



Risk Assessment and Method Statements (RAMS)

At

Cheetham Hill
Manchester

Client: MSV Housing

Reference: 33716-SUT-ZZ-00-HS-G-7001

Date: November 2023

Liverpool Head Office
18-20 Harrington Street
Liverpool
L2 9QA

T: 0151 227 3155
E: enquiries@sutcliffe.co.uk
www.sutcliffe.co.uk

Manchester Office
T: 0161 817 5180

North Wales Office
T: 01978 664 071

London Office
T: 020 8016 4320

 @Sutcliffe_1985

 Sutcliffe1985

 Sutcliffe

Sutcliffe is the trading name of Sutcliffe Projects Limited a limited company registered in England and Wales No. 04287238.



SUTCLIFFE INVESTIGATIONS

Risk Assessment and Method Statements (RAMS)

Document Control Sheet

Report Reference: 33716-SUT-ZZ-00-HS-G-7001

Issue: P01 Date: November 2023

Prepared by:

Checked/Approved by:

Name:	J Smith	Name:	D Bowen	W G Baldwin
Title:	Geo Environmental Engineer	Title:	Senior Environmental Scientist	Director
Qualifications:		Qualifications:	BSc (Hons) FGS	BEng (Hons) CEng MStructE AIEMA FGS

Revision History:

Rev.	Date	Description	Prepared	Checked	Approved
P01	November 2023	RAMS	JS	DB	WGB
Signatures:					

This document has been prepared by Sutcliffe Investigations within the terms of the Contract with the Client to whom this document is addressed. Sutcliffe Investigations disclaims any responsibility to the Client and others in respect of matters outside the scope of the said contract. No person other than the Client or agreed assignees shall rely on it in any respect and Sutcliffe Investigations shall owe no duty of care to any such third party.

Table of Contents

1	Introduction	1
1.1	Scope of Works	1
1.2	Personnel	1
1.3	Environmental Considerations	1
2	Safe System of Works to be Adopted (Sequence of Works)	3
2.1	Dynamic Window Sampling	3
2.2	Machine Excavated Trial Pits	5
2.3	Works in Areas with Invasive Species	7
2.4	Special Measures during COVID-19	9
3	Plant, Equipment and Welfare Arrangement	10
3.1	Plant and Vehicles	10
3.2	Equipment	10
3.3	Personal Protective Equipment (PPE)	10
3.4	Welfare	11
3.5	Services	11
4	Emergency Procedures and First Aid Arrangements	12
4.1	Emergency Contact	12
4.2	Out of Hours Emergency Contact	12
4.3	Emergency Utility Contact Information	12
	Any contact with utilities MUST BE report to Sutcliffe office.	12
	Emergency numbers for damage to utilities are located on service drawings	12
4.4	Nearest Hospital Address	12
5	Audit and Review Procedure	13
6	Variations	14
7	Site Contacts	15
8	Risk Assessments	16
9	Acceptance Sheet	17
	Appendices	A
	Appendix A – Health and Safety Accreditation	A

Appendix B – Route to Closest Hospital	B
Appendix C – Environmental Risk Assessment	C
Appendix D – Invasive Species Reference Sheets	D
Appendix E – Service Plans	E
Appendix F – Calibration Certificates	F
Appendix G – Insurances	G
Appendix H – Manual Handling	H
Appendix I – Operatives Qualifications	I
Appendix J – Plant Specifications	J
Appendix K – COSHH sheets	K
Appendix L – Leptospirosis	L
Appendix M – COVID-19 Requirements for Construction Sites	M
Drawings	N
Drawing Ref. – 33716-SUT-ZZ-00-DR-G-7251 (N) & 33716-SUT-ZZ-00-DR-G-7252 (S)	N

1 Introduction

1.1 Scope of Works

The site address is as follows:

Alderford Parade / Heatherdale Drive, Cheetham Hill, Manchester, M8 0TF.

The proposed start date for the work is 27/11/2023 and subject to the acceptance of the method statement and RAMS. The expected duration of the works is 5No. days.

The works are required in order to provide a geotechnical and chemical assessment of the site and site investigation within the designated areas to include:

-  Setting out of Trial Pit and Borehole locations by Sutcliffe engineer.
-  The sinking of 20No. window sample boreholes to depths of up to 6.00m.
-  Excavating 5No. machine excavated trial holes to depths of up to 3.50m.
-  Undertake in-situ strength testing within the boreholes.
-  The recovery of disturbed and undisturbed soil samples.
-  Undertake logging of the ground conditions encountered within the trial pits and boreholes as per BS5930 -2015.
-  The installation of in-situ ground gas / groundwater monitoring standpipes with lockable covers within the boreholes.
-  Monitoring of the boreholes on a fortnightly basis for methane, carbon dioxide, oxygen, water levels and possibly taking of water samples.

1.2 Personnel

Personnel Type	Company	Name
Supervisory staff	Sutcliffe Investigations	Michael Wiggins
Drilling Contractor / UXO Contractor	Vincent Cameron Drilling	TBC
Excavation/Plant Contractor	H&C Plant Hire Ltd	TBC

Certification from site personnel is appended where available and will be checked on site before works commence.

1.3 Environmental Considerations

All surplus materials from excavations or unused materials to be mounded over excavations to allow for future settlement. Where this is not possible material must be removed from site and disposed of at a licenced facility. In some cases, skips will be made available.

Where possible ensure that reinstatement is carried out on all excavations and any ruts, holes or damage to the ground surface from plant movements and operation.

Upon departure from site ensure that all adjoining highways and footpaths are cleared of debris and left clean.

Any areas that have been temporarily fenced or otherwise delineated in order to preserve flora and/or fauna will not be entered without an appropriate ecological certificate being in place.

