

BALFOUR BEATTY UK

**WOKINGHAM MAJOR HIGHWAYS
PROGRAMME**

WESTERN GATEWAY PHASE 2

**CONSTRUCTION ENVIRONMENTAL
MANAGEMENT PLAN (CEMP)**

WMHP-BB-WG2-PLN-PM-0001

Issue	Date	Author	Approved	Key amendments
Draft	09.04.2020	Tenniel Souter		0 Version - Draft for Planning
C01	30.09.2021	Tenniel Souter		1 st Version - Issued for Enabling works
C01.1	26.11.2021	Tenniel Souter	Andrew Bradshaw	2 nd Version - Re-issued for Enabling Works incorporating WBC Highways Comments
C01.2	07.01.2022	Hristoslav Tsonkov	Andrew Bradshaw	3 rd Version - Re-issued for Enabling Works incorporating WBC Highways DC Consultation response 15/12/2021
C02	12/08/2024	Craig Morris	Vinay Roopun	4 th Version - Re-Issued for Enabling and Main Construction Works
C03	28/08/2024	Ben Heath	Vinay Roopun	5 th Version - Incorporating WBC comments received on 21/08/24
C04	27/09/2024	Craig Morris	Vinay Roopun	6 th Version – Incorporating Tony Gee and Lanpro comments from 25/08/24

Contents

1	Introduction	5
1.1	Description of the Programme and Project	5
1.2	Planning Conditions and Discharge	6
2	Purpose and Scope	9
2.1	Purpose	9
2.2	Phasing & Scope	9
2.3	Monitoring and Review	10
2.4	Objectives	10
3	Environmental Management System	11
3.1	Construction Programme	11
3.2	Working Hours	11
3.3	Roles and Responsibilities	11
3.4	Legal Permits, Consents and Licences	12
3.5	Environmental Training	12
3.6	Monitoring	12
3.7	Stakeholder Liaison	13
4	Environmental Impacts	14
4.1	Sensitive Environmental Receptors	14
4.2	Noise and Vibration	17
4.3	Ecology	19
4.4	Vegetation and Arboriculture	25
4.5	Dust and Air Quality	28
4.6	Water Resources	30
4.7	Heritage	32
4.8	Archaeology	33
4.9	Fire Management	33
4.10	Demolition, Excavation, Ground Conditions, Contamination and Hazardous Materials	33
4.11	Material Resources and Waste Management	35
4.12	Waste Disposal	35
4.13	Energy & Carbon	39
4.14	Traffic and Transport	41

4.15	Visual Amenity.....	46
4.16	Pest Control	46
4.17	Site Lighting	47
4.18	Site Fencing.....	47
5	Pollution Incident Response.....	49
5.1	Preparing for Incidents	49
5.2	Incident Response.....	49
5.3	Incident Reporting	50
5.4	Near Misses	52
5.5	Investigating	52

Appendices

Appendix A: Site Safety Tour Template (including Environmental Inspection)

Appendix B: Sensitive Receptors (Built Environment)

Appendix C: Sensitive Receptors (Ecological and Hydrological)

Appendix D: Balfour Beatty Environmental Policy

Appendix E: Enabling Works Scope and Draft Programme

Appendix F: Site Plans

~~Appendix G: Archaeology Plan (Not Used)~~

Appendix H: Ecology Plans and Reports

Appendix I: Site Clearance Plans

Appendix J: Arboricultural Method Statement and Tree Protection Plan

Appendix K: Green Travel Plan Survey

Appendix L - Bulk Delivery Schedule & TM Plans

Glossary of Terms

AQMA	Air Quality Management Area
BPM	Best Practicable Means
CEMP	Construction Environmental Management Plan
CoCP	Code of Construction Practice
CDMP	Construction Dust Management Plan
CIRIA	Construction Industry Research and Information Association
CTMP	Construction Traffic Management Plan
COSHH	Control of Substances Harmful to Health (Regulations 2002)
EHO	Environmental Health Officer (Wokingham Borough Council)
EM	Environment Manager
HEPAO	Historic Environment Planning Advice Officer
HGV	Heavy Goods Vehicles
HSE	Health and Safety Executive
PLO	Public Liaison Officer
PPV	Peak Particle Velocity
PIRP	Pollution Incident Response Plan
PPG	Pollution Prevention Guidelines (published by Environment Agency)
QMS	Quality Management System
SuDS	Sustainable Urban Drainage Systems
SP	Sustainability Plan
SWMP	Site Waste Management Plan
VERs	Valued Ecological Receptors
VDV	Vibration Dose Values
WSI	Written Scheme of Investigation

1 Introduction

1.1 Description of the Programme and Project

Balfour Beatty (BB) has been commissioned by Wokingham Borough Council (WBC) to carry out the design and construction of ten discreet highway infrastructure projects as part of the Major Highways Programme. The completed projects will provide access to and congestion relief from four Strategic Development Locations (SDLs) around Wokingham Borough. These SDLs will separately provide twelve thousand housing units once developers have completed construction works. These projects when linked to the highway infrastructure constructed as part of the ongoing residential developments will provide greatly improved access around the borough.

The Western Gateway Phase 2 Project (WG2) forms part of the South Wokingham Distributor Road (SWDR). The project consists of the construction of a new roundabout at the junction of Molly Millars Lane and Finchampstead Road.

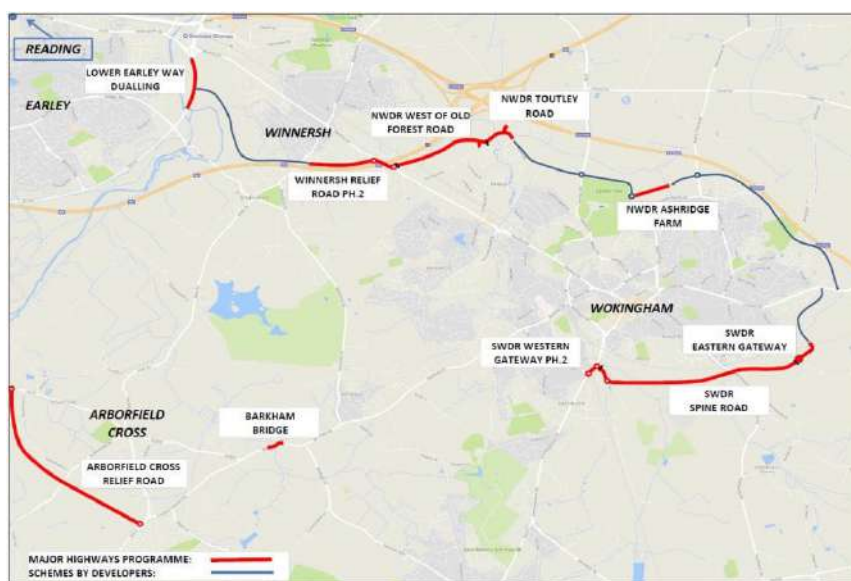


Figure 1-1 Programme Layout

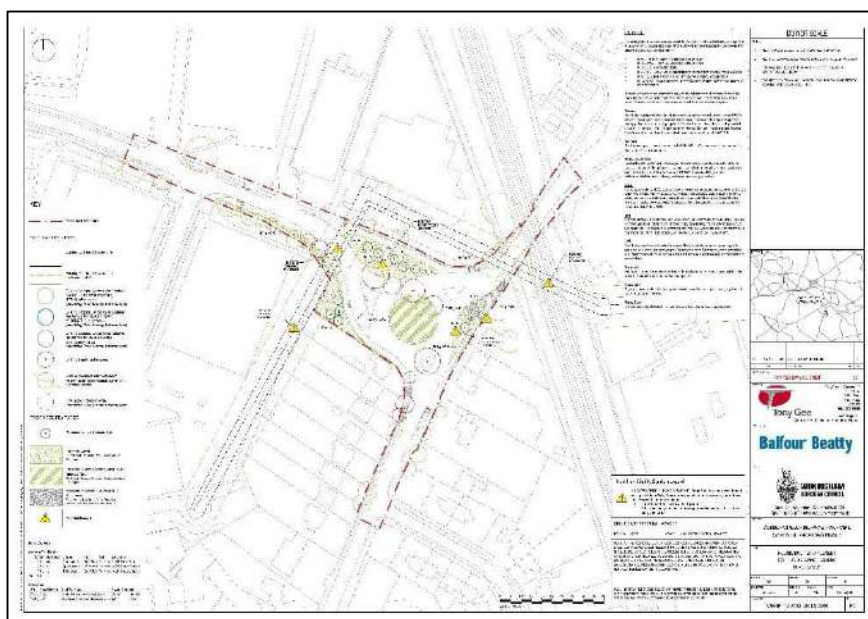


Figure 1-2 Project Layout

1.2 Planning Conditions and Discharge

Planning permission has been granted for the Western Gateway Phase 2 Project. The project is subject to several planning conditions. These planning conditions include requirements for the contractor to produce management plans to mitigate the environmental impacts of construction. It is intended that this CEMP be reviewed as a whole, as aspects described throughout this document will support the discharge of the listed planning conditions. Details for the proposed adherence to and discharge of particular planning conditions are given below:

- Planning Condition 4 - A Construction Environmental Management Plan (CEMP);

Planning Note / Informative Note	Relevant Section of CEMP	Page
i) phasing of development;	2.2 Phasing and Scope	9
ii) Construction Traffic Management Plan comprising		
a. Analysis of the volumes of construction vehicles during construction phases for both light and heavy vehicles,	4.14 Traffic and Transport – Traffic Management	41
b. Vehicle routes and notably lorry routes, with volumes of lorries,	4.14 Traffic and Transport – Deliveries	42
c. traffic management proposals including any mitigations, hours of operation and signage;	4.14 Traffic and Transport – Traffic Management Appendix F – Site Plans (TM Plan) Appendix L - Bulk Delivery Schedule & TM Plans	41 Appendix F Appendix L
iii) vehicle parking for site operatives and visitors;	4.14 Traffic and Transport – Traffic Management	41
iv) provision for loading, unloading and storage of plant and materials;	4.14 Traffic and Transport - Deliveries	42
v) measures to prevent queueing outside the site;	4.14 Traffic and Transport – Traffic Management 4.14 Traffic and Transport - Deliveries	41 42
vi) wheel washing and/or other measures to prevent deposit of mud on the highway;	4.14 Traffic and Transport – Wheel Cleaning	43
vii) measures for the control of dust and dirt during construction;	4.5 Dust & Air Quality	28
viii) measures for the control of noise during construction in accordance;	4.2 Noise and Vibration	17

ix) measures to mitigate the impact on protected species and habitats during construction in accordance with the Ecological Appraisal and Bat Activity Survey Report;	4.2 Noise and Vibration 4.3 Ecology: 1. General 2. Bats 4. Reptiles and amphibians 5. Nesting birds 6. Sensitive invertebrates – worms and arthropods	17 19 20 20 21 22 24 24
x) security hoarding including facilities for public viewing, where appropriate;	4.18 Site Fencing	48
xi) a scheme for recycling/disposing of waste resulting from demolition and construction works;	4.11 Material Resources and Waste Management	35
xii) any temporary lighting	4.17 Site Lighting	47
xiii) procedures for liaising with the local community including a hotline number for reporting and responding to complaints.	3.7 Stakeholder Liaison	13

- Planning Condition 9 – Retention of Trees

Planning Note / Informative Note	Relevant Section of CEMP	Page
No trees, shrubs or hedges within the site which are shown as being retained on the approved plans shall be felled, uprooted wilfully damaged or destroyed, cut back in any way or removed without previous written consent of the local planning authority; any trees, shrubs or hedges removed without consent or dying or being severely damaged or becoming seriously diseased within 5 years from the completion of the development hereby permitted shall be replaced with trees, shrubs or hedge plants of similar size and species unless the local planning authority gives written consent to any variation.	4.4 Vegetation and Arboriculture Appendix J – Arboricultural Method Statement and Tree Protection Plan	25 Appendix J

- Planning Condition 10 – Protection of Trees

Planning Note / Informative Note	Relevant Section of CEMP	Page
a) No development or other operations shall take place except in complete accordance with the details within the Arboricultural Method Statement dated 16th November 2020 (WMHP-TG-WG2-RP-LS-0001 P02) and associated Tree Protection Plan (WMHP-TG-WG2-DR-LS-3004 P04) (hereinafter referred to as the Approved Scheme). b) No operations shall commence on site in connection with development hereby approved (including any tree felling, tree pruning, demolition works, soil moving, temporary access construction and or widening or any other operation involving use of motorised vehicles or construction machinery) until the tree protection works required by the Approved Scheme are in place on site. c) No excavations for services, storage of materials or machinery, parking of vehicles, deposit or excavation of soil or rubble, lighting of fires or disposal of liquids shall take place within an area designated as being fenced off or otherwise protected in the Approved Scheme. d) The fencing or other works which are part of the Approved Scheme shall not be moved or removed, temporarily or otherwise, until all works including external works have been completed and all equipment, machinery and surplus materials removed from the site, unless the prior approval in writing of the local planning authority has first been sought and obtained.	4.4 Vegetation and Arboriculture Appendix J – Arboricultural Method Statement and Tree Protection Plan	25 Appendix J

- Planning Condition 12 – Hours of Work

Planning Note / Informative Note	Relevant Section of CEMP	Page
Condition 12: Hours of work (Compliance Condition)	3.2 Working Hours	11

2 Purpose and Scope

2.1 Purpose

This document is the Construction Environmental Management Plan (CEMP) for the Western Gateway Phase 2 Project. It describes how construction activities shall be undertaken and managed in accordance with commitments and requirements identified to:

- Ensure compliance with all applicable UK Environmental Legislation and statutory controls.
- Ensure compliance with the requirements of the planning permissions for the individual projects.
- Ensure compliance with contract requirements.
- Ensure conformance with the Balfour Beatty Environmental Policy Statement (Appendix D), including all associated Balfour Beatty standards and procedures.
- Achieve Balfour Beatty and Project Objectives and Targets

This CEMP describes methods, controls, monitoring and reporting procedures that need to be employed to satisfy the general requirement to safeguard the environment and mitigate any adverse effects of the works. The requirements presented in this CEMP will be communicated to the Balfour Beatty Project Team and all associated sub-contractors and must be adhered to throughout the full period of works.

2.2 Phasing & Scope

There are three proposed phases of works planned for the Western Gateway Phase 2 Project

- Phase 1 Enabling Works
- Phase 2 Main Construction Works
- Phase 3 Maintenance and Defects Period

This issue of the CEMP has been produced to cover all activities carried out as part of the Phase 1 Enabling and Phase 2 Main Construction Works for the Western Gateway Phase 2 Project.

This works will include but may not be limited to:

Enabling Works

- Site Clearance works – Vegetation Removal (expected duration - 2-3 days)
- Site Clearance works – Demolition of Buildings – 81, 83, & 85 Finchampstead Road (expected duration - 4 weeks)
- Erection of Site Hoarding (expected duration - 3 weeks)

The total duration for which the [enabling works period](#) is expected to be completed is approx. 8 weeks.

Phase 2 Main Construction Works will be covered by a subsequent issue of this document. Main construction activities are listed here for reference only.

Main Construction Works

- Required statutory utility diversions.
- Construction of any required temporary accesses including any associated Traffic Management.
- Remaining Site Clearance Works – Vegetation Removal
- Earthworks (cut & fill).

- Groundworks including:
 - Installation of Drainage Infrastructure (pipes, chambers, headwalls etc.).
 - Installation of Utility Ducting and Chambers.
 - Placement of Kerbs and Paving.
 - Construction of Roundabout and splitter islands
 - Footpath Works
- Roadworks including:
 - Placement of Hydraulically Bound Material (capping and sub-base).
 - Placement of Asphaltic Surfacing (base, binder and wearing courses).
- Installation of Street Lighting.
- Installation of Signage and traffic signals (if required).
- Road Marking.
- Topsoiling.
- Installation of Fencing.
- Landscaping and Planting.

The total duration for which the construction period is expected to be completed is approx. 12 onths.

The total duration for the defects and maintenance period is. 12 months.

2.3 Monitoring and Review

The CEMP is a live document which will be reviewed on a regular basis (every three months or following any significant change to the status of the works) by the site Environmental Management Representative (EMR) and Project Manager.

The Environment and Sustainability Manager will also review CEMP regularly to ensure that:

- The objectives and requirements are still valid, and being met
- Forthcoming activities are reviewed, and any necessary amendments are identified before the relevant works begins
- Current processes continue to be suitable and effective for the project

Should the environmental impacts caused by works activities on site and their management change so that they differ from that which is described in the CEMP then the CEMP must be updated to reflect said changes.

An electronic version of the latest update of the CEMP will always be circulated to the site team and made available upon request .

Minor changes to the CEMP caused by the gradual completion of site works (e.g. minor adjustments to site routes around drainage works) need not trigger a resubmission of the CEMP to WBC Planning. However major changes (e.g. the establishment of new site roads and accesses) will require the resubmission of the CEMP to WBC Planning.

2.4 Objectives

The overall objectives that will be applied to the project are:

- All practicable steps shall be taken to minimise the environmental impacts of construction works.

- All activities shall be conducted in accordance with the CEMP as well as the complementary Balfour Beatty management plans, relevant legislation and PCC's Code of Practice for Construction Sites.
- All staff and sub-contractors shall be aware of the environmental issues relevant to the works, the environmental impacts of construction and the mitigation measures to be applied during inductions, briefings, toolbox talks and other means of communication as required.

3 Environmental Management System

3.1 Construction Programme

Please refer to Appendix E Enabling Works Scope and Programme

3.2 Working Hours

Working hours are to be in accordance with works information and planning permissions (Condition TBC) issued by WBC for this project. Working hours may be as follows:

- 08:00 to 18:00 weekdays; 08:00 to 13:00 on Saturdays;
- No working Sunday or Bank Holiday working.

The working hours detailed above will be adhered to unless otherwise agreed in writing with the client – Wokingham Borough Council at least two weeks before said works have been scheduled to commence.

Key stakeholders including residential properties shall be given written notice at least one week in advance of any out of hours works taking place.

3.3 Roles and Responsibilities

Balfour Beatty will be responsible for the overall management of the CEMP. Balfour Beatty shall work in conjunction with other contractors on site and other key personnel to ensure it is implemented effectively. For the purposes of the CEMP the Balfour Beatty Project Manager will be deemed to be the Construction Liaison Officer.

The CEMP Roles and Responsibilities can be seen in the following table.

Role	Responsibility
Client - Wokingham Borough Council (WBC)	Responsible for producing the Works Information and Project Information to be used in producing the CEMP and to review and approve / reject said documents in accordance with planning conditions as required. Responsible for managing communications to and complaints from all stakeholders including Neighboring Authorities and members of the public.
Principal Contractor - Balfour Beatty (BB)	Responsible for the overall management of the CEMP and ensuring compliance with the CEMP and relevant legal requirements including appointment of a Construction Liaison Officer for each project. Ensure that a project specific Construction Environmental Management Plan is produced for and approved by WBC prior to commencement of works and ensure that the CEMP is included in tender and contract documents. Responsible for managing the environmental risks and site waste management throughout the construction of each specific project and obtaining any environmental permits required from the respective agencies (EA, Natural England etc.).
Sub-Contractors	Contractual obligation Commit to responsibilities detailed within the CEMP.

	Sub-contractor Managers are to ensure that their staff works to agreed plans, methods and procedures to minimise environmental impacts; and comply with directions given by Balfour Beatty Project Management.
Site Personnel	Undertake to work in accordance with the CEMP and comply with directions given by Balfour Beatty Site Management.

3.4 Legal Permits, Consents and Licences

The project has the following permits, consents, licences and exemptions in place. They hold legal compliance requirements that are met within the project operational activities. Copies can be located in section 02 WG2 / 09 HSES of the contracts document filing system on Business Collaborator.

Permits, Consents, Licences and Exemptions	Requirements	Monitoring and Inspection Arrangements for Compliance	Responsibility
Natural England – Bat Licence	TBC - The demolition of any building and the felling of any trees identified as bat roosts can only occur under licence	All licence conditions are to be met. Typically, trees are to be soft felled under supervision from a SQE	Project Lead;
WBC – Building Control - Demolition Notice	Demolition Notice to be lodged 6 weeks before works commence	Demolition RAMS to be followed as detailed in submission to WBC	Project Lead;

3.5 Environmental Training

Environmental awareness and training shall be achieved by:

- Site induction which shall be given to all personnel who work on site and will include an overview of site specific environmental issues and details of how these issues shall be managed
- Detailed CEMP/SP briefings for managers and supervisors
- Balfour Beatty bespoke SEATs and ESSA training
- Toolbox talks for personnel as required on key project- or task-specific environmental issues
- Environmental posters and site notices

3.6 Monitoring

Monitoring of the implementation of the CEMP shall be undertaken through:

- Weekly site checklists completed by each contractor
- Quarterly status/progress reports by Balfour Beatty to the WBC

Where non-conformities are identified (defined as either an environmental incident on site, or where work that has not been carried out in accordance with the CEMP), corrective action shall be taken. All non-conformances and subsequent corrective actions shall be logged in the weekly checklist.

3.7 Stakeholder Liaison

Signage

Notice boards at the site entrance should display the following information:

- Name and brief description of the project and phase
- Outline programme
- Name and contact details for enquiries and complaints, including a single telephone number for the project (TBC) and Email contact : SWDR@balfourbeatty.com

The specified telephone must be attended during all standard working hours by a person or persons with the appropriate authority to act to resolve any problems that may occur.

Complaints Procedure

A Complaints Register will be set up and maintained by the Stakeholder Manager. All complaints will be recorded for action in the register. The Complaints Register will include information on: – the name (can be anonymous if preferred) and location of the affected party; – the time and nature of the event that caused the complaint; and where appropriate, – the remedial action taken. The Stakeholder Manager shall ensure the complainant is notified of what action is being taken to address the complaint, by telephone if possible, and by email/letter once appropriate action has been undertaken.

Stakeholder engagement

Periodic newsletter sent out to Stakeholders by email, used as a means of keeping them informed of the activities taking place relating to the SWDR scheme. This would also be useful as a source of information, keeping readers informed about the plan for the works, the progress of the works once these have started, as well as any potential disruption that may occur.

We are keen to ensure that we focus the appropriate degrees of communication on the relevant stakeholders. We understand that the various stakeholders have varying amounts of involvement in the project as the construction is taking place, of which some will want to be extensively involved and others will only wish to be informed at key junctures in the schemes' progression. Effective channels of communication must be established both within the project team and with the relevant stakeholders, to ensure that genuine dialogue can take place. With this in mind, we have identified our stakeholder audiences as being in two groups – these being the Primary and Secondary stakeholders. This audience segmentation is based on the scale of likely impacts resulting from the works, which will require different communications channels, activities and messages.

Primary Stakeholders

This group includes stakeholders that are associated with each of the projects. Balfour Beatty will ensure that all stakeholders are always kept up to date, and that Ward Members and WBC communications are updated prior to all other stakeholders. This will ensure they are fully up to speed on the WMHP and can respond from an informed position when they are contacted by other stakeholder and secondary audiences.

The primary stakeholders are as follows:

- Nearby businesses
- Nearby residents
- Town and Parish Councils near the proposed road schemes
- Motorists (including business travellers) who use nearby roads that may be affected
- All other road users that pass through the vicinity of the WMHP schemes

- Nearby community facilities
- Nearby education facilities
- Ward members / Councillors
- Local emergency services (police, fire, ambulance).

Secondary stakeholders

This group will be kept apprised of the WMHP by social media, press releases, text or email alerts, and via information leaflets and newsletters distributed locally. We will also work alongside the WBC communications team, who will publicise the works further through the Borough News. Information for these communication channels will come from Balfour Beatty and will be passed on to the WBC communications team, who will assess the importance of releasing this information among the secondary stakeholder audience via the mediums mentioned above.

- Members of the public within Wokingham Borough
- Remaining Town and Parish Councils that are more distant from the road schemes
- Local Members of Parliament and other political figures
- The Business community (e.g. chambers of commerce)
- Community groups
- Voluntary organisations
- Education organisations
- Local and national media (newspapers, radio, TV)

4 Environmental Impacts

The following section of this document provides information on mitigation measures and monitoring controls to avoid or minimize environmental impacts. The following environmental topics have been included:

- Sensitive Environmental Receptors
- Noise and Vibration
- Ecology
- Air Quality
- Dust
- Water Resources
- Heritage
- Archaeology
- Demolition, Excavation, Ground Conditions, Contamination and Hazardous Materials
- Material Resources and Waste Management
- Traffic and Transportation
- Visual Amenity
- Pest Control
- Lighting
- Fencing

4.1 Sensitive Environmental Receptors

Residential		Commercial & Agricultural Sites	
Landen Court	Gorrick Square	Trinity Court Estate	Molly Millar Bridge
Oakey Drive	Eastheath Avenue	Millars Brook Office Park	Businesses
Finchampstead Road	Eastheath Gardens	Space Business Centre	Intersurgical
Tangley Drive	Heath Close	Cyber House	Eden Motors
Beaver Close	Godwin Close	Brook House	Tesco Superstore
		Molly Millars Close	Warr Clinic
		Businesses	Bridge Retail Park
		Enterprise Rentacar	Carpet Right
		Topps Tiles	Pets at Home
		Screw Fix	Majestic Wine
		Ready Steady Store	BP / M&S
		Conviva Technologies	Two Poplars Pub
		Kaplan Publishing	JB Hall Funeral Directors

Local Amenities	Hydrological Features
WBC Family Resource Centre	Surface Water Drainage to Emm Brook Foul Drainage Groundwater
Heritage & Archaeological Assets	Ecological & Arboricultural
None known	Trees along railway embankment Trees and hedgerows within the site containing roosting and foraging bats. Nesting birds Reptiles and Amphibians

The project's sensitive receptors have been assessed and are listed below.

Feature/Issue	Details
Protected Sites e.g. SSSI	n/a
Water courses	Water courses are not expected to be encountered.
Ground water / aquifer	Ground water may be encountered at Western Gateway Phase 2. Mitigation measures will be determined by the level and nature of any groundwater intrusion into the project works.
Cultural Heritage	No specific areas of Cultural Heritage are expected to be detrimentally affected by the proposed works.
Archaeology	n/a
Protected Species e.g. Bats	Controls as detailed in Section 4.3 below
Injurious & Invasive Animal Species e.g. Signal Crayfish	n/a
Industrial / retail / business units	As listed above.
Residential properties	Landen Court Oakey Drive Finchampstead Road Tangley Drive Beaver Close Gorrick Square Eastheath Avenue Eastheath Gardens Heath Close Godwin Close
Educational establishment	n/a

Feature/Issue	Details
Hospitals / medical facilities	n/a
Public buildings (not otherwise mentioned)	n/a
Woodland / Trees	TBC
Tree Protection Orders (TPO)	Trees that have current Tree Protection Orders will be required to be removed according to the relevant WBC protocols. Works will be managed so as to minimise any detrimental effect on adjacent trees with Tree Protection Orders.
Hedgerows	TBC
Injurious & Invasive Plant Species e.g. Japanese Knotweed	n/a
Public footpaths	Public rights of way will be maintained wherever possible and only diverted around the works when absolutely necessary. Should safe diversion of public rights of way not prove possible only then can they be temporarily closed according to the relevant WBC protocols.
Farm Land / Crops	n/a
Farm animals	n/a
Derelict Land	n/a
Parks/recreation areas	n/a
Other	n/a

4.2 Noise and Vibration

This section describes the noise and vibration plan to manage the potential impact during the enabling works phase to sensitive receptors in the vicinity of the works. It covers requirements for noise monitoring, prevention of excessive noise pollution to the surrounding area and allowable limits during construction hours as appropriate.

Noise and vibration issues on the Western Gateway Phase 2 project are likely to arise from demolition works. Plant and Equipment such as excavators, compressors and generators are not considered to be sources of significant levels of vibration. However, driving of piles can be a source of ground vibration and noise. Piling works are not expected as part of the Western Gateway Phase 2 works.

Balfour Beatty shall be required to follow Best Practicable Means and adhere to the codes of practice for construction working given in BS 52281 and the guidance given therein regarding minimising noise and vibration emissions from the site. Provisions of BS 5228 are summarized as follows:

- Use of hoarding incorporating acoustic barriers around the work site perimeter, where practicable, to assist in the screening of noise generation from low-level sources.
- Wherever possible, locating noisy activities away from sensitive receptors.
- On site storage will be located, as far as is reasonably practicable, away from adjacent occupied buildings or as close as possible to noise barriers or site fencing where these are located between the plant and the buildings.
- Off-site pre-fabrication to be adopted where practical.
- Loading and unloading of vehicles, dismantling of site equipment such as trench sheets, manhole chambers and temporary trench support systems or moving equipment or materials around the site to be conducted in such a manner as to minimise noise generation and where practical to be conducted away from noise sensitive areas.
- Materials should be handled with care and be placed, not dropped.
- Proper use of plant with respect to minimising noise emissions and regular maintenance. All vehicles and mechanical plant should be fitted with effective exhaust silencers and should be maintained in good efficient working order.
- Selection of inherently quiet plant where appropriate. All major compressors should 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 silencers of the type recommended by the manufacturers.
- Machines in intermittent use should be shut down in the intervening periods between work.
- White noise type reversing warnings should be used on mobile plant in preference to beepers.
- All ancillary plant such as generators, compressors and pumps should be positioned so as to cause minimum noise disturbance, i.e. furthest from sensitive receptors or behind close boarded noise barriers. If necessary, acoustic enclosures / shielding should be provided.
- Substitution: Where reasonably practicable, plant and or methods of work likely to cause significant levels of vibration at the receptors identified, will be replaced by less intrusive plant/methods of working.

- Vibration Isolation of plant at source: This may prove a viable option where the plant is stationary (e.g. a compressor, generator) and located close to a receptor.
- The potential auditory aspects identified for this project are as described in the following table and will be communicated in the Site Induction:

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
Noise and Vibration	Operations	Impact: human health impacts / noise, causing nuisance for local community / vibration, causing damage to existing buildings and structures Risks: failure to fulfil compliance obligations, reputational damage, negative publicity, costs of repairs, possible prosecution and fine.	<u>Normal / Abnormal:</u> Restrict works to mandated working hours: 08:00 to 18:00 weekdays; 08:00 to 13:00 on Saturdays; Out of hours works only by prior agreement in writing from WBC 2 weeks before proposed works commence. Turn off all plant when not in direct use. Use silenced plant (both static and mobile) where possible. Utilise non-vibratory compaction when within 45m of an identified sensitive receptor site. Refer to Chapter 10 of the Environmental Statement to access background and predicted noise information. Background and operational noise and vibration monitoring is to be addressed within specific site activity ITPs and RAMs Control measures for noise and vibration as per the Section 61 agreement (where applicable) are to be adhered to. <u>Emergency:</u> n/a	Construction Team

4.3 Ecology

This section describes the Ecology plan to manage the potential impact during construction phase to sensitive receptors in the vicinity of the works. Bats, birds, reptiles and amphibians (GCN) have the potential to be impacted by the construction works and as such the hierarchy of mitigation will be applied:

- Avoidance / prevention - measures taken to avoid or prevent adverse effects, for example, scheme layout or timing of site works;
- Reduction / mitigation - measures taken to reduce adverse effects, for example, retaining walls or pollution interceptors; and
- Compensation / offsetting - measures taken to offset significant residual adverse effects, i.e. those which cannot be entirely avoided or mitigated to the point that they become insignificant; for example, habitat creation or enhancement.

A number of generic control measures will be undertaken to avoid or reduce any potentially adverse ecological impacts on the receptors identified in the introduction. These are as follows:

- The Project HSE Advisor will advise on implementation of this CEMP and to provide on-site ecological advice.
- Construction activities will be confined to the defined working footprints
- Protection of important habitats such as watercourses from accidental leaks or spills of oil or other petroleum- based / harmful chemicals will be implemented. This will be achieved by storing such substances in securely bunded areas away from sensitive habitats. No potentially contaminated drainage will be discharged directly to any surface water.
- All equipment will be stored as far as reasonably possible from water courses
- The site induction, briefings, toolbox talks, and instructions will include relevant ecological risks and mitigation
- Vehicle movement will be confined to existing roads and newly created access tracks
- The Project HSE Advisor and/or MER will undertake monthly inspections and carry out an assessment of environmental performance during construction, measured against environmental standards, relevant legislation and the CEMP objectives.
- Ecological Risk Assessments of site activities have been conducted and will be fully documented in the individual Risk Assessments and Method Statements (RAMS) for each site activity.

The significant ecological aspects identified for this project are as described in the following table and will be communicated in the Site Induction:

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
Working near protected species (General)	Ecology & Biodiversity	Impact: Disturbance or damage to protected species and their habitats / loss of biodiversity Risks: possible fine, prosecution, reputational damage, delay to works	Normal / Abnormal: Consult with Client to establish whether ecology survey has been carried out / preconstruction ecology survey is carried out / species specific surveys carried out / fingertip searches / apply for protected species licence and follow conditions / controls such as translocation, watching brief or other suitable mitigation measures to be included in method statements / teams to be briefed on controls / mitigation measures to be implemented / support to be provided by environmental advisor or specialist ecological resource where required. Refer to Chapter 7 (Nature Conservation) of the Environmental Statement for information additional to that described below for the protection and conservation of flora and fauna within the proposed site boundary.	Construction Team
Working near protected species (Bats)	Ecology & Biodiversity	Impact: Disturbance or damage to protected species of bats	Updated Bat Activity and Tree Roost Potential surveys have been carried out at Western Gateway. Bats have not been identified as roosting or active within the WG2 project footprint. Trees contained within the construction footprint have been identified as having negligible to low bat roost potential. Trees scheduled for removal with low bat roost potential are to be inspected by a suitably qualified ecologist (SQE) prior to their removal. A Natural England bat licence is necessary before any works that may impact the bat roosts can be conducted. Once the bat licence is granted, all conditions within the licence must be adhered to. This is likely to include, but is not limited to: • Works to the trees / roosts being conducted in strict adherence with the timings and methods outlined in the licence; • Keeping the specified licence documents on site at all times; • Installation of alternative roosting features; • Completion and submission of licence return form; • Monitoring and maintenance of the alternative roosting features post works. • Protection of the alternative roosting features into perpetuity. • Any building scheduled for demolition on site that is deemed to be suitable for roosting bats should be subject to a detailed internal and external inspection by a SQE prior to the start of works. Features that may support roosting bats should be	Construction Team

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
			soft stripped under ecological supervision. Further works / surveys may be required following the inspection. - As conditions can change on site over time, a SQE should be present on site on a regular basis to determine current tree inspection priorities with regard to bats. If features are present that may support roosting bats, a number of prescriptions may be applied. This could include, but is not limited to, endoscope inspections, climbed tree inspections, soft felling and/or further dawn and dusk bat surveys. - The positioning and illumination direction of any site / task lighting is to be made with consideration to minimise any detrimental effect on bat roosting and foraging sites. This will include not lighting up adjacent hedgerows and woodlands immediately adjacent to the works.	
Working near protected species [REDACTED]	Ecology & Biodiversity	[REDACTED]	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	Construction Team

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
			[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	
Working near protected species (Reptiles and Amphibians)	Ecology & Biodiversity	Impact: Disturbance or damage to reptiles and amphibians	Reptiles and amphibians (potentially including Great Crested Newts) have not been identified at Western Gateway. Reptiles and amphibians likely to be found on site are to be identified and communicated to construction staff via a poster / briefed as part of site induction. It has been discussed and agreed with WBC that the 500m zone of amphibians potentially affected by the works is reduced to 250m and that this will only apply south of the railway line. The railway line has been deemed an effective barrier against regular amphibian migration.	Construction Team

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
			The railway verges, field margins and hedges remain as suitable habitat / corridors for reptiles. Exclusion fencing is to be installed adjacent to the site / compound fencing along the railway and field boundaries to prevent access to the site for reptiles. Receptor sites (as close as possible to the Western Gateway site) should be identified. Any areas identified as suitable habitat likely to be disturbed by the construction works (e.g. Longer grasses in shallow undulations and along field margins) should be subject to fingertip searches and/or destructive searches carried out under licence by SQEs. Phased vegetation removal to allow natural dispersal of reptiles and amphibians should occur under direction of a SQE prior to the commencement of any fingertip / destructive searches. Any reptiles / amphibians captured during the destructive searches are to be transferred to the previously identified receptor site. Exclusion fencing must be installed post-reptile translocation / capture so that it will be considered unlikely that residual reptiles remain on the site within suitable habitat. Where possible aforesaid vegetation clearance, searches and installation of exclusion fencing is to occur in the appropriate season. Residual reptiles are also likely to be present in features such as log piles and rubble piles. Residual amphibians are likely to be present in features such as ponds, ephemeral water bodies and wet meadows. Where possible, these features should be retained until the reptile /amphibian active season, when they can be dismantled / removed under ecological supervision. If it is not possible to retain these features, they should be hand searched by a SQE and removed under a suitable licence obtained from Natural England. Should any reptiles or amphibians be found, the supervising ecologist would advise on what action is required including translocation of animals to appropriate receptor sites. Where required by Natural England any translocation can only occur under appropriate licences. Amphibian / Reptile presence / activity surveys were carried out in September / October 2018. The results of these surveys will inform any reptile and amphibian management programme and are included in Appendix H.	

