



LODDON GARDEN VILLAGE

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

UNIVERSITY OF READING

22 AUGUST 2025





Abley Letchford
3 Tealgate
Charnham Park
Hungerford
RG17 0YT

T: 01488 684390
E: contact@ableyletchford.co.uk
W: www.ableyletchford.co.uk

Quality Management:

Prepared by:	P. Roose
Authorised by:	B. Taylor
Date:	22 August 2025
Document Reference:	A392-R061

**COPYRIGHT © ABLEY LETCHFORD PARTNERSHIP LIMITED t/a
ABLEY LETCHFORD**

The material presented in this report is confidential. This report has been prepared for the exclusive use of University of Reading within the terms of the contract and shall not be distributed or made available to any other company or person without the knowledge and written consent of Abley Letchford.

Any such party relies on the report at their own risk.



Contents

1.0 Introduction..... 1

2.0 Construction Measures 5

3.0 Environmental Controls..... 15

4.0 Construction Management 28

Figures

- Figure 2.1: Site Location
- Figure 2.2: Natural History Museum Access Road
- Figure 2.3: Construction Routing
- Figure 2.4: Indicative Construction Compound Locations
- Figure 2.5: Public Rights of Way
- Figure 3.1: Wokingham Level 2 SFRA

Appendices

- Appendix A - Proposed Development
- Appendix B - Construction Routing Plan
- Appendix C - Construction Compound Locations
- Appendix D - PRow Map
- Appendix E - Flood Water Modelling Extract
- Appendix F - Tree Plans



1.0 Introduction

Context

- 1.1. This Construction Environmental Management Plan (CEMP) has been prepared by Abley Letchford, on behalf of the University of Reading, in support of a planning application for development of land between Shinfield and Arborfield in Wokingham. The site forms part of the Loddon Valley Garden Village site which is proposed for allocation as a new Garden Community via Policy SS13 within Wokingham Borough Council's Local Plan Update: Proposed Submission Plan (Regulation 19) of 2024.
- 1.2. The location of the site is depicted on **Figure 1.1** below, while the Illustrative Masterplan is presented within **Appendix A**.

Figure1.1: Site Location



- 1.3. The development sought via the University of Reading planning application is for the phased development of a new community at Loddon Garden Village, comprising, in outline:
 - *up to 2,800 residential dwellings to include up to 100 custom and self-build plots;*
 - *2 primary schools (up to 3 forms of entry) to include early years provision and 1 secondary school (up to 12 forms of entry);*



- *one District Centre, to incorporate up to 11,000m² of Class E (Commercial, Business and Service, to include a food store of around 2,500m²), and Class F (Local Community and Learning);*
- *one Local Centre; to incorporate up to 2,400m² of Class E;*
- *a Sports Hub to include sports pitches and pavilion space;*
- *up to 4,250m² of further Class E, Class F, and sui generis development to include commercial, health care and public house;*
- *comprehensive green infrastructure including a Country Park, landscaping and public open space, and ecological enhancement measures;*
- *20 gypsy and traveller pitches;*
- *comprehensive drainage and flood alleviation measures to include Sustainable Urban Drainage Systems (SUDS) and engineering measures within Loddon Valley for the River Loddon;*
- *internal road network including spine road with pedestrian and cycle connections and associated supporting infrastructure;*
- *new and modified public rights of way;*
- *associated utilities, infrastructure, and engineering works, including the undergrounding of overhead lines;*
- *Ground reprofiling to accommodate infrastructure, flood alleviation and development parcels;*
- *Up to 0.5ha of land adjoining St Bartholomew's church for use as cemetery;*
- *Electricity substation (up to 1.5ha).*

1.4. All matters are to be reserved other than access, which incorporates:

- *a new pedestrian, cycle and vehicular access to Lower Earley Way via a new 4th arm to the Meldreth Way roundabout;*
- *a new pedestrian, cycle and vehicular bridge over the M4;*
- *a new pedestrian, cycle and vehicular bridge over the River Loddon;*
- *a new vehicular access to the A327 Reading Road, via a new arm to the Observer Way roundabout;*
- *a new pedestrian, cycle and vehicular access to Thames Valley Science Park;*
- *an initial phase of internal roads with associated drainage, landscape and engineering works and ground reprofiling, between the A327 and the south eastern boundary of the site.*



- 1.5. The Planning Application includes full permission for the change of use of 40.4 hectares of agricultural land to Suitable Alternative Natural Greenspace (SANG), 18.35 hectares of SANG link, and provision of Biodiversity Net Gain measures, the demolition and clearance of 20,809 sqm of buildings and structures at the Centre for Dairy Research (CEDAR) and at Hall Farm, the demolition of 3 existing dwellings on Carter's Hill Lane, and the retention of specified buildings at Hall Farm.

Construction Environmental Management

- 1.6. Wokingham Borough Council's (WBC) standard requirements for a Construction Environmental Management Plan (CEMP) typically necessitate the following information to be included:

- i. *a construction travel protocol or Green Travel Plan for the construction phase including details of parking and turning for vehicles of site personnel, operatives and visitors,*
- ii. *loading and unloading of plant and materials,*
- iii. *piling techniques,*
- iv. *storage of plant and materials,*
- v. *programme of works (including measures for traffic management and operating hours),*
- vi. *provision of boundary hoarding and lighting,*
- vii. *protection of important trees, hedgerows and other natural features,*
- viii. *details of proposed means of dust suppression and noise mitigation,*
- ix. *details of measures to prevent mud from vehicles leaving the site during construction,*
- x. *details of any site construction office, compound and ancillary facility buildings. These facilities shall be sited away from woodland areas,*
- xi. *lighting on site during construction,*
- xii. *measures to ensure no on-site fires during construction,*
- xiii. *monitoring and review of the CEMP,*
- xiv. *implementation of the CEMP through an environmental management system,*
- xv. *details of the temporary surface water management measures to be provided during the construction phase,*
- xvi. *details of the haul routes to be used to access the development, and*
- xvii. *appointment of a Construction Liaison Officer.*



- 1.7. This Report provides the necessary information to address the Construction Environmental Management Plan requirements of the proposed development, thereby enabling Wokingham Borough Council to make an informed decision on the planning application with the knowledge that there is a strategy in place so that construction can take place in an organised and safe manner which minimises impact on the local environment and highway network.

Report Format

- 1.8. The principal aim of this CEMP is to ensure that the construction works are organised and delivered in a manner that mitigates the environmental impact and safeguards the amenity of the area surrounding the development site during the construction period.
- 1.9. This Report adopts the following structure:
- **Section 2** outlines the broad construction methodology that could be adopted for the site. This includes details of the construction vehicle access points, construction traffic routings, on-site compounds and material storage areas.
 - **Section 3** advises how the environmental impacts of the construction process will be mitigated.
 - **Section 4** outlines how the Contractor will manage the construction process.
- 1.10. Whilst the principles of the construction strategy in relation to the proposed development are established within this Report, it should be noted that the construction programme may be subject to change once the specific Contractor is appointed. Any subsequent changes to the CEMP that may occur would need to be agreed with officers at WBC.

