



Construction and Environmental Management Statement

**Land at Netley Firs
Kanes Hill, Southampton, SO19 6AJ**

**Version 1.0
August 2024**

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1. Introduction

Purpose of document

- 1.1 Outline planning permission was granted for the development of 23 new employment units under reference O/18/82750 with the following description of development:

Outline application for the demolition of existing buildings and erection of 23 employment units (up to 5,905 sq.m.) with units 12-20 for Use Class B1 (b) and (c) and units 1-11 and 21-23 for Use Class B2, with associated car parking and access. Detailed matters considered: Access and layout.

- 1.2 Reserved matters approval was subsequently granted in June 2024 under reference RM/24/96684 with the following description of development:

Reserved Matters pursuant to Outline Planning Approval O/18/82750 for the demolition of existing buildings and erection of 23 employment units (up to 5,905 sq.m.) with units 12-20 for Use Class B1 (b) and (c) and units 1-11 and 21-23 for Use Class B2, with associated car parking and access. Detailed matters to be considered: appearance, landscaping and scale.

- 1.3 Condition 9 requires the submission and approval of a Construction Environment Method Statement before work commences on Site. The purpose of this document is to provide the information required to discharge this condition which is as follows:

No construction, site clearance or demolition work shall start until a Construction Environment Method Statement has been submitted to, and approved in writing by, the Local Planning Authority. Demolition and construction work shall only take place in accordance with the approved method statement which shall include:

- a) a programme, phasing, and methods of the demolition and construction work, including roads, footpaths, landscaping and open space;**
- b) ecological considerations regarding the timing and methodology of vegetation clearance and refugia removal (for example, with regards to breeding birds and reptiles)**
- c) the location of temporary site buildings, compounds, construction material storage areas and plant storage areas to be used during demolition and construction;**
- d) location of temporary fencing to protect retained habitat (including trees)**
- e) the arrangements for the routing/ turning of lorries and details for construction traffic access to the site;**
- f) the arrangements for deliveries associated with all construction works, loading/ unloading of plant & materials and restoration of any damage to the highway including vehicle crossovers and grass verges);**

- g) the parking of vehicles of site operatives and visitors;
- h) the provision for storage, collection, and disposal of rubbish from the development during the construction period;
- i) measures to prevent mud and dust on the highway during demolition and construction, including wastewater drainage arrangements for any wheel washing facilities;
- j) temporary drainage proposals
- k) the erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate;
- l) temporary lighting;
- m) protection of pedestrian routes during construction, and
- n) details of safe vehicle and plant manoeuvring practices, including reversing, which do not rely on audible alarms.

Reason: To limit the impact the development has on the amenity of the locality.

Address

1.4 The Site is located at Netley Firs, Kanes Hill, Southampton, SO19 6AJ as shown in Figure 1.

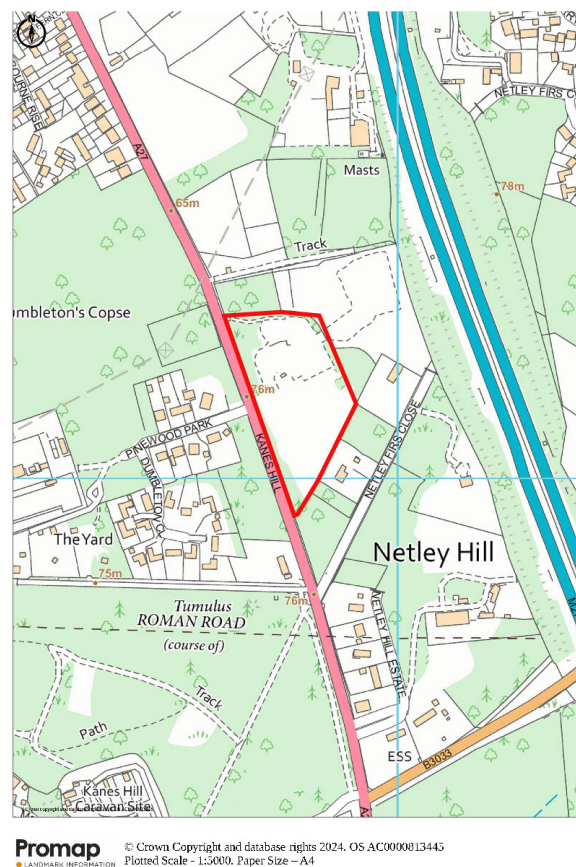


Figure 1 Site Location Plan

Client

1.5 The client is Hi-acre Construction

Contractor

1.6 The principal contractor is Hi-Acre Construction. Sub-contractors will be used for all works other than ground works, civil engineering and brickwork.

Local Planning Authority

1.7 The Site lies within the jurisdiction of Eastleigh Borough Council

Consultant Team

1.8 This CEMS has been prepared with technical advice and input from the following consultants:

Discipline	Company
Town Planning	Nova Planning Ltd
Ecology	Eco Support
Lighting	Hi-acre Construction
Noise	Clarke Saunders
Transport	PBA

2. Local Liaison

- 2.1 Hi-acre Construction will engage with the local community, so our neighbours have a level of understanding of our activities. Feedback will be encouraged to inform our activities on site.
- 2.2 A notice board will be placed at the site boundary providing contact information and scheme details. This will include programme information, contact details (Office and Site) and security arrangements.
- 2.3 For our neighbours on Kanes Hill, Netley Firs Close and Pinewood Park and the surrounding area, we will issue newsletters containing specific information about our activities. Copies of these newsletters will be available on the site notice board.
- 2.4 Once permanent welfare facilities are established residents will be offered the opportunity to visit the site office to meet the project team, raise any issues and view drawings.
- 2.5 To assist in the above, the project will be included into the Considerate Constructor Scheme with a target of 33 points being set.
- 2.6 Our neighbours will be encouraged to communicate with Hi-Acre Construction either directly with the site team or via the head office, any feedback or complaints received will be addressed and managed by the Project Manager with a log held on site detailing any actions required and the outcome.

3. Project details

a) Programme, phasing, and methods of the demolition and construction work, including roads, footpaths, landscaping and open space;

- 3.1 Site clearance and preparation will commence in October 2024 and will last for 6 months. The construction phase will begin in 2025 and is expected to last for 5 years.
- 3.2 Demolition will be carried out using the machinery listed below. Demolition work, deliveries and removal will only take place between 0800-1800 Monday to Friday and 0900-1300 on Saturdays. These activities will not take place on Sundays or Bank Holidays. This is in accordance with Condition 28 of outline approval reference O/18/82750.
- 3.3 The construction phase will be separated into six parts, as follows:
- Site preparation
 - Roads and sewers
 - Groundworks
 - Buildings
 - Final surfacing and footpaths
 - Landscaping
- 3.4 The plant and machinery used on site during the site preparation and construction phases will include:
- 3.5 During the site preparation phase:
- 6no. 360 degree excavators
 - 2-4no. front tipping dumpers
 - 2no. concrete crusher
- 3.6 Balance of works:
- 6-10no. 360 deg excavators
 - 6-10no. front tipping dumpers
 - 2no. 1-3 ton roller
 - 2no. telescopic forklift
 - 2no. 35 ton crane
- 3.7 It should be noted that these are estimated numbers for plant and machinery, which may vary during the course of the development. All plant and machinery will be used and maintained by fully qualified operatives.

3.8 Construction work will take place between 0800-1800 Monday to Friday and 0900-1300 on Saturdays. No construction work will be carried out on Sundays or Bank holidays. This is in accordance with Condition 28 of outline approval reference O/18/82750.

3.9 Landscaping will take place towards the end of the construction phase, once the employment units are largely complete. This is to enable the retention of areas for the storage of building materials, plant, machinery and operative parking. The landscaping proposals mean that soil, trees and plants will be imported onto the site and planted in accordance with approved plans. Landscaping works will only take place between 0800-1800 Monday to Friday and 0900-1300 on Saturdays. No landscaping work will be carried out on Sundays or Bank holidays. This is in accordance with Condition 28 of outline approval reference O/18/82750.

b) Ecological considerations regarding the timing and methodology of vegetation clearance and refugia removal (for example, with regards to breeding birds and reptiles)

3.10 Please see Ecology Construction Environmental Method Statement at Appendix 1

c) the location of temporary site buildings, compounds, construction material storage areas and plant storage areas to be used during demolition and construction;

3.11 There will be a site compound where building materials will be stored as shown on Figure 2 below and enclosed at Appendix 2. Some materials will be stored in pre-designated areas to minimise the need to transfer material again to where it will be used. All materials will be stored neatly and appropriately in such a way to prevent double handling and minimise further movement and waste.

3.12 All storage of fuel/chemicals will be on hard surface areas which are bunded (or drip trays provided) to protect the ground from the impact of any potential spillages.

3.13 Parking for HGVs will be located as shown on Figure 2.

3.14 Temporary buildings will be provided for office and welfare purposes, as well as toilet facilities for staff and contractors. The location of these is shown on Figure 2.

3.15 Figure 2 below shows designated areas for storage, parking and temporary buildings.



Figure 2: Site Setup Plan

d) location of temporary fencing to protect retained habitat (including trees)

3.16 A Phase 1 Ecological Assessment was carried out as part of the outline planning application. This identified that habitat on site includes trees and woodland providing roosting and foraging potential for bats and semi improved grassland, tall ruderals and potential hibernacula providing suitable reptile habitat. With these considerations in mind, it is proposed that tree protection fencing will be installed prior to any site clearance or demolition. The details of this fencing will be provided through the discharge of Conditions 13 and 14 of O/18/82750, which require details and evidence of the tree protection measures provided. In accordance with these conditions, this information will be provided before any excavation, demolition or development related works take place on site. Tree protection measures will be in accordance with the recommendations from the Phase 2 Ecological Survey (paragraph 6.3) which state that:

Removal of, or physical disturbance to existing woodland margins and standard trees should be avoided wherever possible. This will require a stand-off zone of at least 5m between any machinery and retained woodland habitat and, if necessary, the erection of suitable fencing (e.g. Heras) to protect these areas during the construction phase of the development.

3.17 The Phase 2 Ecological Survey concluded that there were no reptiles within the boundary habitats and therefore, no mitigation was required.

3.18 Please also see Ecology Construction Environmental Method Statement at Appendix 1

e) the arrangements for the routing/ turning of lorries and details for construction traffic access to the site:

Vehicle Routing

3.19 The construction routing plan has been meticulously designed to optimise the efficient access of heavy goods vehicles (HGVs) to the strategic road network. This routing ensures that HGVs stay on the strategic road network as much as possible.

3.20 The site is located approximately equidistant between M27 Junction 8 and Junction 7. Therefore, vehicles travelling south/east will leave and arrive at the compound from the south via Kanes Hill (A27). Vehicles will then utilise Windhover Roundabout and the A3024 to arrive from/reach the M27 at Junction 8. Alternatively, vehicles travelling north or west will leave and arrive at the compound from the north via Kanes Hill (A27). Vehicles will then utilise Kanes Hill Roundabout and Charles Watts Way to arrive from/reach the M27 at Junction 7. This split between the two M27 junction means that the impact of construction traffic can be split between Windover and Kanes Hill roundabouts.

