Construction Environment Management Plan

Neddy Lane, Billington

Presented to: Redrow Homes Ltd

Issued: June 2023

Delta-Simons Project No: 22-1367.01

Protecting people and planet

Report Details

Client	Redrow Homes Limited
Report Title	Construction Environment Management Plan
Site Address	Neddy Lane, Billington, Clitheroe, BB7 9LL
Report No.	22-1367.01
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Quality Assurance

Issue No.	Status	Issue Date	Comments	Author	Technical Review	Authorised
04	Final	15/06/2023	Updated drawings	SFells	MO'Halloran PP	MO'Halloran
				Sean Fells Consultant	David Jackson Associate	Mike O'Halloran Associate Director

About Us

Delta-Simons is a trusted, multidisciplinary environmental consultancy, focused on delivering the best possible project outcomes for customers. Specialising in Environment, Health & Safety and Sustainability, Delta-Simons provide support and advice within the property development, asset management, corporate and industrial markets. Operating from across the UK we employ over 210 environmental professionals, bringing experience from across the private consultancy and public sector markets.

As part of The Lucion Group, our combined team of 500 in the UK has a range of specialist skill sets in over 50 environmental consultancy specialisms including asbestos, hazardous materials, ecology, air and water services, geo-environmental and sustainability amongst others.

Delta-Simons is proud to be a founder member of the Inogen Environmental Alliance, enabling us to efficiently deliver customer projects worldwide by calling upon over 5000 resources in our global network of consultants, each committed to providing superior EH&S and sustainability consulting expertise to our customers. Through Inogen we can offer our Clients more consultants, with more expertise in more countries than traditional multinational consultancy.

Delta-Simons is a 'Beyond Net-Zero' company. We have set a Science-Based Target to reduce our Scope 1 and Scope 2 carbon emissions in line with the Paris Agreement and are committed to reducing Scope 3 emissions from our supply chain. Every year we offset our residual emissions by 150% through verified carbon removal projects linked to the UN Sustainable Development Goals. Our consultancy services to you are climate positive.

If you would like support in understanding your carbon footprint and playing your part in tackling the global climate crisis, please get in touch with your Delta-Simons contact above who will be happy to help.

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1.0 Introduction

1.1 Appointment

Delta-Simons was instructed by Redrow Homes Ltd (the "Client") to assist in the production of their Construction Environment Management Plan (hereafter referred to as 'CEMP') for the proposed construction of up to 36 residential dwellings (including 30% affordable housing), along with landscaping and associated infrastructure off Neddy Lane, Billington, Clitheroe, BB7 9LL (the "Site").

Whilst drafted by Delta-Simons, the CEMP will be managed, controlled and updated by the Client during the course of the development and the Client will assume responsibility for it along with requirements outlined if they choose to adopt it.

1.2 Context & Purpose

This document is to be submitted to the Ribble Valley Borough Council in support of the discharge of planning condition 4 under the existing consent (planning reference: 3/2021/0205) to fulfil the requirement for a Construction Environment Management Plan.

The CEMP will form part of the Client management system required to deliver the above project and identifies the project management structure roles and responsibilities with regard to managing and reporting on the environmental impact of the construction phase.

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

- All practicable steps shall be taken to minimise the environmental effects of construction works;
- All activities shall be conducted in accordance with the CEMP, relevant legislation, Codes of Practices, Guidelines, and local environmental procedures;
- Environmental licenses, permits and consents and other statutory requirements are to be obtained prior to works commencing, and fully complied with;
- All staff (including sub-contractors) shall be aware of the environmental issues relevant to the Project through the provision of Site-specific information on the environmental impacts of construction and the mitigation measures to be applied during inductions, briefings and toolbox talks;
- Regularly reviewing the environmental requirements of the project and ensuring that environmental controls remain adequate throughout the duration of the project.

1.3 Roles and Responsibilities

This section describes the environmental roles and responsibilities of key members of the project team. Individuals should be assigned to each of the roles and responsibilities outlined below to the 'Principal Contractor'.

<u>Director</u>

- To lead by example and champion all areas of environmental management;
- Ensure that appropriate resources are in place to effectively implement the CEMP and deliver all legal requirements.

<u>Site Manager</u>

- To lead by example and champion all areas of environmental management;
- Ensure that appropriate resources are in place to effectively implement the CEMP and deliver all legal requirements;
- Review the CEMP throughout the construction process to ensure it remains relevant and effective in identifying and managing environmental risks;
- Report to and agree in writing with Ribble Valley Borough Council any amendments to the CEMP;

- Ensure that all legal requirements are identified and met;
- Ensure that the Site is safe and that hazards are identified and secured;
- Monitor performance of the project against statutory requirements, objectives and targets;
- Ensure that all documentation referencing environmental procedures and policy are relevant and up-to-date and included within the CEMP;
- Manage all necessary documentation to demonstrate compliance with appropriate legislation for the required period;
- Identify necessary levels of environmental competence in staff and ensure necessary training is delivered to personnel;
- Manage investigation and resolution of complaints in accordance with the complaints handling protocol;
- Ensure correct procedures are followed in case of an environmental incident.

Construction Supervisors

- Ensure that the CEMP and associated documents and control methods are effectively implemented on-Site on a day-to-day basis;
- Fully investigate and act on environmental incidents and report findings to the Site Manager;
- Conduct and document weekly environmental inspections;
- Ensure that environmentally orientated briefings and "Toolbox Talks" are being delivered to the site workforce;
- Implement and maintain environmental controls on-Site;
- Ensure action is taken on any spills/incidents that occur on-Site;
- Report activity that has potential to have an environmental effect immediately to the Site manager.

Site Staff & Sub-Contractors

- Compliance with direction given in the Site Induction;
- Proactively approach environmental issues whilst on-Site;
- Site staff should ensure they are fully aware of the environmental procedures in place and if they have any questions, they should be directed towards the Site Manager;
- Ensure all construction activities are carried out in line with the procedures detailed in the CEMP;
- Report environmental incidents to the Site Manager.

The 24-hr contact number at Redrow is **0345 085 0005**.

1.4 Sources

This CEMP has utilised a range of sources including but not limited to; recommendations made within the submitted environmental planning reports and associated planning conditions, general good construction Site practices and good housekeeping along with contractor specifications and government guidance.

