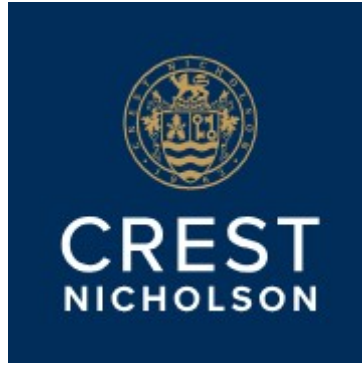




Crest Nicholson

Construction Environmental Management plan

Arborfield Garrison Development – Parcel 02

Revision B – 03/10/2024

Contents

- 1.0 Introduction
- 2.0 Site Access and Traffic Management
- 3.0 Site Management and Supervision
- 4.0 Working Hours
- 5.0 Control of Dust and Noise
- 6.0 Control of Waste
- 7.0 Control for Pollution of ground and surface water
- 8.0 Emergency Procedures and Inclement Weather

Appendix A: Logistic Plan and Site Setup

Appendix B: Crest Nicholson Policies

Appendix C; Site Wide CEMP

1.0 Introduction

- 1.1 This plan forms the Construction Strategy (CS) and Construction Environmental Management Plan (CEMP) to support the Crest Nicholson Development on Parcel O2 (RM – 230152) and to discharge of Condition 65 of the Outline Planning Permission Ref. O/2014/2280.
- 1.2 This CEMP is a live document and will be reviewed and monitored by Crest Nicholson Operations Ltd site management team. Any significant changes will be submitted to Wokingham Borough Council for approval.
- 1.3 A site wide Construction Environment Management Plan Dated October 2014 Ref AGLC/HPA/DOC/7 has been adopted as a live policy document and is appended to this report.
- 1.4 As part of the initial enabling works, a groundwork contractor will be appointed as principal contractor. This is to undertake and construct the development access, new road layout, foul and storm water drainage infrastructure, compound locations, parking and the construction of foundations and substructure works to the buildings as per the approved plans and layouts.
- 1.5 The development will be kept secure using Heras fence panels to the development parcel boundary and where specified by Crest Nicholson with construction hoardings to prevent unauthorised access to the development both during and outside of working hours. No fencing will be installed on highway land.
- 1.6 CCTV Monitoring Security System will be installed at such a time deemed necessary by Crest Nicholson management team and will take over as Principal Contractor for the construction of the superstructure of works on site.
- 1.7 Any contractors appointed as Principal Contractor will review this document and provide the necessary Site Supervision and Welfare to adequately manage the works of the development as per the Construction Management Plan. Details of the appointed

supervisor(s) will be displayed in the site office with a contact telephone number and emergency contact number.

- 1.8 The compound car park will **provide space for up to 60 cars**, as per Appendix A, will be setup for the development and at its peak operational period it is anticipated the maximum number of workers to attend the development daily will be anything up to 75. **This will be kept under review and the car park will be extended if required. No parking will be allowed on other residential roads.**

2.0 SITE ACCESS AND TRAFFIC MANAGEMENT

- 2.1 Traffic management will be the responsibility of the appointed Principal Contractor and on-site Supervisor to ensure that all deliveries are instructed to follow the designated route to and from the development.
- 2.2 Access to the development will be via Biggs Lane to the North of the development site making use of the existing access. **No construction vehicles will be allowed to access and egress from the south via Park Lane.**
- 2.3 **A Road Condition Survey will be carried out on the existing highway, Biggs Lane, that will be used for construction traffic.**
- 2.4 It will be the responsibility of the Principal Contractor to have a traffic marshal at the development to assist, manage and control all deliveries and traffic on site and to bank larger HGV's on the development.
- 2.5 All new estate roads **(including street lighting)** are to be constructed on site to enable vehicles to turn on site to avoid the reversing off site onto the road. **Temporary street lighting will be employed to the estate roads and compound parking as necessary to ensure safety.**
- 2.6 Deliveries to site will be during site working hours 8am to 6pm and **will be managed to be outside of school entry and exit times,**

whenever possible. All necessary signage will be erected giving notification of the development entrance.

To prevent soiling the existing roads and manage mud and dirt being transferred from the development onto the completed roads a jet wash and bowser/direct tap to be located at the site entrance and installed and used to remove any mud from construction vehicles when required as existing the development.

Periodically a road sweeper will be employed to clean the site roads and the surrounding offsite roads, as and when required.

Vehicle movements – it is estimated that the following vehicle movements will be experienced:

- Articulated Vehicles: Typically, 8 per week
- Rigid Vehicles (7.5 – 20 ton): 20 per week peak typically at 30 per week.
- Transit Vans (1.5 ton): 12 per day
- Concrete Lorries: peaking at 10 per day during foundation operations

3.0 SITE MANAGEMENT AND SUPERVISION

3.1 The Principal Contractor shall appoint sufficient suitably qualified and experienced personnel to supervise the main construction works.

3.2 Regular meetings will be held between the Principal Contractor and Subcontractors to discuss construction issues and the forthcoming programme of works.

3.3 The nominated Site Manager will monitor any operations which cause or have the potential to cause nuisance and/ or dust on the site; works will be reviewed and if necessary, stopped until mitigation measures are fully implemented.

3.4 Contractors will set out the procedures to be followed for construction operations in the method statements which will address health, safety, site security and the environmental issues associated with the construction operations. The operations requiring a method statement will be identified using a risk-based approach. As a minimum,

method statements will be prepared for the site-based construction activities.

3.5 Site notice boards will display all site procedures, necessary environmental matter associated with the project.

3.6 Consortium meetings with the lead consortium member will be attended as necessary. The meetings will be to discuss forthcoming work activities and update on the current programme of works being carried out by Crest Nicholson.

4.0 WORKING HOURS

4.1 Core working hours will be from 08:00 to 18:00 on weekdays (excluding Bank Holidays) and from 08:00 to 13:00 on Saturdays. The Principal Contractor will require that its contractors adhere to these core working hours.

4.2 To maximise productivity within the core hours, contractors will require a period of up to one hour before and after normal working hours for start-up and close-down of activities. This will include (but not limited to) movement to place of work, general preparation, housekeeping and clearing up after the days working activities. This will not include operation of plant and machinery likely to cause a disturbance to residents. These periods will not be considered an extension of the core working hours.

5.0 CONTROL OF NOISE VIBRATION AND DUST

5.1 The effects of noise and vibration from construction works will be controlled by introducing management and monitoring processes to ensure that BPM are planned and employed to minimise noise and vibration during construction.

5.2 Where noise, dust and air pollution are likely to affect local residents the contractor shall be held responsible for ensuring that.

- Construction works will not commence until 08:00 Monday to Saturday, and finish 18:00 Monday to Friday and 13:00 Saturdays.
- Vehicles and plant will be turned off when not in use.

- Vehicles and plant used for the purpose of works shall be fitted with effective exhaust silencers, maintained in good and efficient working order and operated to minimise noise emissions. The Subcontractor shall ensure that all plant complies with the relevant statutory and manufacturers requirements.
- Plant shall be maintained in good workmanlike condition so that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
- Operation of construction plant in accordance with the manufacturers written recommendations.
- Shouting and raised voices are not permitted other than in cases where warnings of danger must be given. Radios shall not be played at a volume that is likely to disturb residents.
- Vehicles and construction plant exhaust to be directed away from the ground and positioned at a height to facilitate appropriate dispersal of exhaust emissions.
- Cutting and grinding operations will be conducted using equipment and techniques which reduce emissions and incorporate appropriate dust suppression measures.
- Damping down of dust-generating equipment and vehicles within the site and the provision of dust suppression in all areas of the site that are likely to generate dust.
- Measures to keep roads and accesses clean.
- Drop heights from excavators to vehicles involved in the transport of excavated material will be kept to the reasonably practicable minimum.
- Stockpiles of material shall be damped down or have tarpaulin to prevent the emission of dust from site.
- Stockpiles will be sited to minimise any disturbance to neighbouring properties and roads.
- Skips and associated vehicles will be properly covered when leaving the site. Rubble chutes will be used where necessary to prevent dust emission.
- The Developer will require that its contractors act to minimise waste generated from the construction activities. This will include measures such as “just in time” deliveries, careful storage of materials on site, and to avoid the double handling of material through distribution.

6.0 AIR QUALITY AND CONTROL OF WASTE

6.1 We will apply the Waste Management Hierarchy rules as defined in The Waste (England and Wales) Regulations 2011.

6.2 Priority is to be given to preventing waste generation in the first instance. All waste must be prepared for re-use or recycling for recovery such as energy recovery. The final option is for waste to be safely disposed of via licenced contractor.

- Burning of materials on the site will NOT be permitted.
- The Developer will require that its contractors act to minimise waste generated from the construction activities. This will include measures such as “just in time” deliveries, careful storage of materials on site, minimisation of packaging.
- Skip and storage receptables shall be inspected on arrival to ensure they are fit for purpose. Skip and storage not fit for purpose will be taken out of use immediately with appropriate signage used to signify that they should not be used.
- Mixing inert, hazardous, and non-hazardous wastes, either whilst stored on site or upon collection, will not be permitted.
- Liquid waste will be stored on hard-surfaced areas with secondary containment systems to prevent spillages.
- Storage receptable will be used for the collection and storage of waste within site operation facilities to facilitate the segregation of waste for re-use, recycling and recovering.

7.0 CONTROL FOR POLLUTION OF GROUND AND SURFACE WATER

7.1 Watercourses and associated land drainage within or adjacent to construction sites will be protected to always ensure appropriate working conditions by way appropriate integration within the on-site design, or necessary temporary design for the safeguard of water run-off, and as each situation requires necessary protection.

7.2 Storage of any oil-based materials, including petrol, diesel, waste and vegetable and plant oil above-ground fuel and oil storage tanks will be bunded and made safe so as not allow spillage.

7.3 Stationary plant will be used with secondary containment measures such as drip trays/ nappies to retain any leakage of oil or fuel, which will be emptied at regular intervals to prevent overflow.

7.4 Spillage kits will be stored at key locations on site, in accordance with appropriate use by trades on site.

8.0 EMERGENCY PROCEDURES AND INCLEMENT WEATHER

8.1 The Site Manager will ensure that all staff and subcontractors are made aware of all emergency procedures during the construction phases in accordance with the Construction Phase Plan and this Construction Environmental Management Plan. This will include safe and tidy access throughout and reviews with site staff / subcontractors. This will be reviewed throughout the construction programme until completion.

8.2 During the course of the project there may be periods of inclement weather which may influence the control of dust and mud. This could be due to long dry spells, strong winds or heavy rains. If such conditions are encountered and influence air quality or on-site conditions the Site Manager may temporarily suspend site operations until conditions can be improved or improve naturally.

8.3 Site notice boards will include for all emergency procedures, and updates as required for the site at a given time.

Appendix A: Logistic Plan and Site Setup



- Pedestrian Walkway
- ↔ Traffic
- Compound

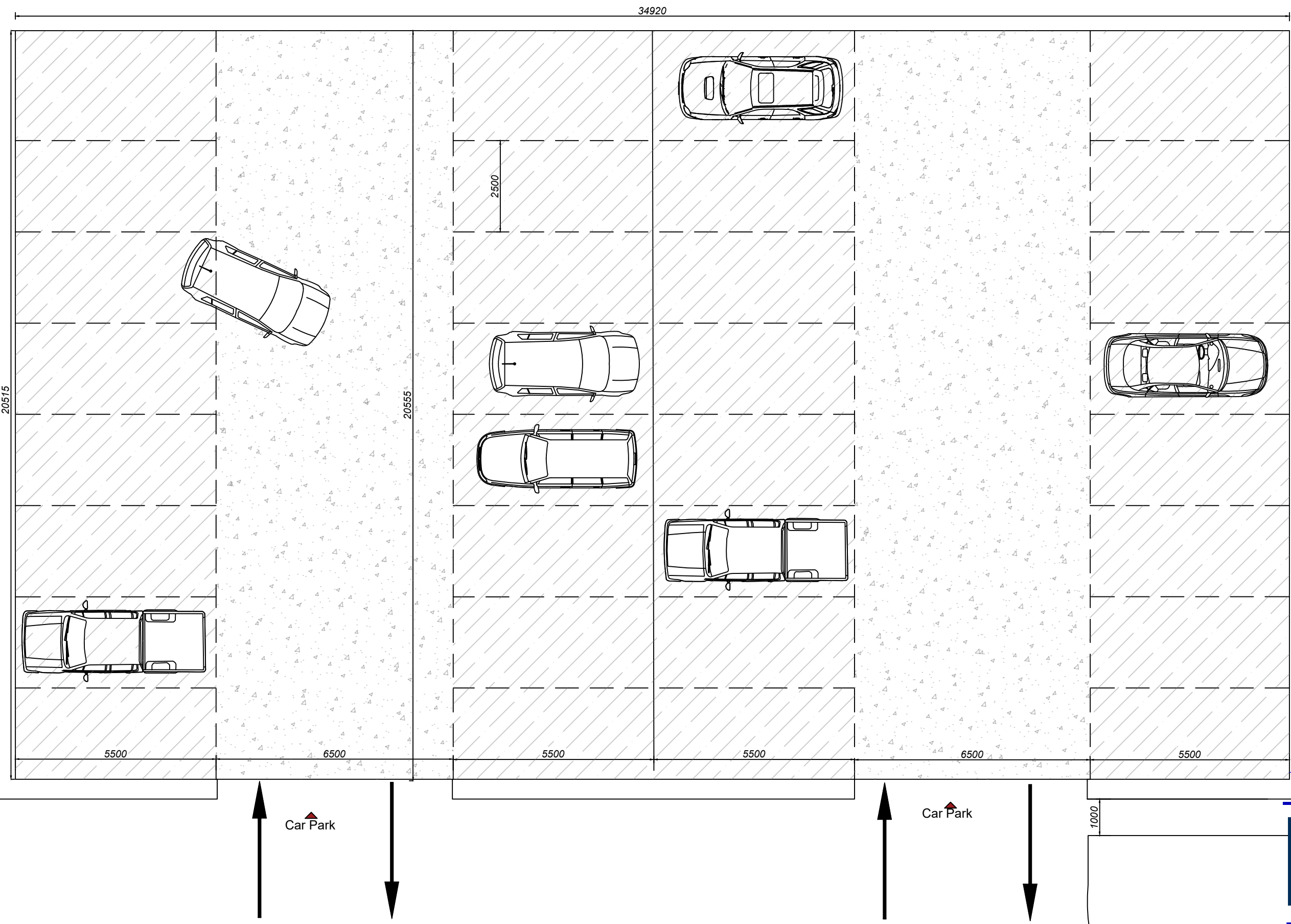
Parcel O2 – Arborfield Green - PEP



- Show home Plot 124
- Site Parking
- Site Compound

Parcel O2 – Arborfield Green - PEP





Notes:

