



THAKEHAM

CLIENT

In association with **Clarion Housing Group**

Construction Environment Management Plan

Cornfield Close, Littlehampton, West Sussex



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1.0 Introduction

1.1 General

This Construction Environmental Management Plan (CEMP) is for the proposed development comprising of the construction of 77 new residential dwellings and all associated infrastructure including highway works, utilities, drainage, and landscaping as permitted under the planning consent from Arun District Council LU/330/18/PL at Land adjacent to Cornfield Close in Littlehampton.

1.2 Planning Condition 6:

Prior to commencement of development a Construction Environmental Management Plan (CEMP) and Landscape and Management Plan (LEMP) including full details of the habitat management and enhancements to take place on site shall be submitted to and approved by the Local Planning Authority and the development shall proceed in accordance with the details so approved.

1.3 Planning Condition 7:

No development shall commence until a Construction Management Plan has been submitted to and approved in writing by the Local Planning Authority. Thereafter the approved plan shall be implemented and adhered to throughout the entire construction period. The Plan shall provide details as appropriate but not necessarily be restricted to the following matters,

- *An indicative programme for carrying out of the works*
- *The anticipated number, frequency and types of vehicles used during construction, including restricting construction traffic to travel outside of the network peak periods*
- *The method of access and routing of vehicles during construction.*
- *The parking of vehicles by site operatives and visitors.*
- *The loading and unloading of plant, materials and waste*
- *The storage of plant and materials to be used to construction of the development*
- *The erection and maintenance of security hoarding*
- *The provision of wheel washing facilities and other works required to mitigate the impact of construction upon the highway (including the provision of Traffic Regulation Orders).*
- *Details of public engagement both prior to and during construction works.*
- *Measures to minimise the noise (including vibration) generated by the construction process to include hours of work, proposed method of piling for foundations, the careful selection of plant and machinery and user use of noise mitigation barrier(s).*
- *Details of floodlighting, including location, height, type and direction of light sources and intensity of illumination.*
- *Measures to control the emission of dust and dirt during construction*
- *A scheme for recycling/disposing of waste resulting from demolition and construction works.*

1.4 Objectives

The purpose of a CEMP is to outline how a construction project will avoid, minimise or mitigate effects on the environment and surrounding area. It is a 'live' document that is to be reviewed and updated at regular intervals throughout the project life cycle.

The CEMP is not intended to be used to discharge planning conditions (other than Conditions 6 & 7 of the planning consent), nor is it intended to be a detailed summary of specialist disciplines, such as drainage or ecology. The CEMP will be provided to all contractors and suppliers at the procurement stage and kept on site to enable the pertinent chapters to be reinforced to each operative during the site induction and tool box talks.

1.5 Site Description, Current Use and Surrounding Land Uses

The site is located to the north of the suburban area of Littlehampton on the south side of Cornfield Close, off the A259, Worthing Road. The development site of 2.71ha, is a former mobile caravan park which is now clear of all buildings although the former clubhouse and several concrete oversites remain. Prior to this the site was a brick field. The topography of the proposed development area of the site is generally flat with a slight fall from the north west corner at approx. 8.0m AOD to the south east corner at approx. 7.1m AOD.

To the north and north-east, the site is bounded by residential properties of Cornfield Close and Oakcroft gardens. To the north-west corner of the site is Cornfield School. The remainder of the site is bounded by public open space separated by tree line and hedgerow. Directly south of the public open space is Littlehampton Academy secondary school.

2.0 Construction Environmental Management Plan

2.1 Project Description and Off-Site Works

The project comprises of the clearance of existing trees and undergrowth trees together with the redevelopment of the site to incorporate 77 new residential dwellings consisting principally of 2 storey houses and one 4 storey block of 12 apartments and one 3 storey block of 6 apartments. The housing is a mixture of affordable rented housing and shared ownership housing.

In addition to the installation of all new services, drainage and other infrastructure, a new access road taken from Cornfield Close into the proposed development and the crossover for these works is subject to a Section 278 Agreement and will form the permanent construction access to the project.

2.2 Project Roles, Responsibilities and Contacts

Thakeham has overall responsibility for the development and will have a dedicated on-site management team consisting of a Project Manager, Site Managers, Finishing Foremen, and Materials Manager, all of whom being supported by Thakeham Head Office staff.

In tandem with Thakeham, there will be a dedicated civil engineering contractor assuming responsibility for the off-site highway works. This will be a contractor who's familiar with undertaking such works. Contact details for this contractor will be displayed on signs in the locality of the roadworks.

2.3 Health & Safety Policies and Responsibilities

Thakeham will carry out all operations on this development in full compliance with all relevant Health and Safety Regulations, which includes making the statutory notification to the HSE and submitting the F10.

CDM Regulations place a statutory obligation for all construction activities to identify key roles, namely the Client, Principle Designer, and Principle Contractor these roles can vary and are confirmed to the HSE via 'F10' notifications.

All site operations will receive careful planning and be carried out in a safe and professional manner with due consideration to the surrounding environment. Site Rules will be issued to all site personnel as well as being displayed in the site offices and notice boards. The Site Rules will form part of the inductions that are carried out by the Site Manager with all site personnel and gives guidance on the required behaviour and conduct as well as environmental considerations.

The Construction Phase Health and Safety Plan will be drawn up by the Construction Management Team. This will then be updated as the development progresses.

A traffic management plan will be implemented and amended to suit the progress of the site. The plan will include both pedestrian and vehicle routes to and from the site for all site operatives and deliveries and provide safe access. A copy of the draft Traffic Management Plan is included in Appendix A

All contractors employed by Thakeham will attend a pre-contract meeting, during which their health and safety documentation will be reviewed and amended as necessary. These meetings are fully documented.

All operations will be carried out in accordance with health and safety legislation and good practices with the necessary safety signs and notices being displayed throughout the site.

2.4 Constraints and Restrictions

The existing supplies to the former caravan park buildings have been isolated and terminated at the site boundary. Due to its previous site use, power and water were distributed around the site. Although it can be assumed that these are no longer live supplies, all areas of the site are to be scanned with a CAT and generator prior to any excavation.

Japanese Knotweed has been identified on the northern boundary and in the north-west corner of the site. These areas have been cordoned off and the Japanese Knotweed will be eradicated from site by a specialist contractor with an approved Method Statement.

2.5 Considerate Contractor, Public Engagement, and Advance Notifications

The site will be registered on the Considerate Constructors Scheme and local residents and businesses will be kept informed of progress in the form of regular letter drops and visits if appropriate. The resident neighbour letters will contain details of Thakeham's website where there will be a 'contact us' tab to allow the public to consult directly should any concerns arise. In addition, a Considerate Constructors sign will be displayed at the site entrance with contact details for the Project Manager. Site visits by local school will be encouraged to engage with the wider community.

Off-site road works will be pre-planned in association with the Highway Authority and carried out under licence using approved traffic management contractors. Motorists and the public will be informed of planned works by way of information boards placed on the road side verges which will advise the public of the duration of the works and emergency contact details.

