

CONSTRUCTION MANAGEMENT PLAN

Residential Development at Phase 2A & 2B, Norton Road, Thurston
(Incl. Highways Infrastructure to Phase 2 Area)

Prepared by:	Reviewed by:	Approved by:
David Howell-Bewsey MAPM		
Revision 0: 19/12/2022		

CONTENTS

1. Introduction
2. Key Information Schedule
3. Project Description
4. Sales Strategy
5. Construction Logistics
6. Construction Waste Management
7. Dust & Emissions Mitigation
8. Plant & Wheel Washing Facilities
9. Pollution Control
10. Noise & Vibration Mitigation
11. Construction Traffic
12. Ecology Management
13. Security Management
14. Public Rights of Way
15. On Site Communication

1.0 - Introduction

1. INTRODUCTION

Vistry Homes Eastern (VHE) have prepared this "Construction Management Plan" (CMP) in order to address the issues raised by planning condition 6 in respect of the development of Phase 2A and B of Land North of Norton Road, Thurston:

Prior to the commencement of development within any phase of the Main Development Area details of the construction methodology for that phase shall be submitted to and approved in writing by the Local Planning Authority and shall incorporate the following information:

- a) Details of the hours of work/construction of the development within which such operations shall take place and the hours within which delivery/collection of materials for the said construction shall take place at the site.*
- b) Details of the storage of construction materials on site, including details of their siting and maximum storage height.*
- c) Details of how construction and worker traffic and parking shall be managed.*
- d) Details of any protection measures for footpaths surrounding the site.*
- e) Details of any means of access to the site during construction.*
- f) Details of the scheduled timing/phasing of development for the overall construction period.*
- g) Details of any wheel washing to be undertaken, management and location it is intended to take place.*
- h) Details of the siting of any on site compounds and portalos.*

The construction shall at all times be undertaken in accordance with the agreed methodology approved in writing by the Local Planning Authority.

The table overleaf (Section 2.0) sign-posts our responses to the above topics.

CONFIRMATION

VHE confirm that the development will be carried out in accordance with the approved scheme, or any amended scheme submitted to, and approved in writing by, the local planning authority.

CONTACT

The main point of contact for this project will be our site manager, the contact details for whom are set out below:

NAME:	
POSITION:	Site Manager
CONTACT NUMBER:	
EMAIL ADDRESS:	
POSTAL ADDRESS:	

A large notice board containing these details will be provided on the site hoarding adjacent to the site compound access gates.

2.0 - Key Information Schedule

2. KEY INFORMATION SCHEDULE

CONDITION TOPIC	LOCATION OF RELEVANT INFORMATION
Details of the hours of work/construction of the development within which such operations shall take place and the hours within which delivery/collection of materials for the said construction shall take place at the site	As set out in Sections 10 & 11
Details of the storage of construction materials on site, including details of their siting and maximum storage height.	As set out in Section 11
Details of how construction and worker traffic and parking shall be managed.	As set out in Section 11
Details of any protection measures for footpaths surrounding the site.	As set out in Section 14
Details of any means of access to the site during construction	As set out in Section 11
Details of the scheduled timing/phasing of development for the overall construction period	As set out in Sections 3 & 7
Details of any wheel washing to be undertaken, management and location it is intended to take place.	As set out in Section 8
Details of the siting of any on site compounds and portalos	As set out in Section 5

3.0 - Project Description

3. PROJECT DESCRIPTION

The site is known as “Phase 2A & B, Norton Road, Thurston”.

Works include the highways infrastructure to the whole of Phase 2 and Residential development of Phase 2A & B consisting of 53 dwellings (Area outlined red on plan at Figure 3.2).

The development is located to the North of Norton Road and East of Meadow Lane, in the village of Thurston, Bury St Edmunds (See Figure 3.1).



CONSTRUCTION SEQUENCING

The development will be delivered in three ‘construction stages’. Works will commence with the phased establishment of estate roads and infrastructure for all of Phase 2 followed by construction of the residential dwellings to Phase 2A & B. The development will be released for occupation as dwellings are completed.

VHE expect that the overall duration for the Phase 2A & B development works will be approximately 27 months commencing as soon as possible and with completion of the first home in about Q3 2023.

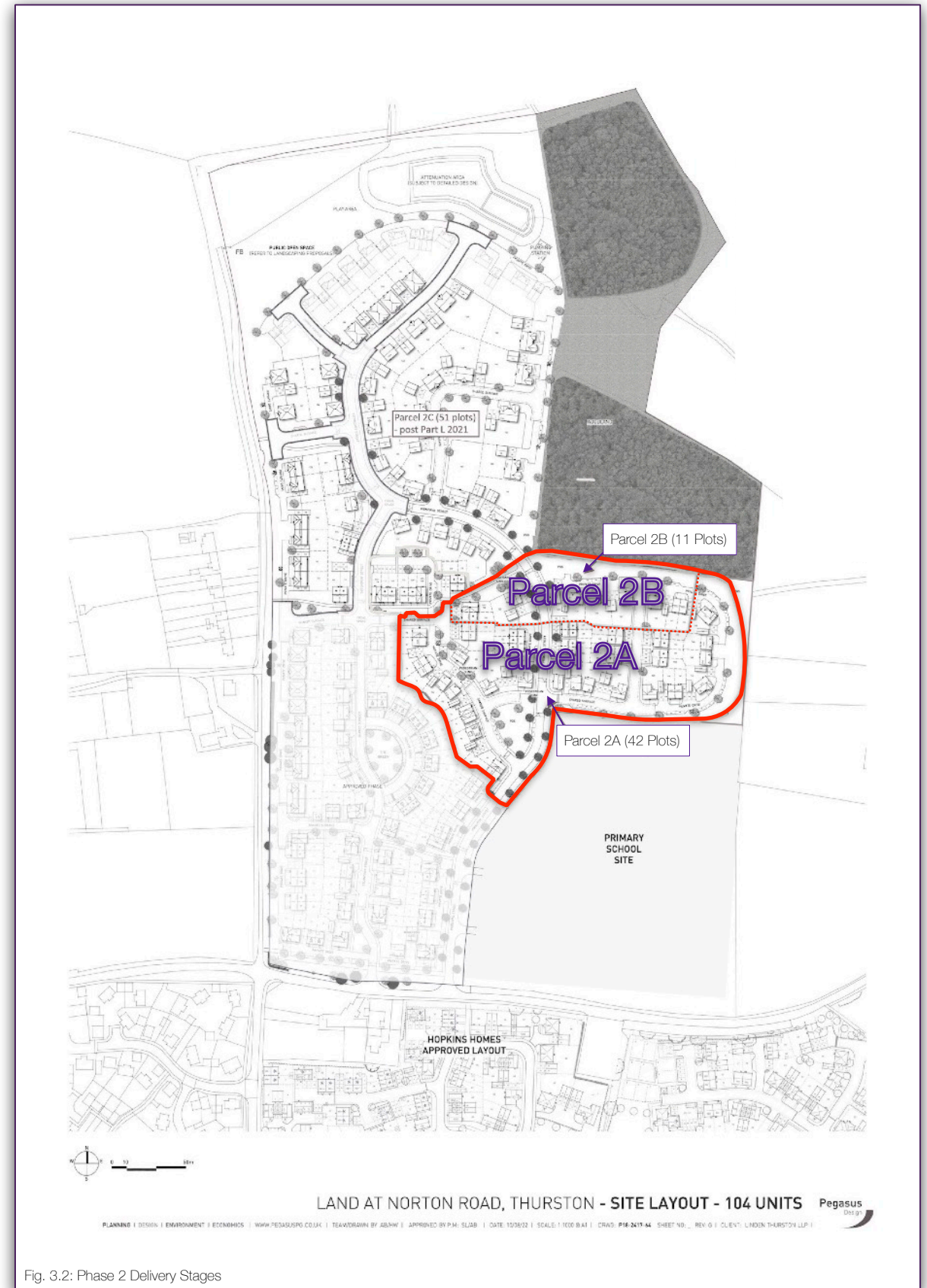


Fig. 3.2: Phase 2 Delivery Stages

PHASING STRATEGY

The development works will be sequenced in a number of stages, as set out below:

STAGE 1: SITE WIDE ENABLING | PHASE 2 INFRASTRUCTURE & RESIDENTIAL DELIVERY (SHOW HOMES)

Enabling Works will include:

- Establishment of site hoardings & gates in locations agreed with the local authority and following approval of licence requests,
- Arboricultural Works agreed with the local authority tree officer
- Ecology works
- UXO Works
- Archaeological Works

The principal plant & equipment used will be: 360° excavators, dumpers and 'muck away' lorries.

Access & Egress will be via the Phase 1 development roads from 'Norton Road'.

Upon completion of the enabling works, the main works will commence with Phase 2 Infrastructure Works. These will include:

- Formation of on site infrastructure (roads, sewers etc) to Residential Delivery Phase 2
- Construction of foundations to show homes

Where possible we will schedule works that interface with the public (for example the S278 works to the existing highway) to avoid carrying out such works during the morning and afternoon drop-off/collection times for the nearby schools and peak traffic times. In any event, all such work will be protected with 'heras' type fencing and approved barriers and works will be executed in accordance with licence arrangements agreed with the local authority.

The principal plant & equipment used will be: 360° excavators, dumpers, 'muck away' lorries, ready-mixed concrete delivery lorries, general delivery vehicles, road paving machines.

Access & Egress will be via the Phase 1 development roads from 'Norton Road'.

Once the Residential Delivery Phase 2 infrastructure is sufficiently complete construction of the first stage of new dwellings will commence (Phase 2A). These works will include:

- Construction of show homes & the 'permanent' sales facility,
- Construction of foundations, drains & sub-structures to new homes,
- Erection of dwellings, roofs & facades,
- Installation of building services & internal fitting out,
- External works to hard and soft landscaping, and
- Inspections & release for occupation

The principal plant & equipment used during residential delivery will be:

GROUND WORKS STAGE: 360° excavators, dumpers, 'muck away' lorries, ready-mixed concrete delivery lorries, general delivery vehicles

SUPERSTRUCTURE STAGE: Load-all Telehandlers, ready-mixed concrete delivery lorries, general delivery vehicles, standing scaffolding & loading bays

FITTING OUT STAGE: General delivery vehicles, standing scaffolding

EXTERNAL WORKS STAGE: Mini-excavators / powered barrows, general delivery vehicles (This will include medium to large vehicles carrying fencing, turf, paving etc).

All plant, equipment & materials will be loaded, unloaded and stored on site as set out in Sections 6 & 12.

Access & Egress will be via the Phase 1 development roads from 'Norton Road'.

The above will repeat for each succeeding Infrastructure & Residential Delivery stage

All works will be carried out in accordance with approved RAMS.

4.0 - Sales Strategy

4. SALES STRATEGY

VHE will continue using the existing Phase 1 Sales Area to market the plots in Phase 2A & B.

5.0 - Construction Logistics

5. CONSTRUCTION LOGISTICS

VHE have given careful consideration to the logistics needed for the construction phase of the project and to the siting of various facilities for delivery of the scheme. Key considerations that have informed the CMP are set out below:

ITEM	REQUIREMENT	CONSIDERATIONS
1	Parking for site operatives	VHE will be providing a substantial visitor/contractor and staffing car park on site, close to the compound. VHE are now encouraging staff / visitors to use electric vehicles and will investigate the possibility of installing charging points on a site basis.
2	Location of compounds	VHE will deliver the Phase 2 infrastructure & residential units from one compound area as identified on the Logistics plans. This will be sited in the Area of Future Phase 2C. The site compound will contain temporary mess and toilet facilities for use by all site personnel.
3	Haul roads	Temporary haul roads are designed to enable construction traffic / materials to be delivered close to the working areas, (ie plots and infrastructure) when the permanent infrastructure is incomplete or is unsuitable for use due to matters such as overhead obstructions or weight / width restrictions.
4	Timing of provision of public open spaces	It is important to VHE that we provide our clients and the community landscaped areas that they can enjoy at the earliest possible time.
5	Deliveries of mortar / Concrete	In order to minimise the requirement for daily deliveries, VHE make use of mortar silos on site. These will be sited adjacent to the construction compound. On-site batching of concrete is not a feasible option for a residential development due to the amounts of dust and noise inherent in the process. Therefore the supply chain includes ready mixed concrete suppliers that will deliver exact quantities as and when required.
6	Interaction with schools	The site will be secure at all times with clear health and safety signage and a gate person in attendance. Any Section 278 works will be completed by Highways or a nominated Highways approved contractor who will at all times fence off the working areas and have approved signage in place. All of our deliveries will be advised of the preferred access route, time constraints and speed limits for the area. VHE will seek to work with local schools as part of our ongoing community engagement. This will include health and safety talks wherever possible.
7	Hoardings / Fencing	VHE will provide plywood hoarding at the Phase 2 entrance but try to minimise use of this as its not a sustainable product. Heras fencing is secure and can be reused on other sites and will be used on most site boundaries.