- Total of 32 cars/vans
- Spaces to be Crushed Concrete
- Runways to be Concrete
- To be read inline with Temp Works Pack

Key:

 Concrete

 Crushed Concrete

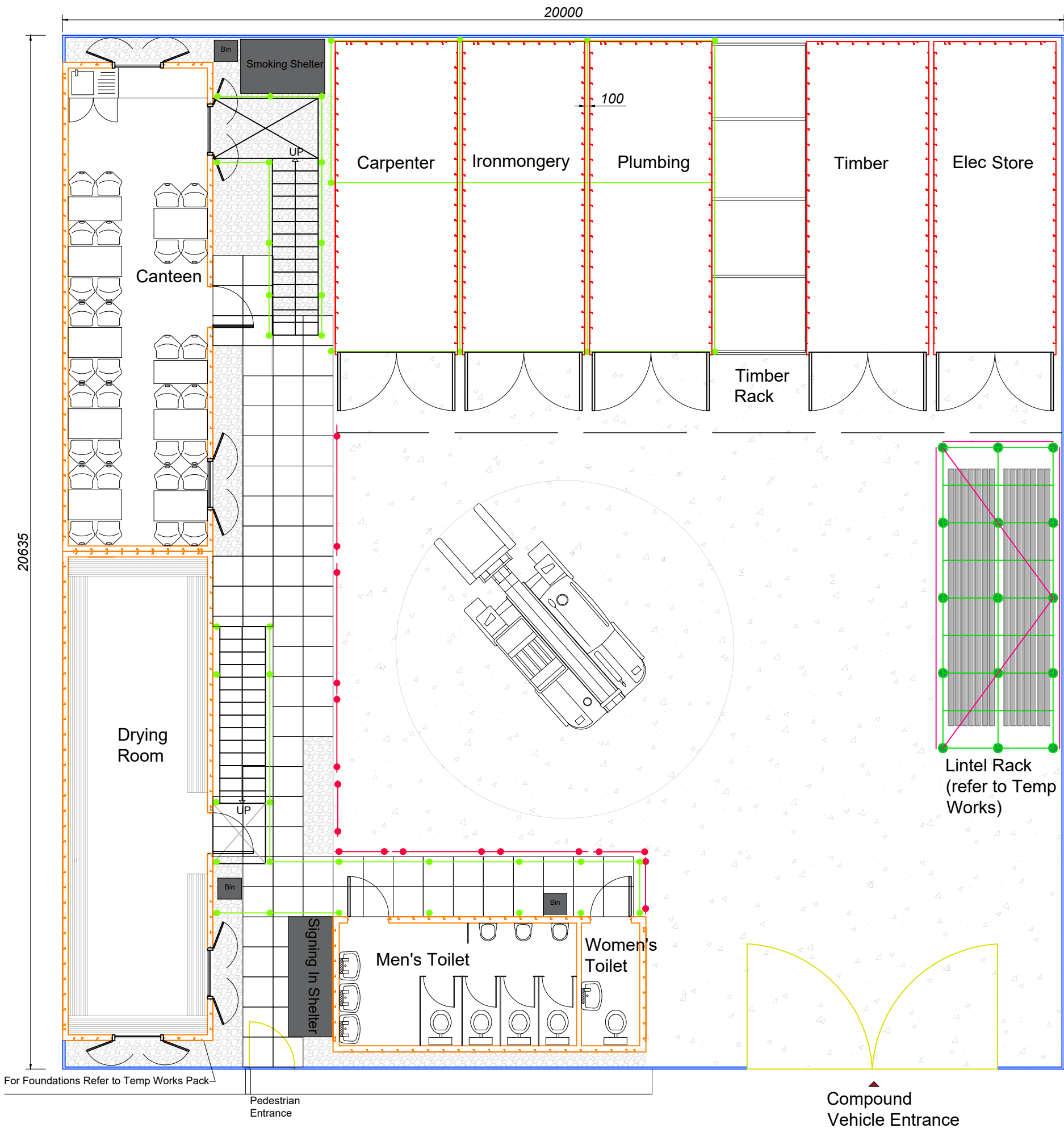
B	Drawing Issued For Construction.	02-12-21	TC
A	External Fencing Removed, Hatching Added to Runways, Hatching Added to Car Spaces, Notes Updated, Lighting Removed	08-10-21	CCP
Rev.	Description.	Date.	Initial.

Drawing Status: **CONSTRUCTION**



Crest Nicholson Ltd.
Crest House
Pyncroft Road
Chertsey
Surrey
KT16 9GN
Tel: 01932 580 555
Fax: 08703 363 990
www.crestnicholson.com

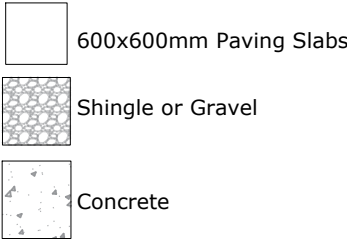
Site:	Unit Size: 35mx20m
House Type:	
Drg Title: Standard Site Compound - Car Park	
Scale:	Page Size: A3 Date: 23-08-21
	Drawn: CCP Checked:
Drawing No:	Revision: B



Notes:

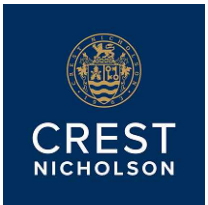
- Compound Area to be Concrete inline with Group Bench Marking
- Material Stores are 6250x2440mm (20'5"x8ft)
- Accommodation Units are 9760x2960mm (32x10ft) for the larger units & 6250x2700mm (20x9ft) for the WC's
- Stacked Units shown on separate sheet
- Lintel Rack follows temporary work detailing
- Timber Rack refer to Temporary work detailing
- Scaffold Racking for storage follow temporary work detailing
- Shingle or gravel around units to reduce cost
- To be read inline with Temp Works Pack

Key:



- Material Stores
- Accommodation Units
- Knee Railing
- External Heras Fencing (Refer to Temp Works Pack)
- Painted Demarcation Crush Zone (Keep Clear)

E	Additional unit added over top of toilet block, first floor platform increased to serve new unit. Container sizes adjusted	07/09/2023	PW
D	Drawing issued for construction	02/12/2021	TC
C	Compound hatching pulled to containers, overall width adjusted, key scale adjusted, timber rack added.	13/10/2021	CCP
B	Generator removed, fencing brought closer to containers, lintel rack moved, timber rack removed, lighting removed. Notes and key updated, hatching added to compound, men's locker room internal partitions removed	08/10/2021	CCP
A	Renamed dryer room	05-10-21	CCP
Rev	Description	Date	Initial



Crest Nicholson Ltd.
 500 Dashwood Lang Road
 Bourne Business Park
 Addlestone
 Surrey
 KT15 2HJ
 Tel: 01932 580 555
 Fax: 08703 363 990
 www.crestnicholson.com

Crest Project No.

Project name & phase

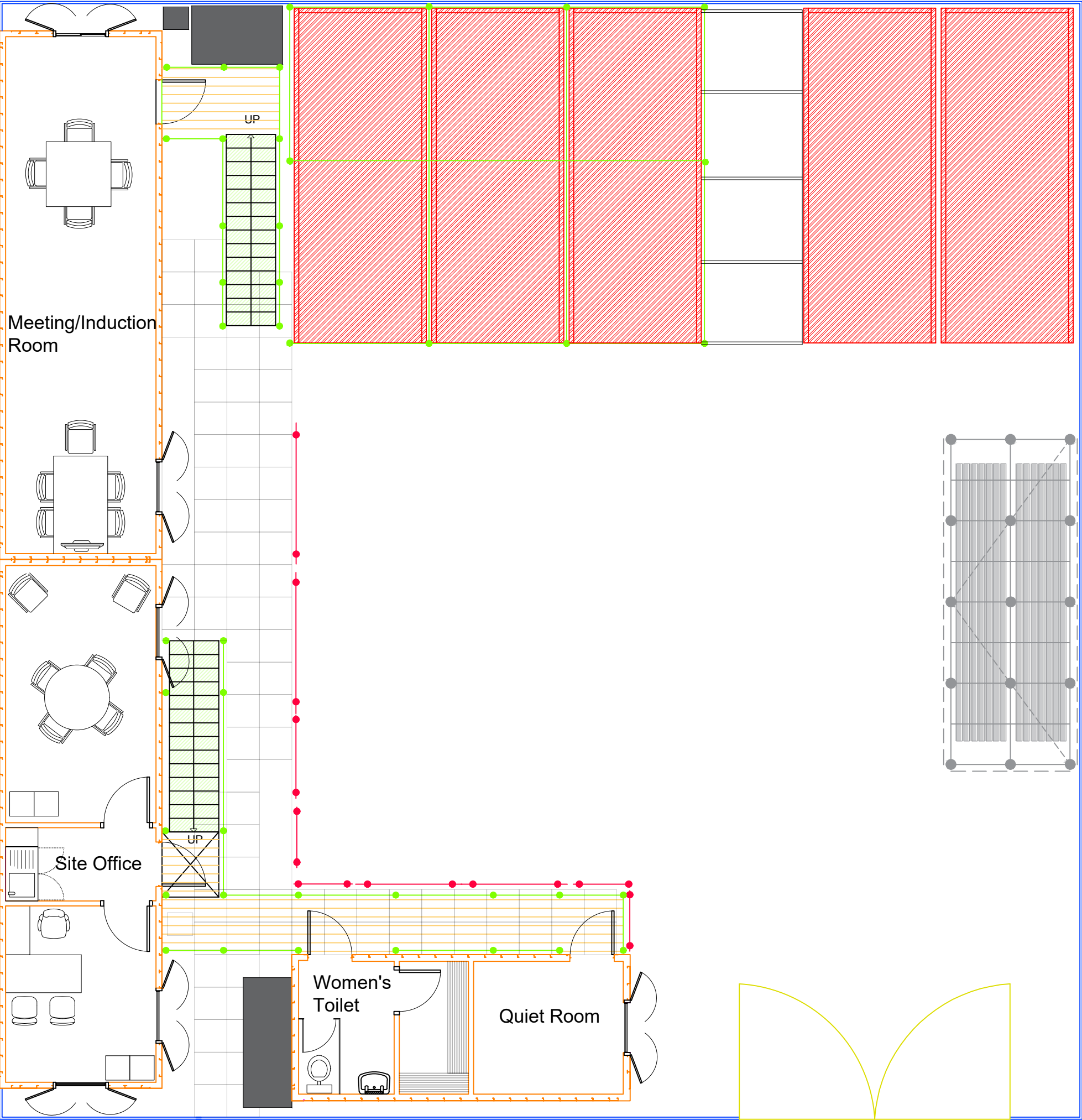
Site/House Type: Crest Standard Details

Drg Title: Standard Site Compound - Ground Level

Scale: Date: Sept 2023 Drawn: PW Checked: GG

CAD Ref: NHBC Approval Ref: -

Drawing No: Revision: E



Notes:

- Material Stores are 6250x2440mm (20'5"x8ft)
- Accommodation Units are 9760x2960mm (32x10ft) for the larger units & 6250x2700mm (20x9ft) for the WC's
- Scaffold Racking for storage follow temporary work detailing
- To be read inline with Temp Works Pack

Key:

-  Material Stores
-  Accommodation Units
-  Area of Gantry
-  Stairs
-  External Heras Fencing (Refer to Temp Works Pack)

E	Additional unit added over top of toilet block, first floor platform increased to serve new unit. Container sizes adjusted, key extended	07/09/2023	PW
D	Drawing issued for construction	02/12/2021	TC
C	Overall width adjusted, timber rack added	13/10/2021	CCP
B	External fencing adjusted to match ground level plan, lintel rack adjusted, notes updated	08/10/2021	CCP
A	Men's locker room notes removed	05-10-21	CCP
Rev	Description	Date	Initial



Crest Nicholson Ltd.
500 Dashwood Lang Road
Bourne Business Park
Addlestone
Surrey
KT15 2HJ
Tel: 01932 580 555
Fax: 08703 363 990
www.crestnicholson.com

Crest Project No.