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
Works near nesting birds	Ecology & Biodiversity	Impact: Harm or disturbance to nesting birds and their habitat, loss of biodiversity Risks: reputational damage, negative publicity, prosecution, fines, delay to works	<u>Normal / Abnormal:</u> Avoid works in nesting season (March to September inclusive) / pre-construction nesting bird survey / net hedges prior to nesting season / check structures prior to nesting season and remove nests / use bird deterrents / Vegetation clearance and removal of suitable habitat should be confined to outside the nesting season and any regrowth suitably controlled. Consideration must also be given to controlling the habitat of ground nesting birds (e.g. skylarks and lapwings). Where works cannot be conducted outside the nesting bird season, they should only be conducted after a SQE has checked the area and found it to be free of nesting birds / If nesting birds are found to be present at any time, a buffer (as defined by a SQE) must be created around the nest in which no works take place until the chicks have fledged /consult ecologist if works unavoidable to agree working methods and mitigation measures / obtain appropriate licences from regulator (Scottish Natural Heritage / Natural England / CADW) for disturbance or relocation <u>Emergency:</u> Utilise warning signs to warn project team of nesting birds / stop work if nests are identified and contact environmental advisor or ecological specialist	Construction Team
Works near Sensitive Invertebrates – Worms and Arthropods.	Ecology & Biodiversity	Impact: Harm or disturbance to nesting birds and their habitat, loss of biodiversity Risks: reputational damage, negative publicity, prosecution, fines, delay to works	Sensitive Invertebrates have not been specifically identified at the Western Gateway Site. However, invertebrates form a major food source for other sensitive fauna and maybe adversely affected by construction works. Methods to protect their habitat will match those designed to protect reptiles etc. Field margins and hedges remain as suitable habitat / corridors for invertebrates. Exclusion fencing can be installed adjacent to the site / compound fencing to prevent access to the site for invertebrates. Receptor sites (as close as possible to the WG2 site) should be identified, e.g. Ancient Woodlands provide preferential habitat for Stag Beetles and other large terrestrial invertebrates. Any areas identified as suitable habitat likely to be disturbed by the construction works should be subject to fingertip searches and/or destructive searches carried out under licence by SQEs. Phased vegetation removal to allow natural dispersal of invertebrates should occur under direction of a SQE prior to the commencement of any fingertip / destructive searches. Any large invertebrates captured during the	

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
			destructive searches are to be transferred to the previously identified receptor site. Exclusion fencing maybe installed post translocation / capture so that it will be considered unlikely that residual large invertebrates may remain on the site within suitable habitat. Where possible aforesaid vegetation clearance, searches and installation of exclusion fencing is to occur in the appropriate season. Residual large invertebrates are also likely to be present in features such as log piles and rubble piles. Residual aquatic invertebrates are likely to be present in features such as ponds, ephemeral water bodies and wet meadows. Where possible, these features should be retained until the invertebrate active season, when they can be dismantled / removed under ecological supervision. If it is not possible to retain these features, they should be hand searched by a SQE and removed under a suitable licence obtained from Natural England if required. Should any large or sensitive invertebrate species be found, the supervising ecologist would advise on what action is required including translocation of animals to appropriate receptor sites. Where required by Natural England any translocation can only occur under appropriate licences.	

4.4 Vegetation and Arboriculture

Tree and Vegetation removal is to occur as part of the Enabling Works and the Main Construction Works. The extent of the vegetation to be removed is shown on the site drawings. Retention of as many trees and vegetation (primarily hedgerows) as possible is a priority of the project. All opportunities to retain trees and hedgerows will be taken whenever practicable. However, construction has the potential to result in damage to trees within the site that are intended to be retained. The project will appoint an arboriculturist to perform regular inspection audits and reporting to ensure all tree and hedge protection measures are being adhered to, as well as to be available to provide specialist support should any unforeseen tree issues arise during the construction process. An Arboricultural Method Statement (AMS) and Tree Protection Plan have been produced (Appendix J) and the locations of trees and hedgerows to be retained or removed are shown on the site plans and site clearance drawings. The site trees and hedgerows will fall into the following categories.

Trees and Hedgerows scheduled to be removed – Trees and hedgerows to be removed will be inspected by a suitably qualified ecologist prior to being soft felled / undergoing phased removal wherever practicable. Potential roost and nest features will be identified and investigated prior to felling. Any trees or hedges that have been determined as roosts or habitat for protected animal species will be removed under licence from Natural England.

Trees and Hedgerows scheduled to be reduced – Trees and hedgerows to be reduced will be inspected by a suitably qualified ecologist prior to being pruned / undergoing phased trimming wherever practicable. Potential roost and nest features will be identified and investigated prior to felling. Any trees or hedges that have been determined as roosts or habitat for protected animal species will be removed under licence from Natural England. Where the reduction has been scheduled to accommodate visibility splays for temporary site accesses then only the minimum number of branches is to be removed from the tree canopy and hedges will be reduced to a minimum height of 600mm above ground level.

Trees and Hedgerows scheduled to remain where works will occur within the root protection area – Works are to be avoided if possible within root protection area however should such works prove unavoidable, they must be as limited as possible and will only occur following consultation with a suitably qualified arboriculturalist. Tree protection measures are to be installed as per the direction of the arboriculturalist. Should the proposed works be deemed too detrimental to the tree then Balfour Beatty will make a request to WBC for permission to remove the tree and provide a suitable replacement upon completion of the works.

Trees and Hedgerows scheduled to remain in close proximity to the works - Where trees are in close proximity to the works and / or there is a risk of site traffic encroaching into the root protection area then the following measures shall be implemented:

- Identification of at-risk trees and hedgerows will be continuously reviewed during the construction process.
- Protection of trees and hedges to be retained in proximity of works will be protected in accordance with BS 5837:2012
- Tree, Hedge & Ground Protection incorporating Root Protection Areas (RPAs) shall be established using Heras fencing to delineate Construction Exclusion Zones (CEZs).
- Locations of required Tree & Hedge Protection Fencing are detailed in Appendix J – AMS and Tree Protection Fencing Drawings.
- No work shall take place within CEZs without the prior authorisation of a suitably qualified arboriculturalist.
- Clear signage shall be placed on all fencing surrounding the protected tree / hedge area. The fencing shall be regularly checked, and any areas found to be of poor quality or damaged shall be repaired or replaced immediately.
- All site personnel shall be made aware of the presence and purpose of CEZs during the initial site induction and this shall be reinforced throughout the duration of the works through regular toolbox talks.

Trees and Hedgerows scheduled to remain distant to the works - Where trees are not in close proximity to the works and / or there is very little likelihood of site traffic approaching the root protection area then signage and indicator fencing can be installed to establish a line at least 1m from the RPA. This fencing is to be of a kind as to not create an entanglement hazard for fauna. All site personnel shall be made aware of which areas are not to be entered within the induction and this shall be reinforced throughout the duration of the works through regular toolbox talks. This type of fencing is to be installed in order to reduce the amount of Heras fencing required on site.

The significant arboricultural aspects identified for this project are as described in the following table and will be communicated in the Site Induction:

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
Working next to Trees scheduled to remain.	Ecology & Biodiversity	Impact: Harm or disturbance to native flora, fauna and their habitat, loss of biodiversity. Particularly damage to branches and roosting sites, root severance and ground compaction. Risks: reputational damage, negative publicity, prosecution, fines, delay to works	Trees scheduled to remain are to be found across and at the periphery of the site. These trees are to be protected throughout the works. This protection will consist of the following as a minimum requirement. - Fencing is to consist of braced Heras panels as described in section 4.18 - Fencing is to be located a minimum distance of 1.5 times the spread of the tree canopy + 1metre or 12 times the diameter of the tree trunk measured at 1.5m above ground level + 1 metre from the trunk of the tree (whichever is greater). - Where the fencing cannot be kept at this distance each circumstance is to be assessed by a suitably qualified arboriculturalist and fencing established to suit. - Groups of trees can be fenced together. Appropriate signs declaring 'Tree Protection Area – Keep Out' or similar are to be attached at regular intervals on the fencing.	Construction Team

4.5 Dust and Air Quality

Construction results in increases in vehicles and plant on and off-site, which in turn increases particulate matter and nitrogen dioxide levels, which can be detrimental to human health.

Mitigation measures to be applied are as follows:

- Ensure that the engines of all vehicles and plant on site are not left running unnecessarily. No idling vehicles or Plant on site.
- Should any emissions of dark smoke occur (except during start up) then the relevant machinery should be stopped, and any problem rectified before being used.
- Requiring that plant will be well maintained, with routine servicing of plant and vehicles to be completed in accordance with the manufacturer's recommendations and records maintained. Balfour Beatty Daily and Weekly Plant check sheets to be completed prior to use of any plant or equipment.
- Siting fixed plant away as far away from sensitive receptors as possible, minimising where possible the use of diesel- or petrol-powered generators and instead using mains electricity or battery powered equipment.

Construction and demolition activities have the potential to generate dust emissions, which can affect the surrounding areas and facilities, as well as ecological and hydrological receptors within the typical dust soiling threshold radius of 100m. In addition, the transfer of debris off site can affect local roads surrounding the site, and residential and commercial receptors alongside these.

- Avoid the siting of dust creating activities and material storage / handling sites in close proximity to sensitive receptors where practicable.
- All vehicles carrying loose materials (aggregates/ waste) must be sheeted at all times.
- Use of water suppression during activities which have the likelihood to create dust e.g. use of mobile bowers to dampen demolition and crushing works.
- Cutting and grinding works: all cutting and grinding operations to be conducted in ways to reduce risk of dust migration e.g. wet cutting techniques, use of water suppressed tools and equipment.
- Fires and bonfires: these will be prohibited on site.

For all works, Balfour Beatty shall undertake routine dust monitoring on a weekly basis. This forms part of the weekly site checklist for visible signs of dust emissions and deposition originating from the site to ensure the adequacy of the mitigation measures being employed.

Activities which have been identified of having a high risk of creating dust, Balfour Beatty shall perform visual monitoring of airborne dust daily. A weekly record of such visual observations made, together with weather conditions and any actions taken shall be kept on site – Weekly Check sheet will be the basis for recording this information.

High wind speeds and inclement weather conditions can increase the propagation of dust. Activities which have an increased risk of causing dust nuisance (e.g. earthworks / breaking / cutting) during periods of high winds will be monitored and restricted or the mitigation level increased.

The significant atmospheric aspects identified for this project are as described in the following table and will be communicated in the Site Induction:

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
Dust and Air Quality	Operations	Impact: human respiratory health impacts / dust, causing nuisance for local community, causing staining to existing buildings and structures Risks: failure to fulfil compliance obligations, reputational damage, negative publicity, costs of cleaning, possible prosecution and fine.	<u>Normal / Abnormal:</u> Site stockpiles so that they are not adjacent to sensitive receptors. Turn off all plant when not in direct use. Background and operational dust and air quality monitoring and control is to be addressed within specific site activity ITPs and RAMs. Refer to section 4.6 for possible further control and mitigation measures. Typically on site sampling using PM10 real time monitors at site boundary adjacent to works where practicable. Acceptable controls for atmospheric dust may be that it remains within the following prescribed 8 hr total exposure limits. Typically 10mg/cm ³ (inhalable dust) 4mg/cm ³ (respirable dust) and 6mg/cm ³ (inhalable dust) 2.4mg/cm ³ (respirable dust) for amorphous silica. <u>Emergency:</u> n/a	Construction Team

4.6 Water Resources

The Western Gateway Phase 2 site is primarily urban. Any rainwater run-off on site is expected to drain into the extant highway drainage network following any necessary treatment (e.g. silt removal). Temporary rainwater attenuation measures (e.g. balancing ponds, temporary drainage) may be required to ensure that any rainwater run-off stays on site, such attenuation will be designed using Balfour Beatty's temporary works management system and then approved by the Project Temporary Works Co-ordinator. There is potential for direct impacts on ordinary water courses and an EA Main River (Emm Brook) as a result of runoff of suspended sediment, leakage or accidental spillage of oil/chemical/fuels and pollution arising during construction entering the watercourse. Control and management of potential pollution sources along with response to pollution incidents is further detailed in Section 5 of this document.

The following mitigation measures should be applied where appropriate:

- Provide spill kits
- Minimise silty runoff generation, isolate silty runoff from surface water systems and treat it.
- Wash down of vehicles must only be undertaken in designated areas isolated from the surface water system.
- In the event of an emergency, if it is necessary to discharge contaminated water to a drain, then it will be discharged to foul sewer not a surface water sewer, controlled via the Balfour Beatty Permit to Discharge System.
- Where wash water is to be routinely discharged to the foul sewer, then consent to discharge trade effluent' will be required from the appropriate regulatory body
- Locate chemical stores and machinery greater than 10m away from watercourses.
- Containers will be leak-proof and kept in a safe and secure area from which they cannot leak, spill or be open to vandalism.
- All fuel bunds to be double-bunded.
- The containers will be protected by temporary impermeable bunds with a capacity of 110% of the maximum stored volume. Areas for transfer of contaminating substances will be similarly protected.
- All refuelling, oiling and greasing will take place above drip trays or on an impermeable surface which provides protection to underground strata and watercourses and away from drains. Vehicles will not be left unattended during refuelling. Refuelling activities to be in accordance with the Balfour Beatty refuelling procedure and PVMP. If bowzers are to be used for refuelling then the bowzers will carry spill kits.
- Stationary plant is to be internally bunded or fitted with drip trays, plant nappies or similar.
- It is intended to only use concrete delivery vehicles with enclosed chutes capable of clean out at source (batching plant) however where it is required to clean out concrete wagons or skips containing wet concrete mixes, a designated area must be made available clear of watercourses or drainage systems so that the cement content does not enter water systems or block or blind drainage networks. This area may require an impermeable surfacing to prevent seepage into underlying soils.
- All foul water from onsite washroom/welfare facilities will be disposed to the public foul sewer with the necessary discharge consent or be removed off site and disposed of appropriately.

- The significant potential pollutant risks identified for this project are as described in the following table and will be communicated in the Site Induction:

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
Spillage of diesel through damaged tank or drips	Material use & storage	Impact: Contamination of ground / ground water / surface water / damage to habitats / disposal of spill kits and hydrocarbon contaminated waste Risks: costs of disposal, waste exceeding hazardous waste landfill acceptance criteria, reputational damage, prosecution, clean-up costs	<u>Normal & Abnormal:</u> Provision of spill kits / use of drip trays / maintenance of tanks and bunds <u>Emergency:</u> Stop work / refer to project environmental plan / utilise emergency response contractor if significant spill which can't be dealt with in-house	Construction Team
Storage of fuel & oil	Material use & storage	Impact: Contamination of ground / ground water / surface water / damage to habitats / disposal of spill kits and hydrocarbon contaminated waste Risks: costs of disposal, waste exceeding hazardous waste landfill acceptance criteria, reputational damage, prosecution, clean up costs	<u>Normal / Abnormal:</u> Double skinned fuel tank / tank & associated pipework within bund / drums stored on spill pallets / locked tank / use of drip trays or plant nappies / concrete hard standing / bund maintenance / spill kits / pollution incident plan / drainage plan / regular inspections of fuel storage areas / store fuel away from watercourse / availability of spill kit materials to deal with large spills <u>Emergency:</u> Refer to project environment plan. Utilise emergency response contractor if significant spill which can't be dealt with in-house	Construction Team
Cleaning & washing of plant, equipment and work areas	Operations	Impact: Depletion of natural resources, runoff of liquids into drains/watercourses without consent causing pollution / global warming / climate change Risks: Reputational damage, negative publicity, fines, prosecution, clean up costs	<u>Normal / Abnormal:</u> Implementation of an environmental management plan / invasive species management plan in place where applicable / implementation of grey water recycling facilities / obtain environmental permit or consent for discharging to watercourse / sewers <u>Emergency:</u> Stop work and seek professional advice	Construction Team
Concrete washout	Operations	Impact: Pollution to water / pollution to ground / damage to flora and fauna / loss of biodiversity Risks: Reputational damage, negative publicity, fines, prosecution, clean up costs	<u>Normal / Abnormal:</u> designated area for wash out away from drains and watercourses / use concrete washout skip / vehicle to return to concrete depot for washout / waste to be removed by licenced waste contractor / use of concrete sock <u>Emergency:</u> Stop work	Construction Team

Refuelling of plant and vehicles	Operations	Impact: Depletion of natural resources / global warming / climate change / contamination to watercourses / contamination to land / impact on ecology Risks: cost of fuel, cost to the business, prosecution, clean up costs Opportunities: Use of electric vehicles and battery operated plant	Normal & Abnormal: never leave plant/vehicles unattended when refuelling / use of drip trays or plant nappies / availability of spill kits / clean up any spills or leaks / report spills and leaks into iSMS regular inspections of refuelling areas / availability of spill kit materials to deal with large spills Emergency: In the event of a significant spill which can't be dealt with in-house, utilise emergency response contractor.	Construction Team
Vehicle washing	Operations	Impact: Depletion of natural resources / global warming / climate change / unauthorised discharge to sewer or surface water / negative impact on ecology / biodiversity loss Risks: failure to fulfil compliance obligations, reputational damage, negative publicity, possible prosecution and fine.	Normal / Abnormal: use designated wash bays only including third party wash bays at garages / ensure trade effluent discharge consent in place / ensure consent conditions are being met / no jet washing in undesignated areas Emergency: Security personnel and CCTV on high risk sites.	Construction Team
Compliance with legislation / compliance with Balfour Beatty reporting procedures	Reporting	Impact: Incidents don't receive adequate response Risks: Negative publicity, reputational damage, fines, prosecution Opportunities: Build good working relationship with regulators by self-reporting	Normal & Abnormal: All environmental incidents and near misses recorded on iSMS / BB legal team to be consulted if required Emergency: UK Environment Team to be consulted	Construction Team

4.7 Heritage

It is not anticipated that any works within the Balfour Beatty scope will impact any heritage assets. If any situation or works activity arises which may impact any of the surrounding heritage areas, then suitable mitigation measures shall be implemented, and a detailed sequence of works shall be produced and included/appended to this document. The Project Manager (Wokingham Borough Council) shall be contacted and informed prior to the undertaking of any works.

4.8 Archaeology

There is negligible potential for direct impacts on any buried archaeological features as a result of excavation or demolition activities.

If archaeological remains are found after works have begun, then the Responsible Person will carry out the following: -

- Stop work immediately in the area;
- Mark the area to avoid further disturbance
- Protect the find by fencing/blocking it off;
- Inform the Project Lead immediately;

4.9 Fire Management

A Fire Risk Assessment & Fire Safety Plan will be produced for the site. It will include:

- A description of the methodologies to be used to help prevent fires on site e.g. Hot Works Permits, Reducing the requirements for cutting on site, hot works exclusion areas etc.
- A detailed plan showing the location of all fire detection, fire alarm and firefighting equipment both within the site compounds and buildings as well as on site. The plan will also detail emergency escape routes and assembly points
- Mains Fire Hydrants are located on Finchampstead Rd and the Tesco Superstore. There locations are detailed in the Fire Safety Plan
- Protocols to be followed upon the discovery of a fire on site.

The burning of rubbish or other materials on site without the prior written consent from the appropriate authority is strictly prohibited. All necessary measures (including employment disciplinary measures) will be made to enforce this rule.

4.10 Demolition, Excavation, Ground Conditions, Contamination and Hazardous Materials

Demolition

Demolition is intended to be kept to the minimum required to carry out the construction works. Demolition is to be controlled as detailed within the Demolition RAMS as submitted within the required demolition notice.

Excavation

Excavation is intended to be kept to the minimum required to carry out the works. Excess excavation produces additional waste both in terms of excess spoil for disposal, but also requires additional materials and activity during backfill works.

Excavation for the installation of drainage, ducting and utilities, formation of the road box and construction of RC structures will be designed using Balfour Beatty's temporary works management system and then approved by the Project Temporary Works Co-ordinator.

Excavation and Filling operations will be controlled by Work Package Plans, Risk Assessments and Method Statements prepared for that section of works. The works will be carried in accordance with the relevant section of the Contract Specification.

Piling

Piling is not expected as part of the Western gateway Phase 2 project

Control measures (including, bunding, sheeting etc.) are to be in place during all piling works to segregate any arising material and ensure that there is no contamination of adjacent areas, surface water channels etc. Where there is potential for piling works to adversely affect groundwater, then monitoring wells or similar are to be installed in order to monitor the level and quality of the groundwater.

Piling works are to be managed and controlled by an in-depth Works Package Plan (WPP) which will provide details of all the environmental controls that will be in place during the piling operations.

Ground Conditions

The receptors potentially at risk from ground conditions, contamination and hazardous materials include construction workers; site neighbours (residential, education, commercial and amenity areas in the vicinity of the development); as well as ecological and hydrogeology and hydrology of the site and its surrounding area.

Wokingham Borough Council has conducted investigations prior to the commencement of any works and formulated reports and risk assessments which have been provided to Balfour Beatty during the Pre-construction stage. The reports dealt indicate that no significant contamination is expected within the Balfour Beatty scope of works. Prior to commencing works site and task specific method statements and risk assessments will be carried out which will outline the use of PPE and if necessary any other measures if any unexpected contamination is to be encountered during the works.

Control Measures in the Event of Unknown Contamination Being Encountered

Where unexpected contamination is encountered, work in the area of concern should be halted. The incident will be reported to the Balfour Beatty Project Manager, who will in turn report this in writing immediately to WBC.

The Balfour Beatty Project Manager will contact a suitably qualified specialist to investigate. Construction work cannot then re-commence until an amended investigation and risk assessment, and where necessary, a remediation strategy detailing how this unsuspected contamination shall be dealt with, has been submitted and approved by WBC. Remedial works shall then be undertaken and works can re-commence. Following completion of measures identified in the approved remediation scheme a verification report demonstrating completion of the works, and which outlines the effectiveness of the remediation, shall be submitted to and approved in writing by WBC.

4.11 Material Resources and Waste Management

Balfour Beatty shall follow the principles of the waste hierarchy, outlined below, is a fundamental principal to waste management on site and is the responsibility of all personnel and supply chain members to implement.



Figure 4-1 Waste Hierarchy

4.12 Waste Disposal

Waste will be disposed of in conjunction with our legal Duty of Care requirements.

Hazardous and non-hazardous waste will be stored separately and where possible non-hazardous waste will be segregated on site.

Hazardous wastes include, but are not limited to the following:

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Oils and fuels • Chemicals e.g. solvents • Batteries • Paints • Fluorescent tubes • Tar containing products | } | <ul style="list-style-type: none"> • ALL COSHH • ALL items marked with hazard symbols • Wastes with an *EWC code |
|--|---|---|

Non-Hazardous Waste

Prior to ANY waste movements the following needs to be checked:

- Waste Management Permit – does the destination site have a permit and is the permit valid (within date and is able to accept the waste stream leaving site).
- Waste Carriers Licence – these can be checked online: <http://epr.environment-agency.gov.uk/ePRInternet/searchregisters> . To be checked prior to ordering waste removal
- Waste Transfer Note (WTN) has been fully and correctly completed – to be checked on site at time of disposal

The above are the responsibility – Balfour Beatty Environmental Management Representative & Project Manager

Balfour Beatty WTN books are available from the Environmental Management Representative. Only one book will be issued at any one time. These must be completed even where the waste carrier has their own version of the WTN.

Four copies of a WTN will be distributed as follows. This provides evidence that the waste ends up at the designated destination.

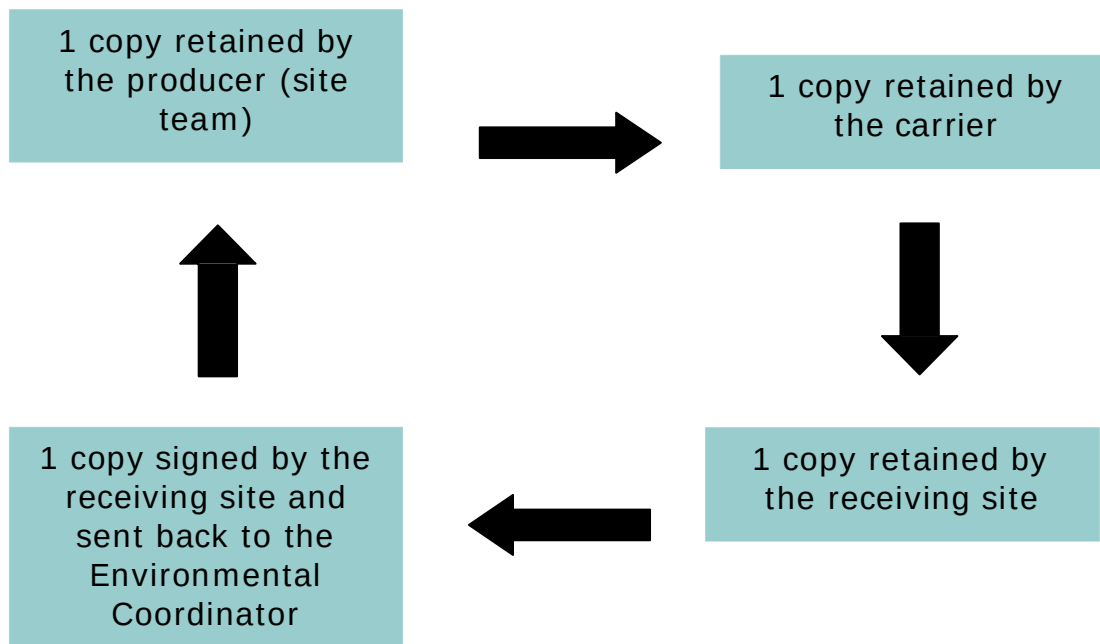


Figure 4-2 Waste Transfer Note Distribution

All completed WTN books to be handed back to the Environmental Co-ordinator who will check the book to ensure the WTNs have been fully and correctly completed and issue a replacement book.

A copy of the Duty of Care WTN must be kept electronically within project register for 2 years as the Environment Agency can ask to view completed Waste Transfer Notes at any time during that period.

Assistance on EWC codes can be found within the WTN books and here:

<http://wastesupport.co.uk/ewc-codes/>

Hazardous Wastes

The same pre-disposal checks apply to hazardous waste as they do for non-hazardous waste with the exception that movements of hazardous waste are subject to a 'Consignment Note' under the Duty of Care requirements.

Due to the specialist nature of the waste, Consignment Notes from contractors will be accepted.

Only the Site Foreman, Environmental Management Representative or a named, authorised person shall complete and sign off Consignment Notes

Four copies of the Consignment Note will be produced (as described in the previous section).

Copies of the Consignment Note must be returned ON THE SAME DAY to the Environmental Management Representative

Consignment Notes should be retained electronically on Project Register for 3 years.

Wastes Control Measures

- Waste contractors will be sourced through Reconomy
- Early set up of contract with National Community Wood Recycling Project or alternate scheme
- 'Just-in-time' procurement to minimise the chance of damage to materials
- Arrange take back schemes with suppliers for excess materials and/or packaging e.g. specify use of Euro code pallets
- Review packaging requirements where possible to avoid, reduce and reuse
- Engage with suppliers to discuss waste take back options
- Procurement of sub-contractors on the basis of services and materials package to encourage waste minimisation
- Limit use of materials coatings where possible
- Consider end of use for all materials – can they be recycled easily e.g. into component parts
- Identify and plan use for potential waste streams e.g. use of wood offcuts to protect pillars during works phase
- Design of temporary works to minimise material use
- Plan for segregated materials storage areas
- Identify and plan use for potential waste streams e.g. use of wood offcuts to protect pillars during works phase
- Effective skip management - well signed, easy access, regular call offs
- Waste training for environmental champion and operatives
- Ensure deliveries are correct before accepting them on site;
- Clear identification of contaminated land segregation area
- Do not mix materials e.g. soils should be segregated from road pavement arising's if necessary, by use of barriers. This will facilitate maximum re-use and minimise disposal

- Construct temporary works with easy deconstruction and material re-use in mind e.g. use of screws rather than nails to fix timber.
- Regular waste management checks
- Training & regular feedback to site team e.g. posters
- All skips and bins are to be appropriately signed. Signs should indicate waste type and relevant European Waste Code (EWC).
- The hazardous waste skip shall be covered. Operatives are to inform the site foreman when this skip is nearing capacity so a call off can be arranged.
- All works materials should be stored in a controlled manner to prevent damage or spoiling e.g. off the ground
- Waste oils will be stored in compliance with the Oil Storage Regulations. The containers will be in good condition and be banded to 110% of the biggest container capacity or 25% of the total stored capacity whichever is the greater.
- The following will be segregated on site:
 - Metals
 - Surplus materials, plant and equipment suitable for reuse;
 - Hazardous waste
 - General uncontaminated construction and demolition waste;
 - Office waste (separate bins for recyclable waste and canteen waste)
 - Electrical waste. A separate bin will be required for fluorescent tubes (as required)
 - Wood waste
 - Waste oils

Operational controls - office

- Segregate recyclable waste e.g. paper and plastics from food waste (bin colours)
- Publish waste returns information
- The following waste will be segregated in the office:
 - Recyclable waste –paper, cans and plastics
 - Canteen waste – food
 - ‘Household’ batteries (AA, AAA etc.)

Subcontractor liaison

All subcontractors will be required to facilitate the implementation of this plan, and this will be defined during tender. Subcontractors will be expected to implement the waste hierarchy, provide evidence that they comply with Duty of Care requirements by providing Waste Transfer Notes, and review their waste arisings throughout the project.

Waste Training

Training is provided through a variety of channels to all site personnel through the site induction, TBTs and posters and briefing notes.

The significant waste management risks identified for this project are as described in the following table and will be communicated in the Site Induction:

Environmental Aspect	Environmental Category	Environmental Impact and Risk	Control Measure to Mitigate Risk and Realise Opportunity for Improvement	Who is Responsible for the Control Measure
Transfer of waste and disposal	Waste	Impact: global warming and climate change / potential use of waste carrier without valid waste carriers licence / potential use of disposal sites without the correct environmental permit, exemption or equivalent / increased costs if local disposal and recycling sites not utilised Risks: Increased cost to business Opportunities: View waste as a resource and prioritise reuse	Normal / Abnormal: Review disposal options prior to commencement / segregate waste materials as they are generated / identify reclaim and reuse materials where possible / dispose of materials in accordance with duty of care / ensure licenced waste carriers are used / segregate all hazardous and non-hazardous waste for disposal / do not landfill liquid hazardous waste / prioritise recycling Emergency: None	Construction Team
Transport of waste by third party	Waste	Impact: human health impacts / global warming / noise, dust and traffic congestion causing nuisance for local community / potential to use supplier without waste carriers licence / potential for waste carriers licence to be revoked / potential for disposal sites to be utilised which don't have environmental permits or exemptions in place Risks: failure to fulfil compliance obligations, lack of control over disposal sites utilised	<u>Normal / Abnormal:</u> use approved waste carriers where waste carriers licence and disposal site licences have been approved prior to use / obtain waste transfer note and retain for 2 years <u>Emergency:</u> Approve new waste carriers and sites prior to use	Construction Team

4.13 Energy & Carbon

The process of producing energy has a major impact on air quality and produces harmful greenhouse gases such as carbon dioxide. The UK Government has set specific targets to reduce carbon dioxide emissions and is encouraging energy saving in the construction industry.

The purpose of this section is to detail the management strategy that will be implemented in order to minimise energy consumption and carbon emissions from this phase of the works.

Reduction in carbon forms a key commitment as part of UK Construction Strategy, is associated with management of key environmental management issues such as waste and can be seen as a proxy for effective commercial management.

Energy & Carbon Control Measures

In order to achieve targets Balfour Beatty will implement a number of energy saving measures across the programme.

Design and specification

- Off-site prefabrication to reduce waste and associated HGV miles.
- Local procurement of materials and sub-contractors to reduce vehicle delivery miles.
- Supplier take back schemes to eliminate waste e.g. hollow cell concrete slabs, thinner wearing course
- Optimise designs to minimise concrete, paving and steel usage and minimise materials arising's with an associated reduction in transport requirements

Vehicle and plant use

- LED lighting
- Use energy-efficient equipment on site where possible and cost-effective.
- Site staff will be required to switch all plant and equipment off when it is not being used, including lighting.
- Traffic marshals will remind delivery and collection vehicles to switch off when idle.
- Supervisors will ensure all equipment is well maintained, therefore improving energy performance. An equipment check schedule and associated records will evidence this
- Double-handling of materials and waste will be avoided where possible, through pre-planning of delivery lay down areas and set up of dedicated storage areas.
- Efficient driver training – arranged through plant manufacturers/ suppliers
- Implementation of the sustainable transport hierarchy

Office use

- 'A' grade energy efficiency rating for all equipment.
- Turning off PCs and monitors when out of the office.
- Using efficient heating and cooling systems in the office.
- Door closers on all external doors
- Installing thermostatic control to all heating control systems
- Installing lighting

4.14 Traffic and Transport

- 1) The WBC and Balfour Beatty Project Managers will liaise with both Wokingham Borough Council concerning the Traffic Management for this project.
- 2) Traffic management will be required for the duration of the enabling works and construction programme. TM is to be limited to the minimum required to carry safely carry out the site clearance works whilst also minimising disruption to traffic flows.
- 3) Copies of the current site plans can be found in Appendix F of this document and include Site Access Points, Site Compounds and Parking.
- 4) The site is to be fenced according to the principles defined in section 4.18 of this document. It is anticipated that any site office, parking and stores areas as shown on the plan are to be fenced off from other site areas by either a timber hoarding or post and chain link fencing.
- 5) Safety and low-level flood lighting is to be employed in the immediate area surrounding the site office, parking and stores areas. It is intended that low power LED lighting be utilised. Vehicle mounted lights and tower lights will be utilised for task lighting as and when required. It is intended that low emission/low noise LED tower lights are to be utilised where possible within the scheme.

Site Access

Site Access will be via the double leaf gates in Molly Millar's Lane as detailed in Appendix F.

- 1) All site vehicles are to be accommodated within the hoarding as detailed. No site or delivery vehicles will be allowed to stand on the public highway unless they are within approved and permitted Traffic Management.
- 2) Site Working hours as set out in Section 3.2 above

Traffic Management

There are no TTROs or Stopping-up Orders planned for the Phase 1 Enabling Works.

- 1) Works within the highway for the Enabling Works Phase will occur within approved TM.
- 2) [Advanced warning signs and traffic management signage will be as per chapter 8 specifications and in agreement with WBC traffic management teams.](#)
- 3) Construction traffic expected to access site during the Phase 1 Enabling Works Tree Clearance and Demolition is expected to consist of the following vehicles:
- 4) 1no. Hilux 4x4 pick-up (BB Staff).
- 5) 1no. Range Rover defender 4x4 (Tree Clearance Subcontractor).
- 6) 1no. short wheelbase Unimog lorry and towed chipper (Tree Clearance Subcontractor).
- 7) 1no. tractor and trailer for tree removal if required (Tree Clearance Subcontractor).
- 8) 1no. low loader with 13t / 20t tracked excavator.
- 9) 10no. 20t tipper lorries per day (max. 6no. per hour)
- 10) 20no. total delivery vehicles and construction-related traffic expected per day (Number of two-way movements). Note this is the peak figure during the demolition works (2-4 weeks).
- 11) Works are to be programmed to avoid activities requiring multiple site vehicles do not coincide.
- 12) A mobile welfare van will be provided for the duration of the Phase 1 enabling works.
- 13) All other vehicles (personal cars etc.) are to be kept at off site at a location to be agreed, most probably the Balfour Beatty Compound at Eastern Gateway and / or NWDR Old Forest Rd.
- 14) Onsite parking facilities for 3-4 cars/vans will be available within the small car par at the back of No

83-85 Finchampstead Road. These will be reserved for the site Supervisor, site personnel van and any visitors. During the site induction, all personnel will be instructed not to park on the nearby streets.

Main Construction Works

- 1) Any works within the highway will occur within approved TM.
- 2) A TTRO will be placed on Finchampstead Rd between the junction of Tangley Drive and Carey Road. An additional TTRO will be placed on Molly Millars Lane at the junction of Finchampstead Rd and Eastheath Avenue with a limit to 30 mph for the duration of the works. This will remain in place for the remaining duration of the works up to the implementation of the TRO concerning the closing of this section of the road. Copies of the Forward Plans for TTROs are included in Appendix L of this CEMP. Copies of the TTROs and associated plans (when obtained by the construction team) will be included in Appendix L in subsequent issues of this CEMP.
- 3) Footpaths and Public Rights of Way through the works will be maintained as safely practicable throughout the works. Any and all Footpath diversions will be maintained to a standard as to minimise the risk of slips, trips and falls on any temporary surface. Any diversions or temporary closures of Public Rights of Way are to be discussed and agreed between the construction team and the WBC Public Rights of Way Officer before they can be implemented. Footpaths and Public
- 4) New permanent speed limits as approved through planning will be introduced upon completion of the works. These lie outside of Balfour Beatty's scope for the Spine Road and Western Gateway Phase 1 Project.