2.6 Indicative Programme/Site Operations

The first construction operation on the development will be the forming of the new crossover and site entrance from Cornfield Close. Upon completion of these works, the foul and storm water drainage and in particular the extensive attenuation tanks will be installed followed by construction of the on-site estate roads to give clean and safe access to all work areas.

If necessary, silt traps will be linked to an on-site storage tank and this will be pumped and emptied as and when required. The sequencing of the construction process will hopefully negate the need for the above, but if extreme weather conditions prevail then the above process will be instigated.

The site consists of 77 units, these will all be constructed using timber frame construction with the exception of the flats which will be traditional masonry construction. There will also be the need to install new water, gas and electric mains including the provision of a new electricity sub-station.

The site will be completed in 5 phases and areas will be opened to both the general public and residents of the development progressively. A copy of the draft Base Programme is included in Appendix B

2.7 Working Hours

Site working hours will be 08:00 to 18:00 Monday to Friday and 08:00 to 13:00 Saturdays and no works shall be undertaken on Sundays or public holidays.

2.8 Construction Site Access Arrangements

Access to the site for all construction traffic will be via the A259. The permanent site entrance will be at the junction of Cornfield Close and will be constructed to base course as one of the earliest operations once the project starts.

Extensive engineering works are due to commence shortly to widen the A259 and ALL site traffic must access the from the east using the Bodyshop Roundabout and exit to the west and use Wick Roundabout.

The designated routes will be signed to instruct construction and delivery vehicles of the direction to and from the site. In addition, 'No Access for Construction Traffic' signs will be erected where appropriate. A Site Access Route Plan is included in Appendix C.

2.9 Public, Visitor, Sales, and End User Access Arrangements

All vehicles must enter and exit the site in forward gear to prevent excess manoeuvring within the highway and appropriate turning areas will be provided on site. In the unlikely event that it is necessary for a vehicle to reverse into or out of the site, a qualified banksman must be in attendance to assist.

The site will have a sales complex which will be completed early in the construction process. Visitor/end user traffic will also enter the site from the new access road off Cornfield Close. There will be onsite car parking for both sales visitors and construction operatives. This is indicated on the Site Logistics Plan in Appendix D

The traffic management plan, which will be developed throughout the project, will clearly identify the location of the aforementioned sales complex and highlight the means of segregation between the general public and construction operatives/traffic.

2.10 Off-Site Construction Traffic, Deliveries, and Signage

Thakeham will have responsibility for ensuring delivery instructions are passed down to all subcontractors and suppliers; such instructions will include delivery routes, site rules and restrictions on delivery times.

All collections and deliveries will be pre-planned, and no collections or deliveries on vehicles over 7.5t will be permitted to site between the hours of 8.00am and 9.30am and 2.30pm and 6.00pm Monday to Friday, during school term time and not between 8.00am and 9.00am and 4.00pm and 6.00pm Monday to Friday during term time. At no time will they be allowed on Sundays or Bank/Public holidays. These times must be strictly adhered to, to avoid peak traffic flow times and school drop off & pick up times.

Large or more complex deliveries require pre-arranged arrival time allocation, and ensuring materials are delivered on suitable vehicles for their size. Due to the restrictions of the local road network within the vicinity of the site ONLY rigid vehicles will be allowed to deliver to site and this will be communicated to all suppliers and subcontractors prior to tendering.

The construction method of the main structure of the two storey houses is timber frame. These will be delivered on Low-loader and there will be approximately 36 deliveries in total. Once the first timber frames are complete, weekly deliveries of either bricks and blocks will commence and it is anticipated that approximately 70 such deliveries will be required on rigid wagon and drag vehicles. Loose materials will be delivered in 8 wheeled rigid vehicles. Mortar silos will be utilised and deliveries of dry mortar will be via a rigid tanker. It is anticipated that approximately 40 deliveries will be required at 1 - 2 week intervals.

The main site entrance gates will be erected at the site boundary, approximately 15m from the junction with Cornfield Close. A gateman will be employed at the main site entrance gates to control access for deliveries. A wheel wash facility will be located at the site entrance to ensure that all vehicles exiting the site are cleaned and do not discharge mud onto the highway.

2.11 On-Site Construction Traffic, Contractor Parking, Pedestrians and Workers Travel Plan

The site compound will encompass all the workers and visitors site parking. At no point during the construction project will parking be permitted off site or in completed areas within the development.

Thakeham encourage all their contractors to vehicle share where possible to minimise off site traffic and on-site parking and this requirement is discussed with each contractor at the Pre-start Meeting.

Traffic routes will be communicated to suppliers and subcontractors via the pre-commencement meetings and order documentation. A Traffic Management plan will be developed on commencement of the project and will be displayed in the site offices.

All Operatives and visitors to the project will be site inducted and briefed on the traffic management and pedestrian routes and updated monthly through sub-contractor meetings. All pedestrian routes will be segregated from construction traffic with the use of designated crossing points, barriers and signage to give clear direction.

2.12 Location of Site Offices, Material Storage, and Construction Plant

The site welfare compound including project offices and welfare facilities will be located in an area located at the north end of the development adjacent to the site entrance. Contractors Parking is located above the attenuation drainage and due to loading restrictions of the attenuation crates, only cars and LGV's will be able to use this area. Proposed car park areas will be used for materials storage areas.

See Site Logistics Plan in Appendix D.

The site compound will consist of double stacked cabins which will be established within the site as soon as possible. LED Security lighting will be PIR lighting and will be installed in such a way as to avoid causing any light disturbance to the surrounding residents. It is anticipated that there will be no floodlighting required on this development. A CCTV security system will be installed to prevent / deter unauthorised access to the site.

All materials will be stored on site in designated areas and in line with the manufacturers' instructions. Materials will be off loaded from delivery vehicles and then moved to the

appropriate areas by mechanical means where necessary/appropriate. Any vehicle movement will be line with the traffic management plan and the designated site routes.

Designated locations will be positioned for construction plant separate from car parking and will include refuelling points and bucket changing areas.

2.13 Surface Water Run-Off Control, Groundwater, and Drainage

During the construction phase the greatest potential effects on the water environment originate from construction-derived pollution i.e. sediment, oil, chemicals and cement products.

The provision of wheel-cleaning equipment for site plant to prevent the tracking of mud onto the public highway and therefore into the off-site surface water drainage systems.

A number of measures will be employed during construction to prevent the release of suspended sediments including:

- Site access points will be regularly cleaned to prevent build-up of dust and mud;
- Earth movement will be controlled to reduce the risk of silt combining with the Site runoff;
- Wheel wash facilities will be used (where required) to isolate sediment rich runoff;
- Cut-off ditches and/or geotextile silt-fences will be installed around excavations, exposed ground, stockpiles to prevent the uncontrolled release of sediments from the Site;
- Sediment traps will be required on all surface water drains in the surrounding region;
- Silty water abstracted during excavations will be discharged to the settlement tanks.

During the construction of the roads and hardstanding's associated with each plot, if the run-off of storm water is excessive then silt traps, straw bales and silt fences will also be used to capture the run-off. The silt traps will be linked to an on-site storage tank and this will be pumped and emptied as and when required. The sequencing of the construction process will hopefully negate the need for the above, but if extreme weather conditions prevail then the above process will be instigated.