For clarity, the following sections of this document relate specifically to recommendations made within submitted environmental planning reports:

- *Phase 2 Site Investigation Report for Residential Development, Dale View, Billington,* by TerraConsult Ltd dated June 2021, ref: 5334/01 Issue 1;
- *Ecological Appraisal for Neddy Lane, Billington* by Envirotech NW Limited, dated January 2021, ref: 1643;
- *Tree Impact Appraisal and Protection Scheme, Land off Neddy Lane, Billington, Lancashire, BB7 9LL* by Bowland Tree Consultancy Limited, dated January 2021, ref: BTC2040; and
- *Flood Risk Assessment, Neddy Lane, Billington* by Banners Gate, dated February 2021, ref: 20023_FRA

2.0 Site Context

2.1 Site Information

Site Overview

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Co-ordinates	Centred approximately at National Grid Reference SD 72528 35972	**Elevation**	c.45 - 62 m AOD
		Area	1.80 Ha
Site Address and Location	The Site is located to the north-west of Dale View road approximately 400 m to the north-east of Billington Village Centre. Access to the Site off Neddy Lane to the south-west of the Site. Google Maps Link		
Site Description	The Site is irregular in shape is comprised of a number of agricultural fields separated by hedgerows and trees. The north-eastern portion of the Site is understood to have comprised allotments until recently and is now overgrown land with rubble presumably from the demolition of the previous allotment structures. The Site boundary includes a portion of land to the west of the proposed residential development comprised of agricultural land for a proposed flood plain compensation pond, and an exclusion zone within the proposed residential development owned by United Utilities. The topography of the Site slopes down from south to north.		
Current Surrounding Area	North	Agricultural Land	
	East	Residential properties	
	South	Residential properties	
	West	Agricultural Land	

Site History	The Site has remained relatively unchanged since the earliest reviewed mapping dated 1846, comprising agricultural land. By 1932 the eastern portion of the Site is indicated to comprise allotments, and by 1966 two structures are present in the southern portion of the Site. By 2012 only one of these two structures remains. The surrounding area has generally comprised agricultural land, with industrial development within 500 m of the Site boundary comprising a brick and tile kiln, sewage works and a quarry.
Proposed Development Description	The planning application relates to a residential development of the Site for up to 36 residential dwellings. The proposed development plan as shown on the Detailed Site Layout is included as Drawing 1. The total period for the development works will be dependent on the commercial requirements of Redrow Homes, which may vary during the period of development. Ribble Valley Borough Council will be notified in advance of the development works commencing.

2.2 Planning

A planning application (ref: 3/2021/0205) has been submitted for the development of 36 residential dwellings at including landscaping and associated infrastructure at Land off Neddy Lane, Billington, Clitheroe, BB7 9LL.

Condition 4 reproduced below relates to the requirement for a CEMP.

Relevant Planning Conditions	Condition 4 *No development shall take place, including any works of demolition or site clearance, until a Construction Management Plan (CMP) or Construction Method Statement (CMS) has been submitted to, and approved in writing by the local planning authority. The approved plan / statement shall provide.* • *24 Hour emergency Contact Number;* • *Details of the parking of vehicles of site operative and visitors;* • *Details of the loading and unloading of plant and materials;* • *Arrangements for turning of vehicles within the Site;* • *Swept path analysis showing access for the largest vehicles regularly accessing the site and measures to ensure adequate space is available and maintained, including any necessary temporary traffic management measures;* • *Measures to protect vulnerable road users (pedestrians and cyclists);* • *The erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate;* • *Wheel washing facilities;* • *Measures to deal with dirt, debris, mud or loose material deposited on the highway as a result of construction;* • *Measures to control the emission of dust and dirt during construction;* • *Details of a scheme for recycling/disposing of waste resulting from demolition and construction works;*

	• *Construction vehicle routing;* • *Delivery, demolition and construction working hours.* *The approved Construction Management Plan or Construction Method Statement shall be adhered to throughout the construction period for the development.* <u>Condition 5</u> *Deliveries to the site shall only be between the hours of:* • *9am and 6pm Monday to Friday (excluding between the hours of 3pm-4pm during school term times);* • *9.30am and 2.30pm on Saturdays with no deliveries at weekends or bank holidays*

3.0 Mitigation of Noise and Vibration

3.1 Introduction

It is considered the Site lies within a noise-sensitive area, due to the adjacent residential development to the east and south.

Normal construction working hours will be as follows:

- Monday to Friday: 08:00 am – 18:00 pm;
- Saturdays: 08:00 am – 13:00 pm;
- Sundays and bank holidays: No work permitted, or noisy work prohibited.

Deliveries will be as follows:

- Monday to Friday: 09:00 am – 18:00 pm (excluding between the hours of 15:00 pm- 16:00 pm during school term times);
- Saturdays: 09.30 am - 14.30 pm;
- Sunday or bank holidays: No deliveries;
- **Note:** The delivery times above assume that Condition 5 was supposed to mean "*9.30am and 2.30pm on Saturdays with no deliveries*…. [on a Sunday] not… [*at weekends*] *or bank holidays"* considering deliveries are permissible o a Saturday between 09.30 to 14.30 pm.

3.2 Site Activities

Various activities carried out during construction have the potential to create noise of potential relevance to nearby receptors. Initial construction activities that may be undertaken and will require noise monitoring / control include:

- Earthworks;
- Stockpiling;
- Groundworks;
- Piling;
- Concreting;
- Construction deliveries;
- Construction traffic;
- Cutting & Sawing.

Measures to be implemented that will reduce and / or avoid noise are as follows:

- Use of silenced plant where practical;
- Use of well-maintained modern plant which complies with the latest noise emission requirements as defined by BS 5228 standards;
- Reducing the need to adopt percussive and vibrating machinery;
- Piles to be broken down using non-percussive techniques e.g. such as with use of a crusher;
- Toolbox talks and Site inductions;
- Site speed limit to be limited to 5 mph on unsurfaced roads;
- Where practical, noise emission limits for equipment brought to Site;

- Indirect method of controlling noise e.g. screening where appropriate;
- Administrative and legislative control; and
- Control working hours & delivery areas and times (see Section 3.1).

3.3 Considerate Constructors Scheme

Redrow Homes Limited are a registered partner of the Considerate Constructors Scheme. The construction industry has a huge impact on all our lives, with most construction work taking place in sensitive locations. Therefore, they will work closely to the Code of Considerate Practice, which commits those sites, companies and suppliers registered with the Scheme to care about appearance, respect the community, protect the environment, care about safety and value their workforce.

3.4 Plant and Machinery

Selection of equipment will, as far as reasonably practicable, seek to control and limit noise and vibration levels associated with construction activities. This will be accomplished by the following:

- Plant and equipment liable to create noise and/or vibration whilst in operation is, as far as reasonably practicable, located away from sensitive receptors. The use of perimeter fencing and acoustic bunds to absorb and/or deflect noise away from noise sensitive areas where deemed appropriate/necessary;
- All plant, equipment and noise control measures applied are maintained in good and efficient working order and operated such that noise emissions are minimised as far as reasonably practicable;
- Where reasonably practical, fixed items of construction equipment will be electrically powered in preference to being diesel driven;
- Vehicles and mechanical equipment utilised on Site for activities associated with the construction works will be fitted with effective exhaust silencers and maintained in good working order with sustained efficient performance and operated in a manner such that noise emissions are controlled and limited as far as reasonably practicable;
- Plant in intermittent use are shut down or throttled down to a minimum during periods when not in use;
- All Plant Operators shall undertake a daily inspection of the Plant or equipment prior to use with a recorded weekly inspection;
- All Contractors to be made familiar with current legislation and the guidance in BS 5228 (Parts 1 and 2), which should form a prerequisite of their appointment;
- Loading and unloading of vehicles, dismantling of Site equipment such as scaffolding or moving equipment or materials around the Site to be conducted in such a manner as to minimise noise generation and where practical to be conducted away from sensitive receptors;
- Careful consideration will be given to planning construction traffic haul routes within the Site and along local roads close to existing sensitive receptors, so as to minimise reversing movements and to minimise the number of construction vehicles during peak traffic flows on local roads.