On no account shall areas of Japanese Knotweed, Giant Hogweed or Himalayan Balsam be entered into. Examples of the plant shall be pointed out prior to work commencing, while there is no evidence of knotweed on site, this is standard protocol followed by Sutcliffe Investigations engineers on all sites. Full information is found in Appendix J

Be aware of the possibility of used syringes and needles being found. Should syringes be found then the main contractor will be informed immediately and removed by themselves prior to continuing the works. While there is no evidence of used syringes and needles being found, this is standard protocol followed by Sutcliffe Investigations engineers on all sites.

Leptospirosis, commonly known as Weil's Disease is spread in the urine of infected animals most commonly rats, mice, cows, pigs and dogs. Work areas most likely to be at risk are during refurbishment or demolition works with areas of rat infestation high risk also . Other potential situations include works near to canals, rivers or sewers.

When works are needed to be carried out in high-risk areas the use of disposable gloves and good basic hygiene including regular handwashing and avoiding hand to mouth/eye etc contact are mandatory. Also taking rest breaks, including meals and drinks, away from the work area are advised. Full information is found in Appendix L

Be aware of immediate surroundings such as adjacent live plant and traffic.

Always be conscious of the environment and bring to the attention of the relevant parties' issues that may need to be addressed such as potential pollution of water courses, destruction of habitat as a result of the works.

2 Safe System of Works to be Adopted (Sequence of Works)

2.1 Dynamic Window Sampling

Site Induction

Before leaving the office, the following information will be compiled:

-  Setting out of borehole locations.
-  Possession of all relevant service information.
-  Details of site access / egress.
-  Permit to drill for the area (if required).
-  Provision / Performance of CAT survey.

Upon arrival at works area, park in a safe position and report to the supervising Sutcliffe site engineer for full brief on RAMS and tool box talks.

Brief all site personnel on intended method of working and any hazards particular to the area/method of working and establish a system of communication.

Manoeuvre over proposed borehole location and erect window sampling drilling rig in a safe manner.

Health and Safety

The following hazards are identified as possible during the Dynamic Window Sampling exercise:

Hazard Code	Hazard Description
H1	Buried Services.
H2	Overhead services/obstructions.
H3	Drilling rig, risk of being struck and trapped by weights and/or rig.
H4	Inexperienced Lead Driller.
H5	Working on the rig resulting in fall from height.
H6	Intrusion of unauthorised personnel into the working zone.
H7	Settlement of ground on completion of works.
H8	Pollution from excavated spoil and rig fluids.

The control measures necessary to minimise risk are described in Section 8 herein:

Control Measure	Hazard Code
The Lead Driller shall be in possession of all relevant drilling qualifications.	H4
The Sutcliffe supervising engineer shall be in attendance through all excavations and a system of communication set up prior to commencement of works.	H3

Control Measure	Hazard Code
The machinery will be set up in a manner that is safe for operating personnel and the general public taking into account the potential trapping points from slewing and tracking of the drilling rig. This may necessitate the provision of fencing that shall be set up at a distance that is sufficient enough to allow safe working and conspicuous of third parties.	H3 / H6
Equipment arisings shall be placed so as not to present a hazard to the operatives or general public, all spoil at least 2m from the edge of the borehole	H5
The surface material shall be heaped in separate piles to avoid mixing (topsoil, concrete, etc.) where possible. The spoil should be placed as to not cause contamination of any water courses.	H8

Relevant health and safety certificates are presented in Appendix A.

Scope of Works

The drilling works will be carried out using a conventional DANDO Terrier type drilling rig. The driller will be British Drilling Association (BDA) accredited and drilling progressed as per safe working practices guidelines. The general method of work being as follows:

-  Scan for buried services using a Cable Avoidance Tool (CAT)
-  A hand dug pit up to a minimum of 1.2m is required before drilling commences to ensure any services are avoided.
-  The sampler will be advanced and removed materials will be deposited by the side of the window sampling drilling rig.
-  Standard Penetration Tests/Cone Penetration Tests (SPT/CPT) will be carried out in the boreholes at close and regular intervals to the methodology given in BS5930.

Upon completion of the borehole a 50mm HDPE ground gas / groundwater monitoring standpipe will be installed in selected boreholes to a specification given by the supervising Sutcliffe engineer based upon the findings of the borehole. The borehole will be fitted with a steel lockable cover.

To avoid direct contact from cement concrete and bentonite, wear appropriate PPE at all times including installation of ground monitoring installations and reinstatement.

Following completion of boreholes, the surplus materials will be removed from site and any disturbed areas made good.

Plant specifications are presented in Appendix J.

2.2 Machine Excavated Trial Pits

Site Induction

Before leaving the office, the following information will be compiled:

-  Setting out of excavation locations.
-  Possession of all relevant service information.
-  Details of site access/egress.
-  Provision / Performance of CAT survey.

Upon arrival at works area, park in a safe position and report to the supervising Sutcliffe site engineer for full brief on RAMS and tool box talks. Brief all site personnel on intended method of working and any hazards particular to the area/method of working and establish a system of communication during excavations and back filling activities.

Health and Safety

The following hazards are identified as possible during the trial pitting exercise:

Hazard Code	Hazard Description
H1	Buried Services.
H2	Overhead services/obstructions.
H3	Excavator, risk of being struck by machine and trapped by slewing parts.
H4	Inexperienced excavator driver.
H5	Collapse of sides due to unstable ground/addition of water from testing/ overburden by dug spoil resulting in fall of persons and instability of the excavator.
H6	Working too close to the edge of excavation resulting in fall from height.
H7	Intrusion of unauthorised personnel into the working zone.
H8	Settlement of ground on completion of works.
H9	Unsecured quick release excavator buckets.
H10	Pollution from excavated spoil and excavator fluids.