Table 5.1 Logistics Considerations

ITEM	REQUIREMENT	CONSIDERATIONS
8	Hours of Working / Deliveries	Working hours will be controlled in agreement with the LPA. HGV arrivals and departures are likely to vary throughout the day. VHE try to stagger the timing of deliveries to assist with reducing local congestion during peak traffic times.
9	Site lighting	The site compounds will have low level lighting during working hours and motion detection lighting in the evening for CCTV purposes. No floodlighting will be used on site.

Table 5.1 Logistics Considerations...continued

Sketch plans overleaf identify the following for each stage of the development:

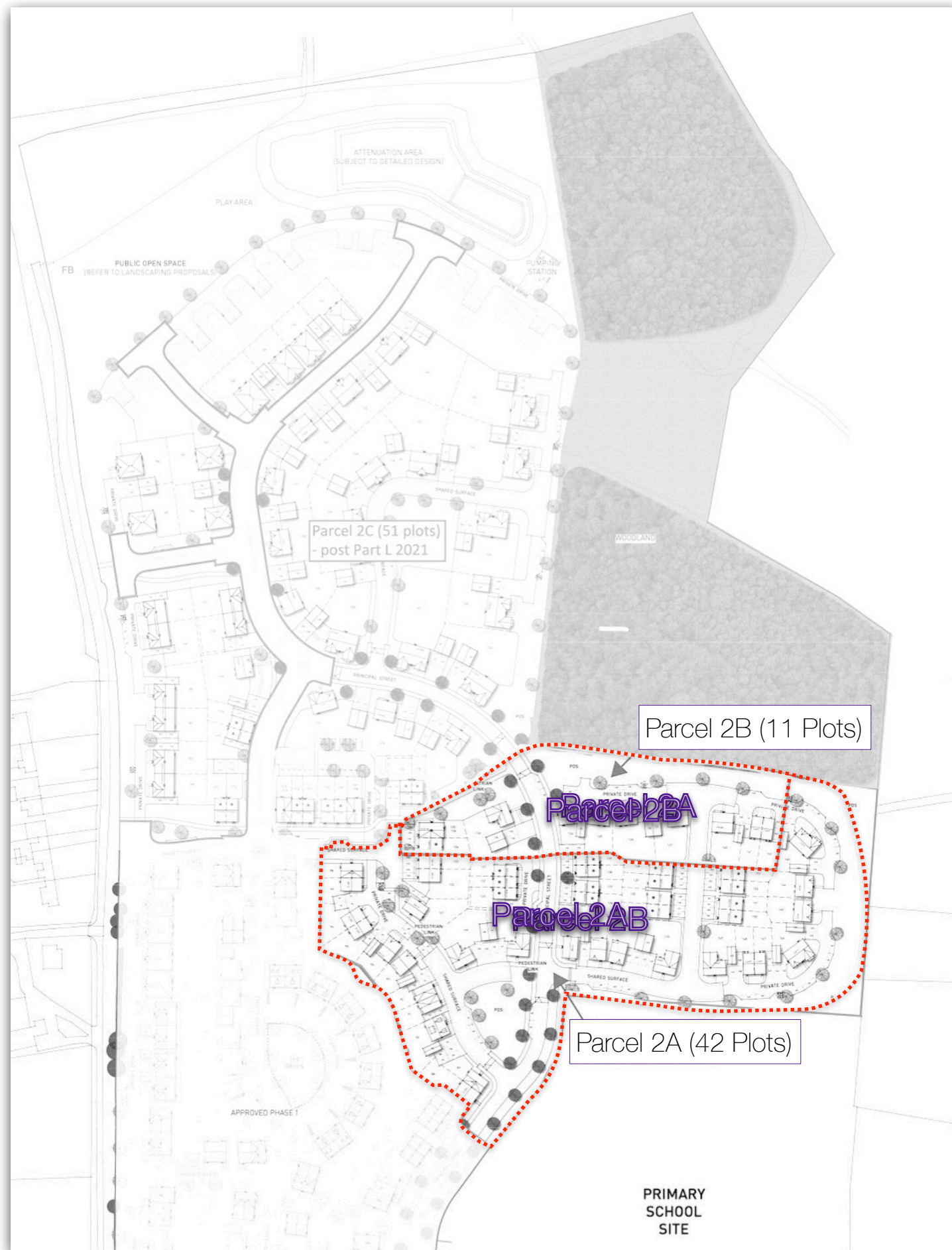
- Build Direction
- Sales outlets
- Compound arrangements

Section 11 contains details of the proposed construction routes between site and Regional Highway Network.

Status:

LOGISTICS PLANNING

Notes:



Date	Rev	Comment	By
19/12/2022	0	Issue 2	dHb

Vistry Eastern
Eastwood House | Glebe Road | Chelmsford
Essex | CM1 1RS | 01245 343000

Project:
Phase 2A & B,
Norton Road, Thurston

Drawing Title:

SITE WIDE PHASING

Issue Date:
19/12/2022

Reference:
C1483-07/SK1/001

Rev:
0

Status:
LOGISTICS PLANNING

Notes:

- 1st Road
- 2nd Road
- 3rd Road
- 4th Road
- Temporary Haul Road

Date	Rev	Comment	By
19/12/2022	0	Issue 2	dHb

Vistry Eastern
Eastwood House | Glebe Road | Chelmsford
Essex | CM1 1RS | 01245 343000

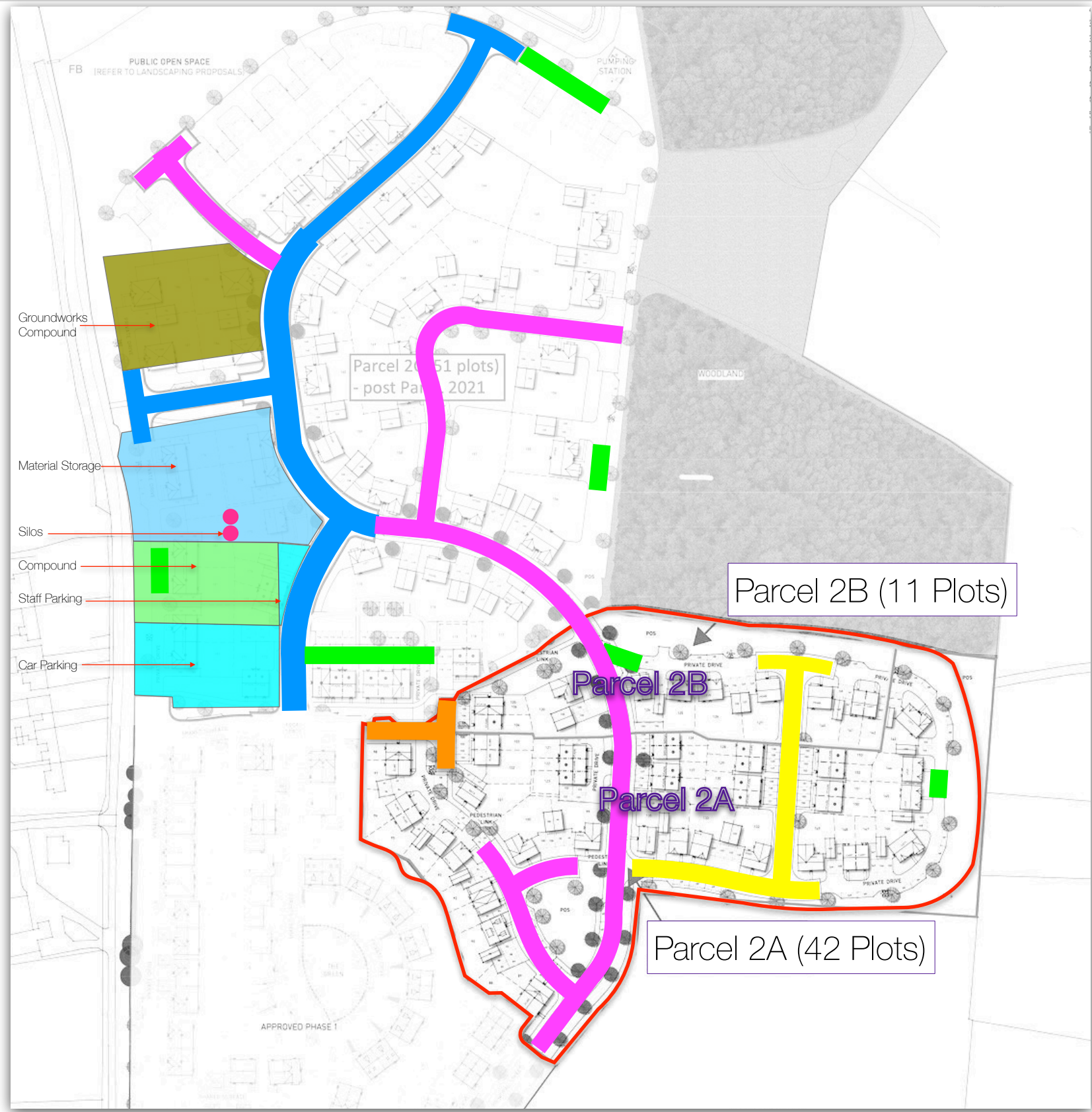
Project:
Phase 2A & B,
Norton Road, Thurston

Drawing Title:
LOGISTICS
Infrastructure Phase 2

Issue Date:
19/12/2022

Reference:
C1483-07/SK1/002

Rev: 0



KEY	
	Heras fencing
	Hoarding
X	Vehicular gates
	Haul Route
	Development under construction
	Show Plots / Sales Unit
➔	Construction Access
➔	Construction Egress
	Infrastructure being delivered
	Infrastructure delivered
	VHE Compound
	Staff / Contractor Parking
➔	Build Direction
	Completed development
●	Mortar silos
	Phase Scope
	Materials Storage
	Close board fencing
	Temporary sales parking
●	Loading bays
	Walkways
	Groundworks Compound

Status:
LOGISTICS PLANNING

Notes:

Date	Rev	Comment	By
19/12/2022	0	Issue 2	dHb

Vistry Eastern
Eastwood House | Glebe Road | Chelmsford
Essex | CM1 1RS | 01245 343000