Transport around Site

- 1) Where it is safe to do so works are to be arranged so that personnel can access their specific work areas on site by walking. Tools, equipment, and materials are to be delivered by the site pick-up as required. Otherwise, personnel can be taken to their work areas by the site minibus or pick-up. Tools, equipment, and materials are to be delivered by the site pick-up as required.

Deliveries

- 1) All heavy deliveries to site from the M4 will be via the A329(M), A3290, B3270 Lower Earley way, Harch Farm Road, Longdon Road, A329 Reading Road, Station Road, Barkham Road and Molly Millars Lane in order to avoid traffic through Wokingham Town Centre. (See Figure on Page 44)
- 2) Deliveries may only be made during site operating hours. Delivery vehicles will not be permitted to stand in the public highway in the vicinity of the site outside of site operating hours. The gate is to be situated far enough from the access such that all deliveries can pull off the road before gaining access to site.
- 3) Whenever possible, deliveries will be scheduled to avoid the highways network peak hours, as long as the programme of works remains unaffected. It should be noted that the most of the planned deliveries are to happen within a relatively short period of time during the hard demolition works.
- 4) The site compound will be set up within the small car par at the back of No 83-85 Finchampstead Road. The compound will be accessible via the existing driveway off Molly Millars Lane, opposite the Eden Peugeot garage.
- 5) All loading/unloading and storage of plant and materials will take place within the confines of the proposed site compound within the small car par at the back of No 83-85 Finchampstead Road.
- 6) Traffic marshals will be employed to prevent any excess traffic build up on the road. Space will be

maintained within the site boundary to ensure that all deliveries can be marshalled off the road prior to unloading. During demolition works (when the highest number of delivery vehicles is expected), the spoil removal wagons will be scheduled to prevent these from queueing in Molly Millars Lane.

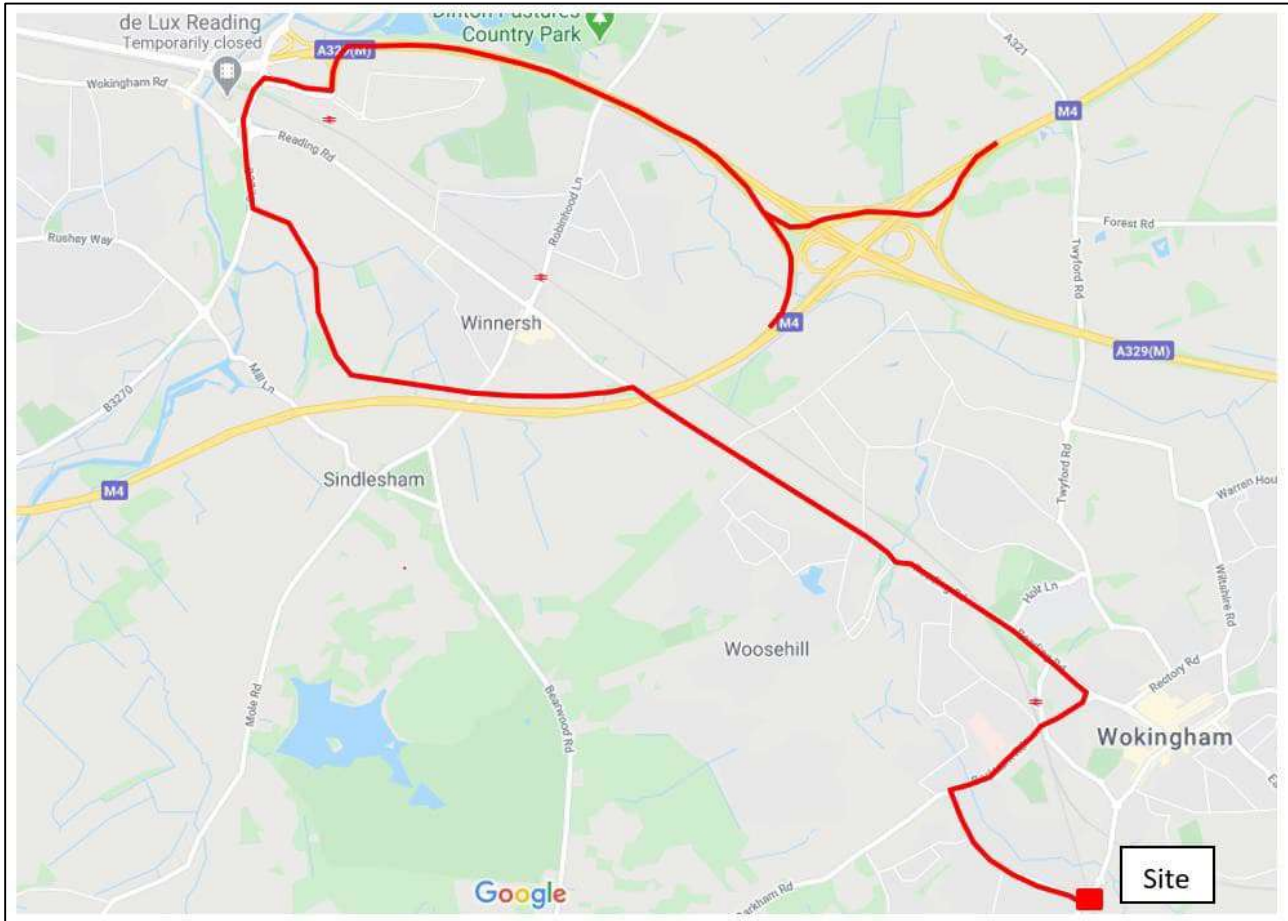
- 7) Materials are to be scheduled for delivery to site such that they arrive on site in a timely fashion as required by site activities.
- 8) Condition surveys of the adopted highways pre and post-construction shall to be undertaken; the extent to undertake the condition surveys to be agreed upon with the local highway authority.
- 9) Appendix L provides the bulk delivery schedule relating to the scheme (subject to programme development and site progress). This indicates that the peak level of construction traffic travelling to / from the site will occur in Sept to Nov 2025, anticipated as an average 0.9 vehicles per hour, across a ten-hour working day. The impact of the operation along the Proposed Route 1 described above, following the addition of construction traffic is reflective of the low level of traffic during the construction period, and therefore no interim junction improvements are considered necessary to accommodate the works.
- 10) It is considered that the capacity of the above junctions along Proposed Route will continue to be sufficient to accommodate the 5 vehicles per hour that would be expected during the peak construction period as has been practically demonstrated via the successful construction of the Eastern Gateway Project.

Workforce Travel Plans

1. Construction workforce Green travel plans will be prepared by the lead contractors, through engagement with the relevant subcontractors and highways authority, with the aim of encouraging the use of sustainable modes of transport to reduce the impact of workforce travel on local residents and businesses.
2. Objectives to support these aims will include:
 - a. effective management of construction worker traffic to minimise damage to the environment, impact on the surrounding road network, danger to road users and disturbance to neighbouring properties; and
 - b. the introduction of measures to reduce single-occupancy car journeys by staff working on construction sites through the encouragement of car sharing, use of available public transport, cycling and walking to work where reasonably practicable
3. An average of up to 0.3 construction workers are forecast to be on site during peak times during the construction period. A temporary car parking area (including spaces for minibuses) will be provided on the site within a contractor's compound. Parking will therefore be contained within the site and no unnecessary parking will occur on the local highway network. The location of where staff will travel from is unknown at this stage as it will depend on the appointed contractor. However, a number of the non-local workforce will stay at local accommodation and general operatives will be transported to the site by minibuses to minimise the impact on the local highway network. The number of car trips to the site will be minimised to those senior staff such as project managers, supervisors and the Health and Safety Managers
4. Appendix L provides the construction staff vehicles relating to the scheme (subject to programme development and site progress).
5. It is considered that the capacity of the above junctions (Proposed Routes 1 and 2) will continue to be sufficient to accommodate the construction staff vehicles per hour that would be expected during the peak

construction period as has been practically demonstrated via the successful construction of the Eastern Gateway Project.

Prescribed HGV / Delivery Route – Preferred Construction Traffic Route



Wheel Cleaning and Monitoring of Surrounding Roads

- 1) A jet wash is to be deployed adjacent to the site compound exit, which is the small driveway linking from the small car par at the back of No 83-85 Finchampstead Road to Molly Millars Lane.
- 2) All Lorry and vehicle wheels are to be inspected for and will be cleaned of mud before being allowed to exit the site. Should any mud be deposited on the highway by project plant or vehicles, then a sweeper lorry will be deployed to clean the road surface.
- 3) Surrounding Roads are to be regularly monitored so that any detritus originating from the construction can be removed. They are also to be monitored for any damage that may have arisen from deliveries and construction traffic.

Please note that the site plan and traffic management plan will be updated regularly as the project progresses. Up to date site plans will be issued with subsequent resubmissions of the CEMP.

Green Travel Plan

Balfour Beatty is committed to reducing the environmental impact and the carbon footprint associated with the Western Gateway Phase 2 Project. A Green Travel Plan is a dynamic process, evolving and changing over time to reflect Balfour Beatty as a business, Balfour Beatty's employees and Balfour Beatty's premises. It provides an opportunity for Balfour Beatty to promote sustainable transport and will cover the following elements:

- Commuter journeys
- Business travel
- Visitor travel
- Deliveries and subcontractors travel
- Fleet vehicles
- Working practices.

Objectives

The purpose of this Green Travel Plan (GTP) is to:

- Ensure compliance with all applicable National and Local Travel Policy Guidelines and promote the use of sustainable transport;
- Ensure Conformance with the Company Environmental Policy Statement – including all associated Balfour Beatty standards and procedures;
- Achieve Company Objectives & Targets (Construction Phase Plan Appendix Q);
- Improve opportunities for and encourage travel by sustainable modes and to reduce unnecessary travel; and
- Raise awareness of the Travel Plan for staff and visitors.

In addition to the reduction of the company's carbon footprint, Balfour Beatty would expect to gain additional benefits:

- A reduction in risk to employees through the reduction of journeys
- A reduction in car parking provisions that may decrease the cost of parking against the project
- Cost reductions for employees and the organisation through the reduction of car journeys
- Quality of life improvements for staff related to reduced congestion and stress and improved health and motivation
- Demonstration to our clients and local communities our commitment to reduce the impact of travel on air quality, congestion and the reduction in the use of natural resources

Management Commitment

Travel is a major contributor to the Balfour Beatty carbon footprint. As an organisation Balfour Beatty is committed to reducing our overall carbon footprint as far as possible. This is reflected in our corporate sustainability policy.

Every premises where Balfour Beatty employees travel to and from should complete a Green Travel Plan and commit to objectives and targets to reduce the carbon footprint associated with travel. Progress is effectively managed and reported through the section 4 of this GTP.

Transport options

Pedestrian Access

The Western Gateway Phase 2 Project is located in an urban environment south of Wokingham Town Centre. There is paved pedestrian access from streets neighbouring the site.

Cycling

There are no designated cycle routes to any part of the site or to the proposed site compounds. Cycle access to site will be by via the public highway only. Cycle parking will be provided, and lockers/showers/changing facilities will be made available for employees using active modes of travel.

Bus links

A bus stop for the Nos. 121, 125, 128 and 145 services is located on Finchampstead Road outside the Two Poplars Public House. It is approximately 150m walk from this bus stop to site.

Rail links

Wokingham train station is within walking distance of the Western Gateway Phase 2 site via Barkham Road and Molly Millars Lane.

Journey Sharing/Car Sharing

Balfour Beatty personnel are to be encouraged to share car journeys wherever practicable. Mini-bus sharing schemes will be encouraged for personnel and subcontractors travelling to site from lodgings within close proximity of each other.

Motorcycles

There will be parking provided for motorcycles at the existing WMHP site compounds.

Driving

There will be parking provided at the existing WMHP site compounds.

Employee Survey

Evolving the plan will involve the collection of data. A travel survey (found in Appendix K) will form the basis of updates to the GTP and will identify the travel behaviour and patterns of the individuals involved. The survey will provide measurable results, which will enable the creation of targets. Targets can be completed once two rounds of surveys have been completed

Roles and Responsibilities

The key roles and responsibilities for the Green Travel Plan

Responsible Person	Duty
Project Manager	• Responsible for Contractual requirements with regard to Green Travel • Ensuring sufficient resources are available to implement this plan effectively • Assist the Environmental Coordinator with implementation of the plan.
Environmental Coordinator	• Assist the Project Manager with implementation of the plan
Traffic / Logics Manager	• Ensure that the 'greenest' mode of delivery/collection is used
Site Manager	• Ensure that the plan is communicated to all new starters through induction
All Staff	• Responsible for complying with this plan

Monitoring and Review

Every six months the GTP champion will carry out a survey on the site to determine whether any changes have taken place, review against the baseline and make recommendations for the site to improve travel options which reduce environmental impact. An example of the questionnaire to be used as part of the survey is included in Appendix J of this document.

4.15 Visual Amenity

Balfour Beatty intends to install fencing and hoarding where appropriate to secure the various project sites and to maintain public safety. Balfour Beatty will instigate a programme of maintenance and regular inspection to ensure that all site fencing is remains secure and in good condition.

Balfour Beatty will consider and adopt suitable mitigation measures, where appropriate, to reduce track-out of material and to keep the site entrance and neighbouring roads as clean and tidy as possible, road sweeping plant and equipment will be utilised to maintain clean road surfaces during the works.

4.16 Pest Control

Unless controlled, vermin can impact on neighbouring properties and land. During the Phase 1 enabling and main construction works, measures will be implemented to control vermin:

- Ensure a clean and tidy site at all times
- Correct and satisfactory stopping up and sealing of all disused drains and sewers where applicable
- Prevention of accumulation of refuse and putrescent materials
- Ensuring appropriate storage and disposal of any food waste.

4.17 Site Lighting

Lighting of the site storage areas is to be kept to the minimum required to ensure health and safety and security. Any lights are to be positioned and orientated so as to not spill light onto neighbouring habitats or residences. Interior lighting for any site welfare is to be controlled such that it switches off automatically when not in use.

During winter months (November to March) temporary site lighting may be required during working hours. In addition, low level security lighting may be required.

Temporary site lighting will be designed to minimise general spillage of light, which may otherwise affect residential receptors and ecological receptors (primarily bats). The following shall be implemented:

- Orientate away from residential properties and adjacent hedgerows / trees
- Use of short light columns;
- The attachment of directional hoods to lights in order to ensure that the light is directed at an angle less than 70°
- The use of suitable low UV/ filtered lights which contain no ultraviolet light, therefore have a low attraction to insects.

The brightness of the lighting should also be kept as low as possible, whilst also maintaining health and safety requirements.

All site lighting requirements will be included within all task specific method statements, risk assessments and briefings prior to works commencing.

4.18 Site Fencing

Existing perimeter fencing to the site is to be utilised where possible, considering the type and condition of existing fencing; its suitability, and the proximity of the fences to the works.

Where existing fencing is not suitable, temporary fencing is to be installed. All temporary fencing is to be installed in a method approved by the Balfour Beatty Temporary Works Co-ordinator. Types of fencing intended for use on the project site are described below.

Timber Hoarding – Where applicable the site is to be securely fenced with timber hoarding.

Chain Link / Post & Wire Fencing – Where deemed necessary the unfenced site boundary is to be securely fenced with driven steel posts and chain link mesh and/or wooden post and steel wire fencing. The expected minimum height for this fencing is 1.83m (6ft).

Temporary Panel Mesh Fencing (Heras) - Heras fencing is to be used to secure the remaining site boundary where other fencing is not practicable. Heras fencing is to be doubly clipped and securely braced. Heras feet and braces are to be weighted down with sandbags or similar to ensure stability in high winds. Where there is sufficient room additional panels are to be installed so as to form triangular braced panel sections. As far as possible all bracing should be sufficiently spaced so as to maximise the stability of the fencing. Heras fencing will also be used within the site where appropriate to fence off excavations, storage areas, tree protection areas etc.

Pedestrian Barrier (galvanised steel and plastic) - Pedestrian barrier is to be used to segregate pedestrians from vehicle and plant routes. Pedestrian barrier is to be doubly clipped and securely braced with concrete Kelly blocks or similar to ensure stability in high winds. Where there is sufficient room additional panels are to be installed so as to form triangular braced sections. As far as possible all bracing should be sufficiently spaced so as to maximise the stability of the fencing. Pedestrian barrier will also be used within the site where appropriate to fence off excavations, storage areas, tree protection areas etc. Pedestrian barrier is not to be used within the Public Highway.

Red & White Water Filled Barrier and Pre-cast Concrete Vehicle Collision Barriers (VCBs) – Red and White barriers and VCBs are to be used in high traffic areas on site or where close proximity to plant / vehicles dictates. These barriers are only to be used on the public highway in an approved traffic management scheme. Additional proprietary approved panels may be attached to these barriers where required.

5 Pollution Incident Response

This section covers pollution incident response and reporting.

5.1 Preparing for Incidents

The following information will be included in the site induction, a toolbox talk, and be displayed in prominent places in order to assist in preparing for and responding to environmental incidents:

- Emergency instructions in the event of a leak or spillage on site, including contact details
- A plan showing the environmental features of the site
 - Existing foul and surface water drains locations, routes and directions of flow
 - Discharge points for surface and trade effluent or any on-site domestic or trade effluent treatment facilities
 - Emergency access routes
 - Location of hydrants and/or fire points
 - Location of spill kits
 - Location of bunded storage areas
 - Locations of waste and materials stores
 - Location of neighbours
 - Information on groundwater sensitivity

An up-to-date COSHH register shall be held by all contractors on site, to include the location and capacities.

The contents and capacity of the spill kits will depend on the detailed inventory of products that will be stored and handled on the site.

- Pollution response procedure diagram
- Sand bags
- Oil-absorbent granules
- Booms
- String
- Gloves
- Absorbent mats
- Shovel
- Polythene sheeting and bags

The spill kits will be clearly marked, sign-posted and held close to the area where materials are stored and handled.

5.2 Incident Response

In most cases the actions required to respond to an incident will seem obvious and common sense will prevail. However the basic response procedure detailed in the following chart should be implemented immediately.

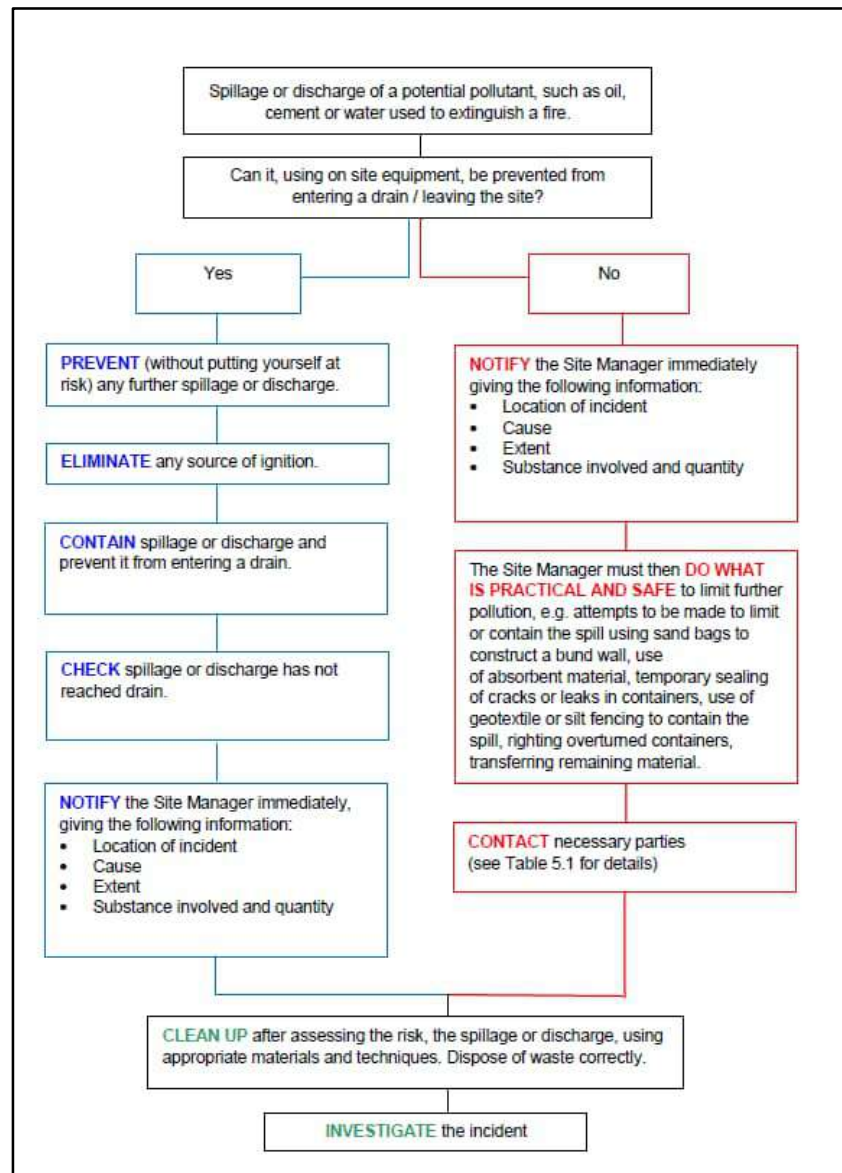


Figure 5-1 Spill Response Procedure & Incident Reporting Procedure

5.3 Incident Reporting

In the event of an environmental incident an employee shall immediately report the incident to their Supervisor and the Balfour Beatty Project Manager.

Then:

- If a spill has reached a surface water drain or watercourse, or soaked away in open ground, the Balfour Beatty Project Manager will contact the Environment Agency immediately on the 24hr helpline; and
- If a spill has entered a foul drain, and then South East Water or Thames water should be notified as soon as possible through the Balfour Beatty Project Manager.

If incidents do not fall into any precise category, or if there is any doubt, the Environment Agency should always be contacted through the Balfour Beatty Project Manager.

Emergency Contact Details

Contact	Name	Daytime telephone number	Out of hours telephone number
Project Director	Matt Parkes	07892 709413	07892 709413
Project Manager	Vinay Roopun	07973 935531	07973 935531
Construction Manager	Craig Morris	07899 996034	07899 996034
General Out of Hours	Balfour Beatty Out of Hours		0800 121 4444
First Aider(s) or Appointed Person Either list here or display names on site	Craig Morris	07899 996034	07899 996034
Health & Safety Manager	TBC		
Health & Safety Advisor	TBC		
Environment & Sustainability Manager	TBC		
Client Representative	Ian Haller (WBC)		
Local HSE office	Priestley House Priestley Road Basingstoke RG24 9NW	01256 404000	01256 404000
Environment Agency	Red Kite House Howbery Park Crowmarsh Gifford Wallingford OX10 8BD	0370 8506506 (8 am to 6pm)	0800 807060 (Incident hot line 24 hrs)
	Pollution	0800 807060 (Incident hot line 24 hrs)	0800 807060 (Incident hot line 24 hrs)
Local Authority	Wokingham Borough Council Shute End Wokingham RG40 1BN	0118 974 6000	0800 212 111
Fire Brigade Royal Berkshire Fire and Rescue service	Fire Station Easthampstead Road, Wokingham, Berkshire RG40 2EH	01189 452 888	999
Ambulance	Reading Ambulance Station North St, Reading RG1 7DA	01869 365000	999
Police Thames Valley Police	Wokingham police Station The Courtyard, Denmark St, Wokingham RG40 2AZ		101 / 999

Accident & Emergency Hospital	Royal Berkshire Hospital 21 Craven Rd Reading RG1 5LE	0118 322 5111	999
Utilities contacts	Gas SGN & GTC	0800 111999 (24hrs)	0800 111999 (24hrs)
	Electricity Scottish & Southern Energy	08457 708090 or 0800 111999 (24hrs)	08457 708090 or 0800 111999 (24hrs)
	Water South East Water Thames Water	03330 003330 (SE) 08007 146 614 (T)	03330 003330 (SE) 08007 146 614 (T)
	Flood Line	03459 881188	03459 881188
Environmental Response	TBC		
Sub-contractor contacts	TBC		

5.4 Near Misses

All environmental accidents, incidents, near misses, property damage must be reported as soon as possible in accordance with the Incident Investigation and Reporting procedure (HSES-PR-0005).

All information will be captured and entered onto the Company incident database iSMS. Investigations will be undertaken by project management; however the Company HSES Advisors and Senior Line Management will assist if required and will always participate in investigating and reporting on all serious incidents. The investigation will determine the root causes and lessons learned will be identified and acted upon, with learnings shared as appropriate.

Subcontractors are responsible for investigating and reporting accidents/incidents under their control, however the Company will assist where required.

All persons onsite will be informed of the processes for accident/incident reporting through attendance at Induction, Pre-Start Meetings and/or by issue of the Subcontractors Health, Safety, Environment and Quality Conditions.

5.5 Investigating

The Site Manager will investigate all environmental incidents to determine the cause of the incident; ensure environmental harm is remedied wherever reasonably practicable; and to introduce improved preventative measures wherever reasonably practicable. The size of the investigation will be proportional to the environmental incident in question and should be a practical tool to improve operations on site for the better. The incident report shall be submitted to the client.

Appendix A – Site Safety Tour (including Environmental Inspection)

Project Number/Title:		Strategic Business Unit:	
Location:		Date:	
Tour carried out by:		Delivery Unit:	
Site Contact:		Date of Tour:	
BB or Subcontractor:		Subcontractor:	
SSOW Ref:		Revision:	
Check List Key	Meets or exceeds Company Standards	☒	Below Company Standards
		☒	Not Applicable
			NA

INSPECTION AREAS / CONTENTS

A - EFFECTIVENESS OF DELEGATED HSES DUTY HOLDERS	1
B - ACCESS AND SEGREGATION ARRANGEMENTS	2
C - WELFARE/OFFICE AREAS	2
D - STORES/WORKSHOP AREAS	2
E - WORKSHOP EQUIPMENT	3
F - SITE ACTIVITIES/CONTROLS / WORK AREA	3
G - STORAGE AREAS.....	4
H - DOCUMENTATION.....	4
I - EMERGENCY ARRANGEMENTS	4
J - PREPARING FOR WORK	5
K – SAFETY TOUR.....	5
L - OTHER CONTRACT SPECIFIC ITEMS (SPECIFY)	5
M – POSITIVE FINDINGS & ACTIONS	6
N – SUBSTANDARD CONDITIONS & ACTIONS	6

Ref.	Inspected Item	Check
A - EFFECTIVENESS OF DELEGATED HSES DUTY HOLDERS		
A-1	Responsible Person for Fire Safety	
A-2	COSHH Co-ordinator	
A-3	Authorised Engineer / Person	
A-4	First Aid Personnel	
A-5	Lifting Operations Appointed Person	
A-6	Authorising Person (AWNES)	
A-7	Manual Handling Competent Person	
A-8	People, Vehicle and Plant Co-ordinator	
A-9	Traffic Safety and Control Officer	
A-10	Temporary Works Coordinator	
A-11	Emergency Response Team Leader	
A-12	Nominated Fuelling Representatives	
A-13	Waste Manager	
A-14	Fire Marshal	
A-15		
A-16		

Ref.	Inspected Item	Check
B - ACCESS AND SEGREGATION ARRANGEMENTS		
B-1	Is the reception/entrance area clean and are notices in order?	
B-2	Are members of the public prevented from accessing the site?	
B-3	Are members of the public protected and segregated from the works?	
B-4	Are road vehicles following the traffic control measures?	
B-5	Are safe walking routes clearly defined and clear from obstructions?	
B-6	Are pedestrian crossings clear and well-marked to adequately warn drivers?	
B-7	Are all the site lights operational?	
B-8	Are the ground and floor surfaces in sound condition?	
B-9	Is there adequate vehicle and pedestrian segregation?	
B-10	Are any segregation and exclusion zone measures in place robust and clearly defined?	
B-11	Are speed limiting devices in place? (e.g. signs, speed bumps)	
B-12	Are traffic routes used by vehicles clear of obstructions?	
B-13	Are all vehicles reverse parked?	
B-14	Are pedestrian crossing points well lit, marked and clear of obstructions?	
B-15	Are measures to address blind spots in place and adequate?	
B-16	Are there adequate direction signs to buildings, entrances and safe areas?	
B-17		
B-18		

Ref.	Inspected Item	Check
C - WELFARE/OFFICE AREAS		
C-1	Drying rooms	
C-2	Are the tops of lockers/filing cabinets/ cupboards clear of stored items?	
C-3	Is the area clear of broken or damaged equipment lying around?	
C-4	Is all portable electrical equipment and visible cabling in good order?	
C-5	Are properly designed steps available for reaching heights?	
C-6	Are buildings in good general condition and state of repair?	
C-7	Are passageways, traffic routes, clear of tripping hazards?	
C-8	Are floor surfaces in offices, corridors and stairs in an acceptable condition?	
C-9	Are rubbish receptacles emptied regularly?	
C-10	Are desks/worktops intact and are desks clean?	
C-11	Is the lift in a clean condition with all notices in order?	
C-12	Are the kitchen areas clean and tidy, with any spills being cleaned up?	
C-13	Are their seats (with backs) provided for resting and eating food?	
C-14	Are the toilet and shower areas clean and tidy with any spills being cleaned up?	
C-15	Are toilets properly stocked with toilet paper, soap and paper towels?	
C-16	Are there suitable provisions for washing and drying hands?	
C-17	Are food preparation areas clean and suitable for use?	
C-18	Is the heating, lighting and ventilation in working order?	
C-19	Is there an adequate means to heat food that is functioning correctly?	
C-20	Is there an adequate supply of hot, cold and drinking water?	
C-21		
C-22		

Ref.	Inspected Item	Check
D - STORES/WORKSHOP AREAS		
D-1	Stores layout & housekeeping	
D-2	Small tools & electrical equipment	

D-3	Lifting accessories	
D-3	Safety harnesses	
D-4	COSHH materials	
D-5	Flammable liquids, LPG, other gases	
D-6		
D-7		

Ref.	Inspected Item	Check
E - WORKSHOP EQUIPMENT		
E-1	Is plant and equipment within the test date?	
E-2	Are guards securely fitted to enclose moving parts, serviceable and effective?	
E-3	Are electrically powered tools and trailing leads in good serviceable order?	
E-4	Do all lifting accessories have evidence of examination (tag or certificate)?	
E-5	Is all vibrating portable tools fitted with a coloured HAV tag?	
E-6	Is Local Exhaust Ventilation fully operational and in date?	
E-7	Are all items of machinery securely mounted and have they been inspected?	
E-8	Are all COSHH items properly marked and accompanied by a valid assessment?	
E-9	Are records of statutory inspection up to date and relevant?	
E-10		
E-11		

Ref.	Inspected Item	Check
F - SITE ACTIVITIES/CONTROLS / WORK AREA		
F-1	Site perimeter	
F-2	Traffic and pedestrian management	
F-3	Site tidiness	
F-4	Are all walkways adequately marked and clear of obstructions?	
F-5	Are all items correctly stored (in suitable areas or containers)?	
F-6	Are all floor surfaces and steps in good repair and free from contamination?	
F-7	Are all guard rails in good order and fit for purpose?	
F-8	Are all the lights in the work area working?	
F-9	Are inspection pits tidy and free from contamination such as oil and grease?	
F-10	Are there measures in place to prevent falls into open pits	
F-11	Is all workplace lighting in working order (e.g. pit lights, local task lights)?	
F-12	Is the area of work clear of litter, and have means to dispose of waste been provided?	
F-13	Plant & equipment	
F-14	Lifting operations	
F-15	Excavations/ Cofferdams	
F-16	Scaffolding	
F-17	Mobile towers	
F-18	Powered access equipment	
F-19	Confined spaces	
F-20	Floor openings & edge protection	
F-21	Temporary electrical supplies	
F-22	Overhead services	
F-23	Underground services	
F-24	Permanent electrics	
F-25	Hand arm vibration	
F-26	Manual handling	
F-27	Personal protective equipment	
F-28	Temporary traffic management	
F-29	Temporary works	

F-30	Hoarding	
F-31	Work at Height	
F-32	Hot Works	
F-33	Safety Signage	
F-34	Environmental Noise & Vibration	
F-35	Air and dust pollution	
F-36	Waste management	
F-37	Fuels and oils	
F-38	Adequacy of spill kits	
F-39	Work in / near watercourses and flood plains	
F-40	Ecology, archaeology & heritage	
F-41	Invasive weeds	
F-42	Consents / licences / permits / etc.	
F-43	Contaminated land	
F-44	Condition of local roads	
F-45	Community relations	
F-46		
F-47		

Ref.	Inspected Item	Check
G - STORAGE AREAS		
G-1	Are the storage areas secure, properly marked and in an orderly fashion?	
G-2	Are items stored in an appropriate way (e.g. stacked safely and no leaners?)	
G-3	Are heavy items stored at a suitable height to avoid reaching up?	
G-4	Do all the lights work in the storage area?	
G-5	Are hazardous items stored in appropriate containers (e.g. cylinders or batteries)	
G-6	Are all walkways free from any loose equipment or contamination?	
G-7		
G-8		

Ref.	Inspected Item	Check
H - DOCUMENTATION		
H-1	Is the notice board displaying up to date safety information (e.g. Policies, HSE Poster etc.)?	
H-2	Does the visitor's induction contain all the up to date details? (e.g. first aiders)	
H-3	Is there a documented up to date Depot Plan showing key H&S arrangements?	
H-4	Is there an adequate signing in system for visitors on site with arrangements for inducting and accompanying visits?	
H-5	Are methods available for reporting close calls / observations and best practices?	
H-6	Are records of statutory inspections up to date and relevant?	
H-7	Are there posters for the close calls / observations' app displayed?	
H-8	Is Golden Rules information present on site?	
H-9	Is Right First-Time literature present?	

Ref.	Inspected Item	Check
I - EMERGENCY ARRANGEMENTS		
I-1	Are emergency arrangements clear and understood (e.g. First aid, Fire, evacuation)?	
I-2	Are emergency contact details prominently displayed and up to date? (Incl. first aiders and fire marshals)	
I-3	Are there trained first aiders and fire marshals on duty?	
I-4	Is first aid equipment provided which is accessible by all staff?	
I-5	Is there an accessible eye wash station containing at least two bottles?	
I-6	Are all first aid kits and eye wash stations stocked and in good condition?	
I-7	Is there suitable firefighting equipment available for immediate use?	
I-8	Are all fire extinguishers in good condition and within their inspection date?	
I-9	Are there spill kits in close proximity to vulnerable areas?	

I-10	Has the fire alarm system been tested in the last 7 days?	
I-11	Is the evacuation route clear of obstructions?	
I-12	Is the Staff Assembly Point and evacuation routes accessible and clear of obstructions?	
I-13	Is the assembly point suitably located considering the planned work?	
I-14	Are fire exits kept clear of obstructions?	
I-15	Are all areas clear of loose combustible materials?	
I-16		
I-17		

Ref.	Inspected Item	Check
J - PREPARING FOR WORK		
J-1	Is there a suitable site induction and or pre-works briefing in place?	
J-2	Are the risks and controls identified clear, understood and briefed?	
J-3	Is the site being adequately supervised and/or monitored?	
J-4	Are protection measures adequate for the works undertaken (limits / isolation)?	
J-5	Are there copies of the necessary documents (e.g. Section 61, Lift Plans)	
J-6	Do operatives hold the relevant training and competencies?	
J-7	Is there a documented / approved SSoW in place for the works?	
J-8	Is there a means to report accidents, incidents and close calls?	
J-9	Are all the necessary tools, plant and equipment available, inspected and fit for purpose?	
J-10	Is everybody aware of the accident, incident & close call reporting procedure?	
J-11	Have unplanned risks been adequately controlled?	
J-12		
J-13		

Ref.	Inspected Item	Check
K – SAFETY TOUR		
K-1	Number of people spoken to:	
K-2	What conversation did you have about the Behavioural Safety Programme?	
K-3	What conversation did you have about the risks present?	
K-4	What works were being carried out at the time?	
K-5	Who did you speak to?	
K-6	What did you see that could be shared by others (good process, specific risk controls, equipment in use)? (Record in section M)	
K-7	Examples of good site control (housekeeping, supervision, segregation etc) (Record in section M)	
K-8	Who should be recognised for demonstrating safety leadership on site?	
K-9	What conversation did you have about how the site could be improved?	
K-10	What risks were present that were not being adequately controlled?	
K-11	What Unsafe Acts did you have to Correct?	
K-12	What Unsafe conditions did you pick up?	
K-13	What did you see that should be shared with the rest of the business?	
K-14	What Risk Elimination measures were witnessed?	
Notes:		

Ref.	Inspected Item	Check
L - OTHER CONTRACT SPECIFIC ITEMS (SPECIFY)		
L-1		
L-2		
L-3		
L-4		

L-5		
-----	--	--

M – POSITIVE FINDINGS & ACTIONS		
Ref.	Details of any Positive Actions or points of interest	Details of any follow up action

All items found to be below company standards must be referenced below, along with actions required to remedy substandard conditions, a priority category according to the potential for injury/damage (see table below), and a person accountable for completion of the actions. When all actions required are complete, the completion date should be filled in to signify this.