The control measures necessary to minimise risk are described in the Risk Assessment in Section 8 herein:

Control Measure	Hazard Code
The mechanical excavator operative shall possess a relevant skill card (CPCS).	H4
The Sutcliffe supervising engineer shall be in attendance through all excavations and a system of communication set up prior to commencement of works.	H3
The machinery will be set up in a manner that is safe for operating personnel and the general public taking into account the potential trapping points from slewing and tracking of the excavator. This may necessitate the provision of fencing that shall be set up at a distance that is sufficient enough to allow safe working and conspicuous of third parties.	H3 / H7
The supervising Sutcliffe engineer shall ensure that the excavator drivers are aware that safety pins must be used on all semi-automatic quick release button mechanisms.	H9

Control Measure		Hazard Code
Equipment arisings shall be placed so as not to present a hazard to the operatives or general public, all spoil at least 2m from the edge of the trial pit.		H5
The surface material shall be heaped in separate piles to avoid mixing (topsoil, concrete, etc.) where possible. The spoil should be placed as to not cause contamination of any water courses.		H10
The supervising Sutcliffe engineer on the ground shall:	Keep within the safety zone while the excavator is operating.	H6
	Not walk along the side of the pit.	
	Only approach the end of the pit when the driver has indicated it is safe to do so.	
	Keep away from the edge of the excavations and not stay near the edges longer than necessary when required (i.e. when placing measuring staff).	
	Not use the buckets as a working platform.	
	During any potential unstable excavations it is recommended that a weighted tape measure and stick are used to ensure a safe distance from the edge is maintained by the supervising engineer.	

Note: No person shall enter the excavation.

Relevant health and safety certificates are presented in Appendix A.

Scope of Works

The general operations are to be carried out as follows:

-  Scan for buried services using a Cable Avoidance Tool (CAT)
-  The trial pitting will be carried under the full-time supervision of qualified Sutcliffe Engineer.
-  The trial pits will be excavated using a JCB 3CX / tracked excavator using a 700mm bucket.
-  At no time will anyone enter the pits, with logging taken from the trial pit arisings. Care will be taken to monitor the stability of the trial pit sides prior to taking depth readings. All other site personnel will be kept away from the work area.
-  Upon completion of the testing the pit it will be backfilled using the arisings that will be compacted in layers to the ground surface using the compactive effort of the bucket. All surplus materials will be mounded over the trial pit to allow for future settlement.
-  No excavation is to be left open overnight.
-  Sutcliffe will maintain communication with the site manager to ensure if any undue overtime settlement resulting from the works occurs and shall make good the area if required.
-  All necessary PPE equipment will be worn by all site personnel.
-  Site personnel not concerned with the works will be kept away by verbal command.
-  Edge protection is not envisaged for these works but will be able if needed.

Plant specifications are presented in Appendix J.

2.3 Works in Areas with Invasive Species

It is an offence under the Wildlife and Countryside Act 1981 to plant or cause the spread of certain species. These include Japanese Knotweed and Giant Hogweed.

Himalayan Balsam is also considered to be an invasive plant by the Environment Agency and its spread should not be facilitated.

Species Information

All of the three species are particularly prevalent along the banks of rivers and streams and in areas of damp ground.

Apart from man, watercourses are the principal pathway for the spread of these species.

See Appendix D for details of each invasive species.

Human Health Hazards

Of the three plant species the only plant which poses a risk to human health is Giant Hogweed.

The sap from this plant contains a group of chemicals known as furanocoumarins.

These chemicals can cause severe blistering/burns if contaminated skin is exposed to sunlight. This reaction can recur for many years. Contact with the eyes can lead to temporary or permanent blindness.

Exposure to the sap can take place during contact with the stems or leaves. The stems and the edges and underside of the leaves bear fine hairs which contain the sap.

Environmental Hazards

The spread of Japanese Knotweed and Giant Hogweed is against the law and we need to guard against this problem.

Working On Site

If possible, all intrusive works and vehicle routing should avoid any areas inhabited by invasive species by a nominal margin of 15 metres.

Where working in closer proximity is unavoidable, every effort must be made to avoid tracking soil by vehicle wheels which could spread seeds and rhizomes.

Where contaminated areas cannot be avoided wheel cleaning measures should be put in place to prevent material being inadvertently taken off site.

Exploratory Holes

As far as possible exploratory holes should not be excavated within 7m of a stand of Japanese Knotweed.

Where a 7m buffer zone is not possible then all materials arising between ground level and 3m below ground should be considered potentially contaminated with fragments of rhizomes.

No exclusion zones have been recommended for stands of Giant Hogweed or Himalayan Balsam but it would appear to be sensible to adopt where site conditions allow the same 7m zone used for Japanese Knotweed.

Where a 7m buffer zone is not possible e.g., on sites with widespread infestations, then all materials arising between ground level and 1m should be considered potentially contaminated with seeds.

Personal Protective Equipment

On sites containing either Japanese Knotweed or Himalayan Balsam or both no special PPE will be required. Normal PPE will suffice.

Where human contact with Giant Hogweed is unavoidable, staff should wear a hooded disposable overall impermeable gloves and a full-face visor.

Plant hairs can penetrate light fabrics.

Care should be taken when removing PPE as deposited sap may remain active for several hours. Cut material also remains active for several hours.

Sample Collection, Handling and Carriage

Samples should be collected in the normal containers required for geotechnical and geo-environmental testing.

The receiving laboratory should be informed which samples may contain fragments or seeds of invasive species.

The sample labels should notify persons handling the samples of the environmental hazard and that special disposal arrangements will be required.

Any spilled material must be gathered up and contained to await special disposal.

All bulk samples should be double bagged and tied (and labelled) to reduce the risk of spillage. Similarly, all tub samples should be bagged and tied (and labelled).

Samples to be transported in cool boxes should be bagged and tied prior to placing in the cool boxes.

Sample Disposal

All samples (double bagged) must be either returned to the site on completion of the testing and the client notified or properly disposed of at the client's cost.

2.4 Special Measures during COVID-19

The outbreak of COVID-19 has required the following information to be in place and that all onsite personnel are able to protect themselves and others from infection. In order to protect yourself and others from coronavirus, it is so important to know how the virus is spread.