Oils and Hydrocarbons: Measures will be taken to protect controlled waters from the release of oil and hydrocarbons. Wherever possible plant and machinery will have drip trays beneath oil tanks/engines/ gearboxes/ hydraulics which will be checked and emptied regularly and correctly disposed of via a licensed waste disposal operator.

Oils and hydrocarbons will be stored in designated locations with specific measures to prevent leakage and release of their contents, including the siting of the storage area away from the drainage system on an impermeable base. There is a risk of accidental spillage of oils and fuels. An emergency spillage action plan will be produced, which site staff will have read and understood. Onsite provisions will be made to contain a serious spill or leak through the use of booms, bunding and absorbent material.

Concrete and Cement Products: Several onsite precautions will be taken to reduce the potential magnitude of an effect. These include pre-mixing the majority of concrete used and delivering it from an offsite source, thereby negating the need to mix concrete onsite and reducing the creation of alkaline waste water onsite. Wherever possible, any mixing and handling of wet concrete that is required onsite will be undertaken in designated areas; and a designated area will be used for any washing down or equipment cleaning associated with

concrete or cementing processes and facilities provided to remove sediment prior to disposal of foul water.

Water Supply: The mixing of concrete (which requires a significant volume of water) is proposed to be undertaken offsite and therefore will not contribute directly to the proposed development's supply demand.

Wastewater Generation: It is proposed that effluent generated from temporary sanitary facilities will be disposed via tanks in the interim. Once the pumping station is live they will discharge into the existing foul sewerage network located nearby to the site therefore minimising pollution risk of untreated effluent discharging to nearby surface waterbodies.

2.14 Air Quality, Noise and Lighting

Air Quality

During the construction phase the greatest effects on air quality are expected to result from dust. To mitigate the potential impacts from dust during construction activities the site layout has been planned so that machinery and dust causing activities are located away from receptors. Further measures Thakeham will put in place to mitigate the potential impacts from dust during construction activities are set out further in 2.15.

Where possible the use of diesel or petrol-powered generators and use mains electricity equipment will be avoided. All on-road vehicles comply with NRMM standards, where applicable and all vehicles are to be switched off engines when stationary.

Regular site inspections to monitor compliance with air quality and dust control procedures will be carried out and inspection results recorded. The frequency of site inspections will be increased when activities with a high potential to produce dust and emissions are being carried out, and during prolonged dry or windy conditions. Any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, will be recorded and the action taken to resolve the situation is recorded in the log book.

Thakeham will display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary along with the head office contact information.

Noise

The construction of the development will involve processes and equipment with the potential to cause disturbance to neighbouring residents such as the properties in Cornfield Close and Oakcroft Gardens.

On-site construction activities will not take place between the hours of 6pm - 8am, and not before 8am or after 1pm on Saturdays, or the remaining hours of the weekend without additional consideration to controlling noise and with the prior approval of the LPA.

Best practicable means (as defined in section 72 of CoPA 1974) will be employed at all times and in all areas to minimise noise and vibration emissions from the works. The relevant recommendations for the control of noise and vibration on construction and open sites in the approved Code of Practice BS5228 will be adopted.

In general the following measures will be taken:

- a. Solid timber hoarding, to areas of construction is to be used where adjacent to sensitive receptors. Consideration to neighbouring residential properties has been given when locating the main site compound.
- b. Hoarding and fencing will be inspected regularly and repaired as necessary.
- c. All hand held and portable equipment where practicable will be electrically powered
- d. All plant and equipment will be maintained in good working order
- e. Plant, when in operation intermittently, will be switched off during periods of inactivity
- f. All vehicles will observe site speed limits
- g. Stationary equipment and plant such as generators will be placed as far as practicable from noise sensitive properties, and where practical in areas benefiting from natural or purpose-built attenuation such as bunding or behind non-sensitive buildings
- h. Delivery of materials and removal of waste from the site will be planned to minimise disturbance to neighbouring properties. Idling of plant, machinery and delivery vehicles will be prohibited when not in use.
- i. Care will be taken when loading and unloading materials to limit impact noise
- j. Vehicles will not be permitted to queue on the road or pavement outside the site access
- k. Vehicle parked within the site, outside working hours will have their engines switched off.
- l. Vehicle routes and traffic management plans will be arranged to avoid where possible any reversing operations
- m. Activities which can produce significant levels of noise will be arranged for times which are less likely to cause disturbance

In addition to the above any plant on site will be compliant with EU/UK noise limits applicable to that equipment or is no noisier than would be expected from the noise levels quoted in BS5228:1997. All plant will be maintained properly and operate in accordance with manufacturers recommendations. All plant will be fitted with appropriate noise and vibration attenuation measures in place, based on guidance given in BS528.

With the aforementioned measures in place and appropriately planned and managed construction operations, no adverse impacts are anticipated.

Lighting

Where possible a daylight only construction schedule will be adopted to minimise adverse lighting. It is unavoidable that construction work may require work during the hours of darkness in consideration of shorter daylight availability during winter months.

The temporary lighting scheme for the construction phase of the works may be required in these circumstances. The main considerations for the construction phase lighting are:

- To provide lighting when natural light levels fall below a safe level for site activity
- To provide adequate lighting for vehicle and pedestrian access around the site
- To provide lighting for storage, prefabrication and laydown areas
- To provide lighting for construction activity within the building footprint
- To reduce light spill at the site boundary to acceptable levels for the general environment

2.15 Construction Waste, Dust Suppression, Earthworks, and Soil Movements

Prior to commencement on site a Site Waste Management Plan will be prepared to identify the types of waste anticipated and forecast on the anticipated volume of waste for the project. It will identify methods of reducing waste and provide targets for the site team to increase recycling and reduce the amount of waste to landfill. A copy of a typical SWMP is in Appendix E.

Every effort will be made to keep waste materials to a minimum during the construction of the site. Any waste that is unavoidable will be disposed of as per the manufacturer's instructions and with regards to COSHH and waste regulations guidelines. Where possible, separate skips will be used on site to segregate waste before being removed by licensed waste carrier. Waste will be segregated

Materials will be removed from site as soon as possible. Site fencing, barriers and scaffolding will be kept clean using wet methods.

Only cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction will be used. An adequate water supply on the site for effective dust/particulate matter mitigation (using recycled water where possible). Full enclosure will be provided of specific operations where there is a high potential for dust production and is active for an extensive period. This will form part of each operatives RAMS which will be reviewed on a 3monthly basis. If extra prevention is deemed necessary by the site management team or health and safety advisors, they will be implemented accordingly.

For the whole duration of the development, wheel cleansing and road sweeping will be in use. To minimise the impact of construction plant temporary hard standings will be installed to avoid plant running "off road". As soon as practical, the permanent roads and drainage will be constructed, and plant will be restricted to these hard standings, reducing the potential for tracking any dirt or mud onto the roads. In the summer months dampening down methods will be deployed. A site speed limit of 10mph will also be enforced.