3.21 The proximity to both M27 junctions 7 and 8, and the A27 means that construction traffic can quickly access the strategic road network, minimising the impact on local roads. However, care will be taken to manage vehicle movements during peak hours to avoid adding to potential congestion at the nearby Windhover Roundabout. This route is considered the most appropriate route and avoids constrained roads or roads unsuitable for HGVs. The figure below displays the proposed HGV route from the construction access to the Strategic Highway Network.

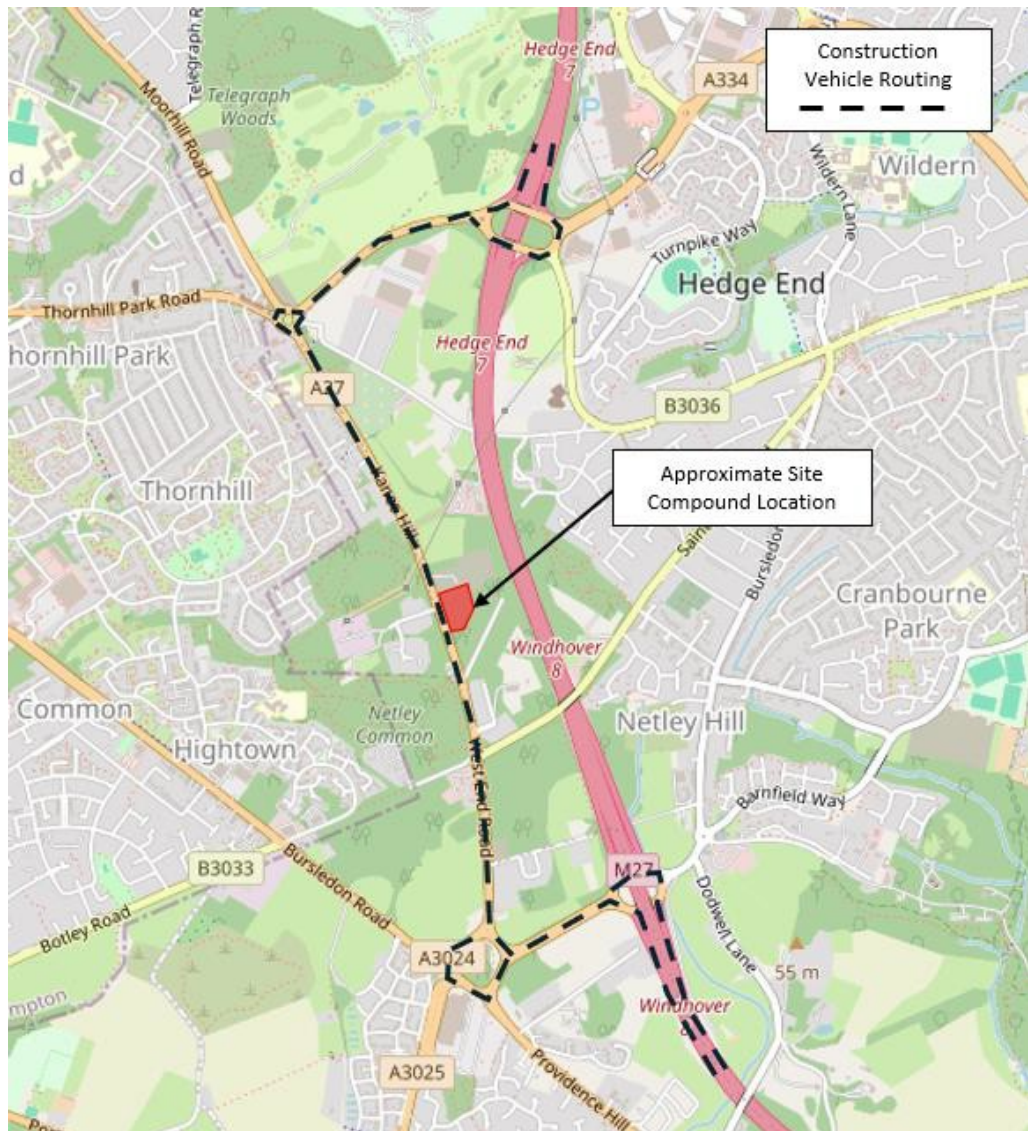


Figure 3: Construction Vehicle Routing

3.22 Construction traffic will be asked to follow this route, with details sent to all subcontractors/delivery companies informing them of the access arrangements and permitted working hours. Temporary directional signage will be installed to assist the drivers if deemed necessary. Therefore, construction vehicles are not anticipated to have an adverse effect on the operation of the local highway network.

3.23 It is not foreseen that any additional temporary traffic management measures are required either in the vicinity of the development site, or on the wider highway network, however should this change, the client will contact the HCC's Traffic Management Team as appropriate.

Site Access and Turning

3.24 Construction vehicles will enter and exit the site from the A27. Within the site, a dedicated construction compound will be established with ample space for vehicle manoeuvring. Detailed swept path analysis has been conducted, confirming that the site entrance and internals can accommodate the largest

anticipated vehicles, 16.5m articulated vehicles. This analysis is shown within drawing numbers 219.0003-0001-P01 and 219.0003-0002- P01 available at Appendix 3. These drawings demonstrate that these vehicles can safely enter, turn within the site, and exit in a forward gear. To ensure safe manoeuvring, a qualified banksman will be on hand if necessary to supervise vehicle movements during peak periods or if oversized deliveries are expected.

f) the arrangements for deliveries associated with all construction works, loading/unloading of plant & materials and restoration of any damage to the highway including vehicle crossovers and grass verges);

3.25 A comprehensive delivery management system will be implemented to minimise disruption to local traffic flows and ensure efficient site operations. All deliveries will be coordinated through a pre-booking regime, allowing site management to spread arrivals throughout the day and avoid peak traffic hours where possible. This system will help maintain on-site storage at optimal levels while reducing the likelihood of delivery vehicles queuing on the public highway.

3.26 The total number of construction vehicle trips is not expected to exceed a maximum of 60 per day (30 arrivals and 30 departures). This includes all deliveries and collections of materials and equipment, which will be scheduled on an "as-required" basis and vary through the construction programme.

3.27 Upon arrival at the site, all delivery vehicles will be directed to designated unloading areas within the site compound, well away from the public highway. The site setup plan illustrates the layout of these areas, ensuring adequate space for the safe unloading of materials using appropriate plant and equipment. If larger or specialised deliveries are required, detailed method statements will be prepared in advance and communicated to all relevant personnel to ensure safe and efficient handling.

3.28 Throughout the construction phase, the condition of the public highway, including any nearby kerbing and adjacent verges, will be closely monitored. Any damage attributable to construction traffic will be repaired at the contractor's expense.

g) the parking of vehicles of site operatives and visitors;

3.29 As illustrated in the site setup plan, 14 parking spaces have been designated within the site compound to accommodate the vehicles of all staff, contractors, and visitors. This arrangement has been carefully planned to prevent any overspill parking on surrounding residential streets or public highways. The number of these parking areas have been determined based on a thorough assessment of anticipated peak demand.

3.30 To ensure compliance with our parking strategy, all contractors will be briefed on the required parking behaviours upon appointment. The site manager will maintain a log of any instances of inconsiderate parking, with the authority to remove repeat offenders from the project if necessary.

3.31 In the unlikely event that parking demand exceeds provision, areas within the site where additional temporary parking can be created if required have been identified.

3.32 To maximise the efficiency of the parking arrangements, a system of staggered arrival and departure times for site personnel. This approach will help to spread parking demand throughout the day. Furthermore, sustainable travel will be actively promoted to staff personnel to reduce overall parking demand. This will include promoting car-sharing schemes among site staff and contractors and providing information on local public transport options, including nearby bus routes. The site is served by public transport, with bus stops located approximately 1000m from the site entrance on Tunstall Road to the west of the site accessed through Netley Common or at Moorhill Gardens to the north of the site. These stops provide connections to Southampton City Centre via the every 10 minute Bluestar 18 service at Tunstall Road and to Eastleigh and Southampton City Centre via the hourly Bluestar 3 bus services.

h) the provision for storage, collection, and disposal of rubbish from the development during the construction period;

3.33 Hi-acre Construction is committed to reducing waste on site, reusing and recycling as much as possible. When appropriate, existing material from the demolition is re-used or recycled. All concrete materials are crushed for re-use and where possible any other recyclable material is taken to a certified recycling waste depot for re-use. The aim is to reuse or recycle 95% of waste rather than transfer it to landfill. Landfill will be used as a last resort.

3.34 Waste separation during construction is implemented by use of allocated bins for plasterboard, hardcore etc. and stored in pre-designated areas.

3.35 Timber is procured from sustainable sources. All procured timber is certified by either the Forest Stewardship Council or the Programme for the Endorsement of Forest Certification (PEFC), ensuring that the wood we use to build homes is sourced responsibly.

3.36 Where possible Hi-acre will work with suppliers who can provide recycled materials, which are rigorously tested to ensure high quality.

i) measures to prevent mud and dust on the highway during demolition and construction, including wastewater drainage arrangements for any wheel washing facilities;

3.37 To ensure that mud and debris is not carried onto the surrounding highway network, wheel washing facilities will be provided on site. The wheel washing station will be located close to the site access to reduce dirt and dust. A vehicle marshal will be used to inspect the wheels of all vehicles prior to leaving the site, and to hose off mud, dust or silt contaminate prior to the vehicle leaving the site. A standard hose will be used as it is more controllable than other methods and uses less water. Water arising from

wheel cleaning will be filtered within the site prior to being drained. No water arising from wheel cleaning will discharge onto the public highway.

3.38 Vehicles entering and exiting the site will be covered to prevent the escape of materials during transport. Hard-surfaced haul route will be installed and similarly maintained with regular dampening and cleaning. Regular inspections of on-site haul routes will be conducted to ensure their integrity, with repairs initiated as soon as reasonably practicable. All inspections of haul route, which are regularly dampened using either fixed or mobile sprinkler systems or mobile water bowsers, will be recorded, and the routes will be regularly cleaned.

j) temporary drainage proposals

3.39 All works where there is a risk of pollution to the environment will be done so in accordance with Hi-Acres environmental management system to ensure compliance with the Control of Pollution Act 1974.

3.40 Where possible water will not be abstracted from excavations. However, if this is required all water will be pumped through a silt buster to remove any possible contaminants and silt before discharging into another area of the site or drainage system. In the event this is required the quality of the water will be monitored regularly to ensure there are no signs of contaminants.

3.41 Groundwater was not encountered during the site investigation. Groundwater monitoring wells were installed within boreholes and monitored on four separate occasions between 21 August 2019 and 7 October 2019 detailed in the Ground Appraisal Report (ref: GE18367/GAR/OCT19). During this monitoring groundwater was only found to be present in one location at between depths of 1.45m and 2.54m bgl. Where works require excavation below this level and groundwater is encountered a dewatering strategy will be implemented to ensure there is no risk of contamination from the works being completed.

3.42 The Ground Appraisal Report confirms that there are no water abstraction points on or within a 500m radius of the site.

3.43 There are no watercourses located within the site boundary, the closest surface water feature was located approximately 252m to the east of the site and is thought to comprise a stream. The Envirocheck data indicated the subject site to be located outside the extent of flooding to extreme flooding from rivers.

3.44 To ensure construction activities do not affect any watercourse the below controls will be adopted throughout the project.