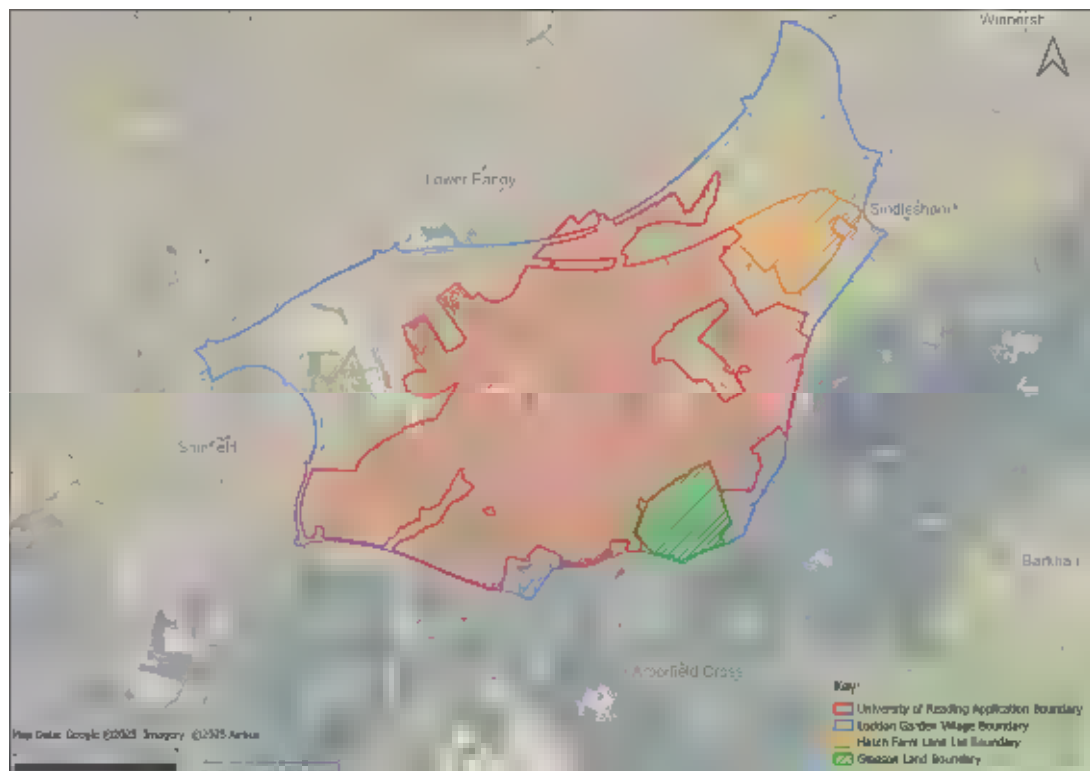


2.0 Construction Measures

Context

- 2.1. The boundary of the Loddon Garden Village site is bordered by the M4 motorway and Lower Earley Way corridors to the north and Mill Lane and Mole Road to the east. The A327 Arborfield Road routes to the south while the Shinfield Eastern Relief Road is located to the west.
- 2.2. The University of Reading parcels comprise the majority of the Loddon Garden Village Site as can be seen from **Figure 2.1** below which also illustrates other main component parts which include land at the south east being promoted by Gleeson Land and parcels at the north-east being promoted by Hatch Farm Land Ltd.

Figure 2.1: University of Reading Parcels within Loddon Garden Village (LGV)



- 2.3. The site area currently mainly comprises a mix of rural landscapes, agricultural fields and properties associated with Hall Farm. The River Loddon acts as a prominent feature, running through the site from the southwestern side to the northeastern side.
- 2.4. The proposed development will be delivered in multiple phases, with early works focusing on enabling infrastructure and provision of the key points of access. Given the proximity to sensitive receptors including residential areas, ecological features, and strategic transport corridors, construction measures will need to be carefully managed to minimise any environmental and traffic impacts.



Construction Phasing

- 2.5. Subject to the appropriate planning approvals, the construction phase of the access junctions and primary road network is anticipated to begin in 2027/2028 and extend over several years.
- 2.6. The initial stages of the construction will include formation of the new permanent access routes into the development and the primary internal roads. It is anticipated that the internal roads will be constructed up to base-course level and used for construction traffic routes as the development is built.
- 2.7. In addition, the enabling works will comprise:
- Arboricultural works which includes the protection of trees to be retained and removal of trees, where applicable.
 - Installation of site hoarding and further security fencing.
 - Demolition of existing buildings and structures.
 - Ground modelling works, including topsoil stripping and stockpiling for later use where possible.
 - Cut and Fill remodelling of the site levels.
 - Localised ground improvement works.
 - Construction of retaining walls.
 - General clearance.
 - Installation of temporary surface water management measures as appropriate.
- 2.8. The next stages would comprise excavation work, preparation of ground works, installation of foundations and implementation of the drainage strategy. The works would include :
- Re-grading within the site to create a generally level development platform.
 - Excavation for foundations and to allow installation of any below ground services.
 - Installation of suspended ground slabs (ground bearing or suspended block) and supporting beams.
 - Construction of the sustainable drainage system (SuDS) during the infrastructure works.
- 2.9. Following on from these activities, the main building structures will be constructed. Landscaping works will then be implemented which may involve some further ground modelling works, albeit the majority of this activity will have been undertaken concurrently with the site preparation and substructure works outlined above. The green spaces will then be established within the development through activities such as soil preparation, tree and vegetation planting, and seeding.



- 2.10. A future construction phase will include the delivery of the bridge structure over the M4 motorway. At this stage, it is anticipated that the bridge will be constructed using a modular approach, with sections either prefabricated off-site or constructed adjacent to the intended bridge location. The final installation is likely to be undertaken during a planned weekend closure of the motorway, subject to agreement with National Highways through the appropriate approvals and permits process. This will allow the bridge units to be lifted into position in a controlled manner while minimising disruption to the strategic road network.

Construction Access

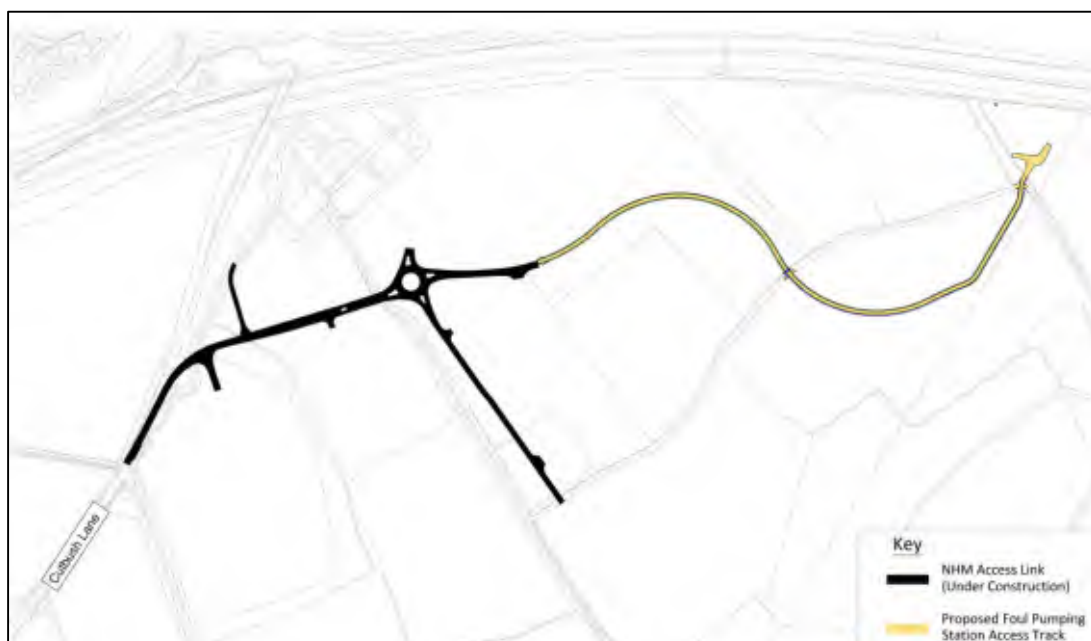
Southern Construction Compound

- 2.11. Access will be provided to the site via the proposed new northern arm of the Observer Way roundabout which has been designed to accommodate two-way HGV movements. In the interim scenario prior to the fourth arm at the roundabout being formed, construction traffic will utilise the existing Hall Farm access junction which is located along Arborfield Road to the west.

North-Western Construction Compound (South of M4 Motorway)

- 2.12. Construction access to the areas of the site which lie to the west of the River Loddon will initially be achieved by making use of the road infrastructure that has already been implemented within the Thames Valley Science Park via the roundabout onto the Shinfield Eastern Relief Road. Traffic would then route along Cutbush Lane East and then along the new road link which is currently being constructed to serve the Natural History Museum (NHM). From this point, traffic would continue eastwards along the Access Track which is being promoted to facilitate access into the Foul Pumping Station being provided in the north-eastern area of Thames Valley Science Park.
- 2.13. **Figure 2.2** illustrates the NHM access road and associated foul pumping station access track that will be utilised to facilitate construction access to the north-western construction compound.