Project name & phase

Site/House Type:		Crest Standard Details	
Drg Title:		Standard Site Compound - First Level	
Scale:	Date: Sept 2023	Drawn: PW	Checked: GG
CAD Ref:		NHBC Approval Ref: -	
Drawing No:			Revision: E

Appendix B: Crest Nicholson Policies

Build Policies and Procedures



Title: *Site set-up*

Issue Date: *26th July 2019*

<u>Policy</u>	A site must be set-up to provide both efficient management control and to be a good neighbour.
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<u>Background</u>	A well-controlled site should reduce the risk of disruptive on-site and off-site issues arising to impede production progress. Maintaining a reputation as a responsible developer is useful when trying to secure future land and planning on nearby sites.
--------------------------	--

<u>Procedure</u>	<i>- Planning Permission</i> The Build Manager is responsible for ensuring that the site set-up complies with all planning conditions. The Site Manager must be aware of all the planning conditions associated with the site set-up and comply with them, as it is not uncommon to see conditions in respect of: • Construction of the compound • Compound position • Materials storage and position • Routes in and out of the development • Parking provisions • Labour requirements These will be found on the projects' document management system, Viewpoint for Projects. <i>- Considerate Constructors Scheme</i> All developments must be registered with this scheme before commencement of the project or phase. The Build Manager is responsible for this. Guidance on the operation of this scheme can be found on its website: https://www.ccscheme.org.uk/ <i>- Telecommunications</i> The Build Manager is responsible for initiating the telecommunications set-up for the site. 12 weeks must be allowed for the service to be delivered. This is done by completing a site request form to trigger the appropriate action, as follows:
-------------------------	---

- Obtain the form from Grapevine > Support > IT > Forms > IT Set Up Form
- Save form to Excel
- Set 'Request Type' to 'set up'
- Complete details
- Press button at the bottom of the form to email it to the appropriate department

The site request form must be used in a similar way if services need to be moved on site at any time. The procedure is as above except that the 'Request Type' must be set to 'Move'.

- Compound

It is the responsibility of the Build Manager to organize a serviced site compound from the outset to provide the site team with a warm and dry place of work, a functional office environment from which to manage the site, adequate materials storage and site welfare facilities that meet statutory requirements.

Where possible, the site office must overlook the compound area and have a good view over the site. The compound itself should be moved as few times as possible during the life of the site.

The compound design will be unique to the demands of the development however, general guidance for a standard or large compound can be found on:

- Grapevine > Safety, Health and environmental > Be safe > 05 standard compound option
- Grapevine > Safety, Health and environmental > Be safe > 06 large compound option

The Site Manager is responsible for obtaining site office supplies and displaying site information in accordance with appendix A and B respectively.

- Parking

The Considerate Constructors Scheme and, in some cases planning conditions, require evidence that sufficient parking is being provided to prevent the roads around the site being blocked up by contractors working on site.

Normally, the Group's compound options should prove adequate however, parking arrangements must be reviewed to ensure they can accommodate the expected variation in numbers of operatives working on site during construction, taking into account any planned change in location of the compound and the occupation strategy for residents' access and parking needs.

The Site Manager must ensure that contractors do not park in occupied areas of the development by using signage on site and covering the issue during the site induction.

- Document management system

All drawings, documents and information relating to a specific project must be stored in that project's folder in Viewpoint for Projects, the Group's web-based, document management system.

This system has a standard structure and guidance on its use is found on:

	- Grapevine > Support > IT > Training > Guides & Manuals > Viewpoint Guides > Site Management – VFP Quick Guide - <i>Data management system</i> Tablet computers are used on-site to operate Fieldview, the Group’s cloud-based, data management system. Build and Site Managers must know how to operate Fieldview as it is, amongst other things, the system used to record of construction progress and quality control. Guidance on its use is found on: - Grapevine > Support > IT > Training > Guides & Manuals > Fieldview Guides > Fieldview User Guide
--	---

<u>Assurance</u>	The Divisional Head of Build is responsible for ensuring that each site is set-up in accordance with this policy.
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<u>Appendices</u>	Work instructions: (A) Provision of site office supplies (B) General information for display
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Appendix A

Work instruction for the provision of site office supplies

All the required site office files, stationery and equipment will be provided by the Divisional Production Secretary at the request of the Site Manager. These items will inevitably change over time, but a general guide is set out below:

- Files

Buying	File 1 - Material orders	)	Blue
	File 2 - Miscellaneous	)	
Sub- contract	File 1 - Sub-contract orders	)	Green
	File 2 - Miscellaneous	)	
Safety, Health & Environment	7 Folder System		Red
Administration			Yellow

- IT Equipment

- A4 black & white printer/scanner
- A3 colour printer
- PC or laptop
- LCD screen
- Tablets

- Safety equipment

- Fire extinguishers (water & powder)
- Fire blanket
- Eye wash station
- First aid kit
- Safety helmets
- Goggles
- Ear defenders
- Face masks
- Gloves (rubber & leather)
- Waterproof suit
- Rubber boots
- Safety footwear
- Site safety board
- Signage

The following information, most of which is included in the Safety, Health and Environment 7 folder system, must be displayed in the site office or canteen, as appropriate:

- Site preparation programme
- Layout plan
- External materials schedule
- Emergency warning device
- Certificate of employers liability insurance
- Abrasive wheels regulations
- Form F10 (Rev) HSE
- Accident book
- Statement of company safety policy
- Method statements
- Risk assessments
- Crest standard safety signage
- Plot production programme ('PPP')
- Crest visitor/NHBC books
- Service/Trade contact list
- Health & Safety law poster
- Health & Safety Acts
- General policy statement from H&S policy
- Site Rules and emergency procedures
- Inspection registers
- Company safety policy
- COSHH assessments
- First aid notices
- Fire notice

1.0 Policy

It is the policy of Crest Nicholson to identify all hazards relating to conflict between traffic movement and pedestrians, and plan sufficiently to avoid conflict where possible.

2.0 Scope

This procedure covers all Crest Nicholson construction sites, and where mentioned, the associated checklists can be found in the HSP019 folder on Grapevine.

3.0 Activities

3.1 Construction site locations

3.1.1 Design and Pre-planning

“Designers” – Land and Technical teams

In accordance with the CDM Regulations the Land and Technical teams take on the role of Designers – this might be a stand alone role or in collaboration with other Crest Nicholson departments or external consultants

Land and Technical Managers need to examine, assess, and reduce the risks associated with their designs, including road and footpath layouts and ensure that project designs take account of any issues identified. Land and Technical Managers must ensure that along with other design risk information specific issues relating to the construction of roads and footpaths are contained in the project information pack for consideration by the Build Team when formulating their construction phase plan.

Specific consideration of the measures at the design stage can assist safe site vehicle operations are detailed in the *“Design Guidance for Traffic & Pedestrian Management”*. This guidance is to be referred to for when designing every Crest Nicholson project

3.2.2 Construction Phase

“Principal Contractor” – Build Team

For the purposes of CDM the Build Team takes on the role of Principal Contractor (PC) on behalf of Crest Nicholson with the exception of specialist trades ie: piling and groundworks that may be PC at the start of a project.

On taking on the role of PC, and in receipt of the design project information pack from the Technical Manager and any other associated information ie: pre-construction information, the build team can begin to assess and prepare the practical considerations with regards to the management of traffic and pedestrians on a new project. These considerations and measures must form part of the documented construction phase plan for the project.

Where items ie: barriers, hoops, signage, banksmen, etc are required, orders must be raised and communicated clearly to the buyer in good time to ensure ordering and arrival of the items to site occur in a timely manner prior to works commencing.

As part of the construction phase a traffic management plan (TMP) is to be drawn up and this will require a TMP whiteboard to be ordered as per the ordering process in advance of site commencement.

The TMP and associated risk assessments must be drawn up ready for site start and must take into consideration the Land and Technical Managers' observations and recommendations and any further pre-construction considerations that might be contained in the pre-construction information.

The *"Construction Phase Guidance for Traffic & Pedestrian Management"* is to be referenced when completing the traffic management arrangements for all projects.

3.4 Procurement

The requirement of all site provisions for the safe access and egress of both vehicles and pedestrians must be determined at the pre-planning stage and the exact requirements communicated to the buyers in order to purchase the correct items in a timely manner prior to site commencement.

The "Procurement Guidance for Traffic & Pedestrian Management" is to be referenced when purchasing the traffic management arrangements for all new projects.

3.5 During construction

During the construction phase all site activities need to be monitored for effectiveness and ongoing practicality. This is particularly important with regards to the control of traffic and pedestrian movements on site and the ongoing review of control measures:

- erect the TMP whiteboard in an area which is suitable for all persons on site to refer to
- ensure that it is protected from the elements and from unauthorised tampering.
- at construction commencement, review the agreed TMP to ensure that all the practical/physical measures are in place around the site, as per the plan and any specific design requirements.
- ensure that any traffic marshals are clearly identifiable in orange PPE and logo'd "vehicle banksman".
- communicate the plan to all operatives at induction.
- review the plan daily and update the plan as site conditions change – recording and storing the changes, by photographing the plan, as detailed in the specification *"Traffic Management Plan Ordering and Use Process"*.
- regularly check the physical controls on site

3.4 Documentation

Guidance documents can be found on Grapevine within the folder HSP019 - Traffic, Pedestrian & Materials Management

1. Purpose

The purpose of this procedure is to ensure that site activity does not cause water pollution.

2. Scope and Definitions

This procedure applies to all Crest Nicholson locations and activities.

Crest Nicholson or, where relevant, the Principal Contractor (with assistance from Crest Nicholson as appropriate) has responsibility for conducting all activities identified in this procedure.

Definitions	
Water Pollution	Water pollution can take place both on and off the site, via surface water and foul water drains, through the ground & directly into the local water course.
Surface Water Drains	Drains which remove clean water which has accumulated on the surface of the ground.
Foul Drains	Drains which remove effluent from toilets, sinks and other plumbed in equipment.
Silt/ Silty Water	Fine sediment derived from soil and rocks which can: • damage and kill aquatic life. • reduce water quality and. • cause flooding by blocking culverts.
Abstraction License	If you plan to take more than 20 cubic metres (20,000litres) a day, you are likely to need an abstraction licence from the Environment Agency. If you want to build or alter a structure that can permanently or temporarily change the water level or flow, check if you need a licence to impound water.
Discharge Consent	Discharge consent is permission granted by the Environment Agency to discharge sewage or trade effluent directly into surface waters, groundwater or the sea..

3. Activities

3.1. Design and Procurement

Where sustainable drainage systems (SUDS) such as ponds and swales are to be part of the completed construction, the **Technical Manager** considers installing these at the outset and using them as a means of treating silty water during construction.

The **Planning Manager** consults with Local Planning Authority, the **Technical Manager** consults with water and sewage undertakers and Statutory Authorities and secures any relevant licences or approvals before work commences on site.

3.2.1. Licenses

The **Technical Manager** must obtain any relevant licences if water is to be abstracted from a controlled water source (river, lake, pond, borehole) and that the volumes of water detailed in the licence, are recorded and do not exceed permitted levels during construction.

The **Technical Manager** must obtain the permits required if water is to be discharged either on or off the site. A consent to discharge will be required if groundwater is being extracted during excavations and is either being directed into a local watercourse off the site or is being dewatered to another location on the site which is a well or a sump. If water is dewatered onto the site and is left to dissipate naturally back into the ground, a consent will not be required.

The **Site Manager** establishes a regular monitoring routine for water discharged from the site that may be required as part of the permit to discharge consents.

3.3. Site Set-Up

The **Buyer** ensures that equipment to enable water pollution prevention measures to be implemented is purchased for the site in accordance with **ES 027 Specification for Pollution Prevention**.

The **Site Manager** must complete the **EF004 Site Pollution Incident Response Plan**.

3.4. Site Management

3.4.1. Site Manager

- The **Site Manager** ensures they are familiar with existing and constructed site drainage and always keeps a marked-up site drainage plan on site which identifies live drains.
- The **Site Manager** ensures that all pollution prevention equipment e.g. spill kits are in place and that all site personnel are trained in the use of this equipment.
- The **Site Manager** ensures that clean water is diverted away from bare ground to prevent erosion of soil and excessive surface water run-off.
- The **Site Manager** must enforce that all lorries wash off concrete residue, in designated area, before leaving site.

3.4.2. Protecting Drains and Watercourses

All Operatives and the **Site Manager** must ensure that:

- Drains and watercourses are protected from liquid concrete, mortar, cement, or any other substance present on-site.
- Materials, substances, and plant (e.g. stockpiles, fuel, paint, pumps, and generators) are not located within 10 meters of drains or watercourses.
- Impermeable upstands or matting are always in place in and/or around foul water drain entry points to prevent accidental discharge of effluents that are not authorised by the water company or water authority. This includes contaminated surface water all surface water drains are protected from silt and other potential contaminants during construction through permeable matting (Terram or similar).
- Where the surface water drain is in an area of extremely elevated risk, an impermeable cover should be installed temporarily over the drain cover.

The **Site Manager** must check drain protection weekly and ensure that any damage to the drain protection is repaired immediately.

3.4.3. Surface Water Management

The **Site Manager** ensures that site runoff rates are restricted during wet weather by appropriate means as set out in the site drainage plan.

During **Groundwork's**, any depressions or barriers created because of excavation or earthworks must not be left exposed where there is the potential to pond water and become occupied by protected species. Backfills must be properly compacted at sub-surface levels and crowned to prevent water ponding.

If **Groundworks** take place during wet weather, any surface water run-off should not be allowed to run off the site but should be directed back onto a vegetated area of the site, where it can dissipate back into the groundwater supply.

3.4.4. Using a Settlement Tank/ Sump

If a settlement tank is used, the **Technical Manager** must ensure it is sized to deal with the flow of water which will be pumped through it.

The **Site Manager** must inspect the tank on a regular basis to ensure it is working effectively and that sediment has not built up in the settlement chamber. The Site Manager must periodically inspect the discharge from the tank to ensure the discharge water is not contaminated.