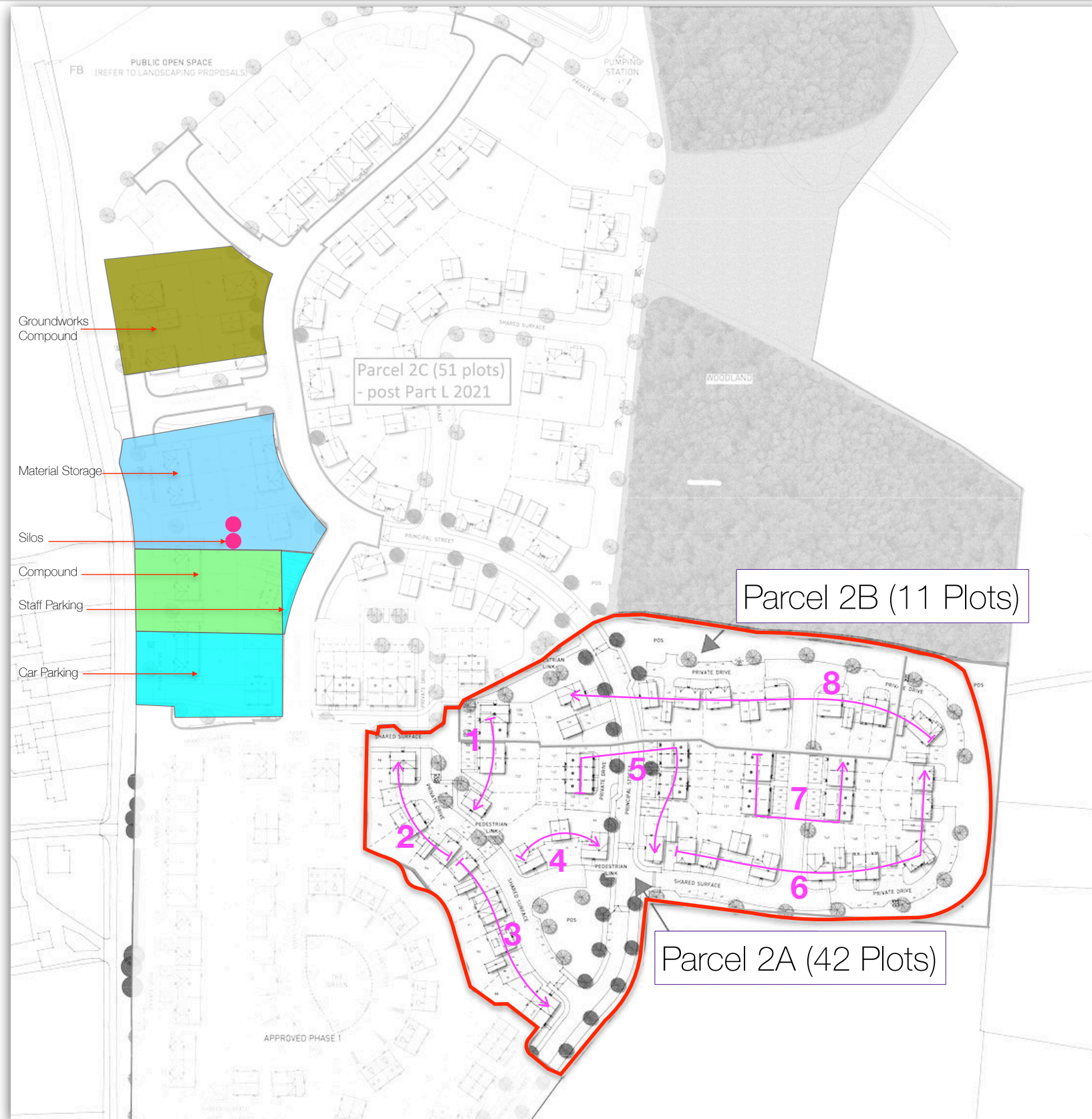
Project:
**Phase 2A & B,
Norton Road, Thurston**

Drawing Title:
**LOGISTICS
Residential Delivery**

Issue Date:
19/12/2022

Reference:
C1483-07/SK1/003

Rev:
0



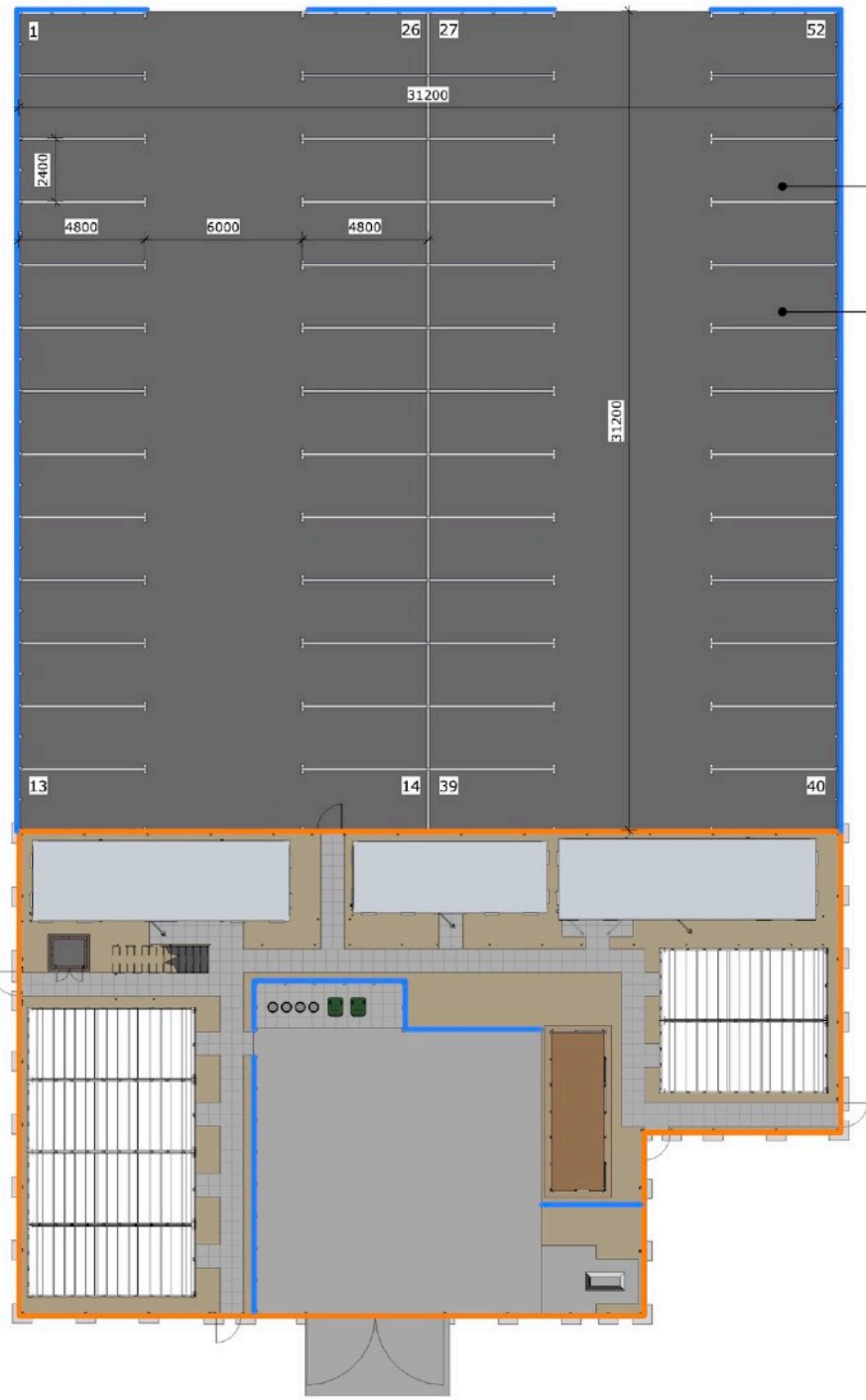
KEY					
	Heras fencing		Show Plots / Sales Unit		VHE Compound
	Hoarding		Construction Access		Staff / Contractor Parking
	Vehicular gates		Construction Egress		Build Direction
	Haul Route		Infrastructure being delivered		Completed development
	Development under construction		Infrastructure delivered		Mortar silos
			Phase Scope		Materials Storage
			Close board fencing		Groundworks Compound
			Walkways		Temporary sales parking
			Loading bays		

Status:

LOGISTICS PLANNING

Notes:

A3

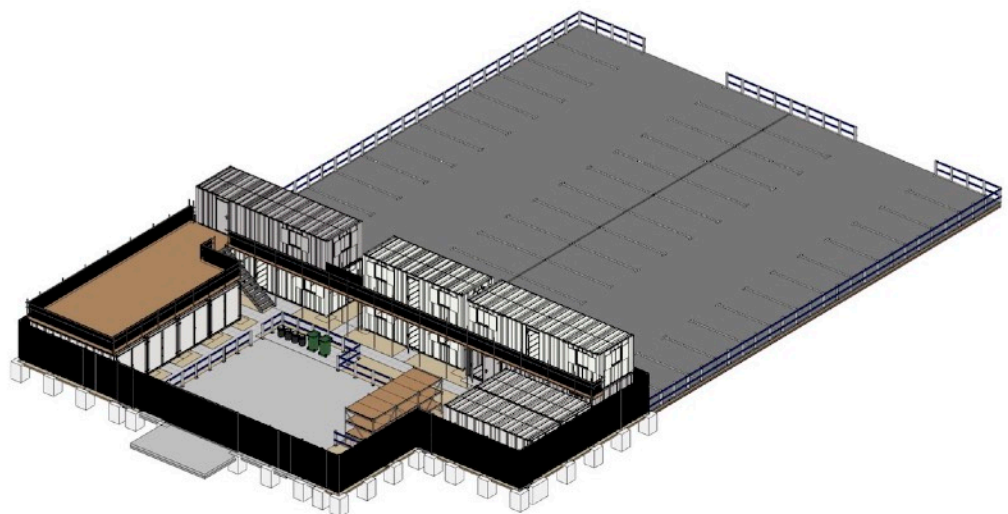


COMPOUND AND PARKING LAYOUT
1:200

ALL PARKING BAYS 2400 X 4800MM.

CAR PARK BUILD UP - 100MM THICK COMPACTED TYPE 1 SUB BASE WITH 100MM TARMAC TOP LAYER.

- KEY:
- COMPOUND STEEL HOARDING - INSTALLED AS PER DRAWING 19496-RLL-19-XX-DR-S-1000, OR TO SPECIALIST FENCING CONTRACTOR SPECIFICATIONS.
 - TIMBER 2 RAIL FENCE
 - 2NO. PEDESTRIAN ENTRANCES ONLY REQUIRED DEPENDENT ON ORIENTATION OF SITE, THE GATES SHOWN ON THE PLAN ARE INDICATIVE ONLY.



3D VIEW
NTS

category SITE COMPOUND		Vistry Group
description STANDARD COMPOUND WITH 52 SPACE CARPARK		
scale As indicated	revision 00	SITE COMPOUND
project: originator volume level type role Class number GROUP - VIS - S - SC - D2 - A - FC - 2007		

Do not scale from this drawing. Use written dimensions only. Any discrepancy or suggested modification is to be reported to Vistry Group Plc. © Vistry Group Plc.

19/12/2022	0	Issue 2	dHb
Date	Rev	Comment	By

Vistry Eastern
Eastwood House | Glebe Road | Chelmsford
Essex | CM1 1RS | 01245 343000

Project:
Phase 2A & B,
Norton Road, Thurston

Drawing Title:

**LOGISTICS
STANDARD COMPOUND
WITH 52 SPACE CAR PARK**

Issue Date:

19/12/2022

Reference:
C1483-07/SK1/004

Rev:
0

6.0 - Construction Waste Management

6. CONSTRUCTION WASTE MANAGEMENT

A Site Waste Management Plan [SWMP] has been developed and will be used on this project.

Waste generated by the project will be diverted from landfill and either:

- Reused on site.
- Reused on other sites.
- Salvaged/reclaimed for reuse.
- Returned to the supplier via a 'take-back' scheme.
- Recovered from site by an approved waste management contractor and recycled

STORAGE, COLLECTION AND DISPOSAL OF RUBBISH

Rubbish is generally defined as “waste material; refuse or litter”. In the wider context of material to be removed from site, this will include:

- Excavated materials
- Waste produced on site as a consequence of construction work for instance, off cuts of plasterboard
- Refuse produced from the site offices and canteen
- Unwanted packaging

The materials identified above can be segregated into various categories for the purposes of classification for recycling and disposal.

VHE's supply chain includes specialist waste carriers that provide services off-site to separate waste into materials that can be recycled and who then deal with the segregated waste appropriately, providing the chain-of-custody evidence needed to comply with appropriate regulations.

Limited waste collection and segregation will be provided on site in the compound area. This will be achieved by the use of designated skips. Other than excavation materials that will be removed in muck-away lorries, all waste will initially be put into skips located in the site compound, sited to make them easy for pick-up and drop-off by specialist skip lorry for sorting off site.

HAZARDOUS WASTE

Any hazardous waste materials found will be recovered and removed from site by specialist contractors during the enabling works stage.

Although unlikely, any buried asbestos containing materials found will be recorded and removed, all such removal will be carried out under controlled conditions, to an approved method statement agreed (prior to works commencing) with the relevant statutory bodies (HSE) and the LPA.

Such work will be carried out in accordance with all relevant codes of practice, HSE guidance notes, current legislation and statutory regulations.

Monitoring and testing will be carried out by an independently appointed UKAS accredited laboratory and all work areas WILL have “air clearance certificates” before normal operations resume.

All materials arising that require controlled disposal will be bagged, identified and disposed of at an approved site, in accordance with the licence issued for their removal.

