

LOVELL

PROJECT MANAGEMENT PLAN (PMP)

Incorporating the Construction Phase Health, Safety and Environmental Plan

Project:

Tetlow Street, Everton, L4 4LF

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Key Commitments:

We are experienced at working in built up residential locations, often closely boarding occupied residential properties and schools. Our Site Managers always strive to keep disruption to local residents to an absolute minimum and achieve this by implementing the following:

- We will engage with local community members in a variety of ways, as below, to ensure that they do not feel threatened or anxious about the development works and disruption to them is kept to a minimum.
- Drop-in Event: Local residents and stakeholders will be invited to a drop-in event, which will be held from mid-afternoon and into the evening to ensure as many people can attend as possible, where our site plans and traffic management plan will be displayed for discussion. The site team will attend, giving residents the opportunity to meet the team, in the aim that our Site Manager and other key team members become familiar and approachable faces to local people.
- Tenant and Resident's Group: We will work with Liverpool Mutual Homes local Housing Officers to engage key community members and any existing local resident's group. Our Site Manager will meet this group on a monthly basis.
- Newsletters: Quarterly newsletters will be issued to local residents providing progress updates and key information. For specific activities that will cause additional disruption (noise and vibration) the Site Manager will personally visit the affected residents.
- Social Media: We will provide updates to LMH for inclusion on their website, Facebook page and/or Twitter account.
- Resident Involvement: We will seek ways to involve local people in the development process.
- School Visits: Our Health and Safety team will visit local schools to inform local children of the potential dangers of the building site and to pass on important safety messages.
- Notice boards: A notice board will be set up on the hoarding to provide weekly updates, frequently asked questions and contact details.
- Managing Complaints: Our engagement activities will ensure strong communication channels, allowing us to proactively identify and resolve concerns as they arise so that they do not escalate into a complaint. Where not resolved immediately, our teams follow our clearly defined 3C's (Comment, Compliment or Complaint) process, including timescales as agreed with LMH
- We will develop a traffic management plan (TMP) to ensure the effective management of deliveries and construction traffic in order to ensure the safety of the general public. This TMP will take into consideration local residents, businesses, schools and such like. The TMP will indicate:
- Permitted routes for construction traffic and deliveries
- Lay down areas for deliveries (within the safety of the site)
- Parking will be permitted in designated parking spaces only and under no circumstance will operative cars be permitted to park on the roads or in designated resident parking

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spaces. Parking is indicated on the TMP but this will be minimal parking for visitors and short stays only. Staff will be asked to make arrangements off site for parking with staff and operatives delivered to the site in groups. This will reduce traffic to and from the site.

- If necessary alternative parking arrangements will be agreed for some residents who currently park on the road. They will be sent a letter and contacted directly by the Site Manager to agree alternative arrangements.
- All suppliers will be sent the TMP and detailed instructions for drivers so they are aware of the arrangements prior to arriving at the sites. All deliveries will be pre-arranged.
- Site working hours will be restricted to 8am until 5pm Monday to Friday. Weekend working will only occur when prior agreement has been made with the Local Authority, client and residents.
- Due to the residential area, deliveries will not be permitted before 9.30pm or after 3.00pm to avoid the times when pupils are most likely to be arriving and leaving school and passing the site by car or on foot.
- We will provide a banksman who will escort vehicles into and from the site.
- The surrounding estate roads will be swept as required and delivery vehicles restricted to clean haul roads.
- Although forklifts will be used to distribute materials around the site they will not be permitted on the roads.
- A speed limit of 5 mph will be adopted on, and 20mph around, the site.
- Deliveries will be made in small loads to accommodate the small estate roads and in consideration of local residents and their safety.
- All project stakeholders will be informed in writing in advance of any works outside the site boundary, including temporary works to the highways and drainage.
- Noise will be kept to an absolute minimum. As part of their site induction operatives will be given the following instructions relating to the minimisation of noise:
 - Never carry out work outside site working hours. (0800 to 1800)
 - Keep machine covers closed when operating.
 - Do not keep machinery running unnecessarily.
 - If you feel an item of plant or a vehicle is more noisy than usual, report it immediately to the Site Manager.
 - Use noise screens for noisy machinery as indicated within the Method Statement.
 - When particularly noisy work must be undertaken residents will be informed in writing prior to the work commencing.
- Dust will be kept to a minimum by:
 - Dust extractors for machinery will be used and water also used to damp down.
 - Vehicles carrying dusty materials will be sheeted.
 - Damping down of haul roads will be carried out.
 - Skips will be kept covered.

The Site Manager will monitor the level of dust and will suspend any work that is deemed excessively dusty until the necessary dust minimisation measures are put in place.

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1. Revision history

ISSUE	DATE	DESCRIPTION OF CHANGE	SIGNED
Rev: 1	3 Dec 15	Initial Plan	Keith Shotton
Rev: 2			
Rev: 3			
Rev: 4			
Rev: 5			
Rev: 6			
Rev: 7			
Rev: 8			
Rev: 9			
Rev: 10			
Rev: 11			
Rev: 12			
Rev:			

2. Sign Off

Originator	Signed: Keith Shotton	Date: 3 Dec 2015
Operations Manager	Signed: Nick Brown	Date:
Health, Safety & Environmental Dept.	Signed:	Date:
Site Manager	Signed: TBC	Date:
Regional Director (When Lovell are the client)	Signed: Nigel Yates	Date:

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3. Description of the project

This project management plan must record the arrangements for managing the significant health, safety and environment risks associated with the construction phase of the project. It is the basis for communicating these arrangements to all those involved in the construction phase, so it should be easy to understand and as simple as possible.

• Project description:

The project comprises of the construction of 4 nr three-bedroom, five-person and 12 nr two-bed four-person houses arranged across an adopted access road complete with services.



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O Traffic Management



All materials will be stored on site in limited quantities. Parking will be off site in designated areas with car sharing encouraged. Maximum numbers on site expected - 35 operatives.

O Key Risks

The following risks have been identified and measures taken to mitigate/remove:

Electrical substation on Tetlow Street - all cables will be identified and diverted if required. A full GPRS survey will be undertaken prior to any intrusive works.

Limited access for materials - all deliveries to be via rigid vehicles banked on to site. Unloading will be via a forklift within the confines of the site.

Contamination of surrounding roads - a maintained haul route to be provided and the main access road to be installed as initial works. Delivery vehicles to be restricted to the haul routes and local wheel washing to take place if required.

Protection of the public - the site will be fully hoarded and either security or vocal CCTV provided to ensure integrity.

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O Details of key members of the project team:

NAME AND ADDRESS	KEY CONTACT NAME	PHONE No & FAX No	EMAIL ADDRESS
CLIENT Liverpool Mutual homes The Observatory 1 Old Haymarket Liverpool L1 6RA	Kate Ellison	0151 235 2549	kate.ellison@liverpoolmh.co.uk
PRINCIPAL DESIGNER & EMPLOYERS AGENT Brian Young & Associates Alina House 10 St. Vincent Street Liverpool L3 5XW	lan Courtney	0151 708 6121 (tel) 0151 708 9141 (fax)	ian@bya.ltd.uk
ARCHITECTURAL DESIGNER: Brian Young & Associates Alina House 10 St. Vincent Street Liverpool L3 5XW	Keith	0151 708 6121 (tel) 0151 708 9141 (fax)	keith@bya.ltd.uk
PRINCIPAL CONTRACTOR: Lovell Partnerships Ltd St, Johns House Barrington Road ALTERINCHAM WA14 1JY.	Nick Brown	0161 905 1727 (tel) 0161 905 1645 (fax)	nick.brown@lovell.co.uk
TEMPORARY WORKS CHECKING ENGINEER (IF REQUIRED) Wentworth House Partnership St Andrews House Portsmouth Road Esher Surrey KT10 9TA	Ray Cooper Stuart Vaughan	Tel 07986 949534	ray@wentworth- house.co.ukstuart.vaughan@went worth-house.co.uk stuart@wentworth-house.co.uk
EMPLOYERS AGENT Brian Young & Associates Alina House 10 St. Vincent Street Liverpool L3 5XW	lan Courtney	0151 708 6121 (tel) 0151 708 9141 (fax)	ian@bya.ltd.uk
STRUCTURAL ENGINEER: Alan Johnston Partnership Engineers : 4th Floor 1 Dale Street Liverpool L2 2ET Tel: 0151 227 1462 Fax:	Jonathan Smith	0151 227 1462	jsmith@ajpstructeng.com

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• Lovell management team:

Position	Name	Location	Phone No.
Regional Director	Nigel Yates	Lovell regional office	0161 905 1727
Operations Manager	Nick Brown	Lovell regional office	0161 905 1727
Commercial Manager	Steve Walker	Lovell regional office	0161 905 1727
Health, Safety & Environment Manager	ТВС	Lovell regional office and roving	0161 905 1727
Health, Safety & Environment Advisor	Anthony Baldwin Derek Kay	Lovell regional office and roving	0161 905 1727
Quantity Surveyor	ТВС	Lovell regional office	0161 905 1727
Buyer	Adrian Simon	Tamworth office	01827 305600
Estimator	Simon Meadows	N/A	
Resident Liaison Officer	N/A	N/A	
Contracts Manager	Paul Aspey	Lovell regional office	0161 905 1727
Project Manager	N/A	Site	
Site Manager	ТВС	Site	
Assistant Site Manager/Site Supervisor	ТВС	Site	
Site Fire/Emergency Marshal(s)	ТВС	Site	
Site First Aider(s)	ТВС	Site	
Temporary Works Co- ordinator (TWC)	Paul Aspey	Site	
Temporary Works Supervisor (TWS)	Site Manager	Site	

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O Designated responsibilities

Description	Duty holder	Frequency
Project Management Plan (PMP)	CM.	Initial compilation, reviewed regularly and updated as required during project development
Traffic management plan	CM.	Prior to commencement - updated during project development
Emergency plans	SM.	Prior to commencement - updated during project development
Incident reporting	SM.	As required
Site Induction	SM.	Prior to individuals commencement on site - content updated to suit project development
Statutory inspections and registers	SM.	Weekly/following adaptation/following event likely to affect strength and stability/following fall of material (Lovell operated plant only and all working platforms)
Welfare provision	SM.	Daily visual inspection
Permits to Work (All types)	SM.	As required
Monitoring & tool box talks.	SM.	Monitoring daily. Weekly recorded HSE inspection. Toolbox talks as necessary
Communication and consultation	SM.	Communication daily. Minuted meetings with workforce representatives as required.
Quality issues	SM.	Various stages of construction as works proceed
Fire Safety	SM.	Prior to commencement - daily monitoring during project development, fire risk assessment updates
First Aid	SM.	As required
Temporary Works	TWC. TWS.	TWC to maintain Temp Works register as required. TWS to issue permits to load/strike when appropriate and check adequacy of materials prior to erection
Environmental considerations	SM.	Prior to commencement - daily monitoring during project development
Health & safety file	SM. CM.	Relevant information collected monthly. Forwarded to Principal Designer/CDM Co- ordinator as appropriate

Key: CM - Contracts Manager SM - Site Manager TWC - Temp Works Co-ordinator TWS - Temp Works PM. Project Manager Supervisor

SS - Site Supervisor

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O Key dates

Start date:25th Jan 2016End date:12th December 2016

4. Management of the work

• Health and safety aims for the project:

The aims are to complete the project on time and to achieve zero accidents and incidents, ill health or occupational disease throughout the duration of the project through careful planning and where possible, elimination of known hazards.

Client Requirements.

The Health & Safety goals for the project are:

- 1. No major accidents, incidents or near misses during the project.
- 2. Structures that can be safely maintained.

O Arrangements to ensure cooperation between project team members and coordination of their work.

Regular communication is required from all parties on any health and safety matter which may affect this plan. Every contractor is to encourage their staff to bring health & safety matters, particularly unsafe acts or conditions observed or encountered, to our site management's attention immediately. If remedial action is required, and it is within the authority of the contractor, then it must be dealt with by them and the actions taken reviewed with site management. If the action required is outside the authority of the contractor or affects other contractors etc., then it must be brought to the attention of the site management immediately.

Health and safety will be tabled for discussions as an agenda item within all formal meetings between Lovell, Client, project team or other contractor.

The meeting agenda is to include the consideration of health and safety implications as a result of design changes/proposals or situations arising on site and whether these are relevant for notification to the Principal Designer or Designer(s). Any apparent shortfall in the liaison between Designer(s) and Principal Designer will be notified via this meeting to the Client or his representative.

Health and safety will be discussed at regular meetings between the site management team and a representative from each contractor working on the site. Matters affecting health and safety shall be discussed and minutes taken. Each contractor's representative at the meeting shall thereafter be responsible for ensuring persons under their control who may be affected are advised of such matters. These meetings will be used to discuss and record any design changes that have been implemented since the last meeting. Design changes, once received from any designer, will be brought to the attention of the relevant contractor by the contracts

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manager, with drawing registers updated accordingly and forwarded with drawings. It is then their responsibility to update their workforce on site. Our site management will ensure that all current revisions of drawings are being worked to on site.

Lovell will co-ordinate meetings with other contractors, including other Principal Contractors, where any matters affecting the health and safety objectives of the project will be discussed.

We will evaluate the impact of any design changes issued during the project and discuss implications, delays, or any rescheduling necessary which affects health, safety and environmental matters if we are unable to undertake the work using safe systems of work originally envisaged.

O Arrangements for involving workers

A procedure will be established to facilitate consultation on site with all contractors' employees with regard to matters that affect their health and safety.

Examples of consultation include, but are not limited to;

Project Level - Induction procedure, Site/Project meetings

Gang Level - Tool box talks, method statement briefings, minuted contractors meetings

Individual Level - Open door policy, directly with employees/contractors

The following methods are used to inform and encourage consultation by Lovell;

- O Direct approach to management (open door policy)
- Lovell Health & Safety Policy
- O Lovell Integrated Management System (LIMS) which includes:
 - Systems approach to work activities
 - Corrective and preventative action
 - Management review by senior staff
 - Best practice policies
 - Training and personal development
 - Induction processes
 - Pre commencement meetings with service providers
 - Risk assessments and method statements and CDM regulation compliance
 - Safety representatives and recognition of SRSCR
 - Toolbox talks
 - Project management plans
- O Site and office notice boards, circulation of H, S & E policies and procedures
- Notification of relevant changes to legislation or working practices to those concerned
- Minuted contractor health and safety meetings held on site with the relevant contractors representatives (where applicable)
- Signed copies of all Policy statements by Lovell's Managing Director
- Warning signage, poster campaigns
- Health, safety and environmental targets and initiatives

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NB - translation will be sought where non-English speaking operatives are engaged using the National Interpreting Service's Language Identification cards which are displayed on site, Tel: 0800 028 0073, ID No. 169017. The use of pictograms may be used to assist in understanding where appropriate.

• Site induction:

All new staff and visitors, if not escorted, will receive a site specific induction upon arrival to the site. Induction is not intended to provide general health and safety training, but will include a site specific explanation of the project.

All personnel receiving an induction are obliged to sign our Induction register (HSE 014) as proof of receipt. The induction will be administered by a competent member of our site team.

