identified, works should stop at that location and an assessment made with regard to the extent of material present. If one fragment or unbonded fibrous material that could contain asbestos is identified, then this should be sampled, double bagged and sent to the laboratory for analysis. • If many fragments or pieces of potential ACM are uncovered, then works should stop and a sample collected and submitted to the laboratory and a suitably qualified person contacted to provide advice on its control and management. The area should be backfilled and damped down to prevent potential release of dust and Herras fencing installed to prevent entry into the area • A watching brief will be maintained during excavation and segregation of potentially contaminated materials, visual and photographic evidence will be undertaken throughout this operation
Himalayan balsam	Hampshire County Council have confirmed the presence of Himalayan balsam across multiple areas within the site boundaries. A Biosecurity Plan has been developed outlining controls that must be followed during the construction phase of Botley Bypass. The key points of this document relating to hazardous waste are as follows: • Where soils are to be excavated during the works, or from areas around the works site, these areas will be inspected by the EcoW for dead canes and new growth before excavations begin to ensure they are free from NNIS. If Himalayan Balsam is found,

	works in the area will not commence until control measures have been agreed with the ECoW. Plant and machinery working on or near the works site will be scraped down before leaving the area so that soils potentially containing seeds or rhizome are not transported to other areas of the site or off site. Where scraping alone does not remove all mud, jet washing of plant wheels and tracks will be carried out without causing water pollution, this will also be carried out within the works area to prevent potential spread. See Section 10.8 Ecology & Wildlife for more information on measures involving Himalayan balsam as well as within the Biosecurity Plan.
Temporary storage of potentially contaminated material	Where potentially contaminated material is required to be stored while waiting for testing results for suitable disposal, the waste will be stored to prevent the spread of contamination. This will include storage on an impermeable surface or membrane and may require covering or bunding depending on the nature of contamination present.

10.6 Waste Management

Standard Requirements

- The waste hierarchy shall be adopted in all instances (prevent, minimise, re-use, recycle, or recover before disposal).
- All waste generated shall be segregated as far as practically possible.
- All waste shall be stored within a suitable holding facility (designated skip or bin etc.).
- Waste containers shall be clearly marked with their intended contents.
- The Site Supervisor shall ensure that copies of waste contractor permits, and exemptions are held within the site file and included within the Site Waste Management Plan PRIOR to waste being removed from site.
- Waste movements shall be accompanied by a Waste transfer ticket. The Site Supervisor shall ensure that the information held on this ticket is passed to the Environment Team on a monthly basis for inclusion within the Milestone Environmental Report Hub
- Hazardous waste movements shall be accompanied by a Consignment Note. The Site Supervisor shall ensure that the information held on this ticket is passed to the Environment Team on a monthly basis for inclusion within the WMS.

Project Specific Requirements

Environmental Risk	Controls to be Implemented
On-site materials and waste – including waste water	All work will be completed in line with the Projects' Site Waste Management Plan which outlines estimated waste production and end use Waste materials will be removed to compound during same shift or to a suitably permitted facility, using a registered upper tier waste carrier and with appropriate waste documentation in place. Water from dust suppression will be managed through the silt filtration system within the temporary balancing ponds

10.7 Materials

Standard Requirements

- All stored materials shall be covered to prevent dust and litter dispersion and to prevent ingress of rainwater.
- All timber imported shall be FSC or PEFC certified.
- Where feasible recycled products shall be preferred over virgin.
- Material stockpiles should be tidy and secure to prevent damage and loss.
- Soils stored on site should be covered to prevent runoff.

Project Specific Requirements

Environmental Risk	Controls to be Implemented
Reuse and stockpiling of materials on site	All work will be completed in line with the Projects' Materials Management Plan which illustrates locations of cut and fill, reuse and storage areas. Key controls are as follows: • Materials are only to be used following comprehensive representative testing has been performed in accordance with the Design Specification • Materials are only to be used once the results have been assessed and the material has been proven to meet the relevant reuse criteria • Operatives will be trained on how to manage soils ie drop heights and sealing • materials will be stockpiled by material class and properties (where variable) and will be surveyed periodically to monitor volume – stockpiles should be clearly signed • imported materials will be tested prior to import to the site where possible
Topsoil stripping	• Topsoil will be stripped using a 20 tonne excavator, carefully loading into lorries and removed to either storage area or Holmesland Lane north site. Care will be taken to avoid tracking over stockpile areas
Stockpiling of specific fen soils for reuse within Hamble Valley	• Topsoil removed from the Hamble valley will be quarantined with minimal compaction using an excavator to place soils • Sealing will occur with bull dozer to reduce rainwater infiltration. • Fen soils are also contaminated with himalayan balsam seeds and will also be treated as per control requirements stipulated in the biosecurity section 10.8