Coronavirus is spread in sneeze or cough droplets. To infect you, it has to get from an infected person's nose or mouth into your eyes, nose or mouth. This can be direct or indirect (on hands, objects, surfaces).

If an operative develops a high temperature or a persistent cough while at work, they should:

-  Return home immediately.
-  Avoid touching anything.
-  Cough or sneeze into a tissue and put it in a bin, or if they do not have tissues, cough and sneeze into the crook of their elbow.

They must then follow the guidance on self-isolation and not return to work until their period of self-isolation has been completed.

In order to protect site personnel, the following special measures have been outlined to help reduce the impact of the disease:

-  Reducing density of workforce and management and maintaining separation.
-  Eliminating need to travel by public or shared transport.
-  Improved Hygiene
-  General social distancing requirements shall be maintained in all other respects for the workplace. Do not relax social distancing requirements.
-  Reduction of tasks that require operatives to be working within 2m of each other.

In theory all site operations should not require operatives to be working within 2m of each other, however if they should further Risk assessments and the use of additional PPE must be implemented.

A mask or face covering will be required to be worn whilst working within 2m distance of fellow operatives unless social distancing can be maintained at all times.

Further information and recommendations on working within 2m of other site workers are attached in Appendix L.

3 Plant, Equipment and Welfare Arrangement

3.1 Plant and Vehicles

The Plant and Vehicles required for this site investigation are as follows:

-  4 x 4 Vehicle.
-  DANDO Terrier type Window Sampling drilling rig.
- JCB 3CX type backhoe mechanical excavator.

All vehicles used upon site are to have visible flashing beacons, operational whilst in use and the appropriate maintenance sticker.

Plant specifications are presented in Appendix J.

3.2 Equipment

The Equipment required for this site investigation are as follows:

-  Cable Avoidance Tool (CAT) and Generator (Genny).
-  Hand Shear Vane (HSV).
-  Hand Penetrometer (HP).
-  Dip Meter.
-  GFM Gas Monitor.
-  Photo Ionic Detector (PID).
-  Shovels.
-  Pinch Bar.
-  UXO Detector / Magnetometer

All equipment to be used upon site will have been checked maintained and where available calibrated to operational standards prior to mobilising on site.

3.3 Personal Protective Equipment (PPE)

The following PPE to be used at all times:

-  Safety Boots (EN:345)
-  Hard Hat (EN:397 - Head Protection Regulation 1989)
-  High Visibility Jacket/Vest (EN 471:2003)
-  Ear Protection (EN:352 - Noise at Work Regulation 1989)
-  Glove Protection (EN: 388)
-  Light Eye Protection (EN:166). *

In addition, the following PPE will be available for use if required:

-  Goggles (EN:166)
-  Waterproof High Visibility Over-trousers (EN 471:2003)
-  Single Use Disposable Gloves

If asbestos containing materials (ACM) is encountered, the following PPE will be used and will be disposed of in the correct manner:

-  Goggles
-  Disposable Dust Masks EN149 (type FFP3) or EN1827 (type FMP3);
-  Single Use Disposable Gloves
-  Disposable Overalls. Type 5 (BS EN ISO 13982-1)

COSHH Risk Assessments are presented in Appendix K.

3.4 Welfare

Welfare facilities available in specific locations.

3.5 Services

Prior to excavating the service drawings must be consulted and any conflict identified prior to operations.

A Cable Avoidance Tool (CAT) must be used to check for services before every excavation in addition to the above checks.

4 Emergency Procedures and First Aid Arrangements

Site Emergency/First Aid arrangements will be notified to all personnel as part of the initial site induction.

Sutcliffe site engineer will provide emergency first aid provision for the works.

If emergency services are required, the emergency services co-ordinator should be contacted with details of the emergency and the exact location.

In the event of an emergency or accident, this must be reported to the safety advisor and or construction manager within one hour.

All accidents, incidents or near misses are to be reported.

4.1 Emergency Contact

Name	Designation	Tel. No.	Email
Dave Samuels	Health and Safety & Environment	0151 227 3155	dave.samuels@sutcliffe.co.uk

4.2 Out of Hours Emergency Contact

Name	Designation	Tel. No.	Email
William Baldwin	Director	07968514671	william.baldwin@sutcliffe.co.uk

4.3 Emergency Utility Contact Information

Any contact with utilities MUST BE report to Sutcliffe office.

Emergency numbers for damage to utilities are located on service drawings

Name	Designation	Tel. No.
National Gas Emergency Service	Gas Utility Emergency Number	0800 111 999
National Grid	Electricity Utility Emergency Number	0800 404 090
United Utilities	Water Utility Emergency Number	0800 330 033
BT	Telecoms Emergency Number	0800 023 2023
Virgin Media	Telecoms Emergency Number	0800 952 8046
6Alpha	UXO Emergency Number	02033 713 900 (Contact with Police may also be necessary)

4.4 Nearest Hospital Address

North Manchester General Hospital, Delaunays Road, Crumpsall, Manchester, Greater Manchester, M8 5RB.

Directions are provided in Appendix B.

5 Audit and Review Procedure

The supervising Sutcliffe engineer will carry out weekly audit on compliance with this method statement and notify any incidents and corrective measures to the appropriate personnel.

In addition, a check will be carried out before work commences to ensure that no work is being carried out that has not been covered in the original method statement.

6 Variations

In the event that changes and or a departure from the method statement is required, all works will cease, any changes will be discussed and agreed with the client before any further work commences.