7.0 - Dust & Emissions Mitigation

7. DUST & EMISSIONS MITIGATION

VHE will follow the three basic principles of 'best practice' that are well established and are central to the strategies for the control of pollution on development sites. They follow a hierarchy to control the emissions of dust and other emissions and reduce human exposure:

- 1.Prevention
- 2.Suppression
- 3.Containment.

SITE EVALUATION

VHE have identified that the site of the proposed development has the potential for an intermittent or likely impact on sensitive receptors (identified as nearby homes & wildlife).

VHE treat environmental issues seriously and will carry out good management practises to minimise the effects of noise and dust on the environment and local community. We will also liaise with the local neighbours regarding any other sensitive environmental issues that need to be addressed.

EMISSIONS

All plant & vehicles used will be subject to routine and periodic inspection & testing to ensure that emissions comply with regulations.

In the event that our site staff suspect that any item of plant is emitting excessive levels of pollutant, arrangements will be made for that plant or equipment to be inspected and certified as complying with the law.

TIMETABLE OF DUST GENERATING ACTIVITIES

The proposed programme of development for the works runs for a period of around 27 months as described in section 3.

The primary risks for dust generation are during site clearance and ground-works stages, particularly where these are carried out within prolonged periods of dry weather.

Dust generating activities will be taking place throughout the programme period to a greater or lesser extent. In order to manage dust mitigation, the steps identified overleaf will be implemented on site.

MITIGATION MEASURES IN RELATION TO SENSITIVE AREAS

VHE will undertake the following measures, as set out in this document, to reduce the wider-community impact to sensitive areas close to the development boundaries (including boundaries with completed parts of the development):

1. We will be establish air quality procedures to minimise dust generation using a water bowser to dampen down dust.
2. Control plant and vehicle exhaust emissions. This will be monitored to ensure no overrun of plant and machinery when not in use
3. Ensure that all materials transported to and from site are in enclosed containers or fully sheeted.
4. Ensuring stock piles of excavated materials etc are kept below hoarding heights and kept damp in dry windy conditions.
5. During dry periods the works are to be damped down to control the generation of dust.
6. Ensuring materials have a minimum of packaging
7. Ensuring all polystyrene and similar light weight materials are weighted down
8. Making sure all dust generating materials are adequately packaged
9. Ensuring all vehicles leaving the site have received a wheel wash and that loads are covered where spoil, waste or demolition material is being removed.
10. Provide regular road cleaning using road sweepers or brushes to control dust and mud.
11. Keeping the loading drop heights of spoil into lorries as low as possible.
12. Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly, via an advised and dedicated telephone number.

DUST & EMISSIONS CONTROL MEASURES

PRE-SITE PREPARATION

In order to prevent dust & emissions from being carried outside the boundary. The following will be adopted:

- Machinery, fuel and chemical storage and dust generating activities will not be located close to boundaries near sensitive receptors if at all possible. Furthermore, fuel & chemicals will only be stored in small quantities, if at all, in bunded storage areas and in containers designed for their containment.
- Solid hoardings/Fencing will be provided to site boundaries to act as a barrier to the spread of dust. Where necessary these will be enhanced with debris netting or 'monarflex' sheeting.
- Where necessary, hoardings will be provided with polythene "skirts" and ballast to prevent sediment run off from the site onto adjacent gardens.

HAUL ROUTES

Unpaved haul routes across site can account for a significant proportion of dust emissions, especially in dry or windy conditions, when the generation of dust through the movement of vehicles is exacerbated. Therefore, to comply with good practice, the following will be implemented:

- Use of consolidated surfaces on designated cross-site routes during groundworks stage.
- Regularly inspect haul routes for integrity and repair when required.

DAMPING DOWN

It may be necessary to wash or damp down haul routes on site in order to control dust emissions. A temporary water supply will be provisioned and distributed about the site to fixed points for use in damping down. In order to comply with good practise, the following steps will be taken:

- Road edges and pavements will be cleaned as required using agreed wet cleaning methods.
- Roads will be regularly inspected by our site manager and cleaned by site labour using wet cleaning methods when required.
- A mechanical road sweeper will be provided on stand-by with a local contractor for use as and when necessary.
- Hard standing areas for vehicles will be provided. They will be regularly inspected and cleaned as necessary.

VEHICLES

As set out elsewhere we will use the following specific controls to reduce dust associated with vehicles, such as the contact of tyres on the road surface or dust blowing from materials carried,:

- Prior to leaving site, all vehicles will have their wheels, chassis & external bodywork effectively cleaned and washed free of earth, mud, clay, gravel, stones or any other similar substance.
- All loads entering and leaving site to be covered.
- A 5mph speed limit will be imposed on site.

CONCRETE BATCHING

Concrete & mortar batching on site are inherently dusty activities. Therefore, it is not considered appropriate for these activities to take place on this development.

Concrete & mortar used in the works will be supplied ready-mixed from local batching plants. It is expected that mortar will be delivered and stored within silos on a regular basis for use as and when needed.

Mortar silos should not generate dust in regular use. In addition, small quantities of bagged mortar will be used where sulphate-resistant mortar is specified but this will be stored and prepared in designated, secured, areas away from sensitive boundaries and will be transported as a wet-mix to work sites to prevent dust being generated.

Ready mixed concrete will be delivered wet to avoid generation of dust on or near site.

EXCAVATION AND EARTHWORKS

Excavation and earthwork activities are a potential source of dust outside the site if they are not properly controlled. The following measures will be used to minimise dust disturbance as much as possible:

- All dusty activities will be damped down, especially during dry weather.
- Temporary earthwork stockpiles will be covered if possible.
- We will minimise drop heights to control the fall of materials.
- Arisings will be removed from site as often as possible to prevent a build up of spoil.
- Long-term stockpiles of material will not be retained on site unless grassed or securely covered.
- Secure covers on temporary stockpiles will only be removed in small areas during work and not all at once

SPECIFIC SITE ACTIVITIES

Other activities carried out on site have the potential to generate dust without proper control. Therefore, the Best Practice Methods will be implemented as outlined below:

Cutting, Grinding and Sawing

Generally speaking, these activities should not be conducted on site and pre-fabricated material should be brought in where possible. In certain cases however, where such work must take place, then the following techniques should be followed:

- All equipment will use water suppressant or suitable local exhaust ventilation systems.
- Dust extraction techniques will be used where available.
- Equipment will be fitted with water suppressant systems.
- Local exhaust ventilation will be provided in areas where this is necessary.
- All fans and filters will be serviced regularly to ensure they are properly maintained.

Chutes and Skips

- Skips will be securely covered.
- Drop heights will be minimised to control the fall of materials.
- Damping down with water will be carried out as necessary, particularly during dry or windy weather.

Scabbling

Where scabbling of concrete surfaces is necessary the following steps will be taken to mitigate dust:

- Pre-wash work surfaces.
- Screen off work areas.
- Vacuum up all dusty residue rather than sweeping away

Waste Disposal / Burning

- No burning of any material is permitted on site.
- All excess material should not be wasted, but used or safely removed from site according to appropriate legislation.

Sand, Grit and Shot Blasting

- Use agreed wet processes, sheet areas to contain dust and use silica-free material.

Planing and sanding

- Use fans and/or filters, dust suppression techniques and water sprays.
- Fitting out
- Fit all machinery for activities such as plastering, sanding or rendering with dust suppression/ collection equipment.
- Vacuum all waste material.

SITE MONITORING

Continuous site monitoring is an important way of ensuring that dust control measures are effective.

VHE will implement the following protocols to routinely monitor dust control measures. These will be managed by the Site Manager:

- Employ best practice methods at all times.
- Carry out regular (at least daily) inspections with increased frequency during particularly dry or windy weather to identify additional mitigation measures to prevent the spread of dust to sensitive receptors.
- Take into account the impact of air quality and dust on occupational exposure standards to minimise worker exposure and breaches of air quality objectives that may occur outside the site boundary, such as by visual assessment.
- Keep an accurate log of complaints from the public.

8.0 - Plant & Wheel Washing Facilities

8. PLANT & WHEEL WASHING FACILITIES

WHEEL WASHING ARRANGEMENTS

A wheel wash area will be located adjacent to the exit from the unloading area before vehicles re-join the tarmac road surface. This will include a hardstanding laid to falls and draining into a sump or gully leading to (or pumped to) a settlement tank to filter water from settled mud/debris. The discharge water will pass through a petrol-interceptor whilst the settled silt will remain in the tank until it is removed. The facility will be provided with hosepipes, brushes, an adequate water supply and pressure washers together with dedicated labour to carry out the cleaning operations. (See figure 8.1 opposite).

As an alternative solution on larger developments, bespoke wheel-wash equipment will be provided on site for relocation as and when necessary. (See figure 8.2 opposite).

A traffic marshal & the vehicle driver will carry out a visual inspection of the vehicle wheels, the underside of vehicles, mud flaps and wheel arches. If necessary, they will then use the pressure washer and hoses to clean the vehicle to ensure that prior to leaving site, the wheels, chassis & external bodywork are washed free of earth, mud, clay, gravel, stones or any other similar substance. Roadways will be swept regularly with a mechanical road sweeper provided by our specialist contractor who will be retained on stand-by in case additional visits are required.

Attendant labour will sweep / pressure wash the hardstanding as and when necessary to keep it clean and to prevent vehicles becoming re-contaminated with mud. Site management will routinely inspect the wheel was area and public highway at least daily and more frequently during periods of wet or inclement weather and when ground works are being carried out to identify:

- Whether the settlement tank needs emptying of silt, or
- Whether the mechanical road sweeper needs to be called to site.

Following settlement, the discharged water will pass through a petrol interceptor before being discharged under licence into existing surface water drains. As and when required, the settlement tank will be emptied of silt.

In the event of a break-down of the wheel washing facility, we will have a stand-by pressure washer unit available on site. We will also have a suitable stand-by portable generator available on site in case of a power failure.



Fig. 8.1: Typical portable wheel-wash equipment



Fig. 8.2: Typical bespoke wheel-wash equipment

9.0 - Pollution Control

9. POLLUTION CONTROL

In order to prevent water & slurry being carried outside the boundary, the following will be adopted:

- Where necessary hoardings & boundary fencing will be provided with polythene “skirts” and ballast to prevent sediment run off from the site. In general though hoardings will not require such measures. (See figure 9.1 below for an illustration of a typical silt barrier).
- Fuel storage will only be permitted in designate areas and these will be provided with proprietary bunds to capture & trap spilled fuel. In accordance with good practise. the bunds will have a capacity larger than the amount of fuel being stored.
- Where connections are permitted to new and existing sewers, traps & interceptors will be provided to settle out sediment, chemicals and fuel that may collect in the water being discharged. Any discharge of water from site will only be allowed in accordance with discharge licenses obtained from the relevant statutory undertakers.
- VHE Project Execution Plans and Task Specific method statements will contain specific Pollution Event Control & Response Plans. These will be regularly reviewed and amended to suit the works phasing and will be communicated to all relevant personnel and statutory authorities.
- Specific environmental control measures defined opposite (Table 9.1) apply to all activities and operations carried out on and off site in relation to the use of water and to prevent contamination of water courses and drains.