Figure 2.2: Natural History Museum Access Road and Eastern Access Track





Secondary Northern Construction Compound (North of M4 Motorway)

- 2.14. Access will also be provided from the exiting access which is located off the southern side of the Lower Earley Way / Meldreth Way roundabout. At present, this comprises an existing farm access track with a width ranging between 3.0–3.5m. However, this roundabout is proposed to be upgraded as part of the access proposals for LGV. The proposed improvements include increasing the diameter of the roundabout from 46m to 58m, incorporation of active travel infrastructure, removal of the farm access track, and provision of a new fourth arm. This new southern arm is designed to accommodate two-way HGV movements and will provide the access for this northern compound, once operational.

Other Construction Access

- 2.15. The above key access points will cater for construction activities at LGV on the land parcels to the east of River Loddon as well as the construction of the primary street network to the west of the river through to Thames Valley Science Park and to the north of the M4 motorway. The access points can also be used to facilitate construction activities within the EcoValley area to the west of the Loddon. As necessary, use can also be made of the existing field accesses along the Arborfield Road frontage as well as the Permissive Path off Cutbush Lane to gain access to works within the EcoValley areas.

Subsequent Construction Phases

- 2.16. As the site covers a large area and the construction phasing will span over several years, the construction arrangements will adapt as the development progresses. As individual development parcels reach completion, the construction compounds associated with those parcels will be relocated further into the site to facilitate construction of subsequent phases.
- 2.17. Whilst the precise routing arrangements within LGV will adapt in response to the build out of the development, the three key points of access for construction onto the wider network as identified above will be utilised throughout the full construction period for LGV.

Construction Routings

- 2.18. The proposed construction routing plan is shown on Drawing No. A392-1045/P1 which is attached within **Appendix B**. In the early phases, it is expected that the majority of the construction traffic will route to and from the site via the fourth arm of the Observer Way roundabout.
- 2.19. For ease of reference, **Figure 2.3** illustrates the construction routings to the site for HGVs which are then described below.



Figure 2.3: Construction Routings



- 2.20. The M4 motorway, A33, A327 and the B3270 road corridors are highlighted as being most suitable for routing the construction traffic due to their ability to accommodate for larger vehicles. This road network further connects into a wide local and regional area to transport construction materials to and from the site, with the M4 motorway extending from London to Bristol and into Wales, and the A33 linking onto the M3 motorway providing access to Southampton.
- 2.21. A clear signing strategy will be locally implemented to direct all construction traffic to the site, avoiding the use of unsuitable roads. The signage at the site entrances will include the times when access into site by construction traffic can be obtained.
- 2.22. Use of the agreed HGV vehicle routes shall be included as a contractual requirement of the Contractor and will be communicated to all individuals associated with the works. The necessary information will also be communicated to all drivers of site and delivery vehicles to ensure that all those attending the site are aware of the routing strategy.
- 2.23. For routing to the southern construction compound, HGVs would travel to the site from the north would use the A327 corridor via the Shinfield Eastern Relief Road from the Shinfield Gyratory, before entering the site from the Observer Way roundabout. This routing would avoid the A327 Hollow Lane to minimise disturbance within the existing urban/residential areas. HGV traffic travelling from southern areas would route along the Observer Way Relief Road.



- 2.24. For routing to the north western construction compound, HGVs would travel to the site using the A327 corridor via the Shinfield Eastern Relief Road from the Shinfield Gyratory and route through the Thames Valley Science Park and along Cutbush Lane. The carriageway width of the road link within the Thames Valley Science Park is 7.3m and the Cutbush Lane carriageway width is 6.0m. These provisions are sufficient to accommodate two-way working and hence can cater for the simultaneous passage of HGVs.
- 2.25. For routings to the secondary northern construction compound, HGVs would travel to the site using the B3270 Lower Early Way corridor before entering the site at the Lower Earley Way / Meldreth Way roundabout.

Haul Routes

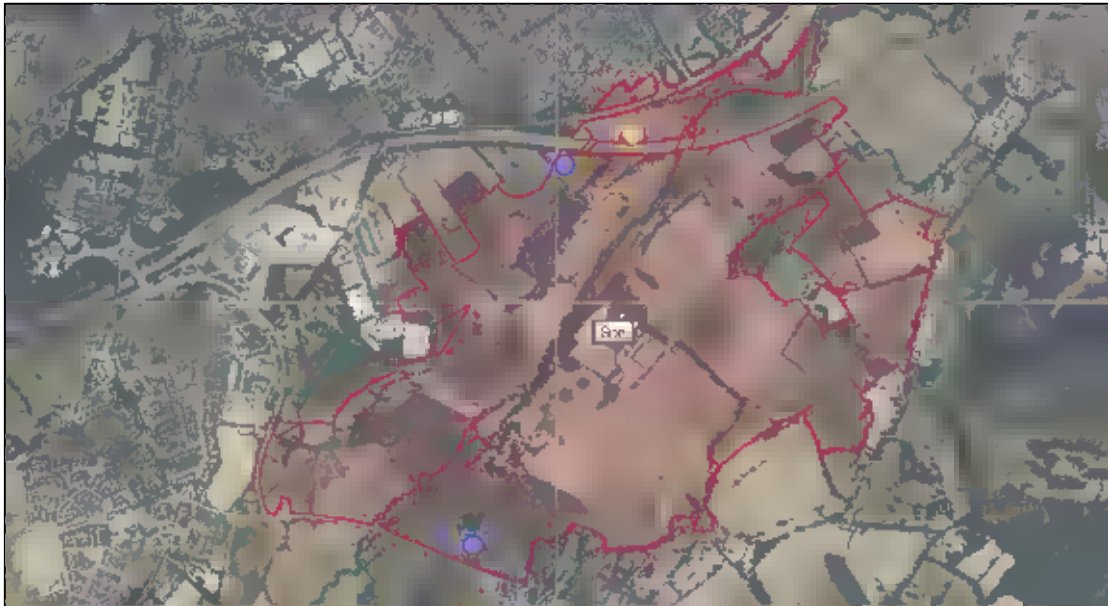
- 2.26. Movements of construction vehicles within the site will be confined to designated temporary haul routes which will be formed by stripping down to a firm base before forming the temporary running surface with suitable material. Haul routes will be provided no wider than is necessary.
- 2.27. The haul routes would seek to follow the general alignment of the proposed street network wherever possible. The configuration of haul routes may evolve as the development advances, not least because use will be made of the highway infrastructure that will be implemented as the construction phase progresses.
- 2.28. No construction vehicles shall exceed a speed of 20mph within the site. A speed limit of 10mph will be implemented within the construction compound areas. The contractor will take responsibility for enforcing speeds in relation to all site and supply vehicles involved in the construction process.
- 2.29. As well as providing haul routes for construction vehicles, appropriate routes will also need to be provided within the site in order to safely facilitate visitor trips, including those undertaken by foot or cycle.

Construction Compounds

- 2.30. A Plan which identifies indicative locations of the construction compounds is included in **Appendix C** and also reproduced as **Figure 2.4** below for ease of reference.



Figure 2.4: Indicative Construction Compound Locations



- 2.31. The southern construction compound will be located within the southern parcel of the site near to the Observer Way roundabout. Northern construction compounds would be located to the north and south of the M4 motorway, near to the location of the future motorway bridge. These compounds would be accessed via the Lower Earley Way roundabout and the links through Thames Valley Science Park respectively.
- 2.32. The compounds are likely to comprise a prefabricated building for staff and welfare facilities such as toilets, showers, a drying room and canteen. A designated parking area for staff and visitors will also be provided. Sufficient space for vehicles to park and manoeuvre safely will be provided, thereby negating any need for site vehicles to park along the adjacent roads beyond the confines of the site.
- 2.33. The compounds will include a waste management area which will house colour-coded skips for various waste streams as well as separate receptacles for the disposal of residual general site waste that cannot be recycled or re-used.
- 2.34. The construction compounds will include a designated area for material deliveries and storage. This will allow materials to be offloaded directly into the dedicated storage area, ensuring that loading and unloading activities are carried out in a coordinated manner within the site, rather than on the public highway at the site entrances. Deliveries will also be scheduled to prevent vehicles from waiting on the highway before the site opens.
- 2.35. Once materials have been delivered to the construction compounds, they will be distributed to their required location within the site using construction vehicles which will use specific demarcated haul routes.