3.4.5. Managing Site Drainage

All operatives, and the **Site Manager** must ensure that NOTHING (e.g. Contaminants/ pollution) is allowed to enter surface water drains, except clean rainwater. Should anything else enter the surface water drains, it has the potential to cause pollution either on or off the site and should be treated as an incident.

It is ILLEGAL to put any polluting matter into controlled waters (ponds, rivers, lakes, groundwater, streams etc.) without obtaining permission from the Environmental Regulator (ENVIRONMENT AGENCY).

Where necessary, the **Technical Manager** seeks permission from the environmental regulator to discharge to controlled waters.

3.4.6. Working near or in watercourses

When working near (within 10meters) or in a water course the following measures must be taken:

- Fuel must not be stored near the water course, at least 10m away.
- The banks or bed of the watercourse outside the area of works must be regularly inspected to ensure they are not being affected by discharges or vehicle movements, etc.
- The watercourse should be inspected on a regular schedule for silt or discolouration downstream of the works or any visible oily sheen.
- Spray, dust, or other airborne materials must be prevented from entering the Watercourse.
- Mud and silt shall be cleared from the haul routes to prevent entry into the watercourse.
- If using a cofferdam to retain water, it should be in good condition and working effectively.
- Ensure spill kits are adequately stocked and in place next to any potential contaminants and that site operatives are aware of the location of spill kits and know how to use them.
- Mitigation measures to be available and put in place in the event of an emergency (e.g. booms across river).

3.4.7. Dealing with spillages

In the event of a spillage, the Spill Response Poster, and Site Pollution Incident Response Plan (SPIRP) should be followed:

- The **Site Manager** shall complete an **EF001 Environmental Incident Form** and inform their **SHE Advisor**.
- The **Site Manager** should ensure that the spillage has been prevented from spreading any further and then inform the contacts as identified in the **EF004-SPIRP**.
- The **Site Manager** shall ensure that where spill kits are used; these are restocked immediately, and any hazardous waste/ used materials are disposed of correctly and replenished as required.

4. Register of Related SHE Documents

1. EF001 CN Environmental Incident Form
2. EF004 CN Environmental Incident Response Plan
3. ES021 Specification for Waste Storage and Recycling
4. ES027 Specification for Pollution Prevention
5. ES032 Specification for Silt management and Site Run Off

Environmental Terms Relating to Licenses, Consents and Permits.

Item	Description
Abstraction Licence	An abstraction licence gives you a right to take a certain quantity of water from a source of supply (inland water such as rivers or streams or an underground source). It also guarantees that no one else who applies for an abstraction licence can take the share of water that is already allocated to you. *If you plan to take more than 20 cubic metres (20,000 litres) a day, you are likely to need an abstraction licence from the Environment Agency. If you want to build or alter a structure that can permanently or temporarily change the water level or flow, check if you need a licence to impound water.
Discharge Consent	Discharge consent is permission granted by the Environment Agency to discharge sewage or trade effluent directly into surface waters, groundwater, or the sea.
Environmental Permit	Environmental permits allow activities to be regulated according to the risks that they pose. This also allows the government to achieve certain environmental targets and promote best practice and consistency within industry.
Flood Risk Activity Permit	You need a flood risk activity permit, previously called flood defence consent, if you want to do work: on or near a main river. on or near a flood defence structure. on or near a sea defence.
Bespoke Permit	A bespoke permit is just that, an environmental permit tailored to your business requirements. In terms of waste volumes & your location. It also describes operating techniques and processes you may want to use on site such as shearing, baling, etc.
Standard Rules Permit	A standard rules permit is just that, a permit with standard rules. You need to decide if you can comply with them before you apply. If you cannot comply then you may need to apply for a “bespoke” environmental permit. A bespoke permit is particular to what volumes and types of waste you want to treat.
Exemption	A waste exemption is a waste operation that is exempt from needing an environmental permit. Each exemption has limits and conditions that you must meet. To find out if there is an exemption for your waste operation, and check that you meet the conditions, see the section 'Choose the right exemptions'.

Item	Description
Water Authority	Is the company or provider of water and sewage services. Find Your Supplier Water UK
Permitting Authority	The Permitting Authority could be the Environment Agency, Port of London Authority, Local Authority, Natural England, Local Planning Authority
Regulator	The Environment Agency is the Primary Regulatory Authority relating to Controlled Waters. The Local Authority is the Primary Environmental Regulator relating to Human Health and Environment. Natural England is the Environmental Regulator for Ecological matters. DEFRA- Department for Environment Food and Rural Affairs. The Office for Environmental Protection (OEP)- non-executive departmental body- DEFRA.

Build Policies and Procedures



Title: *Materials Management*

Issue Date: *14th December 2018*

<u>Policy</u>	Only the materials specified, in good condition, will be used in the construction of a development. Materials must be available on site when required by the production programme and handled in a manner unlikely to cause damage or deterioration. All waste must be disposed of responsibly.
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<u>Background</u>	Using different products to those specified risks compromising the original design performance; reducing the quality of the home delivered, increasing after sales issues, reducing customer satisfaction and, where it involves fire protection, potentially resulting in catastrophic consequences. It is also a fraud against the Group. To maximise site performance, materials need to be matched with need in order to stay on programme whilst avoiding excessive storage on site, which is both capital intensive and liable to increase costs through extra handling and waste.
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<u>Procedure</u>	- <i>Responsibility</i> The project's Buyer is responsible for ordering the directly-supplied materials for a development while the project's Surveyor is responsible for specifying the materials to be supplied by sub-contractors. Copies of all orders are sent to the Site Manager. The Site Manager is responsible for the logistics and on-site management of all materials ordered by Crest and for ensuring that the materials used in construction are those specified. - <i>Materials call off</i> The Site Manager is responsible for the call-off of directly purchased materials and should aim for just-in-time deliveries to minimise stock held on site. Achieving this will require a good understanding of programme requirements and delivery lead times, obtainable from the project's Buyer. Call off instructions must be sent to the supplier in writing. The Site Manager must keep an up-to-date control record of materials on order, called off and delivered. Samples of control sheets can be found as follows: • Plot loaded materials (appendix B) • Bulk materials (appendix C) Where a call off is initiated by someone other than the Site Manager, e.g. by the Buyer at the start of a phase, the Site Manager must obtain a copy of that call off instruction and record it on the relevant control sheet.
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	<i>- Material requisitions</i> Where additional or new materials are required then these must be requisitioned from the Buyer using the materials requisition form in Fieldview. Guidance for this can be found on: - Grapevine > Support > IT > Training > Guides & Manuals > Fieldview Guides > Fieldview – RFI, Materials Requests, Site Variation Orders – For Site <i>- Goods receipt</i> Goods received must be checked for condition and quantity within 24 hours of receipt, with any discrepancy reported to the supplier immediately. The only exception to this is where the protective packaging makes condition checking impractical until the point of use. Materials must be booked into the financial system once they have been physically checked, or where protected materials, on receipt. This must be done in a timely manner, in accordance with the instructions found on: - Grapevine > Support > IT > Training > Guides & Manuals > Agresso Guides > (1) Agresso – Site Manager GRN > (2) Agresso – Site Manager GRN - Scenarios The delivered materials should also be recorded on the relevant control sheets (appendices B & C). <i>- Materials storage, handling and waste management</i> The Site Manager must manage materials in accordance with the materials management standard (appendix A) <i>- Sub-contractor supplied materials</i> The Site Manager must check that sub-contractors are only using the materials specified in their contract. Where a substitute product is proposed, the Site Manager must ban its use unless and until it has been approved in writing by the project's Surveyor. The Surveyor must be notified using the product non-conformance form in Fieldview. Guidance for this can be found on: - Grapevine > Support > IT > Training > Guides & Manuals > Fieldview Guides > Fieldview – Non-conformance products – for Surveyors
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Assurance	Materials call-off control sheets should be kept until site closure. Information on Agresso or Fieldview should be kept until the 15 th anniversary of the last legal completion and be available for inspection at all times.
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Appendices	Work instruction: (A) Materials management standard Documents: (B) Materials call off / delivery record (C) Schedule of bulk quantities
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Materials Management Standard



Although it is understood that every site is different and has its own limitations and constraints, there are basic procedures and techniques required to effectively manage materials. This manual will describe the minimum standards Crest Nicholson requires from all sites with regard to managing materials. One page summaries of this standard to post around your site are available on Grapevine.

Contents

1: Introduction	2
2: Inert Materials	3
A) Receipt & Handling	3
B) Storage	3
C) Use, Reuse & Disposal	3
3: Timber	5
A) Receipt & Handling	5
B) Storage	5
C) Reuse & Disposal	6
4: Plasterboard	7
A) Receipt & Handling	7
B) Storage	7
C) Use, Reuse & Disposal	7
5: References	9

1: Introduction

Every year, Crest Nicholson spends over £10m on wasted materials and disposing of them. This figure takes into account the cost of the creating and transporting the material as well as disposing of any waste leaving our sites.

Currently, the largest waste streams are:

- Inert (bricks, blocks, etc.)
- Timber
- Plasterboard
- Compactable materials (the packaging in which materials arrive on-site)

One of the most effective ways of reducing the financial and environmental impact of materials wastage on site is through proper planning and effective management by both Crest Nicholson site teams and sub-contractors, supported by everyone recognising that materials are valuable and should be treated with care.

This standard sets out the **minimum** requirements concerning the receipt, handling, storage, re-use, and disposal of our four highest waste streams.

The Site Manager must make all Crest Nicholson employees and sub-contractors working on site aware of this standard and the necessity of complying with it.

2: Inert Materials

Bricks and blocks are highly sensitive to moisture and dirt, and are easily damaged prior to being used in the build environment. Care must be taken to ensure they remain in top condition. At a **minimum**, Crest Nicholson requires the following on all sites:

A) Receipt & Handling

- ✓ Designate someone to supervise the delivery to ensure correct location and method of storage, e.g. site manager, gate keeper, banksman.
- ✓ Unload bricks and blocks with care by machine to minimise soiling, chipping, and breakage.
- ✓ Handle packs with wrapping or shrink wrap and banding in place for as long as possible to avoid damage and soiling.
- ✓ Avoid double handling as much as possible through effective logistics planning: less effort, less damage, less waste.
- ✓ Prioritise “Just in Time” delivery to avoid storage issues.
- ✓ When handling part packs, ensure the pack is brightly marked in some way to prevent the forklift from splitting the un-banded/unwrapped pack. This will prevent damage and injury.

B) Storage

- ✓ Designate a bulk storage area on a flat, dry and hard standing surface, taking into account access and transportation logistics, as well as any environmental issues, e.g. forklift access and manoeuvrability, potential for flooding, proximity to build area.
- ✓ Protect the bricks and blocks from rain, frost and soiling by passing traffic by keeping wrapping and banding in place when possible or covering with dry plastic sheeting.
- ✓ Weigh any sheeting down to prevent the wind lifting them.
- ✓ Protect the bricks and blocks from ground moisture by keeping them on appropriately sized pallets.
- ✓ Ensure the packs are stacked to a maximum height of two pallets with a third as a bridge to avoid damage and injury.
- ✓ Stack unwrapped packs to allow free circulation of air.



Examples of good practice on a Crest Nicholson site

C) Use, Reuse & Disposal

- ✓ Use a precision cutting tool to cut bricks.
- ✓ Re-use off-cuts where possible.

Materials Management Standard

- ✓ Crush any broken bricks and blocks (excluding aerated blocks) for use as aggregate where possible, i.e. for haul roads etc.
- ✓ If not possible, stockpile broken brick and blocks for recycling.
- ✓ Re-use film-wrap for small material protection before recycling it into appropriate waste skip or return to supplier (if contractually agreed).

3: Timber

At a **minimum**, Crest Nicholson requires all timber products to be managed in the following ways on site:

A) Receipt & Handling

- ✓ Designate someone to supervise the delivery of materials to ensure correct location and method of storage, e.g. site manager, gate keeper, banksman
- ✓ Upon receipt, delivery should check that the timber is either FSC¹ or PEFC certified, as required by the T&Cs of the order and the sub-contractor agreements.
- ✓ Handle pre-packaged timber with wrapping in place for as long as possible.
- ✓ Put delivered timber immediately in storage and do not remove its wrapping.
- ✓ Avoid double handling as much as possible through effective logistics planning: less effort, less damage, less waste.
- ✓ Prioritise "Just in Time" delivery to avoid storage issues, particularly for bulky items such as trusses.

B) Storage

- ✓ Designate a timber shelving storage area on a flat, dry and hard standing surface taking into account access and transportation logistics, as well as any environmental issues, e.g. forklift access and manoeuvrability, potential for flooding, proximity to build area.
- ✓ Protect timber from the rain by storing in a dry storage (i.e. a container).
- ✓ De-nail all timber for re-use purposes before storing it. This will ensure that people handling the re-useable timber are protected from injury.



Examples of good practice on Crest Nicholson sites

¹ FSC stands for the Forest Stewardship Council and PEFC the Programme for the Endorsement of Forest Certification. Both are not-for-profit organisations that certify forests and timber products all over the world to ensure they meet the highest environmental and social standards. Given that FSC is considered the most robust global certification for forest-related products, we make a strong preference for using FSC-certified timber products in our work. For more information on what you should be looking for when the timber is delivered to site, visit both www.fsc.org.uk and www.pefc.co.uk

C) Reuse & Disposal

Timber is a valuable resource that can be recovered and re-used for other purposes quite easily. Off-cuts, supporting timber and other construction elements should be re-used wherever possible, or segregated for recycling and recovery.