- Fuel bowsers will be double bunded with a 110% bund capacity and located on top of an impermeable surface to prevent any spillages leaking into ground.
- Small items of plant and fuel will be stored on top of bunds/plant nappies to contain any spillages.

- As well as the above all works will be completed in compliance with Hi-Acre's COSHH Procedure, and Guidance Note of the monitoring of groundworks which is expected to pose the most risk.
- A dedicated plant refuelling area will be created on a hardstand and located away from any sensitive receptor to eliminate any contaminants leaking into the groundwater.
- All COSHH substances will be stored within bunded and locked COSHH cabinets and as per their specific COSHH assessment.
- Emergency spill kits will be available in the event of a small spillage and an emergency spill contractor will be appointed and will attend in the event of a larger spillage.
- All plant and equipment will be inspected for leaks on a daily basis.
- Small items of plant (e.g. Genny's) will be located on drip trays so as to contain any spillages.

3.45 Where possible proprietary washout systems will be promoted with site contractors as a means of concrete washout. However, as a minimum standard a lined skip will be used for concrete washout. The skip will be monitored on a regular basis to ensure there are no spillages.

3.46 Throughout the course of the project the level of surface water runoff will be monitored for both quantity and quality (contaminants/Silt). In the event of severe continuous rainfall, settlement ponds will be created at the lowest part of the site following the natural contours of the ground with temporary drainage routing overland runoff into the ponds. After allowing the silt to settle, water will be pumped out through a silt buster to remove further contaminants before being discharged elsewhere in the site. No contaminated or runoff water will enter the woodland to the north of the site. Regular visual inspections and monitoring of the woodland to the north of the site shall be undertaken during the construction phase. Pollution prevention equipment will be kept in the construction area and procedures for use put in place.

3.47 Sediment traps/basins should be installed prior to any major earthworks or regrading of the land take place and additional sediment traps and/or silt fences should be installed as ground works are occurring to keep sediment contained within appropriate locations.

k) the erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate;

3.48 Due to the enclosed nature of the site, temporary security fencing will be provided at the site entrance and along the boundary of Kanes Hill only. Fencing will be maintained and if necessary, relocated appropriately as the site progresses to enable the earlier occupations to take place safely. There are existing boundary treatments around the site and any existing openings will be addressed prior to the commencement of demolition to ensure the site boundaries are secure.

3.49 Secure gates will be provided at the site entrance to prevent unauthorised access.

3.50 A public viewing panel will be created at the site entrance. The exact location may vary as the development progresses and fencing is relocated accordingly.

l) temporary lighting:

3.51 Where artificial lighting is required during winter working, lights will be directed and screened to reduce spillage. The use of artificial lighting will be restricted to that which is necessary for operatives to work during the winter months and enter/leave the site in safety in line with the permissible hours of operation secured by condition 28 of outline approval reference O/18/82750. This will avoid the use of unnecessary lighting during the more sensitive nighttime period.

3.52 Lighting will be provided for security purposes as necessary.

m) protection of pedestrian routes during construction

3.53 Ensuring the safety of pedestrians in the vicinity of the construction site is a top priority throughout the project. Where possible, the existing pedestrian route across the site access will be maintained with minimal disruption. Any damage resulting from construction will be made good by the developer.

3.54 No temporary pedestrian diversions are anticipated as part of construction.

3.55 For authorised visitors and site personnel, clearly marked pedestrian routes will be established within the construction site. These routes will be physically separated from vehicle movement areas, well-lit, and maintained to ensure they remain free from trip hazards. High-visibility signage will be used to guide pedestrians and remind site operatives of pedestrian presence.

n) details of safe vehicle and plant manoeuvring practices, including reversing, which do not rely on audible alarms.

3.56 To ensure the highest standards of safety for both site personnel and the surrounding community, a comprehensive strategy for safe vehicle and plant manoeuvring will be implemented throughout the construction phase. This strategy places particular emphasis on minimising the need for reversing and reducing reliance on audible alarms.

3.57 In instances where reversing cannot be avoided, the following measures will be implemented:

- i. Specific zones will be allocated for necessary reversing manoeuvres, kept clear of pedestrians and obstacles.
- ii. Qualified banksmen will be employed to supervise all reversing operations, using established hand signals to guide drivers.

3.58 For the safe operation of plant and machinery on site:

- i. Clear exclusion zones will be established around operating plant, marked with physical barriers and signage.
- ii. A spotter system will be implemented for all blind lifting operations and when operating in confined spaces.

3.59 All site personnel, including visiting drivers, will receive comprehensive induction training covering the site's safe manoeuvring practices. This will include:

- i. Familiarisation with the site layout and traffic management plan
- ii. Understanding of hand signals used by banksmen
- iii. Awareness of pedestrian routes and exclusion zones
- iv. Proper use of visual aids and communication systems

3.60 Regular toolbox talks will be conducted to reinforce these practices and address any emerging issues

Appendix 1 – Ecology Construction Environmental Method Statement



Ecology Construction Environmental Method Statement

Netley Firs, Kanes Hill

Ecosupport Ltd
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Daedalus Park,
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Report	Construction Environmental Method Statement (CEMS)
Site Name	Netley Firs, Kanes Hill
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Checked By	Darrelle Moffat BES (Hons) PGCert
Client	Hi-Acre Construction Ltd
Date of Issue	28 th August 2024
Status	Final copy ready for submission

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1.0 INTRODUCTION

1.1 Brief

This report has been produced to provide the ecological information required to discharge Condition 9 of the outline planning permission O/18/82750, for the demolition of existing buildings and erection of 23 employment units (up to 5,905 sq.m.) with units 12-20 for Use Class B1 (b) and (c) and units 1-11 and 21-23 for Use Class B2, with associated car parking and access which requires the production of a Construction Environmental Method Statement (CEMS). At this stage the buildings have already been removed. Condition 9 states:

“No construction, site clearance or demolition work shall start until a Construction Environment Method Statement has been submitted to, and approved in writing by, the Local Planning Authority. Demolition and construction work shall only take place in accordance with the approved method statement which shall include:

- a) a programme, phasing, and methods of the demolition and construction work, including roads, footpaths, landscaping and open space;*
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- e) the arrangements for the routing/ turning of lorries and details for construction traffic access to the site;*
- f) the arrangements for deliveries associated with all construction works, loading/ unloading of plant & materials and restoration of any damage to the highway including vehicle crossovers and grass verges);*
- g) the parking of vehicles of site operatives and visitors;*
- h) the provision for storage, collection, and disposal of rubbish from the development during the construction period;*
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- j) temporary drainage proposals*
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- n) details of safe vehicle and plant manoeuvring practices, including reversing, which do not rely on audible alarms.*

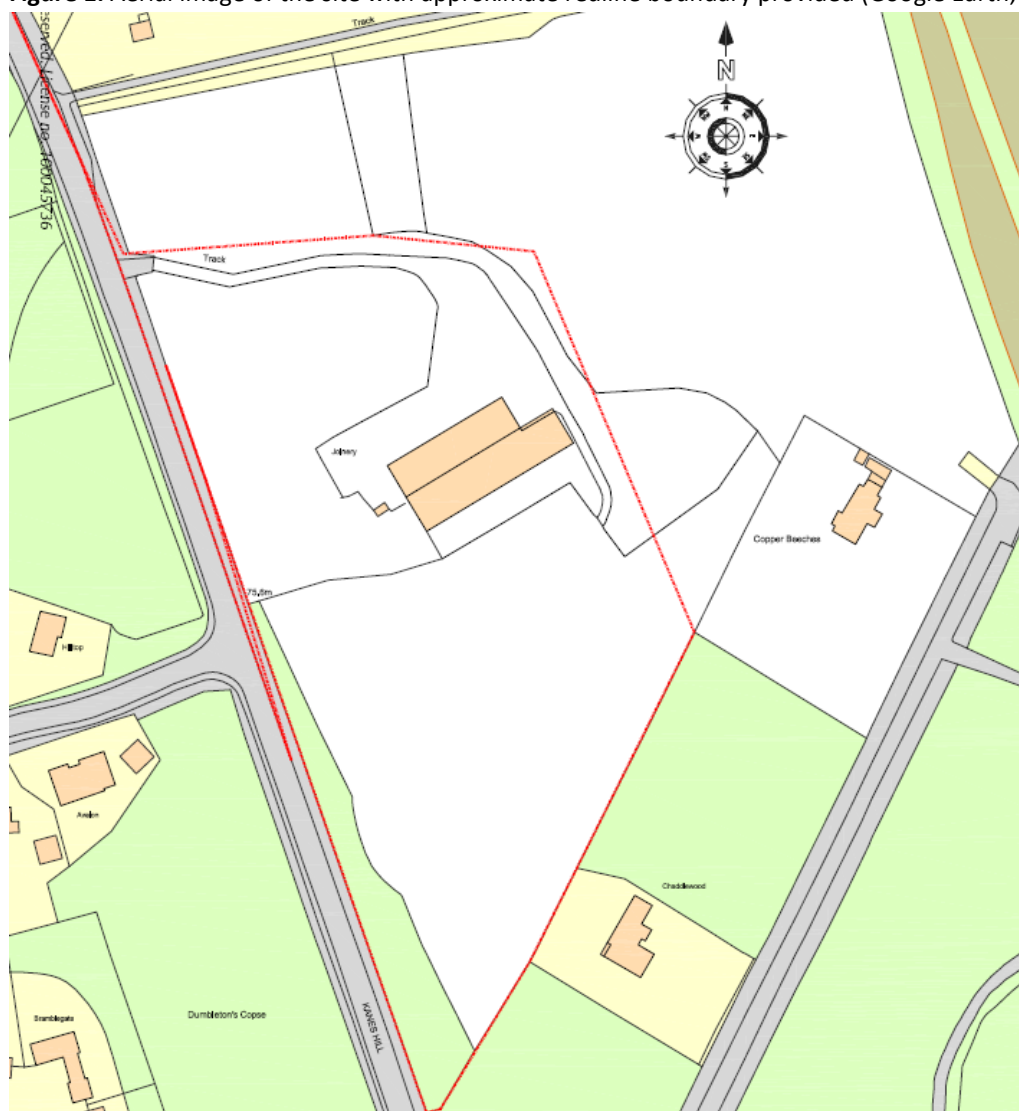
Reason: To limit the impact the development has on the amenity of the locality.”

1.2 Location

The site is approx. 3.7ha and formerly contained two large derelict commercial buildings with an additional brick built building located at Netley Firs, Kanes Hill, Southampton, SO19 6DX (centred on OS grid reference SU 47891 12097) (**Fig 1**). A mosaic of tall ruderal and semi- grassland habitats are present on the north east and south of the site. Scattered groups of mature/over-mature trees are present in the north and east of the site. The site is bounded by semi-natural broadleaved woodland along the southern, eastern, northern and western boundaries, whilst the north-eastern boundaries are comprised of a thin and broken line of trees. A large proportion of the site has been recently cleared (approx. 1ha), leaving areas of bare ground, particularly around the footprints of buildings that were previously on site.

In the wider landscape the site is located within the eastern suburbs of Southampton with Netley Common and Dumbleton's Copse to the west. Allotment gardens and associated grassland habitats are present in the north, a large residential estate lies to the east and a small holding of residential properties lie to the south of the site. The M27 (to the east), Netley Firs Road (to the south) and Kanes Hill Road (to the west) run immediately adjacent to the wooded site boundaries.