- 2.36. In all instances, sufficient room will be provided to allow vehicles to turn around, drop-off / pick-up any required materials and then exit the site in forward gear. There will therefore not be a requirement for the vehicles to undertake turning manoeuvres on any area of the public highway. Notwithstanding this, trained banksmen will be utilised when vehicles are performing turning manoeuvres on site to ensure the safety of site operatives and to maintain an efficient and tidy material storage area.
- 2.37. Precise details of the internal configuration of the compounds, which would be safeguarded with security fencing, can be confirmed by the Contractor prior to the works commencing if required.

Subsequent Construction Phases

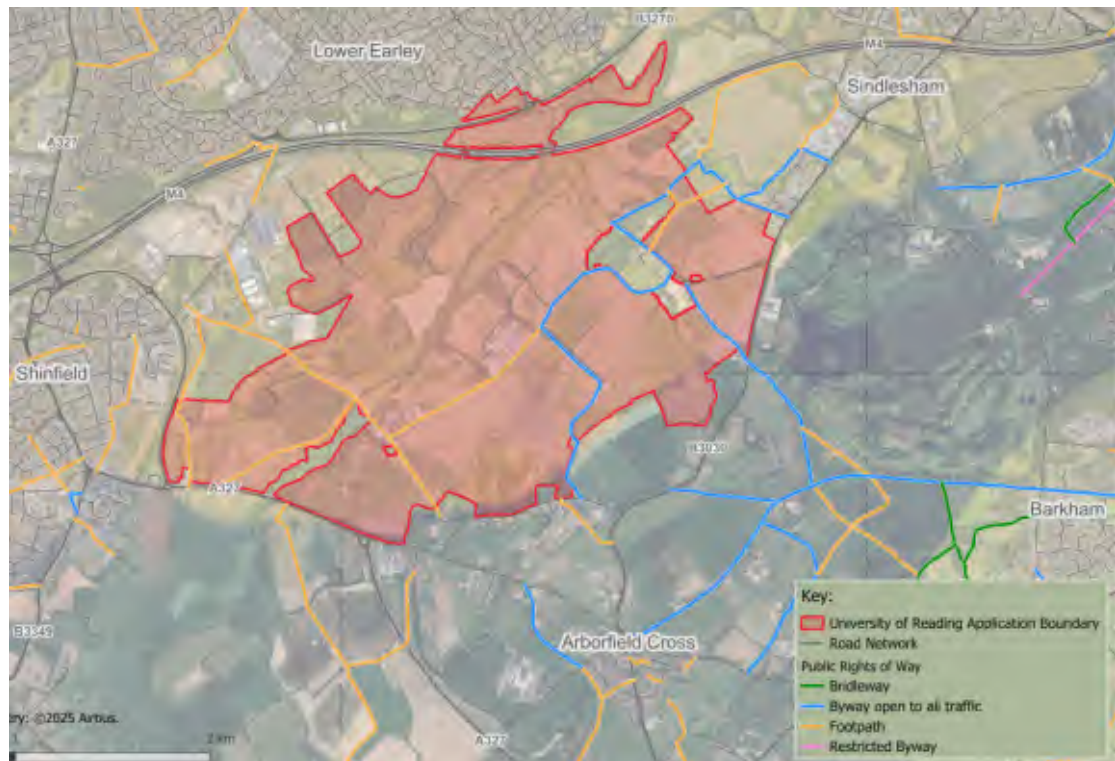
- 2.38. As development advances across the site over multiple years, construction traffic routes will be adjusted accordingly. While access to the site will remain via established routes on the local highway network, vehicles will increasingly make use of completed segments of the internal primary road network to reach subsequent compound locations which will be provided further within the development site.

Public Rights of Way / Pedestrian Routes

- 2.39. There are a number of Public Rights of Way that route within the LGV site as depicted on the Map attached at **Appendix D** and reproduced as **Figure 2.5** below for ease of reference.



Figure 2.5 : Existing Public Rights of Way



- 2.40. To the west of the River Loddon, Footpath 4 routes in a westerly direction before connecting to Cutbush Lane. Footpath 5 runs near to the western bank of the river as it routes to the south connecting to Arborfield Road. Footpath 6 then routes near to the western boundary of the site between the Arborfield Road and Shinfield Eastern Relief Road corridors.
- 2.41. To the east of the River Loddon, Footpath 4 continues to the south-east before connecting to Church Lane. Footpath 2 runs in a north-easterly direction from Hall Farm before connecting to Byway 3 which routes from Church Lane via the existing tracks with the site which include Arborfield Church and Barrat's Lane. Byways 4 and 5, as well as Footpath 5 then route in the north-eastern area of the site along Copse Barnhill Lane and Julkes Lane.
- 2.42. The Illustrative Masterplan for LGV has been developed on a basis that respects the existing alignment of the public rights of way that route through the site; thereby avoiding the need for any diversions or closures of the existing routes. There may however be a need to implement temporary diversions to some of the routes during certain phases of the build out where construction activity is being undertaken on or close to the existing public rights of way.
- 2.43. The construction works will therefore need to be fully cognisant of the aforementioned public rights of way. Moreover, precise details and durations of any temporary alternative provision along the public rights of ways are matters that the Contractor will need to co-ordinate and agree with Wokingham Borough Council before securing through Temporary Diversion Orders as necessary.
- 2.44. Throughout the works, all Public Rights of Way, either current or temporarily diverted, will be segregated from the general site activity using temporary fencing in order to protect members of the public utilising the routes.



- 2.45. Of note, some of the byways are also vehicle access routes to residential properties. There will therefore be a strategy in place to maintain suitable vehicular routes to residential properties during periods where construction activities impact upon the current access arrangements.

Boundary Hoarding

- 2.46. It will be necessary to provide boundary fencing at the site in order to prevent unwanted access and to achieve site security as well as providing noise attenuation and visual screening. Such measures would take the form of solid timber hoarding to the active site frontage and Heras type fencing to all other boundaries. The hoarding at the access point would be lit as appropriate.
- 2.47. The use of hoarding will also help to protect areas of hedgerow and trees to be retained on the boundaries of the developable area. This will in turn prevent unwanted intrusion by construction vehicles into these sensitive areas.
- 2.48. Precise details of the boundary hoarding will be confirmed by the Contractor prior to the works commencing if required. The hoarding will be positioned in a manner that doesn't impede any pedestrian or vehicular routes.

Construction Working Hours

- 2.49. Wokingham Borough Council has set out specific guidelines governing the days and times during which construction activities may take place. These restrictions are intended to safeguard nearby residents from noise and disturbance outside of permitted hours during the construction period. Construction work must not be carried out outside the following timeframes:
- Outside the hours of 08:00 – 18:00 hrs on Mondays to Fridays (inclusive)
 - Outside the hours of 08:00 – 13:00 on Saturdays, and
 - On Sundays and on public holidays.
- 2.50. Should there be specific circumstances where construction work is proposed to be undertaken outside of these hours then confirmation would first need to be obtained in advance and in writing from Wokingham Borough Council.
- 2.51. Whilst there may be opportunity to organise deliveries outside of the peak hours wherever possible, the construction program is such that it does not afford the opportunity for construction access to be fully restricted during the peak hours.