Induction content should include;

- 1. The outline of the project;
- 2. The individual's immediate line manager and any other key personnel;
- 3. Any site specific health and safety risks and site rules, for example in relation to access, transport, site contamination, hazardous substances and manual handling;
- 4. Control measures on the site, including any site rules, any permit-to-work systems, traffic routes and security arrangements,
- 5. Hearing protection zones where applicable,
- 6. Arrangements for personal protective equipment, including what is needed, where to find it and how to use it,
- 7. Arrangements for housekeeping and materials storage,
- 8. Facilities available, including welfare facilities,
- 9. Emergency procedures, including fire precautions, the action to take in the event of a fire, escape routes, assembly points, responsible people and the safe use of any fire-fighting equipment;
- 10. Arrangements for first aid and for reporting accidents and other incidents;
- 11. Details of any planned training, such as 'toolbox' talks;
- 12. Arrangements for consulting and involving workers in health and safety, including the identity and role of any appointed trade union safety representatives, representatives of employee safety, safety committees;
- 13. Information about the individual's responsibilities for health and safety.
- 14. Environmental controls in place or necessary for the project

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O Welfare and storage arrangements:

Welfare and storage arrangements for this project will consist of the following;

Item	Arrangement/Size
Initial Welfare (Oasis)	Advante 1750
Site office/ Meeting room	32 Foot
Canteen ² / Drying room ³	32 Foot
Toilet ¹	20 foot 3 urinal/3 toilet. Female washroom
Accommodation access paving	Concrete paving from Tetlow Street
Power ⁵	Mains via temporary supply
Water ₄	Mains via temporary supply
Compound/external lighting	Localised flood lighting to illuminate the site and access
Site parking	Off site
Smoking area	Within compound
Storage containers	2
Mortar mixing areas	Silo
Material compounds (bricks, drainage, rings, soakaway crates etc.)	As per TMP (rear of plots 13 to 16)
Haul roads	New road formed from 6f2
Roof trusses and other large	Truss rack
components i.e. SIP panels	
Timber	container
Plant & Equipment	As per TMP
Scaffold components	Non stored on site
End of Project Welfare (Oasis)	Advante 1750

NB. If units are to be double stacked, linked fire detection must be provided in both units and access doors arranged at opposite sides.

All accommodation and storage units are to be decorated in Lovell corporate colours.

¹Hot (or warm) and cold running water will be provided and basins will be large enough to immerse forearm into. ²To include suitable and sufficient seating (with backs), a means of boiling water, cups, microwave oven and fridge, a sink with hot or warm running water (for washing up) and a means of drying, adequate comfort and heating and drinking water.

³ To include lockable storage for clothing and PPE

If generators are used for power, full consideration to the free escape of exhaust fumes is to be given. 4 To reduce the risk of frozen water supply pipes during low temperatures in winter months, supply pipes are to be buried into the ground to a minimum depth of 600mm. Any pipework above ground, including entry points into units, must be properly insulated by boxing in and filling with suitable insulating materials such as Rockwool or similar.

⁵ When demobilising welfare accommodation with power supplies, only competent electricians are to de-energise, disconnect and remove the cabling. A certificate is to be obtained from the electrical contractor carrying out these works. Where possible, all cabling, buried or otherwise is to be fully removed and retained for future use on other projects.

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O Delivering Safely Information

To provide site management, contractors, suppliers and carriers/hauliers with the appropriate information they need to ensure that any plant or materials delivered to/collected from site are done so in a safe manner with due consideration given to both loading and unloading operations.

Site Address:	TION PROVIDED BY LOVELL Tetlow Street, Liverpool. L4 4LF
Date:	21 August 2015
Site Contact details:	Tel: TBC
site contact details.	Site Manager Mobile: TBC
Site Delivery Points and Times:	9.30am - 3.00pm
Timing restrictions on when goods	Deliveries only outside of school collection periods
should be delivered or collected;	Derivenes only outside of school contection periods
Low/Narrow Bridges:	n/a
Routes with Weight Restrictions:	n/a
Speed Restrictions:	20mph outside site. 5 mph on site
Traffic Calming Measures:	n/a
One Way Systems:	Tetlow Street is one way only with access off Langham
	Street
Overhead obstacles (power lines):	BT overhead line off site
Narrow Access Roads:	yes
Major Road Works:	unknown
Lifting equipment available on site	As per contractors rams and contract lifts to suit site
including lifting capacity:	operations
Restrictions on the type or size of	Rigid vehicles only less than 20T.
vehicle the site can safely handle:	
Where visiting vehicles should park	We are in consultation with St Francis de sales club to
on arrival:	obtain parking areas for operative vehicles. Parking
Generally, parking and subsequent loading/unloading should be off the road and pavement and well away from members of the public. If articulated vehicles are coupled/uncoupled, drivers should have been instructed on how to park each vehicle type they use. Trailer parking and cab hand brakes should always be used.	will be prohibited from Heather and Mauris Close.
Procedures the visiting driver needs	All drivers must report for site induction and
to follow: Wearing of high-visibility vest, hard hat, safety footwear, limits on use of mobile phones, prohibitions on reversing or conditions for reversing such as the use of a banksman etc.	instructions

A site plan or sketch showing parking, location of reception, route to take through the site, designated turning/reversing areas, rest facilities, location of loading/unloading area etc; should be provided if it will assist in clarification.

The delivery driver is not to use a forklift unless this is agreed in advance and measures are taken to ensure that the driver is suitably trained, competent and experienced, the forklift is well maintained and suitable for the task and site conditions. The driver must be able to provide adequate training certification and current maintenance records- this includes any HIABS used.

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O Fire and emergency procedures

Fire Safety Plan

For further guidance follow link to HSE Fire Guidance Documents

Prepared in accordance with the Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation - an insurance requirement for all projects with an original contract value of over £2.5m.

High fire risk sites include: High Rise - height of 30m above ground level (maximum reach of Fire and Rescue Service) Large Projects - contract value >£20m All timber frame structures Where risk assessment indicates significant potential for loss of life or property Insurers must be consulted prior to the commencement of high risks projects and also if work is suspended on site. Contact your Commercial Manager for current insurer's details.

A fire risk assessment (HSE 002FIRE) will be completed for each project by a competent person. The assessment will be reviewed to ensure that it remains relevant as the project develops.

Travel distances will be considered because of the effect of smoke and heat which spread quickly. It is very important not to overestimate how far people can travel before they are adversely affected by fire. Appropriate distances to reach safety, including on scaffolds, will depend on a variety of matters.

The following table details the maximum travel distances permitted before additional control measures will be required. Note: These distances must include the height of the scaffold staircases also.

	Č		
Property/build type	Fire hazard	Secondary means of escape provided	From a dead end
		escape provided	
Traditional build	Normal	45m	18m
Tradicional Build	normat	13111	TOTT
SIP = Structurally Insulated Panel i.e. K	ingspan TEK etc		

= Structurally Insulated Panel i.e. Kingspan TEK etc.

Staircases are to be used as the primary method of access. They are also the preferred method of secondary escape on scaffolds as they permit a more rapid escape for higher numbers than ladders however; ladder towers are permitted where necessary, but will be signed to indicate that they are for emergency use only.

The Fire and Rescue Service (FRS) must be contacted at the commencement of the construction phase to agree water supplies and to discuss any potential situation that may require specialist rescue arrangements although their maximum reach is 30m. They should also be invited to carry out regular familiarisation visits where appropriate to review access, water supplies, firefighting arrangements etc.

Suitable and sufficient steps shall be taken to prevent, so far as is reasonably practicable, the risk of injury to any person during the construction work. Suitable and sufficient arrangements shall be prepared for dealing with any foreseeable emergency and shall include necessary evacuation measures. A suitable number of emergency routes and exits shall be provided to enable any person to reach a place of safety quickly in the event of danger which will be suitably signed using photoluminescent signage where necessary to assist in providing low lighting levels during primary lighting failure. An emergency plan will be prepared for this site and will be made

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available before work starts. The plan will be kept up to date and be appropriate for the changing site conditions.

Locations of fire points, assembly points, spill kit and means of warning will be detailed on a site layout plan, once on site, which will be displayed on the site office notice board.

The requirements of the site emergency plan will be made known to all persons as part of their site induction training.

The emergency contacts notice, emergency plan and fire action notices for this project shown on the following pages will also be displayed on the site notice board and other pertinent locations throughout the site. Controls for dealing with spillages to land or water and flow charts for environmental incident control are detailed within LIMS.

The appointed site fire/emergency marshal is identified within the management team section of this plan.

The duties of the fire/emergency marshal are as follows:

- Check the fire precaution rules are observed and that the general fire precautions remain adequate, available and in good order including escape routes and fire alarms regularly checked, fire drills carried out in accordance with this PMP etc.
- Where appropriate, liaison with the occupiers of any shared premises.
- O To ensure the alarm has been raised
- O Contact the relevant emergency services
- O Turn off mobile plant and equipment and shut any emergency valves if safe to do so
- O Extinguish the fire if safe to do so with the appropriate equipment provided
- O Implement the use of the spill kit
- Ensure all persons have evacuated the premises/site
- Take roll call from the Site attendance registers
- Meet and liaise with emergency services, providing information to them on access issues, missing persons and any special hazards - a copy of the site layout plan detailing flammable substances storage and location is to be kept with the site attendance registers to inform the emergency services.
- O Confirm safe return to premises/site

Where more than one marshal is appointed, they will maintain sufficient communication to ensure a cohesive approach.

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EMERGENCY CONTACTS Site: Tetlow Street, Liverpool. L4 4LF				ow Street, Liverpool. L4 4LF
Site Manager: TBC Site Te			Site Tele	phone No.: TBC
Service	Tel No.	Contact	Name	Address
Fire	999 0151 296 5375	51 296 5375 Kirkdale, Liverpool, Merseyside L20 8EQ		
Police	999/ 101 0151 709 6010			Walton Police Station Walton Lane, Liverpool L4 5XF
Ambulance	999			Knowsley Road Bootle Liverpool L20 5DQ
A & E Hospital C	0151 706 2000			Royal Liverpool Hospital. Prescot Street, Liverpool. L7 8XP
Lovell health & safety team	0161 905 1727			St Johns House. Barrington Road. Altrincham. WA 14 1JY
	ι	JTILITIES/C	ONTRACT	ORS
Electricity	0800 404 090			
Telecommunication	ns 0800 917 3993	}		
Water 0870 7510 101				
Gas 0800 111 999				
Check a Gas engineer 0800 408 5500 Gas) <u>Gas Safe Re</u>	egister	
Mobile Crane TBC				
Scaffolder	TBC			
Other				
	E	NFORCING	AUTHORIT	FIES
Health and Safety Executive (HSE)	HSE switchboard	- 0151 951 4	000	HSE regional offices
	Note: HSE no longer pro helpline service.			
	Emergency Hotl			Environment Agency regional offices
Environment	General enquirie (Mon-Fri, 8am - 6pm)	es - 03708 5	06 506	
Agency (EA)	Floodline - 0845		,	
	Hazardous waste 502 858 (Mon-Fri, 9a	am - 5pm)		ic and gas services in the area

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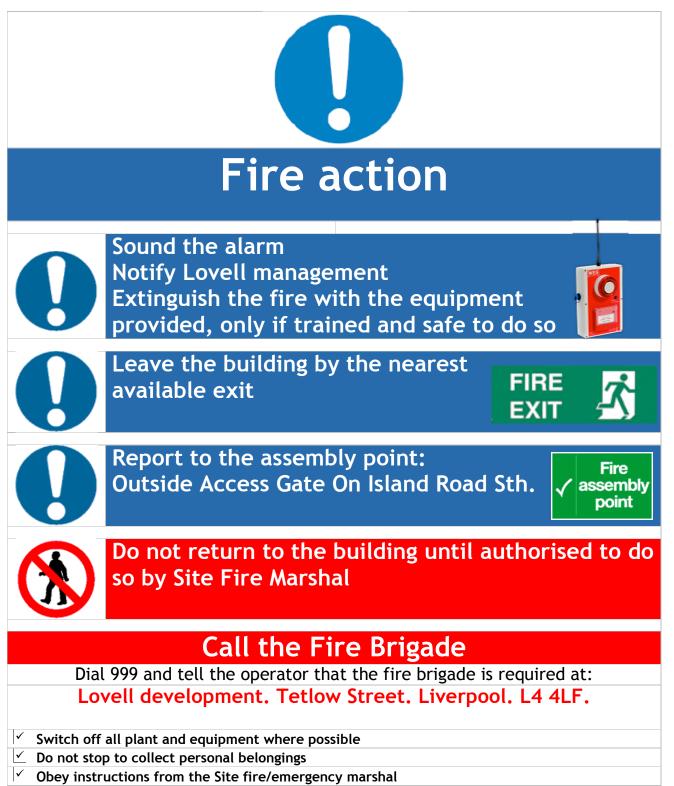


Emergency Safety Plan

Site address:	Tetlow Street. Liverpool L4 4LF		
Fire Marshal:	Site Manager		
Deputy:	ТВС		
Means of Raising Alarm:	Gas Air Horn		
Location of alarm(s):	Site office and remote fire point		
No. of assembly points:	1		
Location (s):	Main access gate, Tetlow Street		
Fire Fighting Point (s):	3		
Location (s):	Site office. Welfare facilities. Remote fire point		
Spill kit:	1		
Location (s):	Site Office		
Review Dates:			

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The following is to be included on the emergency plan site layout drawing;

- O Relevant site specific fire risk assessment findings
- Fire points and alarms
- Fire escape routes & exits (position of protected shaft and lifts)
- Fire engine access and turning
- Assembly point
- Hydrant or water source
- Special hazards (including temporary holes in floor slabs)
- O Temporary buildings
- Spill kits
- Fixed plant showing emergency valves/shut offs
- O Flammable stores inside buildings
- Flammable store outside buildings
- O Designated smoking areas
- Waste disposal areas

Consideration will also be given to the following:

- O Contract documents (Pre-construction information etc.)
- Existing ground e.g. methane build up or similar hazards.
- Existing buildings e.g. highly flammable structure or contents, especially insulation in confined spaces.
- Activities adjacent to the site e.g. proximity of petrol station, chemicals, public areas etc.
- Any high risk new or temporary materials e.g. adhesives, paints, large stores of LPG.
- Any high risk activity on site e.g. welding, burning, gas cutting and angle grinding
- Vandalism Risks/Arson
- Site location e.g. lack of hydrants or other water supply, restricted access to site or adjacent buildings.
- Temporary removal of fire or smoke stops and isolation/covering of fire detection systems alternative arrangements should be detailed below:

For environmental spill and incident control procedures, see Environmental section of this PMP.

The Fire Rescue Service must be notified if any of the following circumstances apply or will apply:

- Fire engine access is not possible to within 45m of all parts of the building for vehicles of 17 tonnes, 4m wide x 4m high with appropriate turning bays.
- Fire Engine access to other properties is restricted during the construction operations. Site access points are not immediately apparent

Escape route signage

All escape route signage is to be photoluminescent to enable visibility during a power failure to assist escape to a place of safety - the use of photoluminescent tapes should be used to indicate changes in floor level where appropriate. In addition, escape lighting is to be installed and maintained in underground or windowless buildings, stairs without natural, borrowed or spill lighting, internal corridors without borrowed light and on high risk projects where work continues outside daylight hours.

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Access/egress

When fitting ironmongery, ensure access is always available in case of emergency evacuation i.e. not leaving latches in situ without levers fitted etc.

Self-closing fire resistant doors must remain closed at all times once fitted- overhead closers must be fitted immediately following installation of the door where applicable.

Security Measures

Fireproof Buildings

Fireproof temporary buildings must have adequate emergency exit provision

Fire Detection and alarm system

Smoke detectors in all welfare accommodation - these will be radio linked where cabins are double stacked. These are to be regularly tested. Suitable fire detection systems are to be used on the site where appropriate.

If units are to be double stacked, access doors will be arranged at opposite sides.

The emergency alarm for this project will be Gas Air Horn

Smoking

Refer to site rules and welfare arrangements. When designated smoking areas are provided a suitable means of extinguishing smoking materials must be provided i.e. buckets of sand, which must be regularly maintained. The smoking area is to be located well away from buildings under construction and any flammable materials.

Space Beneath Buildings

The space beneath temporary buildings will be kept to a minimum, kept free of rubbish, weeds, etc., kept free of stored materials and where appropriate enclosed with wire mesh.

Heating and Cooking

Wall fixed heaters will be used - freestanding electric heaters are not permitted. Microwave ovens will be provided within the canteen facility. Adequate ventilation shall be provided.