Figure 1. Aerial image of the site with approximate redline boundary provided (Google Earth, 2022).



1.3 Aim

The aim of the CEMS is to protect the ecological interests on the site. This report details the approach which construction workers will adopt in dealing with the potential ecological impacts associated with various construction activities. The approved CEMS shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

1.4 Activities

Both outline (O/18/82750) and reserved matters (RM/24/96794) planning permission is granted for the demolition of existing buildings and erection of 23 employment units (up to 5,905 sq.m.) with units 12-20 for Use Class B1 (b) and (c) and units 1-11 and 21-23 for Use Class B2, with associated car parking and access.

There will be significant habitat creation for biodiversity, including native shrub planting, understorey infill planting, native tree planting.

1.5 Structure of this Report

Section 2.0 provides information on the ecological features which required protection during construction. **Section 3.0** onwards then details specific measures that can be implemented to manage construction in order to prevent impacts arising.

1.6 Survey Work

The initial field survey work which forms the basis of the findings of this report was carried out by Pro Vision Ecology in June 2017 with phase II surveys taking place June 2017 – September 2017.

2.0 ECOLOGICAL BASELINE

2.1 Habitats (Area of Impact)

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described with JNCC (2010). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise:

- Semi-natural Broadleaved Woodland (**Figs 2-4**)
- Semi-improved grassland (species-poor) (**Fig 5**)
- Tall Ruderals (**Fig 6**)
- Standard trees (**Figs 7 & 8**)

Figure 2. Indicative photo showing the northern woodland boundaries (Pro Vision, 2017).



Figure 3. Indicative photo showing the eastern woodland boundaries (Pro Vision, 2017)



Figure 4. Indicative photo showing the western woodland boundaries (Pro Vision, 2017).



Figure 5. Indicative photo showing the southern patch of semi-improved grassland (Pro Vision, 2017).



Figure 6. Indicative photo of ruderal habitats in north east of site (within area highlighted red) (Pro Vision, 2017).



Figure 7. Indicative photo of tree groups in north of site (Pro Vision, 2017).



Figure 8. Indicative photo of tree groups in east of site (Pro Vision, 2017).



2.2 Badgers

No evidence of badger (*Meles meles*) dung pits, latrines or foraging signs ('snuffle holes') was found during the survey.

2.3 Bats

2.3.1 Pre-existing data

HBIC provided records for the following bat species recorded within 1km of the site: Brown long-eared Bat (*Plecotus auritus*), Noctule (*Nyctalus noctula*), Soprano Pipistrelle (*Pipistrellus pipistrellus*) and Serotine (*Eptesicus serotinus*).

2.3.2 Preliminary Roost Assessment (Buildings)

Within the Kanes Hill site boundary there were three buildings present, two of which are former commercial buildings and one other small toilet building. The proposals will result in the removal of all three buildings within the site boundary. These buildings have all been demolished and the site has been prepared for development. All buildings were recorded as having 'negligible suitability' to support roosting bats

2.3.3 Preliminary Roost Assessment (Trees)

Eight trees were assessed as having suitability to support bat roosts on site.

Tree 1 - Over-mature pedunculate oak was identified as providing 'moderate' roosting potential for bats. The tree supported a frost crack (a tree growth fault initiated from the base of the tree) on the eastern aspect which leads into a trunk cavity. A knot hole (approx. 3m high) with a potential cavity was also noted on the western aspect.

Tree 2 – Mature pedunculate oak was assessed as having 'moderate' roosting potential due to a large knot hole at approximately 5m high on the east facing limb. The entrance was approx. 15x15cm and potentially lead into a branch cavity. Additional knot holes (approx. 4m high), with a approx. 3x3cm entrance leading into a potential cavity, were also present on a west facing dead limb.

Tree 3 – Mature common beech was assessed as having 'high' bat roosting potential. Features present include a large trunk cavity initiated from a frost crack hole at the base of the tree. The cavity continues up the main trunk and opens out again into a split 7m high on the southern aspect. A knot hole is also present 8m high on an additional south facing limb.

Trees 4-8 - Four pedunculate oak and a single sweet chestnut were classed as providing 'low' roosting potential. Features of interest include small knot holes (entrance 3-5cm), broken limbs and limited loose bark.

2.3.4 Bat Activity Transects & Static Monitoring Surveys

Seven bat species have been recorded and noted during the static bat detector and walked transect surveys. These include Barbastelle (listed under Annex II of the Habitats Directive), a Long-eared Bat which recorded on the automated static bat detector only, Common Pipistrelles,

Serotine, Soprano Pipistrelles, Noctule and *Myotis* species (possible Whiskered/Brandt's) were recorded on site during both the static and walked transect surveys.

The most regularly used linear habitats by foraging and commuting bats were the woodland margins along the northern, eastern and southern site boundaries. The higher usage of these areas would suggest their importance to foraging bats (particularly Common Pipistrelle) along these edge habitats and for commuting bats using the site from adjacent habitats. Very little activity was recorded within the centre of the site (comprising of semi-improved grassland and ruderal habitats interspersed with areas of recently cleared land) and along the least botanically diverse boundary habitats (Rhododendron shrubs), particularly along the western site boundaries. This suggests that these areas are not used extensively by foraging or commuting bats.

The surveys undertaken provided coverage in the months of June to October 2017, and April to May 2018, which are considered to cover the peak of the maternity season for common and rarer bat species likely to be found in the local geographic area.

The site has been shown to support bat activity from seven different species. The surveys demonstrate that the main habitat features of the site used for commuting and foraging bats are the woodland margins along the northern, eastern and southern site boundaries. The survey results indicate that areas in the centre of the site are of lower ecological significance to bats.

2.4 Breeding & Nesting Birds

The woodland boundaries and mature trees on site offer potential foraging and nesting habitat for a range of bird species.

2.5 Barn Owls

Prior to their demolition all buildings together with retained trees were inspected in accordance with current survey guidelines (Shawyer, 2011). No evidence of barn owls was recorded and the mature trees on site did not possess any cavity entrances large enough to support barn owls.

Habitats within the site boundaries and immediately adjacent to the application site boundaries include semi-improved grassland fields (with a limited tussock structure), field margins and woodland margins. ***It is considered that these habitats together support characteristics associated with Type 3 (poor suitability) barn owl foraging habitat.***

2.6 Dormice

No evidence of dormouse nest building or Hazel (*Corylus avellana*) was found during the survey. Semi-natural broadleaved woodland is confined to the site boundaries but is directly connected to larger areas of more suitable woodland habitat to the west, south and east of the site (covering an approx. area of 40ha). However, woodland boundaries on site provide limited opportunities for dormice due to the lack of fruit/nut bearing plant species for foraging and nesting within the understory. Most of the woodland supports invasive species (Rhododendron and Cherry Laurel), therefore the majority of the foraging and nesting opportunities are confined to the upper canopy

including pedunculate oak. Semi-natural woodland boundaries will be retained through the proposals. Thus, retaining commuting links between areas of more suitable habitat in the local landscape.

2.7 Great Crested Newts

No HBIC records of GCN have been returned within 1km of the site. No ponds were present within the site boundaries. Investigation of the area via OS 1:25000 scale maps revealed a single pond within 500m of the site. The pond is located approximately 270m south east of the site. It is surrounded by intensively farmed land and associated hedgerow networks and is isolated from other ponds as it is the only pond present within 500m of the site. This pond is separated from the site by the M27 motorway, a major barrier to the dispersal of amphibians.

2.8 Reptiles

2.8.1 Pre-existing Data

Six records of Slow Worm, two records of Adder (*Vipera berus*) and a single record of Common Lizard were returned within 500m of the site boundaries. Most of these observations were recorded within Netley Common SINC.

2.8.2 Site Assessment

HBIC records of adder, slow worm and common lizard have been returned within 500m of the site. In addition, no evidence of reptiles was found on site at the time of survey. A combination of habitats on site including tall ruderals semi-improved grassland and woodland boundaries provide good suitability for reptiles. Tall ruderals and semi-improved grassland interspersed with bare ground provide a good vegetation structure for foraging and basking reptiles. However, grassland habitats provide limited opportunities on site due to a lack of tussocky grass structure. Suboptimal opportunities within the grassland are confined to the boundaries and within close proximity to tall ruderal habitats. Given the habitats on site, there is likely to be a good assemblage of invertebrate prey, therefore species likely to be encountered are the slow worm, common lizard and grass snake. Hibernacula (approximately 5x5m) in the form of rubble piles are scattered mostly to the south of Building 2 on site and provide refuge and hibernation opportunities for reptiles. An additional hibernaculum (in the form of an earth bank) is also present bordering the north-eastern site boundaries.

2.8.3 Phase II Reptile Surveys

The Phase II reptile surveys conducted July – September 2017 recorded no reptiles within the boundary habitats surrounding the development site. As no evidence of reptiles was observed during the surveys, it is concluded that the site is unlikely to support a population of reptiles (Froglife, 1999; HGBI, 1998).

2.9 Terrestrial Invertebrates

Numerous HBIC records of protected and notable invertebrate species were returned within 1km of the site. However, notable invertebrates that have been recorded and are likely to use the site include stag beetle due to the abundance of over-mature trees and associated standing dead wood. It is considered unlikely that the majority of the site contains protected or notable

invertebrates due to low diversity of plant species present on-site and the unsuitability of the habitat due to recent clearings.

3.0 SPECIES SPECIFIC MITIGATION

The following chapter addresses the species-specific mitigation that will be included within the proposed development to provide appropriate protection to species found within the site.

3.1 Badgers

No Badger setts were identified on site therefore specific mitigation is not required. However, a pre-commencement walkover by a suitably qualified ecologist will be undertaken to identify Badger activity within the site. As a general precaution, during the construction phase any open excavations left overnight should either be covered to prevent commuting Badgers falling in or escape ladders should be used to prevent them from becoming trapped. Any open pipework should be checked and then capped nightly.

In case Badgers enter the site, any chemicals will be securely stored, so that Badgers cannot gain access to them.

In the unlikely event a Badger sett becomes established, an ecologist will be consulted immediately.

3.2 Bats

3.2.1 Trees with Potential For Roosting Bats

Eight trees were assessed as having PRFs which may support roosting bats. Should these trees require removal, a pre-works check will be carried out on the tree, with further surveys carried out if necessary. If roosting bats are identified, a European Protected Species licence (EPSL) must be obtained with appropriate mitigation and compensation as required in the EPSL method statement. If these trees with potential for roosting bats will be retained, they will be protected during works with protective tree fencing (as described below in **Section 3.3.2**).