10.8 Ecology & Wildlife

Standard Requirements

- Should works encounter any protected species, works shall halt and a member of the Environment Team consulted.
- Should works encounter any invasive or injurious species, works shall halt and a member of the Environment Team consulted.
- All vegetation clearance shall be undertaken between September and February where possible.
- If vegetation clearance is required between March and August inclusive, the area of works shall be thoroughly searched by the ECoW for bird's nests on the morning of each day of

works prior to the start of clearance. If a bird nest is found works shall not commence until a member of the Environment Team has been consulted.

- Roots of trees to be retained shall only be cut using a clean hand saw, not a spade or mechanical digger.
- Damp sacking shall be placed around exposed roots of trees to be retained until ready for backfilling.
- All backfilling shall be undertaken ensuring roots are not damaged and soils are not heavily compacted.
- All vegetation clearance, cutting and pruning and other works relating to vegetation shall be undertaken by an NHSS18 Accredited organisation and suitably competent operatives (refer to the NHSS 18 Quality Plan for further information).
- Damage to tree bark and branches of trees that are to be retained shall be avoided at all times. If accidental damage to trees occurs, the Environmental Manager/Advisor shall be consulted at the earliest opportunity.
- If the Project requires work to, or within the vicinity of, Ash trees contact shall be made in advance with the Environmental Manager/Advisor prior to works commencing to ensure against spread of Chalara fraxinea (Ash Dieback).

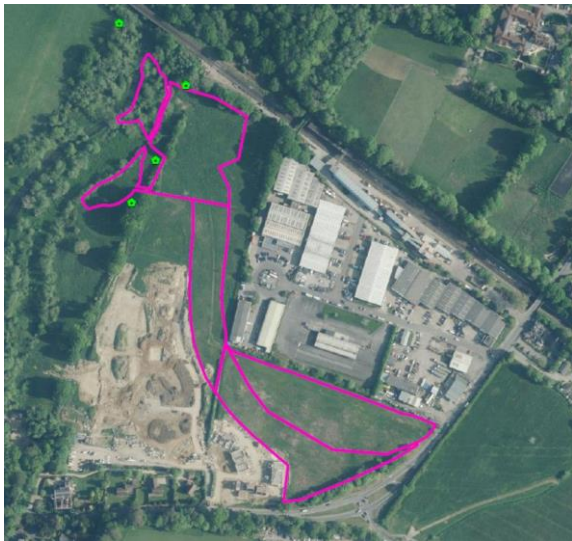
Project Specific Requirements

Environmental Risk	Controls to be Implemented
Himalayan Balsam	Measures to ensure Himalayan Balsam is not spread across the site are outlined within the site Biosecurity Plan. Key mitigation measures outlined in these reports include: • The works site will be inspected by the Ecological Clerk of Works (ECoW) before any plant or machinery track over the unmade ground. • Only persons and plant required to carry out the works will access the areas where Himalayan Balsam has been confirmed as present. • Plant and machinery will be delivered to site free of mud that could potentially bring rhizomes and seeds from other locations. This includes the machine and any attachments such as buckets. • The principle of Check/Clean/Dry will be used for PPE and equipment before working on other parts of the site or off site. • Where soils are to be excavated during the works, or from areas around the works site, these areas will again be inspected by the ECoW for dead canes and new growth before excavations begin to ensure they are free from NNIS. • Track matting will be used where ground conditions allow to ensure plant wheels/tracks remain clean. Matting will be cleaned in situ before removal. • Plant and machinery working on or near the works site will be scraped down before leaving the area so that soils potentially containing seeds or rhizome are not transported to other areas of the site or off site. • Persons working within the works area and nearby will ensure their boots are cleaned down to avoid the potential spread of seeds or rhizomes within the soil. A boot wash facility will be provided for on or adjacent to the works area, consisting of a bath of water with integral brushes. The mud and water will be left at the works site to avoid the potential spread of NNIS.