Fig. 9.1: Typical silt barrier image

Risk	Mandatory Environmental Control Measure(s)
Abstraction, Impounding and Dewatering	<ul style="list-style-type: none"> • Obtain an abstraction licence from the EA for the abstraction of more than 20m³ of water / day from any controlled water Obtain an abstraction licence if waters from dewatering activities are to be used e.g., for dust suppression • Obtain an Impounding Licence from the EA prior to any impounding works commencing • Ensure that the Linden Homes Permit-to-Pump system is used for all effluent pumping activities • Ensure that a pump head rose is used to reduce the risk of harm to aquatic life • Ensure conformance to requirements of obtained licences / authorisations.
Discharges to Surface Water or Groundwater	<ul style="list-style-type: none"> • Consult with the EA as to the need for an Environmental Permit for the discharge of effluent to surface waters prior to the discharge proceeding • Ensure that the Linden Homes Permit-to-Pump system is used for all effluent pumping activities • Obtain permission to discharge silt laden waters to land from the landowner and consult with the EA prior to discharge • Ensure all effluent discharges from site cabins are directed into sewers (with permission from the local water company) or holding tanks • Ensure conformance to requirements of obtained permits / authorisations.
Discharges to Sewer	<ul style="list-style-type: none"> • Obtain a trade effluent discharge consent from the local water Ensure that the Linden Homes Permit-to-Pump system is used for all effluent pumping activities) • Ensure conformance to requirements of any obtained consent.
Works In, Near or Over Water	<ul style="list-style-type: none"> • Obtain a Flood Defence Consent (FDC) from the EA for the construction of any structure in, over or under a main river watercourse, including the construction of dams, weirs, mills, channel diversions and culverts • Obtain a FDC from the Lead Local Flood Authority (LLFA) for the construction of any structure in, over or under an ordinary watercourse, including the construction of dams, weirs, mills, channel diversions and culverts
	<ul style="list-style-type: none"> • Obtain a FDC from the EA for all works involving construction, excavation, erection, re-erection or modification works which: <ul style="list-style-type: none"> - Are within 10m of the bank of any main river / ordinary watercourse - Are within 16m of any tidal defence - May interfere with the bed or banks or flood channel of any main river / ordinary watercourse • Give the EA at least seven working days' notice of any intention to temporarily or permanently divert the flow of a main river; carryout works over or within a main river channel; commence operations in a main river channel; or work on or near foul sewers • Give LLFAs at least seven working days' notice of any intention to temporarily or permanently divert the flow of an ordinary watercourse; carryout works over or within an ordinary watercourse; or commence operations in an ordinary watercourse channel • Develop, communicate and implement a suitable, adequate and effective method statement, where any watercourse diversion is to be undertaken • Consult with the EA as to the need for an abstraction licence where overpumping operations are to be undertaken • Obtain formal approval from the EA prior to the use of any herbicide in or near a watercourse (i.e., within 10m of a watercourse) • Plant and equipment entering or working alongside watercourses should be well maintained, clean and free from oil leaks • Prevent liquid / solid debris falling into a watercourse or onto an embankment during construction activities. • Ensure conformance to requirements of any obtained consent / approval.
Site Drainage	<ul style="list-style-type: none"> • Develop and display a site drainage plan that identifies surface and foul water drainage systems and nearby controlled waters • Implement and maintain control measures to ensure site drainage does not contaminate drains or watercourses e.g., cut-off ditches / silt fences • Provide tool box talks to relevant personnel and contractors that effluent must not be poured down surface / foul water drains without permission.
Washing Activities	<ul style="list-style-type: none"> • Conduct all washing and cleaning operations (including the washing of vehicles and / or plant) in a designated area, which should be isolated from the surface water drainage systems and within hardstanding areas. • Ensure no detergent contaminated wash down effluent is allowed to enter controlled waters unless permitted by the EA • Direct detergent contaminated wash down effluent via the foul sewer (after having gained permission from the Water Company) or ensure that it is contained for off-site disposal. • Establish an impermeable concrete / mortar washout area at least 10m away from drains; surface waters; or trees.
Monitoring	<ul style="list-style-type: none"> • Monitor the quality of watercourses potentially affected by site activities at least once per day and at agreed locations whilst construction operations are in progress, which may involve visual monitoring and / or physical (e.g., pH; suspended solids; total organic carbon) sampling.

Table 9.1: Mandatory Environmental Control Measures

10.0 - Noise & Vibration Mitigation

10. NOISE & VIBRATION MITIGATION

HOURS OF WORKING

VHE confirms that it will adhere to the following hours of working:

- Monday to Friday (excluding public bank holidays) 08:00 – 18:00
- Saturday: 08:00 – 13:00
- Sunday: No working
- Public Bank Holidays: No working
- Delivery hours are set out in Section 11.

EXCEPTIONS TO HOURS OF WORKING

There may be a requirement for exceptional working outside of the expected working hours as a result of the method of construction adopted. Such exceptions may include delivery and erection of large construction plant and equipment such as piling rigs (if required) and scaffolds.

APPROVALS

Any exceptional working hours will be subject to obtaining prior consent from the local authority, in accordance with Section 61 of the Control of Pollution Act 1974. The approvals process will ensure that measures necessary to minimise noise and vibration impacts are identified and agreed at the outset.

BACKGROUND NOISE SURVEY

Average existing noise levels at the site boundary will be measured prior to start of works on site across one and ten hour periods between 08:00 and 18:00.

PLANNING

BS5228 provides guidance on calculating the noise levels from construction works and assessing the likely impacts it will have on neighbouring residential properties. Prior to activities commencing we will carry out noise assessments and VHE will follow the guidance of BS5228-1:2009 as amended by Amendment No. 1 using the most practical measures possible to control noise.

VHE will also follow the guidance of BS5228-21:2009 as amended by Amendment No. 1 using the most practical measures possible to control vibration.

MONITORING

The need for routine monitoring of noise will be considered and addressed within VHE's internal environmental planning and the relevant Standard Operating Procedures.

NOISE RISKS

As the site is located within a residential area it is our intention to minimise the impact that the construction process could cause to the local environment and the neighbouring community. We will also inform all local businesses and organisations of our activities on site so they are fully informed of our site activities.

Due care will be taken not to cause the primary environmental nuisances, noise and dust pollution. All reasonable measures will be taken to control noise levels to within or lower than the regulated decibel levels to comply with the statutory noise restrictions as stated in The Control of Noise at Work Regulations 2005 and Statutory Nuisance Act 1993. A sound / noise meter will be kept on site at all times to check noise levels at the site boundaries during certain operations. Inside the site, and closer to noise sources, hearing protection zones, where hearing protection must be provided and worn if noise levels reach 80 – 85 Db, will be set up. Below are some actions that will be carried out to abate these problems.

Those residents that are near to the site may be adversely affected by construction noise related to the proposed development.

Examples of possible sources of noise include:

- Increased noise levels on-site due to construction activities, plant and road haulage
- Increased noise levels caused by any ground treatment or remediation; and
- Increased noise levels off-site due to road haulage vehicles

As part of the detailed design process, construction methods and techniques have been considered and proposed to mitigate and minimise the risk of noise impact beyond the site boundary.

GOOD PRACTICE MEASURES TO REDUCE NOISE DISRUPTION

In accordance with Section 72 of the Control of Pollution Act 1974, VHE will use the best practicable means to minimise noise generated on site. For example:

- All plant & equipment will be selected having regard for its published sound power level
- Alternative methods will be investigated to avoid the use of inherently noisy activities
- Effective silencers and acoustic covers will be provided and maintained in good working order
- Plant and equipment will be located having regard to sensitive receptors (e.g. residential property).
- Fixed items of plant will be electrically powered rather than diesel or petrol driven. Where available, electrically powered mobile plant may also be used.
- Large concrete pours will be allowed sufficient periods of time to be completed within normal working hours. Where an over-run is expected due to unforeseen circumstances the Council's Environmental Protection Team will be advised as early as possible.
- Anti-social behaviour involving shouting, swearing and loud radios will be prohibited on site
- The use of temporary screens will be considered to increase the length of the sound path from a noise source.
- Contractors are to control construction noise and vibration emission in accordance with the recommendations established in the relevant British Standard – for the control of noise on construction and open sites (BS5228-1:2009); the Environmental Protection Act 1990; Control of Pollution Act 1974 and Best Practical Means.
- Co-ordinated delivery times and efficient traffic management to prevent queues of traffic accessing the site
- Ensuring all plant is equipped with baffles, lined compartments and silenced exhausts to reduce the machines operating noise level to within or lower than the regulated decibel levels to comply with the statutory noise restrictions.
- Utilising construction techniques that minimise the production of noise.
- Strict adherence to the site working hours.

11.0 - Construction Traffic

11. CONSTRUCTION TRAFFIC

VEHICLE OPERATION HOURS

During the construction stage, vehicle arrival and departure will most certainly be audible beyond the boundary, therefore the expected periods during which vehicles will arrive and depart will be:

- Monday to Friday (excluding public bank holidays) 08:00 – 18:00.
- Saturday: 08:00 – 13:00
- Sunday: No vehicle movements
- Public Bank Holidays: No vehicle movements

SITE IN RELATION TO THE REGIONAL HIGHWAY NETWORK

The part of the Regional Highway Network closest to the site is A14 (Figure 11.1) lying to the south of the site.

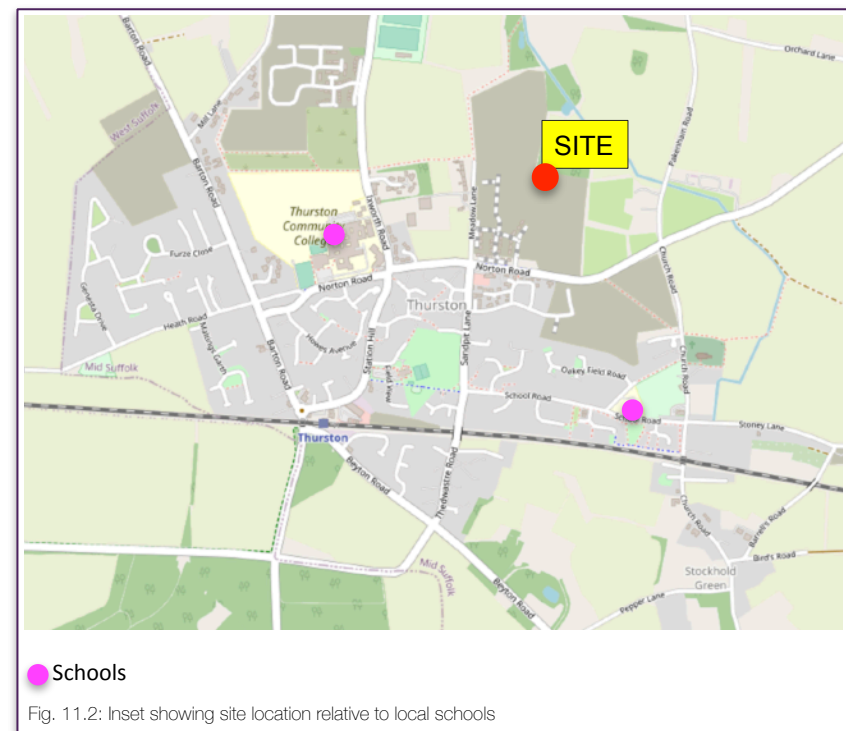
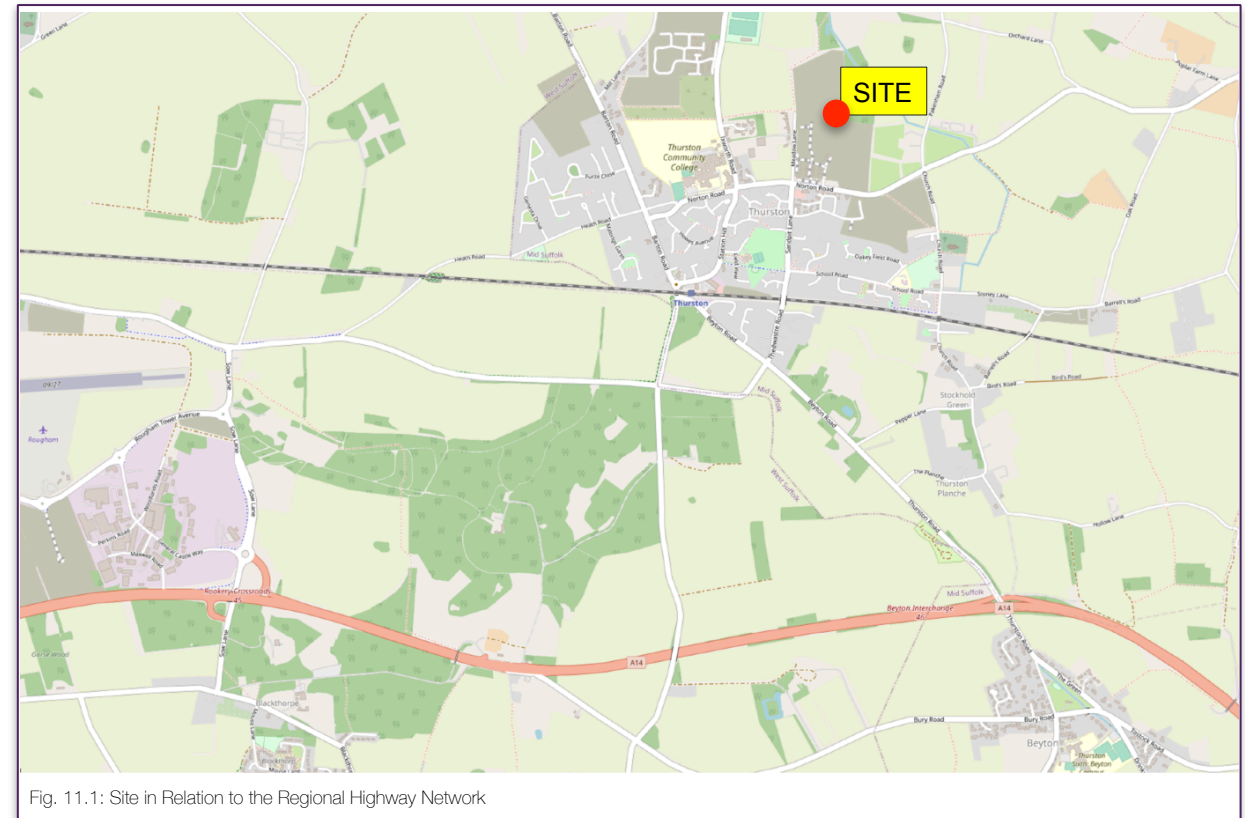
Proposed construction access routes between site and the RHN are illustrated overleaf (Figures 11.3 & 11.4 inclusive). These will be agreed with the local highways authorities and communicated to sub-contractors and suppliers as part of their order.