3.2.2 Artificial Lighting

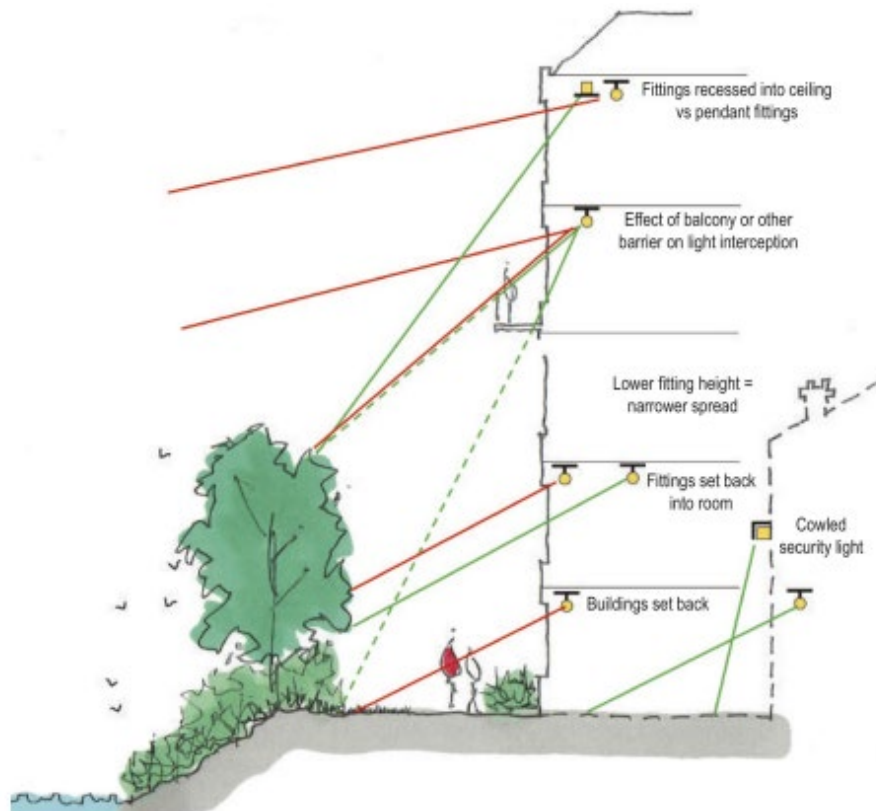
A document (*Guidance Note 08/23 Bats and Artificial Lighting at night*) has been produced via a collaboration between the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT), which outlines the latest recommendations to minimise the impacts of increased artificial lighting on bats. The key recommendations within this document have been outlined below and will be implemented provided there are no conflicts with any legal limits of illumination (in which case a suitable compromise should be reached).

‘Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- *All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used*
- *LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability*
- *A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component*

- *Light sources will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)*
- *Internal luminaires can be recessed (as opposed to using a pendant fitting - See **Figure 9**) where installed in proximity to windows to reduce glare and light spill*
- *Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges (see Case Study 1)*
- *Column heights will be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards*
- *Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01*
- *Luminaires will always be mounted horizontally, with no light output above 90° and/or no upward tilt*
- *Where appropriate, external security lighting will be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate*
- *Use of a Central Management System (CMS) with additional web-enabled devices to light on demand Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS*
- *The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues. See Case Study 6*

Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely'

Figure 9. Internal lighting mitigation options (ILP 2023).

3.3 Birds

3.3.1 Avoidance of Impacts to Nesting Birds

In order to avoid disturbance of nesting birds or damage to their nests, clearance of any shrubs should be undertaken outside of the bird-nesting season (typically March to August, dependant on the weather). If this is not possible, sections to be cleared should be thoroughly checked by an ecologist immediately prior to clearance acting in an Ecological Clerk of Works (ECoW) capacity. If any active nests are found they should be left undisturbed with a suitable buffer of undisturbed vegetation (ca. 5m) until the nestlings have fledged.

3.3.2 Protection of Trees Prior to, During and Post-Development

Removal of, or physical disturbance to existing woodland margins and standard trees should be avoided wherever possible. This will require a stand-off zone of at least 5m between any machinery and retained woodland habitat and, if necessary, the erection of suitable fencing (e.g. Heras) to protect these areas during the construction phase of the development.

4.0 WATER QUALITY

The quality of stormwater and groundwater can be negatively impacted during construction activities. There is a risk that polluted water, generated during construction, could impact upon the nearby waterbodies.

Some general practical measures and sensitive working practices with regard to water quality are provided in **Table 1** below.

Table 1. Practical measures and sensitive working practices involving water during construction.

Issue(s) to Control	Best Practices to be Adopted
Stormwater polluted with debris /chemicals	• Minimise the areas of exposed ground • Locate siltation traps at key points on the site and discharge all runoff through the traps. • Provide adequate drainage channels lined with impervious material. • Ensure integrity of hoarding to prevent uncontrolled discharge to stormwater drains outside site boundaries. • If it is not possible to install temporary water drainage works, as above, use sand bags (and sealed hoarding) to divert site water run-offs to siltation tank and water treatment systems. • Avoid carrying out earthworks during the rainy season and if is not avoidable ensure that the works are kept to a minimum. • Surround earthworks by dykes or embankments for flood protection and cover earthworks as appropriate. • To prevent soil erosion, compact earthworks final surfaces and perform subsequent permanent work/surface protection immediately after surface formation and provide appropriate drainage. • Cover and seal manholes (including newly constructed ones). • Ensure that the road from the wheel washing facilities to the end of the site is paved with backfall to prevent runoff of wash water.
	Sedimentation Tanks: • Position sediment tank upstream and downstream of the culvert sections in order to minimise sediment loading. • Ensure out flow from the sediment traps is low enough and trap design allows for settling of deposits at bottom • Design sediment traps taking into account seasonal variations in rainfall. • Control water flow into the tank to allow for sedimentation by provision of additional retention tanks.

Issue(s) to Control	Best Practices to be Adopted
Concrete	• Recycle wastewater from washing of mixer trucks, drum mixers and similar equipment wherever practical to minimise wastewater discharge. • Treat all contaminated surface water from concrete operations with appropriate facilities.

5.0 AIR QUALITY

Construction activities have the potential to impact on air quality (i.e. through the production of dust). Construction activities are associated with the generation of nuisance dust (larger particles) generated during earthworks and PM₁₀ emissions. The larger particles tend to fall out quickly and therefore the impacts are generally most likely to be felt within 200m of the site (Bureau Veritas, 2013). This has potential to negatively impact upon sensitive habitat receptors. **Table 2** provides a selection of techniques in order to prevent/minimise this.

Table 2. Practical measures and sensitive working practices involving air pollution control.

Issue(s) to Control	Best Practices to be Adopted
Emission of Dark Smoke from Equipment	• Conduct routine and major maintenance in accordance to manufacturer's instructions, and maintain records of all inspections and maintenance works. • Use fuel of quality specified by manufacturer/supplier. • Shut down all vehicles and plant in intermittent use between work periods or throttle down to a minimum idling speed (if the former is not possible).
Open Burning on Site	• Forbid open burning of wastes
Dust Emission from Construction Activities	General requirements: • Operate air pollution control equipment properly and effectively, in accordance to manufacturer's instructions. • In the event of a malfunctioning or breakdown of any air pollution control equipment, suspend the plant, process(s) or activity(s) concerned as soon as practicable until the equipment is restored to its proper function.
	Site boundary and entrance: • Provide vehicle washing facilities at the vehicle exit point.
	Access road (main haul road): • Pave with concrete, bituminous materials, hard core or metal plates, and kept clear of dusty materials; or • Spray with water frequently; • Keep the portion of any road leading only to a construction site that is within 30m of a discernible or designated vehicle entrance or exit clear of dusty materials.
	Exposed earth: • Treat properly by applying water spray, surface compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or temporary covers. • Schedule construction programme to complete works on open areas as quickly as possible.
	Dusty materials: • Dispose of cement, pulverized fuel ash or any other dusty materials collected by fabric filters or other air pollution control system or equipment in totally enclosed containers.

Issue(s) to Control	Best Practices to be Adopted
	Stockpile of dusty materials: • Cover stockpile over 50m³ entirely by impervious sheeting with enclosure extending at least 1 m above and beyond the stored materials. • Place in an area sheltered on the top and the 3 sides. • Spray with water.
	Loading, unloading or transfer of dusty materials: • Spray all dusty materials (except cement and PFA) with water immediately prior to any loading, unloading or transfer operation. • Control height from which excavated materials are dropped to a practical minimum.
	Pneumatic or power-driven drilling, cutting, polishing, breaking or crushing: • Spray water continuously on the surface during operation.
	Use of vehicles: • Wash every vehicle to remove any dusty materials from its body and wheels immediately before leaving the site. • Restrict vehicles to minimum practicable speed limits (< 10 km/h). • Where a vehicle leaving a construction site is carrying a load of dusty materials, cover the load entirely by clean impervious sheeting, which extends over the edges of properly fitting side and tail boards and dampen materials before transportation. • Make sure dusty materials are not loaded to a level higher than the side and tail boards.
	Excavation or earth moving: • Spray working area of any excavation or earth moving operation with water immediately before, during and immediately after the operation.
	Cement: • For every stock of more than 20 bags of cement cover entirely by impervious sheeting or place in an area sheltered on top and three sides. • For cement delivered in bulk, store in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line such that an audible alarm is triggered and the material filling stops within one minute. • Do not overfill silos used for the storage of cement • Carry out loading, unloading, transfer, handling or storage of bulk cement in an enclosed system or facility, and install effective fabric filter or equivalent air pollution control system on vent or exhaust systems.

6.0 NOISE, VISUAL & VIBRATION

Noise and visual disturbance can have a range of impacts upon ecology dependent upon the sensitivity of the species, the nature and duration of the noise and the timing of the disturbance. Noise associated with vegetation stripping will only be a temporary disturbance and is considered to only contribute to a very small proportion of the cumulative potential for wildlife disturbance associated with these activities. In addition to this, all works are expected to be restricted to daylight hours and therefore are unlikely to disturb nocturnal wildlife.

Activities associated with high levels of anthropogenic noise can re-structure animal communities (Barber et al. 2009). Reproductive, territorial, alarm and contact calls are forms of acoustical communication that noise can impact (Barber et al. 2009). This can result in a number of issues such as increased predation, and therefore death and injury, and decreased reproductive efficiency. These can both result in decreased numbers of certain species.

The areas of individual trees and woodland on site also represent suitable habitat to supporting nesting birds. Acoustic masking resulting from increasing background sound levels will reduce the number of individual birds that utilise communication networks and could have consequences for reproductive processes. For example, songbirds show greater nest desertion and abandonment within 100m of noise disturbance. Therefore **Table 3** provides methods of reducing noise and vibrational disturbance.

Table 3. Practical measures and sensitive working practices to reduce noise during construction.

Issues(s) to Control	Best Practices to be Adopted
General Noise Control Measures	“Site activities shall only take place during the agreed operating hours when local ambient noise levels are generally higher, and not during quieter periods.” “All vehicles, plant and equipment will be maintained and operated in an appropriate manner, to ensure that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum”. (i-Transport, 2024)
Powered Mechanical Equipment from General Construction Works	“As far as reasonably practicable, any plant or machinery fitted with noise control equipment, such as engine casings and exhaust silencers, found to be defective will not be operated until repaired.” (i-Transport, 2024)
Lighting	“External lighting of the construction area will be designed and positioned to: Minimise light spillage or pollution and avoid disturbance to nearby residents and to wildlife”. (i-Transport, 2024)

7.0 HAZARDOUS SUBSTANCES

A number of hazardous materials are associated with construction projects that could lead to contamination of the natural environment. **Table 4** contains a variety of procedures to prevent ecological implications from hazardous substances.

Table 4. Practical measures and sensitive working practices involving hazardous substances.