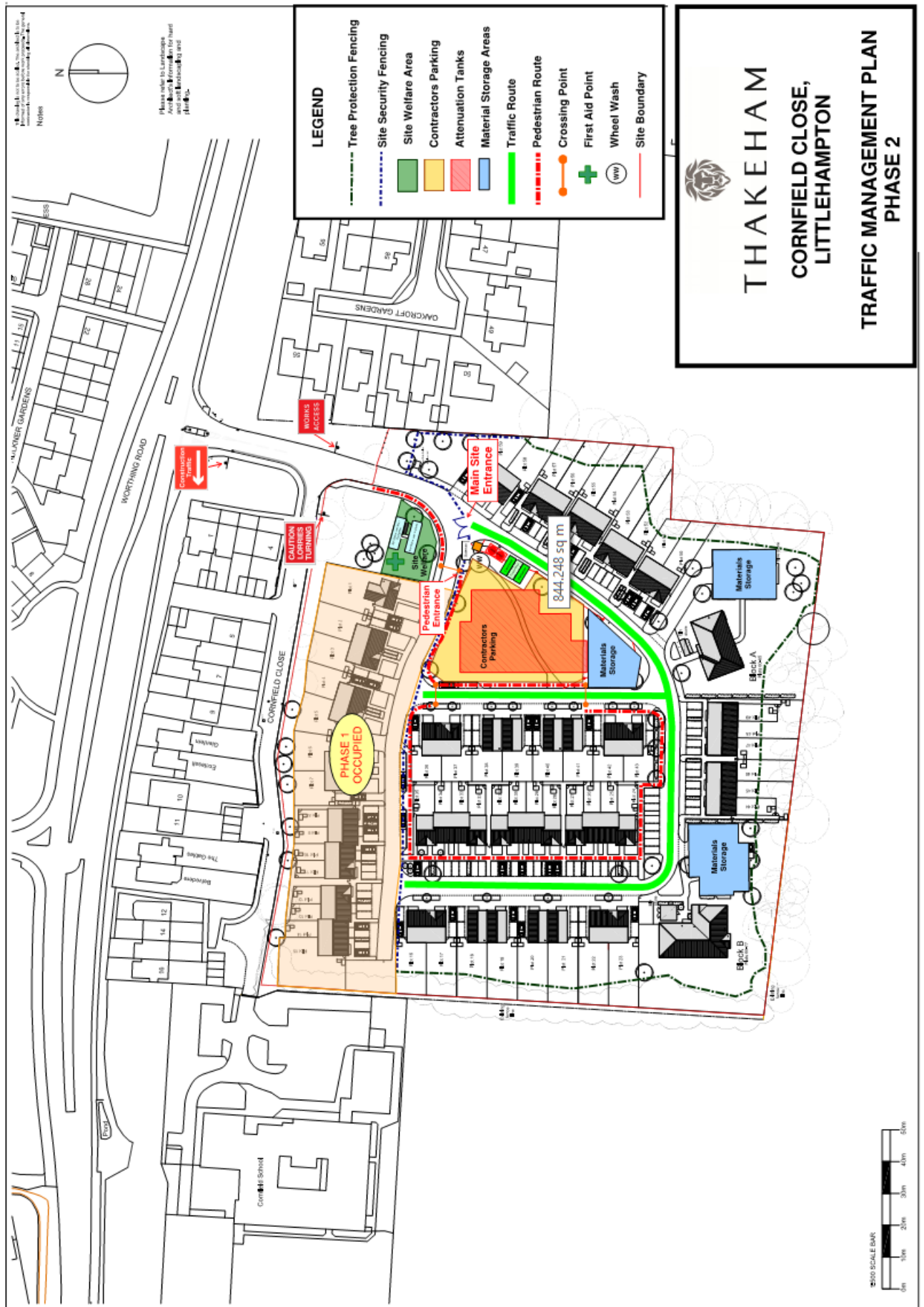
Goal is to keep as much soil on site as possible, a soil strategy will be put in place to reduce double handling of any material. Designated areas will be allocated for stockpiles of material. Consideration will be taken when carrying out large earthworks movements in inclement or hot weather conditions. Haul roads will be laid for transportation of soil to the stockpile areas. All stockpiles will be bunded in neat graded formation at all times.

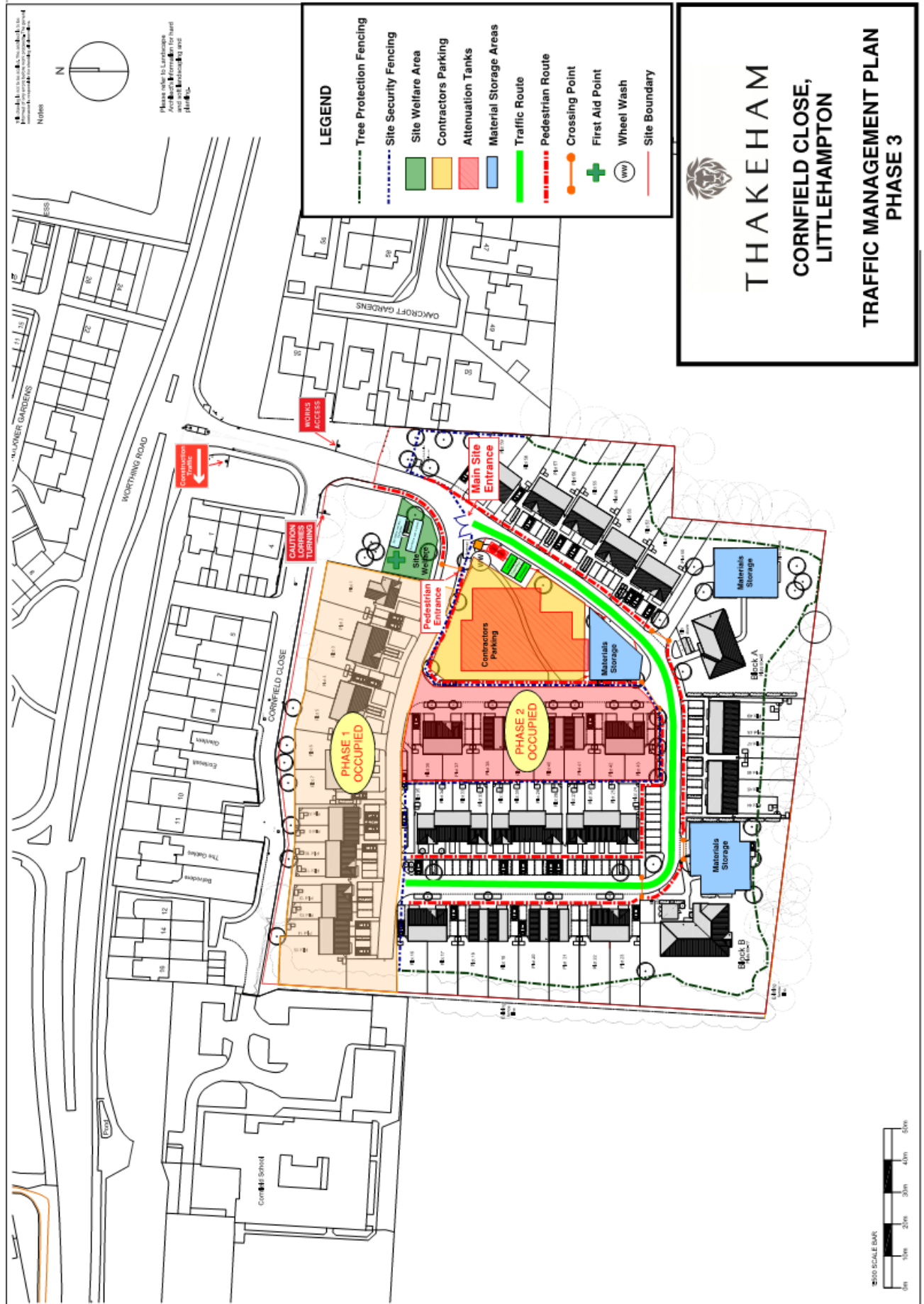
2.16 Site Security, Fencing and Hoarding