HAUL ROUTES

Generally construction vehicles will use the permanent development roads to access and travel across the site. However, from time to time it will be necessary to create temporary 'Haul' roads to access areas that do not yet have the permanent road formed or where no permanent roads are designed on the scheme.

Haul roads will be consolidated and temporarily surfaced to make them cleanable.

Once the use of a 'Haul' road is no longer required, the material will be broken up and either re-used or disposed off-site and the permanent landscaping will be constructed.



VEHICLE ROUTING: BETWEEN SITE AND THE REGIONAL HIGHWAY NETWORK

Proposed construction access routes between site and the RHN for traffic approaching from both the east & west are illustrated opposite (Figures 11.3 & 11.4 inclusive). Traffic travelling to site will travel via Junction 46 of A14

Subcontract & supply orders will contain clauses to ensure that ALL construction traffic travelling to and from the site will utilise the approved route.

Drivers of any vehicles that are found to ignore this constraint will receive a written warning in the first instance and will be banned from site for any repeat breach.

VEHICLE ACCESS ARRANGEMENTS: ON TO / OFF SITE

Primary vehicular & pedestrian access to / egress from the site is from 'Norton Road', via the Phase 1 development roads which lies to the south of the site.

Delivery vehicles will access & leave site in forward gear. No reversing will be allowed to take place on the public highway. On site reversing will only be allowed when the driver is under the control of a qualified "banksman".

Whilst on site, all construction traffic will be limited to a maximum speed of 5mph to prevent the spread of dust in dry conditions and to safeguard personnel on site.

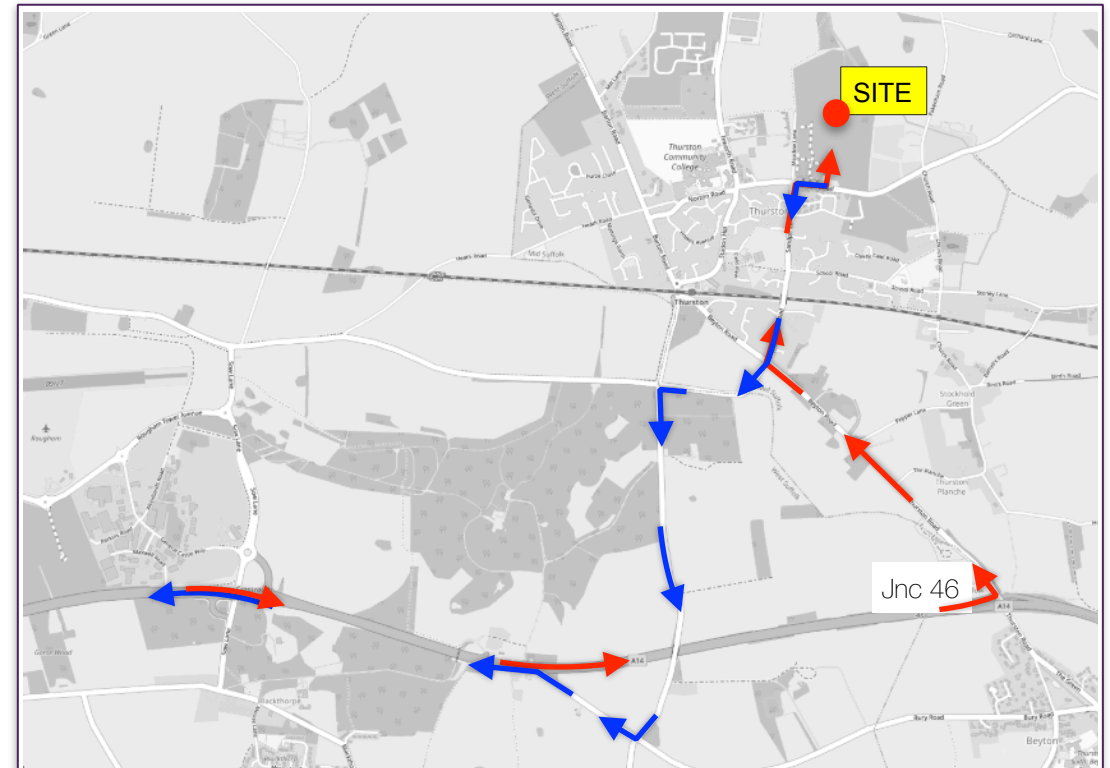


Fig. 11.4: Open Street Map with indicative routes to / from site (Traffic from west)

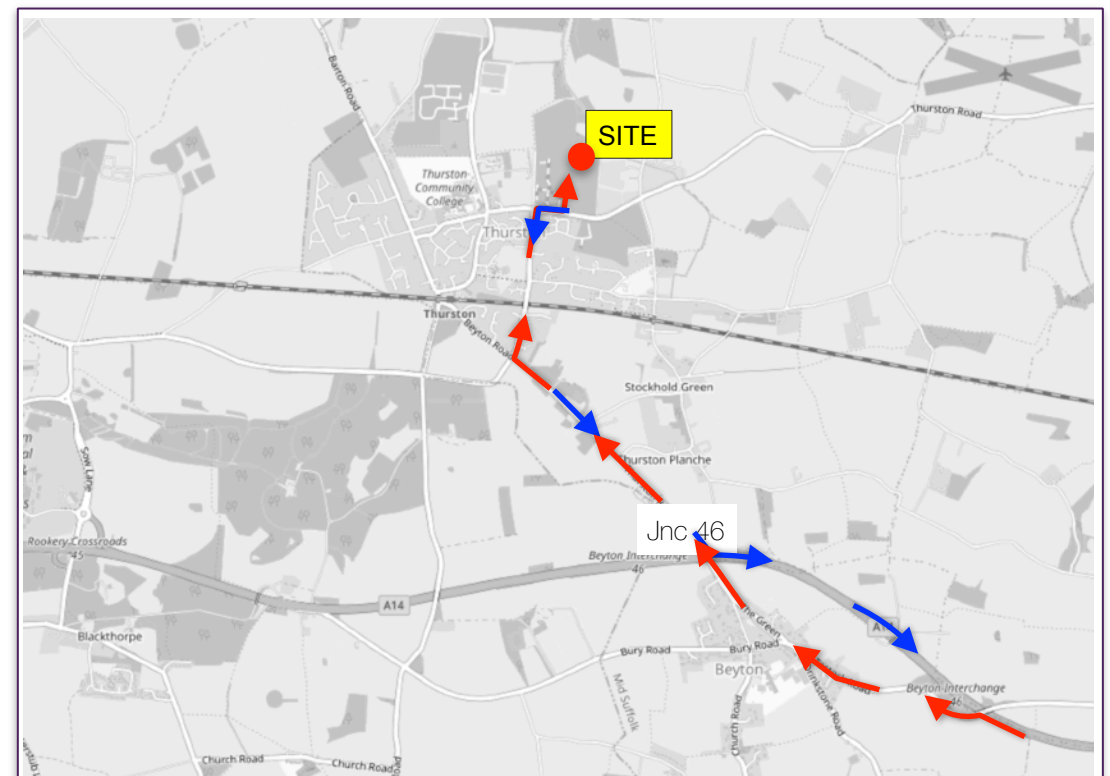


Fig. 11.5: Open Street Map with indicative routes to / from site (traffic from east)

ENTRANCES / EXITS

As the development progresses, site fencing and hoardings will be moved to suit the altered site layout and to reflect the area handed over for occupation.

Site entrances will be provided with gates that will be kept shut when not in use for vehicles. Access onto & off of site will be managed by a gate/traffic marshal.

The accommodation compound will also include a turnstile entrance/exit gate to control and monitor personnel access to the site.

MATERIAL / PLANT STORAGE

All materials and plant will be stored on site within designated areas within the site. Materials will be stored in accordance with RAMS and specifications from manufacturers. Storage heights will not exceed safe limits set out in RAMS.

MATERIAL / PLANT LOADING & UNLOADING

The loads of all delivery vehicles travelling to, or from, site will be adequately covered to prevent debris being deposited on the highway.

Materials and plant will only be loaded and unloaded on site and then stored either close to their point of use (for just in time deliveries) or in Materials Compound Areas (See proposals in Section 5). All loading and unloading will be carried out under the control of suitably qualified personnel.

SIZE OF VEHICLES

In general VHE will insist that rigid heavy goods vehicles make the majority of deliveries to site. However, it is likely that materials such as reinforcing bars and any structural steelwork will be delivered on articulated vehicles.

Where possible, we will instruct suppliers and contractors to use the smallest delivery vehicles possible to ensure that they do not cause obstructions on local roads.

VEHICLE WEIGHTS & EMISSIONS

No vehicles or plant will be used on the public highway that are heavier than allowed by law. There should therefore be no risk of causing damage to buried pipes, cables or services within the highway.

Where any crossover of the existing foot path is proposed, boiler plates or reinforced concrete "spreader-plates" will be provided to reduce the point loads applied to buried services.

All vehicles used will be licensed for use on the public highway and will be subject to routine and periodic inspection to ensure that emissions comply with regulations.

PARKING

Within the site compound areas illustrated in Section 5 we will provide adequate parking facilities for Site Personnel, Operatives, Consultants and Visitors.

PLANT & WHEEL WASHING FACILITIES

See Section 8 for details.

SAFETY OF ROAD USERS

It is not believed that anything contained in the proposed works will affect the normal operation of the roads around the site therefore existing pedestrian and cycle operations should be no worse affected than by any other use of the public highways.

Warning signage will be erected close to site access/exit points to warn pedestrians and road users of the likely presence of construction traffic.

WORKS SEQUENCING

Where possible we will schedule works that interface with the public (for example the S278 works to the existing highway) to avoid carrying out such works during the morning and afternoon drop-off/collection times for the nearby schools or peak traffic times. If possible we will seek to carry out such works during school holiday periods.

All highway work will be protected with 'heras' type fencing and approved barriers and works will be executed in accordance with licence arrangements agreed with the local authority.

12.0 - Ecology Management

12. ECOLOGY MANAGEMENT

TREES & SHRUBS

Damage arising from construction activities can affect trees and shrubs both above and below the ground.

An Arboriculture Impact Assessment (AIA) identifies the Root Protection Area (RPA) for each tree being retained by the development. Any trees that are in close proximity to areas of working should be protected with a Tree Protection Barrier (TPB) to prevent damage to the existing trees / shrubs.

Due to the nature of the scheme a proportion of the proposed works falls within the RPA of various trees as identified within the Arboricultural Assessment included within the Planning Application. Where areas of work lie outside of the RPA, the TPB will be vertical and will comprise steel, mesh panels 2.4m in height ('Heras' type) and should be mounted on a scaffolding frame (shown in Fig 2 of BS5837:2012 (Fig. 12.2 opposite)).

In areas where works about a tree's RPA, or where they fall within the RPA, the TPB will be horizontal. These horizontal TPBs fall into two categories:

1. Those allowing access to carry out construction at the edge of the RPA but for which vehicles can be prohibited.
2. Those to protect buried roots in the location of the existing hard surfacing.

In these areas it is recommended that "No-Dig" surfacing be employed in accordance with BS5837:2012 and 'The Principles of Arboricultural Practice: Note 12, Through the Trees to Development [APN12]'.