Issue(s) to Control	Best Practices to be Adopted
Containers	• <i>“Storage areas of hazardous substances (including oils and chemicals) will be bunded to minimise the risk of hazardous substances entering the drainage system or the local watercourses. Additionally, the bunded areas will have impermeable bases to limit the potential for migration of contaminants into groundwater following any leakage/spillage. The bunding systems for oil/chemical storage will have a capacity of 110% of the oil/chemical volume stored and ideally will be covered to prevent ingress of rainwater. Oil/chemical storage areas will be visually inspected on a daily basis.”</i> • <i>Any storage facility will be sited at least 10m from any watercourse / waterbody and 50m from any well, borehole or spring.</i> • <i>Designated areas for the unloading, storage and handling of materials (including the storage of oils/fuels/chemicals) will be sited away from surface watercourses. Storage containers will be appropriate for the materials being stored and all products will be clearly marked. (i-Transport, 2024)</i>
Cleaning up spills	• <i>Any leaks or spillages of potentially polluting substances will be contained, collected and then removed from site in an appropriate manner, e.g. use of absorbent material or bunding. Spill kits will be provided at agreed locations on the site and all construction staff will be trained in their use.</i>
Inspection and Maintenance	• <i>“Machinery will be routinely checked to ensure that it is in good working condition. Refuelling of machinery will only be undertaken within a designated area of the site where spillages can easily be contained. Any storage tanks and associated pipe work containing fuels will be double skinned or bunded, provided with leak detection equipment and inspected daily. Standing machinery will have dip trays placed underneath to prevent pollution by oil / fuel leaks.” (i-Transport, 2024)</i>

8.0 WASTE DISPOSAL

Construction projects will typically create a certain amount of waste that must be removed from the site. The principal waste on site will likely be aggregates from excavation, debris generated from building demolition and some waste from construction materials. This waste must be stored and disposed of safely and adequately to prevent harm to the environment. **Table 5** below contains a variety of procedures to prevent ecological implications from waste disposal.

Table 5. Practical measures and sensitive working practices involving waste disposal.

Issue(s) to Control	Best Practices to be Adopted
Management of Construction Waste	• <i>“The disposal of all waste or other materials removed from the site will be in accordance with the Site Waste Management Plans Regulations 2008 and requirements of the Environment Agency (EA), COPA, 1974, Environment Act 1995, Special Waste Regulations 1996, the Duty of Care Regulations 1991, and any Environmental Permit requirements.” (i-Transport,2024).</i>
Waste Reduction	• <i>“In general, and in accordance with the principles of the Government’s “Waste Strategy 2000”, and the Site Waste Management Plans Regulations 2008, a principal aim during construction will be to reduce the amount of waste generated and exported from site. This approach complies with the waste hierarchy (i.e. avoid, reduce, reuse, recycle, recover, disposal) whereby the intention is first to minimise, then to treat at source or compact and, finally, to dispose of off-site as necessary. Any spoil that is generated from the development will be re-used on-site wherever possible.” (i-Transport,2024).</i>
Waste Management	• <i>“Bonfires and burning of waste materials will be prohibited.” (i-Transport, 2024)</i>

9.0 RISK ASSESSMENT, MITIGATION AND COMPENSATION TIMETABLE (INDICATIVE)

A combined schedule outlining potential impacts and appropriate mitigation and compensation is included within Table 6.

Table 6. Risk Assessment Mitigation and Compensation Timetable				
Ecological Receptor	Sources of Impact	Possible Impacts	Proposed Mitigation Methods	Timing of Proposed Works/Compensation
Bats (Trees)	- Removal of trees with potential for roosting bats - Construction activities - Lighting	- Death or injury of individual bats - Loss/ damage to roosts - Disturbance to individual bats	- Pre-works check to be on any trees to be removed and further surveys carried out where necessary - Obtain an EPS License in the case that bats are recorded roosting within any trees to be impacted - Appropriate mitigation for the loss of any roosts	- Pre works check undertaken immediately prior to the commencement of works - Any required compensation to be implemented before the removal of trees supporting bat roosts
Badgers	- Vegetation clearance - Open excavations	- Damage/ loss to active setts - Disturbance to Badgers occupying setts - Trapping animals within open excavations	- A pre-commencement walkover by a suitably qualified ecologist will be undertaken to identify Badger activity within the site. - Open excavations left overnight will either be covered or have suitable escape routes installed.	An updated walkover of the site will be undertaken prior to the commencement of works
Nesting Birds	- Vegetation clearance - Construction/ Demolition works	Damage/ loss of active nests	- Vegetation clearance should avoid bird nesting season (March – August) - If this is not possible, sections to be cleared should be thoroughly checked by a suitability qualified ecologist immediately prior to clearance. A suitable buffer will be erected around identified active nests.	- Vegetation clearance to be undertaken outside of bird nesting season - Pre works check to be undertaken immediately prior to vegetation removal

Trees/ Hedgerow	• Vegetation clearance • Excavation • Tracking of plant	• Loss or damage to retained trees/hedgerow of ecological importance	• Protective fencing will be erected around retained trees and hedgerows within the site in accordance with the approved tree protection plan. • No vehicles will enter the protected area and no materials will be stored beyond the fencing boundary	• All protective fencing must be in place prior to the commencement of construction activities and must remain in place for the duration of the construction period
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11.0 RESPONSIBILITIES

The CEMS will be distributed to the project team, including sub-contractors, to ensure that the environmental requirements are communicated effectively. **Table 7** below describes the different roles and associated responsibilities throughout the construction period. It is the responsibility of the project manager to ensure roles are appointed prior to works commencing.

Table 7. Key roles and responsibility (***NB details of the roles as outlined below will be provided once these appointments have been made***)

Role	Appointment by	Responsibilities
Project Manager	Mr James Dennis	- Responsible for ensuring all developers comply with environmental legislation - Overall responsibility for the implementation of this CEMS
Site Manager	To be Appointed	Routine compliance with the CEMS, particularly with concern to activities on site, shall be the responsibility of the site manager primarily. In addition to the above, the site manager will be responsible for: - Implementation and monitoring of this CEMS and the guidance therein. - Ensuring subcontractors comply with the CEMS. - Ensuring site-specific training for staff and operatives (a) Health and Safety (b) Environmental sensitivities (c) Environmental protection measures - Review all risk assessments and method statements and ensure an appropriate toolbox talk programme is developed and effectively communicated. - Review, monitor, and maintain subcontractor RAMS. - Ensuring applicable toolbox talks are provided. - Logging Complaints and Incidents - Ensuring their contact details are prominently displayed on the site compound and entrance hoarding.

Site Management Team	To be Appointed	- Responsible for delivering the site inductions of environmental aspects - Tool box talks to all contractors to ensure implementation of good practice - Assist Site Manager in weekly site audits - Monitor sub-contractors work for compliance - Manage Considerate Constructors Scheme compliance
Principal Contractor	To be Appointed	- Assist Site Manager in preparation of the CMS - Prepare site specific Risk Assessments and Method Statements taking into account all environmental issues
Contractor/Sub-Contractors	To be Appointed	- Ensure workforce is fully aware of the environment issues and are implemented - Take appropriate action to rectify any non-conformance
Community Liaison Officer	To be Appointed	Responsible for public liaison and handling complaints
Ecological Works	Ecosupport Ltd 01329 832 841	Responsible for providing ECoW as needed, EPS works, protected species mitigation and adherence to CEMS / LEMP recommendations.

11.1 Construction Worker Awareness of Ecological Constraints

Prior to any construction works commencing on any part of the site an Ecological Constraints Document (ECD) will be prepared by Ecosupport Ltd (or an alternative SQE). This will provide a summary of the constraints identified on site and the site manager will be required to have a briefing on it to ensure they are aware of the areas that need to be protected and what activities they can and can't do in certain areas. Following this initial briefing, it will be the responsibility of the site manager to notify the ECoW of any new personnel that have not been briefed by the ECoW. The ECoW will then arrange to provide this briefing to those personnel before they start work on the site.

It will be the responsibility of the ECoW to provide the site manager with a plan illustrating the ecological constraints/sensitivities during the construction works and this would be provided in the ECD.

Project staff and all appointed parties are responsible for:

- Understanding the complaints and incidents process
- Working to minimise environmental impacts including noise, pollution, and light, by adhering to the best practices set out in this document
- Reporting environmental incidents or risks
- Considering the impact of development on human and ecological receptors and seeking ways to reduce this during the build
- Ensuring that work activities required of them do not contravene any guidance provided in this document

11.2 Training Awareness and Competence

Site staff shall be competent to perform tasks that have the potential to cause a significant ecological impact. Competence is defined in terms of appropriate education, training and experience. Ecological awareness and training shall be achieved by:

- Site induction, including a talk given by an Ecologist, during which information on all protected areas will be given and the sensitivity of the site for a range of protected species. The importance of leaving areas outside of the construction zone undisturbed once the protective fencing is installed will be emphasised.
- Information on protected species will be given including field signs to look out for during construction work.
- Environmental posters and site notices will be erected around the site.

Training will be recorded in the Project records by the Developer.

11.3 Communication

During the construction phase, internal communication will include regular progress meetings, which should cover training undertaken, progress reports, inspections, audits and non-conformance and objective / target achievement, including reporting on environmental performance along with other forms of communication (**Table 8**).

External communication, including site visits by the Ecologist, and liaison with statutory authorities will be overseen by the Project Manager.

Table 8. Communication throughout construction.

Means	Frequency	Purpose/Action	Responsible Party
Site Environmental Log Book	Continually	Written record of what has been observed and done related to environmental issues, including implementation status of mitigation measures.	Project Environmental Officer
Site meeting	Monthly	Face-to-face communications between construction and client.	Project Environmental Officer
Environmental briefing / training session	Quarterly	Briefing or Training on environmental issues to key site staff and staff of subcontractors.	Project Environmental Officer
Environmental Complaint Log	When necessary	To handle and respond environmental complaints.	Project Environmental Officer

11.4 Line of Communication Regarding Ecological Issues

Prior to work getting underway, all staff will be aware of the ecological features and associated issues on site. They will be conscious of the impacts of their actions not only on the protected habitats retained on site, and adjacent to, site. They will also be mindful during works of field signs of protected species and finally of the steps to take in the eventuality that an ecological situation arises. Therefore, as soon as an issue is uncovered/advice is needed, the Project Manager will be consulted. They will then contact the ECoW who will visit the site and advise accordingly.

11.5 Complaints and Incidents

Complaints and incidents are to be directed to the Community Liaison Officer. If the Community Liaison Officer is unavailable, the next most senior member of staff is to record. Records may be made in person at the site office, in writing or by email.

Details concerning the event are to be logged in a spreadsheet which will contain the headings:

Date	Person recording	Incident or Complaint	Details
-------------	-------------------------	------------------------------	----------------

No restriction on who may file a complaint or incident is to be placed.

All records are to be monitored and investigated by the project team. If corrective measures are necessary, these are to be recorded in a separate worksheet. Confirmation that corrective measures have ameliorated the situation should be sought from the stakeholder submitting the concern.

An Ecologist acting as the Ecological Clerk of Works (ECoW) will be required on a number of occasions (detailed in **Section 3.0**). All workers will be aware of their responsibility to protect ecological features on site and the Project Manager will have the contact details of the ECoW so that in the eventuality that additional advice is needed, they can contact them swiftly.