Combustible materials including flammable materials, liquids and LPG

All combustible materials will be kept way from temporary accommodation units and buildings being constructed and all escape routes. Consideration will be given to use of less combustible or fire resisting materials. **Note:** Use of Acetylene is to be eliminated where possible on site by using alternative methods - when unable to avoid, the fire service must be informed of its presence and its storage methods and location - cylinder numbers must be kept to a minimum. Just in time deliveries of such materials should be considered together with arrangements for removal off site out of working hours.

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Storage arrangements are as follows: (empty and full containers are to be separated in secure cages).

Temporary Electrics

The site temporary installation is to be inspected every 3 months max. (Temporary electric supply to the units) Site office unit permanent wiring - 12 months max. (Consumer unit and hard wiring within the units)

Site office equipment fitted with plugs - each time a site is established or every 12 months whichever is soonest.

On site tools and equipment (Lovell and contractor owned) - PAT 3 months max.

Halogen lighting is not permitted on site; alternatives are to be used such as protected fluorescent lighting.

Hot Works

Hot works include all flame, heat and spark producing activities such as soldering, welding and cutting, grinding, applying weather coatings such as felt, asphalt etc. Alternative methods to hot work should be adopted where possible. When there is no alternative to hot work then, if possible, the hot work should be undertaken in a dedicated area away from the area of work or storage of materials.

All hot work must be subject to a hot work permit once fitting out work has commenced on site and in all buildings which are being refurbished. Before starting hot work, the area must be cleared of all loose combustible material and, if work is to take place on one side of a wall or partition or ceiling etc, the opposite side must be examined to ensure no combustible material will be ignited by conducted heat.

A suitable number of appropriate fire extinguishers must be at hand with a careful watch being maintained for fire breaking out whilst work is in progress.

Exposed wooden flooring and other items of combustible material which cannot be removed must be covered with non-combustible material i.e. Gyproc Fireline, Minerit board etc.

When welding, cutting or grinding, the work area must be suitably screened using non-combustible material.

Gas cylinders must be secured in a vertical position and fitted with a regulator and flashback arrester.

Tar boilers and similar equipment should be placed at ground level wherever possible. Only if a risk assessment shows that overall it is a greater hazard to have the boiler on the ground, may it be placed in another location convenient for the works.

The following precautions should be applied when using tar boilers;

a non-combustible heat insulating base must be provided; the equipment must be supervised by an experienced operative who can monitor the bitumen level and temperature and ensure the lid remains on the boiler; the boiler should be sited where spilled material can easily be controlled; gas cylinders must be at least 3 metres from the burner and secured in a vertical position and

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connected by flexible armoured hose; at least 2 appropriate fire extinguishers must be to hand; hazardous materials must be removed from the location as soon as work is completed (and before the hot work permit is signed off); a lit tar boiler must not be left unattended.

Any area specified in a hot work permit must be constantly monitored throughout the works and then periodically examined during the hour immediately following completion of the work (or any other period as identified by a risk assessment) before the permit is signed off.

Flammable Waste

The following waste is anticipated that may present a fire hazard:

Timber, cardboard, paper, plastics, polythene, polystyrene, general packaging, empty adhesive containers, some paints/tins. All skips sited in public areas to be lockable. Skips to be sited at least 3m from any structure and other buildings where possible.

Special skips/methods of disposal

Any hazardous materials of waste must be disposed of in skips or bins with close fitting metal lids

PLANT

Fire Extinguishers

Where practical, all mobile plant shall carry an appropriate fire extinguisher.

Hazardous Plant and Equipment

The following plant or equipment feature naked flame(s) or the like, or other evident fire hazard:

Blow Torch Floor Covering Jointer

Combustion Engine Plant

The following petrol engine plant will be used:

Generators Fuel Filled Plant Stihlsaws

Fuel Storage Fuel Storage will be as follows:

Diesel: In double skinned tank stored within a suitable bund **Petrol:** In suitable containers stored off site.

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Refuelling: Do not refuel when equipment is still hot - allow to cool. Pour carefully wearing suitable gloves. Use a plastic funnel so as not to generate sparks. No smoking or naked lights and only refuel in the open air. Wear suitable eye protection where splashes likely. Only refuel in appropriate designated areas.

Drip trays are to be used under fuel tanks when decanting.

• First Aid:

A proportionate, adequately stocked first aid box stocked will be provided on site.

The appointed first aiders for this project are identified in the management team listings and their details will be displayed on the site notice board.

Contractors are to ensure adequate and appropriate first aid provisions are made for their employees.

• Reporting and investigation of accidents and incidents including learning events (near misses):

All reportable incidents and other health, safety and environmental issues must be reported to the H, S & E team, relevant Contracts Manager, Operations Manager and Regional Director as soon as possible.

- All types of incident/learning events, other than a minor injury shall be investigated by the health, safety and environment team using the Incident report and investigation form (HSE 039). A view will be taken as to whether a full investigation is necessary minor incidents will be investigated by site management. Root cause to be established to allow control measures to be introduced to prevent recurrence. Refer to the flow charts on the following pages.
- Violent incidents are to be recorded using the Violent Incident Report (HSE 039a). Violent incidents can be categorised as, but not exclusive to, assault, verbal abuse, threats, sexual, disability, racial and homophobic abuse.
- In the event of an incident investigation where support is required, the region's investigation managers will pair up with the Scottish Region.
- Qualified first aiders shall deal immediately with any injured person(s) and inform the emergency services as appropriate.
- If possible, any injured person(s) shall be interviewed to ascertain their version of events.
- Details of any injured person(s) job(s) and normal duties and responsibilities shall be obtained.
- The injured person(s) supervisors or person in charge shall be interviewed and their comments recorded.
- All witnesses to the incident will be interviewed independently to prevent collusion, and are required to complete a signed statement in their own words.
- The scene of the incident shall remain untouched as much as practically possible in order to establish the cause of the incident.
- Timed and dated photographs shall be taken of the incident scene use video if available.
- A full sequence of events shall be established following inspection of the incident scene and evidence gained from witness statements.
- If there is any obvious damage to structures then a competent structural engineer's advice shall be sought immediately.

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- If there are signs of damage or defects to any plant or materials, then the relevant industry expert's advice shall be sought immediately.
- All relevant documentation relating to the incident or any injured person(s) tasks shall be made available and inspected for compliance (Risk assessments, method statements etc.)
- All sections of the accident book shall be completed.
- The relevant statutory report (F2508 or F2508(A/G) is to be completed and forwarded to the HSE for all relevant reportable incidents. Refer to table below for reporting responsibility;

Employers must;	Report any work-related deaths, and certain work-related injuries, cases of disease, and near misses involving their employees wherever they are working.
Those in control of premises must;	Report any work-related deaths, certain injuries to members of the public and self-employed people on their premises, and dangerous occurrences (some near miss incidents) that occur on their premises.

Project management will inform the Client of any RIDDOR notifiable incident.

Site specific method statements and risk assessments are to be reviewed following an incident to ensure that the control measures are adequate to prevent recurrence. The results of this review must be actioned at the earliest opportunity and reported to the regional health, safety and environment and regional management team.

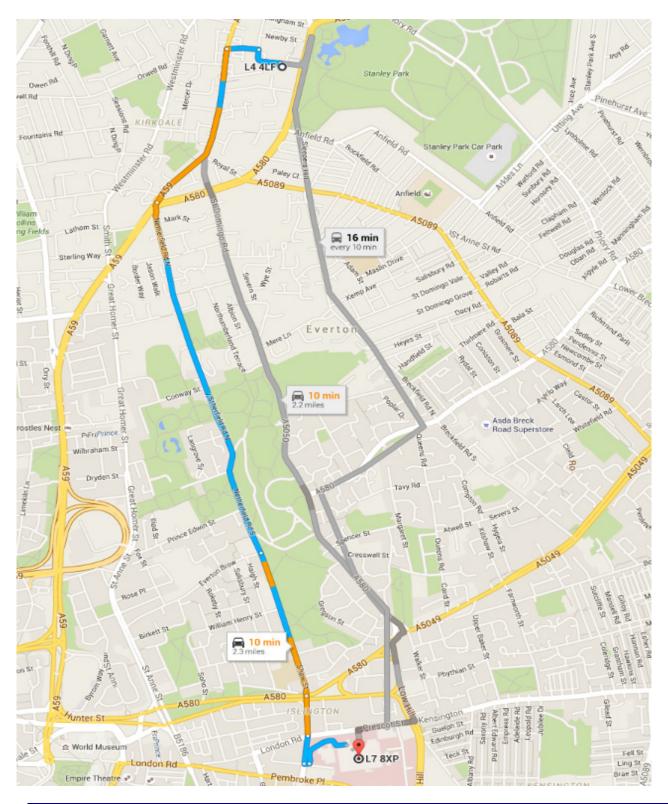
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NEAREST A & E HOSPITAL TO PROJECT

Royal Liverpool Hospital. Prescot St. Liverpool. L7 8XP

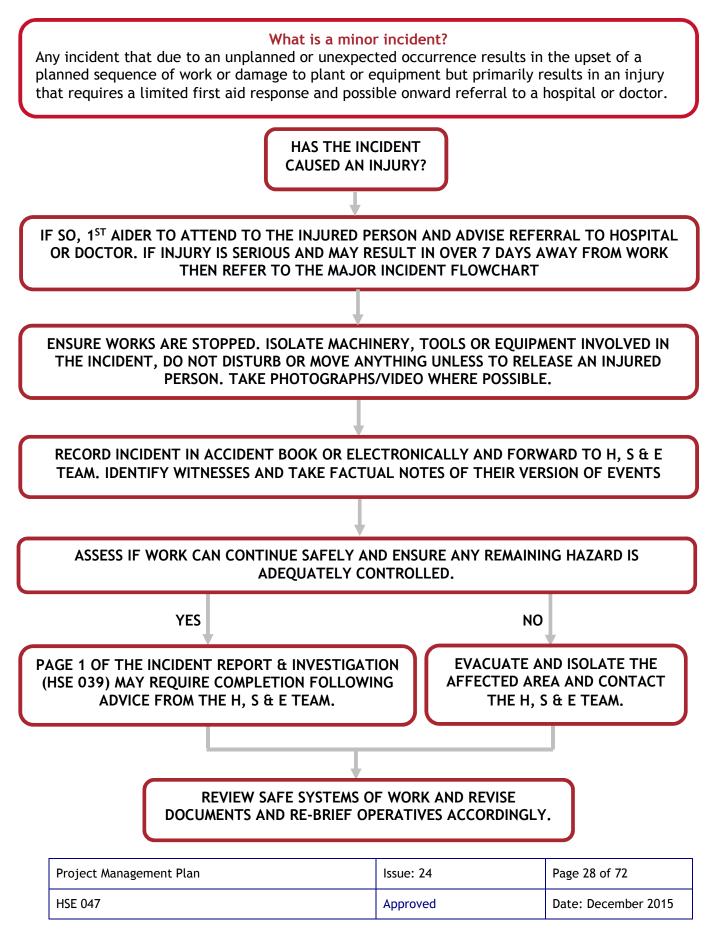
Tel: 0151 706 2000



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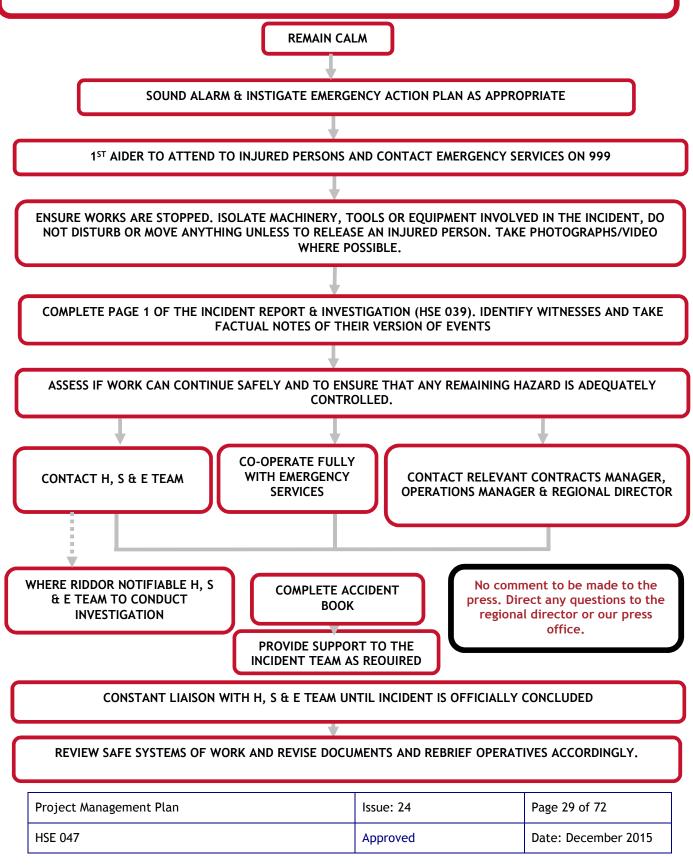
• Minor incidents





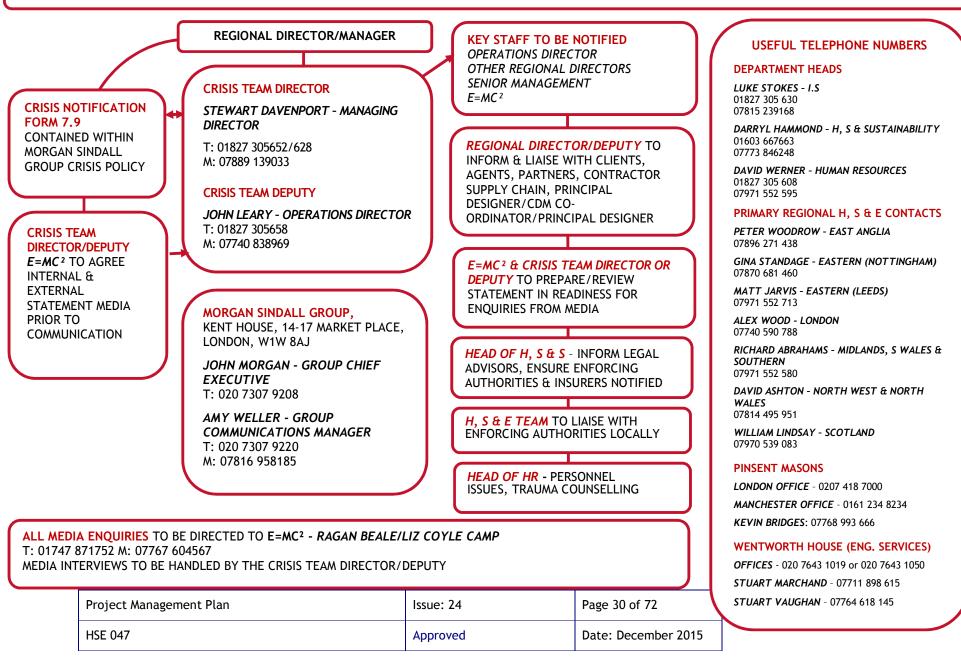
O Specified injuries and dangerous occurrences as defined by **<u>RIDDOR</u>**

The death of any person, specified injuries to workers, over-seven-day incapacitation of a worker, accidents to members of the public or others who are not at work must be reported if they result in an injury and the person is taken directly from the scene of the accident to hospital for treatment to that injury



LOVELL

CRISIS MANAGEMENT PROCESS MAP





5. Arrangements for controlling significant site risks

Safety risks including; (delete or expand each section as appropriate ensuring information detailed is relevant to the project) Refer to the Project Risk List for relevant risks identified for this project.