	• Before any pumping takes place to water courses, permanent outfalls will be constructed to ensure the bank of the watercourse is not eroded. • Settlement ponds will be in place early in construction to pump excess water to avoid flooding. • Water pumping in ditches will be undertaken at a rate to avoid flooding. • Where possible, the works will be undertaken before July/August.
Statutory/Non-statutory designated sites	A number of statutory designated sites are present near the area of works including: • Upper Hamble Estuary and Moorgreen Meadows (SSSI), • Solent Maritime Special Area of Conservation (SAC), • Solent and Southampton Water Special Protection Area (SPA)/Ramsar site. Two non-statutory designated sites are located partly within the area of work • Botley Mill Woodland Site of Importance for Nature Conservation (SINC) • Sherecroft Farm Meadows SINC No Natural England Assents are required for the works however standard mitigation measures, including a variety of good environmental site practices will be employed during the site preparation, and construction phases to minimise the risk of effluent or debris created during works from entering the water environment and potentially affecting statutory or non-statutory designated sites. See Section 10.1 and 10.2 for pollution prevention measures. Should any vegetation clearance or trees removals be required beyond those identified, the client shall be made aware and in agreements. Additional ecological surveys in order to gain consent may be required. To avoid contractor incursion into designated areas the construction works area will be securely fenced using Heras-type fencing. Boundary features should be protected with a fenced 5 metre buffer (unless this would result in the loss of more SINC habitat in constrained areas) and construction access points should be located at existing hedgerow gaps, to avoid severance of habitat connectivity.
Vegetation Removal (scrub, shrubs, grass)	The majority of vegetation removal is programmed prior to main works commencing and is covered by the Advanced Works CEMP rev 3 Oct 2024 and also referenced in the reptile section below
Trees Removal	A responsible person will be appointed by the client to liaise with Project Arboriculturist and Contractor Tree removal will commence under the Advanced Works application and is covered in the Advanced Works CEMP pertaining to this application. Those trees and groups of trees within the footprints of the construction works will be felled close to ground level and the resulting stumps will be grubbed out during the construction works. Grubbing out of stumps will only take place after the tree protection barriers have been erected. Hay bales will be secured where practicable to prevent siltation. ECoW supervision will be required during any vegetation removal and stumping out – including Pinkmead Stream area.

	Those trees that are outside the footprint will be coppiced as referenced in Table 1 of MJC – 22-0165 rev 8 However there are 8 no of trees remaining which cannot be removed until bat presence is confirmed. Further detail is covered within the Bridge Works CEMP
Tree Protection	Tree protection fencing will be installed prior to any demolition or construction vehicles and materials being delivered to site. The tree protection barriers will be erected at the positions illustrated in the plans forming Appendix 5 of the Arboricultural Report <i>Rep BS5837 TS AIA TPP AMS MJC-22-0165 Rev8 Botley Bypass Ph3 12 11 24</i> (Table 1 below) and conform to the specification in Appendix 6 of the Arboricultural report <i>Rep BS5837 TS AIA TPP AMS MJC-22-0165 Rev8 Botley Bypass Ph3 12 11 24</i> or specification within section 6.7.2 of that report. General Measures: - Following tree and vegetation clearance the tree protection barriers must be erected and the site boundary line securely defined by site boundary hoarding/fencing prior to any construction or ground works commence. - A banksman is required when any large/tall vehicles/equipment are in close proximity to the crowns of trees to be retained. - All activities usually carried out in compound areas should take place outside and down slope of tree protection barriers and Precautionary area 1 areas. Including facilities which store oils, fuels and chemicals. Table 1 Tree protection areas  Precautionary Area 1 (yellow hatched area) - Arboricultural watching brief is required for works which extend below the depth of the existing carriageway and subbase.