3.0 Environmental Controls

Context

- 3.1. Given the location and type of works being proposed there are inherent environmental sensitivities to be identified and dealt with whilst construction activity is occurring on site.
- 3.2. It is important that construction impacts are addressed wherever possible. The following measures have therefore been identified which will be used to mitigate specific environmental concerns at the site.

Noise Reduction

- 3.3. Construction works would be carried out in accordance with Best Practicable Means (BPM) of Section 72 of the Control of Pollution Act (CoPA) to minimise noise and vibration effects.
- 3.4. Further to the restriction on working hours, as outlined in Section 2 of this Report, a number of further practices can be implemented to restrict possible impacts on local residents. Suitable mitigation measures to be implemented include:
 - The use of quieter alternative methods or mechanical plant, where reasonably practicable.
 - All vehicles, plant and equipment working within the site shall be fitted with efficient silencers.
 - Where vehicle reversing alarms are required, they should be designed to cause the lowest practical environmental impact; preferably they should be directional broadband noise emitters or automatically adjusted to ambient noise levels.
 - Maintaining and operating all vehicles, plant and equipment in an appropriate manner, to ensure that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
 - Intermittently operating plant will be shut down in the intervening periods between operations. Start-up plant and vehicles sequentially rather than simultaneously. Unnecessary revving of engines should be avoided.
 - Locating plant, equipment, site offices, storage areas and worksites away from neighbouring properties, where reasonably practicable.
 - Pumps and generators to be acoustically screened if required to operate outside of normal working hours.
 - The use of site hoardings within the construction compounds or portable acoustic enclosures / screens around noisy plant or processes, where reasonably practicable.
 - Care will be taken when erecting or striking Heras fencing to avoid impact noise from banging steel. All operatives undertaking such activities will be instructed on the importance of handling the fencing to reduce noise to a minimum.



- Where reasonably practicable, low vibration working methods should be employed. Equipment should be isolated using resilient mountings if vibration levels are deemed high.
- Wherever possible, the use of hydraulic attachments or other means of crushing concrete and hard materials will be used in preference to pneumatic breakers.
- Consideration should be given to use of the most suitable plant, reasonable hours of working for operations which might give rise to perceptible noise and vibrations, and economy and speed of operations.
- Use of rubber linings in, for example, chutes and dumpers to reduce impact noise.
- Reduce drop heights of materials. Loading and unloading to be undertaken as far away from sensitive receptors as possible.
- Regular liaison with local residents to inform them of operations on site, including periods of temporary operations when noise levels would exceed those normally defined for the site.

Dust Suppression

- 3.5. A number of control procedures will be implemented in order to reduce the potential for dust emission as far as practicable. Such measures include:
- Wheel washing facilities will be located at the construction accesses to ensure the local road network is kept clear from mud and dust.
 - All HGVs removing loose materials from the site will be fully sheeted to minimise the risk of any spillage of mud or dusty material.
 - In dry weather, haul routes and stockpiles will be dampened down to help prevent dust migrating from the site.
 - Ensure speed limits along haul routes are adhered to.
 - Use dust suppression techniques such as water sprays when undertaking cutting, grinding and demolition activities.
 - Load demolished material into appropriate waste / recycling skips as soon as possible.
- 3.6. The wheel washing will be undertaken by a site operative using a jet wash at the entrance to the construction areas. A run-off area with polythene filled with shingle will be placed to trap any silt run off. This will be removed when it becomes silted up.

Piling Operations

- 3.7. There may be the need for piled foundations to be implemented for some of the proposed buildings and the formation of retaining walls within the development. In the instances where these are required, such activities would be undertaken in accordance with best practice guidance in order to minimise the extent of arisings and also the environmental impacts such as noise disturbance. In addition, it is important that clear communication lines are established between the Contractor and nearby residents to inform of the type of activities and likely timescales.



- 3.8. Where possible, use of piling methods such as Continuous Flight Auger (CFA) piling or hydraulic sheet piling will be employed given that this approach creates the least vibration.

Fire Prevention

- 3.9. No burning of any materials will be permitted on site. Furthermore, flammable materials will be stored appropriately within the construction compounds in order to reduce the risk of accidental fire.

Lighting

- 3.10. Site lighting will be provided at the site access points as appropriate to ensure the safety of the passing public.
- 3.11. The construction activities are scheduled to take place over a number of years and hence there will be activities during the winter months where natural daylight is restricted. During the winter months when the natural daylight is restricted, temporary lighting may be employed at the site to ensure the safety of the workers. However, precautions will be taken to ensure that the lighting does not cause any significant disturbance on neighbouring properties or other sensitive receptors beyond the site. Similarly, temporary construction lighting must not be allowed to shine onto any retained on or bounding the site.

Mud Prevention

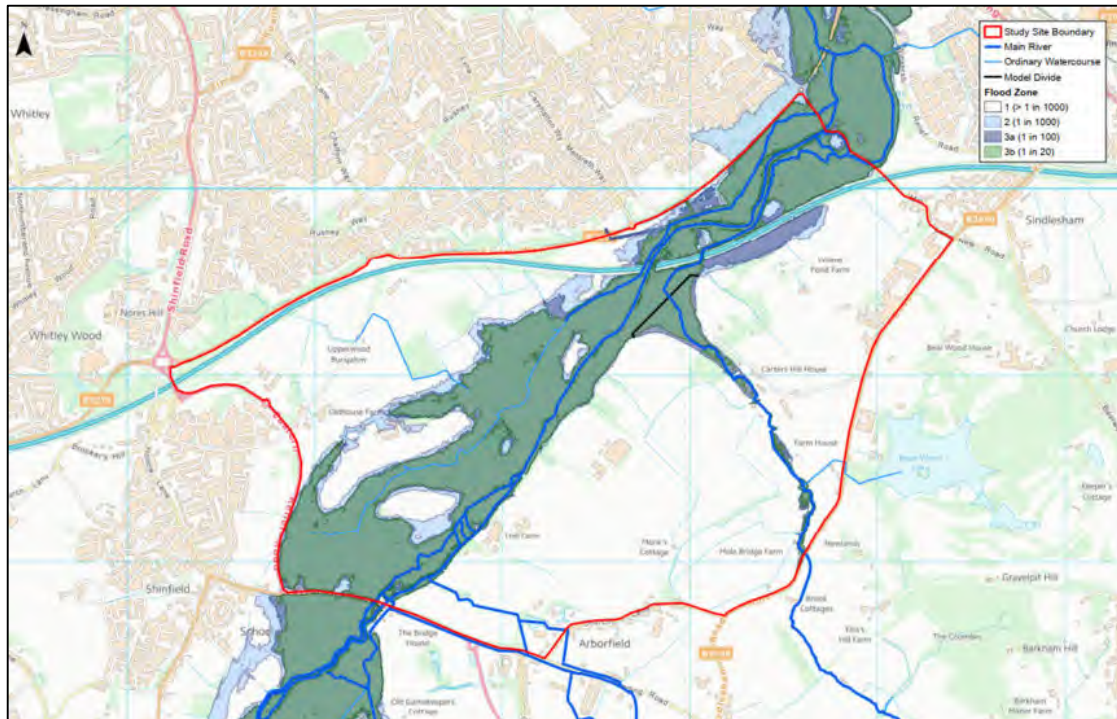
- 3.12. Wheel wash facilities will be provided at the construction accesses to help ensure that the local road network is kept clear from mud and debris.
- 3.13. The wheel washing will be undertaken by a site operative using a jet wash at the entrance to the site. A run-off area with polythene filled with shingle will be placed to trap any silt run off. This will be removed when it becomes silted up.
- 3.14. All HGVs removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway.
- 3.15. Regular inspections of the construction access will also be undertaken to ensure the above measures are effective. Provision for cleaning of the road, if required, will be undertaken using mechanical road sweepers.

Flooding Considerations

- 3.16. The River Loddon and its associated watercourses flow through the LGV development site. An extract from the Environment Agency flood mapping is attached within **Appendix E** and also shown below as Figure 3.1 for ease of reference.