Noisy activities will be accompanied by suitable and proportional risk assessments and reported noise complaints will be investigated thoroughly. Redrow Homes Ltd have a designated Health Safety and Environment manager who will advise and support where necessary. In addition, in accordance with Health and Safety legislation and good site practices, risks to human health from exposure to noise at work will be prevented or reduced by undertaking the following:

- Assess the risks to all employees from noise at work;
- Take action to reduce the noise exposure that produces those risks;
- Provide all employees with hearing protection should it not be possible to reduce the noise exposure enough by using alternative methods;

- Ensure the legal limits on noise exposure are not exceeded;
- Toolbox talks, Site inductions and training to all Operatives.

3.4.1 Plant and Machinery Location

Table 1 below details where other activities will be carried out:

Table 1 – Plant and Machinery Location

Construction Activity	Construction Traffic	Plant and Machinery Location
Site Establishment	Welfare cabins, plant, fencing, barriers, hoarding	Site Compound
Piling, Earthworks and Groundworks	Plant, spoil, rebar, steel, drainage	All Areas
Concrete	Concrete wagons, pump	All Areas
Roof Works	MEWPs, roof materials	Around Building/Roof
MEWPs = Mobile Elevating Work Platform		

3.5 Vibration

All works involving noise / vibration will be avoided or minimised where possible and the following measures will be adopted to reduce vibration:

- Risk Assessment and mitigation plans;
- Use of silenced plant where practical;
- Use of well-maintained modern plant where practical;
- Effective vibration monitoring if deemed required e.g. percussive piling adjacent to residential properties.

4.0 Air Quality and Dust

4.1 Introduction

This section may need updating following receipt of the draft technical reports for the Site.

Construction actives have the potential to create a dust nuisance, however dust suppression will be undertaken throughout the construction phase to limit this alongside the application of good housekeeping measures. Effective management of the following will help to minimise dust nuisance:

Pre-project Planning

- Method statements to include processes for controlling dust;
- Setting of speed limit to 5 mph on unsurfaced roads;
- Preventative measures such as those detailed below.

Site Preparation and Construction

- Keeping fencing, barriers, scaffolding and screening clean;
- Construction areas to be cleaned and regularly swept to prevent the build-up of dust;
- Vacuum plant to be used with all dust generating equipment or use of active dust suppression e.g. water / mist where the plant and activity allows.

Material Storage and Handling

- Unnecessary vehicle movements and manoeuvring will be avoided;
- Location of plant and vehicles away from sensitive areas or housed in closed environments where possible;
- Use of vehicles and plant with low emission levels;
- Regular maintenance of engines, plant, maintenance of pumps and bowser jets;
- Use of jet wash wheel-washes at egress points;
- Use of enclosed and sheeted lorries where practical;
- Prevention of unnecessary engine idling;
- Avoid heating with open flame burners;
- Using water sprays, sand or Hessian to reduce vapour emissions;
- Use of handling methods to minimise dust generation.

Haulage and Vehicle Routes

- Damping down areas likely to cause dusts with water where practical;
- Ensure that skips are monitored to avoid being overloaded and contents are not to spill over the sides;
- Ensure methods and equipment are in place for immediate clean-up of accidental spillages of dusty or potentially dusty materials;
- Use spill kits for spillages and these must be available next to all refuelling points - location of fuelling points to be in a non-sensitive area, where practical.

4.2 Mitigation

These mitigation measures have been set out in accordance with the IAQM guidance for construction dust and should be carried out where practical and the Site layout allows:

- Display the name and contact details of person(s) accountable for air quality and dust issues on the Site boundary. This may be the environment manager/engineer or the Site manager;
- Display the head or regional office contact information;
- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;
- Ongoing dialogue with the Local Authority Environmental Health department regarding complaints;
- Record exceptional incidents that cause dust and/or air emissions, either on- or off- Site, and the action taken to resolve the situation in the log book;
- Undertake regular on-Site and off-Site inspection, during continuous dry periods, inspections should be undertaken more frequently i.e. daily. Inspections should be undertaken where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the Local Authority when asked. Where necessary, this should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of the Site boundary, with cleaning to be provided if necessary;
- Increase the frequency of Site inspections by the person accountable for air quality and dust issues on Site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions (specifically if receptors e.g. housing are downwind from the Site);
- Agree dust deposition, dust flux, or real-time PM10 continuous monitoring locations with the Local Authority;
- Plan Site layout so that machinery and dust causing activities are located away from receptors, as far as practical;
- Locate stockpiles away from sensitive areas;
- Damp down the Site or specific operations where there is a high potential for dust production and the site is active for an extensive period;
- Avoid Site runoff of water or mud;
- Keep Site fencing, barriers and scaffolding clean using wet methods;
- Remove materials that have a potential to produce dust from Site as soon as possible, unless being re-used on-Site. If they are being re-used on-Site, cover as described below;
- Cover, seed or fence stockpiles to prevent wind whipping;
- Ensure all vehicles switch off engines when stationary - no idling vehicles;
- Avoid the use of diesel, or petrol, powered generators and use mains electricity or battery powered equipment where practicable;
- Impose and signpost a maximum-speed-limit of 10 mph on surfaced and 5 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the Local Authority, where appropriate);
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems;
- Ensure an adequate water supply on the Site for effective dust/particulate matter suppression/ mitigation, using non-potable water where possible and appropriate;
- Use enclosed chutes and conveyors and covered skips;

- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate;
- Ensure equipment is readily available on Site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods;
- No bonfires and burning of waste materials;
- Avoid explosive blasting, using appropriate manual or mechanical alternatives;
- Bag and remove biological debris or damp down such material before demolition;
- Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable for stockpiles that are to remain for an extended period;
- Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable;
- Only remove the cover in small areas during work and not all at once;
- Avoid scabbling (roughening of concrete surfaces) if possible;
- Ensure sand and other aggregates are located away from sensitive receptors and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place;
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery;
- For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust;
- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, material tracked out of the Site. This may require the sweeper being continuously in use;
- Avoid dry sweeping of large areas;
- Ensure vehicles entering and leaving the Site are covered to prevent escape of materials during transport;
- Inspect on-Site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;
- Record all inspections of haul routes and subsequent action in a Site log book;
- Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned;
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the Site where reasonably practicable);
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the Site exit, wherever Site size and layout permits;
- Access gates to be located at least 10 m from receptors where practical.

5.0 Biodiversity

5.1 Introduction

Envirotech NW Limited carried out an Ecological Appraisal of the Site in October 2020, and issued the report in January 2021. A Habitat Survey Map was prepared by Envirotech NW Ltd (see Figure 1 below) which shows the locations of various habitat features across the Site.

5.2 Impact Avoidance

Hedgerows, Scrub and Trees

It is recommended that the trees and hedgerows within the Site are retained and protected. If the removal of any trees and hedgerow or section of hedgerow is required to facilitate the development, compensatory planting will be required. In order to protect the shrubs and trees during construction, the following guidelines should be followed:

- Temporary protective demarcation fencing will be used to protect the trees and shrubs to be retained;
- The fencing must extend outside the canopy of the retained trees and must remain in position until all areas have been developed to ensure protection is provided throughout the construction phase;
- The fencing will be in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations (BSI, 2012).