	• If tree roots 25mm or greater are within areas of excavation, the process will be employed as detailed within Rev 8 section 6.9 of the Arboricultural report. Main points are: • Excavation to required depth by handtools, pneumatic air displacement tool or vac ex tool. • Roots 25mm or greater will be left in place undamaged • Roots less than 25mm will be cut off cleanly • Exposed roots will be covered by 3 layers of Hessian to avoid further damage • Trenches to be backfilled initially without compaction, thin layers of soil can be lightly compressed, once hessian is reached it will be removed. Once fully backfilled construction works can recommence. Soft landscaping and fencing works in the RPA of retained trees • Works will be carried out post construction and follow methodology set out in Section 6.10 of the Arboricultural Report.
Reptiles	West of Hamble Potential impacts to reptiles west of Hamble are considered minimal however, the following will be implemented: • Phased vegetation clearance to be undertaken during active reptile season with close supervision from ECoW • Working areas site boundary fencing to be installed within 5m of site boundary. • Two hibernacula will be constructed within the highways soft estate to the west of the Hamble bridge once the scheme is constructed. East of Hamble Impacts to reptile are considered within this section of the construction footprint • Working areas - Retain buffers around hedgerows/margins where possible to retain highest quality reptile habitat including a minimum of 5m buffer from edge of hedgerows/tree lines/rail embankments for compound areas or temporary works areas. • Enhance areas where reptiles will be moved/encouraged into - hibernacula, log piles, vegetation management. Installation of reptile fencing under Ecological supervision • outside of retained areas to enclose works areas. Install reptile fence in March 2025 followed by minimum 30 visit trap out. • Trapping would need to continue for the minimum 30 days and until there are 5 clear days with no reptiles • Trap out start March (weather dependent: 9-18C with sunshine). Programme trap out March to May for start of works May 2025. • Trap out will need to continue into at least April, but trap out may commence in March where there are suitable conditions. – • Reptiles to be relocated to retained habitats outside construction area and to wider corridor along Hamble • Reptile fencing to be installed as per requirements within the mitigation strategy ref: 20.0796 Appendix M • Reptile fencing must be placed outside of root protection areas of retained trees and should enclose any areas of temporary works. An ECoW should supervise the construction of the fencing. • Arisings from vegetation clearance are to be used to create at least four log piles to provide additional refugia for reptiles. These will be constructed using a range of log diameters to create a range of void sizes within the log piles and placed at locations

	shown in figure 11 below. Log piles shall be a minimum of 2m long x 1m high Figure 11 Temporary exclusion fencing and log pile location  Legend - Log Pile - Reptile fencing
Bats	A number of trees identified for removal cannot be felled due to their poor condition for tree climbing during winter months. Trees with confirmed and probable roosts will be subject to removal only after a Natural England European Protected Species mitigation licence is obtained. Further details are covered within the Bridge Works CEMP
Bats lighting	Avoidance of lighting if possible, if not then the following are applicable: - All luminaires should lack UV elements when manufactured. - LED luminaires should be used where possible - A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component. - Light sources should feature peak wavelengths higher than 550nm - Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be used. - Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt. Any proposed lighting will be subject to review by the ECoW
Badgers	An appointed Ecological Clerk of Works (ECoW) will undertake regular inspections of the works area and will advise if evidence of Badger activity is noted including whether any new setts have been constructed within or adjacent to the works areas. All steep-sided excavations deeper than 0.5m depth will either be entirely covered during non-working hours or, alternatively, fitted with a scaffold board ramp or earth ramp to facilitate badger egress should an animal enter the excavation. Any potential evidence of Badger diggings (which may indicate sett formation) will be reported immediately to the site manager and the ECoW. Weekly inspections by the ECoW/ecologist will be made of any potential Badger resting areas within the construction site. This will include spaces beneath site cabins and beneath/within stored materials e.g. pipes. An

	inspection log will be maintained alongside a record of any mitigating actions. Where necessary, changes to the location and manner of stored materials will be made to avoid potential issues e.g. ensuring materials are stored off the ground. Any pipework of 200mm diameter or greater will be capped when stored. Should any new setts be created within the works areas then further instruction/mitigation may be required as recommended by ECoW
Breeding Birds	Any vegetation clearance during the nesting bird season (March to August inclusive) require absence of active bird nests to be confirmed by a suitably qualified ecologist before a given area of scrub or tree can be cleared. Where active nests occur they would need to be retained with a buffer (approximately 5m) until such time that they became inactive of their own volition, to be confirmed by the ECoW

10.9 Archaeology, Cultural Heritage & Listed Buildings

Standard Requirements

- Should works encounter any coins, pottery, bone fragments, brick/stone foundations, spearheads, or other suspected artefacts, works shall halt, and the Environmental Manager/Advisor consulted