- ✓ Store off-cuts, used supporting timber, and other construction elements in the dry store for re-use
- ✓ Ensure timber is segregated into its own skip for recycling – only after all considerations for re-use have been exhausted

4: Plasterboard

The main constituent material in plasterboard is gypsum, a material that is sensitive to moisture, and is easily damaged. At a **minimum**, Crest Nicholson requires the following on all sites:

A) Receipt & Handling

- ✓ Designate someone to supervise the delivery of materials to ensure correct location and method of storage, e.g. site manager, gate keeper, banksman
- ✓ Unload the plasterboard packs with care by machine to minimise breakage.
- ✓ Handle the plasterboard with either its film-wrap or plastic shroud and timber bearers or pallets in place to avoid damage, including from rain, sleet or snow.
- ✓ Avoid double handling as much as possible through effective logistics planning: less effort, less damage, less waste.
- ✓ Prioritise "Just in Time" delivery to avoid storage issues.

B) Storage

- ✓ Designate a bulk storage area on a flat, dry and hard standing surface, taking into account access and transportation logistics, as well as any environmental issues, e.g. forklift access and manoeuvrability, potential for flooding, proximity to build area.
- ✓ Protect the plasterboard packs from rain, frost and soiling by passing traffic by keeping the film-wrap or plastic shroud in place when possible or covering with dry plastic sheeting.
- ✓ Carefully weigh any sheeting down to prevent the wind lifting them.
- ✓ Protect the packs from ground moisture by keeping them on their bearers or on appropriately sized pallets.
- ✓ Ensure plasterboard packs are stacked to a maximum height of two pallets or timber bearers with a third as a bridge to avoid damage and injury.



Examples of good practice on Crest Nicholson sites

C) Use, Reuse & Disposal

- ✓ Use a dedicated cutting station for boards to help reduce off-cut waste.
- ✓ Minimise the number of off-cuts by considering how to fully use the sheet, taking into account the design specifications. Where full use of the plasterboard is not possible, store large off-cuts for re-use (if possible, in a specific re-use stacking area).
- ✓ Consider how to re-use off-cuts before using a new plasterboard sheet.

Materials Management Standard

- ✓ Re-use film-wrap for small material protection before recycling it into appropriate waste skip or return to supplier (if contractually agreed).
- ✓ Ensure that plasterboard waste is segregated from other waste in its own bags or skips.

5: References

Reference documents, related to managing materials on site for the following topics, can be found on:

A) Storage & Handling

- Grapevine > Support > Safety, Health and Environmental > Site Environmental > Environmental Specifications

B) Toolbox talks

- Grapevine > Support > Safety, Health and Environmental > Site Environmental > Environmental Presentations > ETT 001 Environmental Toolbox Talks

C) Environmental forms

- Grapevine > Support > Safety, Health and Environmental > Site Environmental > Environmental Forms

Materials Call Off / Delivery Record

Site:

Phase Number:

Plots:

Material	Supplier		Order number	Date	Plot																			
				Call off																				
	Contact	Telephone		Delivery																				
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Schedule of Bulk Quantities

Site:

Phase Number

Plots:

[illegible]

1.0 Policy

For any vehicle (including construction plant) to be used on the public roads it must comply with insurance, licensing (tax) and registration requirements.

It is the responsibility of the contractor operating the vehicle to ensure these requirements are met. Where there will be a requirement to operate on the public highway the CN Commercial team must ensure this is communicated to the contractor at the tender stage.

NOTE: A full driving licence is required to operate any vehicle on a road “open to the public” including site roads that have not yet been adopted but are accessible by the public. This is in addition to the requirement for the driver to have the relevant competency card.

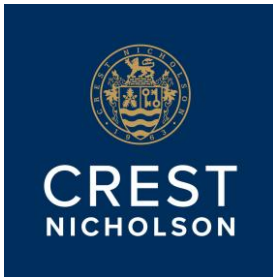
The vehicle must also comply with applicable construction regulations. Primarily these are the Road Vehicles (Construction and Use) Regulations 1986 (C&U), as amended, and the Road Vehicles Lighting Regulations 1989, as amended. These requirements apply even in cases where the road use is minimal (for example crossing the public road from one private premises to another).

2.0 Construction requirements

All vehicles used on public roads must comply with the construction requirements set out in the Road Vehicles (Construction and Use) Regulations 1986, as amended. Although, certain derogations exist for vehicles defined as ‘works trucks’, the following requirements apply:

- if the works truck can exceed 20 mph it must have a horn in good working order
- if it can exceed 25 mph it must have a speedometer in good working order
- the engine must be in good working order (does not emit black smoke) and fitted with a silencer if necessary so that it does not emit excessive noise
- it must have brakes that enable it to stop within a reasonable distance
- the vehicle must be maintained in a safe condition so that it does not cause danger to the driver or other road users

Please note that this list is not exhaustive. For the definitive requirements the regulations themselves should be consulted.



Crest Nicholson PLC

Health and Safety Policy Statement

Crest Nicholson Plc (the Group) is dedicated to achieving high standards of health, safety and welfare, creating a safe working environment, always.

The Group is committed to:

- Providing a safe and healthy working environment for all its employees and ensuring that work carried out does not adversely affect the health, safety and welfare of others.
- Ensuring suitable information, instruction and training are provided to all employees.
- Making appropriate advice and resources available to ensure employees and anyone carrying out work on the Group's behalf are aware of the risks associated with the Group's activities and the relevant precautions required.
- Ensuring employees are aware of their responsibilities with regards to health, safety and the environment.
- Ensuring that all relevant legislation is complied with and legal responsibilities are observed.
- The continual improvement of its health and safety performance through implementation of best practice and current industry guidance.
- Promoting the health, safety and welfare of our workforce as an integral responsibility of management and leadership.

This policy is approved by the Group Board and outlines the commitment to health, safety and welfare

Signed on behalf of the Group Board of Crest Nicholson Plc

.....
Peter Truscott, Chief Executive

November 2023



1.0 Policy

The purpose of this procedure is to ensure that Crest Nicholson identifies all dusty activities and where possible reduce dust to the lowest possible level

2.0 Scope

This procedure covers all Crest Nicholson operations and locations

2.0 Activities

The term “dusty activity” covers tasks such as labourer’s sweeping tasks, brick, block, tile and timber cutting, road sweeping, demolition and ground works. These works can not only affect the producer of the dust but workers in the vicinity and can become a public nuisance

Line/Site Managers are responsible for ensuring that activities that create dust are:

- Risk assessed taking into consideration
 - Elimination – design out the dusty activity or undertake off site
 - Substitution - use another less dust creating method
 - Isolation – remove persons from the area
 - Reduction
 - Mechanical ventilation - extraction at source
 - Natural ventilation - open windows and doors
 - Dampening down – apply water spray before during and at the end of the task
- Controls measures identified are put in place prior to works commencing
- The controls are monitored for ongoing effectiveness
- Where controls are failing, the works are stopped and the assessment and control measures reviewed

Risk assessments are to be completed, as required either by Crest, or the relevant subcontractor.

If after risk controls that are commensurate to the level of risk have been applied there is still residue dust level then additional controls such as respiratory protective equipment (RPE) may be required

Assessments must be communicated to the persons undertaking the works and reviewed and updated as and when conditions change

1.0 Policy

It is the policy of Crest Nicholson to ensure that the duty to manage asbestos is complied with fully to prevent the risks to ill health that exposure to asbestos causes.

Crest Nicholson, as a business does will not work with or remove asbestos containing materials. The purpose of this procedure is to ensure that the company identifies and records all areas that may have the potential to contain asbestos containing materials (ACMs) and appoints competent contractors, consultants, and testing laboratories to ensure the risk is managed appropriately.

2.0 Scope

This procedure covers all Crest Nicholson locations and activities.

3.0 Activities

3.1 Procurement

The Company will ensure that it identifies all potential sources of asbestos containing materials (ACMs).

Where the Technical Report identifies the known, or likely, presence of asbestos on a site a demolition/refurbishment asbestos survey will be commissioned as early as possible by the Technical Manager to positively identify all asbestos or potential asbestos.

The Commercial Manager is responsible for ensuring that:

1. all asbestos surveys, testing and analysis is carried out by a competent asbestos specialist accredited by UKAS for the work required. And,
2. all asbestos removal work is carried out by a specialist asbestos removal contractor licenced by the HSE. Where possible this contractor should be appointed as principal contractor to manage this element of the project. And,
3. all consultants, testing facilities and contractors pass the normal Crest competency requirements.

Prior to any asbestos work (surveying, removal, maintenance etc) the Crest manager for the works must ensure that appropriate risk assessments and method statements have been provided including a safe system of works and emergency procedures. On the completion of work the Crest manager is responsible for ensuring Crest are provided with copies of clean air certificates and any other testing results.

3.1 Divisional and Head Office Locations:

If the building is pre-2000, then the manager responsible for the building should ensure that a competent (UKAS Accredited) contractor has been, or should be, employed to undertake an Asbestos "Management Survey" on behalf of the Division or Head Office (procurement as above).

The Management Survey report will highlight any areas of risk, or potential areas of risk and then the "responsible person" (usually the Divisional MD or Head Office facilities management) will be required to detail how they propose to manage the areas and whether a competent subcontractor will be employed to remove the materials.

Where asbestos is identified within any Crest office location the advice of the Group SHE team must be sought to agree a suitable asbestos management plan.

Management plans must be signed off by the divisional board and must be formally reviewed every 12 months.

3.3 Construction Sites:

Demolition/refurbishment surveys will be undertaken on all projects that require demolition or refurbishment of old buildings or façade retention projects. Where possible any asbestos removal work will be undertaken by a contractor appointed as principal contractor and the work completed prior to Crest taking over as principal contractor. Where this is not possible the Build Manager must consult with the Group SHE Advisor as early as possible to agree how these works will be managed and included in the construction phase plan.

There is also the potential for pockets of ACMs to be left in the ground after previous demolition or brown field sites that were previously rubbish tips. Where this is identified during site surveys the normal process outlined above should be followed for the appointment of specialist contractors and consultants to assist in managing the issue.

Any known asbestos contamination on the site must be isolated as far as possible to avoid accidental exposure. Where required for the safety of those on site any specific control measures must be included in the site-specific induction.

3.4 Emergency Procedures

Under normal circumstances Crest will take all practical steps to ensure that any asbestos is removed from site prior to taking over as principal contractor. However there is a risk, particularly on refurbishment projects, that unknown asbestos will be discovered during construction work. All sites must have a specific emergency procedure within their construction phase plan. In general this must contain:

- Stop work in the area of the discovery,
- Report to the site management team as quickly as possible and escalate to the Group SHE Advisor immediately
- Prevent anyone from accessing the area,
- If safe to do so, take steps to prevent any wider contamination e.g. damp down area.
- Complete incident form including details of anyone who may have been exposed.
- Follow advice of SHE Advisor for decontamination of people and tools,
- Appoint specialist as soon as possible to identify and manage the risk.

5.0 Training

All Crest employees working on sites where there is a risk of asbestos must have attended the group Asbestos Awareness training.

4.0 Control of Records

All documentation, reports, clean air certificates and incident reports/investigations must be held on file for at least 50 years in the event of a future asbestosis claim.

1. Purpose

The purpose of this procedure is to ensure that risks arising from air pollution and dust are effectively controlled.

2. Scope and Definitions

This procedure applies to all Crest Nicholson construction locations and activities.

Definitions

Dust	Dust is any airborne solid matter up to about 0.1 mm in size. Particle sizes can vary considerably, depending on their origin, and the smallest particles can be breathed in. Some dust, such as limestone, can be chemically active.	
Emissions	Sulphur Dioxide- SO ₂	Air emission because of diesel/petrol combustion process.
	Particulate Matter 2.5 microns- PM _{2.5}	Air emission because of diesel/ petrol combustion- soot.
	Particulate Matter 10 microns- PM ₁₀	Air emission because of diesel/ petrol combustion process- soot.
	Nitrogen Oxides- NOx	The gases nitric oxide and nitrogen dioxide, that are produced when fuel is burned and that are harmful to the environment.

Crest Nicholson or, where relevant, *the Principal Contractor* (with assistance from **Crest Nicholson** as appropriate), has responsibility for carrying out all activities identified in this procedure.

3. Activities

3.1. Procurement

The **Buyer** will procure in line with the **ES 001 Specification for Pollution Prevention**. The **Surveyor** must ensure that all subcontractors and where appropriate **Principal Contractors** understand the requirements within this procedure and set out how they will comply in their tender and at pre-start meetings.

3.2. Site Set-up – Refer to **EP 001** Procedure for Planning & Site Set-Up

3.3. Site Management/ Housekeeping

All operatives and the **Site Manager** and **Build Managers Inspections** should ensure that the site is well maintained, and that dust and air pollution is eliminated as far as reasonably practicable.

3.3.1. Haul Routes

All haul routes should be constructed of hard surfaces such as tarmac or recycled aggregate material (Type 1/ Type 2/ 6F2) (see Crest Nicholson Temporary Works Package Pages 5 & 6). Where this cannot be achieved the **Site Manager** ensures that haul routes including pavements are:

- Kept free from dust during periods of dry weather using mechanical road sweepers.
- Dampen down haul roads when dry and dusty (use road sweepers/ water bowsers/ hose pipe/ jet wash as required).

The **Site Manager** ensures that where hard-standing areas are provided for vehicles, these are regularly inspected and cleaned.

The **Site Manager** ensures that haul routes are regularly inspected and repaired if required. When the haul route changes, surface material should be reused where possible.

3.3.2. Vehicles

- All vehicles entering the site must be in good working order.
- All vehicles must switch off engines when not in use, no idling of engines as this causes localised air pollution.
- Vehicles should be cleaned as appropriate, in a designated area, before leaving a site if there is a risk of dust and/or mud contaminating off-site locations.
- Loads with the potential to create dust must be adequately covered when moving around and leaving the site.
- All vehicles must adhere to the speed limits set out on site.
- All plant equipment shall use low sulphur diesel to reduce SO₂, NO_x, PM_{2.5}, PM₁₀ emissions to air.