All stakeholders have a responsibility to ensure that the requirements documented in the CEMS are upheld. Where a subcontractor or supplier or similar is appointed, the appointee will be responsible for distributing the CEMS to the appointed party.

12.0 CONCLUSION

This Construction Environmental Method Statement (CEMS) outlines the measures to be carried out during and prior to construction to ensure the protection of sensitive areas and biodiversity. This report has detailed the methods which will be adopted to protect the environmental value of the site during construction works. This report should be read in conjunction with the supporting ecological reports.

13.0 REFERENCES

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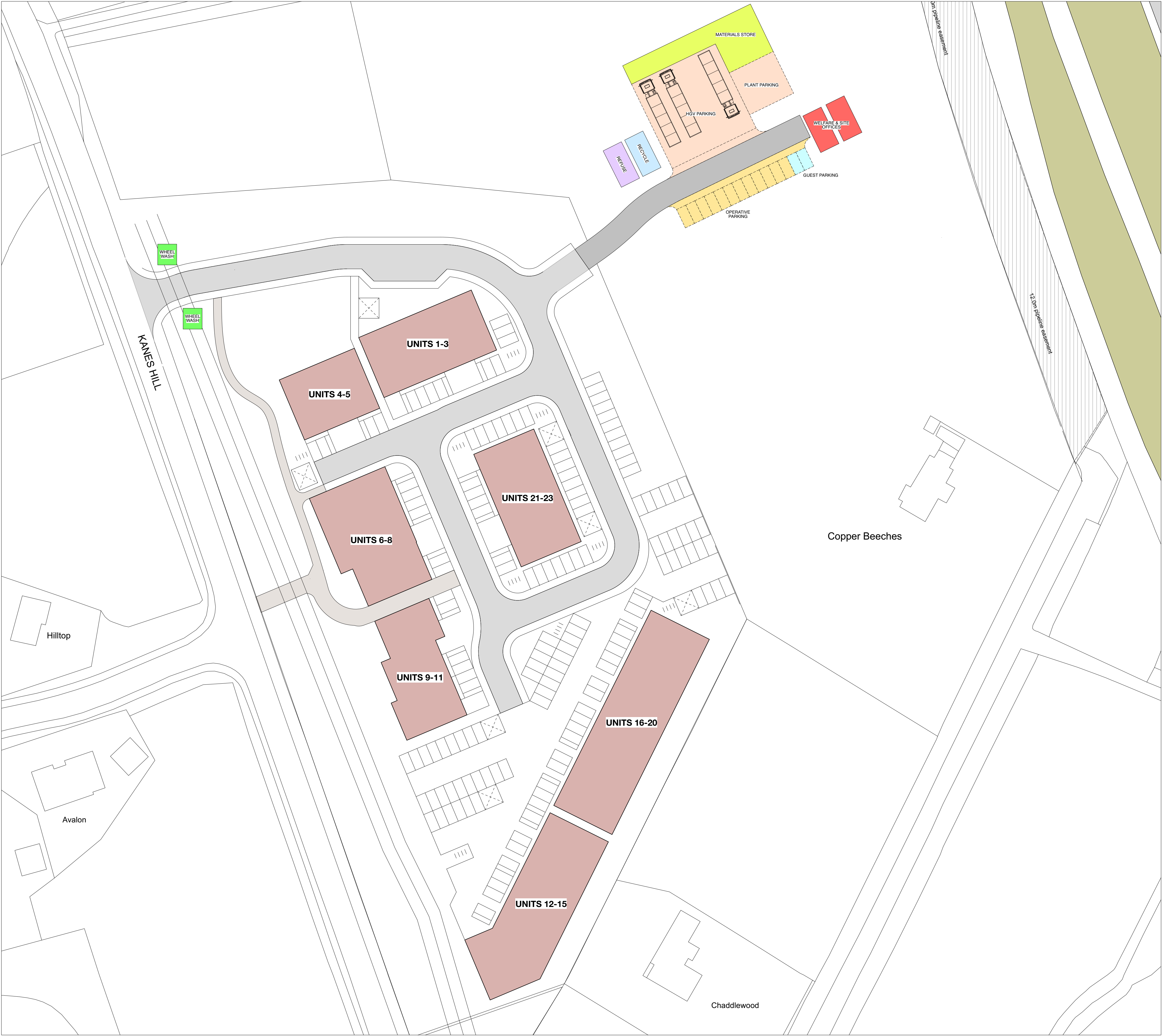
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Shawyer, C. (2011). *Barn Owl Tyto Alba Survey Methodology and Techniques for use in Ecological Assessment*. Available:
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Appendix 2 – Site Setup Plan



01 SITE PLAN - Construction Environmental Management Plan
Scale: 1:500

REV	DATE	NOTES	DRN	CHKD

GENERAL NOTES

THE CONTRACTOR IS RESPONSIBLE FOR THE CHECKING OF ALL SITE DIMENSIONS AND LEVELS.

DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE CONTRACT ADMINISTRATOR / ARCHITECT.

TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONSULTANTS DRAWINGS AND INFORMATION.

ALL EXISTING SITE, TREE AND BUILDING INFORMATION HAS BEEN COMPILED FROM DIFFERENT SOURCES.

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DRAWING TITLE CEMP

DRAWING REF 2407-site plan-2001

STATUS INFORMATION - NOT FOR CONSTRUCTION

SCALE

PROJECT TITLE NETLEY FIRS

CLIENT WILKES

ORIGIN 04/24

PROJECT NO. 2407

Appendix 3 – Vehicle tracking drawings 219.0003-0001-P01 and 219.0003-0002- P01

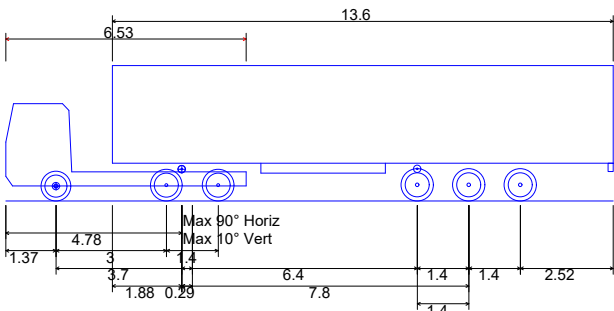


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6. VEHICLE TRACKED AT 10MPH.

VEHICLE PROFILE



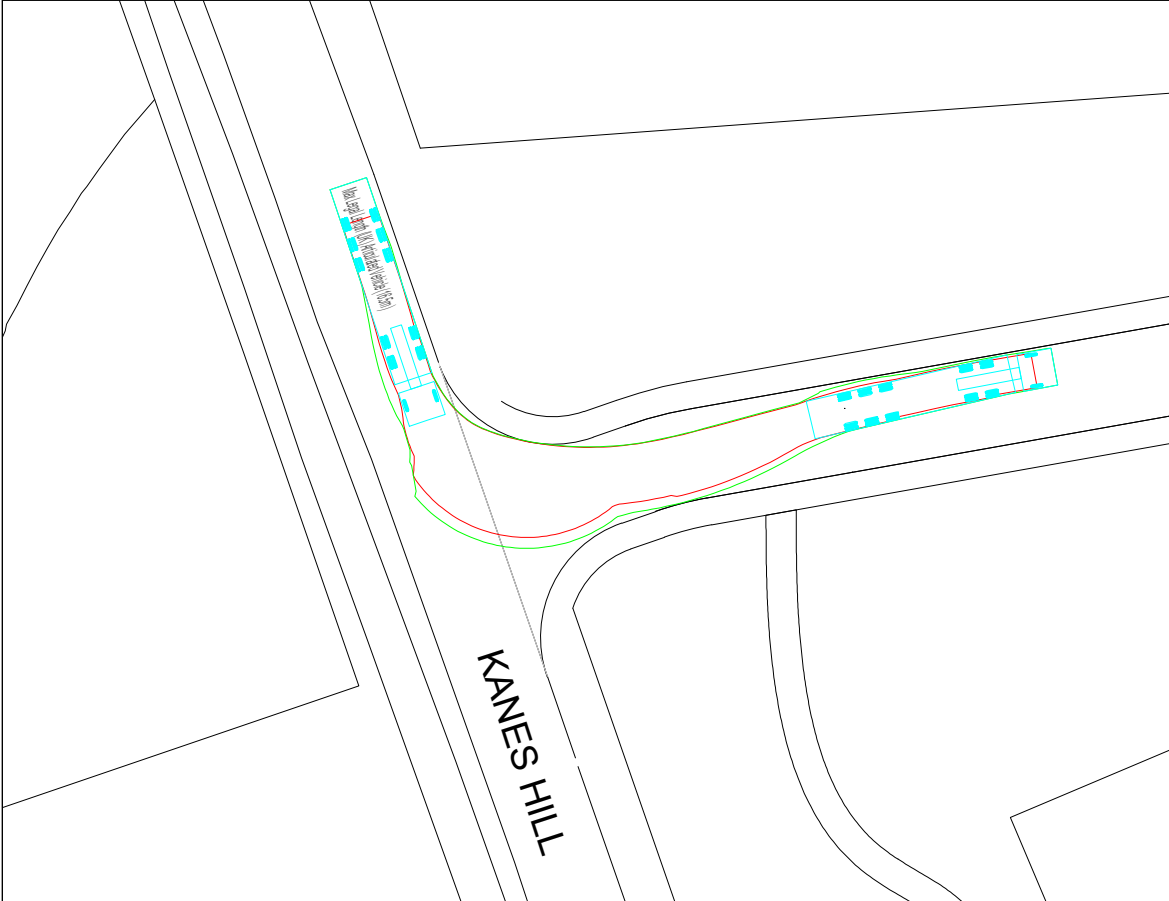
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Overall Length	2.550m
Overall Width	3.681m
Overall Body Height	0.411m
Min Body Ground Clearance	2.500m
Max Track Width	6.00s
Lock to lock time	6.530m
Kerb to Kerb Turning Radius	