For further guidance, follow link to HSE Guidance Documents

Contractors' risks assessments and associated method statements will further detail required specific controls

		beautennennes miner jar enrer		
Housekeeping	fallen/blown over, provides adequate Only authorised people are allowed of Vehicles and pedestrians are to be kee Footpaths and traffic routes are to be Walkways, stairs and work areas are materials. Cables, particularly on landings and a Steps into plots and site cabins are to Work areas are to be kept as tidy as p All holes and excavations into which Adequate skips are to be positioned w	possible while the work's going on. people could fall are to have adequate barriers around, or covers over them. where they can be filled easily, and collected safely. eliveries should be planned to minimise the amount of materials on site.		
Excavations	Excavations should be properly suppor involve the use of shuttering and should Shoring/support designs are to be che Provide a safe means of access into t Provide edge protection, fencing or be excavated material falling into the ex- Keep plant and materials away from Avoid underground and overhead serva Make sure adjacent structures are no Check the excavation each day before or poor weather. Keep records so peop	ring or a trench box syste ecked in accordance with he excavation, such as a parriers to prevent anyone (cavation. the edge. vices - refer to relevant se t undermined - dig well a e work starts and after ar	n - don't assume ground will stand our temporary works procedure. ecured ladder. falling into the excavation - also t ection in this PMP. way from them. y event that may affect its stabilit	unsupported.
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Buried services Use Energynetworks (al-before/solved) obtain contact info on electric and gas in the area.Planning the work - Identify clearly the extent of the work area and find out what underground services are within the area before considering whether they are likely to be disturbed: Obtain service drawings from utilities companies and other organisations with relevant information about the site. Survey the site to identify the services and other underground structures. Record the location of any services. Review/assess the planned work to avoid disturbing services where possible. Allow sufficient time and provide sufficient resource to do the work safely. Emergency work still requires planning and assessment of the risks arising from the work. A precautionary approach must be taken when breaking ground. Use and limitation of plans - Plans alone are not sufficient to identify and locate services before starting work. They are not always drawn accurately to scale and should not be relied upon to obtain distances or depths. Errors may have been made during drafting, or reproduction may have changed the scale, accuracy may be further limited because: • the position of reference points (e.g. kerb line) may have changed since the plans were drawn; • re-grading of the surface may mean that the depths shown are now incorrect; • services marked as straight lines may, in practice, snake. Excessively long cables may have been laid in horizontal loops outside substations, switch rooms etc; • plans may show spare ducts; • the routes of older services in particular may not have been recorded, so the absence of records should never be taken as port that the area in question is free of underground services. Detecting, identifying and marking underground services - Locate the services identified at the planning stage survey as being in the work area.		A permit to excavate will be issued prior to work which requires suitable supervision and monitoring to ensure that the conditions are complied with. All manholes, inspection chambers, rodding eye pits etc., must have their correct covers fitted at all times when left unattended; if there is a need to remove a cover, suitable strength alternative measures, such as barriers must be put in place. If dewatering is necessary, necessary permission is to be sought from the Environment agency and a permit to discharge must be issued by Lovell site management.
	Use <u>Energynetworks</u> <u>dial-before-you-dig</u> to obtain contact info on electric and gas in the area. Buried services Refer to <u>Avoiding danger from</u> <u>underground services</u> (HSG47) for further	 area before considering whether they are likely to be disturbed: Obtain service drawings from utilities companies and other organisations with relevant information about the site. Survey the site to identify the services and other underground structures. Record the location of any services. Review/assess the planned work to avoid disturbing services where possible. Allow sufficient time and provide sufficient resource to do the work safely. Emergency work still requires planning and assessment of the risks arising from the work. A precautionary approach must be taken when breaking ground. Use and limitation of plans - Plans alone are not sufficient to identify and locate services before starting work. They are not always drawn accurately to scale and should not be relied upon to obtain distances or depths. Errors may have been made during drafting, or reproduction may have changed the scale, accuracy may be further limited because: the position of reference points (e.g. kerb line) may have changed since the plans were drawn; re-grading of the surface may mean that the depths shown are now incorrect; services, particularly cables, may have been moved without the knowledge of their owners/operators; in many cases service connections are not marked; services marked as straight lines may, in practice, snake. Excessively long cables may have been laid in horizontal loops outside substations, switch rooms etc; plans may show spare ducts; the routes of older services in particular may not have been recorded, so the absence of records should never be taken as proof that the area in question is free of underground services. Detecting, identifying and marking underground services - Locate the services identified at the planning stage survey

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 detecting devices as well as reading/interpreting plans. Once detected, identify and mark the services and confirm their status - i.e. whether electricity cables are live, gas pipe are pressurised - and then record their location. The position of any services in or near the proposed work area should be pinpointed as accurately as possible using a detecting device in conjunction with up-to-date service plans and other information which provides a guide to the possible location of services, and help interpret the signal. Use of signal generators (Genny) will significantly increase the accurate of the service location. Anyone who uses a locator should have received thorough training in its use and limitations. Always use detection devices in accordance with the manufacturer's instructions, check and calibrate regularly, and maintain in good working order. Safe excavation - Determine the method or technique for excavating near underground services before work starts, taking account of:

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	Shoring/support designs are to be che Provide edge protection, fencing or b excavated material falling into the ex-	arriers to prevent anyone cavation.			
<u> </u>	The site contains an oil cooled High V		.1		
Overhead power lines	There is a BT pole and Overhead line	off site on Island Road so	uth		
Working at	Before working at height you must wo	rk through these simple s	teps:		
neight	• avoid work at height where it is rea	sonably practicable to do) SO;		
	 where work at height cannot be average right type of equipment; 	oided, prevent falls using	either an existing pla	ce of work that is already safe or the	
	• minimise the distance and consequent eliminated.	ences of a fall, by using t	he right type of equip	ment where the risk cannot be	
	People with sufficient skills, knowledge and experience are to be used to carry out work at height task, or, if they are being trained, they are to work under the supervision of somebody competent to do it.				
	When a more technical level of competence is required, for example scaffolders or MEWP operators, relevant training and certification schemes is one way to help demonstrate competence, i.e. CISRS or IPAF.				
	Work planning - The following are to Take account of weather conditions t	be considered when plar	ning and undertaking		
	Check that the place where work at height is to be undertaken is safe. Each place where people will work at height needs to be checked every time, before use;				
	Stop materials or objects from falling or take suitable and sufficient measures to make sure no one can be injured; Store materials and objects safely so they won't cause injury if they are disturbed or collapse;				
	Plan for emergencies and rescue and agree a set procedure for evacuation for foreseeable situations. Brief all involved persons into the emergency procedures. Do not rely entirely on the emergency services for rescue although it is good practise to liaise with them during planning.				
Due regard should be given to ground conditions and the movement of vehicles and plant when planni activities and location of equipment to be used.					
Collective protection - Where temporary guardrails are used for edge protection, th 950mm minimum from platform/ground/floor, an intermediate guardrail positioned					
	470mm, and a toe board which is to b				
Working at height	board height then additional barriers	-	-		
	1]	
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	Adequate physical edge protection	must be provided in	n any situation where injury	from falling could occur - i.e.		
	stairwells, openings, excavations.					
	Edge protection must be robust end	ough to prevent per	sons from falling.			
	Fall arrest measures such as safety	nets may be consid	ered where other measures	are unsuitable.		
	Scaffolding (tube and fitting, syste dismantled by authorised, suitably		, S	ll types is to be erected, adapted and		
		Put-log scaffolds should not be used.				
	Scaffolding is to be adequately des	gned in accordance		cal guidance series (TG20) designed scaffolds that incorporate such		
	Procedures. When flexible material		2	dance with Lovell Temporary Works orm to the fire requirements of the Loss		
	Prevention Standard (LPS 1215).					
	Bandstands must be fully boarded a a handrail, brickguard, toe board a recommended centres.			ral edge protection system incorporating ported at the manufacturers'		
	Attention should be given to ensure process. The adequacy of scaffold f	Attention should be given to ensure the intended actual loadings on the scaffold have been considered within the design process. The adequacy of scaffold foundations and ground conditions are also important factors.				
		are to be programmed to permit tasks such as painting, mastic sealants, cleaning and removal of protective ial to be completed prior to the dismantling of scaffolds/working platforms where possible.				
	Birdcage scaffolding/internal fall p	revention platforms	are to be installed to suit	the appropriate build stage.		
	Only purpose made 'hop ups' are p	ermitted.				
	Makeshift platforms are not permit	ted.				
	Mobile Towers - Mobile towers are					
	The towers must be erected and us	ed in accordance w	ith the manufacturers' inst	ructions and recommendations, inclusive		
	of the use of outriggers where nece	essary.				
	Operatives are to access the platfo		s provided on the inside of	the tower only - no external or		
	additional ladders are to be introdu					
	A separate risk assessment is to be suitable ties may be required.	carried out where o	excessive horizontal forces	are expected to prevent overturning -		
		pected by a compe	ent person before first use	, every 7 days, following alteration or		
Working a height		hat may have affec	ted its strength or stability	- a new inspection and report is not		
TEISIIC						
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Working at height

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		personal protection is to be considered Harness users must provide satisfactor Suitable anchor points are to be agreed Ladders - Suitable ladders can be used higher level of fall protection is not jue workplace features which cannot be a Short duration should not be the decide is to be considered. As a guide, if the time, it is recommended that alternation Only use ladders where they can be use practicable to do so, the ladder can be footed by another operative. Footing Before starting a task, carry out a 'pro- safe condition to use. Use the ladder safely. Ladders and stepladders used are to be equipment is not permitted. Follow the guidance detailed in <u>Safe</u> Roof voids - Walking on/working from Carry out works from below where por Falling objects - Any materials stored toeboards, brickguards.) Loading bays are to have suitable gat Loading bay gates are to have adequa	ed. ry proof of training and a ed, possibly in conjunction d for work at height when ustified because of the low ltered. ling factor in establishing task requires staying up a tive equipment is selected ed safely, e.g. where the secured. If other options of should be viewed as a last e-use' check to spot any be either British Standard use of ladders and steplat h ceiling cords/joists is for pssible or adequate staging d or used at height are to rere- ate internal guard rails where the set of the set of the state of the set of the set of the set	a satisfactory inspection on with a structural en- e risk assessment show v risk and short duration whether use of a ladded leaning ladder or step d. ladder will be level an- of securing a ladder can st resort. obvious visual defects (BS) Class 1 Industria adders INDG 455 (HSE orbidden. g/boarding is to be us remain inside edge pr nain closed following I nich provide a physica	gineer. ws that using equipment offering a on of use; or there are existing er is acceptable or not, the overall risk pladder for more than 30 minutes at a ad stable, and where it is reasonably not be achieved, the ladder should be s to make sure the ladder is in a l or BS EN 131. Domestic grade guidance) for safe use. ed. rotection measures provided (i.e. loading or unloading. l barrier when in its open position.
S	at	Loading bays are to have suitable gates fitted which are to remain closed following loading or unloading. Loading bay gates are to have adequate internal guard rails which provide a physical barrier when in its open position. An adequate exclusion zone is to be considered at the base of loading bays where appropriate. Pedestrian routes should be so arranged that walking directly below the loading area is not possible to avoid injury from falling materials. Gaps in platform boarding are to be kept to a minimum. Platforms are to be positioned as close as is practical to the structure to suit the works in progress. Access underneath a platform should be restricted or controlled to prevent persons being struck by loose material or debris.			
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	Store materials and objects saf Suitably fire retardant debris n to public highways/footpaths.			r collapse. ioned above as appropriate i.e. close	
	The throwing/dropping of mate	rials, waste, tools etc. fror	n height is strictly prohibi	ted.	
				ere icy conditions, heavy rain or	
	extremes of temperature could		· · · ·		
	Work at height equipment is to safe for use.	be inspected by competen	t persons following advers	e weather to establish if it remains	
	Safe access - A suitable means and from their work place safe	•	to all work at height equi	pment to ensure workers can get to	
		ing may however prove moi		in excess of 2 storeys. Suitable hoists be used where scaffolding is in public	
	Lockable security gates are to e working hours.	enclose the base of staircas	es to deter unauthorised a	access especially out of normal	
	Ladders are to be removed at t	he end of each shift/workir	ng day and placed in a safe	e, secure location to prevent	
	unauthorised use. Where high r acceptable.				
Internal permanent staircases are access upper floors of dwellings. External ladders are not to be use inside of the tower only. Selection and maintenance of e working at height.			rliest possible opportunity	y in preference to using ladders to	
			on mobile towers - the integral ladders provided are to be ascended/descended		
		equipment - The most suit	able equipment appropria	ate for the work should be selected for	
	Considerations should include;				
	The working conditions (i.e. wo The nature, frequency and dura		r, nearby activities);		
			where the work;		
				equipment Information Toolkit) that	
	provides details of common typ				
Working height	All vales and scale at height envi	ipment is to be visually insp	pected by competent pers	ons before first use, every 7 days,	
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	Results of inspections will be recorded in the relevant statutory register. Defects identified are to be rectified by the relevant competent persons without delay. Where this is not possible, i.e. the defect is severe or the working platform is incomplete, a notice is to be displayed indicating that the working platform is not to be used and all access prevented.
Lifting	All lifting equipment is to be;
operation	• Sufficiently strong, stable and suitable for the proposed use. Similarly, the load and anything attached, timber pallets, lifting points, etc., must be suitable.
Follow link	• Positioned or installed to prevent the risk of injury, e.g. from the equipment or the load falling or striking people.
additional T crane guida	
	 Additionally, lifting operations are to be planned, supervised and carried out in a safe manner by people who are competent.
	• Where equipment is used for lifting people it is marked accordingly, and it is safe for such a purpose, e.g. all necessary precautions have been taken to eliminate or reduce any risk.
	• Before lifting equipment (including accessories) is used for the first time, it is thoroughly examined. Lifting equipment
Lifting operatior	is to be thoroughly examined in use at periods specified in the Regulations (i.e. at least six-monthly for accessories and equipment used for lifting people and, at a minimum, annually for all other equipment) or at intervals laid down in an examination scheme drawn up by a competent person. All examination work is to be performed by a competent person (someone with the necessary skills, knowledge and experience) - following a thorough examination or inspection of any lifting equipment, a report is submitted by the competent person.
	Mobile cranes - Competent person to select the most suitable crane for the project - all overhead hazards are to be considered.
	The positioning of the crane is to be thoroughly planned by a competent person - allowances are to be made for matters such as the tail swing of the counterweight, size of outriggers, area of spreader mats and the radius of the arc described by the crane jib at different inclinations.
	The weight bearing characteristics of the ground are to be determined by a competent person - designs for crane mats/
	bearing plates etc. are to be externally checked in accordance with our temporary works procedures.
	A safe system of work is to be in place before operations commence.
	Maintain records of relevant information including lifting plan, method statements, thorough examination and inspection certificates, CPCS card etc.
	The tower crane is to be thoroughly examined and/or inspected at the necessary time intervals and be safe to use.
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	to the table below for	Adequate resources including competent supporting operatives such as banksmen, slingers etc., are to be available. Refer to the table below for minimum training requirements for various duty holders Access to the working area during lifting and moving operations is to be restricted to those involved in the work.				
	.	All Cranage subject to Temporary works procedure				
	Role	Minimum Qualifications	Additional competencies			
	Crane operators	CPCS Tower Crane (A04)	Product specific knowledge available from manufacturers and			
		CPCS Mobile Crane (A60)	others. Red card holders require period of mentoring, duration is			
		CPCS Crawler Crane (A02)	task specific.			
	Appointed person (AP)	CPCS Appointed Person (NVQ) (A61)				
	Crane Supervisor (CS)	CPCS Crane Supervisor (S/NVQ) (A62)	Red card holders require period of mentoring, duration is task specific.			
	Slinger/signaller (SS)	CPCS Slinger/signaller (A40)	Red card holders require period of mentoring, duration is task specific.			
	attainment level does not pr	Note: Employers must determine competence of each individual person based on attributes listed above together with academic qualifications. A shortfall on attainment level does not preclude employment in this role but must be addressed before the person is permitted to carry out the role.				
			ers, scissor lifts etc) - Competent person to select the most			
Lifting		project - all overhead hazards are t				
operation		When selecting MEWPs consider height, general space restrictions and ground conditions, and other obstructions				
		(particularly overhead to prevent trapping/crushing injuries)				
		MEWP operators must provide valid proof of training by either CPCS or IPAF.				
	Any operative inside th at all times.	Any operative inside the basket is to properly wear a suitable harness attached to the designated anchor points provided				
	The MEWP is to have a	The MEWP is to have a current 6 month thorough examination certificate provided with the machine and a lifting				
	equipment register is t	equipment register is to be provided for proof of an inspection regime by a competent person.				
	•	Telehandlers - Competent person to select the most suitable telehandler for the project.				
		Telehandler is to be fitted with reverse assisting "field of view" mirrors or similar 360° visibility aid.				
	•	The operator is to familiarise themselves with every specific machine upon delivery and the Plant Checklist (HSE 025) is to be completed before first use.				
		The operator has ultimate responsibility for all telehandler lifts - consideration must be given to size, weight, centre of				
	obstacles including site	gravity, security of the load, terrain, weather conditions, distance, height, proximity to overhead power lines and other obstacles including site personnel - safe Working Load (SWL) of telehandler must be clearly marked and strictly adhered				
	to.					
Г						