The TPB for hardstandings will be formed of a "protective sandwich" comprising: Traffic plate or boards or proprietary system such as "Ground-guards"; 150mm layer of woodchip; Traffic plate or boards or proprietary system such as "Ground-guards"; Geotextile material. This "sandwich" will be constrained on all sides to prevent horizontal movement and spreading of the protective layers. A vertical barrier as Fig 2 of BS5837:2012 will be provided at the edge of the "protective sandwich" material to prevent access to the unprotected TPA.

The TPB for the areas adjacent to construction that extends up to the edge of the RPA will not be required to take construction traffic and will comprise timber boarding on a layer of wood chippings, laying on geotextile material. Again, a vertical barrier will be provided as above.

The sketches opposite indicate various Tree Protection Barriers / Zone types.

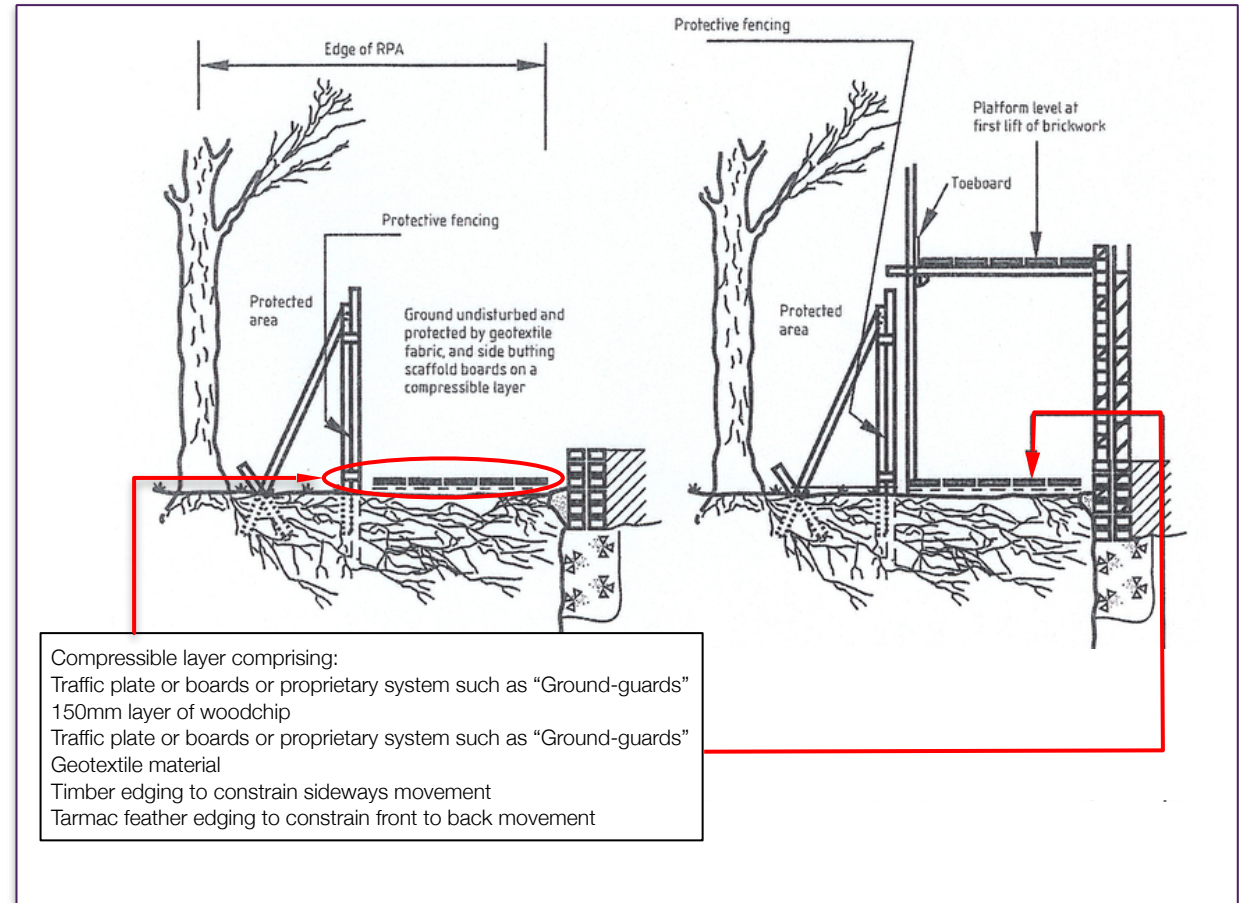


Fig 12.1 Horizontal Root Protection zone for both access / egress & vehicle exclusion zone

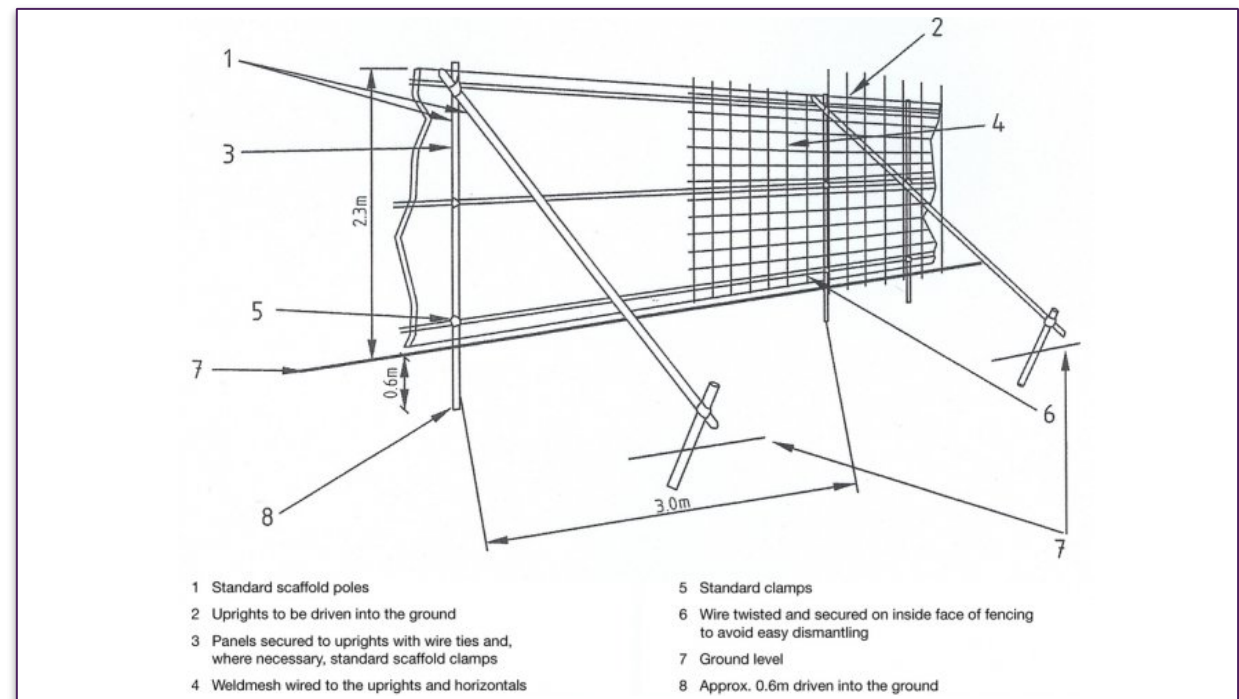


Fig 12.2 Typical Vertical Tree Protection Barrier

PROTECTION OF ECOLOGY AND WILDLIFE

General measures for the 'Protection of Ecology & Wildlife' are set out below. For further details of ecological measures and ongoing management, please refer to the "Landscape & Ecology Management Plan" (LEMP) and "Construction Environmental Management Plan - Biodiversity" (CEMP-Biodiversity).

Any environmental measures identified within the LEMP or CEMP-Biodiversity will be carried out on site with ongoing measures subject to periodic review by Ecological Clerk of Works (ECoW) with details of roles and responsibilities as set out below:

Potential Receptors	Development Actions/Effects with Potential Impacts	Incorporated Measure
Habitat (General)	Dust deposition resulting in changes to vegetation	Works will be undertaken using all necessary and practical measures to minimise the release of dust including: using road sweepers as necessary following construction traffic passing from the site on to public roads; damping down haul roads during dry weather; and ensuring that lorries transporting material onto the Site are sheeted when conditions warrant, e.g. during dry periods or when carrying fine materials.
	Hedgerow removal to facilitate development resulting in loss of habitat and of connectivity for various species	All works will be undertaken in accordance with details set out above with regard to 'Trees & Shrubs' and in accordance with approved plans only. Removal of nesting habitat to be reviewed as part of ECoW duties. Retained hedgerows will be protected in line with AIA and the above details for 'Trees & Shrubs' Any mitigation to compensate for the loss of hedgerow will be set out in appropriate assessment documents.
Badger	Potential for badger setts to be dug within the site during construction and risk of damage/obstruction to sett and associated legal implications	A pre-construction badger survey, to include all areas within 30m of construction sites, will be carried out approximately 3 months in advance of each phase of development. Should any active setts be identified, either construction activities will be re-sited to avoid it, or a licence would be sought from Natural England to close the sett. Ongoing review of badger activity to be undertaken as part of ECoW duties. See below.
	Collisions with construction traffic causing death or injury	A method statement will be prepared under which vehicle movement outside of daylight hours will be restricted, vehicle speeds controlled, and operatives warned of the presence of badgers in order to reduce the risk of collisions. Application of a 20mph speed limit during operation.
	Creation during construction of deep excavations in which badgers could be trapped, causing death or injury	Deep, steep-sided excavations will be covered at night or an escape ramp provided to avoid badgers falling in and becoming trapped.
Reptiles / Amphibians	Vegetation & pond clearance during construction could result in the death or injury of reptiles or amphibians	Populations of reptiles or amphibians may be present within small areas of the wider site. Where no formal translocation exercise is to be undertaken, with creatures 'displaced' from suitable habitat into retained areas through a process of habitat manipulation. Any on site works likely to affect reptiles or amphibians will be supervised by the ECoW. Habitat manipulation will involve cutting vegetation to below 5 cm during the winter (November to February), to create sub-optimal conditions for reptiles. The short sward would be maintained until the ground clearance is undertaken. Clearance would be supervised by ECoW and a destructive hand search would be undertaken (where appropriate) to reduce the risk of injury to, and killing of reptiles. All clearance works would be undertaken during the period when reptiles are active (generally from late March/ April to late October) on warm days (with temperatures above 9oC). Immediately prior to any vegetation clearance and / or ground disturbance works within other areas of suitable reptile habitat (i.e. hedgerows and adjacent grassland/ruderal habitats) a destructive hand search would be undertaken as per above.