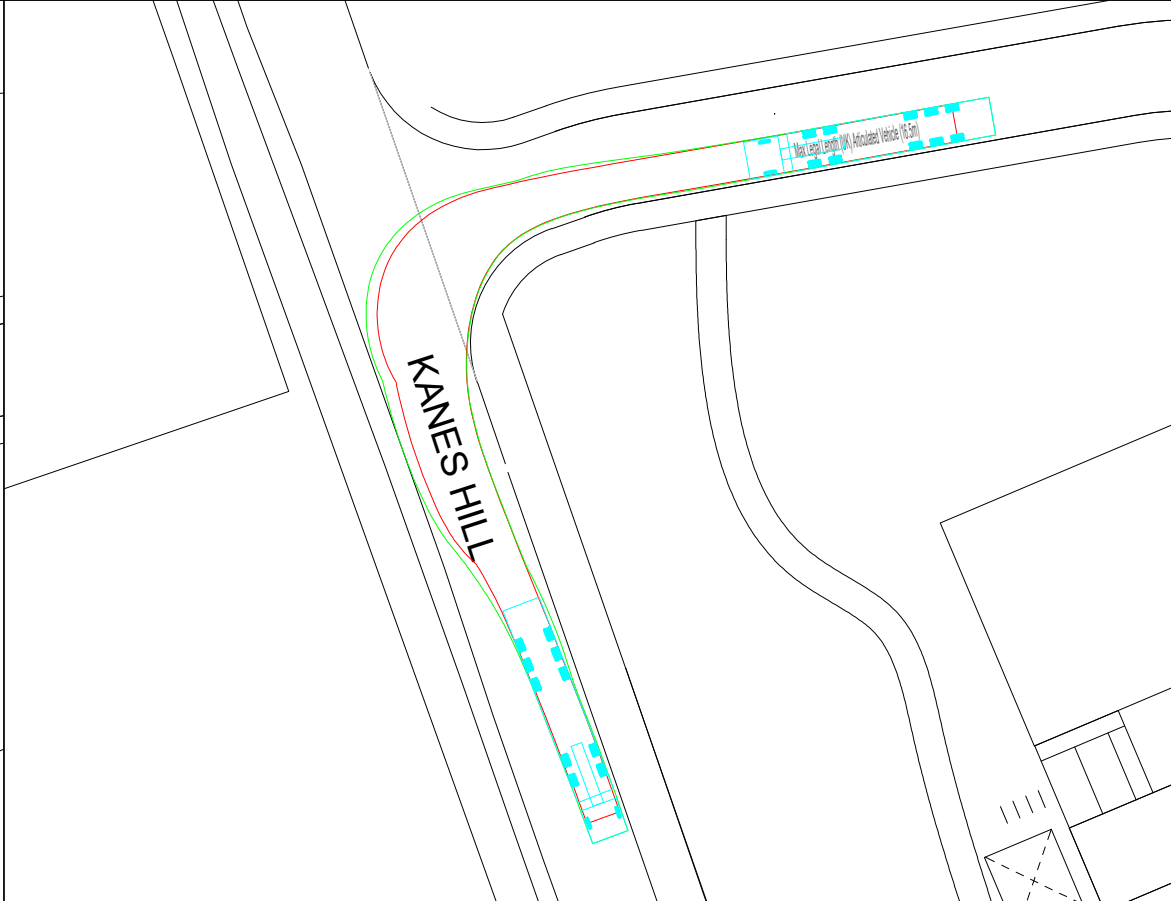
PRELIMINARY

DRAWING/DESIGN IS STILL 'IN DEVELOPMENT'
YOU ARE ADVISED TO MAKE DUE ALLOWANCE

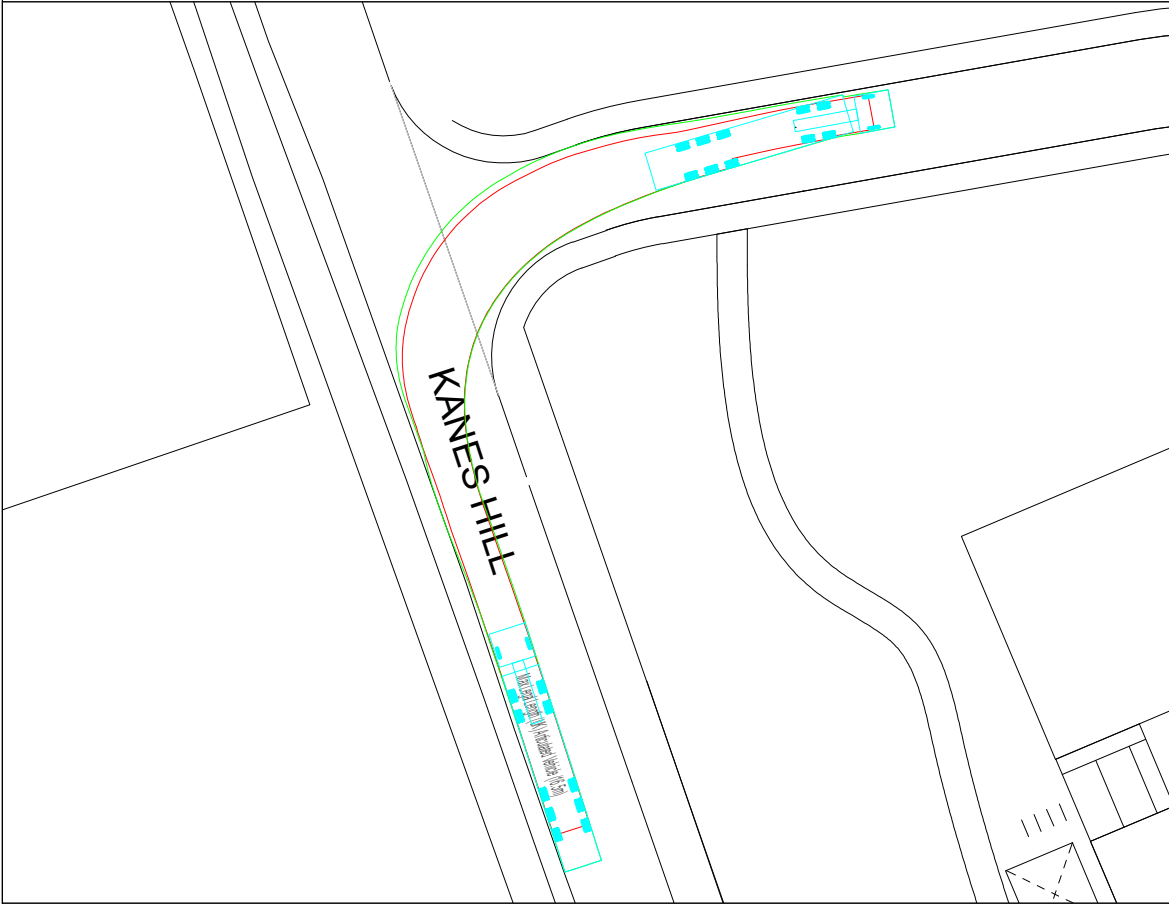
Project Name NETLEY FIRS, KANES HILL, HEDGE END	Title ARTICULATED VEHICLE SWEPT PATH ANALYSIS (INTERNAL SITE)	 Paul Basham Associates Ltd The Bothy, Cams Hall Estate, Fareham, PO16 8UT 01329 711 000 info@paulbashamassociates.com www.paulbashamassociates.com	Client 	Date Created 27.08.24 Drawn By AJF Approved By MDS Suitability Code -
Project Phase PRELIMINARY				PBA Project Number 219.0003 Scale 1:500 (AT A3)
				PBA Drawing No: 219.0003-0002 Revision P01



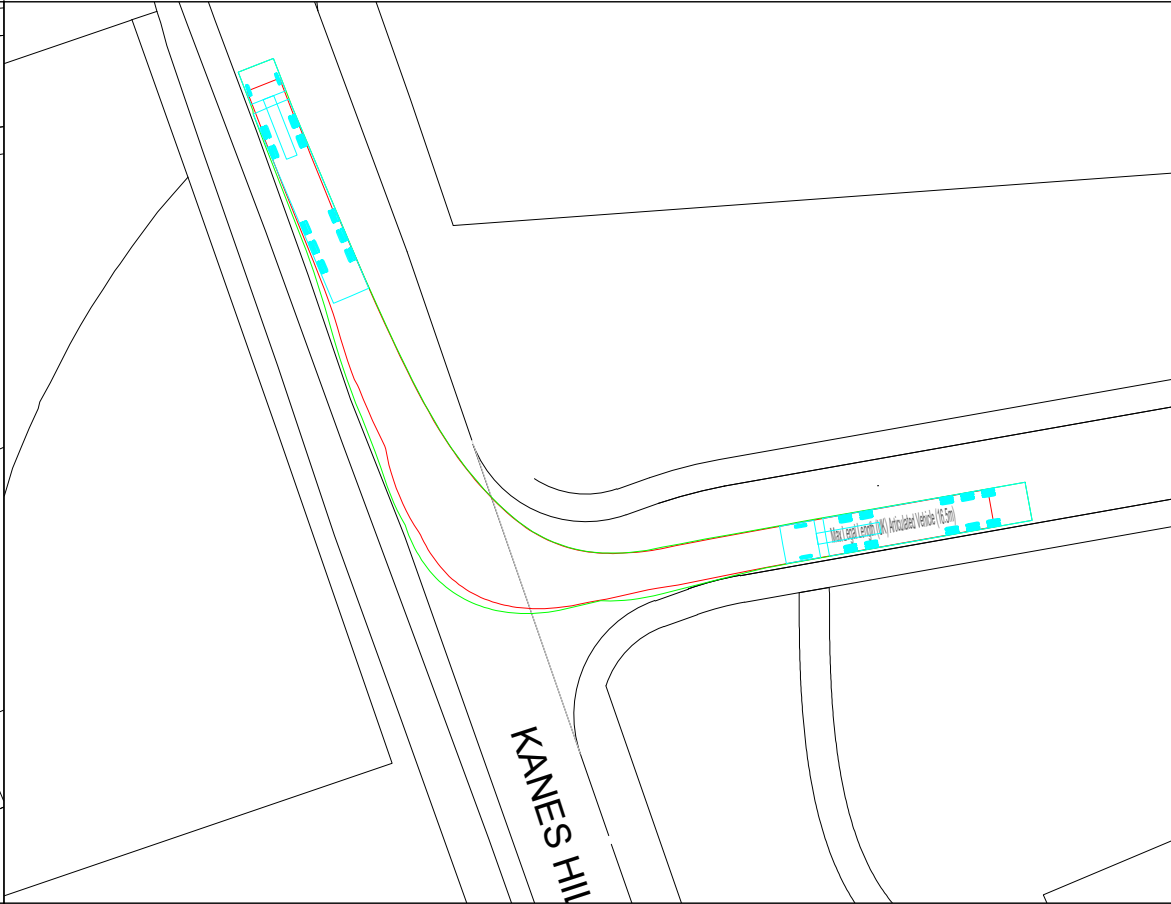
LEFT IN



LEFT OUT



RIGHT IN



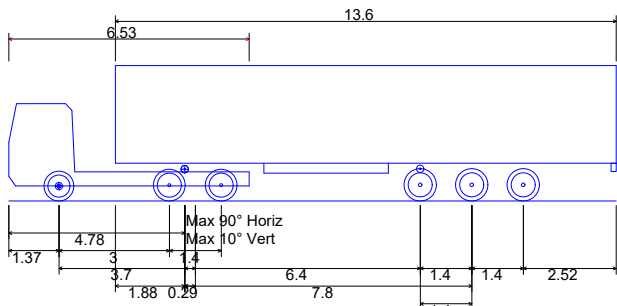
RIGHT OUT

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VEHICLE PROFILE



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m



PRELIMINARY

DRAWING/DESIGN IS STILL 'IN DEVELOPMENT'
YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Project Name
NETLEY FIRS, KANES HILL,
HEDGE END

Project Phase
PRELIMINARY

Title
ARTICULATED VEHICLE
SWEEP PATH ANALYSIS
(SITE ACCESS)

Client

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NOVA
Planning

P01	FIRST ISSUE	27.08.24	AJF	MDS
Rev	Description	Date	By	App'd
	Date Created	Drawn By	Approved By	Suitability Code
	27.08.24	AJF	MDS	-
	PBA Project Number	Scale	(AT A3)	
	219.0003	1:500		
PBA Drawing No:			Revision	
219.0003-0001			P01	