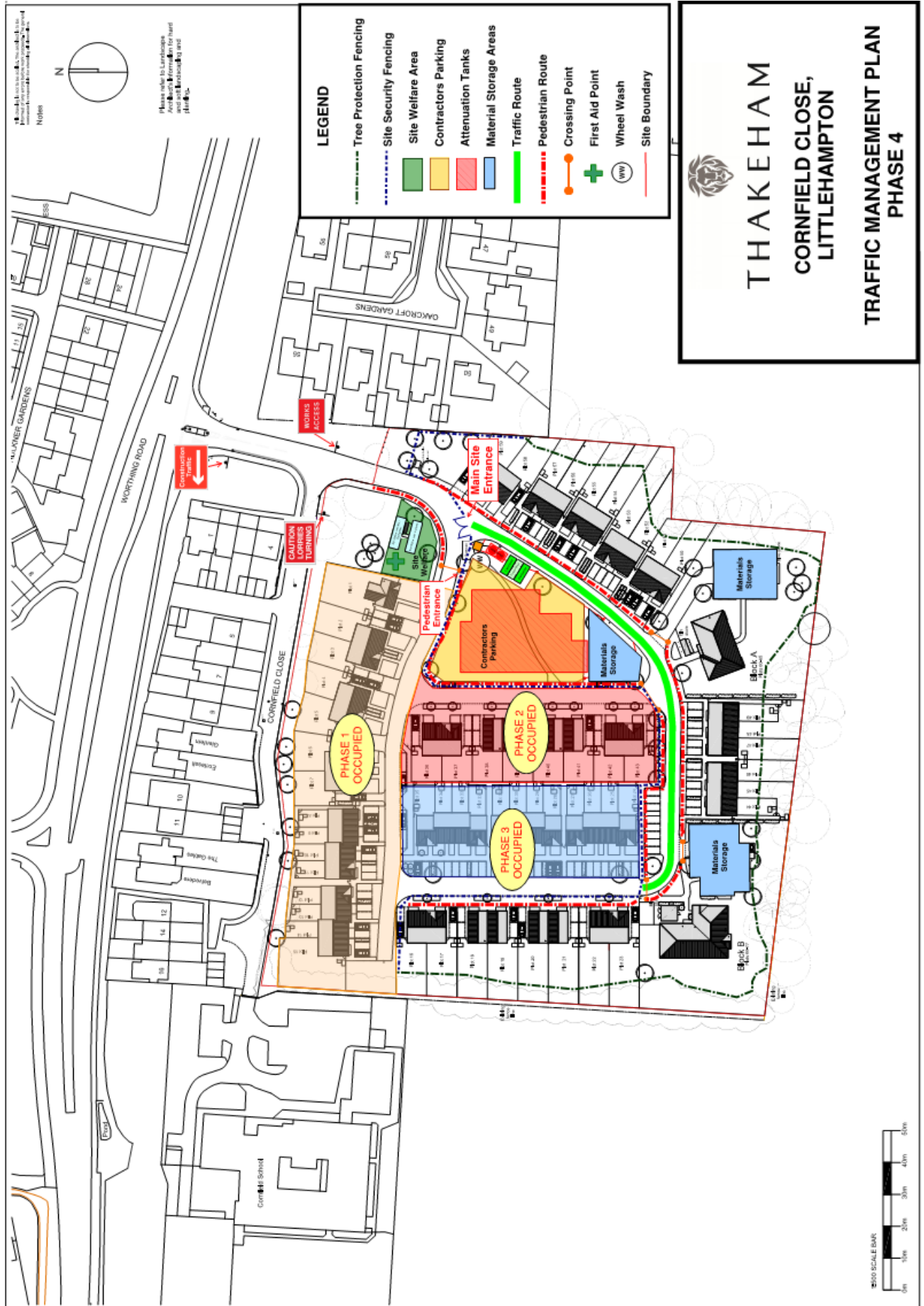
All boundaries of the development will be secured with various methods including 2-metre-high close board fencing, hoarding or double clipped heras panels. A recorded inspection will be carried out on the boundaries on a weekly basis. A combination of CCTV and Infrared detection beams will be deployed within the site compound and boundaries of the site, where deemed necessary a manned operative will be employed during out of hours.

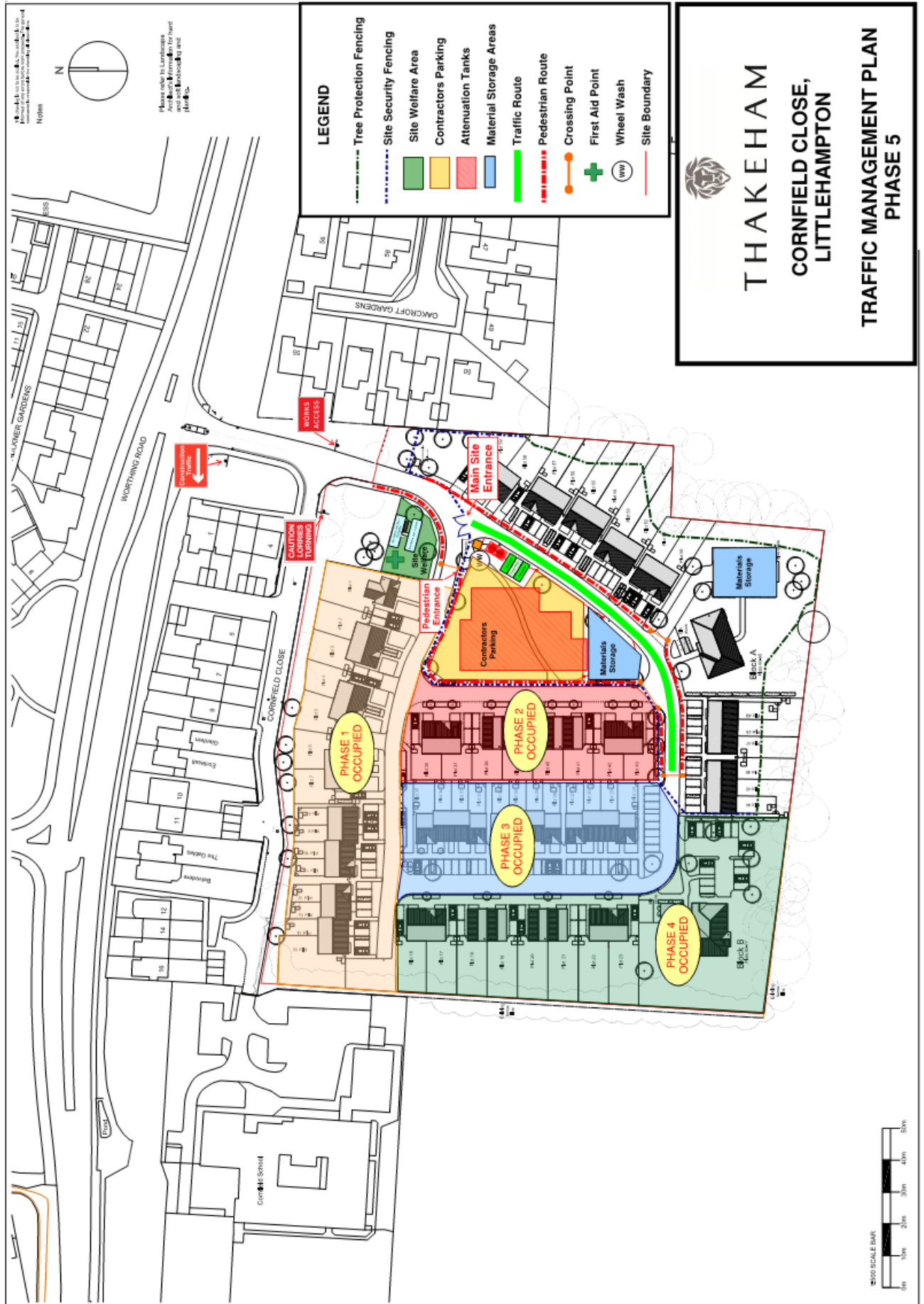
See Appendix D.