Figure 1 – Phase 1 Habitat and Vegetation Map by Envirotech NW Ltd

Amphibians

- There is no standing water on site or within 250 m which can be identified on OS mapping or aerial imagery;

- The core development area has a low value to amphibians being open and exposed. The boundary hedgerows could be utilised as refugee and/or hibernacula but there are no breeding ponds in proximity to the site;
- The Site is also isolated from bodies of standing water, with major public highways, a railway line, a river and dense urban mosaic all presenting significant barriers to the dispersal of amphibians which would prevent their ingress onto the site.

To avoid the active construction working area becoming suitable for the attraction of amphibians the following best practice actions are necessary:

- Ensure areas of standing water / pools are not permitted to accumulate;
- Store construction materials off the ground (i.e. on pallets) as much as possible;
- Avoid the accumulation of construction waste and debris in piles (which can create suitable shelters for amphibians) by ensuring skips are available to receive waste; and,
- Avoid leaving trenches / holes open overnight (either complete the works in one day or ensure the holes are suitably covered or fitted with a means of escape (sloping edge or plank) to permit wildlife to escape.

If a great crested newt(s) is found, or suspected, at any point all works on-Site must cease and the appointed Ecologists must be contacted for further assistance.

Invasive Plant Species

- There was no evidence of Japanese knotweed, giant hogweed or Himalayan balsam on the Site. No other invasive or notable species listing on schedule 9 (Section 14) of the Wildlife and Countryside Act (1981) (as amended) was identified within the site or adjacent land.

Bats

- The foraging habitat at the Site is very poor for bat species being open and exposed. The poor semi-improved grassland offers negligible foraging opportunities for bats;
- Despite being poor, the trees and hedgerows on the site offer the best foraging habitat for bats on the Site as the remainder of it comprises open and exposed grassland;
- So long as the hedgerows and trees are retained for their loss is compensated for in any landscaping scheme, there would not be significant degradation of foraging habitat

To reduce the risk of indirect disturbance to bats that may on occasion forage and/or commute through the Site, both during and post-development, sensitive lighting of the Site should be used, and the guidelines below should be followed:

- Use hoods or directional lighting to avoid light directed at surrounding trees, scrub, pond, hedgerows and ditches;
- Development works should not take place between sunset and sunrise between April and September (the main season of bat activity); and,
- Security or spot lighting required should be kept to a minimum, and where possible be placed on a short timer to reduce the extent of lighting on Site during development.

Birds

- All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) while they are breeding. It is advised that any works such as vegetation clearance that will affect habitats suitable for use by nesting birds are scheduled to commence outside the bird nesting season;
- Commencement of works in the nesting season must be informed by a pre-works nesting bird survey, carried out by a suitably experienced ecologist. The bird breeding season typically extends between March to August inclusive (Natural England, 2015).

Habitat Connectivity

- To ensure habitat connectivity is maintained as part of the development, gaps within the proposed fencing are recommended to allow access by other wildlife (including hedgehog) across the Site. It is recommended that suitable wildlife gaps (at least 0.1 metre tall and 0.15 metre wide) are installed at suitable intervals around the base of the proposed fencing;
- It is also recommended that amphibian ladders are installed at all gully pots proposed at the Site to ensure amphibian species are not trapped within the Site drainage system. One gully pot ladder should be installed and maintained at each proposed gully pot within the Site.

5.3 General Precautions

To prevent risk of harm to other small animals that may occasionally be present on the Site, the following general precautions should be undertaken:

- One end of the trench should be sloped or stepped to allow animals to climb out if practical and/or routine morning inspections of open trenches;
- Materials brought to the Site for the construction works should be kept off the ground on pallets, so as to prevent small animals seeking refuge within them and coming into harm's way; and
- Rubbish and waste should be removed off Site immediately or placed in a skip, to prevent small animals using the waste as a refuge, and thus coming into harm's way.

5.4 Communication

Information about the importance of biodiversity and wildlife will be highlighted to all Site operatives throughout the duration of the project through the following:

- HS&E Site Induction;
- Toolbox Talks;
- Daily Activity Briefings.

6.0 Landscape and Visual

6.1 Introduction

Construction activities have the potential to create landscape and visual impacts resulting from plant and machinery required to facilitate the construction process. Bowland Tree Consultancy Limited produced a Tree Impact Appraisal and Protection Scheme in January 2021 and those recommendations are included within the following construction phase mitigation measures.

6.2 Mitigation

- Placement and organisation of stockpiles and materials for least visual impact and management of the Site to maintain a tidy appearance and to limit the visible area of disturbed ground;
- Restriction of the number of the vehicular movements to practicable minimum and confinement of operations to normal working hours;
- Safeguarding of existing vegetation to be retained, tree protection zones would be created and fenced off to ensure that the development would not encroach onto the root protection areas;
- Construction and security lighting would be shielded where possible and directed downwards in order to minimise light pollution;
- Temporary Site security fencing/hoarding would be provided around the perimeter of the Site, in order to restrict public access during construction works; and
- Protection is afforded to the tree by defining a Root Protection Area (RPA) within which no development activity should take place. The size of the RPA is defined in the British Standard and relates to trunk diameter. The RPA is normally the minimum position for placement of protective fencing.

7.0 Traffic and Transport

7.1 Introduction

This section may need updating following receipt of the draft technical reports for the Site.

Construction activities have the potential to create additional localised traffic, however mitigation will be undertaken throughout the construction phase to limit this alongside the application of good housekeeping measures. Effective management of the following will help to minimise traffic issues:

7.2 Access and Egress

The agreed access/egress point for general construction traffic is via the main site entrance, with routing along Dale View and Whalley Road as per Drawing 2 supplied by the Client.

Construction traffic for the flood compensation scheme is to access/egress via the A59 and the agreed traffic management scheme that is in place as per Drawing 3 supplied by the Client. Note this is to be approved under application 3/2023/0165.

Site access and egress routes must take into consideration the following:

- Staff and visitor parking arrangements;
- The Site manager will patrol the approach roads twice daily to check that no vehicles associated with the Site are parked on the approach roads;
- Arrangements and timing of deliveries to the Site will be carefully planned to ensure highways are kept clear. Refer to Section 3.1 for specific permissible times/days for deliveries;
- Vehicle and plant and equipment movement - An adequate turning area will be provided within the Site to ensure that no vehicle reverse out of the entrances of the Site;
- Pedestrian Routes - Separate and dedicated pedestrian access routes and walkways will be provided around the Site in order to provide safe access for Site operatives and others around the Site;
- Use of appropriate signage in the vicinity of the Site and surrounding roads;
- Banksman requirements for the co-ordination of movements into, around and off the Site;
- Loading and unloading of Site vehicles to be undertaken on-Site within a designated area.

7.3 Pedestrians

The safety of the public and protection of pedestrians will be ensured at all times. The following procedures will apply for pedestrian routes on and adjacent to the Site:

- All traffic and pedestrian routes will be clearly separated from each other by designated walkways and suitable barriers;
- Road crossing points will be clearly identified.