3.3.3. Excavation and Earthworks

- All dusty activities must be damped down, especially during dry weather.
- Drop heights should be minimised to control the fall of materials into dumper, lorries, and the formation of stockpiles onsite.

3.3.4. Stockpiles

Stockpiled materials management should be undertaken in accordance with Crest Nicholson Environmental Specification **ES 011 Stockpiles** and the **Crest Nicholson Temporary Works Package (page 18)**.

3.3.5. Cutting, Grinding and Sawing

- All cutting and grinding equipment to be used on masonry, brickwork, or concrete must have built-in water suppression, as per H&S requirements.
- All timber cutting mechanical saws must be fitted to M-Class dust extraction technologies.

3.3.6. Chutes and Skips

- The **Site Manager** ensures that: CN Waste Management Specification is adhered to, to reduce air pollution from chutes and skips. No bombing of waste from the scaffold is allowed onsite. All skips should be fenced off where use is in conjunction with waste chutes. Consider the use of screening to prevent dust migration.

3.3.7. Waste Disposal/Burning

- No burning of any material is permitted on site, burning of material onsite may contaminate the ground and will create air pollution via combustion of waste.
- The CN Waste Management Policy should be followed.

4. Register of Related SHE Documents

- ES011 Stockpiles.
- ES012 Combustion Engines- Fixed.
- ES013 Combustion Engines- Portable.
- ES015 Dust Management.
- ES 021 Specification for Waste Storage & Recycling.
- ES027 Specification for Pollution Prevention.
- ES029 Road sweeping.
- CN Waste Management Specification.

5. Legislation

- Clean Air Act 2022.
- Part IV Environment Act 2021.
- Part IV Control of Pollution Act 1974.
- **USEFUL GUIDANCE DOCUMENTS:**
- Clean Air Strategy 2019.
- [Clean Air Strategy 2019 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/clean-air-strategy-2019)
- Mayor of London: Control of Dust and Emissions from Construction & Demolition Sites.
- [London Plan Annual Monitoring Report 9](#)
- IAQM- Guidance on assessment of dust from construction and demolition v2.1 Aug 2023.
- [Construction-dust-2023-BG-v6-amendments.pdf \(iaqm.co.uk\)](#)
- Land-Use Planning & Development Control: Planning for Air Quality Jan 2017.
- [air-quality-planning-guidance.pdf \(iaqm.co.uk\)](#)
- Non-Road Mobile Machinery (NRMM) Practical Guide v.5 April 2022.
- [Non-Road mobile Machinery \(NRMM\) Practical Guide v.5 \(london.gov.uk\)](#)



CREST NICHOLSON PLC ENVIRONMENTAL POLICY STATEMENT

ESP001

APRIL 2024

REV001



Crest Nicholson Plc (The Group) is dedicated to high standards of Environmental Compliance across its Business Operations and protecting the Environment.

The Group is committed to:

- Ensuring compliance with current UK Environmental Laws, Acts and Regulations.
- Promoting Good Environmental Governance and Stewardship across all its Business Operations.
- Minimising Environmental Nuisance such as noise, vibration, air pollution and dust emissions from construction activities where reasonably practicable.
- Reducing water consumption onsite as far as reasonably practicable.
- Preventing pollution to water courses, ponds, rivers, and groundwater.
- Preventing pollution occurring onsite and offsite during construction activities.
- Designing & managing pollution mitigation measures for onsite operations to prevent environmental incidents.
- Providing information and training to its workforce and where applicable its contractors to prevent Environmental incidents occurring.
- Reducing energy consumption and considering the use of alternative forms of energy to fuel site operations e.g. solar, wind generation, hydrogen, and air source heat pumps.
- Committing to Procure 100% renewable electricity for the Group by 2025.
- Using low emission plant and biofuels onsite.
- Making better use of resources onsite to prevent & reduce waste.
- Monitoring waste streams and outputs via environmental monitoring & waste reporting.
- Encouraging the supply chain to minimise packaging waste, ensuring packaging has at least 30% recycled content, minimising the use of single use plastics via superior design practices.
- Ensuring compliance with Extended Producer Responsibility (ESR) with regards to waste streams.
- Consider the use of Materials Management Plans (MMP) and U1 exemptions with regards to the Sustainable re-use of soils onsite to divert waste from landfill.
- Using Sustainable Urban Drainage Systems (SuDS) onsite to mitigate Surface Water Flooding and Climate Change risks.
- Committing to achieving net zero emissions across our value chain by 2045.
- Managing risks to Biodiversity and Ecology.
- Ensuring existing habitats and the natural environment are not damaged by construction activities, and enhancement of new developments to help improve biodiversity.
- Ensuring compliance with the Green Claim Code of Practice.

The Policy has been adopted by the Group Board of Directors and outlines the Companies commitment to protecting the Built and Natural Environment.

Signed for and on behalf of the Group Board of Directors Crest Nicholson Plc

.....
Peter Truscott, Chief Executive
April 2024

Appendix C; Site Wide CEMP

Arborfield Garrison SDL

Proposed Major Residential Led Development

Construction Environmental Management Plan

Reference – AGLC/HPA/DOC/7

October 2014



Contents

1. Introduction	4
1.1 Project Description	4
1.2 Document Purpose	4
1.3 Document Status	4
2. Relevant Legislation	4
2.1 Relevant Legislation and Policy Framework	4
3. Environmental Objectives	5
3.1 Environmental Objectives	5
4. Responsibilities and Organisation	5
4.1 Roles and Responsibilities	5
5. Training and Competence	7
5.1 Inductions	7
5.2 Training	7
5.3 Tool Box Talks	7
5.4 Spill Response	8
5.5 Training Records	8
5.6 Sub Contractor Competency	9
6. Communication and Monitoring	9
6.1 Communication	9
6.2 Monitoring, Inspections and Audits	9
6.3 Incident Reporting	9
7. Project Environmental Control Measures	9
7.1 General Site Operations	9
7.2 Working Hours	9
7.3 Construction Site Layout and Good Housekeeping	10
7.4 Register of Environmental Aspects and Impacts	11
7.5 Considerate Contractor	11
7.6 Visual Effects	11
7.7 Noise and Vibration	12
7.8 Air Quality	12
7.9 Traffic and Transport	13
7.10 Ground Conditions and Land Quality	14
7.11 Water Quality	14
7.12 Biodiversity	15
7.13 Archaeology and Heritage	16

Arborfield Garrison Strategic Development Location	Construction Environmental Management Plan	3
7.14 Waste Management Plan (WMP)		16
Appendix 1		18



- Control of Pollution (Oil Storage) (England) Regulations 2001;
- Control of Substances Hazardous to Health Regulations 2002;
- Landfill Regulations 2002.; and
- Waste (England and Wales) Regulations 2011.

3. Environmental Objectives

3.1 Environmental Objectives

At this stage the Principal Contractor has not yet been appointed but, once instructed, the environmental objectives for the project can be set. These objectives will be reviewed and updated to reflect the project requirements and the different phases of the development.

As a minimum the following objectives will be upheld for the Site:

- seek all opportunities to include sustainable and environmental principles throughout all phases of the development;
- prevent pollution;
- reduce waste;
- reduce materials consumption;
- implement energy efficiency measures; and
- training for all employees to raise and promote environmental awareness on site.

4. Responsibilities and Organisation

4.1 Roles and Responsibilities

Project Manager will:

- Appoint the Environmental Manager/ responsible person;
- Provide information such as scope of works and predictions of waste quantities to the Environmental Manager prior to start of work and where any changes occur;
- Appoint Waste Representative, a person to undertake weekly Site Inspections, persons to supervise refuelling of tanks and bowzers, and person to check drip trays and bunds;
- Ensure the required consents are in place before work starts;
- Ensure oil, including diesel, is stored in properly bunded tanks/ drip trays;
- Report incidents and non-conformances to the Client;
- Liaise with statutory authorities, the Client and sub contractors as required, and ensure records of communication (including verbal communication) are kept.
- Ensure employees and subcontractors implement the controls outlined in the final CEMP;
- Ensure employees and subcontractors receive Induction Training (including project environmental issues) and Tool Box Talks, as appropriate;
- Ensure personnel needed for audits are available when required;
- Verify actions resulting from Corrective Action Requests and Observations are completed by the deadlines; and
- Ensure environmental training is provided.

Environmental Manager will:

- Report any major environmental incidents;
- Log and monitor environmental incidents and non-conformances;
- Disseminate information, such as legislation changes to relevant staff;
- Provide and maintain training for all staff;
- Offer advice on environmental issues;
- Ensure any environmental consents are identified and obtained;
- Notify the Environment Agency if any Hazardous Waste will be produced;
- Ensure the CEMP is produced, continually reviewed and updated, and that it is within compliance;
- Undertake environmental Site Inspections to ensure all controls are in place and are working;
- Ensure all environmental records are kept ready and available;
- Agree process for reporting to senior management on the project; and
- Liaise with Quality Managers and Safety Managers.

Foreman will:

- Control and manage environmental impacts of the crew and activities;
- Report any environmental incidents to Environmental Manager;
- Ensure proper waste segregation and handling;
- Ensure correct storage of all materials;
- Maintain fuel and oil bunds and storage;
- Ensure spill kit requirements are met; and
- Ensure Control of Substances Hazardous to Health (COSHH) data sheets are kept with materials.

Environmental/Emergency crew will:

- Be available to respond to any environmental issues;
- Work in accordance with the Emergency Response Procedure;
- Provide an acceptable level of out-of-hours assistance in the case of environmental incidents;
- Provide all site support for environmental issues; and
- Provide approved refuelling duties if required.

Waste Representative will:

- Arrange for the collection of waste through the Environmental Manager/ Project Manager;
- Keep an up-to-date record of waste movements;
- Confirm with the Environmental Manager that Carrier Licenses/ Disposal Site Licenses are valid and keep records for site files;
- Manage and maintain all Waste Transfer Notes/ Hazard Waste Consignment Notes;
- Register with the Environment Agency as a 'Hazardous Waste Producing Premises' if required; and
- Ensure that waste storage/ segregation, and recycling activities are correctly implemented.

Waste Drivers will:

- Inform the Waste Representative of what waste is being removed and where it is being taken prior to any movement of waste;
- Issue Waste Transfer Note/ Hazardous Waste Consignment Notes to Waste Representative when

collecting waste or confirm 'Season Ticket' is already in place;

- Only take waste to a licensed Waste Management Site as instructed by either the Waste Representative or the Environmental Manager; and
- Ensure Waste Management Site has signed all Waste Transfer Note/ Hazardous Waste Consignment Notes.

Bowser Drivers will:

- Perform regular checks on vehicles and equipment for signs of vandalism or wear;
- Ensure adequate spill kits are carried at all times;
- Not refuel in areas which have been designated as Source Protection Zones SPZ1 by the Environmental Agency or No Refuelling Zones by the Client or Principal Contractor; and
- Ensure safe refuelling at all times.

All Staff and Sub-contractors will:

- In the case of an incident, stop work, implement control procedures and reporting to the Project Manager or Environmental Manager;
- Contact the Waste Representative when waste needs collecting;
- Pass any queries or correspondence on environmental issues to the site manager;
- Comply with directions and requirements given in the Induction and Tool Box Talks; and
- Work in strict accordance with the finalised CEMP and associated management plans.

5. Training and Competence

5.1 Inductions

All project personnel including subcontractors shall undertake a mandatory site induction which shall include a general overview of environmental matters and how these will be managed. Indicative induction topics include:

- Potential archaeological finds;
- Waste management and segregation;
- Spill response;
- Refuelling;
- Plant, equipment requirements;
- Biodiversity;
- Invasive plant species; and
- Tree and hedgerow protection.

5.2 Training

A project specific environmental training matrix will be developed, as part of the overall project training matrix, which clearly identifies any environmental training requirements. The Environmental Advisor will ensure that training programmes are undertaken in accordance with the matrix and any additional project requirements.

5.3 Tool Box Talks

Regular Environmental Tool Box Talks (TBT) will be carried out on site by relevant project personnel. Indicative TBT topics include:

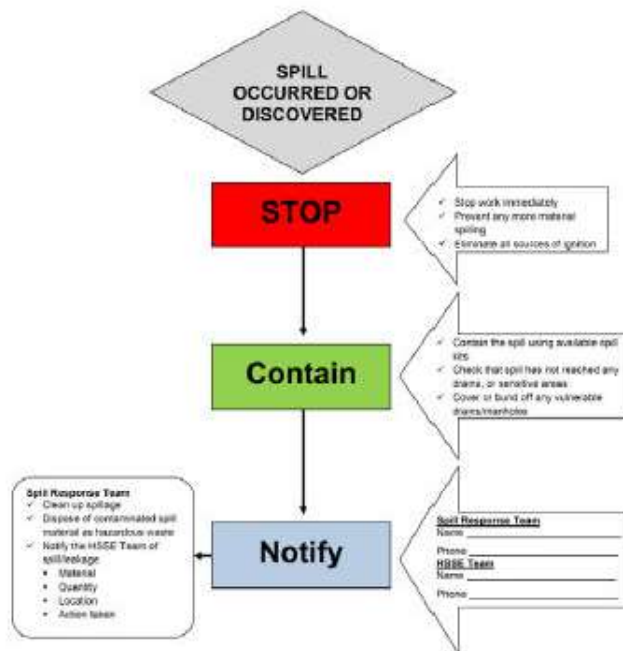
- Waste Segregation and Management;
- Dust Suppression;

- Handling of Materials;
- Refuelling;
- Spill Prevention/Response;
- Emergency Response;
- Housekeeping;
- Flora and Fauna;
- Nesting Birds;
- Lighting;
- Biodiversity; and
- Pollution Prevention.