Figure 3.1: Wokingham Level 2 SFRA



- 3.17. The proposed construction compound locations have all been identified as being on land that is within Flood Zone 1 and as such are not located within areas that are susceptible to flooding. Indeed, all areas of built development identified on land to the east of the River Loddon lie within Flood Zone 1 and hence there are no special considerations that are needed in terms of storage of materials within a designated floodplain.
- 3.18. Land to the west of the River Loddon is however located within Flood Zone 2, and much of this area is also shown to be functional floodplain within Flood Zone 3. Construction activities associated with the Eco Valley proposals as well as the implementation of the access roads through to Thames Valley Science Park and north over the M4 Motorway way corridor will therefore be subject to the following considerations.

Flood Zone 2 and 3 Specific Measures

- 3.19. Where there are construction activities within Flood Zones 2 and 3 (predominantly on land to the west of the River Loddon), the following additional measures are to be taken.
- 3.20. Project Managers and Works Managers are to sign up to the Met Office weather warning system which announces alerts for surface water flood risks, based on a yellow, amber or red graduated system. Project and Works Managers are similarly required to sign up to the Environmental Agency flood warning system which announces for river and sea flood risks.
- 3.21. In the event that a Met Office Yellow Alert and / or an EA Flood Alert is issued then the following tasks are to be undertaken by the site manager:



- Any tasks that may cause sedimentation/pollution are to be postponed.
 - Any basins and bunds are to be checked.
 - Any filters and gullies are to be cleaned.
 - Pumps are to be checked.
 - The contact details of all on-site personnel are to be checked.
 - Any hazardous materials within the flood zone are to be safely stored or relocated.
- 3.22. In the event that a Met Office Amber Alert and / or an EA Flood Warning is issued then flooding is expected and immediate action is required. In such circumstances, the following actions are to be taken by the site manager:
- Any tasks that may cause sedimentation/pollution are to be postponed.
 - Pumps are to be put in place ready for use.
 - Water levels and run-off is to be monitored.
 - Equipment is to be relocated to high ground or outside of the flood zones.
 - The site should be ready to increase the height of any bunds within the flood zones.
 - Start the flood safety procedures.
- 3.23. If a Severe Flood Warning is announced, severe flooding that is a danger to life is expected, and immediate action is required. The following actions are to be taken by the site manager.
- Any tasks that may cause sedimentation/pollution are to be postponed,
 - The site is to be secured; and
 - On-site workers are to be moved to high ground or outside of the flood zones.

Temporary Surface Water Management Measures

- 3.24. Best practice is to be employed during the construction works to reflect the guidance contained within the CIRIA Control of Water Pollution from Construction Sites and the SuDS Manual guidance on Sustainable Drainage Systems. Similarly, the works will need to be managed to comply with the necessary surface water quality standards and any consent conditions arising from the planning approval.
- 3.25. Temporary drainage facilities will be provided during the construction phase to ensure the controlled discharge of surface water run-off, until such a time as the permanent surface water drainage strategy is implemented. Such measures may include the introduction of temporary bunding and settlement ponds to protect the receiving water environment from excess water. Where possible, the surface water drainage features should be implemented early within the program.



- 3.26. The movement of plant machinery and vehicles and the storage of materials during the construction works will be limited near to surface water features. The use of plant and machinery over bare soil areas will also be limited to avoid soil compaction and smearing, with suitable preparatory works included where this cannot be avoided so as to minimise effects on the surface water runoff regime.
- 3.27. The movement of materials around the site will be managed to ensure the placement of materials does not change the flood risk. Any stockpiling of materials is not to take place within overland surface water flood paths. Excavation activities are to be carefully monitored and coordinated with forecasted dry periods where possible, with excavation works covered during periods of heavy rain to minimise the entry and collection of rainwater and transport of pollutants.
- 3.28. Care will therefore need to be taken when undertaking construction activities close to the River Loddon or any existing watercourse to control and reduce the risk of contaminated surface water run-off. Where possible, water is to be prevented from entering excavations through the use of cut-off ditches as appropriate. Any silty water that is caused by excavation work, and other activities such as wheel washing facilities or run off from exposed ground, is not to be pumped directly into watercourses. Culverts will be constructed during dry periods wherever possible with the existing watercourse temporarily diverted or pumped downstream to avoid the works.
- 3.29. Silt protection measures will be integrated within the construction works. This will include the provision of high-quality geotextile silt fencing around the entirety of any boundary where there is a possibility of surface water running towards the River Loddon or one of its tributaries. The silt fencing will physically trap and prevent silt-contaminated water from leaving the construction area.
- 3.30. There will be no discharge of foul or contaminated drainage or trade effluent from the Site into either groundwater or any surface water, whether directly or via soakaways. No pumped water will be discharged into the live drainage system without having been filtered through a silt interceptor.
- 3.31. All surface water drainage from impermeable areas and tarmac will pass through trapped gullies prior to being discharged into any watercourse. As appropriate, gullies will be appropriately protected, such as with terram or straw bales, and will be regularly inspected and replaced or cleaned as needed;
- 3.32. Fuel, lubricating oils and chemicals will be stored appropriately within the construction compounds which are located away from any existing watercourses. The storage areas will be constructed with an impervious base and surrounded with an effective and impervious bund capable of holding the full contents of the store plus 10%. All stores are to be kept locked when not in use. Refuelling of equipment will take place within the storage compounds given that they are remote from any watercourse or drain. Any leaking of empty drums or chemical containers will be contained immediately. Consideration should also be given to identifying an emergency activity plan for enabling a timely and efficient clean-up operation, including consideration for the use of shut-off valves, such as at the discharge points from the surface water drainage strategy.
- 3.33. In order to protect the groundwater quality during the construction activities, the following matters should be taken into consideration:



- Where encountered, perched groundwater within made ground or superficial deposits may need to be dewatered during foundation excavations.
 - Construction work will stop immediately if ground contamination is encountered to prevent disturbance and mobilisation of contaminants, until the contamination has been treated in-situ or removed from off-site treatment.
 - Water arising from excavation will require disposal into Thames Water foul sewer network under appropriate licence from Thames Water.
- 3.34. Moreover, where practicable, the inclusion of measures that improve the efficiency of water use should be utilised during the construction works including rainwater harvesting and measures to reduce water usage, such as efficiency measures.

Ancient Woodland, Trees and Hedges

- 3.35. Plans identifying the trees and hedgerows within the site which are identified for retention or removal are set out within the arboricultural report prepared by FLAC dated June 2025.
- 3.36. The report also identifies the method and type of tree protection fencing to be used, and the required extent of Root Protection areas for trees within and along the boundaries of the site. For ease of reference, the Tree Protection Plans are provided in **Appendix F**.

Ecological Management

- 3.37. The full details of the potentially sensitive Important Ecological Features that need to be taken into account and protected during the site clearance, construction and operational phase are set out in the Ecological Impact Assessment chapter of the Environmental Statement prepared by Ecological Planning & Research Ltd (EPR), which should be read in conjunction with this CEMP.
- 3.38. The key mitigation measures needed during the construction phase are however summarised below.

General Ecology Protection Measures

- 3.39. All wild animals must be protected during construction activities. Best practice measures must be adhered to and will include:
- During construction plant and materials will not be stored on Site where possible. Where on-site storage is required, plant and material should be stored on cleared ground or hardstanding only.
 - Any plant and materials left on Site should be carefully checked by hand the following morning before being moved.
 - Any excavations should be filled or covered overnight and/or the provision should be made for plank escape routes for any trapped wildlife.
 - Designing and ensuring hoarding and fencing has no holes that allow animals to access site.
 - Ensuring that all liquids and other toxic substances are stored and handled correctly and are locked away during site closure.



- Any wildlife discovered within the scheme area shall not be deliberately or intentionally harmed or injured.
- Wildlife shall not be handled but be left to leave the area of its own accord.