APPENDIX A

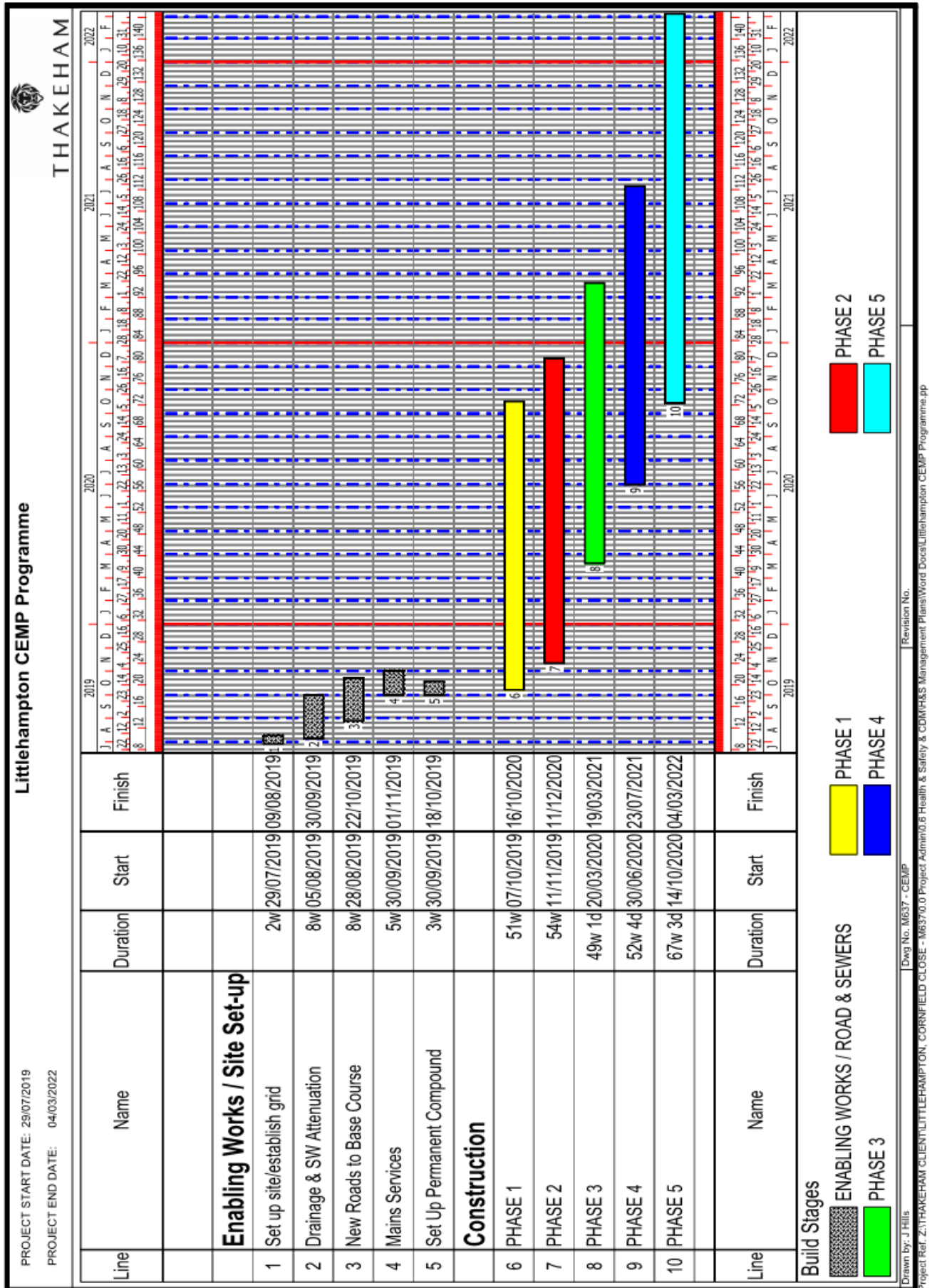


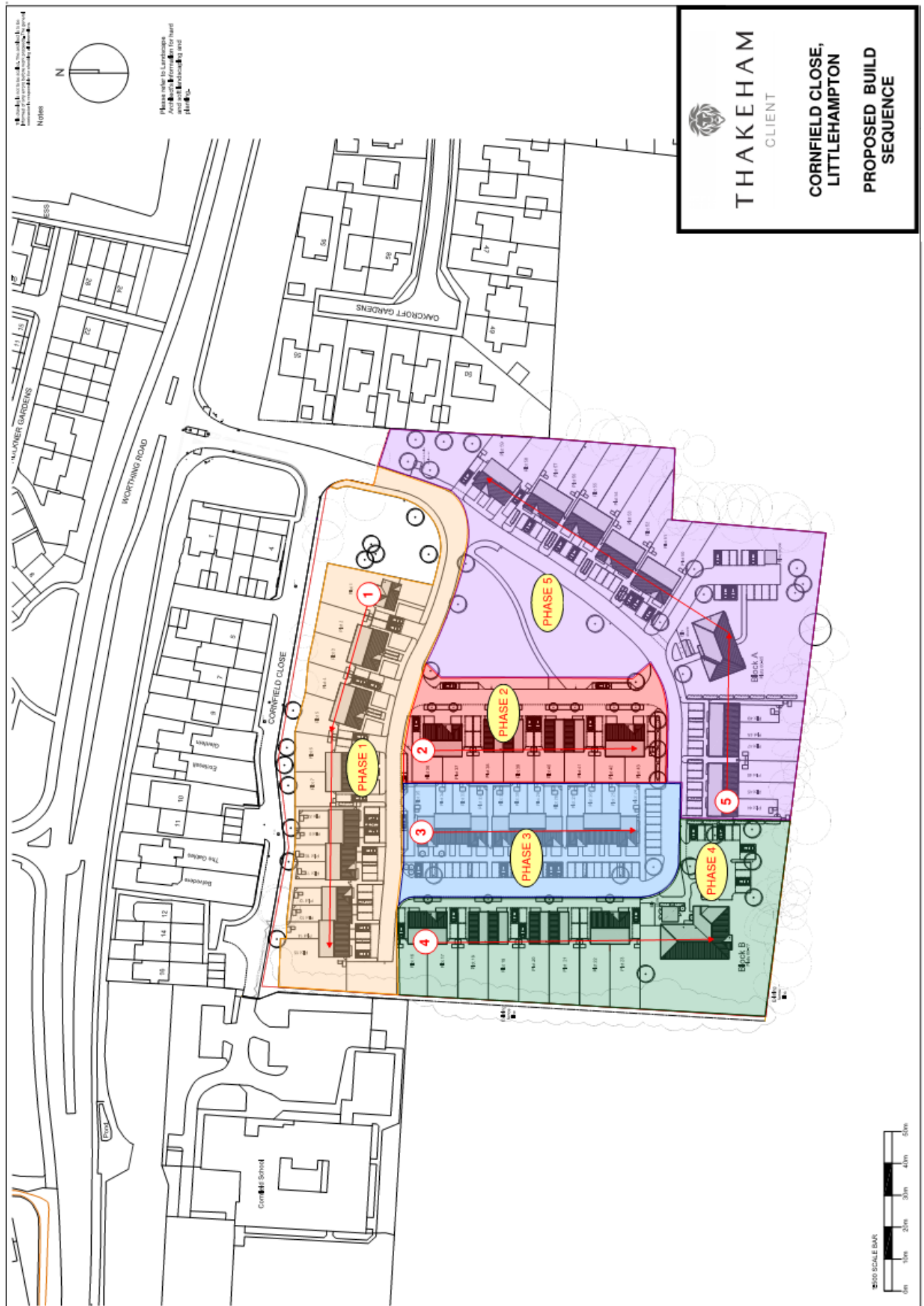






APPENDIX B



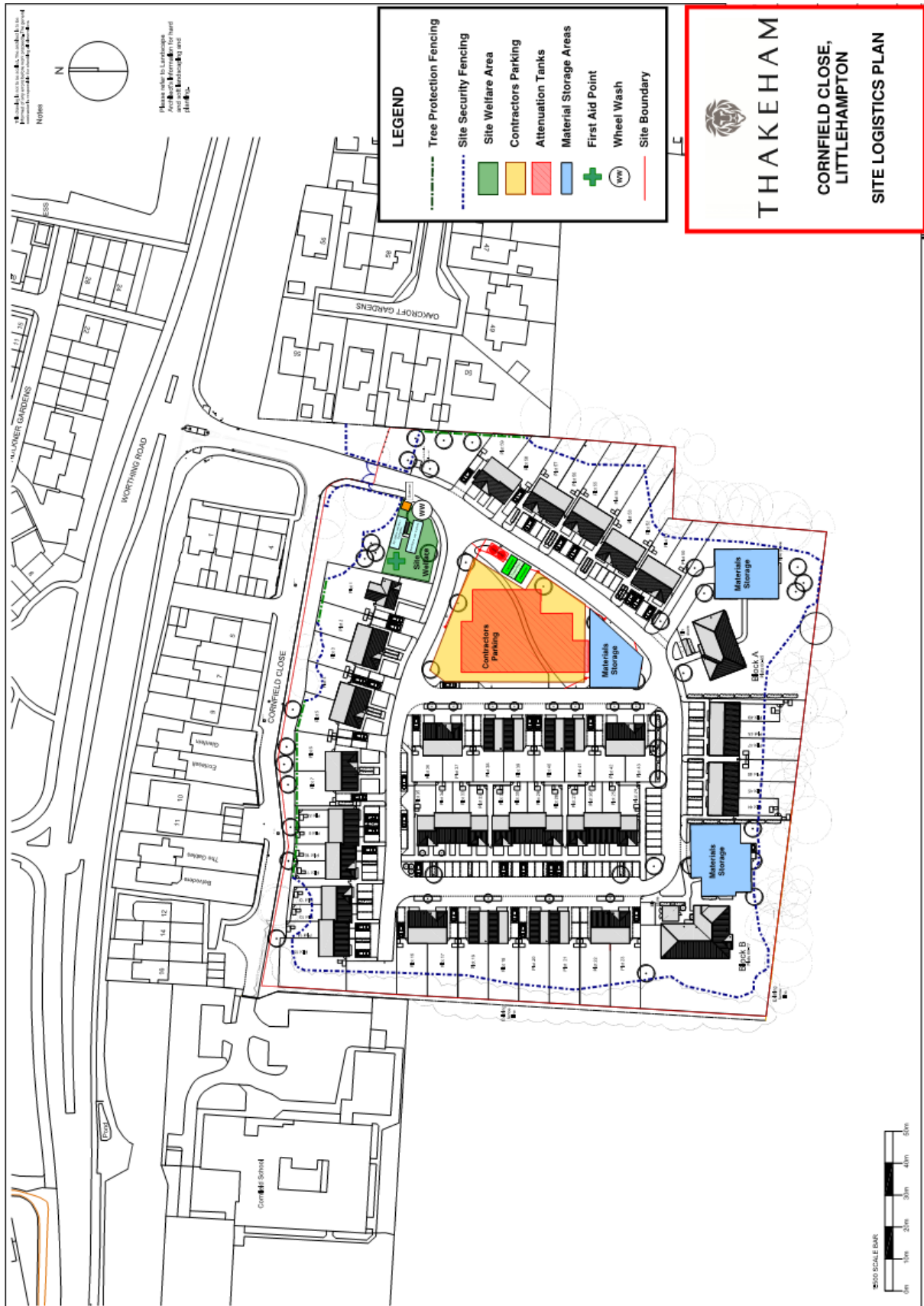


APPENDIX C





APPENDIX D



APPENDIX E



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Site Waste Management Plan

Responsibility

Name of Client:	[.....]
Name of Principal Contractor:	[.....]
Name of person who drafted plan:	[.....]
Notes, amendments:	[.....]

Construction project

Location (address, postcode if appropriate)	[.....]
Estimated project cost	[.....]
Notes, amendments	[.....]

Nature of Project:

➤ Construction of

Scope of project:

Project Aim

At [site name] we are committed to implement the project environmental plan and SWMP so that it is effective, accurate and economical, we are expecting time and a lot of effort to ensure that the procedures put into place are working and are maintained.



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Position	Name	Contact details
Client	[.....]	
Client WM representative (if applicable)	[.....]	
Site Agent	[.....]	Project office
Project Environmental Co-ordinator	[.....]	Project office
Waste Management Co-ordinator	[.....]	Project office
Document Controller	[.....]	Project office

Management

The Construction Director is environmental co-ordinator of the project and as such is responsible for instructing workers, overseeing and documenting results of the SWMP. The Environmental Department will monitor the effectiveness and accuracy of the documentation during the routine site visits.