5.4 Spill Response

The project will carry out basic spill response training (Stop-Contain-Notify) for all personnel during the Induction.

A spill response Emergency Crew will be established, who will be responsible for clearing up spills and reporting any environmental incident accordingly.



5.5 Training Records

Records of all training carried out on the project (including Induction and TBT) will be retained and made available for viewing during environmental audits if required.

5.6 Sub Contractor Competency

All sub contractors employed by the project will be on the Approved Vendors List of the appointed Principal Contractor. As part of the approval process the competency of subcontractors will be evaluated and all training requirements addressed. If required, specific evidence of personnel competency will be retained by the project.

6. Communication and Monitoring

6.1 Communication

Environmental Alerts will be distributed by the Principal Contractor, as required, to key staff to keep them informed of environmental issues such as learning events from incidents/accidents or new legislation.

All project personnel will be encouraged to make suggestions for environmental improvements and report environmental observations.

The project environmental issues arising from site environmental reports, corrective action notices or audits will be discussed at site meetings and actions apportioned accordingly.

6.2 Monitoring, Inspections and Audits

The Principal Contractor will undertake environmental Site Inspections. Any actions resulting from the inspection will be recorded and closed-out in a timely manner.

The Principal Contractor will also undertake regular environmental compliance audits. Indicative topics of these audits include:

- Ensuring that the CEMP is adhered to and that relevant documentation is being completed;
- Ensuring that progress towards environmental objectives and targets is monitored; and
- Ensuring that legislation and / or other requirements are complied with. The Audit Report will make recommendations for improvement and identify the appropriate personnel and timescales for completing the actions.

6.3 Incident Reporting

All environmental incidents will be reported and recorded by the appointed Principal Contractor and a full investigation will be completed where appropriate. Corrective action will be taken. Records will be kept for all environmental occurrences including:

- Potential Hazards;
- Near Misses;
- Incidents; and
- Complaints.

7. Project Environmental Control Measures

7.1 General Site Operations

The works will be carried out in such a way as to limit, as far as reasonably practicable, any adverse environmental impact of the construction activities.

7.2 Working Hours

No construction work shall be carried out on the site outside the following core hours unless subject to prior agreement of, and/or reasonable notice to, WBC. Night-time working will be restricted to exceptional circumstances, and to work internally within buildings:

**Permissible site working Hours are: Mon – Fri 08.00 – 16.00Hrs Saturday 08.00- 13.00
(Sunday and bank holidays will be No working).**

Activities involving access for plant to the worksite, loading and unloading and maintenance of plant and equipment will be undertaken during core hours.

If necessary, consents will be sought from Wokingham Borough Council under Section 81 of the Control of Pollution Act 1974, which gives prior consent for the proposed construction works. The applications for consent will include details of the work to be undertaken, including the proposed hours of work.

In the case of work required in response to an emergency such as health and safety or damage to property that dictates work outside the core hours, the Environmental Health Officer of Wokingham Borough Council will be advised as soon as possible of the reasons for and the potential duration of the emergency works.

7.3 Construction Site Layout and Good Housekeeping

In planning the construction site layout, contractor's offices and equipment will be sited to minimise pollution and other forms of disturbance to surrounding neighbours, site offices located so as not to cause any environmental harm and the Principal Contractor will ensure that an efficient and achievable housekeeping policy is operated at all times and that, as far as reasonably practicable the following is achieved::

- existing hedges, trees and topography will be utilised to screen the site. Temporary earth mounding or other temporary screening may be considered within the site boundary;
- perimeter and on-site hoardings and signage will be regularly inspected, repaired and re-painted as necessary;
- ensure that the appropriate provisions for dust control and road cleanliness are implemented;
- all working areas will be kept in a clean and tidy condition;
- undertake all loading and unloading of vehicles off the public highway;
- wheel washing facilities, where required, will be regularly brushed or sprayed clean in a designated area;
- adequate toilet facilities will be provided for all site staff;
- rubbish will be removed at frequent intervals and the site kept clean and tidy;
- food waste will be removed frequently;
- any waste susceptible or liable to spreading by wind or liable to cause litter will be stored in enclosed containers;
- open fires will be prohibited at all times;
- appropriate measures will be taken to minimise the risk of fire and the contractor will comply with the requirements of local Fire and Rescue Service;
- storage sites, fixed plant and machinery, equipment and temporary buildings will be located to limit adverse environmental effects;
- all external lighting and illumination associated with the construction process will be in accordance with the guidance issued by:
 - 'Guidance Note for the Reduction of Light Pollution', The Institution of Lighting Engineers
 - 'Guide on the Limitations of the Effects of Obtrusive Light from Outdoor Lighting Installations', CIE (International Commission on Illumination)
- ensure that construction lighting does not affect the amenity of residents or create a statutory nuisance under the Environmental Protection Act 1990, as amended, external lighting will be designed and installed to:
 - provide minimum light levels necessary and appropriate for safe working;
 - avoid disturbance to adjoining residents and occupiers;

AECOM

- avoid creating dazzle or distractions for drivers using adjacent highways;
- minimise light spillage or pollution;
- ensure that excess light does not fall on sensitive ecological habitats;
- energy efficient options for site facilities will be incorporated where possible, i.e. energy efficient light bulbs, automatic controls, etc;
- adequate security will be provided by the Principal Contractor to protect the public and prevent unauthorised entry to the site. Site gates will be closed and locked when there is no site activity and site security measures will be implemented;
- any security cameras will be located and directed away from occupied residential property; and
- except for 2-way radios for works communication, radios and other forms of equipment with loud speakers will not be allowed on site.

The visual intrusion of the construction site on nearby residents and users of local facilities and amenities will be contained and limited, as far as practicable.

The Principal Contractor will ensure that all working areas are sufficiently and adequately fenced from members of the general public and to prevent animals from straying on to the working area. The appropriate standard of enclosure and screening will be selected to maintain effective site security and achieve appropriate noise attenuation and visual effect.

The Contractor will not display or allow to be displayed any advertisement or notice (other than for development marketing, delivery or signage purposes), etc including illicit bill or fly posting on the hoardings. The Contractor will ensure that all graffiti, bill posting or defacement to the hoardings is removed and made good.

7.4 Register of Environmental Aspects and Impacts

AGLC in collaboration with the Principal Contractor will seek to limit adverse environmental impacts through the identification of project specific aspects, impacts and mitigation measures for all site works. The significance of each aspect identified will be assessed by determining the severity and likelihood of each impact.

The initial impacts and risk register is detailed in Appendix 1.

7.5 Considerate Contractor

The appointed construction contractor will be registered with the Considerate Contractor Scheme. The site will therefore be subject to regular inspection by a third party. The scheme monitors site appearance, impact on the community effect on the environment, safety and workforce support.

7.6 Visual Effects

Construction will be carried out, as far as is reasonably practicable, to minimise disturbance to visual receptors. The following environmental control measures will be adopted as appropriate:

- Selective and sensitive location of the contractors' compound(s), security fencing and temporary storage of materials and plant;
- Stipulate compound locations, hours of working etc prior to construction works commencing;
- The protection of key landscape resources such as existing retained vegetation. The contractor will be required to work in accordance with BS 5837:2012 - Trees in Relation to Design, Demolition and Construction;
- Use designated routes around site for construction vehicles;
- Regular removal of construction related waste from the immediate environment;
- Aesthetic consideration will be given to site hoardings;
- Appropriate methodology for the demolition of large scale buildings/infrastructure to minimise the visual intrusion of works associated with the upper levels of existing buildings and the use of cranes;
- Sensitive and appropriate lighting e.g. direction and height of lighting towers;

- All boundary fences will be maintained in a neat and tidy condition; and
- Secure storage will be provided for materials at risk from displacement by wind.

7.7 Noise and Vibration

The Principal Contractor will, as far as is reasonably practicable, seek to control and limit noise and vibration levels so that sensitive receptors are protected from excessive noise and vibration levels associated with construction works.

Mitigation measures will include, but are not limited to:

- Local temporary noise barriers, where required;
- All plant and equipment associated with construction works will be properly maintained, provided with effective silencers and operate in such a manner to avoid causing excessive noise emissions;
- Unless otherwise directed items or plant in intermittent use will be shut down during idle periods;
- Normal working hours are 07:00-19:00 Monday to Friday and Saturday 07:00-13:00 hours. All work outside these hours will be subject to prior agreement of, and/or reasonable notice to, WBC. Night-time working will be restricted to exceptional circumstances, and to work internally within building;
- Audible warning systems, such as vehicle reversing sirens, will normally be set to as low a setting as is compliant with safety requirements;
- Occupiers of nearby properties will be informed in advance of particularly noisy works taking place, including the duration and the likely noise and vibration effects. In the case of work required in response to an emergency, the local authorities and local occupiers will be advised as soon as is reasonably practicable;
- Noise monitoring will be undertaken before and during construction in order to check levels against any agreed limits; and
- Contractors will be required to adhere to the codes of practice for construction working and piling set out in BS 5228 where appropriate.

Whilst construction noise and vibration will be managed through the implementation of the CEMP, until the Principal Contractor is appointed and the actual (rather than assumed) method of working is specified, detailed recommendations to reduce the predicted construction noise to the closest residential and other noise sensitive buildings cannot be undertaken, and the matter can be reserved for management and control as necessary via the statutory Section 61 Control of Pollution Act 1974 procedure.

7.8 Air Quality

The Principal Contractor will, as far as reasonably practicable, seek to control and limit emissions to the atmosphere in terms of gaseous and particulate pollutants from vehicles and plant used on the construction site, and dust from construction activities. The Principal Contractor will identify potential sources and apply appropriate control techniques.

Mitigation measures will include, but are not limited to:

- The Principal Contractor will ensure that all plant is correctly adjusted and checked as being in good working condition before being allowed onto the site and is adequately maintained;
- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. Display the head or regional office contact information. Develop and implement a stakeholder communications plan that includes community engagement before work commences on site;
- Undertake on-site and off-site inspections where receptors are nearby and log findings to make available to Local Authority when asked. Increase the frequency of site inspections on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions;
- 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. Make the complaints log available to the

- Establish site speed limits.

The TMP will be regularly reviewed and updated to take into account the changing pattern of existing traffic and the construction traffic throughout the different phases of the development.

7.10 Ground Conditions and Land Quality

Mitigation measure will be implemented to ensure good practice and emphasise environmental protection. This will include, but is not limited to:

- Mitigation of soils – adherence to Construction Environmental Management Plan (CEMP) and Material Management Plan (MMP) and manage soils in accordance with DEFRA guidance. Disposal route for waste soil to be assessed following Environment Agency Guidance WM2 and WAC testing;
- Suitable control measures put in place in accordance with environmental legislation, pollution prevention and control regulations and through good design guidance including NPS EN-1 and EN-2;
- An asbestos "Refurbishment / Demolition Survey" (formerly Type 3) survey will be required prior to any demolition of the buildings at the site, to allow an assessment of the condition and location of asbestos containing materials (ACMs) across the site;
- Emergency procedures/plans will be set in place for all spills and incidents; and
- Final gas protection measures to be verified and designed after full categorisation of site based on final design layout with reference to CIRIA C865 and BS8485:2007 guidance.

7.11 Water Quality

The Principal Contractor will implement working methods to protect surface water and groundwater resources from pollution and other adverse impacts including changes to water levels, flows and quality. Mitigation measures will include, but not limited to:

- A buffer of 10m will be erected along all watercourses in the site, other than where there are direct works to remove or install new structures;
- Site compounds and stockpiles will be located at least 30m away from watercourses where practicable, and if closer then protection measures to be agreed with WBC;
- A drainage system will be developed to prevent silt-laden runoff from entering surface water drains without treatment (e.g. earth bunds, silt fences, straw bales, or proprietary treatment) and ponds under any circumstances;
- Earth stockpiles will be seeded as soon as possible, covered with geotextile mats or surrounding by a bund;
- Mud on vehicles will be controlled at entry and exits to the site using wheel washes and / or road sweepers, where necessary;
- Tools and plant to be washed out and cleaned in designated areas within the site compound where runoff can be isolated for treatment before discharge under appropriate consent;
- Debris and other material will be prevented from entering surface water receptors;
- Where appropriate site runoff containing silts will be spread across fields (to soakaway);
- Construction SuDS (such as settlement lagoons or other temporary attenuation) to be used during construction if necessary;
- Fuel will be stored and used in accordance with the Control of Substances Hazardous to Health Regulations 2002, and the Control of Pollution (Oil Storage) (England) Regulations 2001;
- Fuel and other potentially polluting chemicals will be stored in a secure impermeable and bunded area (minimum capacity 110%);
- Refuelling of plant will take place off site if possible, or only in a designated area at the site compound at least 20m from watercourses;
- Any plant / machinery / vehicles will be regularly inspected and maintained to ensure they are in good working order and clean for use in a sensitive environment. This maintenance is to take place off site if

possible or only at designated areas in the site compound;

- All fixed plant used on site will be self bunded as a preference;
- Mobile plant will be in good working order, kept clean and fitted with drip trays where appropriate;
- An Emergency Response Plan will be prepared. Spill kits and oil absorbent material will be carried by mobile plant and located at vulnerable locations on the site. Construction workers will receive spill response training;
- The site will be secure to prevent vandalism that could lead to a pollution incident;
- Surface water drains on roads, other watercourse crossings or the core scheme compound area will be identified and where there is a risk that silt laden runoff could enter them they will be protected (e.g. covers or sand bags); and
- Concrete washwater will be adequately contained and removed from site.