7.4 Public Highways

Prevention of dirt, mud and debris on Site and on the surrounding roads will be managed by:

- Regular inspections and monitoring;
- Skip vehicles to be sheeted to prevent spillages of mud and debris;
- Having a road sweeper to clean and maintain the surrounding roads and footpaths and the Site entrance weekly or at a greater frequency as Site conditions dictate.

Parking of any vehicle associated with the project must take account of the requirements of surrounding buildings, residents and businesses whose needs will take priority and all vehicle parking will be contained within the Site boundary.

7.5 Wheel Washing Facilities

A wheel cleaning procedure will be used in order to mitigate the amount of mud/debris that could potentially be deposited on the highways by vehicles exiting the construction Site. The proposed wheel cleaning procedure will consist of:

- Before leaving the Site, vehicles will be inspected for heavy deposits left on wheels;
- Following inspection, wheels will be cleaned prior to leaving if required.

7.6 Plant Fuelling Station

The following procedures should be adhered to, to ensure the environment is protected from contamination:

- Ensuring any diesel tanks are double bunded and kept locked when not in use;
- All items of plant are parked in a designated area for re-fuelling with drip trays sufficient for the task in place;
- A fire call point will be established at the re-fuelling point with CO^2, Foam and Water Extinguishers available;
- Spill kits will be maintained in close proximity to the plant fuelling station and suitable for the task.

8.0 Water Management

8.1 Surface Water

This section may need updating following receipt of the draft technical reports for the Site.

It is important that surface water runoff is properly managed during construction activities to reduce impacts on neighbouring land. Mitigation will be undertaken throughout the construction phase to limit this alongside the application of good housekeeping measures. Effective management of the following will help to manage surface water run-off:

8.2 Mitigation

- Where possible, greenfield run-off will be kept separate from silty water or other potentially contaminated water. Where appropriate, in order to collect and divert greenfield run-off from construction disturbed areas, interceptor ditches and other drainage diversion measures will be installed in advance of excavation works;
- The Contractor shall maintain separate silty and clean water drainage channels and discharge points. Discharge to vegetated areas shall be a minimum of 50m from watercourses to allow settlement of suspended solids. Where settlement over vegetation is not ecologically sound (e.g. involving intact blanket bog, requiring only rain-fed nutrients), or is not practical or adequate to deal with the volume of silt generated, the Contractor shall provide and maintains silt fencing and / or settlement ponds;
- Silt laden run off should be expected from areas of recently exposed soil or rock. This silt laden run-off will be captured and directed via berms or ditches towards specially constructed sediment retention structures or equipment (e.g. Silt Buster);
- Where standing water accumulates within the base of the excavations, due to surface water runoff or groundwater seepage, a 'permit to pump' procedure to control removal of water from the excavation should be employed.

9.0 General Site Management

9.1 Ground

Safe working practices should be undertaken and appropriate Personal Protective Equipment (PPE) should be used alongside reference to the Construction (Design and Management) Regulations 2015.

During the construction phase of the works and the unlikely event that pockets of isolated contaminated soils may be discovered, this may release or increase the mobility of contamination present. If contamination is identified the potential effect will be assessed prior to the implementation of suitable mitigation measures. Records of such areas will be maintained and recorded within the validation reports for the construction works.

9.2 Waste Storage and Removal

Good construction site practices should be followed to ensure safe and secure storage and removal of both non-hazardous and hazardous waste.

Non-hazardous Waste Environmental Working Procedure

- Proper and safe disposal of waste must be ensured even after it has been passed on to another party. The Duty of Care has no time limit. It extends until the waste has either been disposed of or fully recovered;
- Duty of Care requires that all waste is stored and disposed of responsibly, it is only handled or dealt with by authorised individuals or companies and a record is to be kept of all waste received or transferred (e.g. a Waste Transfer Notes (WTN)). These must be created for each load of waste that leaves Site. The waste should be adequately described on the WTN;
- Ensure those that treat, store or dispose of the waste have a Waste Management Licence or Exemption certificate;
- Ensure the supplier is a registered waste carrier for this purpose;
- Ensure that all wastes that arise irregularly (e.g. redundant materials, wastes arising from cleaning up spills) are declared on WTNs;
- Ensure that all Contractors use the identified skips and bins and that these are kept in good order. No waste is to be left on the floors around the bin/skip. Use skip sheeting to reduce dusts or wind scatter.

Hazardous Waste Environmental Working Procedure

This Environmental Working Procedure clearly details the definitions of hazardous waste, obtaining consignment notes, actions for waste carriers, actions for consignors and consignees, the hazardous waste register, after disposal and rejected loads.

9.3 Lighting

Lighting will be used when necessary, for health and safety purposes and to provide clear visibility on working areas. Lighting will be chosen that is fit for purpose and controlled so far as practical to limit light spill on the surrounding areas. Construction lighting will be brought on to Site when it is required and will be turned off when no longer required for specific tasks. Lighting will also be in accordance with considerate contractor requirements and in accordance with Section 3.3 of this document.

9.4 Litter Management and Boundary Treatment

Bins and skips will be appropriately located across the Site where practical and continued monitoring, part of general good construction site practices, will take place to ensure a clean and safe working environment.

Routine inspections of the boundary and fencing will also take place and incorporate effective litter management to ensure no detriment to the surrounding environment.

9.5 Communication

This project will employ effective recording of all environmental incidents and/or complaints. Any complaints will be recorded and appropriately investigated and resolved where applicable.

Construction Site management and project manager details will be fully available and located in a prominent places along the perimeter.

9.6 Compound, Storage, Welfare, Signage and Security

A compound will be set up within the Site hoarding. The compound shall be surrounded by barrier fencing. All welfare facilities and storage will be within the confines of the compound. The Site shall be opened and locked by the Site Supervisor at the start and end of every shift.

10.0 Construction Waste & Pollution Prevention

10.1 Construction Waste Management

Refer to Redrow Waste and Recycling best practice guidance 2020.

10.2 Pollution Prevention

The management of pollution risk will be integral to the planning and design of the development works. All activities will be assessed for the potential to cause pollution and appropriate measures put in place to minimise risk.

Storage of fuel and oil

- Refuelling facilities for mobile plant will be provided on-Site and fuel storage may be required for the operation of generators, pumps etc., where mains electricity connections are not available;
- Storage facilities will be within a secure area, minimising the risk of leakage caused by the actions of trespassers. Delivery lines from tanks will be locked. Tanks will be located where the risk of accidental damage due to vehicle movements etc. is low, and away from drains and roads which could allow spillages to migrate into watercourses;
- Above-ground tanks will be provided with containment in accordance with the Control of Pollution (Oil Storage) Regulations 2001, for example by double-skinned tanks. Containment will be sufficient to contain 110% of the tank volume;
- Emergency response equipment (absorbents, drain blocking materials) will be kept on-Site and appropriate persons instructed in their use.

Storage and use of cement

- Concrete or cement mixing carried out will be undertaken on an impermeable surface, remote from surface water drains. Cement will be stored in a secure, dry, area. A designated area will be identified suitable for the cleaning of on-Site concrete batching equipment or wash-out of ready-mix Lorries, where contaminated water can be contained.