N – SUBSTANDARD CONDITIONS & ACTIONS				
Ref.	Description of substandard condition & action required	Priority	Accountable Person	Date Actioned

PRIORITY	DEFINITION	ACTION
1 (Major / High Potential)	Substandard action or condition with the potential to result in fatal or major injury, or serious damage to equipment, infrastructure or environment.	Operations must cease immediately until the situation is rectified and restart is authorised by the Site Lead.
2 (Medium Potential)	(a) Substandard action or condition with the potential to result in significant other injuries (i.e. minor) or minor damage to equipment, infrastructure or environment OR (b) No work being carried out but there is a substandard condition with the potential to result in fatal/major injury, or serious damage to equipment, infrastructure or environment.	Either (a) Operations which are creating hazards of a less serious nature must cease, or (b) No work being carried out but prior to recommencement then points raised within this report must be addressed.
3 (Minor / Low Potential)	Substandard action or condition, which, whilst not resulting in injury or damage, falls below the requirements and standards, set by the Company.	Action required as soon as practicable.

	Name (Print)	Signature	Date
All remedial actions certified as complete – (Site Lead)			

Appendix B. Sensitive Receptors (Built Environment)

Appendix B. Sensitive Receptors (Built Environment)

Western Gateway Phase 2 (WG2)



Legend	
Site Boundary	
Residential	
Commercial	
Schools, Community Facilities etc.	

Appendix C. Sensitive Receptors (Ecological and Hydrological)

Appendix C. Sensitive Receptors (Ecological and Hydrological)

Western Gateway Phase 2 (WG2)



Legend	
Site Boundary	
Woodland	
Nature Reserve	
Pond	
EA Main River	
Ordinary Watercourse	

Appendix D. Balfour Beatty Environmental Policy

Balfour Beatty is a leading infrastructure group. We finance, develop, build and maintain innovative and efficient infrastructure that underpins daily life, supports communities and enables economic growth.

We are committed to protecting and where appropriate enhancing the environment in which we operate. We will act in a responsible way and take a proactive approach to continually improving our environmental performance. We will ensure compliance with all legal, customer and Balfour Beatty Group requirements as a minimum.

Balfour Beatty operations in the UK implement a management system that meets the requirements of ISO14001:2015. We recognise our activities both impact and are impacted by the natural environment and act accordingly.

RESPONSIBILITIES

This policy applies to our workforce, business partners, suppliers and subcontractors working on our behalf.

The Board of Balfour Beatty is responsible for establishing the overall Environmental Policy for the Group and for reviewing the performance of each Division within the Group.

Our Group Sustainability Strategy, Building New Futures, identifies key environmental focus areas, commitments and targets our businesses will address.

Each business is responsible for:

- Ensuring, at a minimum, compliance with all legal, customer and Balfour Beatty Group requirements
- Supporting our customers and supply chain partners to enrich the social and physical environment through the provision of innovative and efficient solutions which support communities and enable economic growth
- Providing leadership for environmental management
- Developing action plans, agreeing milestones, and reviewing progress
- Ensuring arrangements to deliver requirements are implemented

ENVIRONMENTAL IMPACTS

Where we can influence or control, we will work with our people, customers, designers, supply chain and other partners to protect the environment by:

- preventing pollution
- reducing our local impacts and effects of disturbance, noise and air pollution
- halting nature loss and embedding nature positive principles
- reducing our Greenhouse Gas emissions to address climate change mitigation and adaptation
- improving our energy efficiency
- using material resources efficiently and selecting materials with a low environmental impact which are sourced responsibly
- reducing waste by applying the waste hierarchy to improve resource efficiency

CONTINUAL IMPROVEMENT

We are committed to engaging with stakeholders to ensure we improve our environmental management system to meet our compliance obligations to deliver environmental best practice.

We will measure and report environmental performance on a monthly basis across the UK business to identify opportunities for continual improvement. We will review our policy and externally report on our environmental performance annually.

We are committed to raising environmental awareness in relation to our environmental risks and opportunities with our employees and supply chain partners through training courses, toolbox tools, workshops and other communication methods.

We will communicate this policy to our employees, supply chain partners and relevant interested parties to raise environmental awareness.

AUTHORISATION

Leo Quinn
Group Chief Executive, June 2024

Appendix E: Works Programme and Construction Phasing Plans

WESTERN GATEWAY PHASE 2 – TARGET PROGRAMME SEQUENCE SLIDES – 1 of 6



KEY

- Existing kerb line
- Road works this stage
- Road works completed
- Public pedestrian route
- Public traffic route
- Road closure point
- Site fence line

NOTES

- Mobilisation
- Trial Holes to validate C4s
- Opportunity to install Carriageway Crossings for SSE LV Diversion
- Opportunity to install Carriageway Crossings for BT Diversion
- Cut down remaining trees

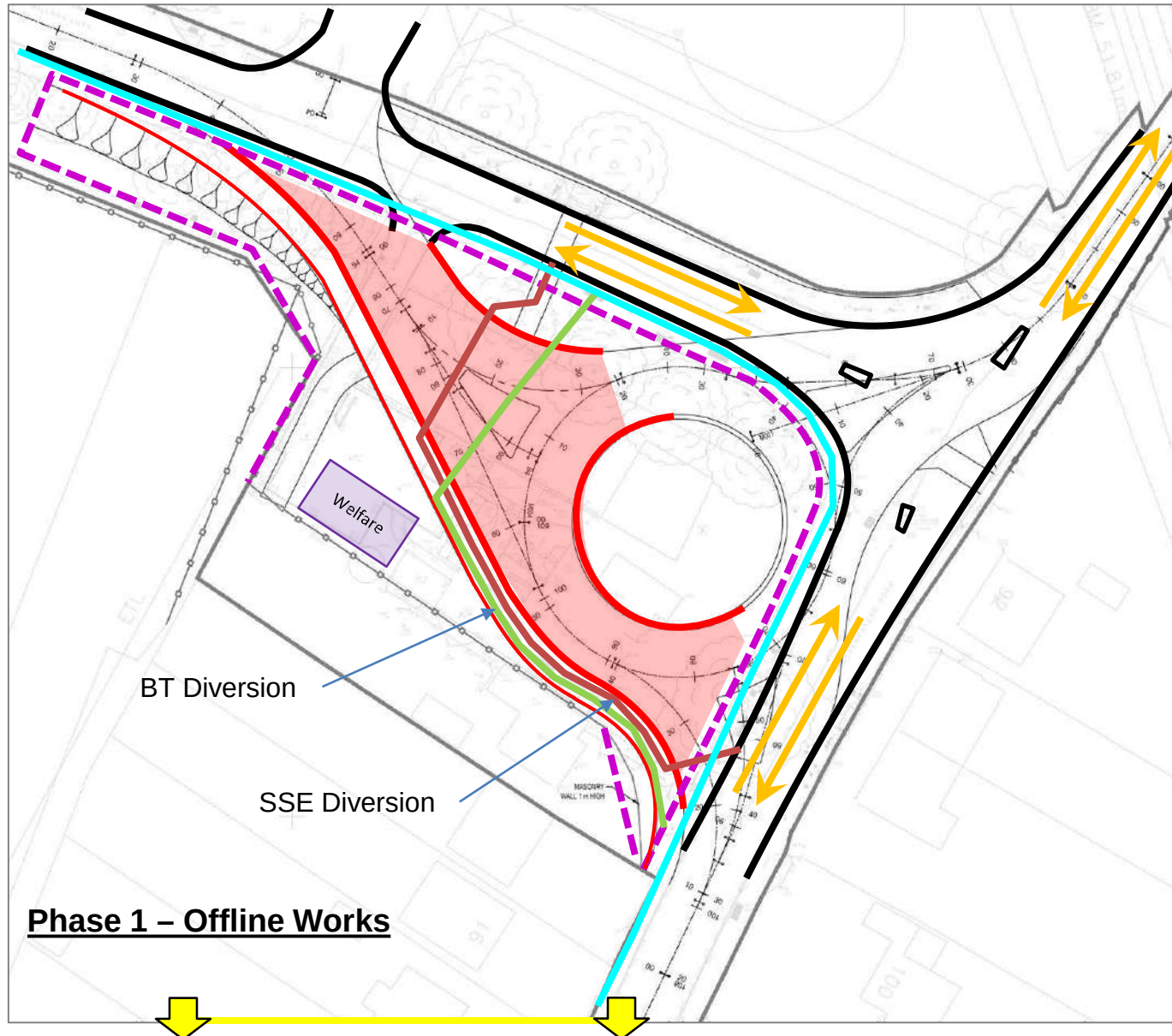
Programme Revision :
WG2/FP/001 Rev 01

Enabling Works



MAY'25	JUN'25	JUL'25	AUG'25	SEPT'25	OCT'25	NOV'25	DEC'25	JAN'26	FEB'26	MAR'26	APR'26	MAY'26	JUN'26
--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------

WESTERN GATEWAY PHASE 2 – TARGET PROGRAMME SEQUENCE SLIDES – 2 of 6



KEY

- Existing kerb line
- Road works this stage
- Road works completed
- Public pedestrian route
- Public traffic route
- Road closure point
- Site fence line

NOTES

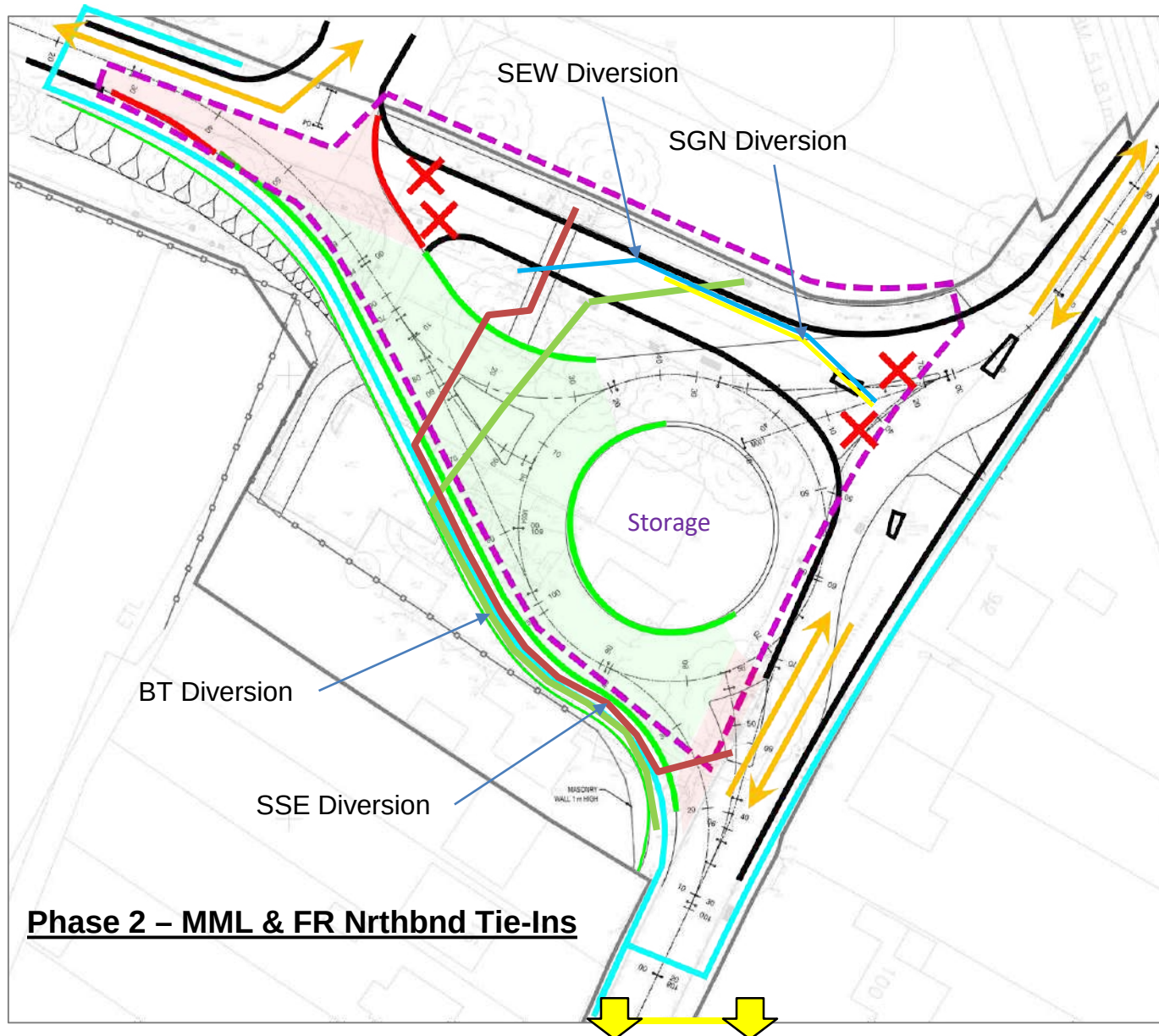
- Off road roundabout works
- Install ducting for SSE LV Diversion Route
- Install ducting and chambers for BT Diversion

Phase 1 – Offline Works

Programme Revision :
WG2/FP/001 Rev 01

MAY'25	JUN'25	JUL'25	AUG'25	SEPT'25	OCT'25	NOV'25	DEC'25	JAN'26	FEB'26	MAR'26	APR'26	MAY'26	JUN'26
--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------

WESTERN GATEWAY PHASE 2 – TARGET PROGRAMME SEQUENCE SLIDES – 3 of 6



KEY

- Existing kerb line
- Road works this stage
- Road works completed
- Public pedestrian route
- Public traffic route
- Road closure point
- Site fence line

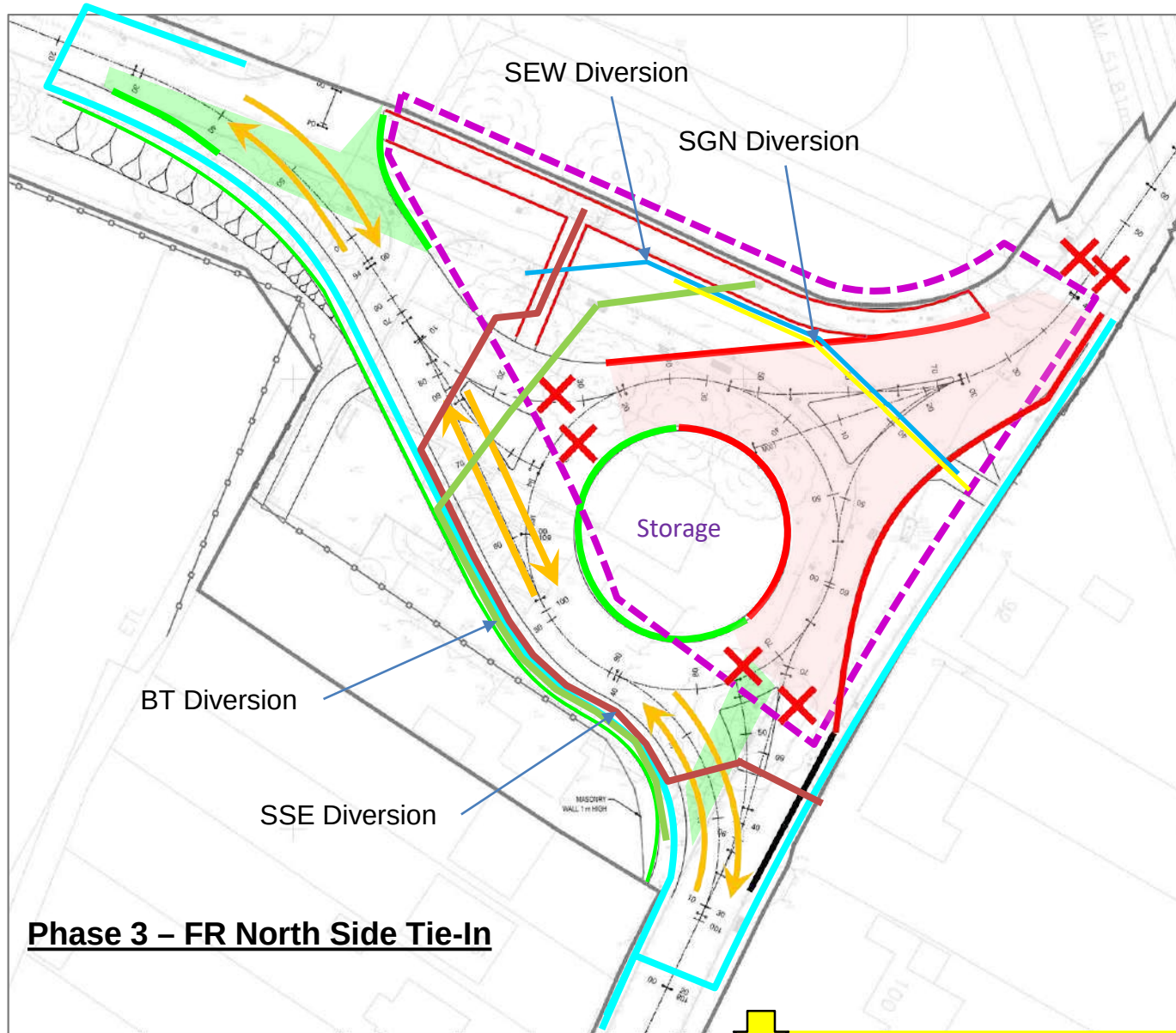
NOTES

- Molly Millars Lane closure
- Peds diverted across new footway
- Complete tie ins for diversion route through new roundabout
- BT Diversion Route Complete and cables can be diverted

Programme Revision :
WG2/FP/001 Rev 01

MAY'25	JUN'25	JUL'25	AUG'25	SEPT'25	OCT'25	NOV'25	DEC'25	JAN'26	FEB'26	MAR'26	APR'26	MAY'26	JUN'26
--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------

WESTERN GATEWAY PHASE 2 – TARGET PROGRAMME SEQUENCE SLIDES – 4 of 6



KEY

- Existing kerb line
- Road works this stage
- Road works completed
- Public pedestrian route
- Public traffic route
- Road closure point
- Site fence line

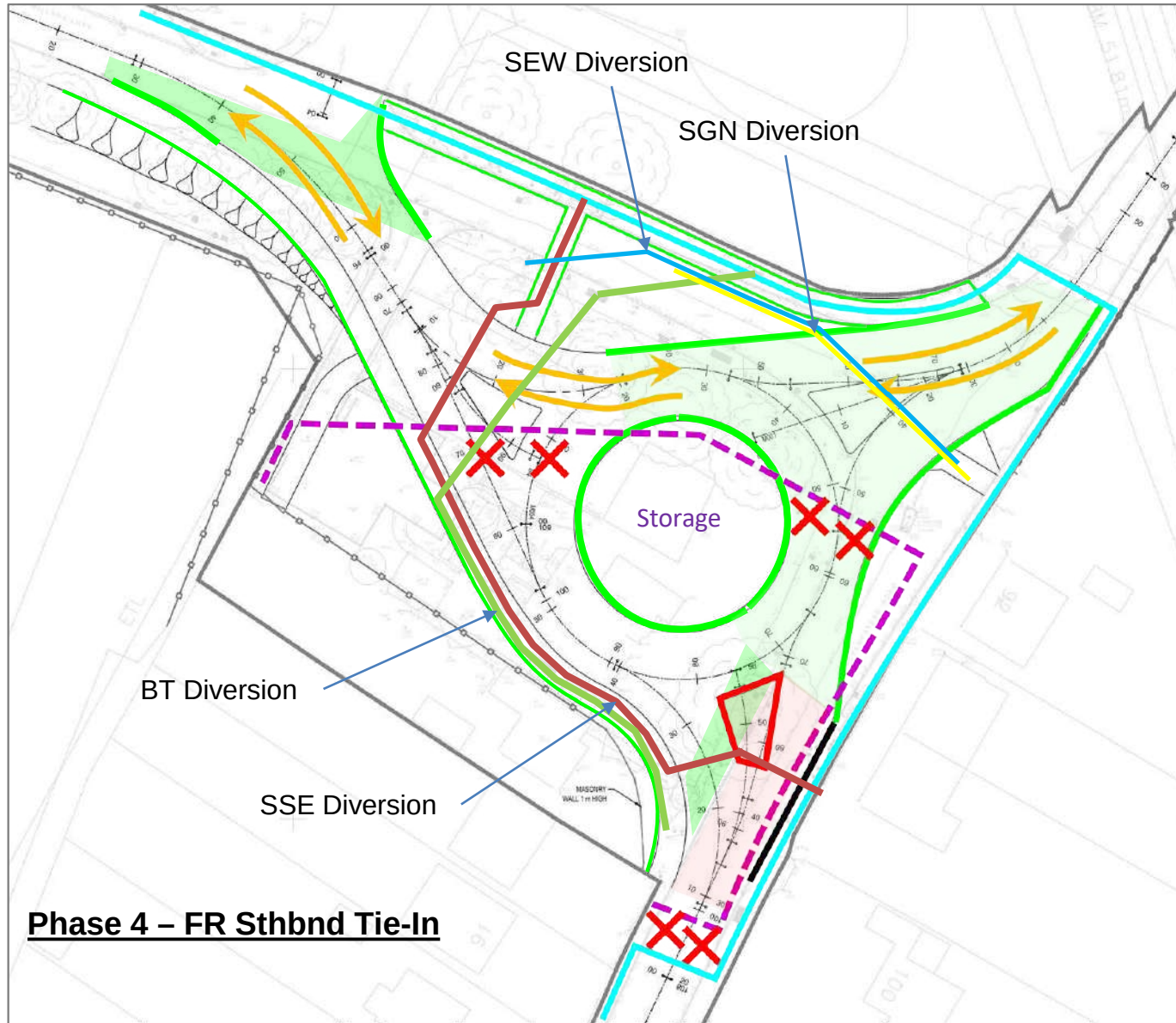
NOTES

- Finchamstead Rd north closure
- Through traffic between Molly Millars Lane and Finchamstead Rd south only
- Construct new carriageway, footpath and verge Finchamstead Rd north
- SGN and SEW Diversion Complete
- SSE Diversion Route Complete and Cables can be diverted

Programme Revision :
WG2/FP/001 Rev 01

MAY'25	JUN'25	JUL'25	AUG'25	SEPT'25	OCT'25	NOV'25	DEC'25	JAN'26	FEB'26	MAR'26	APR'26	MAY'26	JUN'26
--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------

WESTERN GATEWAY PHASE 2 – TARGET PROGRAMME SEQUENCE SLIDES – 5 of 6



KEY

- Existing kerb line
- Road works this stage
- Road works completed
- Public pedestrian route
- Public traffic route
- Road closure point
- Site fence line

NOTES

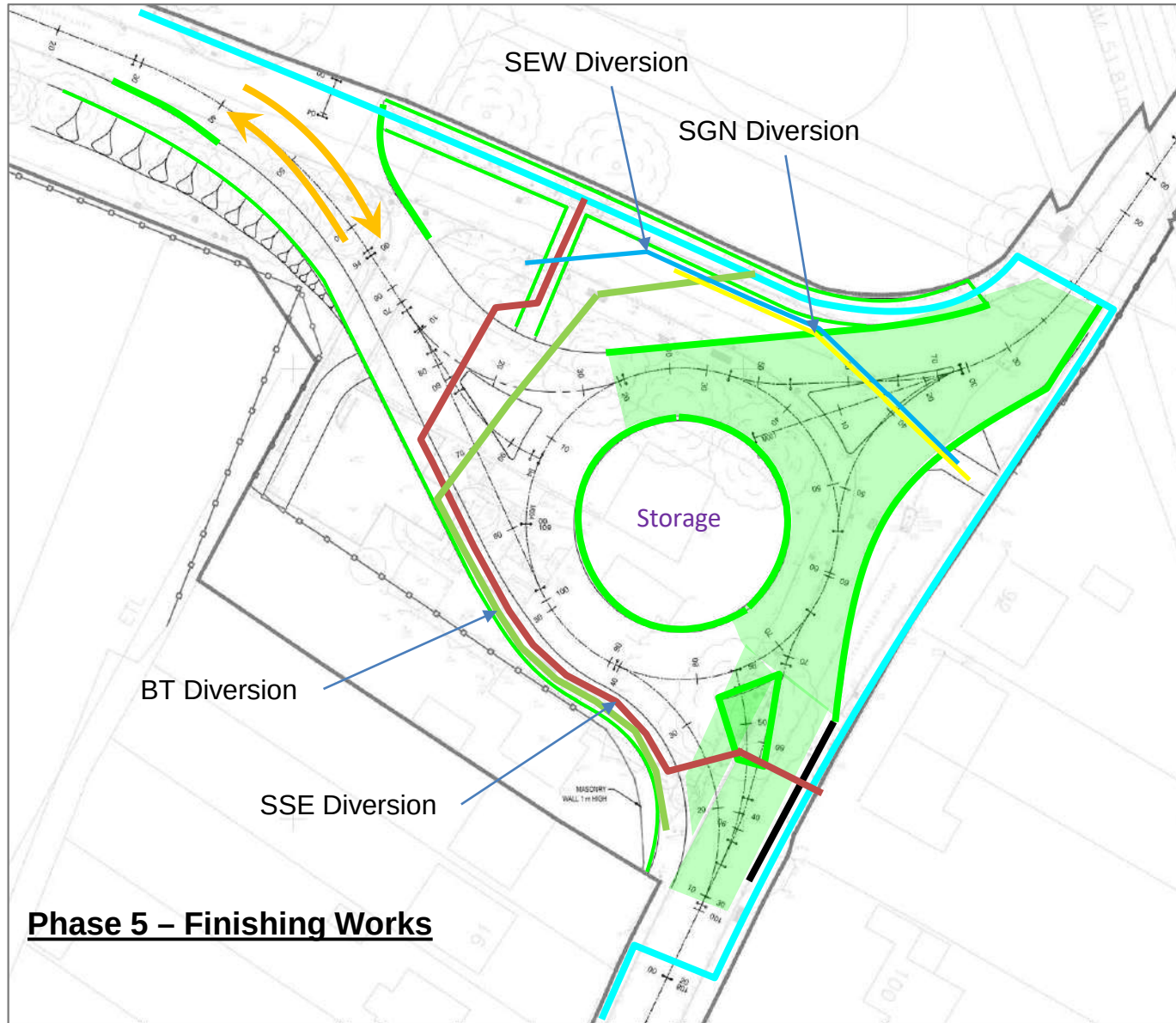
- Finchamstead Rd south closure
- Through traffic between Molly Millars Lane and Finchamstead Rd north only
- Construct new carriageway, footpath and verge Finchamstead Rd south
- Remove redundant clashing services and complete roundabout

Programme Revision :
WG2/FP/001 Rev 01



MAY'25	JUN'25	JUL'25	AUG'25	SEPT'25	OCT'25	NOV'25	DEC'25	JAN'26	FEB'26	MAR'26	APR'26	MAY'26	JUN'26
--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------

WESTERN GATEWAY PHASE 2 – TARGET PROGRAMME SEQUENCE SLIDES – 6 of 6



KEY

- Existing kerb line
- Road works this stage
- Road works completed
- Public pedestrian route
- Public traffic route
- Road closure point
- Site fence line

NOTES

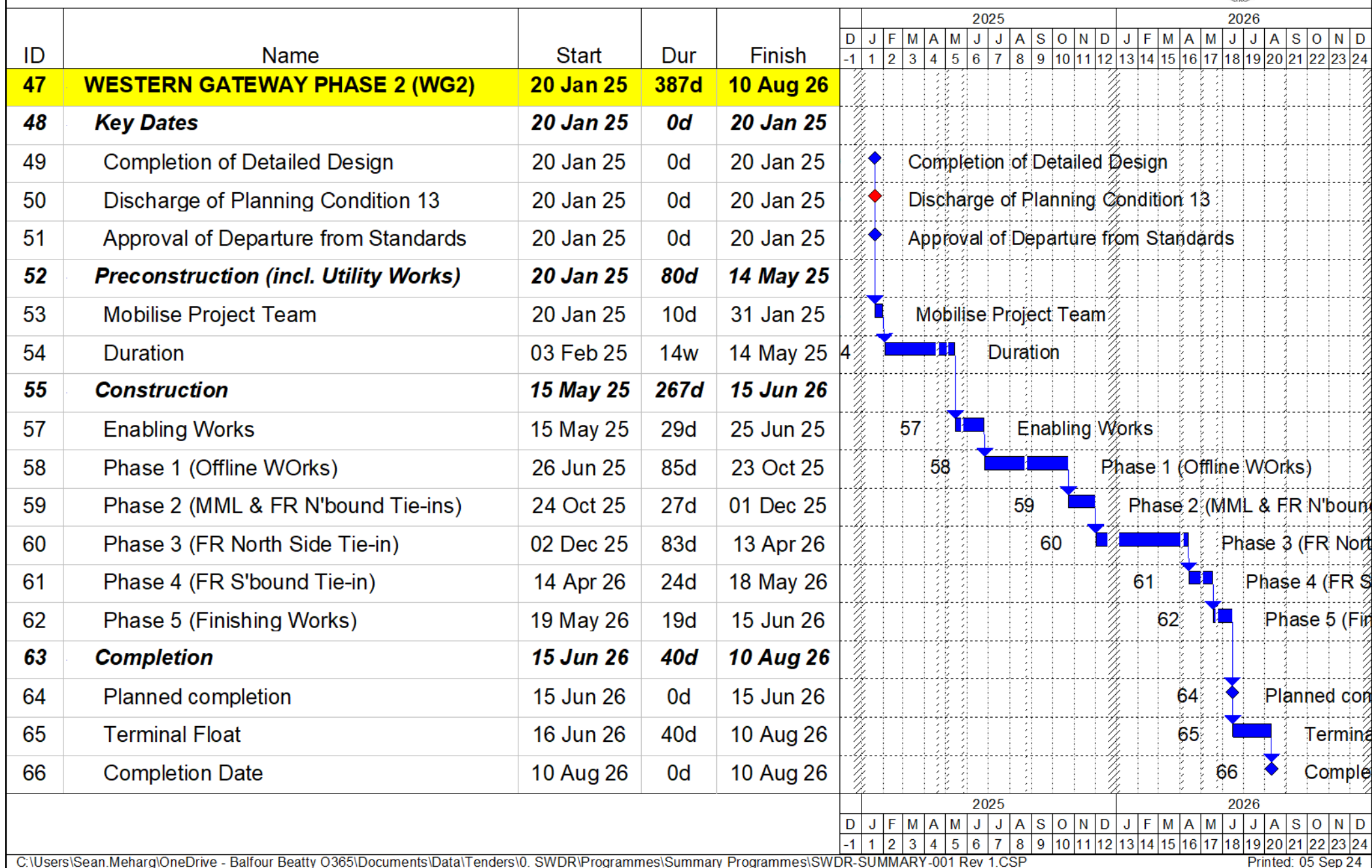
- Finishing works, incl. traffic islands, surface course, etc

Phase 5 – Finishing Works

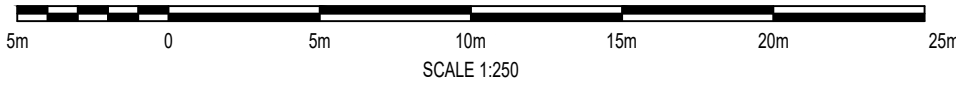
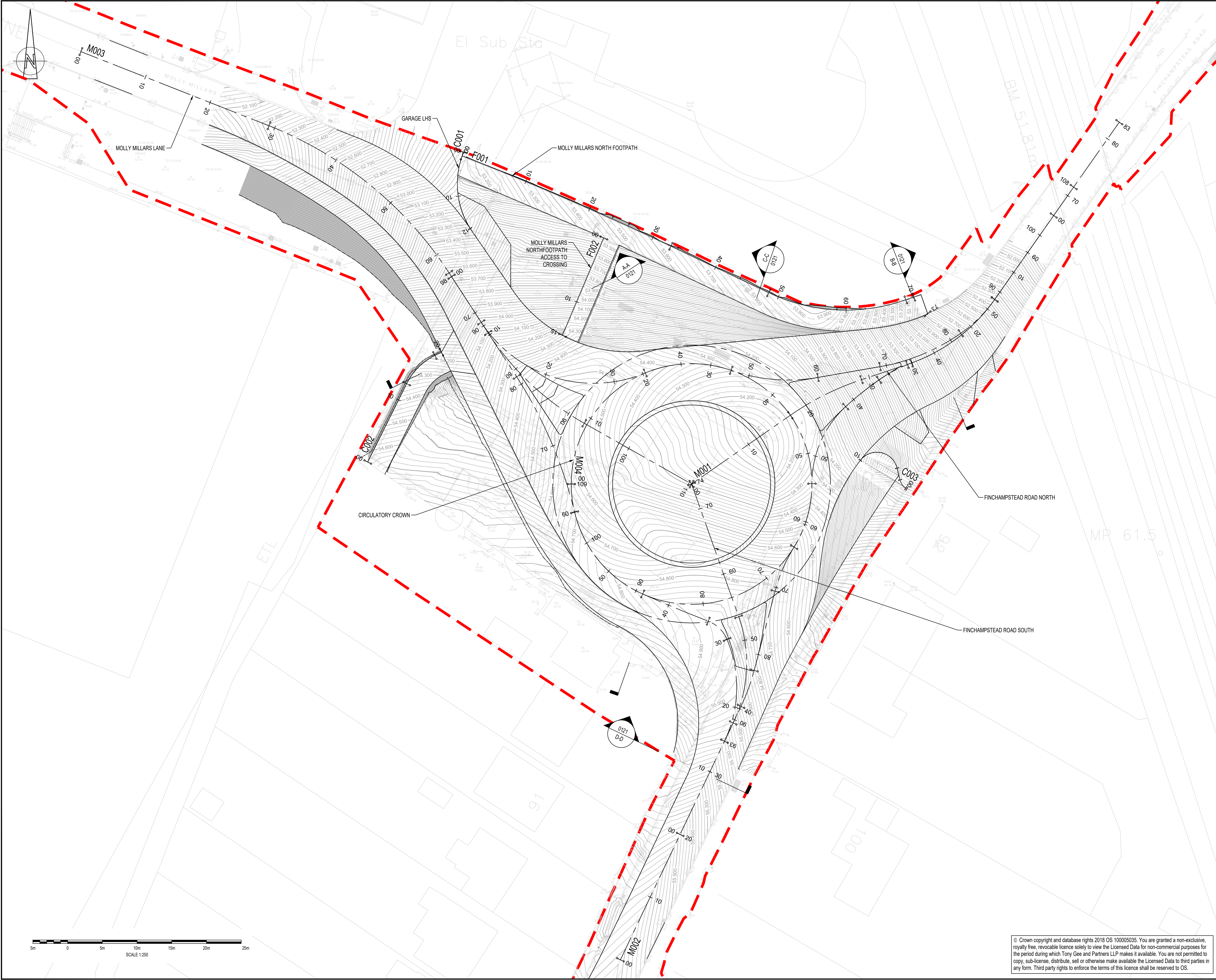
Programme Revision :
WG2/FP/001 Rev 01



MAY'25	JUN'25	JUL'25	AUG'25	SEPT'25	OCT'25	NOV'25	DEC'25	JAN'26	FEB'26	MAR'26	APR'26	MAY'26	JUN'26
--------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------



Appendix F: Site Plans



© Crown copyright and database rights 2018 OS 100005035. You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which Tony Gee and Partners LLP makes it available. You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form. Third party rights to enforce the terms of this licence shall be reserved to OS.