7.12 Biodiversity

Construction works will be carried out in such a way as to ensure that disturbance to any nearby ecologically sensitive areas is controlled and that appropriate measures are adopted to avoid impacts on protected species in accordance with relevant good practice and statutory provisions or legislative requirements.

Although there are no statutory designated sites within the site boundary or directly adjacent there is a Special Protection Area (SPA) and a Site of Special Scientific Interest (SSSI) nearby.

The Environmental Manager will be responsible for the safe retention of the sensitive ecological areas. The success of protective measures will be reviewed every two months to ensure all areas are adequately protected. An Ecological Clerk of Works (ECoW) will be present throughout the construction phases where works have the potential to impact upon sensitive receptors.

Various environmental measures will be implemented which will include, but are not limited to:

- All staff will receive Tool Box Talks on the various ecological sensitivities of the proposed development as part of their site inductions. Sensitive receptors, their characteristics and mitigation requirements will be outlined;
- Working corridors will be demarcated to prevent damage to habitats and value such as semi-improved neutral grassland;
- Where biodiverse habitat is to be lost the soil will be stored separating top soil and sub soil for later in habitat creation and for the creation of further bunds it is important that the soil is removed by excavator and then transferred via loose tipping to ensure that the soil structure is not damaged. The works will be undertaken to the Construction Code of Practice for the Sustainable Use of Soils (2009);
- Excavated topsoil will be stored and replaced to conserve soil biodiversity;
- Soil storage mounds will be securely covered to prevent run-off into the watercourses or the spread of airborne particulates;
- The bunds will be no more than 1m high (to prevent compaction and loss of structure within the soil and with breaks every 10m to allow for water to run off the site);
- The replaced topsoil will be grassed over;
- Ensure that work compounds and access tracks, etc. are not located in, or adjacent to, areas that maintain habitat value;
- Establish site fencing to prevent access to areas outside of construction working areas, particularly in areas adjacent to features of interest/value;
- Implement site safety issues, including storage of potentially dangerous materials;
- Where lighting is required for health and safety reasons it will be directional and low level;
- In the event of clearance of vegetation within or adjacent to the development plots being necessary during the bird breeding season, a suitably qualified ecologist will examine the area immediately prior to starting works to confirm likely absence of breeding birds. If nesting birds are found within the

Private: Information that contains a small amount of sensitive data which is essential to communicate with an individual but doesn't require to be sent via secure methods.

The Principal Contractor will undertake material resource management to minimise waste creation. All waste will be managed according to the Waste Hierarchy:

The Waste Hierarchy

Preferred Environmental Option



Least preferred Environmental Option

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Indicative Environmental Aspects and Impacts Register

Note: This register will be completed by the Principal Contractor once appointed.

Evaluation of Impacts:

- A. Likelihood of Occurrence (5=very likely 1=very unlikely)
- B. Ease of Detection (5= very difficult 1=very easy)
- C. Ease of Resolution (5= very difficult 1=very easy)
- D. Severity of Consequence (10=very severe 2=very minor)

Impacts scoring over 60 are significant

Activity	Aspect	Impact	Evaluation of Impacts				Significance (A+B+C+D)	Control Measures
			A	B	C	D		
Construction and Plant Machinery Operation	Noise Emission	Nuisance to local community. Disturbance to flora/fauna	3	1	3	5	35	Considerate working hours between 07:00-19:00 Monday to Friday and 07:00-13:00 Saturday. Consultation prior to noisy activities Effective silencers on plant and equipment Construction plant located, as far as is reasonably practicable, away from adjacent buildings.
	Dust Emission	Nuisance to local community. Air pollution Disturbance to flora/fauna	3	1	3	5	35	Site speed limits of 15mph on surfaced roads and 10 mph on surfaces roads and work area. Sheeting on vehicles Damping down during dry periods.



Activity	Aspect	Impact	Evaluation of Impacts				Significance (A+B+C+D)	Control Measures
			A	B	C	D		
	Vibration	Nuisance to local community Damage to buildings/equipment Disturbance to fauna and flora	2	1	3	5	30	Considerate working hours between 07:00-19:00 Monday to Friday and 07:00-13:00 Saturday. Contractors will be required to adhere to the codes of practice for construction working and piling set out in BS 5228 where appropriate.
	Gas emissions	Air pollution	3	3	3	5	45	Regular vehicle maintenance. Shut down equipment/plant during idle periods.
Transport of materials to and around site	Noise Emissions	Nuisance to local community Disturbance to fauna and flora	3	1	3	5	35	Designated haul routes. Considerate working hours between 07:00-19:00 Monday to Friday and 07:00-13:00 Saturday. Working corridors and ensure that access tracks are not located in, or adjacent to, areas that maintain habitat value.
	Gas emission	Air pollution	4	2	3	5	45	Regular vehicle maintenance. Stationary vehicles will be shut down.
Vehicle Maintenance	Accidental spills	Water pollution	1	2	3	7	42	Spill Kits and emergency response



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Activity	Aspect	Impact	Evaluation of Impacts				Significance (A+B+C+D)	Control Measures
			A	B	C	D		
and refueling	and leaks	Harm to flora and fauna Land contamination						Fuels stored and used in accordance with the Control of Substance Hazardous to Health Regulations 2002 and the Control of Pollution (Oil Storage) (England) Regulations 2001 Fuel and other potentially polluting chemicals will be stored in a secure impermeable and bunded area
Storage of harmful chemicals	Accidental spills and leaks	Water pollution Harm to flora and fauna Land contamination	1	2	3	7	42	Spill Kits and emergency response crew Fuel and other potentially polluting chemicals will be stored in a secure impermeable and bunded area
Production of hazardous waste	Improper disposal	Water pollution Land contamination Air pollution	1	2	2	8	40	All employees to follow Waste Management Plan which sets out guidelines to follow when dealing with hazardous wastes
Construction Dewatering	Discharge of silty water	Water pollution	2	2	3	7	42	A drainage system to prevent silt-laden runoff A buffer of 10m around all watercourses Runoff containing silts will be spread across fields where appropriate

Activity	Aspect	Impact	Evaluation of Impacts				Significance (A+B+C+D)	Control Measures
			A	B	C	D		
Works near protected Species	Uncontrolled activities	Disturbance to fauna and flora	2	4	2	8	64	Working corridors to prevent habitat damage Tool Box Talks on sensitive species Noise reduction, screening, lighting spec
	Noise Emissions		2	2	2	6	36	Noise reduction and screening Sensitive selection of location of site facilities
	Accidental spills/leaks		1	2	3	8	48	Spill Kits and emergency response
Works near trees/hedges	Accidental Cutting/removal of trees or hedges that have been designated to remain	Disturbance to fauna and flora	1	1	3	5	25	Robust protective fencing to encompass root protection areas All works in the vicinity of trees or hedgerows to be retained will be undertaken to BS5837:2012 guidelines
Works archaeologically important areas	Ground excavation and accidents	Damage to archaeologically significant remains	2	1	3	6	36	A phased archaeological investigation to fully identify the nature, extent and significance of archaeological remains within the Site. Staff briefed on importance of archaeological

Activity	Aspect	Impact	Evaluation of Impacts				Significance (A+B+C+D)	Control Measures
			A	B	C	D		
								discoveries.
Works near built heritage	Accidents	Architectural damage	2	1	3	4	20	Buildings which will require alterations/renovations will undergo a programme of building recording appropriate to their significance.
	Vibration	Architectural damage	1	1	2	4	16	Buildings which will require alterations/renovations will undergo a programme of building recording appropriate to their significance.
Soil Handling	Accidents	Damage to soil structure/ water pollution	2	2	2	4	24	Management of soils in accordance with DEFRA guidance. Disposal route for waste soil to be assessed following Environment Agency Guidance WMQ and WAC testing. Soil should be removed by excavator and then transferred via loose tipping to ensure that the soil structure is not damaged. The works will be undertaken to the Construction Code of Practice for the Sustainable Use of Soils (2009)
All Activities	Visual	Nuisance to local communities	3	1	3	6	42	Selective and sensitive location of site facilities

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Activity	Aspect	Impact	Evaluation of Impacts				Significance (A+B+C+D)	Control Measures
			A	B	C	D		
								Designated routes for construction vehicles on site Aesthetic consideration to hoardings Sensitive and appropriate lighting

AECOM

Appendix H – Water Pollution Management Plan

Crest Nicholson Plc Environmental Management System

Issue Date: 07 October 2009

Revision: 003



Control of Water (Ground & Surface) Pollution on Site

Controlled waters have legal protection and include rivers, streams, ditches, ponds, locks, groundwater and coastal waters up to three miles offshore. Pollution is any poisonous, noxious or polluting matter or any solid waste matter (which includes silt, cement, concrete, oil, petroleum spirit, chemicals, solvents, sewage or other polluting matter).

It is vital to manage water properly on site to protect the environment and water supplies. If controlled waters are polluted, or unacceptable wastes are disposed of to the sewer system, you, your company, your sub-contractors and your client could end up in court. Additionally, you may be liable for damages to industries utilising water downstream.

The polluter is responsible for paying any fine through strict liability, court costs, and also for the cost of clean-up, which is often greater than the fine. Directors can be held personally responsible and can be fined and imprisoned for up to six months or an unlimited period of indictment.

The site does not need to be next to a river to cause a problem. Any pollutants getting into a surface water drain or groundwater can end up in a river even if it is miles away. These pollutants can be tracked back to their source.

Know your site

- Understand the existing water quality and water levels around the site from the site geology survey
- Mark water courses or ponds/lakes on the site plan
- Carry out a risk assessment to determine the type and level of water protection required on the particular site
- Identify all water bodies, gain appropriate consents and put measures in place to fulfil the requirements of your consent

Abstracting water

- Ensure the site has a licence to abstract water from a controlled water source
- Ensure the site complies with the abstraction licence

Site Drainage

- Ensure that the correct connections are being made with either: foul sewers, surface water drains or combined systems
- Protect/cover all drains
- Mark the position of surface water drains and foul sewers on site
- Temporary Office and Welfare facilities to be connected into Main Foul Drain, or be in self-contained units.
- Care should be taken in installing drainage to avoid cross contamination.

Crest Nicholson Plc Environmental Management System

Issue Date: 07 October 2009

Revision: 003



Discharging water

- Check that appropriate consents for disposal of all water is in place, and that personnel are aware of the quantity and quality of water that can be discharged
- Check for any visible sign or smell of pollution in watercourses at or near the site
- Water needs to be treated effectively before disposal
- If a settlement tank is being used, check it is working

How and what to monitor

- Establish a regular monitoring procedure for water discharged from the site and keep records as required by your consents (e.g. flow rate)
- Check outfalls and pipework regularly (at least weekly) to ensure they are clean and clear of litter, etc.

Protect sensitive receptors

- Carry out regular inspections of all discharge points and associated pipework, drainage systems, collection ditches, lagoons, oil separator (and drip-trays) and watercourses to check that these are in good order.
- Avoid disturbing any underground services or structures.
- Where possible, select haul routes away from sensitive receptors such as storm water drains or water courses. Haul roads must be constructed to sufficient depth to prevent the likelihood of damage to any SW & FW below.
- **Materials storage, avoiding spillages**
- Fuels and chemicals must be securely stored away from drains and watercourses, and where appropriate, bunds and drip trays provided. Site diesel must always be bunded appropriately.
- Store solvents, chemicals or paints in accordance with their COSHH datasheets. For preference, there will be no storage of these materials on-site.
- Drip trays must be used around mobile plant
- Fuel deliveries and refuelling must be supervised at all times
- Refuelling areas must be isolated from surface water drains
- All waste should be stored and removed from site in accordance with the Site Waste Management Plan.

Herbicide Use

- To be used by an authorised Contractor only.

Emergency Procedures, Dealing with spillages

- Regularly inspect the site area for spillages
- Ensure spillage kits are available at Site office. Appropriate spill kits should be available (e.g. oil only, chemical or general use) and adequately stocked.
- Follow the Crest Nicholson Environmental Incident Response Procedure: Stop, Contain, Notify
- Clean spillages using agreed wet handling methods
- Follow the Crest Nicholson notification procedure.

Crest Nicholson Plc Environmental Management System

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Managing run-off and silty water

- When undertaking earthworks ensure a filter strip been left to protect surface water
- Regularly check watercourses (if applicable)
- Look for any visible signs of discolouration in watercourses (if applicable) at or near the site
- Silty or discoloured water should not be discharged from the site
- Surface water runoff should not be directly entering a watercourse or drain
- Monitor any water treatment methods to ensure their effectiveness
- If a settlement tank is used, see if water is moving too fast and/or overflowing (other than at the discharge point)
- If straw bales are used, ensure they are securely fixed

Working over or near to water

- Avoid storing fuel in vessels near water
- Check to see if any site works are occurring within 10 m of the edge of watercourses
- Check that the banks or bed of the watercourse outside the area of works is not being affected by discharges or vehicle movements, etc
- Spray, dust or other airborne materials should not enter a watercourse
- Approachways to the watercourse should be kept free from the build up of mud
- If using a cofferdam to retain water, it needs to be in good condition and working effectively
- Check the watercourse to see if it is silty or discoloured downstream of the works or if there is an oily sheen visible on the water
- Ensure spill kits are adequately stocked
- Personnel are to be aware of the location of spill kits and know how to use these properly
- Mitigation measures to be put in place in the event of an emergency (eg booms across river)

Settlement tank/lagoon

Operation

- Ensure there is a consent to pump clean water from the surface of settlement lagoons into rivers or designated discharge point
- Periodically clean the entry chamber to prevent a build-up of silt
- Periodically monitor the outflow quality