Storage of hazardous chemicals

- Quantities of hazardous chemicals such as herbicides, cleaning products and flammable gases may be required on-Site. All such materials will be stored in secure locations, with drip trays / containment where applicable. Quantities held in store should be minimised so far as practicable. Storage should be remote from drain connections to reduce the risk of water pollution in the event of leaks and spills.

11.0 Pest Control

Pest control on the Site will be carried out for duration of the construction works using the Exclusion, Restriction, Destruction, Monitoring (ERDM) methodology.

12.0 Conclusion

This CEMP has been prepared in compliance with the requirements of Condition 4 and 5, for the residential development at Neddy Lane, Billington, Clitheroe, BB7 9LL.

The CEMP will form a basis for the management of environmental impacts during the construction period. It will be a requirement that the developer adhere to the plan or notify Ribble Valley Borough Council of any necessary variation as the development progresses.

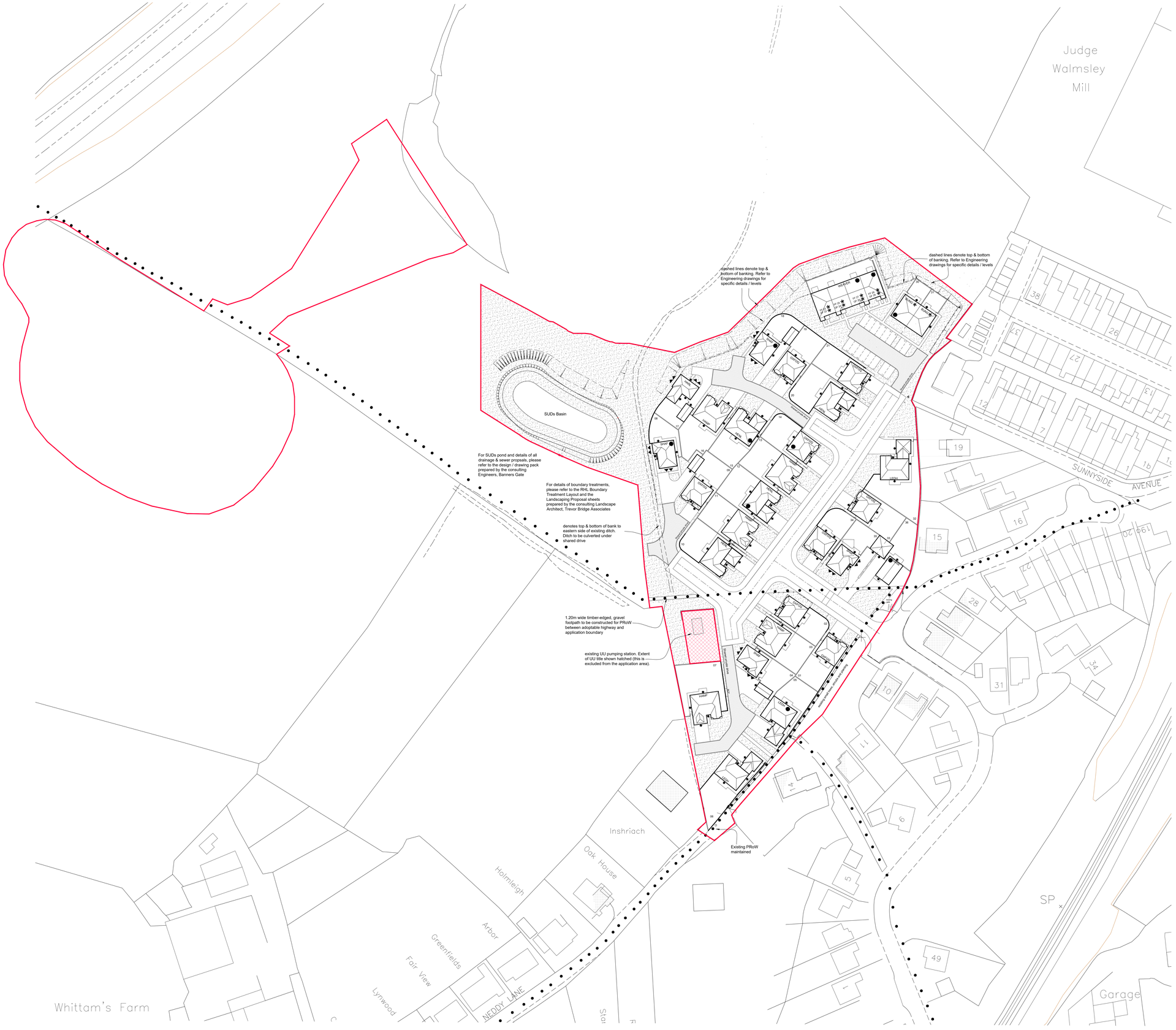
Notwithstanding those elements specified in the CEMP, a high standard of environmental management will be maintained throughout with the objective of minimising impact on existing residents and the wider environment.

The CEMP should be kept under review throughout the development. Changes should be made in the event of any arising issues or potential improvements and Ribble Valley Borough Council notified.

Drawings

Drawing 1 – Proposed Development Plan

Calder Grange



0m 25m 50m

Scale: 1:500

Survey Information

Legend

- Line to delineate application Site Boundary
- Line to delineate extent of 1.8 metre high close boarded fencing. Refer to Redrow standard detail no. F-SD0906
- Line to delineate extent of 750mm high post and rail fencing. Refer to Redrow standard detail no. F-SD0900
- Indicates 1.2m bali-top railings. Refer to Redrow Standard Detail No. D-SD0922
- Indicates 0.6m Knee Rail. Refer to Redrow Standard Detail No. D-SD0902
- Indicates 1.8mm high brick, garden wall. Refer to Redrow standard detail no. F-SD0908
- Refer to Landscape Architect's layouts for landscaping proposals layout / planting schedules
- Indicates areas of turf surface finish
- Indicates position of timber gate for rear garden access. Refer to Commercial Department for specification
- Indicates tarmac shared drive surface. Refer to Engineer's External Works Plan for further details
- Indicates 'handed' house type
- Indicates affordable dwellings
- Indicates dual aspect property
- Indicates position of bollards
- Indicates line of existing Public Right of Way

Item	Description

Mix Schedule

House Type	Sqft	No Beds	Garage	Quantity
HOUSE TYPES				
Warwick	1081	3	SG	1
Harlech	1312	4	SG	1
Oxford Lifestyle	1318	3	ISG	8
Shaftesbury	1427	4	SG	4
Henley	1769	4	IDG	4
Ledsham	1842	4	IDG	3
Hampstead	1855	4	IDG	5
AFFORDABLE TYPES				
Weaver GF	597	1	-	4
Weaver FF	660	1	-	4
Bungalow	673	2	-	2
TOTAL				36

SG = Detached Single Garage
ISG = Integral Single Garage
IDG = Integral Double Garage