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Lifting operations	load is as low as possible - driving with extra risk that must be assessed. If the management should re-assess the use Where areas of risk to the general pu- suitably trained and appointed. Telehandlers are to traverse gradient operator training. Reversing is to be avoided where poss reversing alarms are to be fitted and Flashing beacon to be utilised at all to Unattended telehandlers must be par- in neutral, handbrake applied, keys re LIFTING ACCESSORIES - E.g. Chain, w spreader or equaliser beams etc A intervals not exceeding 6 months with user and an entry made into the Work Any defects discovered during these i competent engineers/mechanics bein Lifting accessories must be clearly ma SLINGER/SIGNALLERS (for all lifting of attached to the lifting equipment and All slingers and signallers must be add use of radios as necessary and be suit training they must be under the const They must be fit with regard to eyesing be able to judge distances, heights ar	with the boom lowered to the the boom raised should be site is so restricted that of a telehandler at all on blic or limited visibility a s not exceeding manufact sible; if unavoidable it mut working correctly. imes when telehandler is ked in a safe place with the emoved and doors locked wire rope, fibre rope or all lifting accessories are that written report obtained king Equipment and Liftin nspections will result in the g informed and the defect arked to indicate their sate operations) - Slingers/sign d will initiate movement of equately trained in the tele ably competent, experient ant supervision of a com- ght, hearing, reflexes, ag	I never be considered t manoeuvring is impor- r, at least, consider re- re identified, banksmo- turer's recommendati ust be done with the a in use. the engine switched o flat nylon slings, stro to be thoroughly exan ed and must be visuall g Equipment Register the equipment being r tts rectified as soon as fe working load, ident ballers will ensure that of the lifting equipme tochniques of slinging, s need and authorised b petent trainer. ility, and strength to sh weights and be able	eselection of the machine chosen. en will be required; these must be ons and guidelines as taught during assistance of a banksman - audible ff, forks lowered to ground, the gear ps, shackles, hooks, eye bolts, nined by a competent person at ly inspected weekly by the competent (HSE 016) or contractors equivalent. emoved from service and suitable s practically possible. cification, and appropriate use. t loads are securely and correctly nt. signalling (the signal code), and the by Lovell site management. If in handle lifting accessories. They must e to balance loads. nust be held on site
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	Non-person lifting equipment - telehandlers, cranes, excavators etc.	12 months		
	Person lifting equipment - MEWPS, hoists etc.	6 months		
	All lifting accessories - strops, chains, shackles etc.	6 months		
	NOTE: If equipment or accessory is less than 6 months/12 months old it mu	ist be accompanied by a certificate of conformity		
Maintenance of	Thereugh examination cortificator or conformance cortificator if loss th	an 12 months old for relevant items of plant are to		
	Thorough examination certificates or conformance certificates if less th	•		
plant and equipment	be obtained and retained before allowing them to start work on site, i.e vehicles.	2. SOU excavators, telenanuters, cranes, mad		
equipment		very out a visual inspection and record the findings		
	All operators of mobile and large items of static plant are required to ca in a suitable register at least every 7 days - any defects discovered durin			
	being removed from service and suitable competent engineers/mechani			
	soon as practically possible. In addition, daily checks are to be carried of	5		
	checking things such as tyre pressures, condition of brakes, lights, horns	•		
	All plant and equipment not in use shall be isolated.	, audible warning systems, etc		
	All plant and equipment shall comply with current Provision and Use of "	Work Equipment Regulations		
	Items of portable plant not in use shall be securely stored and rendered			
	All electrical power tools must operate at 110 volts or less and have app			
Traffic	Separate entry and exit gates for pedestrians and vehicles are to be pro			
management	Firm, level, well drained walkways that take the most direct route, where possible, are to be created.			
5	Barriers between pedestrians and vehicles are to be erected, maintained and arranged to suit the work progression.			
	Where walkways cross roadways, a clearly signed crossing point is to be installed. Where drivers and pedestrians can			
	clearly see each other.			
	Position routes to allow drivers to be able see both ways along a footpat	h before they move where possible - this includes		
	when exiting the site onto public roads.	· · ·		
	Where possible vehicle parking areas will be arranged away from the wo	ork area.		
	The need for vehicles to reverse should be avoided where possible by im	plementing one-way systems, or turning circles		
	especially in storage areas.			
	If vehicles reverse in areas where pedestrians cannot be excluded, comp	petent signallers/banksmen are to be appointed to		
Traffic	control manoeuvres.			
management	All drivers and pedestrians are to be made aware of and understand the	routes and traffic rules on site -standard road		
	signs are to be used where appropriate			
	Hi visibility clothing is to be worn by all on site			

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	Refer to Site Specific Traffic Management plan posted in the site office and Welfare facilities
Storage of	A suitable area will be designated for storage of bulk materials.
materials	Materials are to be stacked flat rather than upright and pallets used to stack materials are in good condition, not stacked
(particularly	more than 2 high, and are on firm ground and not leaning.
hazardous	Lockable steel storage containers will be provided to store items such as ironmongery, fixings etc.
materials) and	To discourage theft, plant and equipment is to be locked away where possible and the keys kept safe.
work equipment	All materials and/or substances for inclusion within the works shall be correctly stored prior to use in a suitably ventilated and/or secure area during working and non-working hours.
	All hazardous and flammable materials and substances shall be appropriately stored in accordance with manufacturer's instructions and shall not be placed so as to cause a health and safety hazard on site.
Roof Work	All personnel involved in roof works will use only the access scaffolding provided and must not interfere with any part of the scaffold.
	Roof tiles will be delivered to the scaffold via a telehandler and distributed evenly around the scaffold.
	Roof tile cutting works are to be carried out on the surrounding scaffolding with dedicated cutting area(s) established
	before work starts - a suitable piece of sacrificial material is to be placed between the tile and scaffold board when
	cutting.
	Refer to the National Federation of Roofing Contractors guidance document for controlling silica when disc cutting roof
	tiles.
Street Works	Plant is to be selected suitable for the task and the site - e.g. mini-excavators may need to be used to prevent the public being struck during slewing operations.
	Trained banksmen are to supervise vehicle movement.
	The correct signs, lighting and information boards to draw the public's attention to the work are to be used.
	Excavations are to be reinstated as quickly as possible with any left open securely fenced.
	Uneven surfaces are to be either covered or the public alerted to their presence.
	Materials are to be stored safely - storage near entrances and busy pedestrian areas is to be avoided.
Street Works	store materials within the site perimeter, preferably in a separate compound away from any perimeter fencing;
	Plant and equipment is to be removed from site at the end of the shift - if not possible, isolate and secure it; and select
	and use the least hazardous materials and chemicals.
	Tools are to be fitted with dust and noise suppression.
	Dusty and noisy equipment should be enclosed where possible.

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Workforce to be suitably trained and competent in accordance with the New Roads and Street Works Act and any plant and equipment in use.

Health risks including; (delete or expand each section as appropriate ensuring information detailed is relevant to the project) Refer to the Project Risk List for relevant risks identified for this project.

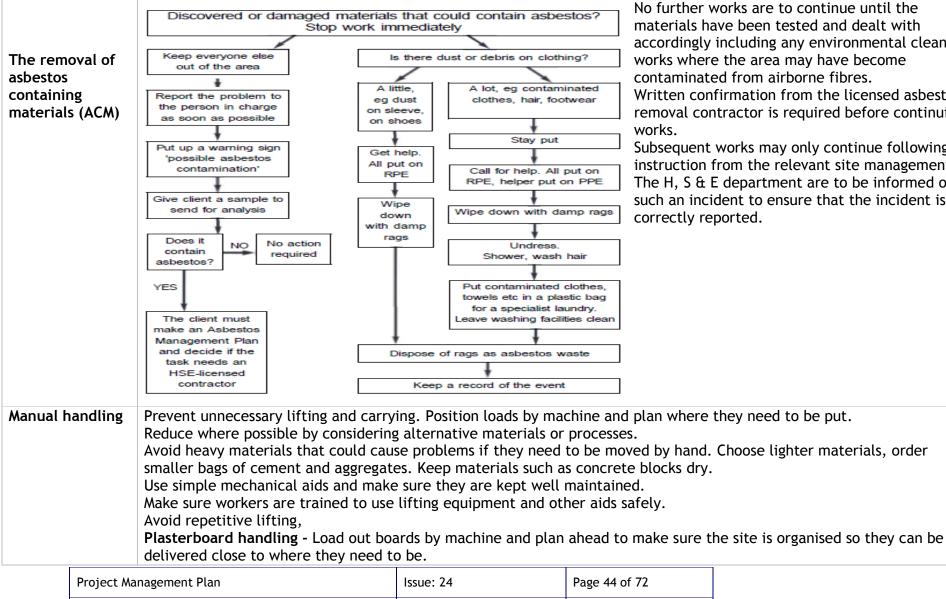
For further guidance, follow link to HSE Guidance Documents and/or Health and Wellbeing

Construction	Plan the work - work in a different way, limit the amount of cutting or use non-powered equipment like block splitters;
dusts	Don't cut if unnecessary, for example, arrange flags/slabs to avoid cutting.
Silica dust - concrete, mortar and sandstone etc. Wood dust - timber, MDF and plywoods. Lower toxicity dusts - plasterboard, limestone, marble	Stop the dust getting into the air. Wet cutting and on-tool extraction are both effective - water damps down the dust cloud. On-tool extraction removes the dust as it created -both are effective if correctly used. Use the right mask - make sure the mask has the right level of protection and it fits the operatives' face. Individuals need to have been face fit tested to the relevant face mask, be clean shaven, wear it correctly, and request replacements when necessary. Adequate evidence is to be obtained from contractors. Where appropriate, health surveillance is to be provided to employees. Service providers are to supply suitable and sufficient CoSHH assessments to identify exposure and control measures they will be adopting when using such substances. These are to be reviewed to ascertain suitability. The provision and use of
and dolomite.	respiratory protective equipment (RPE) must only be considered when equally or more effective protective control measures cannot be used, however RPE may be necessary to control residual dusts. Refer to <u>HSG53</u> for further information.
The removal of asbestos	A method statement from a fully licensed contractor detailing safe means of working, including containment and disposal will be obtained prior to commencement of work on site.
containing	ACM to be removed in accordance with the relevant survey carried out for the project.
materials (ACM)	Operatives to be informed that all identified ACM has been removed and a reoccupation certificate issued where appropriate.
	Operatives are to PROCEED WITH CAUTION during their works.
	Any unforeseen ACM and suspect materials that are uncovered during the works will mean that the works must stop
	immediately and the incident be reported to the relevant supervisor and site management as soon as possible. (Refer to flow chart overleaf)
	Prevent others from entering the area if possible i.e. by fencing off the area, displaying signage etc.

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No further works are to continue until the materials have been tested and dealt with accordingly including any environmental clean-up works where the area may have become contaminated from airborne fibres. Written confirmation from the licensed asbestos

removal contractor is required before continuing

Subsequent works may only continue following instruction from the relevant site management. The H, S & E department are to be informed of such an incident to ensure that the incident is



	Use panel trolleys or other mechanical aids to move boards around site. Keep them well maintained. Use plasterboard lifts or adjustable props to position boards safely for fixing. For low-level wall panels, use a foot- operated board lifter to avoid stooping.
	Where positioning aids cannot be used, for example in stairwells or tight spaces, use smaller size boards that are easier to handle.
	Make reasonable checks to ensure workers are trained to use lifting equipment and handling aids safely.
	Handling heavy blocks - the lightest block that has the required strength, unless otherwise specified by a designer for genuine technical reason is to be selected - if using large foundation (trench) blocks, consider units with handholds to
	help grip.
	Avoid double handling by carrying from block stacks to the work area. Use handling equipment to take the blocks to where they are to be laid. Organise site traffic routes and scaffolding bays to deliver blocks close to where they will be laid. Where possible, use lightweight foundation (trench) blocks that have handholds and consider using half-size blocks. Consider widening trenches so blocks can be laid at foot level, not below it.
	Adapt scaffolding and working platforms to allow blocks to be laid between chest and knee height. It places less stress on the body and work rate is faster.
	Always try to lay between shoulder and waist height, use staging or adapt work platforms to help. If unavoidable, reduce laying rate or consider a half-size block. Arrange block stacks and spot boards at a comfortable position.
	Handle blocks close to the body when lifting into position. Arrange block stacks with clear access and small enough to avoid over-reaching.
	Make reasonable checks to ensure workers are trained to use lifting equipment and handling aids safely. Keep stored blocks dry to avoid weight gain from rain.
Manual handling	Handling road kerbs - follow the hierarchy of control measures;
	Elimination - eliminate manual lifting of kerbs at the design stage, (e.g. use alternative construction methods that do not involve manual handling or eliminate the need for the kerb).
	Total mechanisation - ensure kerbs are handled and laid mechanically (e.g. using vacuum devices/mechanical grabs etc). Partial mechanisation - ensure that the maximum amount of the kerb handling process is undertaken mechanically (e.g. using mechanical solutions to get the kerb near its final position, off-loading using a hoist etc). Using smaller/lighter kerbs or handling aids will further reduce the risks from any residual manual handling.
	Manual handling - in rare cases where it is not possible to use any of the above solutions, short stretches of kerb may be laid manually. Where this is necessary workers should be trained in good handling techniques. The use of lighter weight kerbs, or devices which allow two people to share the lift, will further reduce the risk of injury.
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Use of hazardous substances, particularly where there is a need for health monitoring	All construction materials deemed hazardous will be accompanied by a CoSHH assessment prepared by a competent person. The CoSHH assessment will be made available to all persons who may foreseeably be exposed to the substance.					
Reducing noise	Noise - Select quieter equipment or a different, quieter processes where possible.					
and vibration	Use screens, barriers, enclosures and absorbent materials to reduce the noise where possible.					
	Limit the time people spend in noisy areas/activities.					
	Suitable hearing protection should be provided where noise cannot be controlled as above; choose a suitable protection factor - sufficient to eliminate risks from noise but not so much protection that wearers become isolated; consider the comfort and hygiene and ensure compatibility with other protective equipment.					
	Vibration - look for alternative work methods which eliminate or reduce exposure to vibration, for example use a breaker attachment on an excavating machine to break concrete rather than using a hand-held breaker.					
	Make sure that equipment selected or allocated is suitable and can do the work efficiently; unsuitable equipment, too small or not powerful enough will take much longer, requires more effort and will expose the worker to vibration for longer than necessary.					
Ensure equipment is well maintained - follow manufacturer recommendations where appropriate. Do not use blunt or damaged accessories - replace as necessary ensuring exposure is as short as possibl						
Reducing noise	Provide workers with necessary clothing to keep them warm and dry to encourage good blood circulation - gloves can be					
and vibration	used to keep hands warm but should; not be relied upon to provided protection from vibration.					
	Health surveillance should be provided for workers regularly exposed to noise and vibration					
Exposure to UV	UV INDEX					
radiation (from	01 02 03 04 05 06 07 08 09 10 11					
the Sun)	LOW MODERATE HIGH VERY HIGH EXTREME					
- /	Check the UV index from the daily weather forecast and communicate to workforce as necessary.					
	Avoid or minimise exposure to direct sunlight in the middle of the day (highest proportion of daily radiation occurs					
	between 10am and 2pm)					
	Swap jobs amongst workers where possible to allow time in shaded areas.					