Protection of Retained Habitats (Scrub, Hedgerows, Trees, Grassland and Flora of Conservation Interest)

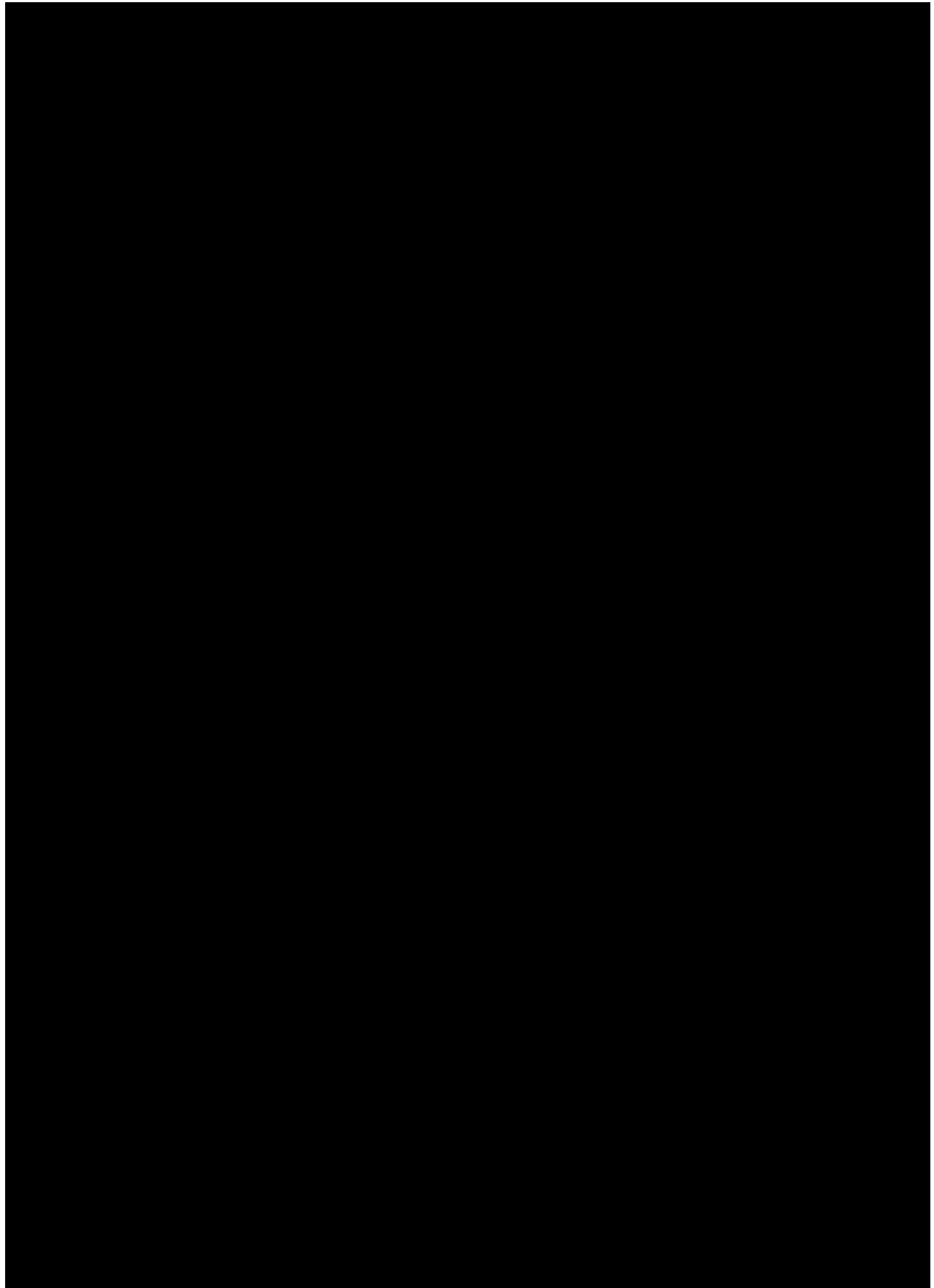
- 3.40. Habitats that are to be retained and enhanced as part of the Proposed Development must be protected from accidental impacts during works. Therefore, retained habitats including trees and the dense scrub require tree protection fencing. These measures should be put in place prior to the onset of works and left in place until works are completed, to prevent accidental damage to these retained habitats.
- 3.41. To prevent damage to flora of conservation interest which lies within, or close to, the development footprint, a Working Method Statement (WMS) will be devised and implemented during the construction phase. The WMS will include the following measures:
- The Proposed Development construction footprint will be marked out on the ground where it is located within close proximity of known flora of conservation interest.
 - A suitably experienced botanist will undertake a survey to determine whether flora of conservation interest is located within an area whereby it is at risk of damage or loss.
 - Where the flora is located a reasonable distance from construction but at risk of accidental damage, suitable protection measures, such as the installation of Heras fencing will be installed to protect the flora.
 - Where the flora is likely to be lost as a result of construction, the botanist will identify a suitable receptor location and the specimen will be translocated under the supervision of a suitable qualified ecologist.

Bats

- 3.42. All native species of bat and their roost benefit from protection under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). This protection is detailed more fully in the Ecological Impact Assessment (EPR, 2025).
- 3.43. The construction phase includes the demolition or renovation of a number of buildings which have previously been confirmed to support roosting bats. The presence of bats will mean that there will be seasonal constraints for destruction of the roost during demolition of the buildings, which need to be taken into account when planning the build programme.
- 3.44. Any works to a building supporting a confirmed roost which is to be lost or disturbed as a result of planned works will be undertaken under a European Protected Species Mitigation Licence (EPSL) from Natural England. The licence application will include a detailed mitigation strategy, developed in accordance with best practice guidance, that will be adopted to avoid detrimental impacts on bats. Although full details of the mitigation strategy will be agreed with Natural England through the licensing process, the principal elements will include:
- Sensitive timing of works (bats are most vulnerable during the maternity season and the hibernation period).



- A pre demolition/felling emergence survey.
 - A pre demolition/felling inspection.
 - The supervised soft strip of building features.
 - Provision of appropriate new roosting features in/on new buildings or on retained boundary trees (for example, bat boxes, recessed bat bricks, external wall mounted boxes, tree mounted boxes or pole mounted boxes).
- 3.45. Where a structure is not confirmed as an active roost but nevertheless retains suitable features to support roosting bats, works may be carried out under ecological supervision and a precautionary WMS which may include all or some of the measures identified above. The extent of ecological supervision will be based on Bat Conservation Trust (BCT) Guidelines and will depend on the suitability of the feature and the anticipated level of risk.
- 3.46. The results of Ecological Impact Assessment (EPR, 2025) also identifies there are many trees within the site that have the potential to support bat roosts. As with buildings, any tree supporting a confirmed roost which is likely to be felled or disturbed as a result of planned works will need to be subject to a EPSL from Natural England with similar measures to those detailed above.
- 3.47. Moreover, tree fencing will also need to be installed to protect retained vegetation that may support roosting bats as well as measured to reduce light spill on any features that may support roosting bats and commuting/foraging bats.





Great Crested Newts

- 3.57. The presence of suitable aquatic and terrestrial habitats within and adjacent to the LGV development parcels, particularly along the River Loddon corridor, indicates that Great Crested Newts may be present and potentially using the site during part of their life cycle. A habitat suitability assessment will be undertaken to inform the requirement for presence/absence surveys in accordance with Natural England guidelines.
- 3.58. Should any Great Crested Newts be confirmed within or in proximity to the site, a mitigation strategy will be developed in consultation with a suitably qualified ecologist. Where presence is confirmed and works risk causing disturbance or harm, a European Protected Species Mitigation License will be obtained from Natural England prior to works commencing, in consultation with a licensed ecologist.
- 3.59. Prior to any intrusive groundworks, a Reasonable Avoidance Measures (RAMs) method statement will be prepared and implemented to minimise the risk of harming Great Crested Newts. This may include phased clearance, directional strimming, and ecological supervision.
- 3.60. In addition to species-specific measures, the following Best Practice Measures will be applied in areas where Great Crested Newts may be disturbed.
- All excavations will be backfilled by the end of the working day or securely covered to prevent entrapment.
 - Materials will not be stored within 50m of potential aquatic habitats unless impermeable barriers are installed to prevent contamination or ingress by wildlife.
 - Site lighting within 50 metres of aquatic habitats will be minimised and directed away from waterbodies to avoid disruption of nocturnal amphibian behaviour.
 - Site personnel will be briefed through toolbox talks on the potential presence of Great Crested Newts and the legal protections afforded to them.