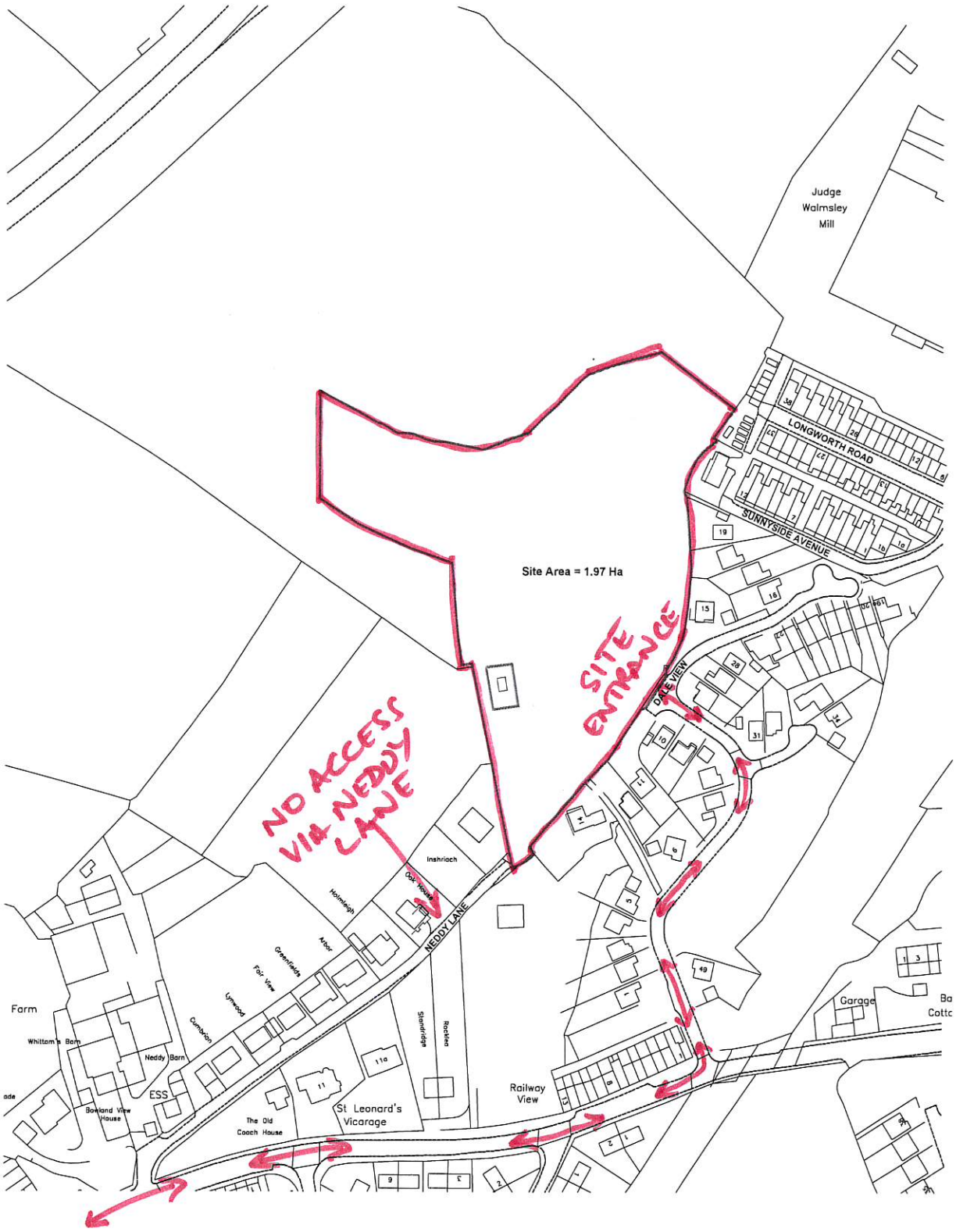
Revision	Date	Amendment	Initials
D	04.10.2021	Red line amended	AB
C	16.09.2021	Screen fences between plots changed from 750mm post and rail to 1.8m close boarded fences as per planner request.	HB
B	26.08.2021	Application boundary amended to include area of flood compensation. Highway amends adjacent to plot 02. FFLs to plots 16 & 17 raised 150mm.	GJF
A	07.04.2021	Minor amendments to the application red-edge. Rear boundary to plot 07 repositioned.	GJF

Development	**BILLINGTON**
Location	Neddy Lane
Marketing Name	Calder Grange
Drawing Title	Detailed Site Layout
Drawing Number	**4441-DSL-001**
Revision	**D**
Scale @ A0	1:500
Drawn By	RHL
Date Started	Jan 2021
Checked by	Date

REDROW HOMES
Redrow Homes Lancashire
Redrow House, 16 Eaton Avenue, Buckshaw Village, Chorley, PR7 7NA
Tel: 01772 643700 Fax: 01772 643701 Web: www.redrow.co.uk

Drawing 2 – General Construction Traffic Access/Egress

Neddy Lane, Billington



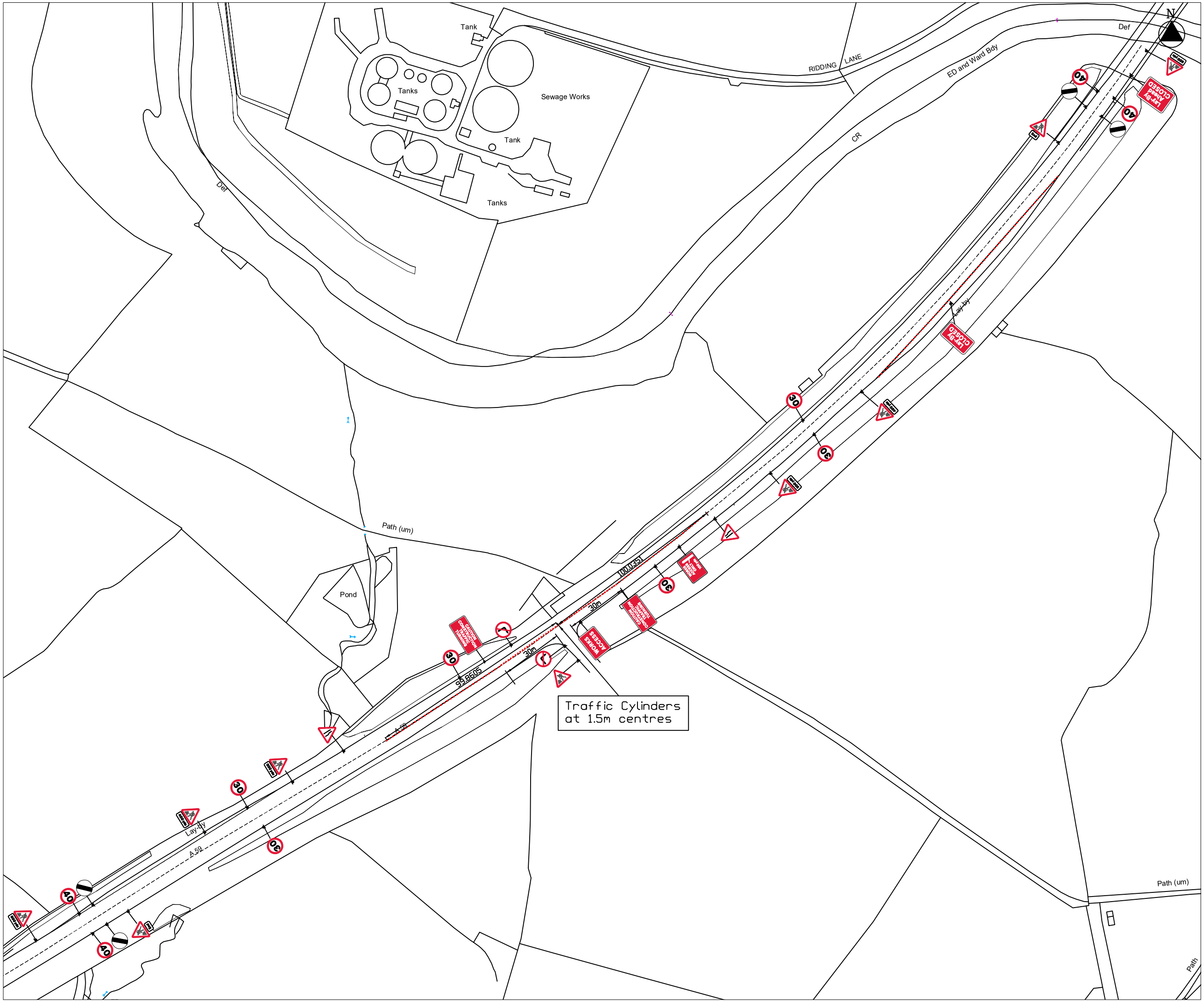
Development	BILLINGTON
Location	Neddy Lane
Client/Architect	T.B.C
Drawing Title	Location Plan
Drawing Number	4441-LP-001
Revision	-
Scale @ A3	1:1250
Drawn	RHL
Date	Jan 2020