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	Ensure rest breaks are taken in shaded areas or indoors - position water points indoors to encourage breaks to be taken out of the sun. Ask employees to cover up with long sleeves, loose fitting tops and trousers when working outdoors Encourage workers to protect their necks with flaps fitted to safety helmets. High factor sunscreen should be used where skin cannot be protected by other measures, for example, the face and lips. Encourage workers to regularly check their skin for changes to moles or other changes
Gas	Refer to the Gas Safety Plan within section 6 of this PMP
Contaminated land	Refer to Site Specific Investigation Report
Weil's Disease (Leptospirosis)	 Maintain good housekeeping particularly around canteen areas ensuring food waste is put in the waste bins/skips provided on site. Where rodents have been observed, engage with relevant pest control contractor and instruct operatives not to touch them if encountered. Wash cuts and grazes immediately with soap and running water and cover all cuts and broken skin with waterproof plasters before and during work, and always before eating, drinking or smoking.
Discarded hypodermic needles and other sharps. Discarded hypodermic needles and other sharps.	If discarded needles are discovered they are not to be handled without appropriate arm's length tools. If possible cover the needle(s) with something heavy such as a block or slab or something obvious, warn all in the area that needles have been discovered giving the location and inform them to avoid all contact. Inform site management as soon as possible giving location and amount and allow them to remove them safely using their safe disposal kits. No part of the body should be placed 'blind' into any cavity/space - the area is to be exposed as much as possible and suitable lighting provided. If skin is accidentally punctured by a needle, encourage the wound to bleed - wash the wound with cold running water, dry and cover it with a plaster, and attend the nearest Accident and Emergency Hospital as soon as possible.

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LOVELL

Temporary Works Register

Proje	ct Title: Tetlow Street												
Proje	ct Number: Tender												
Date:	03 December 2015	Requirements			Des	ign	Check		Approval		CDM-C	Supervision	Comments
Ref	Description of Temporary Works	Name of Temporary Works Co-ordinator (TWC) responsible	Date design approval required	Classification	Name of Temporary Works Designer (TWD)	Date design received	Date issued for checking/ approval	Name of Temporary Works Design Checker (TWDC) - independent of TWD	Approved by	Date approved	Date approved design forwarded to CDM-C	Name of Temporary Works Supervisor (TWS)	To include details of when designs have changed or require changing works have ceased etc.
1	Site Hoarding - standard 2.4m plywood	Operation Manager		1									
		Operation Manager		1									Initial design by subcontractor on a supply and fix basis
		Operation Manager		1									
	Base to site cabins Silo bases	Operation Manager		1									
-		Operation Manager Operation Manager		1									Plate load tests required to verify
	Shuttering and false work to foundations -	Operation Manager		0									Plate load tests required to verify
12	Drainage earthwork support to main site generally 2 less than 2m in depth.	Operation Manager		1									Likely use of proprietary system such as drag box subject to subcontractor RAMS
13	Drainage earthwork support to off site connection overall depth around 2m but probably using trench sheet due to small working area?	Operation Manager		2									Support may be required to existing services
15	Hoarding to offsite drain connection - probably proprietary heras type panels on rubber blocks	Operation Manager		0									
17	Temporary bracing for steelwork - SE & subcontractor to identify sequence of erection.	Operation Manager		1									support from the main block structure and can be erected independantly
	Scaffold base at perimeter of building	Operation Manager		1									Design using 6f2 reclaimed from pi mat
	Handrails to stair case and landings	Operation Manager		1									
22	communal areas	Operation Manager		1									
	Tie detail for scaffold to prevent through ties penetrating window positions.	Operation Manager		2									
		Operation Manager		1									
26	s & 10	Operation Manager		2									
27	Propping at ground floor level to allow party wall scaffold to be built off floor.	Operation Manager		2									
	Crash decking	Operation Manager		1									Check that the crash decking is suitable for loading out by tower crane if required. Designate loading areras?
	Loading bays	Operation Manager		2									-
	Proprietary aluminium tower scaffold	Operation Manager		0									Based on precast floor or screed.
31	Temporary site electrics	Operation Manager		1									Design by specialist engineer

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6. Gas Safety Plan

1. Scope of works;							
Installation o		gas boilers					
				by works - tick all 3. Gas Contractor	that ap	ply	
Boilers		ild project) 🗖 Fires		Cookers		Hobs	
Flues		Vents/Air bric		Window vents			
Other Deleas		VEHIS/AII DITC	ks 🗖				
3. Gas contra	actor:		ТВС				
4. Gas contra Registrati		afe	ТВС				
Supervisor mus	st be named	or supervisor:	твс				
		o the Competence & Au Itrolling signific					
TBCF							
ingress of foreigr	nents for supp n materials whe	ere appropriate.	or gas eq	uipment must be dei	laneo a	pove, including preventing	5

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Guidance.

Anyone who works on gas must be competent to do so. The level and range of competence should match the full extent of work done, but needs only to be sufficient for and relevant to that work. Employers of gas fitting operatives are required to ensure that their employees have the required competence for the work undertaken; in addition to ensuring they are properly experienced and trained. This involves ongoing monitoring of performance standards, as necessary.

Before a significant alteration is made to premises where a gas appliance or equipment is installed, e.g. installation or removal of windows, air bricks, extractor fan units, re-roofing, external cladding work etc, any implications for gas appliance/fitting safety need to be properly addressed - seek the advice of a competent gas engineer.

In some cases, the effects of particular work for gas safety may be obvious. For example, where a chimney is being reduced in height or capped, its effectiveness in removing flue gases may be drastically affected. Before such work is started, it needs to be established whether, or not, the chimney is active and, if so, allowance made for this in the way the work is carried out. This may include planning for appliances to be disconnected before work commences, preventing debris falling or being thrown down the chimney, and ensuring appliances are tested for safety after the work has been completed. Disconnection/testing of appliances must only be carried out by a Gas Safe-registered engineer. Similar consideration needs to be given to any proposed alterations which might affect operation of a flue system, e.g. fitting a flue liner or terminal.

In other cases, the effects of the work may not be so obvious. For example, when fitting double glazing or cavity wall insulation, providing a temporary roof covering over a building, the removal of fixed permanent ventilation, such as air bricks, and replacement with closeable ventilation louvres (in contravention of standards) or blockage of vents by insulation material, can lead to danger from reduced ventilation/incomplete combustion. Equally, fitting extractor fans can lead to the pull on flues being overcome and flue products being sucked back into premises. Moreover, the enclosure of an existing flue terminal within a new extension or conservatory (again in contravention of standards) can lead to flue gases becoming entrapped. All alterations must be properly planned.

In accordance with regulation 9 of the Gas Safety (Installation and Use) Regulations 1998, a person who allows gas to flow into any premises for the first time should ensure an appropriately sited emergency control is in place. Where there is a gas meter, the meter control may serve as the emergency control as long as the conditions (as follows) are met. Each individual premises (e.g. each house or flat) using a supply of gas should be provided with an emergency control, whether or not that premises contains a gas meter. The emergency control should be situated as near as is reasonably practicable to the point where the pipe supplying gas enters the premises. It should be readily accessible to all consumers, i.e. gas users, in the premises concerned (e.g. not located in a basement or cellar); therefore, a valve located in a meter-room which is normally locked, and accessible only to a landlord, gas supplier, gas transporter and/or emergency services, for example, cannot act as an 'emergency control'. In the case of LPG, this regulation only applies where the gas is supplied from a storage tank or tanks, or from two or more cylinders connected by an automatic changeover device. In other cases the vapour valve on each cylinder also functions as a shut-off control and no additional provision is necessary. For further information refer to 'Safety in the installation and use of gas systems and appliances L56'

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7. The Health and Safety File

Each contractor and supplier will be requested to supply information relating to materials supplied and or works packages completed.

Information will be requested at the earliest possible opportunity as it becomes increasingly more difficult to obtain information from contractors or suppliers who have left site or have completed delivery of materials.

The information will be collected and passed to the Principal Designer/CDM Co-ordinator and the main file as soon as it is available and will not be left towards the end of the contract period.

O Health and safety file format

Check the Pre-construction Information (PCI) to ensure that the clients requested format is detailed in this section - if none provided, use the format below

Section	Content
Α	A brief description of the work carried out.
В	Any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (e.g. surveys or other information concerning asbestos or contaminated land)
С	Key structural principles (e.g. bracing, sources of substantial stored energy - including pre or post-tensioned members) and safe working loads for floors and roofs.
D	Hazardous materials used (e.g. lead paint; pesticides; special coatings)
E	Information regarding the removal or dismantling of installed plant and equipment (e.g. any special arrangement for lifting such equipment)
F	Health and safety information about equipment provided for cleaning or maintaining the structure
G	The nature, location and markings of significant services, including underground cables; gas supply equipment; firefighting services etc.
Н	Information and as-built drawings of the building, its plant and equipment (e.g. the means of safe access to and from service voids and fire doors)

There should be enough detail to allow the likely risks to be identified and addressed by those carrying out the work. However, the level of detail should be proportionate to the risks. The file should **not** include things that will be of no help when planning future construction work such as pre-construction information, the construction phase plan, contractual documents, safety method statements etc. Information must be in a convenient form, clear, concise and easily understandable

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8. Environment

O Operational Control

Site management are responsible for ensuring all necessary environmental control measures identified within this plan are followed and implemented prior to start of any construction activities.

Pre start meetings with contractors will assess arrangements contractors have provided for minimising waste. Surveyor and Contracts Manager are responsible for ensuring contractors have included waste controls within their site documentation and they sign the administration document before signing off the order.

Site induction will include environmental controls in place or necessary actions required.

• Monitoring

Site management will undertake weekly recorded inspections to ensure relevant environmental control measures are appropriate, and controls are being complied with.

Site environmental performance will also be monitored regularly by our health, safety and environment team. The inspection report will be discussed with site management and any recommendations will be actioned as necessary

O Emergency Preparedness and Response

Minor Incidents

A minor environmental incident is an occurrence which leads to, or has the potential to lead to minor harm to the environment. Examples include:

Table 1

Pollution Spillage of chemicals or oil (>2 litres) to hardstand.		Spillage of chemicals or oil (>2 litres) to hardstand.
•	Nuisance (dust/noise etc)	A minor environmental complaint received from a member of the public.
•	Waste segregation	Incorrect segregation of general and hazardous wastes on site.

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Major Incident

A major environmental incident is a legal breach, an event or series of events, which leads to or has the potential to lead to significant harm to the environment.

Examples include:

Table 2		
Legal breach is identified	An activity is undertaken and direct or indirect processes or emissions lead to a breach of legal requirements identified by Lovell personnel, client or third party. Examples include:	
Waste disposal	Disposal of waste materials, including giving or selling to an unlicensed carrier or site. Also includes poor description of waste, leading to poor "duty of care" control and inappropriate disposal. Where all the records of waste consignments are missed or incorrectly completed.	
Nuisance (dust/noise etc)	A complaint is received from a regulator relating to nuisance and it is substantiated.	
Enforcement action is served by a regulator	 A notice is served by a regulator on a project. Notices include: S60 notices (noise and vibration) Enforcement notice (waste) Prosecution (all of above) 	
System failure	When auditing shows that the management of our processes is systematically failing to maintain compliance.	

Emergency Incident

An emergency is a situation that has moved beyond the control of Lovell and requires the assistance of external agencies to minimise the potential harm to the environment.

Emergency Situation	An emergency is where the control of an environmental incident	
Arises	requires the assistance of external bodies to bring it under control. In	
	particular, incidents shall be reported in the event of pollution to a	
	watercourse. The Environment Agency hotline for reporting	
	environmental incidents is 0800 80 70 60.	

• Spillage Kit Provisions

The site will maintain a suitable spillage kit at the following location(s) across the site:

Spill Kit available at the Site Office.

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O Incident Reporting

Where the incident is controllable and no intervention is required from any third party/statutory Environmental Authority, then controls should be implemented, the incident cleaned up/resolved and recorded on form (HSE 039).

Where the incident cannot be managed using on-site resources or is considered difficult to control (e.g. cannot be cleaned up within one hour of occurring), the Health, Safety and Environment department and the relevant Environmental authority must be informed and an Incident/Accident Report and Investigation Form (HSE 039) should be completed stating the following data:

- Date of incident
- Time of incident
- Exact Location of incident
- Incident details (including type)
- Who incident was first reported to
- Notified relevant Environmental authority details
- Remediation measures
- Measures to prevent a recurrence
- Details of any machinery involved
- Details of any witnesses
- Details of person completing the report
- Witness statements

Notify the Environment Agency by calling the Emergency Hotline on 0800 80 70 60. Do not hose any spillage down or use any detergents

A copy is to be forwarded to the Regional Health, Safety and Environmental Manager at the earliest opportunity. Corrective and preventive action will be communicated as a follow up to the Incident Report

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O Emergency procedure instruction

All site teams and site operatives should receive information on the environmental emergency control procedure on induction; this will include the location and use of the spill kits nominated to the job.

FIGURE 1. MINOR INCIDENT (EMERGENCY) CONTROL - ALL SITE OPERATIVES

STOP WORK IN AFFECTED AREA - CONTROL - NOTIFY



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FIGURE 2. MAJOR INCIDENT (EMERGENCY) CONTROL - LINE MANAGERS

STOP WORK - CONTROL - NOTIFY IF IN DOUBT SEEK SPECIALIST ASSISTANCE

Step 1	 Review Situation Type and location of incident Ensure controls are applied to protect sensitive areas Define whether it is a difficult to control (major incident) or controllable (minor incident)
Step 2	 Identify the controls to be implemented & whether external assistance is required (i.e. emergency situation)
Step3	• Apply additional controls as necessary to protect sensitive areas that are at risk of harm.
Step 4	 Notify relevant personnel Management team Health, safety & environmental team The relevant external organisations (as necessary)
Step 5	 If required await assistance prior to implementation of remedial action
Step 6	 Reporting Complete Incident/Accident Report and Investigation form (HSE 039) immediately and forward to the Health, safety & environmental team.

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• Managing waste

The project team will assess requirements during the pre-start process and develop this environmental plan and SWMP to identify suitable and sufficient measures to achieve the waste hierarchy.

The following guidance is to be used to ensure the hierarchy is applied.

- Order the correct amount use just in time deliveries
- Ensure materials are not delivered damaged or unsuitable
- Reduce the amount of packaging from suppliers
- Establish take back schemes
- Ensure suitable and sufficient handling and storage of materials
- Reuse materials where possible, put off cuts back in storage facility
- Control amount of material leaving the stores
- Ensure work methods are efficient
- Ensure storage facilities are suitable, sufficient and located appropriately
- Ensure plant/equipment is suitable and maintained in good order
- Include waste minimisation at induction
- Include waste minimisation on coordination meeting agendas
- Introduce incentives and, where necessary, discipline measures on site

Where possible waste segregation on site for various waste streams using appropriate containers will be provided.

Where mixed waste containers are used they must be disposed to licensed waste transfer facilities.

The following good practice is to be implemented and monitored on site;

- where possible segregate waste into different types
- clearly mark each skip to identify intended waste
- include waste management best practice in tool box talks
- enforce the site rules regarding waste and operatives duties
- Do not allow skips to become overfilled
- Do not burn waste on site
- Do not allow the waste areas to become littered
- Do not allow unauthorised waste deposits
- Do not put hazardous waste into non-hazardous waste skips

Site management will ensure all waste transfer/consignment notes are correctly completed by the waste carrier including;

- The name of the site and producer of the waste
- Signature of the waste producer
- Signature of waste carrier
- Identity of the waste including correct EWC code and description
- Quantity of waste items
- Name and address of waste producer and carrier
- Date time and place where the waste was transferred

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- Where the waste is being transferred
- State who is the carrier producer or licence holder of the waste
- Waste carrier's registration and or licence management details
- Declaration of that the Waste Hierarchy has been used
- SIC code for our company (41202)

A waste transfer note (WTN) in the case of general waste must be kept for a minimum of two years, in the case of hazardous waste consignment notes (CN) three years. Both must be signed and dated by the relevant parties. Copies wil be held on site.