Project Specific Requirements

Environmental Risk	Controls to be Implemented
Grade II Listed Buildings at Uplands Farm and Winchester Street	Boundary fencing will be installed to protect listed buildings, no incursion into area permitted by construction traffic. Listed building shown in figure 12 Figure 12: Grade II Listed Buildings at Uplands Farm and Winchester Street  The figure is an aerial photograph showing a residential area with a large green field. A road, Winchester Street, runs along the bottom left. Several buildings are visible, some of which are marked with colored circles. A legend on the right side of the image identifies the grades of listed buildings: Grade I (green circle), Grade II* (orange circle), Grade II (grey circle), and NL (purple circle). The buildings marked with orange circles are Grade II* listed buildings.

10.10 Visual Impacts

Standard Requirements

- All waste shall be stored within a suitable holding facility (designated skip or bin etc.).
- Any artificial lighting shall be positioned with care to avoid light spill onto any neighbouring properties or vegetation.
- Good housekeeping shall be adopted throughout the Project to ensure a clean and tidy site.

Project Specific Requirements

Environmental Risk	Controls to be Implemented
N/A	

10.11 Sampling & Testing

Standard Requirements

- Whenever waste of unknown condition and characteristics (soil, plantings, demolition waste etc) is removed from site then appropriate sampling and testing must be undertaken prior to its disposal.
- A 'Sampling and Testing Plan' must be completed for each site prior to waste removal.
- All samples must be tested in accordance with the appropriate test suite detailed in HazWaste Online.
- All results must be run through HazWaste Online by a competent, trained member of staff.
- Results from the samples will determine how the waste will be managed and disposed of.
- The 'Sampling and Testing Plan' together with all results must be kept on file and also provided to the waste contractor

Items to Consider:

- Location of site in relation to risk areas (watercourse, residential areas etc)
- Previous site usage/historic records/known pollutants
- Number of samples
- Depth of samples
- Spread of samples
- Testing criteria

Project Specific Requirements

Environmental Risk	Controls to be Implemented
Settlement pond waste	Once the construction phase of the works has been completed, the settlement ponds will require dredging before they can be used as permanent balance ponds. Prior to dredging, the sediment shall require sampling.
Tar bound material	Early testing results have shown there to be no tar bound material present on site. Additional testing is likely to be required as correct coring depths were not originally taken. All asphalt breakout will require PAK testing and recorded within the PAK marker register and uploaded to procore. TBT will be given to all operatives to ensure that the process of PAK spraying and waste segregation is understood. All material with positive results will need to be segregated at all times and samples sent

	off to a lab as per instructions within the MIL_FOR_ENV_013 Sampling Plan and Instruction Form Botley Bypass Phase 3. For samples identified as containing coal tar, the material will be taken directly from site to a facility licenced for 170301*.
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11.0 Project specific tool box talks

The Site Supervisor shall ensure the following Project specific tool box talks are delivered to all relevant site staff at the approved stage in construction:

Discipline	Description	Must be delivered prior to construction	May be delivered throughout construction period
Pollution prevention	Fuel & oil	x	x
	Silt	x	x
	Cement & concrete if making concrete	☐	x
	Bentonite	☐	☐
	Pumping & over pumping	☐	x
	Washing down of plant machinery	☐	x
Nuisance	Dust & air quality	x	x
	Noise & vibration	x	x
	Be a good neighbour	☐	x
Good Practice	Materials handling & housekeeping	x	x
	Archaeology	☐	☐
	Working on previously developed land	☐	☐
	Energy/Fuel efficiency	☐	x
Nature conservation	Bats	x	x
	Badgers	x	x
	Dormice	☐	☐
	Great crested newt	☐	☐
	Adders	☐	☐
	Nesting birds	x	x
	Common Reptiles	x	x
	Giant Hogweed	☐	☐
	Himalayan Balsam	x	x
	Japanese knotweed	☐	☐
	Working around trees	x	x
Waste	Control of sweeper arisings	☐	x
	Segregation of waste	x	x
	Storage of waste	x	x
	Waste hierarchy	x	x

12.0 Emergency Preparedness and Response

All environmental incidents and near misses shall be logged on the Environmental, Health and Safety database known as Optimus. Optimus incident notifications are received via email and a text message on receipt of notification of an incident at the Customer Service Centre (CSC). For Intermediate and Significant incidents, the Environment Advisor/Manager will complete an