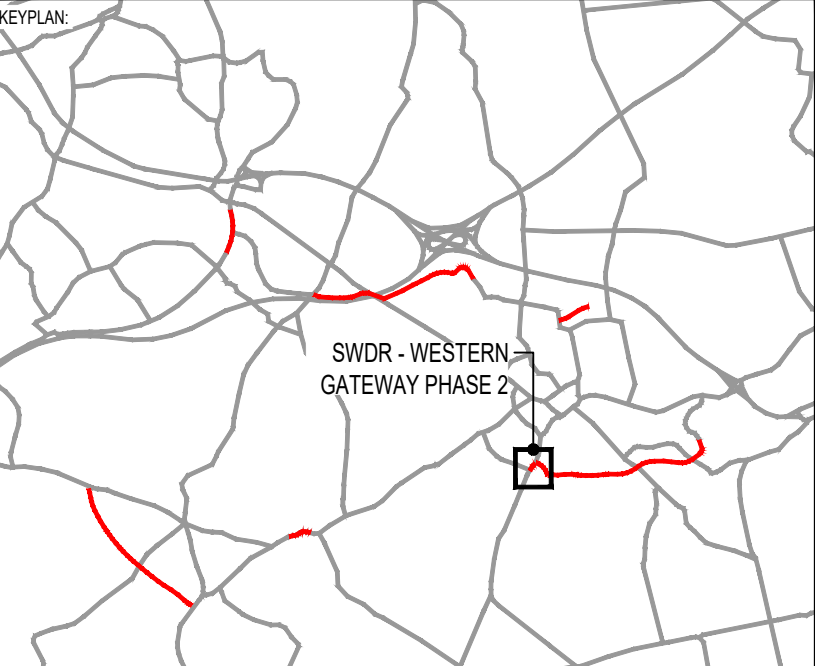
DO NOT SCALE

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWINGS WMHP-TG-WG2-DR-HI-0102 TO 0104 AND WMHP-TG-WG2-DR-HI-0121.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SPECIFICATION WMHP-TG-WG2-SP-HI-0101.

LEGEND

PLANNING APPLICATION NUMBER 203535 RED LINE BOUNDARY



P09	17/07/2024	JB	UPDATED FOR PLANNING CONDITION DISCHARGE	DJF	JC
P08	02/06/2022	GKC	MATTERS OUTSTANDING WMHP-TG-WG2-RG-DM-0002	BH	JC
P07	22/02/2022	JPG	BACKGROUND UPDATED FOR SHARED USE FACILITY	BH	ARL
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: SUITABLE FOR EXAMINATION S8

DESIGNER:



Tony Gee
Consulting Civil, Structural and Geotechnical Engineers

Tony Gee and Partners LLP
Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600
www.tonygee.com

CONTRACTOR:



CLIENT:



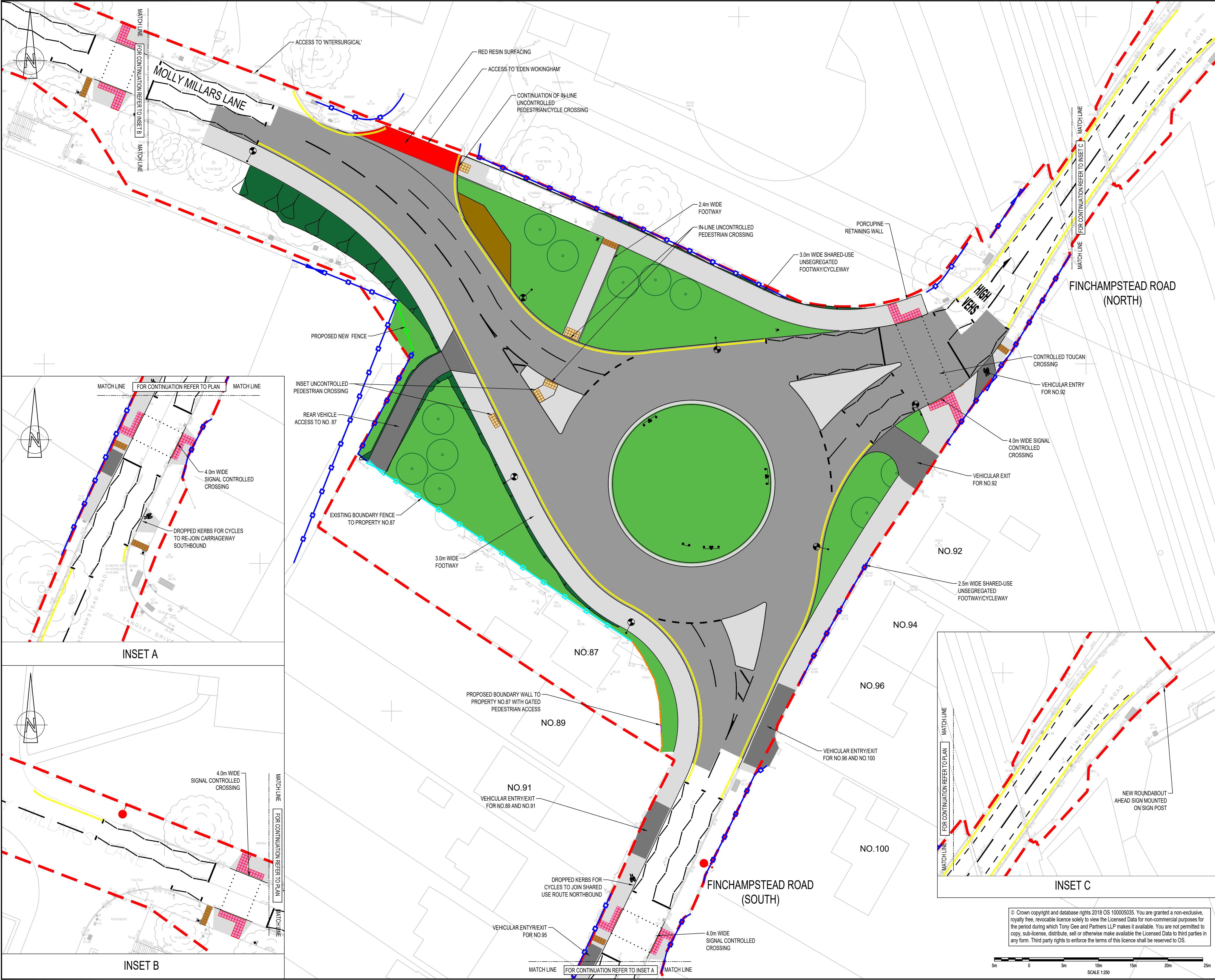
**WOKINGHAM
BOROUGH COUNCIL**

Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT: WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SWDR WESTERN GATEWAY PHASE 2

TITLE: ROUNDABOUT ENHANCEMENT
ALIGNMENT
PLAN

SCALE @ A1:	1:250	CHECKED:	BH	APPROVED:	JC
PROJECT NO:	C118048	DESIGNED:	RDS	DRAWN:	RDS
DRAWING NO:	WMHP-TG-WG2-DR-HI-0101	DATE:	July 24	REV:	P09



DO NOT SCALE

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
- FOR DETAILS OF LANDSCAPING REFER TO DRAWING NO. WMHP-TG-WG2-DR-LS-3001.

LEGEND

- PLANNING APPLICATION NUMBER 203535 RED
- LINE BOUNDARY
- EXISTING FENCE TO BE RETAINED
- CHAINLINK (H11)
- MASONRY WALL
- TACTILE CORDUROY PAVING (BUFF)
- TACTILE BLISTER PAVING (BUFF)
- TACTILE BLISTER PAVING (RED)
- PROPOSED TRAFFIC SIGN
- PROPOSED EXTERNALLY-POWERED SELF-RIGHTING ILLUMINATED BOLLARD
- EXISTING LIGHTING COLUMN TO BE RETAINED
- PROPOSED LIGHTING COLUMN
- PROPOSED CARRIAGEWAY
- PROPOSED PAVED AREAS
- MAINTENANCE VEHICULAR LAY-BY
- PROPOSED TREE
- EXISTING TREE TO BE RETAINED

KEYPLAN

SWDR - WESTERN GATEWAY PHASE 2

SWDR - SPINE ROAD AND WESTERN GATEWAY PHASE 1

REV	DATE	BY	DESCRIPTION	CHK	APP
P07	11/09/2024	JB	MINOR AMENDMENTS	DJF	JC
P06	17/07/2024	JB	MINOR AMENDMENTS	DJF	JC
P05	16/07/2024	JB	UPDATED FOR PLANNING CONDITION DISCHARGE	DJF	JC

DRAWING STATUS: SUITABLE FOR EXAMINATION S8

DESIGNER: Tony Gee and Partners LLP
Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600
www.tonygee.com
Consulting Civil, Structural and Geotechnical Engineers

CONTRACTOR: Balfour Beatty

CLIENT: WOKINGHAM BOROUGH COUNCIL
Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT: WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SWDR WESTERN GATEWAY PHASE 2

TITLE: ROUNDABOUT ENHANCEMENT ALIGNMENT SCHEME LAYOUT 0

SCALE @ A1:	CHECKED:	APPROVED:
1:250	BH	JC

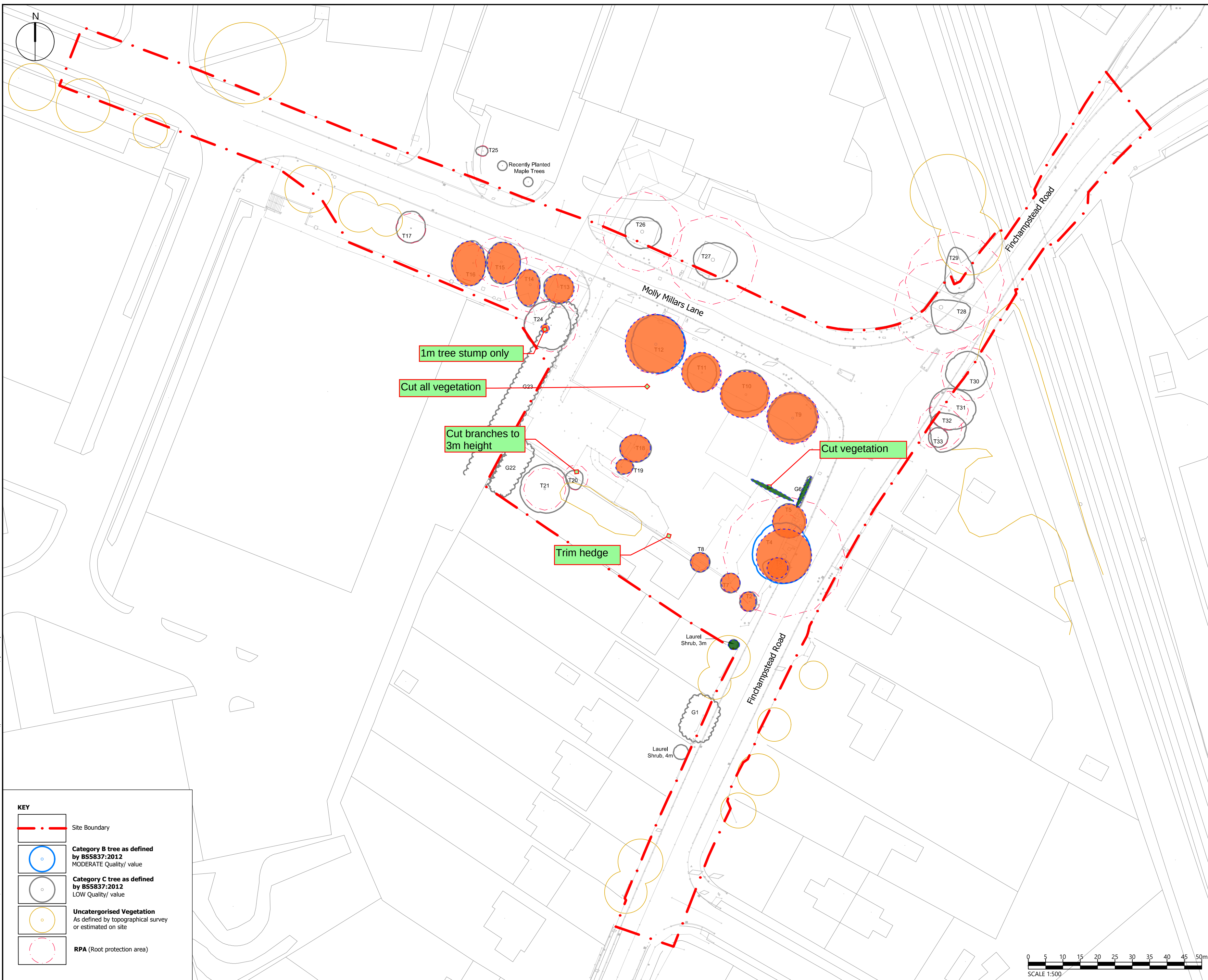
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
C118048	RDS	MS	February 21

DRAWING NO: WMHP-TG-WG2-DR-HI-0152

REV: P07

© Crown copyright and database rights 2018 OS 100005035. You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which Tony Gee and Partners LLP makes it available. You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form. Third party rights to enforce the terms of this licence shall be reserved to OS.

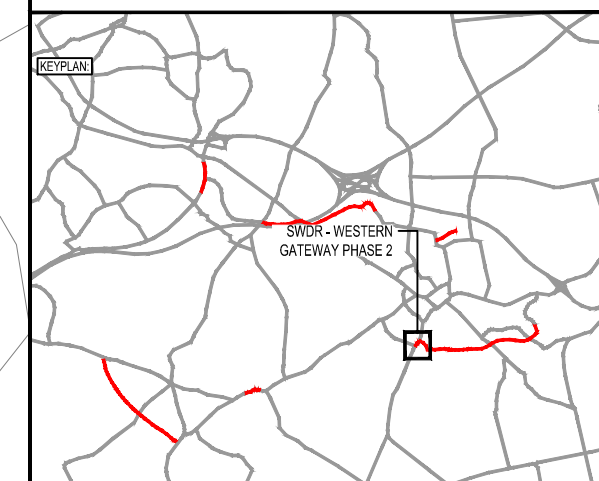
5m 0 5m 10m 15m 20m 25m
SCALE 1:250



DO NOT SCALE

NOTES:

1. TREE LOCATIONS BASED ON TOPOGRAPHIC SURVEY INFORMATION.



P03	06/11/20	JC	REVISED RED LINE BOUNDARY AND KERB AND HIGHWAYS LAYOUT	LH	LH
P02	19/08/20	WM	REVISED RED LINE BOUNDARY	LH	LH
P01	17/02/20	WM	FIRST ISSUE	LH	LH
REV	DATE	BY	DESCRIPTION	CHK	APP

FOR REVIEW & COMMENT

S3

DESIGNER



Tony Gee

Tony Gee and Partners LLP
Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600

CONTRACTOR



CLIENT


WOKINGHAM
BOROUGH COUNCIL

Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT-

WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SWDR WESTERN GATEWAY PHASE 2

TITLE:

ROUNDBOAT ENHANCEMENT
TREE CONSTRAINTS PLAN

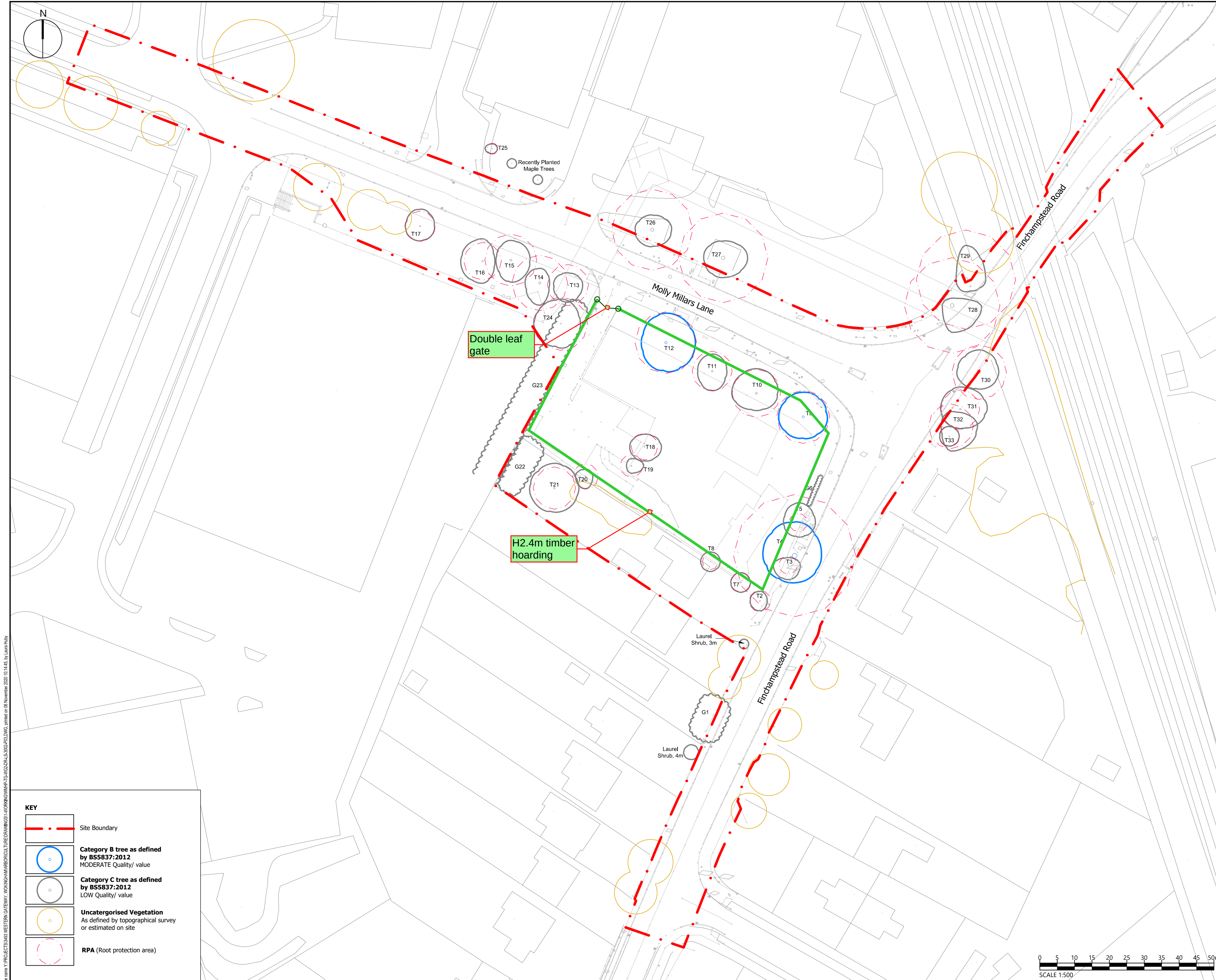
SCALE @ A2: 1:500	CHECKED: LH		APPROVED: LH
PROJECT NO: C118048	DESIGNED: BM	DRAWN: BM	DATE: November 20

DRAWING:

WMHP-TG-WG2-DR-LS-3002

RE

P03



File name: Y:\PROJECTS\3483 WESTERN GATEWAY\WORKING\BARCHCULTURE\DRAWINGS\1\WORKING\WHP-TG-WG2-DR-LS-3002-003.DWG, printed on 06 November 2020 10:14:45, by Laura Haley

KEY

Site Boundary

Category B tree as defined by BS5837:2012
MODERATE Quality/ value

Category C tree as defined by BS5837:2012
LOW Quality/ value

Uncategorised Vegetation
As defined by topographical survey or estimated on site

RPA (Root protection area)

DO NOT SCALE

NOTES:
1. TREE LOCATIONS BASED ON TOPOGRAPHIC SURVEY INFORMATION.

KEYPLAN

SWDR - WESTERN GATEWAY PHASE 2

P03	06/11/20	JC	REVISED RED LINE BOUNDARY AND KERB AND HIGHWAYS LAYOUT	LH	LH
P02	19/08/20	WM	REVISED RED LINE BOUNDARY	LH	LH
P01	17/02/20	WM	FIRST ISSUE	LH	LH
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: FOR REVIEW & COMMENT S3

DESIGNER:

Tony Gee
Consulting Civil, Structural and Geotechnical Engineers

Tony Gee and Partners LLP
Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600
www.tonygee.com

CONTRACTOR:

CLIENT:

WOKINGHAM BOROUGH COUNCIL
Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT:

WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SWDR WESTERN GATEWAY PHASE 2

TITLE:

ROUNDBOUT ENHANCEMENT
TREE CONSTRAINTS PLAN

SCALE @ A2: 1:500	CHECKED: LH	APPROVED: LH
PROJECT NO: C118048	DESIGNED: BM	DRAWN: BM
DATE: November 20		REV: P03

DRAWING NO: WMHP-TG-WG2-DR-LS-3002

Appendix G: Archaeology Plan (Not Used)

Appendix H: Ecology Plans and Reports



Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) - Western Gateway Phase 2 (WG2)

**Ecological Appraisal
WMHP-TG-WG2-RP-EV-0002**

(Revision P02, Date 18/11/2020)

Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) – Western Gateway Phase 2 (WG2)

Ecological Appraisal

Wokingham Borough Council

Document no: WMHP-TG-WG2-RP-EV-0002

Revision: P02

Date: 18/11/2020



Document Issue Record

Project:	Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) - Western Gateway Phase 2 (WG2)
Report Title:	Ecological Appraisal
Client:	Wokingham Borough Council
Document No:	WMHP-TG-WG2-RP-EV-0002
Revision:	P02
Status	S3 – For Review and Comment
Date:	18/11/2020
Filename:	WMHP-TG-WG2-RP-EV-0002

Rev	Date	Description and Purpose of Issue	Prepared	Reviewed	Approved
P01	27/02/20	Draft for client review	CW	DH	PP
P02	18/11/20	Amendment to redline boundary	DH	JM	JM

Issuing Office:	Tony Gee and Partners LLP, Hardy House, 140 High Street Esher, Surrey, KT10 9QJ
Tel:	+44 1372 461600
Email:	esher@tonygee.com

Contents

1.	Introduction	1
2.	Methods	2
2.1.	Desk Study	2
2.2.	Ecological Walkover Survey	2
2.3.	Preliminary Bat Roost Assessment	2
3.	Results	3
3.1.	Desk Study	3
3.1.1.	Designated Sites	3
3.1.2.	Protected Species	4
3.2.	Site Description	6
3.3.	Ecological Walkover Habitats	7
3.3.1.	Amenity Grassland	7
3.3.2.	Built Structures and Other Infrastructure	7
3.3.3.	Hard Standing	8
3.3.4.	Scattered Trees	8
3.3.5.	Species-poor hedgerow	8
3.3.6.	Scattered Scrub	8
3.4.	Protected Species	9
		9
3.4.2.	Bats	9
3.4.3.	Herptiles (Amphibians and Reptiles)	10
3.4.4.	Birds	10
3.4.5.	Other Protected/Notable Species	11
3.5.	Limitations and Assumptions	11
4.	Further Survey Requirements	11
4.1.	Bats	11
4.1.1.	Buildings	11
4.1.2.	Trees	12
4.1.3.	Habitats	12
4.2.	Herptiles (Amphibians and Reptiles)	12
4.2.1.	Amphibians	12

4.2.2. Reptiles	12
4.3. Birds	13
4.4. Other Protected Species/Notable Species	13
5. Discussion, Mitigation and Enhancement	13
5.1. Designated Sites	13
5.2. Bats	13
5.2.1. Lighting and disturbance	14
5.3. Herptiles (Amphibians and Reptiles)	14
5.4. Birds	14
5.5. Other Protected Species/Notable Species	15
5.5.1. Toad	15
6. Conclusions	15

Appendix

Appendix A - Photographs

Appendix B – Figure 2 – Phase 1 Habitat Plan

1. Introduction

Arcus Consultancy Services Ltd was commissioned by Tony Gee & Partners LLP to undertake a Preliminary Ecological Appraisal (PEA) and a Preliminary Roost Assessment (PRA) of buildings and land west of Finchampstead Road and south of Molly Millar's Lane, Wokingham, RG41 2PE. (approximate National Grid Reference SU 80771 67755) (henceforth referred to as the 'Survey Site') and shown in Figure 1 below.

Figure 1 .Site Location



Reproduced from Ordnance Survey digital map data © Crown copyright 2019. All rights reserved. License number 100048606.

This report has been prepared to accompany the planning application for the enhancement works to the A321 Finchampstead Road/Molly Millar's Lane roundabout (the 'Development'), as part of the wider South Wokingham Distributor Road scheme. The roundabout enhancement scheme will comprise realignment of the existing highway along Finchampstead Road and Molly Millar's Lane including the following works:

- Demolition of properties 81 and 83/85 Finchampstead Road;
- Construction of a new standard roundabout to replace the existing mini roundabout;
- A new controlled crossing on the north arm of the new roundabout; and
- Extension of the existing shared use (unsegregated) footway/cycleway along Molly Millar's Lane.

This report details ecological baseline conditions and potential ecological impacts from the Development, taking into account relevant planning policy and legislation. Further surveys and

mitigation have been described, where applicable, in order to provide additional information for assessing impacts and to inform recommendations to avoid or reduce potential impacts.

2. Methods

2.1. Desk Study

Natural England's Multi Agency Geographic Information for the Countryside (MAGIC) website was consulted to obtain information about any local or national statutory designated sites such as Sites of Special Scientific Interest (SSSI) within 2 km of the Survey Site. A search of European statutory designated sites such as Special Areas of Conservation (SAC) or Special Protection Areas (SPA) within 5 km was also undertaken.

A desk study was undertaken to obtain local records of features of ecological interest with a search for records of non-statutory designated sites within 2 km of the Survey Site such as Local Wildlife Sites (LWSs) and notable and protected species were requested from Thames Valley Environmental Records Centre (TVERC).

Where minor amendments have been made to the red line boundary of the Site (see Figure 1) on Molly Millar Lane since survey assessments were completed, a desk-based assessment using an online street view resource has been used to inform impacts from the Development on those areas.

2.2. Ecological Walkover Survey

An ecological walkover survey was conducted on 28th January 2020 by suitably experienced ecologist Gemma Costin (working under licence: 2015-15845-CLS-CLS). The survey included all land within the red line area as shown in Figure 1 above and Figure 2, Appendix B. The aim of this survey was to identify potential ecological constraints to inform the design and planning process. The survey was carried out following the Guidelines for Preliminary Ecological Appraisal¹, with an assessment of habitat suitability for protected species, including mammals, nesting birds and herptiles (amphibians and reptiles).

2.3. Preliminary Bat Roost Assessment

The Preliminary Roost Assessment (PRA) was carried out by experienced bat ecologists Gemma Costin and assistant Jon Ford on 28th January 2020. The bat assessment work and recommendations followed guidelines produced by the Bat Conservation Trust (BCT)².

The PRA included an external inspection of the buildings wherever the structural condition of the buildings permitted access. This was undertaken using a powerful torch, a pair of binoculars and, where necessary an endoscope to inspect gaps and crevices. Floors, walls and storage surfaces beneath all possible access points or crevices that may be used for bat roosting were checked for droppings, scratching, and staining from urine and fur. Particular

¹ CIEEM (2017), *Guidelines for Preliminary Ecological Appraisal, 2nd Edition*. Available [online]

https://www.cieem.net/data/files/Publications/Guidelines_for_Preliminary_Ecological_Appraisal_Dec2017.pdf

² Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd ed.). The Bat Conservation Trust, London.

attention was paid to the areas beneath timber beams and other surfaces from which bats may hang or rest.

All structural features of the buildings with potential to provide suitable bat roosting surfaces were examined for evidence of bat use. This included any crevices in the buildings frame, wall structure, window/door frames and roof covering.

Features subject to assessment included the adjacent habitats, the grassland and individual trees. The individual trees were classified according to their 'Roost Suitability'. Should evidence of bats be recorded or the features assessed provide suitability for bats, further surveys may be required.

3. Results

3.1. Desk Study

3.1.1. Designated Sites

There are two nationally designated sites within 2 km of the Survey Area; Holt Copse and Joel Park Local Nature Reserve (LNR) is approximately 1.2 km north-west and Thames Basin Heaths Special Area of Conservation (SAC) is approximately 1.5 km south-east from the Survey Area. In addition, a single internationally designated site is recorded within 5 km of the Survey Site; Thames Basin Heaths Special Protection Area (SPA) is located approximately 4.9 km south-east. There are seven non-statutory Local Wildlife Sites (LWS) within 2 km of the Survey Area. Further details are given of the designated sites in Table 3.1.

Table 3.1 Statutory and non-statutory designated sites

Site	Status	Minimum Distance and Direction (km) from Site Boundary	Description/Reason for Designation
Statutory designated sites			
Holt Copse & Joel Park	LNR	1.2 km north-west	Designated as a Local Nature Reserve in 2001, Holt Copse consists of semi-natural ancient woodland and is part of the larger deciduous woodland of Joel Park. It is known to support a large noctule (<i>Nyctalus noctula</i>) bat roost.
Thames Basin Heaths	SAC	1.5 km south-east	Designated for its geological features and extensive areas of heathland and bog habitat. Designated in 2005 for its lowland heath habitat which supports a range of important ground nesting birds; Dartford warbler (<i>Sylvia undata</i>),

	SPA	4.9 km south-east	Nightjar (<i>Caprimulgus Europaeus</i>) and Woodlark (<i>Lullula arborea</i>).
Non-statutory designated sites			
Woodland Near Ludgrove School	LWS	0.9 km east	Dense woodland with a stream and several ditches running through the wood.
Bottle Copse	LWS	1.3 km east	Bootle Copse is situated to the south-west edge of Wokingham, primarily consists of ancient woodland with areas of dense bramble scrub. Designated as a local wildlife site in 2003, it supports protected species such as slow worm (<i>Anguis fragilis</i>), grass snake (<i>Natrix natrix</i>), [REDACTED] and pipistrelle (<i>pipistrellus</i> sp.) bats.
Trench's Bridge	LWS	1.5 km south-east	Woodland coppice with a stream flowing north to south.
Holt Copse	LWS	1.6 km north	Ancient, semi-natural woodland situated to the north of Wokingham.
The Moors (including Sand Martins Golf Course Edge)	LWS	1.9 km south-west	Wet woodland with marshy meadows and acidic grassland. Site is adjacent to the golf course which supports a sand martin (<i>Riparia riparia</i>) colony.
Gorrick Plantation	LWS	2 km south-east	Conifer woodland with heathland and bog habitat. Habitat supports grass snake and an array of breeding birds.
Land to the east and west of Sandhurst Road	LWS	2 km south	A diverse mixture of woodland, wetland, grassland and heathland, Queen's Mere lake is situated to the west of the Site. Grass snake have been recorded to the south of the woodland.

3.1.2. Protected Species

The desk study returned 444 individual protected and priority species records within 2 km of the Survey Site, dated between 2005 and 2019, which included the following species protected under UK legislation^{3, 4} and listed on Habitat and Species Biodiversity Action Plans (BAP) for Norfolk Biodiversity Action Plan (BAP). The desk study returns include 34 records of legally protected or notable bird species within 2 km of the study area.

Those relevant to the Survey Site by habitats present and date (2003 onwards) are detailed further below and in Table 3.2.

³ Wildlife and Countryside Act 1981 (as amended), Schedule 5

⁴ Conservation of Habitats and Species Regulations 2019 (as amended)

Great Crested Newt (*Triturus cristatus*);
Common toad (*Bufo bufo*);
Brown long-eared (*Plecotus auratus*);
Common pipistrelle (*Pipistrellus pipistrellus*);
Leisler's bat (*Nyctalus leisleri*);
Long eared bat (*Plecotus* sp.);
Natterer's bat (*Myotis nattereri*);
Nathusius's pipistrelle (*Pipistrellus nathusii*);
Noctule bat (*Nyctalus noctula*);
Pipistrelle bat (*Pipistrellus* sp.);
Serotine bat (*Eptesicus serotinus*);
Soprano pipistrelle (*Pipistrellus pygmaeus*);
Common Lizard (*Zootoca vivipara*);
Grass Snake (*Natrix Helvetica*);
Slow worm (*Anguis fragilis*);
[REDACTED]; and
Western European Hedgehog (*Erinaceus europaeus*).

Table 3.2 Relevant protected species and priority species within 2 km of the Survey Site

Taxonomic group	Species	Number of records	Distance and direction of closest record from Site (Year)
Amphibians	Great Crested Newt	30	1.1 km north-east (2012)
	Common toad	4	1.6 km south-west (2010)
Bats	Unidentified bat	13	0.1 km south-west (2005)
	Brown long-eared bat	30	0.3 km south-east (2017)
	Common pipistrelle	74	0.3 km north east (2017)
	Nathusius' pipistrelle	2	0.3 km south-west (2017)
	Noctule	28	0.3 km north east (2017)
	Soprano pipistrelle	56	0.3 km north east (2017)
	Long-eared bat	34	0.3 km north east (2014)
	Unidentified pipistrelle bat	52	0.3 km north-east (2008)

Taxonomic group	Species	Number of records	Distance and direction of closest record from Site (Year)
	Unidentified myotis bat	5	0.6 km south (2018)
	Natterer's bat	1	0.7 km north-east (2017)
	Leisler's bat	1	1.1 km north-east (2018)
	Serotine	3	1.2 km north-east (2015)
Birds	Fieldfare	6	0.8 km south (2005)
	Redwing	9	0.8 km south (2005)
	Barn Owl	1	0.9 km south-west (2013)
	Merlin	1	1.2 km north (2003)
	Red Kite	12	1.2 km north (2005)
	Kingfisher	4	1.4 km north-west (2004)
	Goshawk	1	2 km north-west (2003)
Reptiles	Slow worm	33	0.4 km south-west (2017)
	Common Lizard	5	0.6 km north-east (2009)
	Grass Snake	7	0.8 km north-east (2010)
Terrestrial Mammals			
	Western European Hedgehog	51	0.03 km south (2019)

3.2. Site Description

The Survey Site is situated in the hamlet of Eastheath to the south-west of the market town of Wokingham, Berkshire. The Survey Site is approximately 0.83 hectares (ha) and comprised of built structures, hard standing, amenity grassland, scattered trees and species poor hedgerow. Emm Brook is approximately 57 m north-east from the Survey Site.

In the wider area, is an industrial estate to the north-west, arable fields to the east, further residential and commercial properties to the north, east and south; and an active railway line to the north-east.

3.3. Ecological Walkover Habitats

3.3.1. Amenity Grassland

Amenity grassland lies within the back and front gardens of the residential properties within the Survey Site. Further amenity grassland is situated along the roadside, to the south of Molly Millar's Lane. All of the amenity grassland within the Survey Site was well maintained with a short sward.

3.3.2. Built Structures and Other Infrastructure

Within the Survey area there are four properties, 81, 83, 85, and 87 Finchampstead Road to the west, with the addition of several out buildings, one of which is in current use as an office. Descriptions of the buildings are given below and the buildings are shown on Photographs 3-9 and 11-12, Appendix A and Figure 2, Appendix B.

81 Finchampstead Road

Two storey residential property with a multi-pitched slate roof. The lower half is of brick construction with painted mortar on the upper storey. There were uPVC windows, with bay windows to the front with hanging tiles present. The view from aerial imagery shows there is a conservatory extension to the rear. At the time of the walkover survey, there was no access to the rear garden or internally to inspect the roof void.

83 Finchampstead Road

Two storey residential property of brick construction with a multi-hipped roof. The windows and soffits were wooden with paint starting to peel in several places. There is a single brick chimney on the south-western elevation. The ridge tiles were in a good condition with no gaps noted. There are some clay pan tiles which are lifted on the eastern elevation of the ground floor porch (Photograph 11, Appendix A). Some hanging clay pan tiles were slightly lifted on the south-eastern elevation between the ground and first floor bay windows. In addition, there was ivy growing to the south-eastern side of the ground floor bay window and on the sloped porch roof. A tile was missing on the south-eastern side above the bay window; there was evidence of nesting bird material (Photograph 12, Appendix A). A gap between the soffit and brickwork was noted on the south eastern side of the bay window.

The roof void was cluttered with a dense covering of cobwebs present. There were multiple wasps' nests scattered throughout the void. There was no roofing felt present and the wooden boards appeared to be in a relatively good condition.

85 Finchampstead Road

Two storey brick property, currently in use as a Family Resource Centre. The roof was hipped with slate tiles. On the northern elevation was a single brick chimney with flashing surrounding the base. The soffits, barge boards and lead work all appeared to be intact.

The roof void was lined with sarking boards and was in good condition. There was daylight ingress from the skylight window on the southern elevation. There was evidence of rodents with mouse droppings and chewed insulation throughout. The void itself was cluttered with insulation and in current use as storage. There was a moderate covering of cobwebs on the wooden rafters and surrounding the skylight.

87 Finchampstead Road

Two storey residential property of brick construction with a hipped slate tiled roof. To the rear of the property was a single storey extension and an entrance porch to the south-east with a sloped roof. The wooden soffits included ventilation air vents. There was a single brick chimney, which included intact lead flashing where the chimney meets the roofline. A single storey outbuilding with a corrugated pitched, metal roof was located to the north-west.

The roof void was cluttered and used for as storage. The sarking board was in good condition with no gaps seen. There was a small amount of daylight ingress from the vents along the eaves to the south-east and north-west elevations. Cobwebs were present throughout the void with a dense covering situated towards the edge of the roof.