O List of EWC codes relevant to the construction industry (not conclusive)

EWC	Description
15 01 01	Cardboard and packaging
17 01 01	Concrete
17 01 07	Mixed concrete bricks tiles ceramics
17 02 01	Wood
17 02 03	Plastic
17 04 05	Iron steel
17 04 07	Mixed metals
17 05 11	Cables
17 05 04	Soil & stones
17 09 04	Construction demolition waste
20 01 01	Paper & cardboard
20 03 01	Mixed office waste
20 01 08	Biodegradable kitchen waste

O The construction industry waste colour coded system

Plasterboard and gypsum products must not contaminate with other waste	Gypsum
Asbestos, solvents, mastics, oils, some paint, fluorescent tubes, contact adhesives, diesel, petrol	Hazardous
Clean concrete, bricks, blocks, hardcore or that which does not decompose	Inert
Any waste which cannot be recycled in other bins but not contaminated	Mixed
Any carbonaceous material which is not contaminated	Packaging
Clean clear not etched stained or leaded.	Glass
Only timber/wood products which are not treated with preservatives	Wood
Only uncontaminated examples include rebar cuts, bandings, empty paint containers, electrical wires	Metal

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O Site Waste Management Plan

SWMP implementation of design phase decision(s) taken to minimise on-site waste produced.

Identification of individual responsible for planning and preparing the SWMP and ensuring that it is followed.

Identification of the waste groups and estimated quantities of waste expected at every stages of the work programme/plan.

Identification of waste management options, for each waste group, including reference to the waste hierarchy (reduce, re-use, recycle), on and off-site options. Highlight arrangements to identify and manage any hazardous waste.

Identify and record waste management sites, transactions and contractors for all wastes that require them. Ensure that the contracts are in place and that wastes are handled efficiently, in compliance with legal requirements such as the Duty of Care and waste carrier registration times.

Set targets and procedures for monitoring progress.

Provide suitable site induction, information and training both for in-house and sub-contracted staff, guaranteeing that everyone knows the requirements of the SWMP and what it is expected of them.

Confirmation that the site construction waste is being monitored.

Measure and record the amount of waste per type produced.

Continuously update the SWMP during the construction phase

After the project completion, revise the SWMP, noting all deviations from initial targets, including resource and estimate cost changes.

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O Consent and pre-notification

CONSENT TYPE	TYPICAL WORKS REQUIRING APPROVAL	ENFORCEMENT AGENCY	REQUIRED Yes/No		
Discharge to Watercourse	Effluent discharges to a point source, i.e. pipe, outfall or soak-away, that enters directly or indirectly controlled waters				
Discharge to Sewer	Consent or approval for discharge of effluent to sewer. (Only applies if a septic tank is to be installed)	Water Company	no		
Abstraction Licence	Abstraction of water from a controlled water resource. In Scotland the abstraction of water requires notification only.	Environment Agency	No		
Notification of Dewatering Operation	Abstraction of water from the ground or surface water to assist construction or the extraction of aggregates and minerals.	Environment Agency	no		
Land drainage/flood defence consent	Any temporary or permanent physical works in, adjacent (within 8m), under, or over a controlled watercourse.	Environment Agency	no		
Use pesticide in close proximity to a watercourse	Any application of a pesticide within 10m of a watercourse, including canal, ditch, river or estuary.	Environment Agency	no		
Consent to affect bed of an estuary or sea (FEPA Consent)	Any works that may deposit material onto the bed of an estuary or the sea, including cofferdams, erection of jetties, outfall structures.	Marine Consents Unit: DEFRA	no		
Discharge of Type I or II Listed Dangerous Substance / groundwater regulations	stance / is not covered by Consent to Discharge.		no		
Prescribed Processes	Use of Mobile Concrete Crushers and Screens- operator should have a licence from the planning authority local to its head quarters.	Planning Authority	no		
S61 Consent	Consent S61 Consent is only necessary if a planning or development order or the client requires the contractor to enter into the s61 process.		no		
Hazardous Waste Regulations 2005 Registration	Every site that produces hazardous waste i.e. asbestos, some oils, contaminated land etc.		no		
Waste Management Licences	Where waste material requires disposal, storage or treatment on site or where the off site location does not have permitted licences.	Environment Agency	no		
Waste Exemptions	Schedule 3 of the Waste Management Regulations 1994 permits export/import and use of various surplus or waste materials	Environment Agency	no		

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CONSENT TYPE	TYPICAL WORKS REQUIRING APPROVAL	ENFORCEMENT AGENCY	REQUIRED Yes/No
Licence to affect protected Hedgerows or Trees with Tree Preservation Orders	Where protected hedgerows or trees with tree preservation orders have been identified, and where no detailed planning permission is in place.	Planning Authority	no
Felling licenses	Where more than 5m ³ of timber is to be felled per quarter and no detailed planning permission is in place.	Forestry Commission	no
Listed Building Consent	Works affecting a listed building including installation of noise insulation and remedial works on structure.	Planning Authority English Heritage	no
Scheduled Ancient Monuments	Works potentially affecting a scheduled ancient monument must be consented by English Heritage	English Heritage	no
Planning Permission/ Development Order / Act conditions	Conditions may require certain controls and agreements to be in place and implemented prior to and during the works.	Planning Authority	yes
Closure and Diversion of Public Rights of Way and Roads	Temporary/permanent closures or diversions of public rights of way and roads require consent and notification of alterations prior to works commencing.	Planning Authority	yes
Closure and Diversion of Trunk Roads of Motorways	Temporary or permanent closures or diversions of trunk roads and motorways require consent and notification of alterations prior to works commencing.	Highways Agency	no

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O Significant environmental impacts and controls (Environmental risk assessment) Note: Should any of the impacts listed as 'no' become apparent during the construction phase, works must stop and observations reported to site management. Refer to Pollution Prevention Guidelines (PPG) for assistance with controls where required Definitions :- Environmental Aspect - is the element of the organisations activities products or services that can interact with the environment. Environmental Impact - is the effect or influence caused on the environment by the aspect.

ASPECT	IMPACT	CONTROLS
POLLUTION PREVENTION PLANNING	Pollution can be caused to land, air and water at the point of delivery, especially with fuels, oils and hazardous materials; or when the area is unsuitable for storing that material.	Prepare tool box talks to site workers on deliveries and preventing pollution. Ensure the site boundary is secure and access to site is controlled. Ensure that polluting substances are securely locked away when not being used, e.g. fuel Communicate this plan and control actions to everyone working on site (For more information Reference Page 10 PPG6)
DRAINAGE	Drainage systems act as a pathway to spread pollutants small amounts of oils can spread large distance drains can make pollution invisible and can happen without the site knowing it	Identify existing drainage on the site by type surface water, soakaways, land drains, foul and combined sewers If any pollutant enters a drain, immediately stop the pollution with a physical block, stop the activity causing the pollution, then notify the EA for surface water drains or the local sewerage provider for foul water drains. If there's a spill, accident or emergency, try and prevent pollutants entering other drains. Colour code the existing drainage Blue for surface water Red for foul water Red for combined Seek advice from the environmental regulator before any pumping or disposing of water (For more information Reference Page 21 PPG6)
EXCAVATIONS AND DE- WATERING	Excavations can increase the risk of pollution on site by generating excessive dust, producing silt and silty water spreading contaminated soils finding contamination or objects, such as old fuel tanks; this is often indicated by smells, discoloured soils and oily residues water such as rain or contaminated water run-off, or groundwater entering excavations (ingress), if your water table is high	Contact the EA if you need permission to extract and/or dewater on site, permission to discharge anything to surface waters or groundwater control measures such as a settlement lagoon or tank, silt trap or a grassed area need to be in place before operations commence. To remove water (dewater) from excavations, this is high risk and permits to pump must be in place and directed by the site management. Before any excavations are made be aware of the ground investigations looking out for known contamination of the ground. Check with the Environment Agency and obtain any necessary written consent prior to any dewatering. Use the Permit to discharge HSE028 for control and consent adherence on site. Typical systems include: settlement tanks or lagoons, discharge over grassed areas, through silt socks or hay bales. Check that the point of discharge is to the correct location that is to the sewer, manhole or gulley as set out by your line manager. Check that all couplings and other pipework fittings are secure. Periodically check that any treatment systems are working and that water being finally discharged is clear of silt or solids that may give rise to pollution, and is not causing damage to the bed or banks of any watercourse. Notify your line manager immediately if you notice pollution (muddy water, oils etc) occurring, the discharge causing flooding, any pipework is damaged or connections have broken or are leaking. Do not leave pumping operations unattended for long periods unless authorised to

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		cope with the capacity entering watercourses authorisation of your l (For more information	v. Do not ignore signs t or gullies. Do not tam ine manager. Reference Page 24 PP	hat pollution per with pipev G6)	ping if the receiving sewer or pipeline cannot is occurring, for example muddy water work or discharge points without the
MATERIALS STORAGE, STOCKPILES AND EXPOSED GROUND	Deliveries to site can be a common cause of pollution Vehicles can cause water, noise and dust pollution as they enter and exit site, for example by spreading mud or contaminated material on neighbouring roads.	suppliers and those we drains as possible. Def these delivery times a are well be supervise	orking on site. Ensure a ine times for deliverio re suitable for neighb d	Il deliveries a es to site and ours, i.e. afte	d communicate the requirements to the re made as far away from watercourses and communicate these to suppliers Make sure er 9am. Ensure that all material deliveries
OIL STORAGE, USE AND REFUELLING	Oil is one of the most common pollutants in the UK. Spilt oil can pollute streams, rivers and (if it soaks through the soil and rock) groundwater supplies which can be used for drinking water. Oil is toxic and harmful to plants and animals, and is a threat to their habitats. A small amount of oil can cause a large problem; five litres of oil can pollute an area of water the size of two football pitches.	collision e.g. from site watercourse, ditch of manhole covers or soa run over hard ground groundwater, where a can run down gutterin Avoid storing or using spill and pipelines to Provide drip trays for a necessary security mea	gh risk locations. Don e traffic within 50 met r drainage channel wh k into unmade ground to enter a watercourse tank vent pipe outle g which is connected oil in areas at risk fro break all fuel bowers and asso asures to prevent theft nd/ or lockable valves not in use. This may be	't store oil wh res of a sprin here spilt oil o d where it cou e or soak into et can't be se to surface wa m flooding. Co ociated pipew c, or unauthor where neces e a legal requ	ontainers may float in a flood causing oil to ork to catch any spills or leaks. Take all ised use, by providing suitable locks, sary. Make sure the locks are used when oil
NUISANCEDust, Light, Noise, Insects and vermin, Emissions/smoke, VibrationWhere possible, use machinery or plant with noise control measures e.g. silencer covers. Ensure that potential to cause nuisance through exhaust emissions is min plant to prevent black smoke and positioning mobile or fixed plant away from si Comply with any restrictions on operating hours or emissions set out in the plann our neighbours, explain what we are doing and try to find solutions before probl temporary lighting where absolutely necessary. Only use temporary lighting whe necessaryDefine access routes to and from site to prevent nuisance. Make arrangem leaving the site on delivery vehicles use of Anti-vibration mountings should be f impacting equipment where practicable. Keep haul roads as smooth as possible to reduce vibration impacts caused by heavy plant movements (For more information Reference Page 39 PPG6)		exhaust emissions is minimised by maintaining ixed plant away from site boundaries. ons set out in the planning consent. Talk with d solutions before problems arise. Only use temporary lighting where absolutely isance. Make arrangements to reduce mud n mountings should be fitted to rotating / s as smooth as possible and maintain them			
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CEMENT, CONCRET GROUT		Cement, concrete and grouts are highly alkaline and corrosive and can cause serious pollution to the ground and watercourses. Water wildlife, such as invertebrates and fish, are very sensitive to changes in pH (acid/alkaline) levels. Whereas oil in water is easy to see, changes to pH are not, so pollution can occur for some time before the extent of damage to wildlife is noticed	 Concrete and cement mixing should be sited on an impermeable designated area, at least 10 metres away from a watercourse or surface water drain, to reduce the risk of run-off entering watercourse. Surplus dry concrete, cement and grout should be used elsewhere on site if possible, or as inert rubble; if not, it will need to be disposed of offsite. Equipment, such as chutes, portable mixers, barrows, pump lines, shovels, should be washed out in a designated area that has been specifically designed to contain wet concrete/wash water e.g. designated skip. Concrete mixing and delivery lorries should return to the batching plant for washout. Excess concrete should be sent back to the batching plant. With design concrete this may not be possible, a designated area to allow the concrete to cure without polluting the ground or watercourses will need to be established. Ensure all cement bags are sealed after use, stored appropriately to prevent leaks or dust (preferably in a waterproof. Do not over-order materials; you'll either have to store them, or pay to have them taken away. Consider timing of deliveries; it is more likely to have waste cement and concrete if it's delivered at the wrong time. Identify all watercourses, gullies and drains prior to commencing work. Store bulk and bagged cement and concrete additives at least 10 metres away from watercourses, gullies and drains. Undertake mixing/batching well away from watercourses and drains. Use only designated areas for concrete washout. Where necessary protect nearby drains against washout and water running into them. NOTIFY your manager IMMEDIATELY if you see any concrete spillages or concrete washout likely to cause pollution. Do not hose down spills of concrete or cement into surface water drains. Do not allow readymix trucks to washout anywhere other than in areas designated for the purpose. Do not wash off any tools or plant in watercourses. Do not allow mortar wash out to be tipped directly onto the ground - allow to set and remove			
LAND CONTAMI	INATION	Common pollutants especially on brownfield sites include asbestos, hydrocarbons such as oils and fuels and hazardous heavy metals and solvents. They might be present in either the soil or groundwater or both.	contaminants and the measures required to manage them Ensure that we work to agreed methods to			
INVASIVE SPECIES	WEEDS	Some plants in the UK are designated as invasive non-native species; these are plants that don't naturally occur in the UK but, when introduced, establish themselves very quickly. They have a significant impact on construction	competent expert (e.g. an ecologist, or Health, Safety and Environmental manager). We must contact the EA if we propose to use herbicides to manage invasive plants in or near watercourse. We have a duty of care to dispose of waste responsibly. Contact the EA if you need advice on how to dispose of			
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	sites as they spread easily, are difficult to eradicate, can damage structures, contaminate soil and also damage the natural ecology in your area. Invasive plants can be either land or water based e.g. Japanese Knotweed, Himalayan Balsam and Giant Hogweed. The owner / occupier of a site is required by law to manage and prevent the spread of invasive plants. If we knowingly spread, or allow these plants to spread, through our activities we will be committing an offence	 contact site management Do not carry out any works within 7 metres of the suspect plant and engage specialists for instructions. Do not excavate or move any soil from within 7 metres of a Japanese Knotweed plant without instruction. Do not track plant or vehicles over the area. Do not stockpile potentially contaminated material within 10 metres of a watercourse or drain. Do not carry out any works in the immediate area and engage specialists for instructions. Do not disturb the seedpods. Do not move soil that may contain seeds or other plant material without specific instructions. Do not carry out any works in the immediate area and engage specialists for instructions. Seek medical advice if you have been in contact with the sap. Wear protective clothing before touching the plant. Do not handle the plant until further advice is taken. Do not move soil that may contain seeds without specific instructions. (For more information Reference Page 45 PPG6)
CHEMICALS AND HAZARDOUS SUBSTANCES	All chemicals and hazardous substances or materials we store and use such as oils, cleaning products, solvents and pesticides could cause pollution if they spill onto land, enter surface waters or groundwater or are released into the air. If we cause or allow pollution to occur we may be prosecuted and fined.	'Safety Data Sheet (SDS)' should be provided with chemicals and hazardous by the supplier, or manufacturer. If you receive a chemical without an SDS, contact the supplier to find out whether or not they have to provide one. Follow these instructions carefully as they tell you how to store, use and dispose of chemicals and hazardous materials safely. Attempt to replace hazardous products with non-hazardous alternatives. Ensure that a responsible person is designated to control the issuing of chemicals and hazardous materials Store all chemicals and hazardous substances away from areas where there is risk of damage from impact or collision e.g. site traffic Ensure all chemicals and hazardous substances are stored securely, stored on impermeable surfaces, labelled, and that containers are sealed when not in use, inspected regularly and fit for purpose i.e. free from damage, no leaks Dispose of any damaged / old containers in line with your duty of care requirements, these may be considered hazardous waste Develop incident / emergency plans to help you deal with spills and train individuals how to use them from the SDS sheets. Ensure that incident / emergency procedures. Lock storage facilities when not in use. Limit orders to what we need and limit storing substances. Never wash any spilt oil, chemicals or other pollutants away into drains or into the ground or use detergents to clean up the oil; you could cause a more serious pollution incident (For more information Reference Page 49 PPG6)
WASTE MANAGEMENT	Poor waste management is a common cause of pollution at construction and demolition sites; failing to comply with 'duty of care' leading to illegal disposal of waste such as fly tipping, illegal disposal such as burning of	Everyone on site must comply with the waste 'duty of care'; store your waste safely and securely on site e.g. prevent wind blown materials such as plastics leaving the site; covered skips and bins will assist in this prevent any liquid wastes leaching from bins or skips - this includes dry wastes that may become wet, e.g. through exposure to rain; check waste storage has no holes or damage develop a site procedure for selecting and managing waste contractors, those that remove your waste, to ensure that you meet your duty of care requirements only pass waste to authorised persons and