Distribution

The contractor shall distribute copies of this plan to the Planning Supervisor, Client, Site manager and each Subcontractor. This will be undertaken every time the plan is updated.

Instruction and Training

The contractor will provide on-site instruction of appropriate separation, handling, recycling, re use and return methods to be used by all parties at all appropriate stages of the project.

Toolbox talks will be carried out every month on waste issues and all subcontractors will be expected to attend. The SWMP will also be mentioned in the site induction process. This will ensure that everyone feels they are included and that their participation is meaningful.

Waste management on site

Surplus of waste materials arise from either the materials imported to site or from those generated on site. Imported materials are those, which are brought to the project for inclusion into the permanent works. Generated materials are those, which exist on the project such as topsoil, sub-soil, trees and materials from demolition works etc.

However, there are other considerations to waste management such as waste reduction, segregation of waste, disposal of waste, financial impacts of waste disposal and recording, monitoring, education and reviewing. This plan outlines the procedures that have been put in to place and demonstrates how they benefit the environment, how we can measure the effects and how these procedures and practices are sustainable.



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Forecast volumes (m³) of Potential waste on Site

Waste Category & Types	ENABLING WORKS (Including DEMOLITION)			CONSTRUCTION WORKS		
	Tick	Estimated (m ³)	Quantity	Tick	Estimated (m ³)	Quantity
e.g. concrete						
Inert Waste						
Rock						
Gravel						
Sand						
Aggregates						
Concrete						
Tarmac						
Brick/Blocks						
Top Soil(uncontaminated)						
Sub soil (uncontaminated)						
Bulk excavated (uncontaminated)						
Glass						
Polystyrene						
Plastics (non biodegradable)						
Other;						
Other:						
Other:						
Sub TOTAL						
Active/biodegradable waste						
Plasterboard						
Gypsum products						
Metals-reinforcement						
Metals-steel						
Metals-off cuts						



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Timber				
Cardboard				
Paper				
Biodegradable plastic				
Canteen waste				
Trees				
Vegetation (shrubs, bushes)				
Other:				
Other:				
Other:				
Sub TOTAL				
Hazardous Waste				
Topsoil (contamination)				
Sub soil (contaminated)				
Bulk excavated (contaminated)				
Asbestos				
Explosive				
Flammable				
Other:				
Other:				
Other:				
Sub TOTAL				
TOTAL VOLUMES				



THAKEHAM

Actual Volumes (m³) of Actual waste on Site

Waste Category & Types	ENABLING WORKS (Including DEMOLITION)			CONSTRUCTION WORKS		
	Tick	Actual (m ³)	Quantity	Tick	Actual (m ³)	Quantity
e.g. concrete						
Inert Waste						
Rock						
Gravel						
Sand						
Aggregates						
Concrete						
Tarmac						
Brick/Blocks						
Top Soil (uncontaminated)						
Sub soil (uncontaminated)						
Bulk excavated (uncontaminated)						
Glass						
Polystyrene						
Plastics (non biodegradable)						
Other;						
Other:						
Other:						
Sub TOTAL						
Active/biodegradable waste						
Plasterboard						
Gypsum products						
Metals-reinforcement						
Metals-steel						



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Metals-off cuts				
Timber				
Cardboard				
Paper				
Biodegradable plastic				
Canteen waste				
Trees				
Vegetation (shrubs, bushes)				
Other:				
Other:				
Other:				
Sub TOTAL				
Hazardous Waste				
Topsoil (contamination)				
Sub soil (contaminated)				
Bulk excavated (contaminated)				
Asbestos				
Explosive				
Flammable				
Other:				
Other:				
Other:				
Sub TOTAL				
TOTAL VOLUMES				



THAKEHAM

PRIORITISING WASTES REQUIRING WASTE MANAGEMENT

ENABLING WORKS (including DEMOLITION): Waste Type, Category and Origin

Waste Types		Waste Category	Origin of waste
e.g. Bricks		Inert	Demolition of existing buildings and walls.
1	Concrete	Inert	Site Strip & Demolition
2	Tarmac	Inert	Site Strip
3	Brick/Block	Inert	Site Strip & Demolition
4	Timber	Active/Bio	Demolition Works
5	Sub soils	Inert/Hazard	Site Strip
6	Metals	Active/Bio	Site Strip & Demolition
7	Asbestos	Hazardous	Demolition Works
8	Plasterboard	Active/Bio	Demolition Works



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Waste Minimisation

At [site name] we have, from a very early stage looked at how we can minimise the waste produced, thereby reducing the amount of waste to be removed from the project.

Trade Contractors, design team and Suppliers are all being encouraged to look at ways to minimise the amount of waste produced at the work face. Up to date actions are recorded in the table below:

Action	Responsibility	Date Action Commenced
The wash down point for the concrete wagons is in a suitable location so that the washed out aggregates formed part of the fill		
Substructure-when the bases are being poured that we had other bases excavated so that any surplus concrete could be utilised as blinding.		
Materials, which arrive on pallets, are unloaded and the pallets are stored neatly and removed from site once the numbers are sufficient to make collection economical		
Plasterboard sheets are made to standard sizes to suit the wall heights and to reduce the amount of off cuts.		

All of the above act to reduce the amount of waste and surplus materials, which traditionally would be skipped and sent to landfill. We are continually identifying waste minimisation actions and these will be updated in the above table.

Segregation

A specific area shall be laid out and labelled to facilitate the separation of materials for potential recycling, salvage, reuse and return. Recycling and waste bins are to be kept clean and clearly marked in order to avoid contamination of materials. The labelling systems shall be the Waste Awareness Colour Coding Scheme. If the skips are clearly identified the bulk of the workforce will deposit the correct materials into the correct skip. Skips for segregation of waste identified currently are:

- Wood
- Metal
- Brick/Rubble
- Canteen waste



As works progress and other trades come to site other skips will be placed to enable certain waste to be removed from the site. This is likely to include:

- Plasterboard
- Paper and cardboard (bagged Up)

Management

Disposal of Waste

All surplus or waste materials fall into three categories for management, these are:

- Re-used
- Recycled
- Landfill

a. Re-used

If surplus materials can be used in the permanent works they are classified as materials, which we have been **re-used**. If they are surplus to requirements and need to be removed from the site and they can be removed and used in their present form, they can be removed from site for **re-use**.

b. Recycling

If the surplus material cannot be re-used in its present form but could be used in a different form, it is sent for recycling such as 50x50 timbers to make chipboard.

c. Landfill

If either of the above cannot be satisfied then the only option left is to send the surplus materials to **landfill**. At Project Y landfill is a last resort.

Post-Construction

(Within three months of the construction work being completed)

Confirmation

This plan has been monitored on a regular basis to ensure that work is progressing according to the plan and has been updated to record details of the actual waste management actions and waste transfers that have taken place.

Signature:



Issue	Details
Explanation of any deviation from the planned arrangements	
Waste forecasts- exceeded	
Waste forecasts – not met	
Cost savings achieved	