7 Site Contacts

Name	Designation	Tel. No.	Email Address
Sean Keyes	Managing Director	0151 227 3155	sean.keyes@sutcliffe.co.uk
Michael Wiggins	Site Engineer	0151 227 3155	michael.wiggins@sutcliffe.co.uk

Head Office	Tel. No.	Fax No.
SUTCLIFFE, 18-20 HARRINGTON STREET, LIVERPOOL, L2 9QA	0151 227 3155	0151 227 3156

8 Risk Assessments

Drilling and Excavation Operations Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Drilling/ Excavation Operations	<u>Drilling Rigs</u> - Possible contact with drop weight - Possible entrapment with drive chain - Possible entrapment with coring unit - Possible entrapment between rig and track unit - Loading/unloading from vehicle - Operation on unstable ground <u>Excavators</u> - Possible contact with excavator arm/bucket - Possible entrapment under excavator - Operation on unstable ground	- Potential for serious injury i.e. crushing broken bones - Entrapment under rig/excavator i.e. crushing broken bones	Extremely Harmful	Unlikely	Substantial Risk	- All operatives to be fully trained in the safe use of the rig/excavator - Careful inspection and assessment of access to site and position of holes allowing the safe passage and safe work areas - Machinery to be adequately guarded and guards tested prior to operation. - Always inspect the rig/excavator prior to working. - Use of experienced, competent, qualified operators/crews.	Moderate Risk
Striking services	- Possible risk of electric shock from underground cables - Possible risk of explosions from services below ground level - Services struck with rig or hand tools	- Potential for fatal or serious injury - Electrocution - Burns	Extremely Harmful	Unlikely	Substantial Risk	- Cable Avoidance Tool (CAT) to be used - Service drawings must be provided prior to the commencement of digging. - Use insulated hand tools - Pick axes are not permitted	Moderate Risk
Contaminated Substances	Contact with contaminated substances	- Potential risk of poisoning or gastro-intestinal upset - Potential inhalation of airborne particles (e.g. Asbestos)	Extremely Harmful	Unlikely	Moderate Risk	- Appropriate PPE (rubber gloves) to be worn at ALL times on site - Personal hygiene/washing. - Wash hands prior to eating, drinking or if smoking off site during the lunch break and before touching the eyes. - Avoid known asbestos locations - Continuous monitoring of excavations - If encountered report to site supervisor/line manager	Tolerable Risk

Drilling and Excavation Operations Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Manual Handling	 Lifting  Carrying  Heavy weights	 Possible risk of strains due to incorrect manual handling.	Harmful	Likely	Substantial Risk	 Awareness of manual handling techniques.  Share loads, avoid twisting and use best lifting practice	Tolerable Risk
Possible risk of slips, trips and falls	 Untidiness of site  Vegetation concealing holes, trenches and site debris  Uneven ground  Slippery floor surface  Overgrown vegetation - i.e. vines roots	 Possible injury to legs, ankles  arms, wrists, hands  Cuts bruises and grazes	Harmful	Likely	Substantial Risk	 Backfill trial pits immediately on completion of each pit.  Keep equipment orderly and in set places.  Ensure equipment is kept tidy and thus not causing a trip hazard.  Care to be taken when working on uneven ground and where vegetation is overgrown	Tolerable Risk
Explosion/ Combustion	 Possible risk of contact with flammable gases (e.g. methane)  Contact with Fuel and Oils  Unexploded Ordnance	 Explosion  Combustion of Material	Extremely Harmful	Unlikely	Substantial Risk	 If there are any doubts whatsoever then stop work immediately and contact the site supervisor who will investigate further and instruct you if it is safe for excavation works to recommence.  Smoking is NOT allowed on site at any time.  Turn off engine before refuelling rig  Fire extinguishers are stored in work vehicles	Tolerable Risk

Drilling and Excavation Operations Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Vehicle Movements	 General Traffic  Moving Site Vehicles	 Members of the Public/Operatives struck by plant or other site vehicles entering exiting or moving on site	Extremely Harmful	Unlikely	Moderate Risk	 Keep vehicle movement to a minimum and use agreed access routes.  During vehicle movements a banksman must be in attendance  Be aware of others working on the same site and operating vehicles and machinery.  Discuss with client prior to the job commencing.  Barrier off Area	Tolerable Risk
Noise	 Noise from Machinery	 Possible risk of hearing impairment	Harmful	Likely	Substantial Risk	 Correct use of PPE (ear defenders)  Use of Acoustic Barriers when required	Tolerable Risk
Falls from Height	 Falls from height  Falls into excavations	 Potential for fatal or serious injury  Broken bones  Crushing/Buried by collapsing excavation	Harmful	Unlikely	Moderate Risk	 All excavations/openings etc. to be cordoned off using correct signage/barriers prior to commencement of work  Safe practise while logging excavations  Constant observations of excavation walls and surrounding surface for evidence of collapse (e.g. appearance of cracks or falling material)  Do Not Climb on Drilling Rigs or Excavators	Tolerable Risk

Drilling and Excavation Operations Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Inclement Weather	 Inclement weather such as thunder storms, heavy rain, snow, high winds, ice, fog and extended periods of hot weather	 Potential for fatal or serious injury  Hypothermia/Hyperthermia  Lightning strikes  Wind affecting stability of the rig  Slips and falls  Dehydration  Sunburn	Harmful	Unlikely	Moderate Risk	 Weather forecasting will be assessed prior to the commencement of the job  Necessary precautions will be taken to ensure the job can be carried out safely  The job will not take place and will be re-scheduled if safe working is not possible  Ongoing monitoring	Tolerable Risk
Vibration	 Misuse of Tools/Machinery  Damaged Tools/Machinery	 Potential for vibration relation injury	Harmful	Unlikely	Moderate Risk	 Site Operatives to use equipment in accordance with regulations  Constant supervision by Site Operatives  Maintenance of machinery on site report any damage or defects to site supervisor and return for repairs/disposal	Tolerable Risk
Welfare Facilities	 Contact with contaminated substances	 Potential risk of poisoning or Gastro intestinal upset	Extremely Harmful	Unlikely	Moderate Risk	 Provision of suitable welfare facilities (including hot and cold running water) on site.  Facilities are to be suitable for identified contaminants on site to ensure that cross contamination does not occur	Tolerable Risk