3.3.3. Hard Standing

Two roads are situated within the Survey Site, Molly Millar's Lane to the west and Finchampstead Road (A321), both join at the small roundabout. Further areas of hard standing behind the residential properties included a small car park to service the properties, one of which was used for The Family Resource Centre. Public footpaths were adjacent to either side of Molly Millar's Lane and Finchampstead Road. There was also a stone gravelled driveway to the east/ front garden of 81 Finchampstead Road.

3.3.4. Scattered Trees

There were several scattered trees throughout the Survey Site to the south of Molly Millar's Lane, to the north of 81 Finchampstead Road, to the north of the existing roundabout and in the rear gardens at 81, 83 and 87 Finchampstead Road and front garden of 81, 83 and 85 Finchampstead Road. Tree species include sycamore (*Acer pseudoplatanus*), cherry (*Prunus avium*), ash (*Fraxinus excelsior*) and oak (*Quercus robur*); all of which were found to be in good condition.

3.3.5. Species-poor hedgerow

A species-poor leylandii hedgerow borders the front of the properties to the east and a laurel hedgerow is present to the north-west bordering the carpark.

3.3.6. Scattered Scrub

Some scrub lies to the north of the existing roundabout, hawthorn (*Crataegus monogyna*) with ground ivy (*Hedera helix*), dandelion (*Taraxacum officinale*) and common nettle (*Urtica dioica*) in the understory.

3.4. Protected Species

[REDACTED]

[REDACTED]

3.4.2. Bats

Buildings

There are four properties within the survey boundary with additional single storey outbuildings. 83 Finchampstead road was assessed as having 'low' potential to support roosting bats due to the potential bat access points seen. Externally, there were missing clay pan tiles, lifted hanging tiles and a gap between soffit and brickwork of this building. 81 Finchampstead road could not be fully assessed internally or over the full extent of the roofline, it has therefore been provisionally assessed as having 'low' potential to support roosting bats.

All other buildings were assessed as having 'negligible' potential to support roosting bats due to their lack of bat potential roosting features.

Trees

All trees within the Survey Site which were assessed as having 'negligible' potential to support roosting bats due to their young age and lack of Potential Roost Features (PRF's). In addition, the location of the trees within a well-lit residential area offers limited opportunities for bats. There were no signs of rot holes, missing limbs or spilt bark identified during the walkover survey. A desk-based street view assessment of trees within the expanded red line boundary area on Molly Millar Lane found them to be similar in form and type to those trees identified during the original Site survey, and were considered likely to offer a 'negligible' potential for roosting bats.

The desk study returned records for species of brown long-eared, common pipistrelle, soprano pipistrelle, noctule, serotine, Nathusius's pipistrelle, Natterer's, unidentified pipistrelle species, unidentified long-eared bat, and unidentified myotis bat species.

Habitats

Within the Survey Site lies scattered trees and hedgerows which may provide opportunities for foraging and commuting bats. The railway line was found to the north-east, which provides linear habitat connectivity to more favourable habitats in the wider area; such as Gorrick plantation and lake which are approximately 2.1 km south to the Survey Site. In the absence of other factors, this was a feature that provided potential suitability for foraging and commuting bats.

However, the majority of the Survey Site was comprised of hard standing, situated within a busy residential area, which is likely to have frequent noise disturbance from commuting traffic and light disturbance from housing and street lighting; which limits the suitability for foraging and commuting bats. Given that the proposed works will not directly impact upon the existing railway and its adjacent linear habitat features, the Survey Site has been assessed as offering 'negligible' suitability for foraging and commuting bats.

3.4.3. Herptiles (Amphibians and Reptiles)

The desk study returned 34 records of amphibians within 2 km of the Survey Site boundary, 30 of which were for GCN. The most recent GCN record was recorded approximately 1.1 km to the north-east in 2012.

There were no ponds situated within the Survey Site boundary. There are two ponds within 500 m of the Site. One pond is located approximately 225 m south-east and is a suitable size to support great crested newt (GCN) with immediate suitable terrestrial habitat adjacent to it. A further pond was situated 385 m north-east to the Site. However, given the distance between the Site and these two ponds, the major barrier of the A321, Emm Brook, and existing residential development, it is considered unlikely that GCN will pose a constraint to the Development.

The desk study returned 45 records of reptiles within 2 km of the Survey Site; the closest is for slow worm found approximately 0.4 km south-west in 2017.

There is scrub and bare ground habitat to the east, outside of the Survey Site (Target Note 2, Figure 2, Appendix B) which may have the potential to support foraging and sheltering reptiles. However, the habitat within the Survey Site was primarily comprised of hard standing, with buildings and poor-quality foraging habitat (short amenity grassland) for reptiles. The Survey Site is likely to be frequently disturbed by pets and human disturbance, and is therefore considered unsuitable for supporting reptiles.

3.4.4. Birds

The desk study returns included 34 records of legally protected or notable bird species within 2 km of the study area, the closest record is for fieldfare approximately 0.8 km south in 2005.

Several birds were identified flying over the Survey Site or heard calling at the time of the walkover survey. Species included: black cap (*Sylvia atricapilla*), collared dove (*Streptopelia decaocto*), jackdaw (*Corvus monedula*), pigeon (*Columbidae* sp.), dunnock (*Prunella modularis*), great tit (*Parus major*), blue tit (*Cyanistes caeruleus*), crow (*Corvus corax*), song thrush (*Turdus philomelos*), rook (*Corvus frugilegus*) and blackbird (*Turdus merula*). In addition, a red kite (*Milvus milvus*), a schedule 1 listed bird was seen flying north to south over the Site. The rear garden of 87 Finchampstead Road had several bird boxes present, which in the past appear to have been occupied during the bird nesting season.

The Survey Site had some scattered trees and hedgerow habitats that had the potential to support nesting birds.

3.4.5. Other Protected/Notable Species

Suitable habitat for priority species⁵ such as toads and hedgehogs were found onsite. There is anecdotal evidence that hedgehog utilise the rear garden of No. 87 for foraging and sheltering opportunities.

3.5. Limitations and Assumptions

The ecology walkover survey was undertaken in suitable weather (dry, sunny and warm) by a suitably experienced ecologist who is a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and holds Natural England Licence for great crested newts and is accredited under a Natural England survey licence for bats.

There was no access to No. 81 Finchampstead Road; internally at the time of the walkover survey. A complete external visual inspection of the building was unable to be carried out due to the height of the surrounding fence line and the presence of a hidden roof gulley. A further bat activity survey had been recommended to overcome this limitation.

The red line boundary has changed since the PEA was completed, which now includes additional trees along Molly Millar Lane that had not previously been assessed for bat roost potential or been subject to bat activity surveys. However, from an online street view assessment of these additional trees, they appear to be similar to those previously assessed as offering negligible bat roost potential and will also be retained within the Development. The absence of survey data within this small area therefore represents only a minor limitation.

4. Further Survey Requirements

The Survey Site has suitable habitats for a number of protected species and these habitats have the potential to be directly and indirectly impacted by the Development. Additional ecology surveys are recommended to provide further information to help assess the potential ecological effects of the proposed Development and to inform mitigation. Survey requirements for protected species are referenced in the following sections.

4.1. Bats

4.1.1. Buildings

83 Finchampstead Road was assessed as having a 'low' bat roost potential. As a precautionary approach, given the lack of access to 81 Finchampstead Road, this building was also provisionally classified as having a 'low' bat roost potential. It was therefore recommended that a single dusk or dawn activity survey within suitable weather and temperature conditions, which was subsequently completed on the 1st June 2020 following the standard Bat Conservation Trust survey methodology⁶. The results, recommendations and mitigation

⁵ Species listed under the Natural Environment & Rural Communities (NERC) Act 2006.

⁶ Collins, J. 2016. Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). BCT

requirements following this survey have been included in a separate Bat Survey Report⁷, which should be read in conjunction with this Ecological Appraisal.

4.1.2. Trees

All trees within the Survey Site were assessed as having 'negligible' potential to support roosting bats due to there being a lack of PRF features and no further surveys on the trees are required. In areas where an online street view assessment of trees was made, it is understood that these trees will be retained within the Development and no further survey of these trees are required. However, where trees located within the proposed Development area are due to be felled, further advice should be sought from a qualified arboriculturist prior to works commencing.

4.1.3. Habitats

The Survey Site has been classed as offering a 'negligible' suitability for foraging and commuting bats. Therefore, no transect surveys are required.

4.2. Herptiles (Amphibians and Reptiles)

4.2.1. Amphibians

No waterbodies were present on Site, and therefore there were no suitable breeding opportunities for great crested newts or any other amphibians. There were two waterbodies within 500m of the Site, although these were separated by distance, major barriers such as A roads, and a fast-flowing watercourse from the Site. It is therefore considered highly unlikely that GCN will pose a constraint to the proposed works and no further surveys are recommended.

However, the rear gardens of houses on Finchampstead Road may support common toad and further recommendations have been provided in Section 5.5.2.

4.2.2. Reptiles

It is considered the area that is proposed to be within the Development footprint offered a negligible potential for use by basking, foraging, and commuting reptiles. Given the small area of amenity grassland which is frequently disturbed (pet and human disturbance), in combination with no features present for sheltering or hibernation, the Survey Site also offers negligible value to reptiles. On this basis, it is considered unlikely reptiles will pose a constraint to the Development and no further surveys are recommended.

⁷ Bat Activity Survey Report: WMHP-TG-WG2-RP-EV-0007, Rev 2 Dated 18th November 2020

4.3. Birds

At the time of the walkover survey, no nesting birds were identified. However, in the rear garden of 87 Finchampstead Road, the residents had several bird boxes present, which may be used during the nesting bird season.

Ideally works should commence outside the bird nesting season of March to August inclusive; however, if this is not possible a nesting bird check will need to be carried out by a suitably experienced ecologist prior to works commencing on Site.

4.4. Other Protected Species/Notable Species

Habitats on site provide suitable terrestrial habitats for hedgehog and toad, which are both rapidly declining Section 41 species⁸. Although no specific surveys for hedgehogs or toads are recommended, measures detailed below in Section 5 will provide actions to safeguard and/or enhance areas of the Site for this species.

5. Discussion, Mitigation and Enhancement

5.1. Designated Sites

There are no statutory or non-statutory sites within the Site boundary. All internationally and nationally designated sites are separated from the Site by distance, with major barriers such as road infrastructure and existing development limiting connectivity to the Site. The Site is also separated from non-statutory designated Sites, with no habitat connectivity from the LWSs onto Site. It is therefore considered unlikely that there will be any impacts from the Development on the features which the sites have been designated and no further assessments or mitigation is required.

5.2. Bats

The final mitigation requirements for bats are detailed within the bat survey report. For ease of reference, the summarised mitigation within the bat report includes, but is not limited to the following:

- Ensuring all site operatives are made aware of current legislation protecting bats via a Toolbox Talk;
- In the unlikely event that any bats are encountered then works will cease and Natural England contacted to agree appropriate measures;
- Development design will need to ensure that the retained and adjacent boundary vegetation is unlit by additional lighting; and

⁸ Natural Environment and Rural Communities Act 2006, Section 41

- A minimum of two bat boxes will be installed on retained trees or the railway bridge to provide enhanced roosting opportunities. Boxes are to be installed in accordance with good practice⁹.

Where trees within the proposed Development area are to be felled, further mitigation has been proposed for the loss of this habitat. To ensure there is no net loss to biodiversity (including bats), the planting of new replacement trees and/or hedgerow within a suitable location has been proposed in the Landscape Plan¹⁰ to provide potential opportunities for foraging bat species such as pipistrelle that may be less sensitive to street lit habitats.

5.2.1. Lighting and disturbance

The effects of lighting on plants and animals are difficult to assess but it is known that lighting can adversely affect invertebrates and bats (as well as other species). The Site already experiences moderate levels of lighting from residential properties and street lighting, with no new lighting design recommended to increase these levels further. Any new lighting needs to be designed in line with good practice¹¹, such as minimising light spill and directing it away from boundaries and retained habitats, such as; trees, scrub and adjacent hedgerows.

5.3. Herptiles (Amphibians and Reptiles)

It is considered unlikely that reptiles will be present within the proposed Development area. However, the precautionary approach as mentioned in Section 5.2 is to be followed during the clearance works. In the unlikely event that reptiles or great crested newts are found on site, works will need to cease immediately and a suitably experienced ecologist contacted for further advice.

5.4. Birds

Nesting habitats (all vegetation on site) will need to be removed during the period October to February inclusive to avoid the bird nesting season (March to September). Alternatively, if clearance is not possible during this time, prior to habitat clearance, a check for nesting birds needs to be undertaken by a suitably experienced ecologist no more than 48 hours prior to habitat clearance. Any active nests will need to be left *in situ* until a suitably experienced ecologist confirms birds have stopped using them.

The planting of thick shrub species should be incorporated into the Development scheme to provide sheltering opportunities for passerine birds and the used of berry rich shrub species which would provide foraging opportunities for local bird species.

⁹ <https://www.rspb.org.uk/get-involved/community-and-advice/garden-advice/unwantedvisitors/cats/index.aspx>

¹⁰ Arcus (2020) Highways Soft landscaping Planting Plan Layout (Drawing No. 3493_DR_LAN_101). Document reference WMHP-TG-WG2-DR-LS-3001, Rev P05.

¹¹ Bat Conservation Trust/Institute of Lighting Professionals (2018), Bats and Artificial Lighting in the UK: Bats and the Built Environment Series. Guidance Note 08/18

5.5. Other Protected Species/Notable Species

In order to prevent any potential harm to mammals or notable species such as toads and hedgehogs, the following controls should be implemented during the works, if possible:

- Where possible, works should be limited to the hours from dawn to one hour before sunset;
- Cover excavations overnight to prevent animals falling into them. Inspect excavations daily for the presence of animals before recommencing work on them;
- Any deep excavations that are to be left open overnight should include a means of escape for any animals that may fall in;
- The creation of large stock piles of earth should be avoided as these may be attractive for mammals;
- Store any materials above ground on pallets; and
- Contact an ecologist for advice if new animal burrows are identified.

5.5.1. Toad

The Development should incorporate an infrastructure design that is suitable for toads. This will need to include the use of drop kerbs to allow toads free movement between habitats and avoiding the use of gulley pots that would otherwise trap toads. Where there are existing gulley pots, the inclusion of amphibian ladders within them to allow toads and other amphibians to escape is recommended.

6. Conclusions

Some protected species and habitats have the potential to be affected by the Development. Further survey work, as described Section 4, has been completed to inform the assessment of effects and mitigation. A further recommended bat survey to include an assessment of effects and mitigation has been completed and is reported separately⁷. In order to increase the Development's biodiversity value, and to adhere to Government guidance set out in the National Planning Policy Framework 2019 (NPPF)¹², a range of enhancement measures have also been provided (detailed in Section 5).

¹² National Planning Policy Framework, [Online] Available:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Appendix A – Photographs



Photograph 1: Overview facing north west along Molly Millar's Lane.



Photograph 2: Overview facing north east along Molly Millar's Lane.



Photograph 3: Overview of No.87 roof structure.



Photograph 4: No. 87 cluttered roof void.



Photograph 5: Back garden of No.87.



Photograph 6: Overview of No.85.



Photograph 7: Skylight in No.85 roof void, lots of daylight ingress.



Photograph 8: Rear view of No.85.



Photograph 9: Front of No. 83.



Photograph 10: View to the south-east of No.83 and 85.



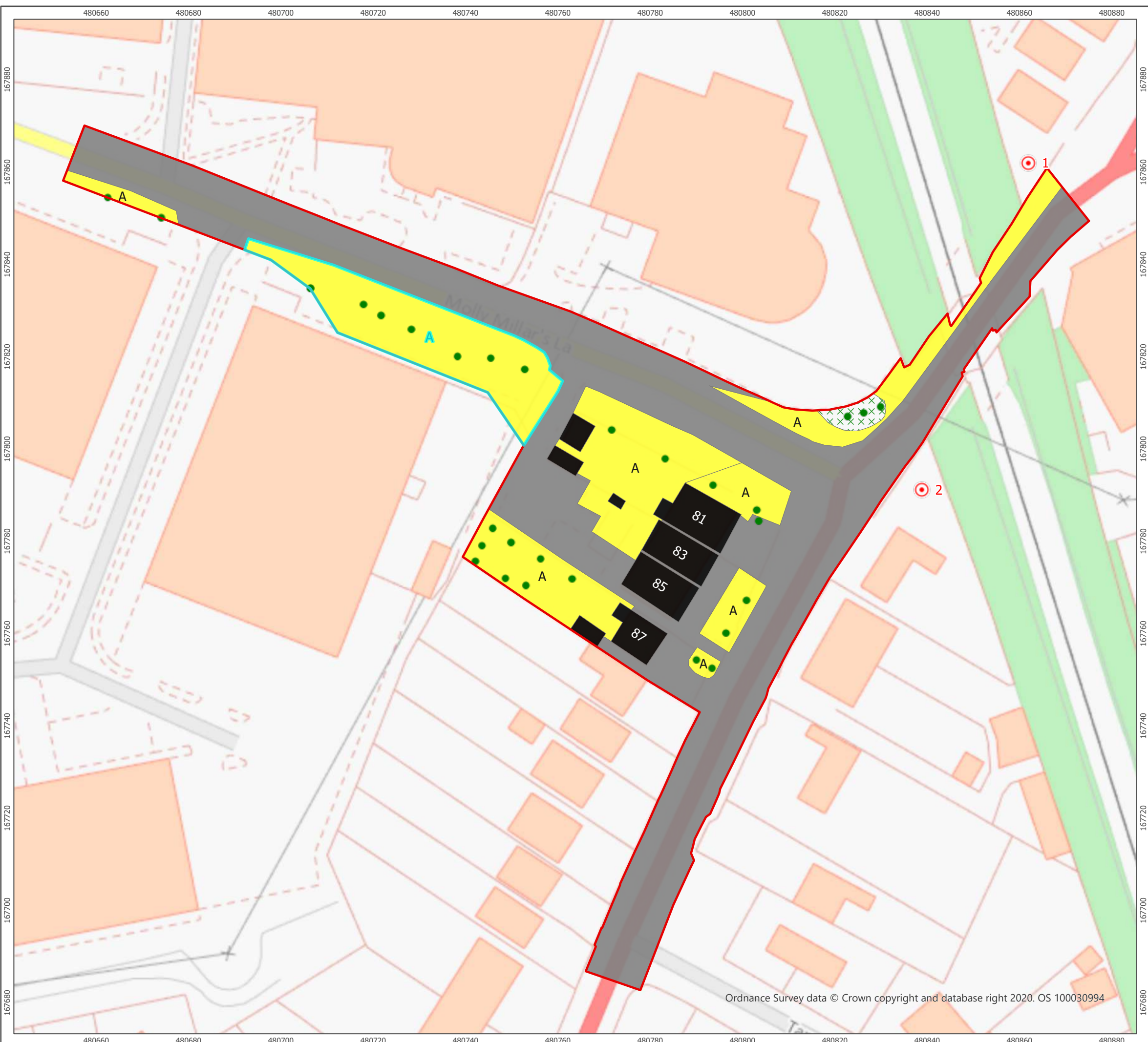
Photograph 11: Lifted tile on the sloped roof porch of No. 83.



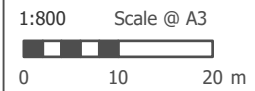
Photograph 12: Missing tile above the bay window on the front elevation of No.83.

Appendix B – Figure 2

Reproduced from Ordnance Survey digital map data © Crown copyright 2020. All rights reserved. License number 100048606



- Survey Boundary
- Scrub - scattered
- Cultivated/disturbed land - amenity grassland
- Hard Standing
- Buildings
- Target Note
- Broadleaved parkland/scattered trees



Produced By: CW	Ref: 3493-REP-002
Checked By: SC	Date: 13/11/2020

Phase 1 Habitat Plan Figure 2

Western Gateway, Wokingham Ecological Appraisal



Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) - Western Gateway Phase 2 (WG2)

Bat Activity Survey Report WMHP-TG-WG2-RP-EV-0007

(Revision P02, Date 18/11/2020)

Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) – Western Gateway Phase 2 (WG2)

Bat Activity Survey Report

Wokingham Borough Council

Document no: WMHP-TG-WG2-RP-EV-0007

Revision: P02

Date: 18/11/2020



Document Issue Record

Project:	Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) - Western Gateway Phase 2 (WG2)
Report Title:	Bat Activity Survey Report
Client:	Wokingham Borough Council
Document No:	WMHP-TG-WG2-RP-EV-0007
Revision:	P02
Status	S3 – For Review and Comment
Date:	18/11/2020
Filename:	WMHP-TG-WG2-RP-EV-0002

Rev	Date	Description and Purpose of Issue	Prepared	Reviewed	Approved
P01	25/06/20	Draft for client review	LS	DH	PP
P02	18/11/20	Amendment to red line boundary	DH	JM	JM

Issuing Office:	Tony Gee and Partners LLP, Hardy House, 140 High Street Esher, Surrey, KT10 9QJ
Tel:	+44 1372 461600
Email:	esher@tonygee.com

Contents

1.	Introduction	1
2.	Methods	2
2.1.	Desk Study	2
2.2.	Preliminary Roost Assessment	2
2.3.	Bat Activity Survey	2
2.3.1.	Timings and Weather Conditions	3
2.3.2.	Surveyor Location and Experience	3
2.3.3.	Survey Equipment and Data	3
2.3.4.	Call Analysis	4
2.3.5.	Equipment Calibration	4
2.4.	Limitations and Assumptions	4
2.4.1.	Survey Limitations	4
2.4.2.	Call analysis Limitations	4
3.	Results	5
3.1.	Desk Study	5
3.1.1.	Designated Sites	5
3.1.2.	Bat Records	5
3.2.	Site Overview	6
3.3.	Bat Activity Survey – 01.06.2020 Emergence Survey	6
4.	Discussion and Recommendations	7
4.1.	Designated Sites	7
4.2.	Bats	7
4.2.1.	Roosting Bats	7
4.2.2.	Foraging and Commuting Bats	8
5.	Mitigation and Enhancement	8
5.1.1.	Timing of Works	8
5.1.2.	Replacement of Bat Habitat Features	8
5.1.3.	Lighting and disturbance	8
5.1.4.	Bat Boxes	9
5.1.5.	Toolbox Talk	9
6.	Conclusions	9

Appendix

Appendix A – Photographs

Appendix B – Figure 2

1. Introduction

Arcus Consultancy Services Ltd (Arcus) was commissioned by Tony Gee & Partners LLP on (henceforth referred to as 'the client') behalf of Balfour Beatty PLC to undertake a Bat Activity Survey at buildings and land west of Finchampstead Road and south of Molly Millar's Lane, Wokingham, RG41 2PE. (approximate National Grid Reference SU 80771 67755) (henceforth referred to as the 'Survey Site') and shown in Figure 1 below.

Figure 1: Site Location



*Reproduced from Ordnance Survey digital map data © Crown copyright 2020. All rights reserved. License number 100048606.

This report has been prepared to accompany the planning application for the enhancement works to the A321 Finchampstead Road/Molly Millar's Lane roundabout (the 'Development'), as part of the wider South Wokingham Distributor Road scheme. The roundabout enhancement scheme will comprise realignment of the existing highway along Finchampstead Road and Molly Millar's Lane including the following works:

- Demolition of properties 81 and 83/85 Finchampstead Road;
- Construction of a new standard roundabout to replace the existing mini roundabout;
- A new controlled crossing on the north arm of the new roundabout; and
- Extension of the existing shared use (unsegregated) footway/cycleway along Molly Millar's Lane.

Accommodating the A321 Finchampstead Road/Molly Millar's Lane roundabout as part of the Western Gateway Scheme will require the removal of a number of buildings in this location, notably 81, 83 and 85 Finchampstead Road. Following a Preliminary Roost

Assessment (PRA) on the 28th January 2020, No. 81 and 83 were assessed as having a low bat roost potential. Following completion of the PRA, recommendations for a bat activity survey were made for these buildings. No. 85 and 87 were assessed as having a negligible bat roost potential and no further Bat Activity Survey was required of this building. The red line boundary of the Site was expanded further along Molly Millar Lane to accommodate the Development, which encompassed an additional line of trees that were not subject to the original PRA assessment, but will be retained within the Development. As such, a PRA and no further bat activity surveys were required of these trees.

This report therefore details the findings of the Bat Activity Survey carried out on 1st June 2020 of 81 and 83 Finchampstead Road. The aim of the Bat Activity Survey was to identify any bat roosts present within the Survey Site and assess the likely impacts of the proposed works on bats. Further surveys and mitigation have been described, where applicable, in order to provide additional information for assessing impacts and to inform recommendations to avoid or reduce potential impacts.

2. Methods

2.1. Desk Study

A desk study search of statutory sites and non-statutory designated sites was completed as part of the Ecological Appraisal¹ provided to the client on 27th February 2020, which should be read in conjunction with this report. The information from the desk study was reviewed to determine if any of the interest features of these designated sites comprised of bat species, with the findings provided in Section 4 of this report.

2.2. Preliminary Roost Assessment

The PRA was conducted as part of an Ecological Appraisal carried out at the Survey Site and reported upon by Arcus, with the Ecological Appraisal¹. This Bat Activity Survey report was commissioned as a result of findings of the PRA and therefore should be read in conjunction with the Ecological Appraisal Report.

2.3. Bat Activity Survey

Four buildings were located within the Survey Site at the time of the Ecological Appraisal, which included 81,83,85 and 87 Finchampstead Road. Following the PRA, two of these were identified as having 'negligible' potential to support roosting bats and were disregarded from further examination. The remaining two buildings, 81 and 83 Finchampstead Road, were classed as having a 'low' suitability for roosting bats. Based on best practice guidance², the scope of surveys for this level of suitability and to inform the assessment of a development of this type typically includes a single dusk emergence bat activity survey, in suitable weather conditions.

¹ Arcus (2020) Western Gateway Phase 2: Ecological Appraisal. Document reference WMHP-TG-WG2-RP-EV-0002

² Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed.). The Bat Conservation Trust, London.

2.3.1. Timings and Weather Conditions

Bat activity is strongly influenced by weather conditions and time of night. Peak activity occurs at dusk and dawn, but activity continues throughout the night as bats can commute long distances from their roosts to particular foraging sites (depending on the species). For this reason, the dusk activity survey started fifteen minutes before sunset and continued for one and half hours thereafter. Bat activity survey timings and weather conditions can be seen in Table 3.1.

Table 3.1 Bat Activity Survey Details

Date	Sunset Time	Start Time	End Time	Start/End Temp (°C)	Cloud (Oktas)	Rain	Wind (Beaufort)
01/06/2020	21:11	20:56	22:41	22 / 17	1	Dry	1 - 2

2.3.2. Surveyor Location and Experience

The bat activity survey was completed by two surveyors with previous bat survey experience, with surveyor information seen in Table 3.2.

Table 3.2 Surveyor Details

Date	Surveyor Location	Surveyor Names	Bat Survey Experience
01/06/2020	Front of 83 Finchampstead Road	Gemma Costin	>3 Years
01/06/2020	Side of 81 Finchampstead Rd off Molly Millar's Lane	Jane Marie Osborne	1 Year

Each surveyor was positioned at vantage points close to the building, which would offer a clear view of any bats exiting potential roost features. Surveyor locations are described in Table 3.2, and depicted in Figure 2, Appendix B.

2.3.3. Survey Equipment and Data

The following equipment was used by the bat surveyors during the surveys:

- Wildlife Acoustics EM Touch Pro 2 bat detector and iPhone recorder;
- Elekon Batlogger M; and
- Thermal imaging night video recorder.

In addition to the digital recordings, information about bat registrations was recorded on maps and standardised recording sheets, including, if possible:

- Time of bat registration;
- Direction of flight;
- Bat behaviour e.g. foraging;

- Environmental variables, including cloud cover, wind strength, precipitation, and air temperature were recorded at the start and end of the survey (Table 3.1);
- Start and end times; and
- Surveyor details (Table 3.2).

2.3.4. Call Analysis

Following completion of the bat activity survey, the bat data was downloaded from the Elekon Batlogger M, Wildlife Acoustics EM Touch Pro 2 bat detector & iPhone recorder, and then analysed for individual bat recordings using sound analysis software. This was then cross-referenced against the surveyor's bat activity survey sheet notes.

2.3.5. Equipment Calibration

In line with Bat Conservation Trust (BCT)³ guidance all bat detectors are subject to routine maintenance and testing. Detectors used for remote monitoring are routinely calibrated using appropriate equipment and software supplied by the detector's manufacturer.

2.4. Limitations and Assumptions

2.4.1. Survey Limitations

The Bat Activity Survey was undertaken in suitable weather (dry, calm and warm) and led by Gemma Costin, an ecologist with suitable experience working with bats. Therefore, there were no limitations to the survey with the potential to affect its efficacy.

The red line boundary has changed since the PRA was completed, which now includes additional trees along Molly Millar Lane that had not previously been assessed for bat roost potential or been subject to bat activity surveys. However, from an online street view of these additional trees, they appear to be similar to those previously assessed as offering negligible bat roost potential and will also be retained within the Development. The absence of survey data within this small area therefore represents only a minor limitation.

2.4.2. Call analysis Limitations

There are limitations associated with species identification from acoustic monitoring. Echolocation calls from congeneric species often exhibit a large degree of overlap in their call structures making definitive identification difficult. Also, a bat will vary the structure of its echolocation calls to reflect its proximate needs. This behaviour results in a large degree of variation in the call structure of any given bat species and can also result in the structure of echolocation calls overlapping with those of other bat species. Species identification is therefore applied with a level of confidence, especially where deterministic call characteristics are not present within a recording.

³ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed.). The Bat Conservation Trust, London.

3. Results

3.1. Desk Study

3.1.1. Designated Sites

Of the designated sites within 2 km of the Site, Copse and Joel Park Local Nature Reserve (LNR) and Bottle Copse Local Wildlife Sites (LWS) are the only two that are designated for their potential to support bat species; further details of these two sites are given in Table 3.3. Full details of all designated sites within 2 km of the Survey Area are provided in the Ecological Appraisal¹.

Table 3.3 Statutory and Non-Statutory Designated Sites Relating to Bats

Site	Status	Minimum Distance and Direction (km) from Site Boundary	Description/Reason for Designation
Statutory designated sites			
Holt Copse & Joel Park	LNR	1.2 km north-west	Designated as a Local Nature Reserve in 2001, Holt Copse consists of semi-natural ancient woodland and is part of the larger deciduous woodland of Joel Park. It is known to support a large noctule (<i>Nyctalus noctula</i>) bat roost.
Non-statutory designated sites			
Bottle Copse	LWS	1.3 km east	Bootle Copse is situated to the south-west edge of Wokingham, primarily consists of ancient woodland with areas of dense bramble scrub. Designated as a local wildlife site in 2003, it supports protected species such as slow worm (<i>Anguis fragilis</i>), grass snake (<i>Natrix natrix</i>), [REDACTED] and pipistrelle (<i>pipistrellus</i> sp.) bats.

3.1.2. Bat Records

To provide context for the results of the Bat Activity Survey, a search for recent (0-20 years) biological records of bat species within 2 km of the Survey Site was carried out via publicly available resources, such as the National Biodiversity Network (NBN) database⁴. The results of this search are shown in Table 3.4.

⁴ National Biodiversity Network (online) Available online at: www.nbn.org.uk. Accessed June 2020.

Table 3.4 Bat Records Within 2 km of the Survey Site

Species	Number of records	Distance and direction of closest record from Site (Year)
Unidentified bat	13	0.1 km south-west (2005)
Brown long-eared bat	30	0.3 km south-east (2017)
Common pipistrelle	74	0.3 km north east (2017)
Nathusius' pipistrelle	2	0.3 km south-west (2017)
Noctule	28	0.3 km north east (2017)
Soprano pipistrelle	56	0.3 km north east (2017)
Long-eared bat	34	0.3 km north east (2014)
Unidentified pipistrelle bat	52	0.3 km north-east (2008)
Unidentified myotis bat	5	0.6 km south (2018)
Natterer's bat	1	0.7 km north-east (2017)
Leisler's bat	1	1.1 km north-east (2018)
Serotine	3	1.2 km north-east (2015)

3.2. Site Overview

The Survey Site is situated in the hamlet of Eastheath to the south-west of the market town of Wokingham, Berkshire. The Survey Site is approximately 0.83 hectares (ha) and comprised of built structures, hard standing, amenity grassland, scattered trees and species poor hedgerow. Emm Brook is approximately 57 m north-east from the Survey Site.

In the wider area, is an industrial estate to the north-west, arable fields to the east, further residential and commercial properties to the north, east and south; and an active railway line to the north-east.

3.3. Bat Activity Survey – 01.06.2020 Emergence Survey

Over the course of the Bat Activity Survey a total of eight bat calls were recorded, all calls were from common pipistrelle (*Pipistrellus pipistrellus*) bats. The first bat pass recorded was at 21:43 and the last at 22:41. As the bat passes were recorded later in the evening all but one was 'heard not seen' meaning that no visual identification was obtained to determine

the location of bats, number of bats or their behaviour. The one pass in which a visual observation could be made, the bat was seen to be foraging, flying in a circle north of the surveyor. The remainder of the bats were assumed, based on their call parameters, to be commuting through the Survey Site. No bats were seen to emerge from the buildings surveyed.

4. Discussion and Recommendations

4.1. Designated Sites

There are no statutory or non-statutory sites within the Site boundary. All internationally and nationally designated sites are separated from the Site by distance, with major barriers such as road infrastructure and existing development limiting connectivity to the Site. The Site is also separated from non-statutory designated Sites, with no habitat connectivity from the LWSs onto Site. It is therefore considered unlikely that there will be any impacts from the Development on the features (including bats) for which the sites have been designated and no further assessments or mitigation is required.

4.2. Bats

When establishing the conservation needs of bats there are three important aspects that should be considered when making changes to the local habitat or features. These are roosting sites, foraging areas and commuting/navigational corridors or features⁵.

4.2.1. Roosting Bats

There are a small number of potential roosting opportunities within the buildings (81 and 83 Finchampstead Road) surveyed. These included; loose roof tiles, areas where the soffit had lifted against the exterior walls and gaps in the brickwork around windows and soffit boxes. Internally, the loft space within No. 83 was completely dark. No light was visible around the eaves or the rafters implying that none of the external gaps extend into the building. Furthermore, roofing felt was observed to be tightly secured throughout the loft. No. 81 could not be accessed during the PRA for an internal inspection.

The structures surveyed are of low suitability for winter roosting bats. Features on the external surfaces of the buildings are present but are exposed and shallow. All such features would not typically be regarded as providing the protection from weather and/or temperature fluctuation during the winter period. Structures with low suitability for winter roosting do not require specific winter surveys⁶.

No evidence of bats was found during the external and internal inspection of 81 and 83 Finchampstead Road where access permitted, and no evidence of bats using the buildings was observed during the bat activity survey. However, the lack of evidence of bats should not be interpreted as an indication that no roosts or roosting bats exist within the Survey

⁵ Entwistle, A. C., Harris, S., Hutson, A. M., Racey, P. A., Walsh, A., Gibson, S. D., Hepburn, I. and Johnston, J. (2001). Habitat Management for Bats - A Guide for Land Managers, Land Owners and their Advisors. JNCC, Peterborough.

⁶ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed.). The Bat Conservation Trust, London.

Site, as they may be utilising the structures at other times of year or using features that cannot be fully inspected. The buildings surveyed are proposed to be demolished to make way for the proposed upgrades to the adjacent road network. There remains a low potential that bats use the buildings as a roost.

No bat roosts were identified during the bat activity survey of 1st June 2020 in either 81 or 83 Finchampstead Road. Bat activity was low during the survey, with only a commonly occurring bat species present. Therefore, no further bat activity surveys have been recommended. However, mitigation has been proposed to ensure that the potential for bats to be killed or injured during the Development is fully mitigated, with further details provided in Section 5 of the report

4.2.2. Foraging and Commuting Bats

All bats within the UK require large amounts of insect food in order to survive. As the Survey Site is situated within a well-lit urban environment and the surrounding landscape offers plenty of similar habitat, the proposed works will not affect bats in this respect. No further surveys or assessments with respect to foraging or commuting bats is proposed. A landscape plan⁷ has been developed that will provide opportunities for foraging and commuting bats, which is discussed further in Section 5 of this report.

5. Mitigation and Enhancement

5.1.1. Timing of Works

The survey work reported upon within this document was carried out during the period 28th January 2020 to 1st June 2020. If works at the Survey Site do not commence prior to 1st January 2022 then further surveys should be commissioned in order to ascertain that the situation regarding bats has not changed during the intervening period and thus the conclusions of this report are still valid.

5.1.2. Replacement of Bat Habitat Features

Native species trees and shrub mixtures have been proposed within the landscape plan⁴. This ensures that where habitat and plant species are lost, they are in part replaced with planting of known value to bats⁸, which ensures replacement foraging habitat is available to bats post Development.