Potential Receptors	Development Actions/Effects with Potential Impacts	Incorporated Measure
Bats	Light, noise or vibration during construction or operation causing displacement from foraging areas and commuting routes	<p>In case bat roosts are present at the Site, a lighting strategy would be implemented to minimise the extent to which lighting associated with both construction activity and the occupied dwellings affect areas of retained and newly created wildlife habitats on or in the vicinity of the site. The preparation of the strategy would be informed by the Bat Conservation Trust's 2014 Interim Guidance note Artificial Lighting and Wildlife and the Institute of Lighting Professionals' publication Guidance Notes for the Reduction of Intrusive Light (http://www.bats.org.uk/pages/bats_and_lighting.html). Further details of the Lighting Strategy are set out within the LEMP.</p> <p>In respect of construction, if working during darkness is unavoidable during the bat activity period (April-October inclusive), lighting would be restricted to the area required to be illuminated, to avoid light spill on to bat habitat, principally retained hedgerows.</p>
	Vegetation clearance could result in the loss of bat roosts, the killing or injuring of individual bats, or effects on the population of bats (through loss of foraging and commuting habitat)	<p>Any trees capable of supporting bat roosts will be checked by the ECoW prior to felling/removal.</p> <p>Any hedgerows and woodland areas on-site provide good foraging habitat and commuting corridors for bats. New habitats (i.e. within public open space) may be designed to provide good foraging habitat for bats as well as to maintain any sheltered commuting corridors across the Site.</p>
Dormouse	Land cover change (hedgerow removal) resulting in death or injury of dormice	<p>Any works affecting confirmed or potential dormouse habitat, namely hedgerow and shrub habitats will be subject to the terms of a Dormouse Mitigation Licence issued by Natural England, and subject to the conditions of such a licence.</p> <p>Advanced planting of new hedgerow habitat can be conducted in the appropriate planting season to mitigate for the loss (if any) of initial phases of development and associated hedgerow removal.</p> <p>Any hedgerow removal, and the timing of works, will be subject to review by the ECoW to ensure compliance with the mitigation licence.</p> <p>Initial phases of hedgerow removal (small extents) would be undertaken in a single summer clearance phase, with future removal subject to two stage removal: winter reduction of vegetation and late spring removal of roots.</p> <p>Further mitigation enhancement measures will be detailed within any LEMP and assessment documents. In addition a lighting strategy would be implemented (see bat compensation measures).</p> <p>Retained hedgerows (supporting dormouse) will be protected in line with AIA and the above details for 'Trees & Shrubs'.</p>
Other mammals	Creation during construction of deep excavations in which hedgehogs and other small ground-dwelling fauna could be trapped, causing death or injury	As set out above for badgers, any deep holes created during construction would be either covered or an escape ramp provided, to prevent death or injury to hedgehogs and other small ground-dwelling fauna.
Birds	Vegetation clearance could result in the loss of potential nesting habitat, potential destruction of an active bird nest and / or the killing or injuring of individual birds	<p>All vegetation clearance would be completed outside of the breeding bird season (March to August inclusive), where feasible. If this is not feasible, an ecologist would check the area to be cleared for breeding birds prior to vegetation removal. Should active nests be found, vegetation removal would be delayed until the young have fledged or the nest has been abandoned for other reasons.</p> <p>A pre-construction survey for nesting birds would be carried out prior to each phase of development, during mid-June-July. Should nests be identified which would be disturbed or destroyed by development activities, appropriate measures would be put in place to protect the nest from disturbance until any young have fledged. Should a nest site be lost to subsequent development, or be unlikely to be used in the future as a result of occupation, a replacement nest site would subsequently be provided in a suitable location (to be advised by the ECoW).</p>

POTENTIALLY DAMAGING DEVELOPMENT

Annex G of BS4202:2013 (illustrated opposite [Figure 12.3]) sets out typical construction activities that could impact on biodiversity on and/or off site.

Prior to any activity taking place on or near to the site, detailed task specific 'Risk Assessment/ Method Statements' (RAMS) will be prepared to:

1. Consider the impact that activities will have (including upon biodiversity on and off site)
2. Set out the way in which operations will take place.

The Method Statements will outline the hazards involved and detail a step by step guide on how to do the job safely, they will also detail which "control measures" are to be introduced to ensure:

- the safety of everyone who is affected by the task or work process, and
- protection of the local environment & biodiversity on and off site.

The site logistics proposals and environmental protection measures contained in this CMP have been derived to minimise the impact that the site logistics & construction works could have upon the local environment.

ECOLOGICAL CLERK OF WORKS (ECOW)

VHE will engage a dedicated ECoW to supervise or undertake the following activities, to avoid causing harm to biodiversity features and to ensure that works are carried out in accordance with legislation. ECoW duties will comprise the following:

- to provide a point of contact for all sensitive works or those effecting habitats, flora and fauna- with contact details maintained on-site
- to directly supervise works and to ensure accordance with any mitigation licence issued by Natural England
- to maintain a record of compliance with ecological requirements, including the CEMP-Biodiversity, CMP, LEMPs, licenses and any other relevant documents/plans
- to advise on any remedial actions or amendment to details set out within CEMP-Biodiversity, CMP, LEMPs licenses and any other relevant documents/plan
- to supervise activities on site and to provide advice to site management.

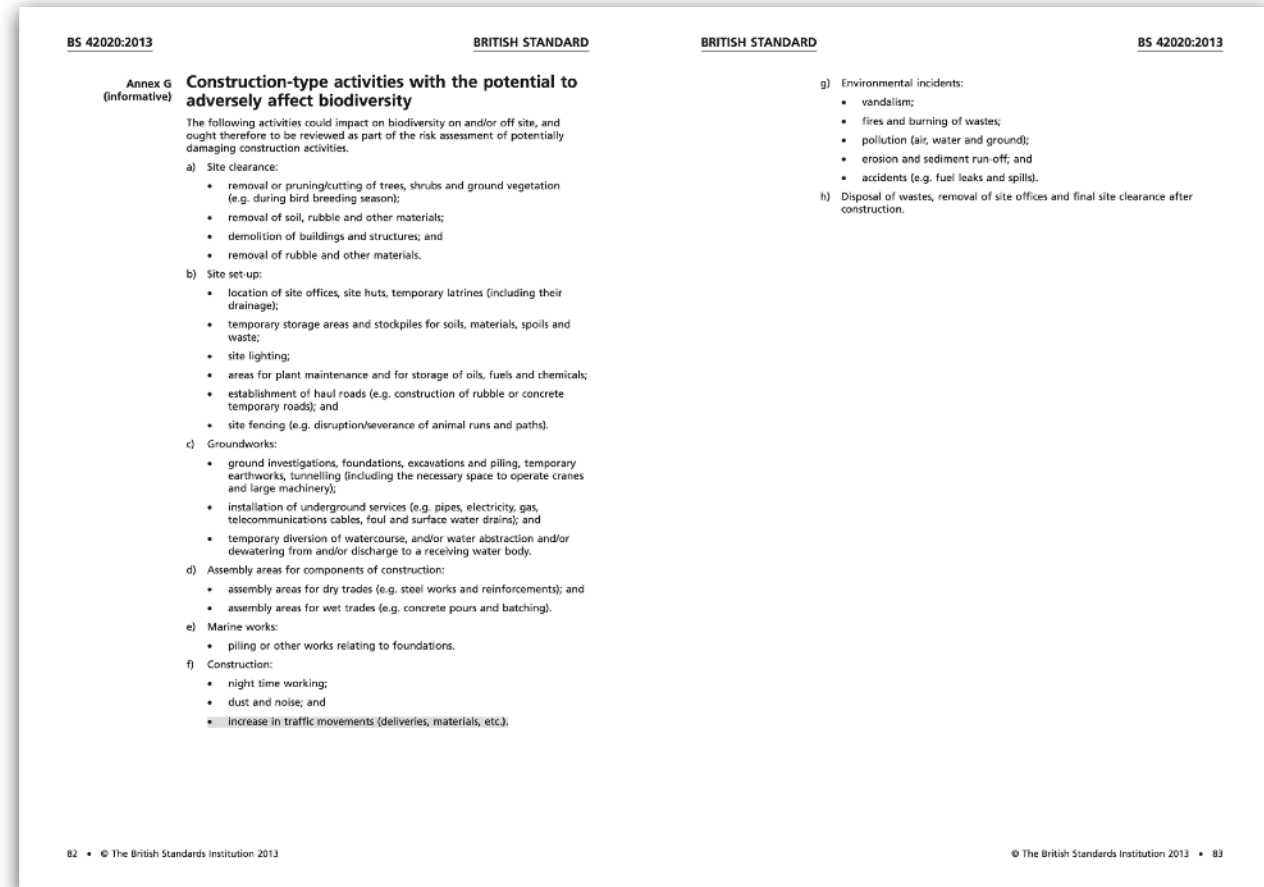


Fig. 12.3: Annex G - BS 4202:2013

13.0 - Security Management

13. SECURITY MANAGEMENT

TEMPORARY HOARDINGS & FENCES

The site perimeter of each delivery phase will be fully enclosed to protect the general public and deter unauthorised entry. Principal site hoardings will be constructed of plywood faced on a timber frame (Figure 13.1 opposite) with an approximate minimum mass of 7kg/m². These hoardings will be a minimum of 2.4 metres high above external level and will be sited on the site boundary. Other site boundaries will be fenced (either as existing or by use of ‘Heras’ type fencing panels (Figure 13.2)) to prevent unauthorised access.

Where necessary, fenced boundaries will be provided with debris netting or ‘monarflex’ sheeting to control the spread of dust and debris.

Our Contracts Manager will meet the Local Authority on site to discuss hoarding locations and traffic management and a licence for the erection of the hoardings will be applied for in accordance with section 172 of the Highways Act 1980.

Hoardings will be provided with a copy of any licence as well as contact details for site management for use in the event of an emergency. As works progress, ‘heras’ type fencing may be used to prevent access to ‘nearly complete’ dwellings and work areas.

ACCESS/EGRESS GATES

Accesses to the site will be provided during the initial enabling & s278 works as illustrated in Section 5. These will be relocated once the new main development access roads have been constructed to suit the phases of construction.

The site compound areas will also be provided with secondary access gates to segregate the compound from the main works area. Site access/egress gates will be manned to prevent unauthorised entry during normal working hours and securely locked out of hours.

SECURITY

VHE will implement procedures for signing in staff, operatives and visitors to the site as part of induction and management procedures. “Robowatch” cameras may be established on site to provide around the clock surveillance of the site perimeter.

MAINTENANCE

Our site team will regularly inspect boundaries to identify any damage to perimeter fencing and hoardings and these will be reinstated / made good as quickly as possible to prevent unauthorised access.

LIGHTING

It is expected that external lighting may be required to external areas, compound and storage areas during the winter months when work is being carried out.

External site lighting to compound and site areas will be set up to ensure that it does not point directly at neighbouring residences nor the public highway. Timer controls will be used to ensure that lighting is not used outside of working hours so that it does not become a nuisance to neighbours.

Security lighting, incorporating PIR detectors will be set up to keep illumination periods to a minimum and to avoid triggering by small animals and birds.



Fig. 13.1: Typical Hoardings



Fig. 13.2: Typical Heras fencing and branding

14.0 - Public Rights Of Way

14. PUBLIC RIGHTS OF WAY (PROW)

VHE are not aware of any Public Rights of Way that cross the development site and that will be affected by the works.

The nearest PROW to the site lies along Meadow Lane to the west of the site (No. 7 on the abstract SCC Definitive Map).

No PROW will be closed or diverted without permission, subject to the necessary statutory applications and approvals.

No construction materials or arisings will be stored on a PROW.



Fig. 14.1 Abstract from Suffolk County Council Definitive Map

15.0 - On Site Communication

15. ON SITE COMMUNICATION

Information identifying the requirements of the CMP that affect daily work on site will be communicated to operatives as part of their induction process.

A copy of the CMP will be available for inspection on site at all times.

All operatives on site are required by law to undergo a site-specific induction. The names and details of attendees at such inductions are recorded and logged as part of the VHE management procedures for the purposes of health and safety monitoring.

Site management will continuously monitor operations on site to ensure that the requirements of the CMP are being adhered to.

The Construction (Design and Management) Regulations 2007 Approved Code of Practice is specific about the obligations of the Principal Contractor in respect of site induction, as shown in the following abstract:

"INDUCTIONS - Inductions are a way of providing workers with specific information about the particular risks associated with the site and the arrangements that have been made for their control. Induction is not intended to provide general health and safety training, but it should include a site-specific explanation of the following:

- (a) senior management commitment to health and safety;*
- (b) the outline of the project;*
- (c) the individual's immediate line manager and any other key personnel;*
- (d) any site-specific health and safety risks, for example in relation to access, transport, site contamination, hazardous substances and manual handling;*
- (e) control measures on the site, including:*
 - (i) any site rules,*
 - (ii) any permit-to-work systems,*
 - (iii) traffic routes,*
 - (iv) security arrangements,*
 - (v) hearing protection zones,*
 - (vi) arrangements for personal protective equipment, including what is needed, where to find it and how to use it,*
 - (vii) arrangements for housekeeping and materials storage,*
 - (viii) facilities available, including welfare facilities,*
 - (ix) emergency procedures, including fire precautions, the action to take in the event of a fire, escape routes, assembly points, responsible people and the safe use of any fire-fighting equipment;*
- (f) arrangements for first aid;*
- (g) arrangements for reporting accidents and other incidents;*
- (h) details of any planned training, such as 'toolbox' talks;*
- (i) arrangements for consulting and involving workers in health and safety, including the identity and role of any:*
 - (i) appointed trade union safety representatives,*
 - (ii) representatives of employee safety,*
 - (iii) safety committees;*
- (j) information about the individual's responsibilities for health and safety."*

Construction Management Plan

Development at Phase 2A & B, Norton Road, Thurston

REVISION HISTORY

Rev 0 - Initial Issue 05/12/2022

Rev 0 - Issue 2 19/12/2022