Drilling and Excavation Operations Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
General Public	 Contact with general public	 Injury to general public e.g. contact with site vehicles  Confrontation/Violence following interaction with general public  Dog bites	Harmful	Unlikely	Moderate Risk	 Fence off work area from general public if possible  If interaction with public is unavoidable be polite and courteous  Try not to provoke general public even if comments made in jest  If general public become provocative/aggressive leave site and report to line manager  Secure site at end of daily operations	Tolerable Risk
Security	 Damage to plant and/or machinery  Loss of plant and/or machinery	 Potential for fatal or serious injury  Loss of plant and equipment	Harmful	Likely	Substantial Risk	 Fence off work area from general public if possible  Secure non hand portable equipment  Remove hand portable tools and equipment  Secure site at end of daily operations	Tolerable Risk
Cutting Equipment	 Use of knives, saws, bolt cutters angle grinders	 Potential for serious injury	Harmful	Likely	Substantial Risk	 Appropriate PPE (cut proof gloves, eye protection, safety footwear) to be worn while cutting is required  Site Operatives to use equipment in accordance with regulations  Site operatives to be fully trained in the safe use of the cutting equipment	Tolerable Risk

Drilling and Excavation Operations Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Fumes	 Contact with noxious/exhaust gases	 Potential risks of lung damage Carbon Dioxide poisoning	Extremely Harmful	Unlikely	Substantial Risk	 Work only in well ventilated areas  If possible use electric machinery  Keep generators outside (if operations are indoor) and away from work areas  Use PPE provided  If operations are indoor use fans and ventilation equipment  Continuous monitoring of site works	Tolerable Risk
Leptospirosis/ Weil's Disease	 Contact with infected soil or water  Contact with infected blood or flesh	 Potential of high fevers, nausea, diarrhoea  If left untreated it can develop into kidney failure.	Harmful	Unlikely	Substantial Risk	 wearing protective clothing like gloves  following good basic hygiene including regular hand-washing and avoiding hand to mouth/eye etc contact  taking rest breaks, including meals and drinks, away from the work area;  washing cuts and grazes immediately with soap and running water Cover all cuts, abrasions and other breaks in the skin with waterproof dressings and/or gloves.	Tolerable Risk

Gas Monitoring and Lone Working Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Contaminated Substances	 Contact with contaminated substances	 Potential risk of poisoning or gastro-intestinal upset  Potential inhalation of airborne particles (e.g. Asbestos)	Extremely Harmful	Unlikely	Moderate Risk	 Appropriate PPE (rubber gloves) to be worn at ALL times on site  Personal hygiene/washing.  Wash hands prior to eating, drinking or if smoking off site during the lunch break and before touching the eyes.  Avoid known asbestos locations  Continuous monitoring of excavations  If encountered report to site supervisor/line manager	Tolerable Risk
Manual Handling	 Lifting  Carrying  Heavy weights	 Possible risk of strains due to incorrect manual handling.	Harmful	Likely	Substantial Risk	 Awareness of manual handling techniques.  Share loads, avoid twisting and use best lifting practice	Tolerable Risk
Possible risk of slips, trips and falls	 Untidiness of site  Vegetation concealing holes, trenches and site debris  Uneven ground  Slippery floor surface  Over grown vegetation – i.e. vines roots	 Possible injury to legs, ankles arms, wrists, hands  Cuts bruises and grazes	Harmful	Likely	Substantial Risk	 Backfill trial pits immediately on completion of each pit.  Keep equipment orderly and in set places.  Ensure equipment is kept tidy and thus not causing a trip hazard.  Care to be taken when working on uneven ground and where vegetation is overgrown  If there are any doubts whatsoever then stop work immediately and contact the site supervisor who will investigate further and instruct you if it is safe for excavation works to recommence.  Smoking is NOT allowed on site at any time.	Tolerable Risk
Explosion/ Combustion	 Possible risk of contact with flammable gases (e.g. methane)	 Explosion  Combustion of Material	Extremely Harmful	Unlikely	Substantial	 Fire extinguishers are stored in work vehicles	Tolerable Risk

Gas Monitoring and Lone Working Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Vehicle Movements	 General TrafficMoving Site Vehicles	 Members of the Public/ Operatives struck by plant or other site vehicles entering exiting or moving on site	Extremely Harmful	Unlikely	Moderate Risk	 Keep vehicle movement to a minimum and use agreed access routes.  During vehicle movements a banksman must be in attendance  Be aware of others working on the same site and operating vehicles and machinery.  Discuss with client prior to the job commencing.  Barrier off Area	Tolerable Risk
Falls from Height	 Falls from height  Falls into excavations	 Potential for fatal or serious injury  Broken bones  Crushing/Buried by collapsing excavation	Harmful	Unlikely	Moderate Risk	 All excavations/openings etc. to be cordoned off using correct signage/barriers prior to commencement of work  Constant observations of excavation walls and surrounding surface for evidence of collapse (e.g. appearance of cracks or falling material)	Tolerable Risk
Inclement Weather	 Inclement weather such as thunder storms, heavy rain, snow, high winds, ice, fog and extended periods of hot weather	 Potential for fatal or serious injury  - Hypothermia/Hyperthermia  Lightning strikes  Wind affecting stability of the rig  Slips and falls  Dehydration  Sunburn	Harmful	Unlikely	Moderate Risk	 Weather forecasting will be assessed prior to the commencement of the job  Necessary precautions will be taken to ensure the job can be carried out safely  The job will not take place and will be re-scheduled if safe working is not possible  Ongoing monitoring	Tolerable Risk