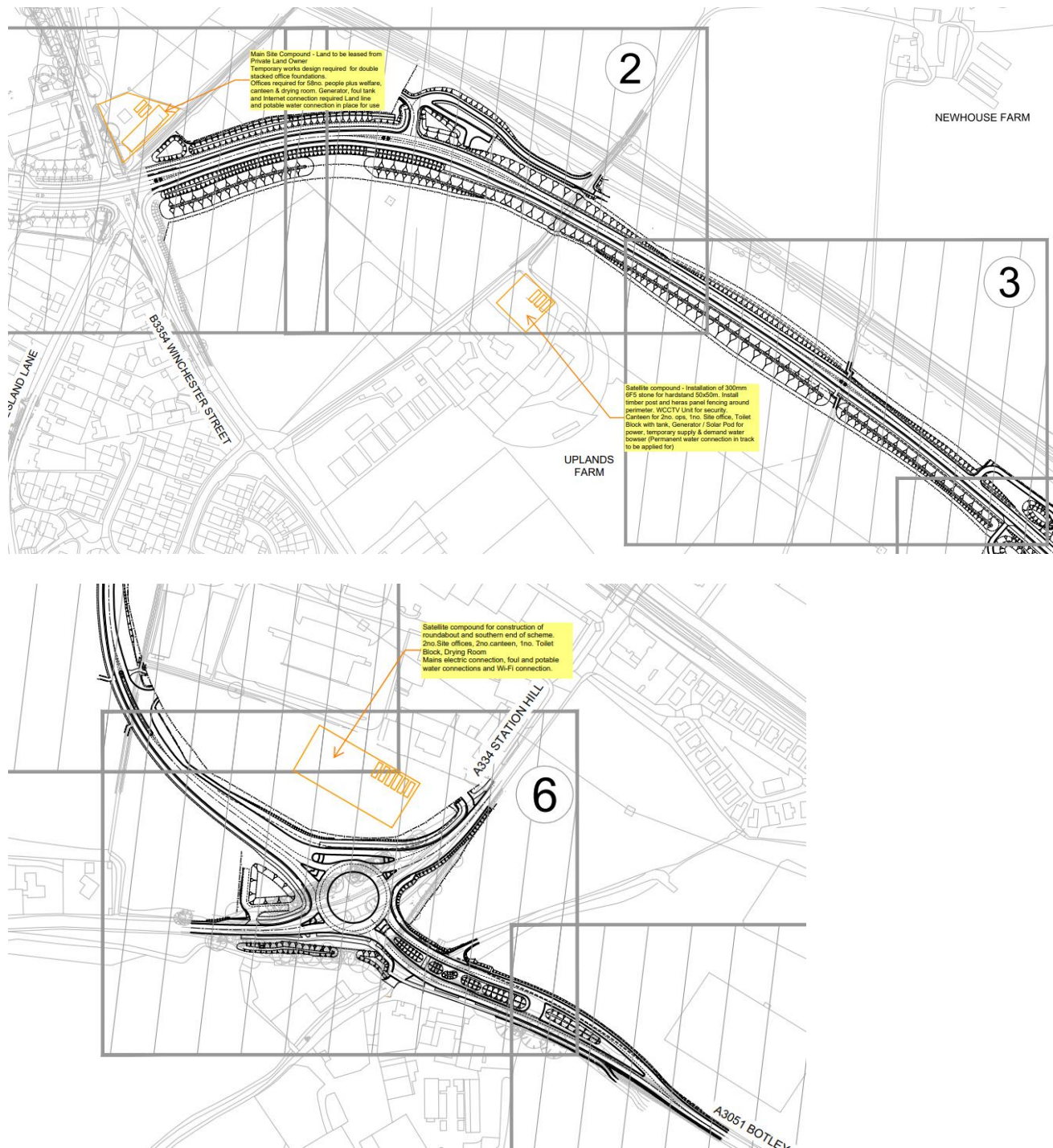
Environmental Incident Notification (EIN) and forward it for further distribution to the Environment Team and wider business.

Major incidents and environmental breaches are to be escalated to a member of Senior Management, usually the Business Director.

Major incidents and environmental breaches are to be escalated to a member of Senior Management, usually the Business Director.