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	waste on site causing air pollution, or emissions caused by the transportation and break down of the waste in landfill sites.	companies have appropriate duty of care documentation, i.e. completed waste transfer notes or consignment notes for hazardous waste for each load of waste removed from the site prevent hazardous wastes being mixed with other hazardous wastes or non-hazardous wastes keep all waste transfer notes and consignment notes for 2 and 3 years respectively Ensure materials aren't over- ordered to avoid waste in the first place. Lock waste storage areas, bins and skips. (For more information Reference Page 52 PPG6)
SILTY WATER	Poor management of silt and silty water is a major cause of serious pollution incidents from construction sites Silt for these purposes is fine inert sediment derived from soil and rocks. Silt pollution can: damage and kill aquatic life by smothering and suffocating reduce water quality cause flooding by blocking culverts and channels	Use of cut-off trenches, vegetation corridors adjacent to waterways to act as 'buffer strips' and reduce the amount of exposed ground for runoff. Plant, wheel and boot washing Run-off should be collected in a sump, with settled solids removed regularly and water recycled and reused where possible. Any excess water should be discharged to foul sewer with prior permission from your local sewerage provider or tankered off site for authorised disposal. Do not strip all site of vegetation when not building in that area, limiting the amount of run off
INCIDENT RESPONSE	Although careful planning and preparation reduces the risks of a pollution incident, accidents can still happen. If site workers know how to deal with an incident, and can use the necessary equipment, they can help prevent the pollution spreading and minimise damage to the environment.	Train site staff and contactors how to use the plan and equipment such as spill kits - using tool box talks Test our plans When working near water include daily visual inspections into your incident planning. Reporting incidents Report all pollution incidents as soon as possible to site management or the EA Hotline: 0800 80 70 60 (freephone, 24 hour service) If we do not report an incident and it is later traced back to our site, this will be taken in to account when the EA decide what enforcement action to take
EMISSIONS TO AIR:	Activities generate air pollution above regulatory control levels or cause a public nuisance	Keep surfaces swept and damp down with water at regular intervals. Minimise drop heights into haulage vehicles. Ensure cutting and grinding operations are adequately shielded or wetted. Sheet lorries carrying dry materials off site. Keep to site speed limits to minimise dust generation. Implement wheel washes, for appropriate vehicles, where appropriate. Store fine, dry materials within buildings or provide adequate protection from the wind. Position silos and stockpiles away from residential areas or watercourses. Clean up or damp down any spillage of dry dusty materials.
EMISSIONS TO LAND:	Previous land use caused any contamination. Storage of potential pollutants, i.e. diesel fuels, hydraulic oils etc.	Fuel stored in a double skinned tank away from sources of heat and flame. Drip trays used when refuelling
RESOURCE USE	Will there be excessive resource consumption from construction activities, excessive energy consumption leading to CO ² emissions, poor air quality, and excessive water	Envirocabins are used on sites where possible to reduce waste and energy usage. Staff are informed to conserve energy where possible by switching off lights, equipment and site machinery when not in use and to report any damage that may be discovered. Staff are required to follow the company handbook when selecting private vehicles with sensible emissions. Staff are informed to conserve water where possible by turning off taps when not in use and reporting any leaks or damage that may be discovered.

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	consumption leading to demand upon natural water resources?	Use any offcuts of materials, monitor skip usage and what is being thrown away.
ECOLOGY:	Are there any protected Wildlife or natural features in or around the site (bats, birds, reptiles, snakes, amphibians, badgers Great Crested newts, trees, hedges, flowers etc.)	Survey completed for site
TRAFFIC MOVEMENTS:	Public highways suitable to accommodate anticipated construction vehicles (narrow roads, junctions, low bridges, local traffic incl. public transport) public amenities (hospitals, schools etc)	Refer to TMP

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9. Quality

• Quality issues

Specifications and technical information for the project will be assessed by the Building Control Authority

All substructures will be constructed as designed by a structural engineer

O Quality objectives

The development will be constructed in accordance with the approved register of drawings and document to a quality which accords with good building practice, standards laid down by the NHBC or Zurich, and the requirements of the CDM Regulations.

The register of documents and drawings will be checked on issue with a master copy retained in the regional office.

The Site Manager, will take specific responsibility to ensure that the scheme is built in accordance with the CDM Regulations, LIMS Requirements, specific requirements of this PMP and approved specifications.

• Procedures and work instructions:

Company procedures are clearly set out in the Construction section of LIBMS and will be implemented in the building of this project

The Site Manager, will ensure that the works are carried out in accordance with the approved drawings. Work will be initiated by instructing contractors to carry out works in accordance with programme, LIMS, orders, drawings and specifications issued.

Approved drawings will be issued by the Contract Manager, who will update as necessary the contract drawing register. The Site Manager will maintain a copy of the current drawing register in the site office.

O Inspection and testing

New Build

New Build works shall be carried out in accordance with NHBC standards, or other where specified. The Inspection and Testing regime will generally be in accordance with nationally agreed NHBC inspection and hold points, and site management will carry out stage checks in accordance with LIMS. Site checks shall be carried out in advance of any NHBC/third party inspection.

Where items require rectification these shall be carried out immediately as part of the site operation.

Other Inspection and Test plans shall be prepared by the Contracts Manager as required for:-

• Screed, Mortar and Concrete - (Ready Mixed to be sourced and test certificates to be obtained from supplier/contractor)

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- **O** Special requirements as identified in the specification.
- Activities agreed at the Contract Commencement Meeting.
- Activities identified during the construction stage.

Site management will implement stage checks and material call off/delivery schedules in accordance with Lovell Integrated Business Management System which will be monitored by the Operations and Contract Manager. Consideration has been given to the quantity and method of delivery and the following restrictions have been noted (i.e. size of delivery vehicle, frequency and requirement of part loads on bulk orders).

The Contracts and Site management will update and maintain the build programme, stage check and material call off delivery schedules which will all be displayed in the site office.

The build programme will be as the copy attached. Any amendments will only be made with the full agreement of the construction team.

• Meetings:

The following meetings will be held in the Site Manager's Office:

Regular contractor coordination meetings, chaired by the Contracts Manager, and attended by relevant contractors. The date for the first meeting will be agreed at the monthly job review. Internal job review meetings chaired by the Contracts Manager/Site Manager and attended by Job Surveyor will be held monthly following initial handover from estimating team. Design coordination and progression meetings with all relevant parties and specialists as required, to fully develop the design. The first meeting will be held (insert agreed date).

• Standard forms to be used during the project:

The LIMS Quality forms agreed by the construction team for use on this project are as follows;

Quality Forms

- QO 01 Project Directory
- QO 02 Drawing Register
- QO 03 Communication sheet
- QO 04 Build Stage Checks
- QO 05 Defects List
- QO 06 Build Complete Inspection
- QO 07 Material Delivery Schedule
- QO 08 Material Bulk Order Monitor
- QO 09 Material Plant Weekly Return
- QO 10 Contract Report
- QO 11 Subcontractor Progress Meeting
- QO 12 Monthly Job Review
- QO 13 Weekly Diary
- QO 15 Client Handover Certificate
- QO 16 New Build End of Day Checklist
- QO 17 Complaints Log

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O Handover Procedures:

Properties are to be brought to completion by the Site Management before being offered to the Client's Representative.

All plots are to be inspected jointly by Lovell's Representative and the Client's Representative/Purchaser and outstanding items recorded.

Following the inspection and completion of any works arising, the property is available for handover, and is evidenced by the signing of a Handover Certificate, by the Client's Representative/Purchaser.

At this time meter readings will be taken and a handover pack containing all the relevant details appropriate to the property will be handed to the Client's Representative, including the information card. This card will contain information we are required to provide to the occupant under the CDM Regulations. The NHBC card complies with this requirement.

The Health and Safety File will be completed and presented prior to practical completion of the works.

• Maintenance:

The objective of this procedure is to ensure property maintenance is carried out in accordance with the Company's Contractual, NHBC or other obligations under Common or Statute Law.

The maintenance on the development will occur as follows:

While still on site, site management will ensure day-to-day defects are dealt with as they are reported. Following completion of the site, the day-to-day maintenance will be carried out by Lovell Customer Care Department, who should be contacted by the Client. All relevant information will be passed to Customer Care Department to enable this procedure to take place.

6/12 month defects will be the responsibility of the Customer Care Department. These are to be dealt with as laid down within the Lovell Integrated Business Management System and the NHBC Buildmark Requirements or Contract Documents. On completion of the project the Contracts Manager will ensure the handover is recorded on Coins with the customer care co-ordinator and update the inspection log to ensure defects liability periods are recorded.

On completion of any items raised by the representative/tenant, confirmation, by signature, that these works have been carried out will be required.

• Roads and Sewers:

Site management will ensure that roads and sewers for adoption and upgrading are completed in accordance with details and specification and placed on maintenance by the Local Adopting Authority. The Contracts Manager will be responsible for ensuring that adoption takes place at the end of the maintenance period, where applicable.

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SITE RULES

All visitors must report to the site office on arrival.

All are to sign in the site attendance register on arrival and sign out on departure.

All site employees will attend a site specific induction and are required to confirm they understand the requirements of risk assessments and associated method statements provided by their company.

Any unsafe act or condition observed or encountered is to be reported to site management.

Safety helmets, high visibility vests or jackets, suitable safety footwear and suitable gloves* are mandatory on this site at all times. All safety helmets and hivis vests or jackets worn on site are to display the Lovell logo - other Company logos are not permitted.

All other personal protective equipment must be worn when required. *The wearing of suitable gloves is a mandatory requirement on this site unless risk assessment determines otherwise.

Where CoSHH assessment identifies use of respiratory protective equipment (RPE), wearers must be appropriately face fit tested to ensure that RPE is of the correct size and type.

Site hours are from 8am to 4.30pm Mon/Fri. Working outside of these hours is not permitted unless by prior agreement.

All accidents, incidents and learning events, no matter how minor must be reported to the site management.

Smoking is only permitted in areas designated by site management.

All on site must be considerate of others, particularly the general public, and refrain from using foul or lewd language or aggressive, insulting behaviour.

All people entering the site are to be made aware of the emergency procedures, first aid arrangements, escape routes on the site and the site assembly point.

All access and emergency routes must be kept free from obstruction at all times All site employees must co-operate in keeping the site tidy and clear away debris, waste, tools, and materials at the end of each work shift. This includes the site welfare facilities.

No site employee is to interfere, damage or abuse any safety sign or item provided in the interests of site safety including fire safety equipment.

No one is to remove or interfere with any scaffold structure/work platform unless they are trained, competent, and authorised to do so by site management.

The consumption or possession of alcohol or illegal drugs on the site is strictly prohibited. No person is to work on this site having consumed alcohol or illegal drugs. Those suspected of being under the influence of alcohol or illegal drugs will be excluded from the site. The use of medicines is to be notified to the site management.

Where there is a risk of serious or imminent danger or wild animals are discovered on site, work activities must stop immediately and be reported to site management - work must not continue until instructed to do so.

240v tools are not permitted on site. All equipment is to be 110v or less and is to be tested every 3 months. Battery chargers may be used in site accommodation.

Halogen lighting is not permitted on site; alternatives are to be used such as













protected fluorescent lighting.

Permits to work are required for all hot works, excavation work & confined space entry. Suitable, serviced fire extinguishers must be available in the work area whilst carrying out hot works.

Burning of waste and other materials is not permitted on site at any time.

SITE HEALTH & SAFETY STARTS HERE

SITE RULES

The wearing of earphones is not permitted on site. Radios and mobile phones may be used at site management's discretion. Mobile phones are not to be used whilst carrying out work activities

Operators of plant and equipment must be trained and competent for the equipment they are using and mobile plant operators must hold current CPCS certification. These qualifications are to be produced at induction to the site management and on request. The use of mobile phones during the operation of plant is forbidden.

It is strictly forbidden to ride on any plant as a passenger.

Operators of dumpers must not remain on the machine whilst it is being loaded and must wear the seat belt whilst in motion.

All designated traffic/pedestrian routes are to be followed at all times.

Site employees are to report any defects to plant or equipment to their manager immediately; this includes any fire safety equipment

Reversing long distances is to be avoided where possible; if unavoidable it must be done with the assistance of a banksman

All footpath and roads, both on and off the site, shall be maintained in a condition which is satisfactory for foot and vehicular traffic.

Vehicles must be parked considerately and must not obstruct public footpaths

No site deliveries are to be made during periods of peak pedestrian and vehicular traffic to local schools. All suppliers and their drivers are to be formally notified of this.

All manual handling operations are to be assessed. The use of mechanical aids must be considered.

All materials are to be stored in agreed areas where they will not obstruct site access. Materials should not be stored in any public area.

Should any Asbestos containing materials (ACM's) be discovered or suspected, works must stop and the incident reported to site management.

Creation of airborne dusts is to be prevented where practical by substituting materials, using different processes and off site manufacturing.

Where prevention is not possible, controls should consider either on-tool extraction or the use of water to damp down dusts, depending on the process and tools to be used. Where practical carry out work in open air. Suitable respiratory protective equipment must also be worn. Wearers must be appropriately face fit tested to ensure that RPE is of the correct size and type.

Any step ladders or ladders intended for use must be justified by risk assessment to ensure other access equipment has been considered. Step ladders must only be used for short duration, low risk works, and operatives must maintain 3 points of contact. Domestic grade equipment is not permitted. Larger materials and tools are not to be carried up ladders.

Plant & equipment must be fitted with appropriate silencers that are properly used and maintained. Plant must not be left idling unnecessarily. Where necessary for warming up purposes then the plant must be situated to minimise nuisance to others.

This project is registered with the Considerate Constructors Scheme and the code of conduct must be followed

Waste materials to be placed into the relevant container provided - use off cuts where possible.



Protect the environment Reduce - Reuse - Recycle

All visitors

must report

to site office







A

Warning

Site traffic







Ear protection

must be worn

where required

Consideration must be given to the environment e.g. air, ground and water pollution - all observations are to be reported to site management Unsafe and inappropriate behaviour may result in dismissal from site

SITE HEALTH & SAFETY STARTS HERE