Gas Monitoring and Lone Working Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Welfare Facilities	 Contact with contaminated substances	 Potential risk of poisoning  Gastro intestinal upset	Extremely Harmful	Unlikely	Moderate Risk	 Provision of suitable welfare facilities (including hot and cold running water) either on site or at a designated safe point.  Facilities are to be suitable for identified contaminants on site to ensure that cross contamination does not occur	Tolerable Risk
General Public	 Contact with general public	 Injury to general public e.g. contact with site vehicles  Confrontation/Violence following interaction with general public  Dog bites	Harmful	Unlikely	Moderate Risk	 If interaction with public is unavoidable be polite and courteous  Try not to provoke general public even if comments made in jest  If general public become provocative/aggressive leave site and report to line manager	Tolerable Risk
Lone Working	 Working alone  Working in derelict buildings  Working unsecured buildings/sites  Remote areas	 Confrontation/Violence following interaction with general public  Dog bites  Contact with itinerants	Harmful	Unlikely	Moderate Risk	 All risks to be assessed prior to the commencement of the job - if deemed possible a second operative will be sent in support  Check in with line manager before and at the end of lone working sessions  Constant assessment of hazards - if hazards increase leave site report to line manager  The job will not take place and will be re-scheduled if safe working is not possible	Tolerable Risk

Gas Monitoring and Lone Working Risk Assessment

Topic of Concern/ Activity	Identified Hazards	Potential Outcome	Severity Factor	Likelihood	Risk Level	Controls	Residual Risk Level
Cutting Equipment	 Use of knives, saws, bolt cutters angle grinders	 Potential for serious injury	Harmful	Likely	Substantial Risk	 Appropriate PPE (cut proof gloves, eye protection, safety footwear) to be worn while cutting is required  Site Operatives to use equipment in accordance with regulations  Site operatives to be fully trained in the safe use of the cutting equipment	Tolerable Risk
Leptospirosis/ Weil's Disease	 Contact with infected soil or water  Contact with infected blood or flesh	 Potential of high fevers, nausea, diarrhoea  If left untreated it can develop into kidney failure.	Harmful	Unlikely	Substantial Risk	 wearing protective clothing like gloves  following good basic hygiene including regular hand-washing and avoiding hand to mouth/eye etc contact  taking rest breaks, including meals and drinks, away from the work area;  washing cuts and grazes immediately with soap and running water Cover all cuts, abrasions and other breaks in the skin with waterproof dressings and/or gloves.	Tolerable Risk

9 Acceptance Sheet

RISK ASSESSMENT METHOD STATEMENT SIGN OFF SHEET

This is to certify that all personnel listed below
have read or had communicated to them and understand the requirements
of the Method Statement and Risk Assessments pertaining to
the above works

Name	Signature	Date	Company Name

Appendix A – Health and Safety Accreditation



a veriforce® company

STANDARD

SSIP
SAFETY
SCHEMES IN
PROCUREMENT

FOUNDER MEMBER

CERTIFICATE OF ACCREDITATION

This is to certify that

Sutcliffe Projects Ltd

Membership No.: CHAS-139624

Principal Designer / Designer

has demonstrated compliance with the CHAS standards in line with SSIP Core Criteria and UK H&S Legislation and has been awarded accreditation to the requirements of the CDM Regulations 2015

Ian McKinnon
Managing Director



MEMBERSHIP VALID UNTIL: 17 June 2024

CERTIFICATE VALID UNTIL: 02 July 2024

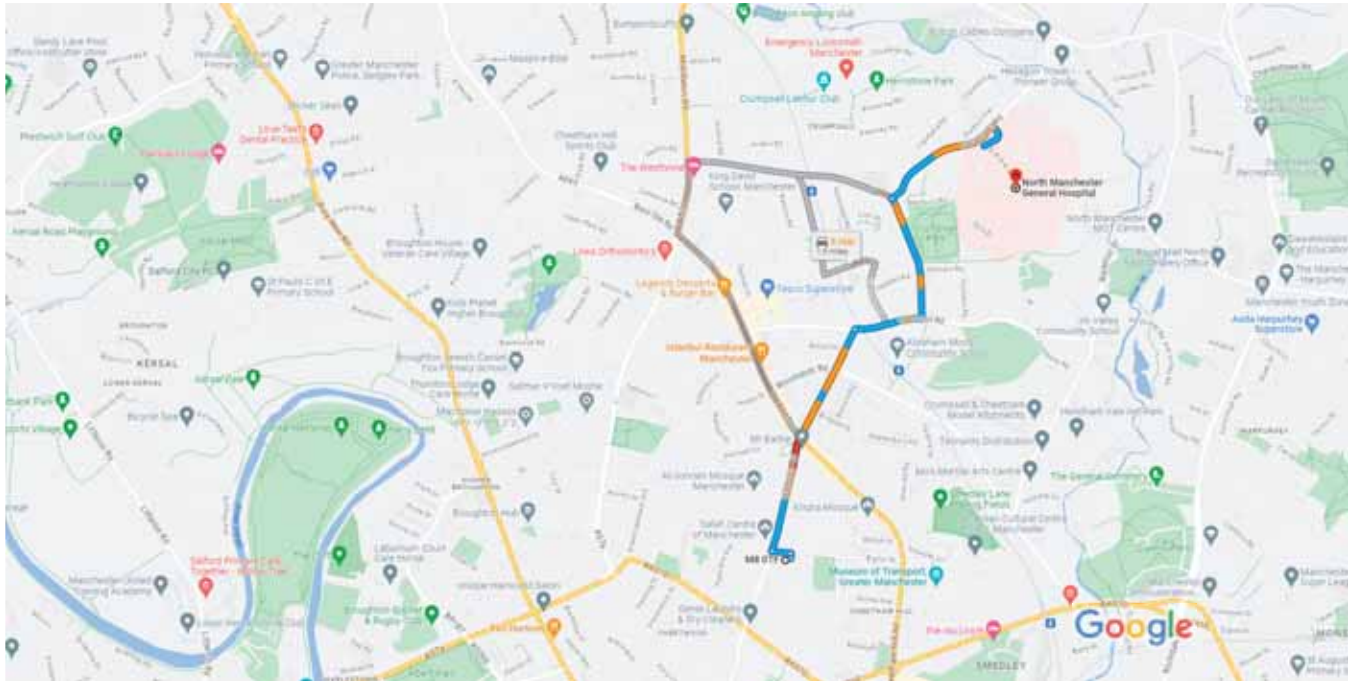
0345 521 9111

CHAS.co.uk

Appendix B – Route to Closest Hospital



M8 OTF, Minsmere Walk, Cheetham Hill, Manchester Drive 1.5 miles, 8 min
to North Manchester General Hospital