5.1.3. Lighting and disturbance

The Survey Site already experiences moderate levels of lighting from residential properties and street lighting, and any bats currently foraging in the area will therefore be accustomed to this level of disturbance. However, to ensure lighting does not impact bats during the construction and operational stages of the Development, retained and adjacent, garden and boundary habitat that could be used by foraging bats is unlit by additional lighting. The

⁷ Arcus (2020) Highways Soft landscaping Planting Plan Layout (Drawing No. 3493_DR_LAN_101). Document reference WMHP-TG-WG2-DR-LS-3001, Rev P05.

⁸ Royal Horticultural Society, plants of value for bats, available here: <https://www.rhs.org.uk/advice/pdfs/plants-for-bats.pdf>

lighting requirements detailed in the Ecological Appraisal with respect to lighting and bats will need to be followed.

5.1.4. Bat Boxes

The inclusion of two bat boxes (e.g. Schwegler 2F or similar) on retained trees or railway bridge will enhance the Survey Site and act as compensation for the loss of roosting opportunities within the buildings that are to be demolished have been proposed as part of the Ecological Appraisal.

5.1.5. Toolbox Talk

A toolbox talk must be given to all contractors by an experienced bat ecologist prior to works starting. This will explain the potential for finding bats, how to work in a bat sensitive manner, and what to do if a bat is found.

If bats are found during any operations under no circumstances should they be handled. Works will need to stop immediately and the advice of a bat ecologist sought, with Natural England contacted to agree appropriate measures. If someone has been bitten or scratched by a bat inadvertently, the wound will need to be immediately be washed (not scrubbed) with soap and water and medical advice sought as soon as possible (although the risk of rabies in the UK appears to be very small, anyone having come into direct contact with a bat should seek advice, initially from Natural England).

6. Conclusions

No bats were found within the Survey Site at the time of the PRA or the Bat Activity Survey. However, due to the fact that some of the potential roost features within buildings 81 and 83 Finchampstead Road were unable to be fully inspected it is recommended that a tool box talk is delivered to all contractors, delivered by a suitably experienced ecologist, prior to any works commencing. This is expected to provide sufficient mitigation for the low risk of encountering any bats during the work associated with the Development.

Appendix A – Photographs



Photograph 1: Overview facing north west along Molly Millar's Lane.



Photograph 2: Overview facing north east along Molly Millar's Lane.



Photograph 3: Overview of No.87 roof structure.



Photograph 4: No. 87 cluttered roof void.



Photograph 5: Back garden of No.87.



Photograph 6: Overview of No.85.



Photograph 7: Skylight in No.85 roof void, lots of daylight ingress.



Photograph 8: Rear view of No.85.



Photograph 9: Front of No. 83.



Photograph 10: View to the south-east of No.83 and 85.

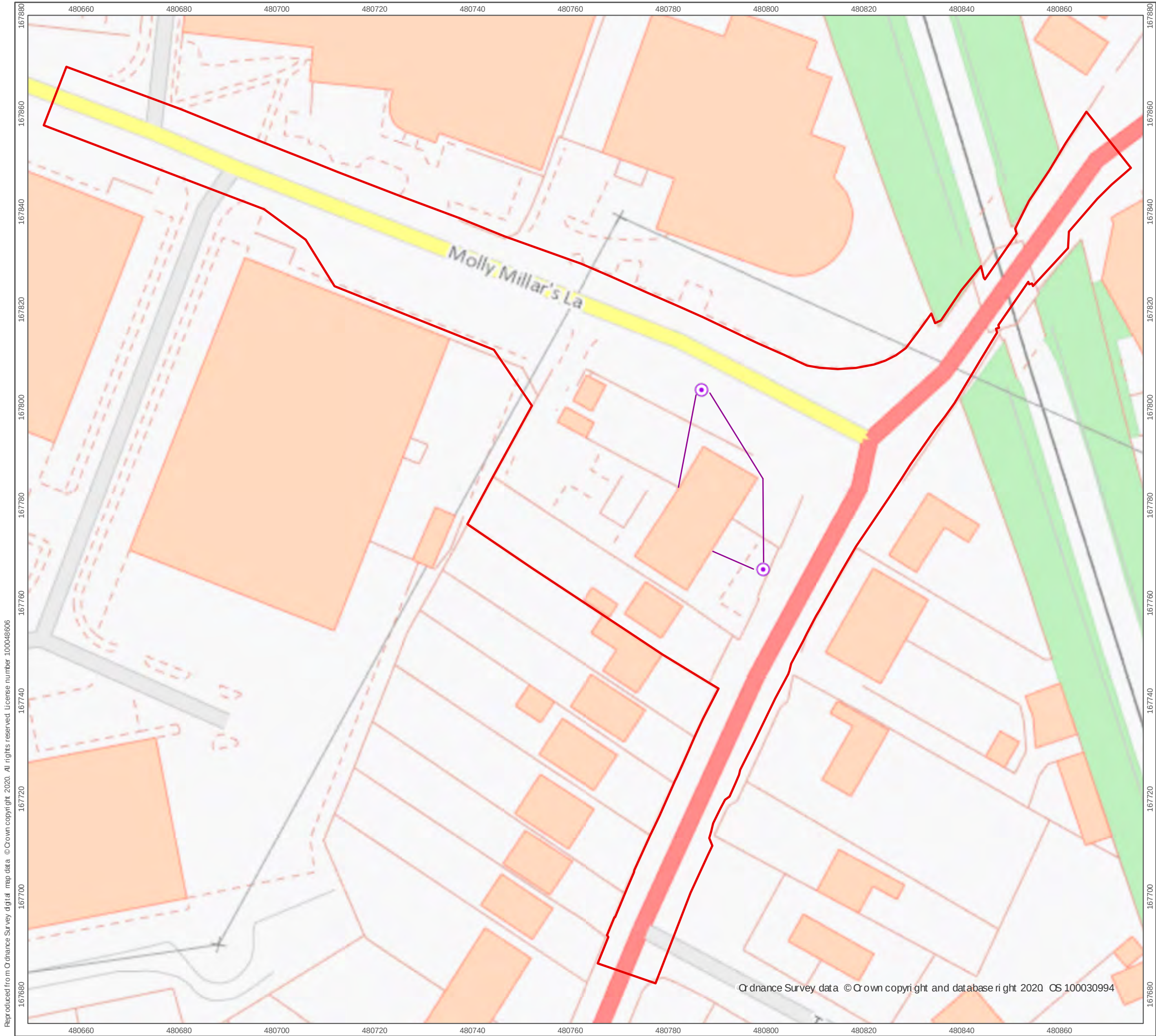


Photograph 11: Lifted tile on the sloped roof porch of No. 83.

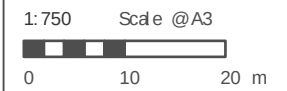


Photograph 12: Missing tile above the bay window on the front elevation of No.83.

Appendix B – Figure 2



- Site Boundary
- Surveyor Location
- Surveyor Field of Vision

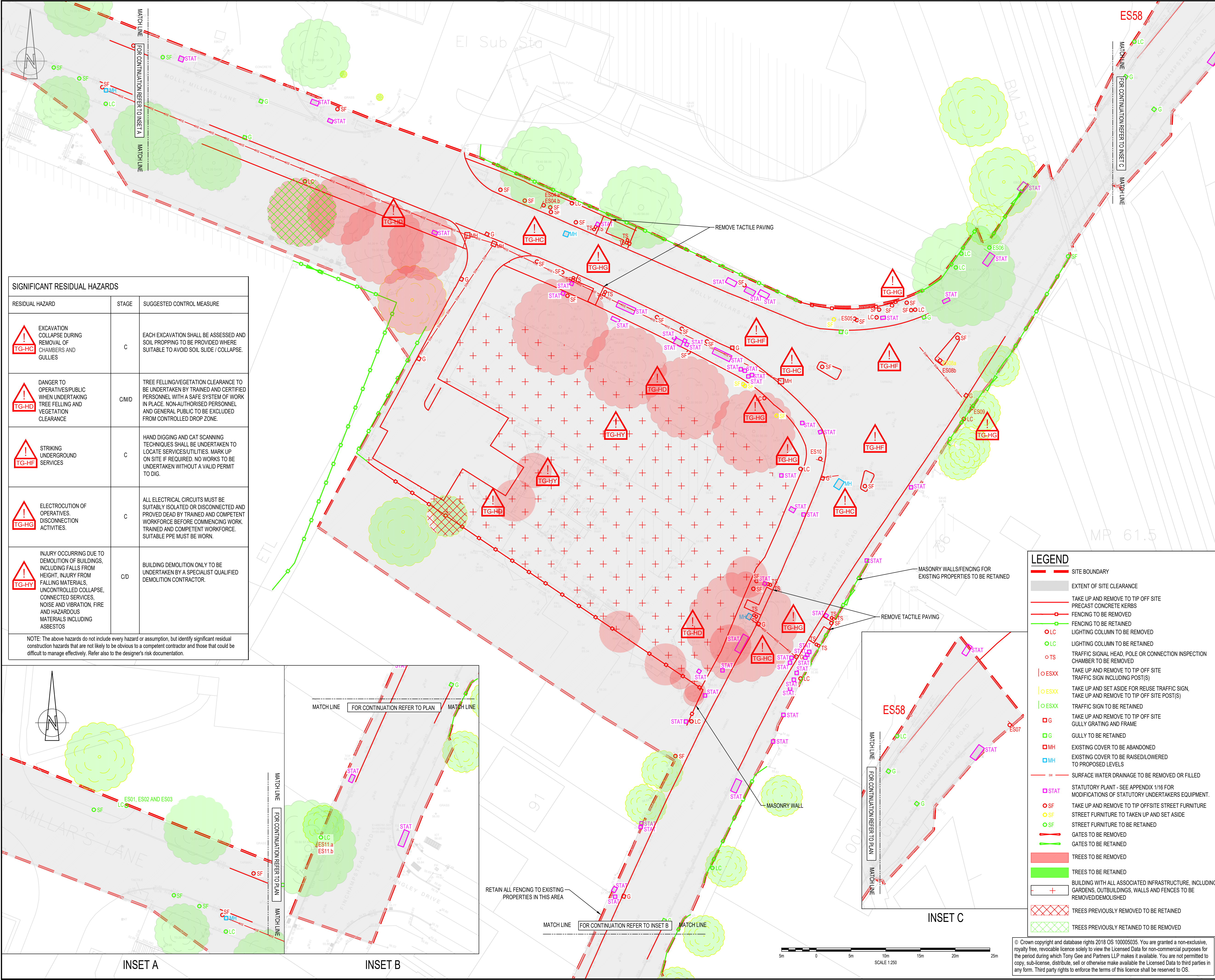


Produced By: GC	Ref: 3493-REP-003
Checked By: DH	Date: 13/11/2020

Bat Surveyor Locations
Figure 2

Wokingham Western Gateway
Bat Activity Report

Appendix I: Site Clearance Plans



SIGNIFICANT RESIDUAL HAZARDS		
RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
EXCAVATION COLLAPSE DURING REMOVAL OF CHAMBERS AND GULLIES	C	EACH EXCAVATION SHALL BE ASSESSED AND SOIL PROPPING TO BE PROVIDED WHERE SUITABLE TO AVOID SOIL SLIDE / COLLAPSE.
DANGER TO OPERATIVES/PUBLIC WHEN UNDERTAKING TREE FELLING AND VEGETATION CLEARANCE	C/MID	TREE FELLING/VEGETATION CLEARANCE TO BE UNDERTAKEN BY TRAINED AND CERTIFIED PERSONNEL WITH A SAFE SYSTEM OF WORK IN PLACE. NON-AUTHORISED PERSONNEL AND GENERAL PUBLIC TO BE EXCLUDED FROM CONTROLLED DROP ZONE.
STRIKING UNDERGROUND SERVICES	C	HAND DIGGING AND CAT SCANNING TECHNIQUES SHALL BE UNDERTAKEN TO LOCATE SERVICES/UTILITIES. MARK UP ON SITE IF REQUIRED. NO WORKS TO BE UNDERTAKEN WITHOUT A VALID PERMIT TO DIG.
ELECTROCUTION OF OPERATIVES DISCONNECTION ACTIVITIES.	C	ALL ELECTRICAL CIRCUITS MUST BE SUITABLY ISOLATED OR DISCONNECTED AND PROVED DEAD BY TRAINED AND COMPETENT WORKFORCE BEFORE COMMENCING WORK. TRAINED AND COMPETENT WORKFORCE. SUITABLE PPE MUST BE WORN.
INJURY OCCURRING DUE TO DEMOLITION OF BUILDINGS, INCLUDING FALLS FROM HEIGHT, INJURY FROM FALLING MATERIALS, UNCONTROLLED COLLAPSE, UNCONNECTED SERVICES, NOISE AND VIBRATION, FIRE AND HAZARDOUS MATERIALS INCLUDING ASBESTOS	C/D	BUILDING DEMOLITION ONLY TO BE UNDERTAKEN BY A SPECIALIST QUALIFIED DEMOLITION CONTRACTOR.
NOTE: The above hazards do not include every hazard or assumption, but identify significant residual construction hazards that are not likely to be obvious to a competent contractor and those that could be difficult to manage effectively. Refer also to the designer's risk documentation.		

DO NOT SCALE

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
3. DRAWING TO BE READ IN CONJUNCTION WITH SPECIFICATION REFERENCE WMHP-TG-WG2-SP-HI-0201.
4. EXTENTS OF SITE CLEARANCE TO BE CONFIRMED FOLLOWING SUCCESSFUL PLANNING APPLICATION APPROVAL AND ASSOCIATED PLANNING CONDITIONS.

KEYPLAN

P06	17/07/2024	JB	MINOR AMENDMENTS	DJF	JC
P05	16/07/2024	JB	UPDATED FOR PLANNING CONDITION DISCHARGE	DJF	JC
P04	02/06/2022	GKC	MATTERS OUTSTANDING WMHP-TG-WG2-RG-0M-0002	BH	JC
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:

SUITABLE FOR EXAMINATION

S8

DESIGNER:

Tony Gee
Consulting Civil, Structural and Geotechnical Engineers

Tony Gee and Partners LLP
Hardy House
140 High Street
Esher, Surrey
KT10 9JQ
Tel: 01372 461600
www.tonygee.com

CONTRACTOR:

CLIENT:

WOKINGHAM BOROUGH COUNCIL
Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT:

WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SWDR WESTERN GATEWAY PHASE 2

TITLE:

ROUNDABOUT ENHANCEMENT
SITE CLEARANCE
PLAN

SCALE @ A1:

1:250

CHECKED:

BH

APPROVED:

JC

PROJECT NO:

C118048

DESIGNED:

MH

DRAWN:

MH

DATE:

March 21

DRAWING NO:

WMHP-TG-WG2-DR-HI-0201

REV:

P06

File name: S:\PROJECTS\2018\1804\BIM\01\WIP\DRAWINGS\WMHP-TG-WG2-DR-HI-0201.DWG, printed on 17 July 2024 14:19:11, by Jennifer Baudry

Appendix J: Arboricultural Method Statement



Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) - Western Gateway Phase 2 (WG2)

**Arboricultural Method Statement
WMHP-TG-WG2-RP-LS-0002
(Revision P02, Date 16/11/2020)**

Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) – Western Gateway Phase 2 (WG2)

Arboricultural Method Statement

Wokingham Borough Council

Document no: WMHP-TG-WG2-RP-LS-0002

Revision: P02

Date: 16/11/2020



Document Issue Record

Project:	Wokingham Major Highways Programme South Wokingham Distributor Road (SWDR) - Western Gateway Phase 2 (WG2)
Report Title:	Arboricultural Method Statement
Client:	Wokingham Borough Council
Document No:	WMHP-TG-WG2-RP-LS-0002
Revision:	P02
Status	S3 – For Review and Comment
Date:	16/11/2020
Filename:	WMHP-TG-WG2-RP-LS-0002

Rev	Date	Description and Purpose of Issue	Prepared	Reviewed	Approved
P01	18/02/20	S3 – For Review and Comment	LH	JC	JC
P02	16/11/20	Final	JC	JM	JM

Issuing Office:	Tony Gee and Partners LLP, Hardy House, 140 High Street Esher, Surrey, KT10 9QJ
Tel:	+44 1372 461600
Email:	esher@tonygee.com

Contents

1.	Introduction	2
1.1.	Instruction	2
1.2.	Purpose	2
1.3.	Description of Development	2
1.4.	Details of Consent	3
2.	Method Statement Timeline	3
2.1.	Overview of Sequence of Operations	3
2.2.	Specific Sequence of Operations	3
3.	Tree Management	5
3.1.	Tree Works	5
4.	Tree Protection	5
4.1.	Tree Protection Fencing	5
4.2.	Drainage and Utilities	6
4.3.	Additional Precautions	6
4.4.	Post Construction Landscaping	7
Appendix A - Images and Figures		
Appendix B - Relevant Contact Details		
Appendix C - Record of Arboricultural Supervision		
Appendix D - Tree Data		
Appendix E - Tree Protection Plan		

1. Introduction

1.1. Instruction

- 1.1.1. Arcus Consultancy Services Ltd were instructed by Tony Gee to prepare an Arboricultural Method Statement (AMS) for the proposed roundabout enhancement works to the A321 Finchampstead Road/Molly Millars Lane roundabout (the 'Development'), as part of the wider South Wokingham Distributor Road scheme.

1.2. Purpose

- 1.2.1. This AMS describes how the trees will be protected and managed during the development of this site. It explains how and when the protection measures must be installed and maintained throughout the development.
- 1.2.2. A copy of this document report must be permanently available on site for the duration of all development activity and should be referenced for practical guidance on how to protect the retained trees at this site.
- 1.2.3. The AMS has been prepared in order to demonstrate that the development operations at this site can be undertaken with minimal risk of adverse impact on the trees to be retained.
- 1.2.4. The AMS conforms to 'BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations'. It is based on the arboricultural data, collected at a site visit during February 2020, detailed within Appendix D of this report.

1.3. Description of Development

- 1.3.1. It is proposed to undertake enhancement works at the A321 Finchampstead Road/Molly Millars Lane roundabout (the 'Development'), as part of the wider South Wokingham Distributor Road scheme. The roundabout enhancement scheme will comprise realignment of the existing highway along Finchampstead Road and Molly Millar's Lane including the following works:
- Demolition of properties 81 and 83/85 Finchampstead Road;
 - Construction of a new standard roundabout to replace the existing mini roundabout;
 - A new controlled crossing on the north arm of the new roundabout; and
 - Extension of the existing shared use (unsegregated) footway/cycleway along Molly Millar's Lane.
- 1.3.2. The proposed development layout is the basis for the Tree Protection Plan (TPP) provided in Appendix E.

1.4. Details of Consent

- 1.4.1. Planning consent is subject to this method statement being agreed upon in advance by the Local Planning Authority. The contents of this report must be adhered to, before, during, and after the construction phase.
- 1.4.2. As such, no equipment, machinery or materials shall be brought onto the site in connection with the development until this arboricultural method statement detailing tree management and tree protection measures has been submitted to and approved by the Local Planning Authority.

2. Method Statement Timeline

2.1. Overview of Sequence of Operations

- 2.1.1. In overview, it is necessary to undertake the following sequence of operations in relation to arboricultural input for development operations.
 - i. Method Statement approved by the LPA.
 - ii. Undertake tree and hedge/shrub removal of T2, T3, T4, T5, G6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T18, T19 and T24, and a small section of G23 (as detailed in Appendix D).
 - iii. Install tree protective fencing.
 - iv. Pre commencement meeting / confirm fencing and tree protection is as specified.
 - v. Construction of new development.
 - vi. Removal of tree protection.

2.2. Specific Sequence of Operations

- 2.2.1. The following timeline table informs the key principles for development operations proceeding in relation to arboricultural requirements conditioned as part of this AMS.
- 2.2.2. The actions and timescales within this table must be adhered to in order to discharge the arboricultural method statement planning condition for this site.
- 2.2.3. The precise timing and order of some of the development operations may need to be changed due to site specific operational requirements, yet any operations that may affect the trees on the site must be done so under arboricultural supervision by a suitably qualified person appointed by the contractor.

Sequence of Operations		
Stages	Action	Arboricultural Input
1 Approval	This AMS is submitted to and approved in writing by the LPA.	If necessary, liaise with contractor and LPA to discuss methodologies detailed.
2 Tree Works	Tree removals and pruning works shall be carried out as the first operation on site, in accordance with Appendix D and as detailed in section 3.1.	Review the tree work requirements with the tree contractor. If necessary, liaise with the contractor on site during tree works.
3 Tree Protection	Installing the tree protective fencing will take place prior to any storage of plant, materials and machinery. As shown at Appendix E.	If necessary, liaise with the contractor installing the protective fencing until completed to the standard specified in this method statement.
4 Site Meeting	Following installation of tree protective fencing, the LPA shall be invited to inspect the fencing, ground protection and tree works, and discuss any other site operations that have implications for trees.	Meeting with a representative of the LPA and the site manager. Alternatively, contractor can confirm the fencing and tree works are as specified by taking photographs of the tree protection measures.
5 Construction	Undertake the construction of the new development.	If necessary, liaise with the local authority and the site foreman to ensure any issues are adequately resolved.
6 Site Finishing	Removal of tree protective fencing must only be undertaken when all site traffic and machinery has left the site.	If acceptable to the LPA, the contractor can take photos of the site to give to the LPA to gain approval for the removal of protective fencing.

3. Tree Management

3.1. Tree Works

- 3.1.1. The development will require the removal of 17 trees and 1 groups (T2, T3, T4, T5, G6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T18, T19 and T24), and a small section of 1 further group (G23).
- 3.1.2. The trees requiring removal are highlighted in red on the plan at Appendix E and as detailed in the tree data schedule at Appendix D.
- 3.1.3. All tree work should be carried out according to British Standard 3998:2010 Tree Work - Recommendations.
- 3.1.4. When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

4. Tree Protection

4.1. Tree Protection Fencing

- 4.1.1. The protective fencing for this site should be located as shown on the Tree Protection Plan (TPP) at Appendix E (as illustrated with a thick black line). The precise fencing location may need to be slightly adjusted on site due to local site conditions but is not expected to differ from that shown on the TPP. The final fencing position must be agreed on by the LPA before the commencement of any site works.
- 4.1.2. The tree protective fencing details should be incorporated into relevant subsequent plans, method statements used for design purposes and construction drawings issued for use on site, to ensure that all interested parties are fully aware of the areas in which access and works may and may not take place.
- 4.1.3. The protective fencing will be appropriate to the degree and proximity of likely construction works. In this instance, the default BS 5837:2012 tree protection fencing is deemed disproportionate. It is suggested (if acceptable by the LPA) an adequate level of protection for the trees could be provided by 'Heras' type fencing, of welded mesh panels on rubber or concrete feet.
- 4.1.4. The fencing should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The fencing panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins or mounted on a block tray (see Appendix A for an example).

- 4.1.5. The area enclosed by the fencing is referred to as the Construction Exclusion Zone (CEZ); this area should be considered a restricted area. No pedestrians, vehicles, storage of materials, equipment or machinery should be allowed within the CEZ unless specified within this method statement. The site manager must ensure that all personnel are aware of the restrictions that apply to the fenced-off area.
- 4.1.6. Once the fencing is erected, waterproof warning signs labelled '*Tree Protection Area*' should be placed at 3m intervals to ensure that all personnel are aware of the restrictions that apply to the fenced-off area (see Appendix A for an example sign).
- 4.1.7. The protective fencing should be inspected for faults or damage by the site manager or other responsible named person on a regular basis and a written record kept. Any faults or defects should be repaired or replaced as soon as is reasonably practicable. The Tree Protection Fencing shall not be removed, breached or altered without prior written authorisation from the local planning authority and under arboricultural supervision by a suitable named responsible individual appointed by the site manager.

4.2. Drainage and Utilities

- 4.2.1. Drainage and utilities are to be directed away from the retained trees. Over-ground services should ideally be routed away from areas where they are likely to interfere with the crowns of mature trees.
- 4.2.2. New underground services should be grouped together and routed away from RPAs. NJUG 10: Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees should be considered when installing services.

4.3. Additional Precautions

- 4.3.1. Allowance should be made for operations outside of the CEZ that could indirectly impact on trees. Including space for site huts, temporary toilet facilities (including their drainage) and other temporary structures; and space for storing (whether temporary or long-term) materials.
- 4.3.2. Care must be taken to prevent contamination with chemical spillages, including petrol, diesel and oils. Cement mixers and any other toxic materials should not be permitted within the RPA of the trees. Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the outer edge of its RPA.
- 4.3.3. Fires on the site should be avoided if possible. Where they are unavoidable, and approved by the Local environmental health authority, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction should be considered when determining its location, and it should be attended always until safe enough to leave.

4.4. Post Construction Landscaping

- 4.4.1. Many of the trees on site may be subject to some form of landscaping or seeding beneath their canopies after the development phase. At this stage the protective fencing will have been removed.
- 4.4.2. Landscaping works should be carried out in such a way as to avoid ground level changes or deep digging. Tractor mounted rotovation or other mechanised cultivation methods must not be used.
- 4.4.3. No heavy machinery should be brought into the vicinity of retained trees.
- 4.4.4. Herbicides should be appropriate for the purpose and should not be used in such a way as to damage any retained trees or vegetation.

Appendix A – Images and Figures

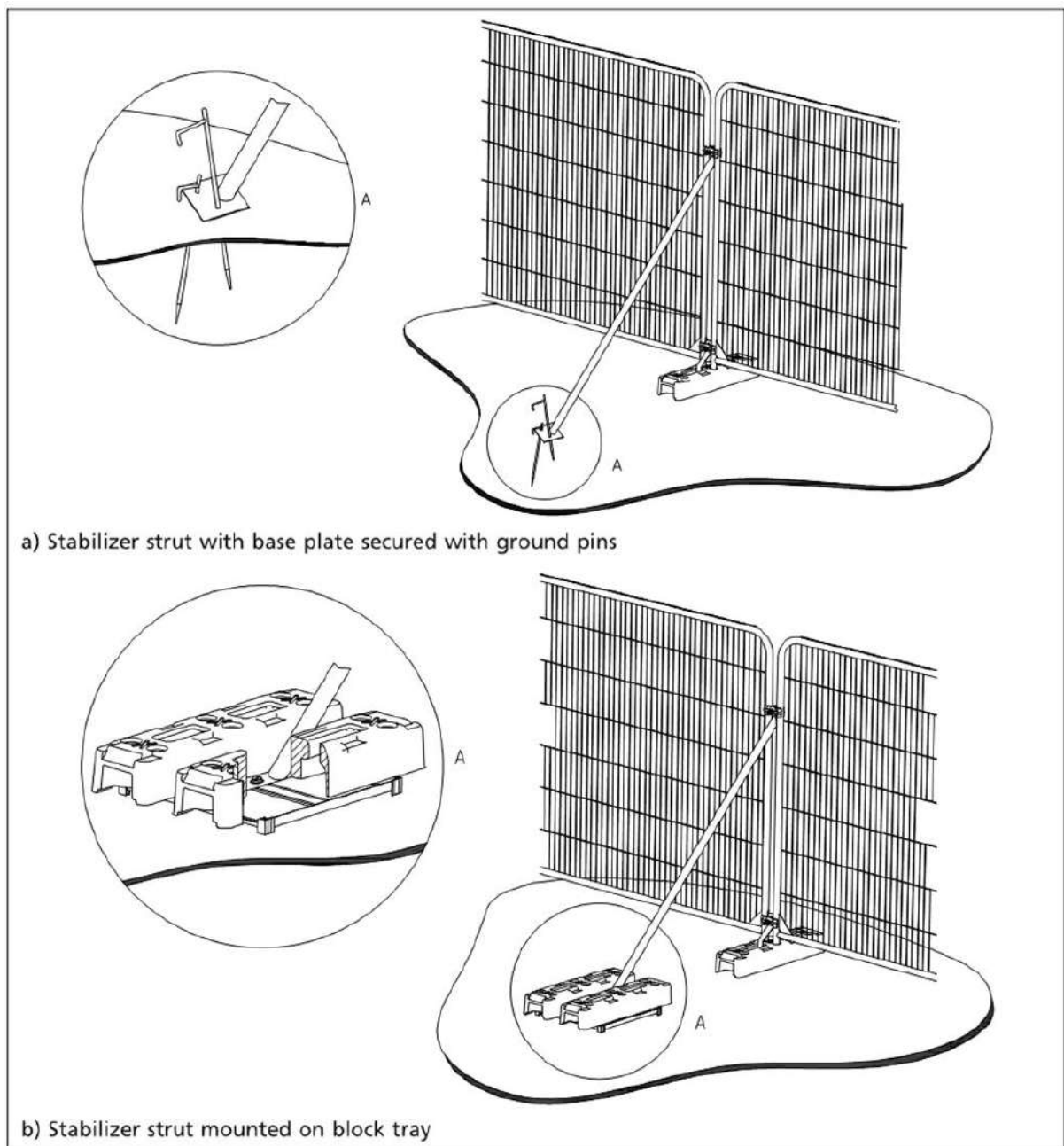


Figure 1: Secured 'Heras' type fencing with stabilizing system and fixed central pins (©BSI)



Figure 2: Secured 'Heras' type fencing with stabilizing system and anti-tamper couplers



Figure 3: Anti-tamper couplers to secure fencing and avoid unauthorised access



Figure 4: Warning sign for tree protection fencing



Figure 5: Example of A3 Correx Tree Protection Warning Sign fixed to fencing panel

Appendix B - Relevant Contact Details

Contact Name	Organisation/ Details	Contact Number	Contact E-mail
Laura Huby	Arcus Consultancy Services Ltd	01904 715470	laurah@arcusconsulting.co.uk
Tree and Landscape Officer	Wokingham Borough Council	0118 9746000	planning@wokingham.gov.uk

Required Site Visits

Required Site Visits	
<i>Name of Site Inspector/ Arboricultural Consultant</i>	
Supervision Stages	Comments/ Required Actions
Site visit 1: Inspect the tree protective fencing prior to any development works. Confirm tree protection completed to the standard specified in this method statement.	Signed and Dated
Site visits - Monthly: Supervise any other sensitive operations, if required, as they arise in relation to trees.	Signed and Dated
Additional Comments/ Required Actions:	

Additional Comments/ Required Actions:

Signed and Dated

Appendix D – Tree Data

	Tree Species			Measurements				Crown (m)				Tree Condition							Value		Management	
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
G1	Lawson Cypress	<i>Chamaecyparis lawsoniana</i>	Early-mature	11	4	280, 280, 190, 130	No	2.5	See Plan				No visual defects, Soil compaction	Multiple stemmed at 2.5m, Vertical, Old pruning wounds, Stubs, Tight union	Normal, Minor deadwood	Linear group of 4 trees, previously managed at 2.5m.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T2	Lawson Cypress	<i>Chamaecyparis lawsoniana</i>	Semi-mature	4	2	130, 120	No	1	2	1.5	2	2	No visual defects	Twin stemmed at base, Vertical, Old pruning wounds, Stubs, Tight union	Old pruning wounds, Minor deadwood		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T3	Ash	<i>Fraxinus excelsior</i>	Semi-mature	6	1	150	No	1.5	1.5	2.5	3	3	No visual defects	Single stemmed, Vertical, Old pruning wounds, Stubs	Slightly unbalanced, Minor deadwood		Good	Fair	>40 yrs	Low	C	Removal required to facilitate development
T4	Oak	<i>Quercus robur</i>	Mature	16	1	1010	No	4	7	5.5	5.5	6.5	No visual defects, Soil compaction	Single stemmed, Vertical, Stubs, Old pruning wounds, Epicormic growths, Minor cavities, Ivy covered	Old pruning wounds, Moderate deadwood	Dead ivy on stem from 1m up to 6m. Several minor cavities in large old pruning wounds.	Fair	Fair	>40 yrs	High	B	Removal required to facilitate development
T5	Cherry	<i>Prunus sp.</i>	Semi-mature	4.5	1	150	Yes	2	4	3.5	3	3	No visual defects, Limited access around base	Multiple stemmed at 2m, Vertical, Old pruning wounds, Tight union	Normal	Limited visibility of base & stem due to boundary fence.	Good	Fair	>40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)				Tree Condition								Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
G6	Thuja, Yew	<i>Thuja sp. Taxus sp.</i>	Semi-mature	2	10+	80 avg	No	0	See Plan				No visual defects, Limited access around base	Single & multiple stemmed at base, Vertical, Stubs, Tight union	Old pruning wounds	Managed boundary hedge.	Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T7	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	5	1	160	Yes	2	2	2	2	2	No visual defects	Single stemmed, Vertical, Old pruning wounds, Stubs, Ivy covered	Small / sparse, Old pruning wounds, Minor deadwood	Situated in inaccessible garden area. Dense ivy prevented detailed inspection.	Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T8	Yew	<i>Taxus baccata</i>	Semi-mature	4	1	130	Yes	1.5	2	2	2	2	No visual defects	Single stemmed, Vertical, Tight union	Normal, Minor deadwood	Situated in inaccessible garden area.	Fair	Fair	>40 yrs	Low	C	Removal required to facilitate development
T9	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	12	1	440	No	2	5	5	4.5	5	No visual defects	Single stemmed, Vertical, Old pruning wounds, Stubs, Bark damage	Stubs, Minor deadwood		Fair	Good	>40 yrs	Moderate	B	Removal required to facilitate development
T10	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	12	1	400	No	2	5	4.5	3.5	5	No visual defects, Exposed roots	Multiple stemmed at 2m, Vertical, Old pruning wounds, Stubs, Epicormic growths, Minor cavities	Stubs, Moderate deadwood		Fair	Fair	>40 yrs	Moderate	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition								Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works	
T11	Sycamore	Acer pseudoplatanus	Early-mature	12	1	330	No	2	3.5	3	4	3	No visual defects	Twin stemmed at 2m, Vertical, Old pruning wounds, Stubs, Tight union	Stubs, Minor deadwood		Good	Fair	>40 yrs	Moderate	C	Removal required to facilitate development	
T12	Sycamore	Acer pseudoplatanus	Early-mature	12	1	510	No	1.5	6	6	6	5	No visual defects	Multiple stemmed at 2m, Vertical, Old pruning wounds, Tight union, Partially included bark	Minor deadwood		Good	Fair	>40 yrs	Moderate	B	Removal required to facilitate development	
T13	Norway Maple	Acer platanoides	Early-mature	10	1	340	No	2	2.5	3	3.5	3	No visual defects	Single stemmed, Vertical, Old pruning wounds, Stubs, Tight union	Stubs, Minor dieback, Minor deadwood, Slightly unbalanced		Fair	Fair	>40 yrs	Moderate	C	Removal required to facilitate development	
T14	Silver Maple	Acer saccharinum	Early-mature	10	1	460	No	1.5	3	2	4.5	3	Exposed roots, Root damage / loss	Multiple stemmed at 2m, Vertical, Old pruning wounds, Stubs, Epicormic growths, Bark damage, Minor decay	Small / sparse, Old pruning wounds, Stubs, Moderate dieback, Major deadwood	Previously topped at 5m, and recently at 8m. Significant dieback from old pruning wounds. As a minimum remove significant deadwood, but very limited long term value.	Poor	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development	
T15	Norway Maple	Acer platanoides	Early-mature	11	1	430	No	2	4	4	4.5	3	No visual defects, Exposed roots	Multiple stemmed at 2m, Vertical, Tight union, Partially included bark, Old pruning wounds, Stubs	Old pruning wounds, Stubs, Moderate deadwood	Previously topped at 8m with some minor dieback of old pruning wounds.	Fair	Fair	>40 yrs	Moderate	C	Removal required to facilitate development	

	Tree Species			Measurements				Crown (m)				Tree Condition							Value		Management	
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T16	Norway Maple	<i>Acer platanoides</i>	Early-mature	11	1	310	No	2	4.5	2.5	4.5	4.5	Exposed roots, Root damage / loss	Multiple stemmed at 2m, Vertical, Old pruning wounds, Stubs, Tight union	Old pruning wounds, Stubs, Minor deadwood	Previously topped at 8m with some minor dieback of old pruning wounds.	Fair	Fair	>40 yrs	Moderate	C	Removal required to facilitate development
T17	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	9.5	1	250	No	1.5	3.5	3	3	3	No visual defects	Twin stemmed at 2.5m, Slight lean, Old pruning wounds	Stubs, Minor deadwood, Snapped / hanging branches		Fair	Good	>40 yrs	Low	C	No works required
T18	Norway Maple	<i>Acer platanoides</i>	Semi-mature	13	1	220	No	2	2.5	3.5	3	3	No visual defects	Single stemmed, Vertical, Old pruning wounds, Stubs, Tight union	Normal, Minor deadwood	Smaller Rowan at base.	Good	Fair	>40 yrs	Moderate	C	Removal required to facilitate development
T19	Rowan	<i>Sorbus aucuparia</i>	Semi-mature	8	3	110, 110, 100	No	2	1.5	2.5	1.5	1	No visual defects	Multiple stemmed at base, Vertical, Old pruning wounds, Tight union, Partially included bark	Normal		Good	Fair	>40 yrs	Low	C	Removal required to facilitate development
T20	Lawson Cypress	<i>Chamaecyparis lawsoniana</i>	Semi-mature	11	1	210	No	0	1.5	1.5	2.5	2	No visual defects	Single stemmed, Vertical, Ivy covered	Old pruning wounds, Stubs, Minor deadwood	Growing against boundary fence.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required