Other Reptiles and Amphibians

- 3.61. All native common species of reptile are protected from intentional or reckless killing and injury under the Wildlife and Countryside Act 1981 (as amended).
- 3.62. Should any construction phase contain substantial areas of suitable reptile habitats, a reptile survey should be undertaken to confirm presence or likely absence and to inform a suitable mitigation strategy. Should sufficient populations be identified, the mitigation strategy should include a translocation exercise to a pre-identified reptile receptor site, which has established reptile habitats and will not be disturbed as part of future development phases.
- 3.63. For areas where reptile habitats are present but limited (for example minor field margins or verges), works should be undertaken under the provisions of a WMS, which will include the following:
- Phased vegetation clearance will take place which will include a first cut to approximately 15cm above ground to avoid potential direct harm to reptiles, then after a period of 1 week, during which reptiles will be able to disperse, a second cut to ground level will be conducted.



- A suitably experienced ecologist will hand-search any potential natural/artificial refuges prior to vegetation clearance. If any refugia needs to be dismantled using an excavator, then this will be supervised by the ecologist. If reptiles are found during this task, then they will be relocated to a suitable pre-identified receptor area.
 - Any works to suitable reptile habitats will take place during the active reptile period (April to September inclusive) and during weather conditions suitable for promoting reptile movement.
 - Once the phased clearance has been completed, a destructive search will be carried out on areas remaining areas of suitable reptile habitat. This will require a suitably experienced ecologist supervising the removal of the top layer of soil using an excavator. Areas within the RPA of retained trees will need to follow detailed recommendations from a suitable qualified arboricultural consultant to ensure tree roots close to the surface are not damaged.
 - Only once the ecologist is satisfied that all potential reptile habitat has been removed, then remedial/construction works can commence.
 - If habitats cannot be kept unsuitable for reptiles for the duration of the construction works, temporary reptile fencing should be erected for the duration of the construction works.
- 3.64. Potential hibernation habitat will not be uprooted, disturbed or tracked over between November and February (inclusive), although this may vary year-on-year dependent upon weather conditions.

Nesting Birds

- 3.65. Any clearance of trees, hedgerows or scrub undertaken in the course of implementing the works should ideally be conducted where possible between September and February (inclusive), to avoid the bird nesting season, as nesting birds are afforded protection under the Wildlife & Countryside Act 1981 (as amended).
- 3.66. Where this is not possible it will be necessary for a suitably experienced ecologist to check the vegetation to be removed no more than 24 hours before the commencement of operations. The discovery of an active nest in the course of this check would require the maintenance of an exclusionary buffer zone until such time as any fledglings depart the nest.
- 3.67. Moreover, tree fencing will also need to be installed to protect vegetation that may support nesting birds.

Water Voles

- 3.68. The River Loddon and its associated tributaries provide suitable habitat for Water Voles (*Arvicola amphibius*), a species fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). A pre-commencement survey for Water Vole field signs will be carried out between April and September by a suitably qualified ecologist, in accordance with the *Water Vole Mitigation Handbook* (Mammal Society).



- 3.69. If Water Voles are found to be present, the site layout and construction working areas will be reviewed in consultation with the ecologist to avoid disturbance. Where disturbance cannot reasonably be avoided, works will proceed under a conservation licence obtained from Natural England and in accordance with a detailed mitigation strategy.

Lighting

- 3.70. To avoid impacts of foraging and/or commuting bats [REDACTED] and other mammals, the following control measures will be implemented during construction:
- If security lighting is required, this will be directed away from retained habitats (including trees, hedgerows, scrub and grassland) and will use motion sensors and will be on a short timer (1 minute).
 - direct light downwards wherever possible.
 - if up-lighting is unavoidable use baffles to keep light spill to a minimum.
 - All luminaires will lack UV elements and metal halide, fluorescent sources should not be used. LED luminaires should be used where possible with a warm white spectrum adopted (<2700Kelvin).
 - Lighting along the boundaries will be minimised to a value of 3lux to avoid impacts upon light avoiding species.
 - Lights to be turned off at the end of the shift unless required for H&S reasons.



4.0 Construction Management

Context

- 4.1. This section sets out the measures, management structure and control processes that will be put in place to implement, monitor and manage the Construction Environment Management Plan. The Site Contractor, will themselves appoint a Construction Liaison Officer who will oversee the implementation of the Construction Environment Management Plan and will ensure that the control processes are efficiently communicated and implemented.

The Considerate Constructors Scheme

- 4.2. During Construction, the following broad principles will underpin the management of the site:
- Considerate : Work to be carried out with consideration to the public, businesses, site personnel and visitors.
 - Environmentally Conscious : Noise to be kept to a minimum with attention to waste management and pollution.
 - Cleanliness : Site to be kept clean and in good order.
 - Good Neighbour : Good communication links with neighbours.
 - Safe : All working practices to be carried out with care and consideration.
 - Responsible : Everyone on site complies with the code.
 - Accountable : Site contact details to be easily accessed.
- 4.3. The aim is to encourage constructors to undertake their operations and activities in such a way that a higher than satisfactory level of performance is achieved. The approach will provide a mechanism for all variety of complaints to be submitted, recorded and passed onto the Site Manager.

Implementation and Communication Strategy

- 4.4. The Site Manager will have overall responsibility for implementing and developing the Construction Environment Management Plan which would be implemented alongside the Contractor's other management systems and procedures that relate to environmental management.
- 4.5. It is proposed that the operation of the Construction Environment Management Plan is regularly reviewed and updated as necessary on an ongoing basis.
- 4.6. The Site Manager would appoint a suitably skilled member of staff to undertake the Construction Liaison Officer role. Contact details for the Site Manager and Construction Liaison Officer will be provided to Wokingham Borough Council and local Key Stakeholders.



- 4.7. The Construction Liaison Officer would be responsible for keeping neighbours and Wokingham Borough Council informed of the construction progress and also to ensure that there is adequate liaison between all stakeholders throughout the construction period. This process will enable the opportunity for measures within the Construction Environment Management Plan to be enhanced through the construction period.
- 4.8. Whilst the Site Manager and Construction Liaison Offer will use reasonable endeavours to ensure that site neighbours are informed of the construction programme and associated impacts it is possible that complaints may be raised by local residents about the programme of works. The Site Manager and Construction Liaison Offer will therefore be available to meet and explore issues with concerned residents directly via appointment.

Construction Travel Management

- 4.9. In addition to ensuring that the impact of the construction / delivery related traffic is minimised, the Contractor will also seek to encourage the workforce to travel to and from the site by sustainable modes.
- 4.10. The site is well placed to facilitate non-car modes of travel with bus stop facilities available at the Thames Valley Science Park, Lower Earley and along Reading Road near the Observer Way roundabout. Additionally, these stops provide connections to Reading Railway Station which is a national hub, serving destinations across the country and particularly the south east.
- 4.11. As the site is built out, the public transport strategy will expand and direct routes into areas of completed development will become available, further improving convenience.
- 4.12. In light of the above, construction workers travelling to the site will be encouraged to travel by sustainable modes as far as possible. Where this is not practicable, staff will be encouraged to co-ordinate their travel arrangements with each other in order to arrive via as few vehicles as possible.
- 4.13. Examples of travel planning measures that could be used to influence construction worker and visitor travel are set out below :
- Provide walking maps.
 - Shower/changing/storage facilities for staff.
 - Provide cycle maps.
 - Display public transport information – timetables, maps, local bus and rail stations.
 - Promote car-sharing schemes.
 - Encourage contractor use of mini-buses for multiple staff to limit vehicle trips to site.