REDROW HOMES
Redrow Homes Lancashire

0m 125m

Scale: 1:1250

Drawing 3 – Construction traffic access/egress for flood compensation scheme



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1 June 2023

DRAWING No. P6280

Drawn By:	Revision No:	Comments
Shauna Openshaw		
Checked By:		
R Lee		
Approved By:		
R Lee		

Project: Works Access

CLIENT: WPI

Address: A59 Billington

SCALE: 1:500 @ A3

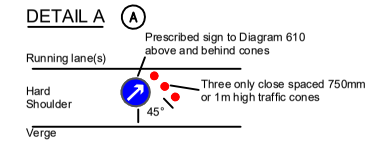
Key:
- Works Area
- Pedestrian barrier
- Traffic Cones
- Traffic light head
- Sign
- Pedestrian route

CHAS Accredited Contractor www.chas.gov.uk
TMCA TRAFFIC MANAGMENT CONTRACTORS ASSOCIATION
NHSS
QA INTERNATIONAL

DO NOT SCALE FROM THIS DRAWING.
All measurements are in meters unless otherwise stated

Chapter 8 Details

DETAIL A (A)



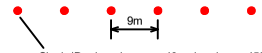
Notes:
1) During darkness, a single warning light to BS EN 12352:2006 should be provided.
2) Traffic cones should conform to diagram 7101.1 and to BS EN 13422.

DETAIL B (B)

Single/Dual carriageway 40mph or less - 450mm traffic cones, spacing 1.5m.
Single/Dual carriageway 50mph or more - 750mm traffic cones, spacing 1.5m.
Dual carriageway national speed limit - 750mm traffic cones, spacing 1.5m, relaxation 3m.

Notes:
1) During darkness, warning lights to BS EN 12352:2006 should be provided in accordance with Table A1.3 (Appendix 1).
2) 45° tapers have 1.5m spacing, no relaxations.
3) On motorways and NSL AP duals with hard shoulders, 1m cones will be required for both standard and relaxation works for lead tapers and the facing wall of lane changes.

DETAIL C1 (C1)



Single/Dual carriageway 40mph or less - 450mm traffic cones.
Single/Dual carriageway 50mph or more - 750mm traffic cones.

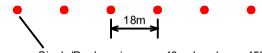
Notes:
1) During darkness, warning lights to BS EN 12352:2006 should be provided in accordance with Table A1.3 (Appendix 1).
2) For relaxation to Detail C1 see Table A1.3 (Appendix 1).

DETAIL C2 (C2)

Single carriageway 40mph or less - 450mm traffic cones.
Single/Dual carriageway 50mph or more - 750mm traffic cones.

Notes:
1) During darkness, warning lights to BS EN 12352:2006 should be provided in accordance with Table A1.3.

DETAIL D (D)



Single/Dual carriageway 40mph or less - 450mm traffic cones.
Single/Dual carriageway 50mph or more - 750mm traffic cones.

Notes:
1) During darkness, warning lights to BS EN 12352:2006 should be provided in accordance with Table A1.3 (Appendix 1).
2) Detail D applies only to relaxation cases.

Appendices

Appendix A – Limitations

Limitations

This Report was prepared by Delta-Simons Ltd (Delta-Simons) for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. Delta-Simons does not intend, without its written consent through a formal letter of reliance or warranty, for this Report to be disseminated to any party other than the named Client or to be used or relied upon by any party other than the named Client. Use of the Report by any other party is unauthorised and such use is at the sole risk of the user. Any party using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by Delta-Simons. Unless explicitly agreed otherwise, in writing, this Report has been prepared under Delta-Simons' Standard Terms and Conditions as included within our proposal to the Client.

The recommendations contained within this Report represent Delta-Simons professional opinions, based upon the information detailed within the Report, exercising the reasonable skill and care to be expected of a professional consultant holding itself out as having the competence, experience and resources necessary for the purpose of carrying out similar work in scope and character to the services performed. The Report needs to be considered in the light of the proposal and associated limitations of scope. The Report needs to be read and considered in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the Report.

Where Delta-Simons has obtained, reviewed and evaluated information in preparing this Report from the Client and others and Delta-Simons conclusions, opinions and recommendations has been reasonably determined using this information, Delta-Simons does not warrant the accuracy of the third-party information provided to it and cannot be responsible for any opinions which Delta-Simons has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate.

Site surveys document the conditions encountered at the time of survey only and conditions may change due to natural processes or human intervention. As such, surveys represent an assessment at a specific point in time and Delta-Simons cannot be responsible for adverse conditions which arise or become apparent after the time of the survey or for conditions which sit outside the scope for which the survey or Report was commissioned.

Where intrusive investigations have been completed, information, comments and opinions given in this report are based on the ground conditions encountered during the site work period and on the results of laboratory and field tests performed during the investigation. Ground conditions are inherently variable such that no investigation can be exhaustive to the extent that all adverse conditions are revealed. Conditions may therefore be present beneath the Site that were not apparent in the data reviewed or obtained as part of this assessment. It should be noted that groundwater levels vary due to seasonal and other effects and may at times differ to those measured during the investigation. Delta-Simons does not warrant or guarantee that the Site is free of hazardous or potentially hazardous materials or conditions. Where risk assessment is undertaken, this is based upon the standards, guidance and common practice at the time of the assessment and Delta-Simons cannot be responsible for conditions which become apparent following changes in guidance or practice or advancements in scientific knowledge which change the position in relation to assessment of risk.

No aspect of this Report constitutes a design. Where this information is used in design, the designer should verify the information has been used appropriately.

Where budgets are prepared and presented within the Report, these are for information only to indicate the likely magnitude of a cost and do not represent an invitation to treat for the works. All budgets and programmes presented should be reviewed and verified by appropriately qualified and experienced independent Project Managers and Cost Consultant.