Appendix A – Compound Layout Plan

Only high level plans currently available – full layout to be finalised



Appendix B – General Site Constraints & Environmental Constraints Map

Attached Separately applicable to whole site – available on procore

CJ008882-ECH-HGN-44301694-DR-HE-0012 - GENERAL CONSTRAINTS - D1-P02 (1)

CJ008882-ECH-HGN-44301694-DR-HE-0013 - ENVIRONMENTAL CONSTRAINTS - D1-P02 (1)

Appendix C – Dust Management Plan

Attached Separately applicable to whole site – available on procore

Appendix D – Refuelling Plan

Refuelling will only take place within designated Refuelling Areas which will be agreed with the Environmental Manager. These areas will be suitable bunded to prevent spills, and spill kits will be available.

Generators / pumps

1. All generators and pumps will be integrally bunded and compliant with PPG2
2. When refuelling is taking place, drip trays or plant nappies will be placed under the point where the hose meets the refuelling point on the plant to contain any possible spillages.
3. Any spillages will be cleared up immediately, as per the spill response plan
4. Used spill kits will be stored in the hazardous waste bin before being removed from site by a specialist contractor.

Plant / Machinery

1. Re-fuelling of plant and machinery on site will take place using towable bowzers ensuring the necessary fuel spill kits are available and in place.
2. No refuelling is to take place within 20m of any watercourse.
3. Once refuelling is complete the towable bowzers will be taken back to the refuelling area in the compound.
4. Any spillages will be cleared up immediately, as per the response plan
5. Used spill kits will be stored in the hazardous waste bin before removed from site by a specialist contractor.

Small Plant

1. Small plant will be filled with either 25L green metal jerry cans if diesel, or 5L red metal cans if petrol
2. All small plant refuelling will take place within the designated refuelling area
3. 25L green metal jerry cans will be filled next to the fuel bowser. The jerry cans will be filled on a spill tray.
4. Refuelling of the small item will also take place on the spill tray within the refuelling area.
5. Once refuelling is complete the petrol or diesel jerry cans will be returned to the COSHH store
6. Any spillages will be cleared up immediately, as per the spill response plan
7. Used spill kits will be stored in the hazardous waste bin before removed from site by a specialist contractor.

Appendix E – Aspects and Impacts Register

Attached Separately applicable to whole site – available on procore

Appendix F – Environmental Emergency Response Plan

Attached Separately applicable to whole site – available on procore

Appendix G – Permits and Consents Register

The Permits and Consents Register can be viewed on Procore (currently in application)

Appendix H – Site Waste Management Plan

Attached Separately applicable to whole site – available on procore

Appendix I – Detailed method Statement for Main Works Construction

Attached Separately: Botley Bypass Main Works Construction Methodology Nov 2024

Appendix J – Drawings to support Main Works CEMP

Attached Separately:

CJ008882-ECH-HGN-44301694-DR-HE-0001 GENERAL ARRANGEMENT - D1-P06
 CJ008882-ECH-HGN-44301694-DR-HE-0002 GENERAL ARRANGEMENT - D1-P07
 CJ008882-ECH-HGN-44301694-DR-HE-0003 GENERAL ARRANGEMENT - D1-P06
 CJ008882-ECH-HGN-44301694-DR-HE-0005 GENERAL ARRANGEMENT - D1-P07
 CJ008882-ECH-HGN-44301694-DR-HE-0006 GENERAL ARRANGEMENT - D1-P07
 CJ008882-ECH-HGN-44301694-DR-HE-0007 GENERAL ARRANGEMENT - D1-P06
 CJ008882-ECH-HDG-44301694-DR-D-0001 DRAINAGE LAYOUT - D1-P06
 CJ008882-ECH-HDG-44301694-DR-D-0006 DRAINAGE LAYOUT - D1-P06
 CJ008882-ECH-HDG-44301694-DR-D-0007 DRAINAGE LAYOUT - D1-P07
 CJ008882-ECH-HDG-44301694-DR-D-0008 DRAINAGE LAYOUT - D1-P07
 CJ008882-ECH-HDG-44301694-DR-D-0009 DRAINAGE LAYOUT - D1-P07

Appendix K – Biosecurity Plan

Attached Separately applicable to whole site – available on procore

Appendix L – Materials Management Plan

Attached Separately applicable to whole site – available on procore

Appendix M – Reptile Mitigation Strategy

Attached Separately applicable to whole site – available on procore