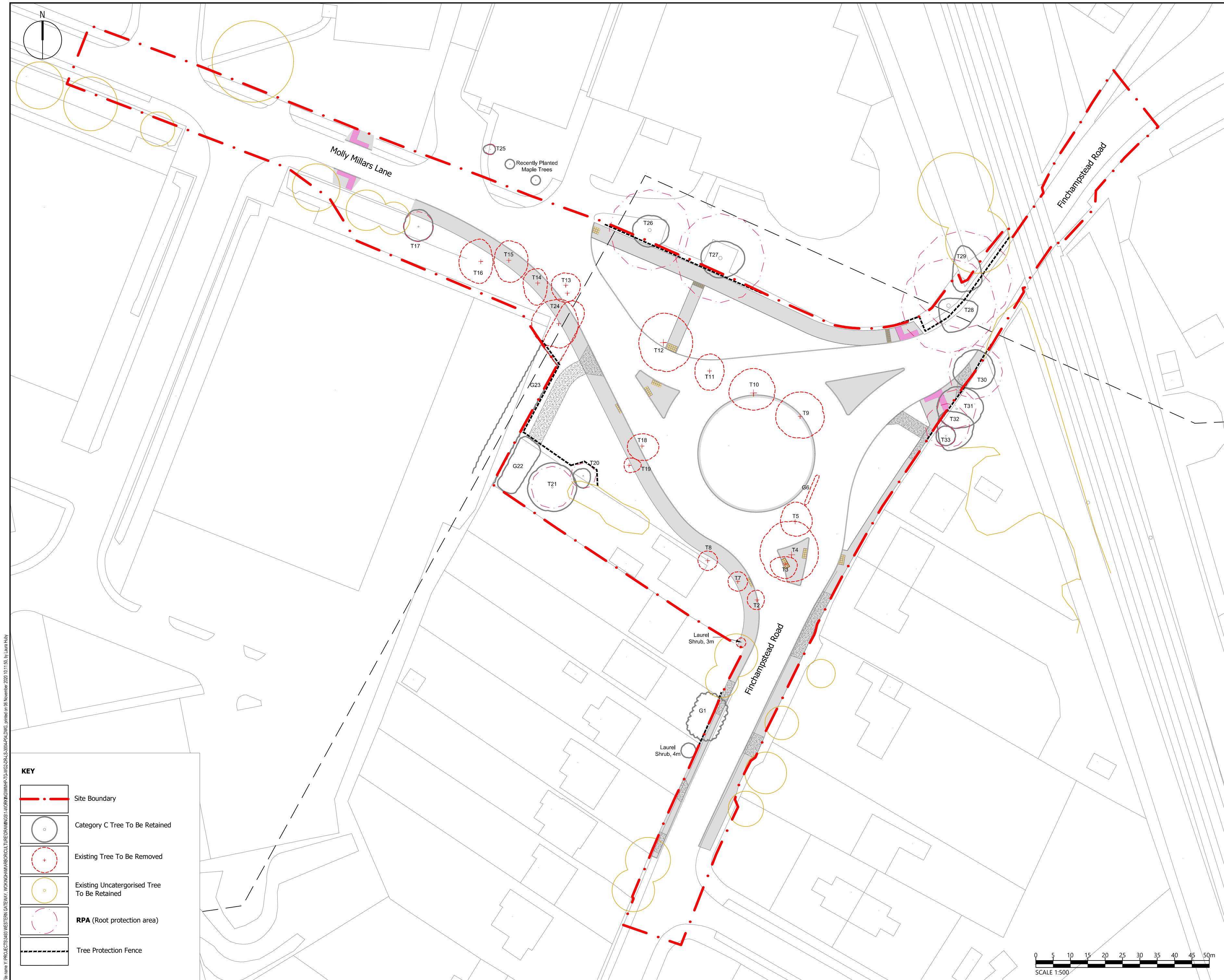
	Tree Species			Measurements				Crown (m)					Tree Condition								Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works	
T21	Apple	Malus domestica	Early-mature	7.5	1	350	No	2	5	5	5	5	No visual defects	Multiple stemmed at 2m, Old pruning wounds, Stubs, Epicormic growths, Tight union, Minor cavities	Old pruning wounds, Stubs	Heavily pruned in the past.	Fair	Fair	>40 yrs	Low	C	No works required	
G22	Cherry	Prunus sp.	Semi-mature	6	10+	100 avg	Yes	1.5	See Plan				No visual defects, Limited access around base	Single & multiple stemmed at base, Vertical, Old pruning wounds, Tight union	Normal, Minor deadwood	Dense group of young to semi-mature trees, in inaccessible garden area.	Fair	Fair	>40 yrs	Low	C	No works required	
G23	Cherry Laurel	Prunus laurocerasus	Semi-mature	4	10+	100 avg	No	0	See Plan				No visual defects	Single & multiple stemmed at base, Old pruning wounds, Stubs, Tight union	Old pruning wounds, Minor deadwood	Managed boundary hedge, occasional Lawson Cypress.	Fair	Good	>40 yrs	Moderate	C	Remove small northern section to facilitate development	
T24	Lawson Cypress	Chamaecyparis lawsoniana	Early-mature	7	10+	140 avg	No	0.5	5	4	5	5.5	No visual defects	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs, Tight union, Partially included bark	Old pruning wounds, Minor deadwood	Several pallets attached to stem.	Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development	
T25	Plane	Platanus x hispanica	Young	5.5	1	90	No	1.5	1	1	1	1.5	No visual defects	Single stemmed, Vertical, Bark damage	Normal	Stake and tree tie beginning to damage stem.	Good	Good	>40 yrs	Low	C	No works required	

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T26	Ash	Fraxinus excelsior	Mature	8	1	670	No	2	3	4	3.5	3.5	Soil compaction, Exposed roots, Root damage / loss	Single stemmed, Vertical, Old pruning wounds, Stubs, Epicormic growths, Minor cavities	Small / sparse, Old pruning wounds	Very heavily pruned in the past. Limited long term value.	Fair	Good	20 to 40 yrs	Moderate	C	No works required
T27	Oak	Quercus rubra	Mature	8	1	740	No	2.5	3.5	5	4	4	Soil compaction	Single stemmed, Vertical, Old pruning wounds, Stubs, Epicormic growths, Minor cavities	Small / sparse, Old pruning wounds, Minor deadwood	Very heavily pruned recently. Limited long term value.	Fair	Good	20 to 40 yrs	Moderate	C	No works required
T28	Oak	Quercus robur	Mature	11	1	790	No	2.5	1.5	6	5.5	2	No visual defects, Soil compaction	Single stemmed, Vertical, Old pruning wounds, Stubs, Epicormic growths, Ivy covered	Small / sparse, Unbalanced, Stubs, Minor deadwood	Dense ivy on stem prevented detailed inspection. Heavily pruned in the past, leaving several large stubs with the potential to die back.	Fair	Fair	>40 yrs	Moderate	C	No works required
T29	Oak	Quercus robur	Mature	11	1	820	No	4	7	4	2.5	2	No visual defects, Soil compaction	Single stemmed, Vertical, Old pruning wounds, Stubs, Epicormic growths, Bark damage, Ivy covered	Old pruning wounds, Small / sparse, Unbalanced, Stubs	Dense ivy on stem prevented detailed inspection. Heavily pruned in the past, leaving several large stubs with the significatn bark damage and the potential to die back.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition								Value		Management
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T30	Ash	<i>Fraxinus excelsior</i>	Early-mature	14	1	450	Yes	3	4.5	4	3.5	4.5	No visual defects, Soil compaction	Single stemmed, Vertical, Ivy covered	Old pruning wounds, Minor deadwood, Ivy in crown	Dense ivy prevented detailed inspection of stem and crown.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T31	Willow	<i>Salix fragilis</i>	Early-mature	14	1	320	Yes	4	4.5	5.5	4	4	No visual defects, Soil compaction	Single stemmed, Vertical, Old pruning wounds, Stubs, Epicormic growths	Old pruning wounds, Stubs, Minor deadwood, Unbalanced	Growing around street light.	Fair	Fair	>40 yrs	Moderate	C	No works required
T32	Ash	<i>Fraxinus excelsior</i>	Early-mature	13	1	370	Yes	5	3	5.5	5	2	Soil compaction, Exposed roots, Damage to buttress roots	Single stemmed, Slight lean, Old pruning wounds, Stubs, Tight union, Decay fungi, Moderate cavities, Moderate decay	Unbalanced, Minor deadwood, Small / sparse	Cavity at 2m on main stem from removal of large limb, with decayed fungal fruiting bodies. Formal health & safety assessment advised but likely to have limited long term value.	Fair	Poor	10 to 20 yrs	Low	C	No works required, Formal health & safety assessment advised
T33	Lawson Cypress	<i>Chamaecyparis lawsoniana</i>	Semi-mature	10	1	170	Yes	1.5	2	2	2	2	No visual defects, Soil compaction	Single stemmed, Vertical, Old pruning wounds	Normal, Minor deadwood		Good	Fair	>40 yrs	Moderate	C	No works required

Appendix E – Tree Protection Plan

File name: Y:\PROJECTS\3483 WESTERN GATEWAY, WOKINGHAM\BOROUGH\DRAWINGS\1\WOKINGHAM\WHP-TG-WG2-DR-LS-3004-P04.DWG, printed on 06 November 2020 10:11:50, by Laura Haley



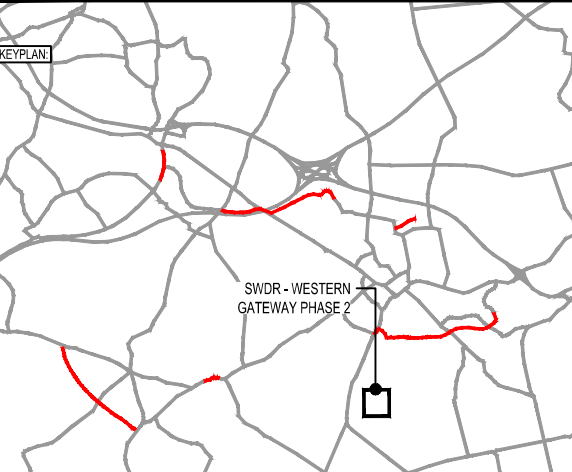
KEY

- Site Boundary
- Category C Tree To Be Retained
- Existing Tree To Be Removed
- Existing Uncategorised Tree To Be Retained
- RPA (Root protection area)
- Tree Protection Fence

DO NOT SCALE

NOTES:

- ALL PROPOSED LEVELS REFER TO ENGINEERS DRAWING.
- ALL TREE REMOVAL TO BE IN ACCORDANCE WITH TREE IMPACTS PLAN.
- FOR PAVEMENT DESIGN INFORMATION REFER TO DRAWING WMHP-TG-WG2-DR-HI-0701
- FOR KERBS, FOOTWAYS AND HARDSTANDING INFORMATION REFER TO DRAWING WMHP-TG-WG2-DR-HI-1101



P04	06/11/20	JC	REVISED RED LINE BOUNDARY AND UPDATED KERB AND HIGHWAY LAYOUT	LH	LH
P03	21/08/20	WM	UPDATED WITH KERB AND HIGHWAY LAYOUT	LH	LH
P02	19/08/20	WM	REVISED RED LINE BOUNDARY	LH	LH
P01	18/02/20	WM	FIRST ISSUE	LH	LH
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: **FOR REVIEW & COMMENT** **S3**

DESIGNER:  **Tony Gee** Consulting Civil, Structural and Geotechnical Engineers

TONY GEE AND PARTNERS LLP
Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600
www.tonygee.com

CONTRACTOR: **Balfour Beatty**

CLIENT:  **WOKINGHAM BOROUGH COUNCIL**

Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT: **WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SWDR WESTERN GATEWAY PHASE 2**

TITLE: **ROUNDBOUT ENHANCEMENT
TREE PROTECTION PLAN**

SCALE @ A2: 1:500	CHECKED: LH	APPROVED: LH
PROJECT NO: C118048	DESIGNED: WM	DRAWN: WM
		DATE: November 20

DRAWING NO: **WMHP-TG-WG2-DR-LS-3004** REV: **P04**

Appendix K: Green Travel Plan Survey

Appendix K: Green Travel Plan Survey

Staff Travel Questionnaire

Employee Travel Survey

Question 1: How do you usually travel to work?

☐	On foot	☐	Taxi
☐	Bicycle	☐	Van or Lorry
☐	Bus, minibus or coach	☐	Car
☐	Train	☐	Car share
☐	Motorcycle / Scooter	☐	Other (<i>specify</i>):

Question 2: What is your main reason for choosing that mode

☐	Cheapest	☐	Habit
☐	Quickest	☐	Personal safety
☐	Environmentally friendly	☐	Other commitments
☐	Lack of alternative	☐	Reliability
☐	Less stressful	☐	Other (<i>specify</i>):

Question 3: Which modes of travel do you occasionally use to travel to/from work?

☐	On foot	☐	Taxi
☐	Bicycle	☐	Van or Lorry
☐	Bus, minibus or coach	☐	Car
☐	Train or London Underground	☐	Car share
☐	Motorcycle / Scooter	☐	Other (<i>specify</i>):

Question 4: Which of the following modes of travel would you consider using for your journey to/from work, if they were available?

☐	Walking	☐	Public Transport (bus, train, underground)
☐	Bicycle	☐	Car-sharing
☐	Car	☐	Other (<i>specify</i>):

Question 5: How far do you travel to work?

☐	Up to 1 mile	☐	10 – 15miles
☐	1 - 5 miles	☐	15 – 20 miles
☐	5 - 10 miles	☐	Over 20 miles

Question 6: Would you be interested in any of the following initiatives to promote walking or cycling? Please tick all that apply?

☐	Bicycle maintenance classes offered	☐	Information on fold up bikes (for use by people commuting part of the way on public transport/ by car) available through the Cycle to Work scheme
☐	Cycle training / on-road skills	☐	Other (<i>specify</i>):
☐	Incentive Scheme for green commuters	☐	

Appendix L: Bulk Delivery Schedule and Traffic Management Plans

SWDR - SRWG1 - Bulk Delivery Schedule (vide CL31 Programme)																																																
Delivery Item	Expected Deliveries																																															
	Mean No. per day	Mean No. per hour	Peak No. per day	Peak No. per hour	Start Date	End Date	2024												2025												2026																	
							Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
Enabling Works (Haul rds and Compound Set Up)					15/05/2025	25/06/2025																																										
Tree Removal	4	0.47	4	0.47																																												
Phase 1 (Offline Works)					26/06/2025	23/10/2025																																										
Earthworks & Excavation	5	0.59	5	0.59																																												
Capping, Subbase and Drainage	8	0.94	8	0.94																																												
Road Pavements	10	1.18	10	1.18																																												
Phase 2 (MML & FR N'bound Tie-ins)					24/10/2025	01/12/2025																																										
Earthworks & Excavation	5	0.59	5	0.59																																												
Capping, Subbase and Drainage	6	0.71	6	0.71																																												
Road Pavements	8	0.94	8	0.94																																												
Phase 3 (FR Northside Tie-in)					02/12/2025	13/04/2026																																										
Earthworks & Excavation	5	0.59	5	0.59																																												
Capping, Subbase and Drainage	4	0.47	4	0.47																																												
Road Pavements	8	0.94	8	0.94																																												
Phase 4 (FR S'bound Tie-in)					14/04/2026	18/05/2026																																										
Earthworks & Excavation	1	0.12	1	0.12																																												
Capping, Subbase and Drainage	1	0.12	1	0.12																																												
Road Pavements	3	0.35	3	0.35																																												
Phase 5 (Finishing Works)					19/05/2026	15/06/2026																																										
Road Pavements	10	1.18	10	1.18																																												
Miscellaneous Deliveries	2	0.24	2	0.24																																												
Mean No. Deliveries per day per month																																																
Mean No. Deliveries per hour per month																																																

Delivery Item	Expected Deliveries																																															
	Mean No. per day	Mean No. per hour	Peak No. per day	Peak No. per hour	Start Date	End Date	2024												2025																													
							Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
Site Office Staff	60	6	60	6	15/05/2025	15/06/2026																																										
Construction Site Staff	10	1	25	2.5	01.03.2025	31.03.2025																																										
Visitors	6	0.6	10	1	04.04.2025	15.05.2025																																										
Mean No. Construction Staff / Vehicles per day per month																																																
Combined Mean No. Construction Staff / Vehicles / Deliveries per hour per month																																																

Explanatory Notes:
Mean No. of deliveries are calculated based on 20 no. working days per month and 10 no. working hours per day.
The UK average no. of working days per month is 21.7. Including half day Saturdays this becomes 23.7.
Using this figure would further reduce the mean number of deliveries per day.
Bank Holidays are also not considered.
This schedule of deliveries have been calculated as follows:
The duration of each activity / Delivery Item has been taken from the CL31 works programme and simplified to 4 working weeks per month, if works are scheduled to occur on any day within the working week then for the purposes of this schedule they are considered to occur for the whole week. This accounts for minor changes in programme and potential weather delays.
The required volumes of materials are also considered.
e.g. the the required volume of fill is approximately 28,000m3. The duration of filling works from the programme considered is 13 weeks (65 working days). This gives a delivery rate of 431m3 per day (28,000 divided by 65). A standard 20t tipper lorry carries on average 8.5m3 per load (accounting for the varying densities of fill classes). This then equates to 50.7no. deliveries per day (65 divided by 8.5). This has been rounded to 50no. to account for peak deliveries accommodating the 0.7. The peak delivery rate of 75no. is based on the estimated maximum volume that can be handled and emplaced within the confines of the works given the requirements of the specification.
This calculation has been repeated for other works including concrete works (6m3 per concrete wagon) and surfacing works(10m3 per asphalt wagon) also considering the maximum volumes that can be safely handled and placed.
The Mean No. of Deliveries per day & hour per month has been calculated as follows:
The mean number of deliveries per day for each Deliver Item is multiplied by the number of days in that month where deliveries are expected (1 month = 20 days, 3 weeks = 15 days, etc.) to give the total number of deliveries of each Delivery Item per month. These are then added together to give the total number of deliveries per month. this total is then divided by 20 to give the mean number of deliveries per day and then divided by 10 to give the mean number of deliveries per hour.
e.g. October 2020 - Structural Concrete has a mean of 6no. deliveries per day for the whole month (20 days), this gives 120no. deliveries for the month. Offline Filling Works has 9no. deliveries per day for 2 weeks (10 days) giving 90no. deliveries for the month. Offline Sub-base has 10no. deliveries per day for 1 week (5 days) giving 50no. deliveries for the month. Miscellaneous deliveries has 2no. deliveries per day for the whole month (20 days) giving 40no. deliveries for the month. Adding these all together (120 + 90 + 50 + 40) equals 300no. deliveries for the month (20m days). Dividing this figure by twenty gives a mean of 15no deliveries per day. Dividing again by ten gives a mean of 1.5no. deliveries per hour.
These delivery rates are based on the assumptions as described above and best estimates based on Balfour Beatty's experience. These rates are indicative only and do not necessarily represent actual maxima and minima of deliveries per day throughout the works. There may be working days where there are no deliveries and others where the projected maximum is exceeded. Only bulk deliveries and significant deliveries have been considered. Balfour Beatty accepts no liability should these delivery rates not be met.
This schedule is likely to be subject to change without notice dependant on site access availability, subcontractor input, site progress and programme development.
The Mean No. of Construction Staff per day & hour per month has been calculated as follows:
The mean number of construction staff per day for each week is multiplied by the number of days in that month where works are expected (1 month = 20 days, 3 weeks = 15 days, etc.) to give the total number of construction staff of each per month. These are then added together to give the total number of construction staff per month. this total is then divided by 20 to give the mean number of deliveries per day and then divided by 10 to give the mean number of construction staff per hour. An allowance has been made for 25% reduction of construction staff vehicles coming into work in shared vehicles / mini buses or public transport
e.g. for Sept 2024 - the construction staff onsite is anticipated to be 5no Office Staff, 5no site workers and 2no visitors per day. This gives 240 man days per month. Therefore dividing 240 / 20no days per month gives a mean of 12no man days per day. Applying the 25% reduction for shared vehicles / public Transport gives 9 constrctuon staff vehicles mean per day
Dividing again by ten gives a mean of 0.9no. Construction Staff vehicles per hour.



GOV.UK

Plan and manage roadworks

- Home
- Applications and works
- Inspections
- FPN
- Registered reinstatements
- Comments
- Section 81
- Section 74
- Section 58
- Map

BETA This is a new service - your [feedback \(/feedback\)](#) will help us to improve it.

[jeff.williams@balfourbeatty.com \(/user/amVmZi53aWxsaWFtc0BiYWxmb3VyYmVhdHR5LmNvbQ==\)\(Sign out\) \(/logout\)](mailto:jeff.williams@balfourbeatty.com (/user/amVmZi53aWxsaWFtc0BiYWxmb3VyYmVhdHR5LmNvbQ==)(Sign out) (/logout))

WOKINGHAM BOROUGH COUNCIL [Change Organisation \(/contracts\)](#)

Forward plan details Reference: JX01499435540-FP

Status: Raised

Works reference:

[JX01499435540 \(/works/JX01499435540?backToWorkRecord=true\)](#)

Works location:

FINCHAMPSTEAD ROAD, WOKINGHAM ([View on map](#)) ([/works/JX01499435540/forward-plans/JX01499435540-FP/location-map](#))

Works location

USRN

44700558

Road/street

FINCHAMPSTEAD ROAD

Area

Not provided

Town

WOKINGHAM

Primary notice authority

Submitting application to

[WOKINGHAM BOROUGH COUNCIL \(/organisations/0360\)](#)

Works area

Works area draw

Line

Designations

Designations impacted by works

Traffic Sensitive

- DESIGNATED AS SENSITIVE STREET 07:00 TO 19:00 WORKDAY (Working days only from 07:00 to 19:00)

Special Engineering Difficulty (SED)

- BROOK BRIDGE (OVER)
BROOK BRIDGE (OVER) (Everyday)

Structures (not designated Special Engineering Difficulty)

- BRIDGE IS 59M W OF ROUNDABOUT AT LANDEN COURT AND 131M NE OF TANGLEY DRIVE
BRIDGE (RAIL OVER ROAD) REFERENCED BY NETWORK RAIL AS - ELR GTW2 NO 19-1375 (Everyday)
- NORTH OF BRIDGE TO SOUTH OF BRIDGE FOR 10 METERS ON FINCHAMPSTEAD ROAD.
BRIDGE (RAIL OVER ROAD) REFERENCED BY NETWORK RAIL AS - ELR: RDG1 NO: 4/34 (Everyday)
- NORTH OF BRIDGE TO SOUTH OF BRIDGE FOR 10 METERS ON FINCHAMPSTEAD ROAD.
BRIDGE (RAIL OVER ROAD) REFERENCED BY NETWORK RAIL AS ELR RDG1 NO 4-34 (Everyday)
- BRIDGE IS 59M W OF ROUNDABOUT AT LANDEN COURT & 131M NE OF TANGLEY DRIVE
BRIDGE (RAIL OVER ROAD) REFERENCED BY NETWORK RAIL AS - ELR: GTW2 NO: 19/1375 (Everyday)

Pedestrian Crossings, Traffic Signals And Traffic Sensors

- SOUTH OF MOLLY MILLARS LANE JUNCTION
FOOT TRAFFIC (Everyday)

Transport Authority Critical Apparatus

- NORTH OF RUSSLEY GREEN
ATC LOCATION - NO 1 SITE 2 (Everyday)
- OPPOSITE CAREY ROAD BEFORE THE RAILWAY BRIDGE
ATC LOCATION NO 28 SITE 108 (Everyday)

Forward plan details

Location description

Finchampstead Road between Tangley Road and the BP Garage

Works type

Forward plan

Road type

Carriageway type 2 (2.5 to 10 MSA)

Proposed start date

01/09/2024

Proposed end date

31/12/2026

Primary contact

WOKINGHAM BOROUGH COUNCIL (</organisations/0360>)

Primary contact number

0118 974 6000

Workstream

SCAPE - SWDR

Works reference number

JX01499435540

Project reference number

Not provided

Traffic management type

Not provided

Description of works

Junction improvement works at 1. Finchampstead Road /Molly Millars Lane 2. Finchampstead Road
/Tesco roundabout

Additional details

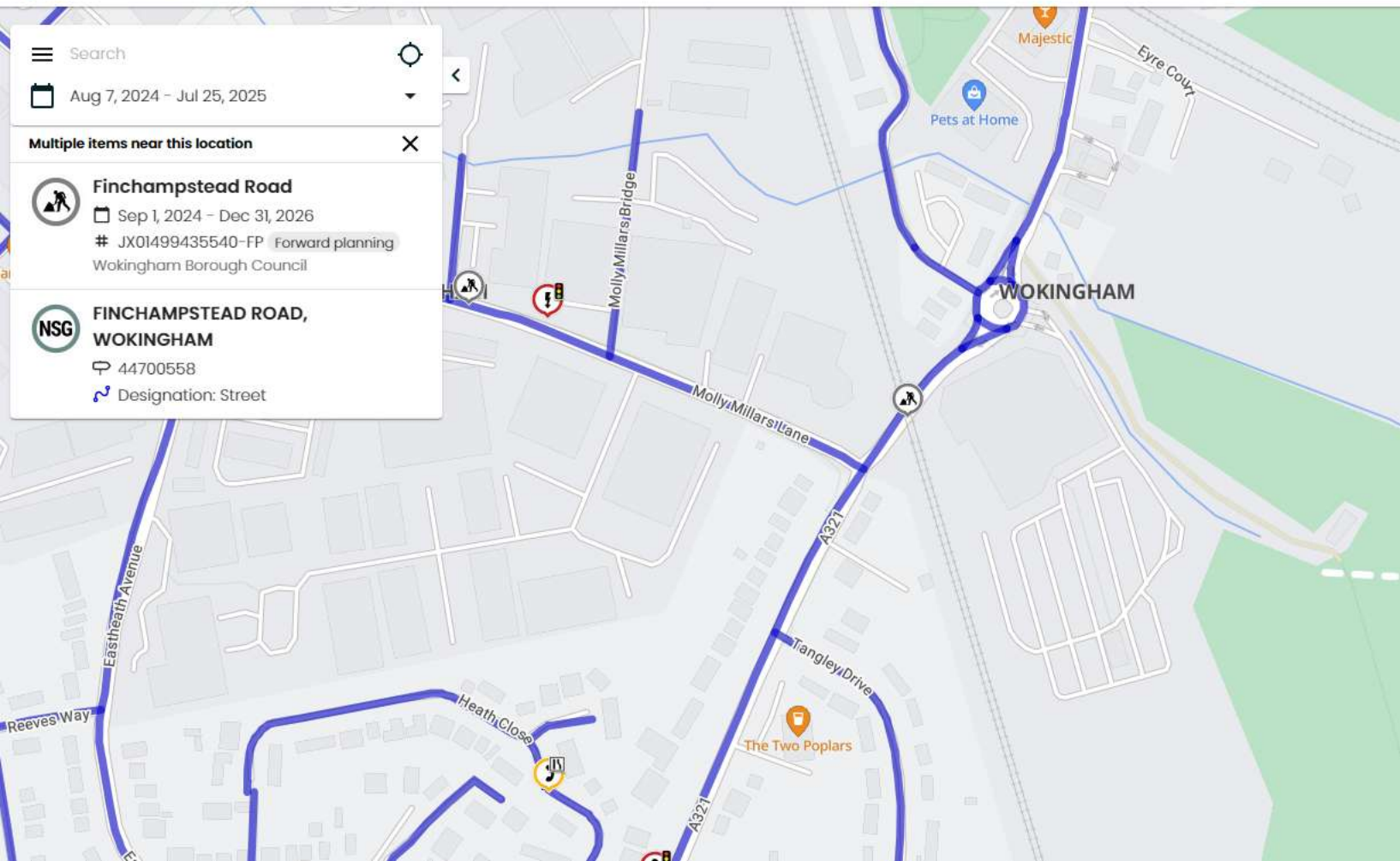
Not provided

You can leave a comment on the [works record](/works/JX01499435540#comment_header) (/works/JX01499435540#comment_header).

[Progress forward plan](/works/JX01499435540/forward-plans/JX01499435540-FP/progress-forward-plan) (</works/JX01499435540/forward-plans/JX01499435540-FP/progress-forward-plan>)

[Change forward plan details](/works/JX01499435540/forward-plans/JX01499435540-FP/change) (</works/JX01499435540/forward-plans/JX01499435540-FP/change>)

[Cancel forward plan](/works/JX01499435540/forward-plans/JX01499435540-FP/cancel) (</works/JX01499435540/forward-plans/JX01499435540-FP/cancel>).



Search

Aug 7, 2024 - Jul 25, 2025

Multiple items near this location



Finchampstead Road

Sep 1, 2024 - Dec 31, 2026

JX01499435540-FP Forward planning

Wokingham Borough Council



FINCHAMPSTEAD ROAD, WOKINGHAM

44700558

Designation: Street



- Home
- Applications and works
- Inspections
- FPN
- Registered reinstatements
- Comments
- Section 81
- Section 74
- Section 58
- Map

BETA This is a new service - your [feedback \(/feedback\)](#) will help us to improve it.

[jeff.williams@balfourbeatty.com \(/user/amVmZi53aWxsaWFtc0BiYWxmb3VyYmVhdHR5LmNvbQ==\)\(Sign out\) \(/logout\)](mailto:jeff.williams@balfourbeatty.com (/user/amVmZi53aWxsaWFtc0BiYWxmb3VyYmVhdHR5LmNvbQ==)(Sign out) (/logout))

WOKINGHAM BOROUGH COUNCIL [Change Organisation \(/contracts\)](#)

Forward plan details Reference: JX01434186869-FP

Status: Raised

Works reference:

[JX01434186869 \(/works/JX01434186869?backToWorkRecord=true\)](#)

Works location:

MOLLY MILLARS LANE, WOKINGHAM ([View on map \(/works/JX01434186869/forward-plans/JX01434186869-FP/location-map\)](#))

Works location

USRN

44701065

Road/street

MOLLY MILLARS LANE

Area

Not provided

Town

WOKINGHAM

Primary notice authority

Submitting application to

[WOKINGHAM BOROUGH COUNCIL \(/organisations/0360\)](#)

Works area

Works area draw
Line

Designations

Designations impacted by works
Traffic Sensitive

- AMENDED CURRENT RESTRICTION FOR PEAK TIMES ONLY DUE TO TRAFFIC FLOW DATA
(Working days only from 07:00 to 12:00)
- AMENDED CURRENT RESTRICTION FOR PEAK TIMES ONLY DUE TO TRAFFIC FLOW DATA
(Working days only from 12:00 to 18:00)

Pedestrian Crossings, Traffic Signals And Traffic Sensors

- BY BARKHAM ROAD JUNCTION
(Everyday)
- BY FINCHAMPSTEAD ROAD JUNCTION
(Everyday)

Forward plan details

Location description
Molly Millars Lane between Finchampstead Road and Barkham Road

Works type
Forward plan

Road type
Carriageway type 2 (2.5 to 10 MSA)

Proposed start date
01/09/2024

Proposed end date
31/12/2026

Primary contact
WOKINGHAM BOROUGH COUNCIL (/organisations/0360)

Primary contact number
0118 974 6000

Workstream
SCAPE - SWDR

Works reference number
JX01434186869

Project reference number
WG2

Traffic management type
Not provided

Description of works
Highway improvement works at the junction of Molly Millars Lane and Finchampstead Road.

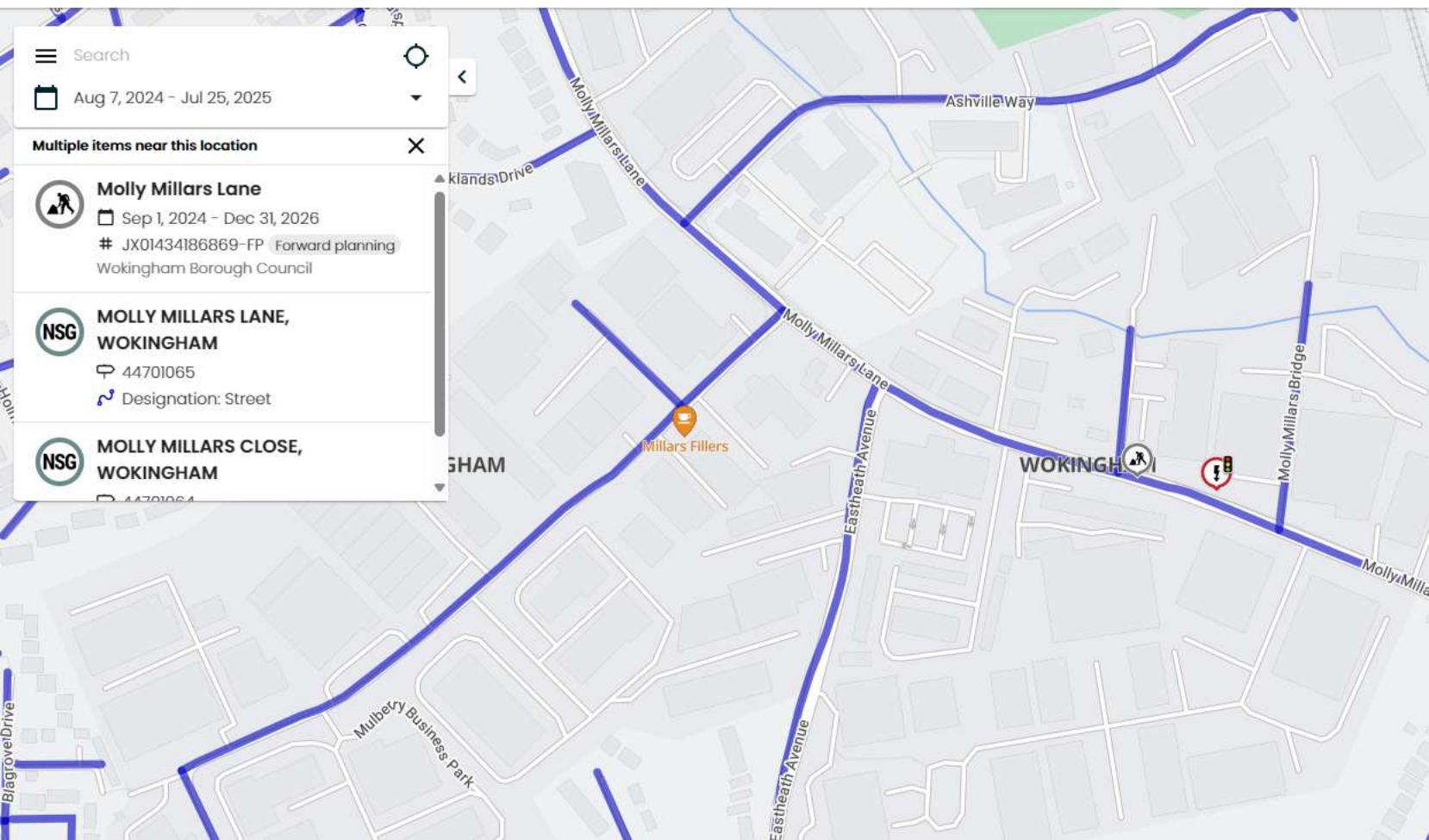
Additional details
Not provided

You can leave a comment on the [works record \(/works/JX01434186869#comment_header\)](/works/JX01434186869#comment_header)

[Progress forward plan \(/works/JX01434186869/forward-plans/JX01434186869-FP/progress-forward-plan\)](/works/JX01434186869/forward-plans/JX01434186869-FP/progress-forward-plan)

[Change forward plan details \(/works/JX01434186869/forward-plans/JX01434186869-FP/change\)](/works/JX01434186869/forward-plans/JX01434186869-FP/change)

[Cancel forward plan \(/works/JX01434186869/forward-plans/JX01434186869-FP/cancel\)](/works/JX01434186869/forward-plans/JX01434186869-FP/cancel)



 Search

 Aug 7, 2024 - Jul 25, 2025

Multiple items near this location 

**Molly Millars Lane**
 Sep 1, 2024 - Dec 31, 2026
JX01434186869-FP Forward planning
Wokingham Borough Council

**MOLLY MILLARS LANE, WOKINGHAM**
 44701065
 Designation: Street

**MOLLY MILLARS CLOSE, WOKINGHAM**
 44701064