Map data ©2023 200 m

M8 OTF

Minsmere Walk, Cheetham Hill, Manchester

Take Brentfield Ave to Waterloo Rd/B6180

- ↑ 1. Head north on Minsmere Cl towards Brentfield Ave
26 sec (328 ft)
- ← 2. Turn left onto Brentfield Ave
72 ft
- ↘ 3. Turn right onto Waterloo Rd/B6180
256 ft
- ↘ 4. Turn right onto Waterloo Rd/B6180
2 min (0.3 mi)
- ↑ 5. Continue onto Greenhill Rd
1 min (0.3 mi)
- ↘ 6. Turn right onto Crescent Rd
46 sec (0.2 mi)
- ← 7. Turn left onto Ash Tree Rd
2 min (0.3 mi)
- ↘ 8. Turn right onto Delaunays Rd
1 min (0.3 mi)



8. Turn right onto Crumpsall Way

39 sec (394 ft)

North Manchester General Hospital

Appendix C – Environmental Risk Assessment

Environmental Risk Assessment

Impact	Impact Classifications	Controls
Potential to disturb indigenous animals and plants	1	Avoid excavations which may lead to scars, reinstate as close to original as possible. Pre start inspection by Ecologist to review existing environment, and confirm the investigation and related activities are appropriate, they should advise on measures to be taken, this may include carrying out the work at a different time of year.
Noise and Vibration	2	All vehicles and machinery in use should be properly silenced. All machines in intermittent use should be shut down between activities. Agreed routes for vehicles should be used.
Air Pollution	2	Avoid allowing dust being released into the atmosphere. Maintain engines to avoid excessive exhaust fumes.
Light Pollution	1	Work is only likely to take place during daylight hours, no compound flood lights or site lighting apply.
Waste Management	4	All spoil produced from boreholes/trial pits to be removed to suitable waste facility. General waste such as food wrappings, bottles etc. should be removed from site to a suitable waste facility.
Water Pollution	4	a) Do not allow surface run off produced by the boring process to flow into any watercourses - use a sump hole or physical barrier e.g. sandbags.
a) Silting		b) All fuel, oil and chemicals stored in bulk tanks should be sited on a non-porous base within a bund and secured, smaller containers should have their tops secured and stored in the rear compartment of the Land Rover, or securely locked store, any spillage's shall be immediately removed. A supply of suitable absorbent materials should be available. Leaky or empty drums should be removed from site immediately and returned to the yard or suitable facility.
b) Fuels, oils and chemicals		c) Mobile plant should be refuelled away from drains and watercourses. Static plant should be refuelled carefully and under supervision. It should be carried out using a suitable funnel. Drip trays and a supply of absorbent material should be available for spillage's. Drip trays and mats should be checked regularly and any accumulated substances removed for disposal.
c) Refuelling		d) Care should be taken when washing out grouting plant, such washings shall not be allowed to flow into any drains or watercourses.
d) Grouting		
Contamination of Water Supply	5	Care should be taken to avoid damage to water supply pipes.
Alien Species	1	Avoid the spread of species such as Japanese Knotweed, make sure no plant parts are carried back or onto other sites.

Classification Table: **1 – MINIMAL, 2 – LOW, 3 – MODERATE, 4 – HIGH, 5 - MAJOR**

SPECIAL SITE ENVIRONMENTAL RULES

-  Care should be taken when moving to the boreholes/trial pits to avoid damage to pipework and buildings associated with surrounding buildings.
-  No water to be extracted from streams without the consent of the Environment Agency.
-  No arisings or contaminated water should be allowed to enter watercourses.
-  Refueling the rig should be done carefully using a suitable funnel.
-  Use agreed access routes
-  Ensure a supply of absorbent material is available to use in case of spillage
-  Keep the site tidy from litter and refuse.
-  Keep noise levels to the minimum possible.

POLLUTION INCIDENT REPORTING PROCEDURE

In the event of a Pollution incident that results in:-

-  The Pollution of controlled water.
Pollution is the discharge of poisonous, noxious or polluting material, including silt, cement, sewage, diesel etc.
-  Any enforcement action taken by the E.A. or Local Authority.
-  Keep noise levels to the minimum possible

The following procedure should be followed :-

-  Contact Site Engineer who is supervising the work.
-  Inform the Environment Agency on 0800 807 060
-  Inform Line Manager in office on 0151 227 3155
-  Take steps to minimise the impact of the incident.

ARCHAEOLOGICAL FEATURES

-  Reference to the wider area refers to some industrial archaeology.
-  Care should be taken to avoid damage to structures which appear old.
-  Any artefacts or other items, which appear old, should be reported to the Site Supervisor

SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI's)

-  None of the investigation is within SSSI's.

NOISE AND VIBRATION MONITORING

-  Noise and Vibration Monitoring is unnecessary on this site

Appendix D – Invasive Species Reference Sheets

Works in Areas with Invasive Species

It is an offence under the Wildlife and Countryside Act 1981 to plant or cause the spread of certain species. These include Japanese Knotweed and Giant Hogweed. Himalayan Balsam is also considered to be an invasive plant by the Environment Agency and its spread should not be facilitated.

Species Information

All of the three species are particularly prevalent along the banks of rivers and streams and in areas of damp ground.

Apart from man, watercourses are the principal pathway for the spread of these species. See Appendices E for details of each invasive species.

Human Health Hazards

Of the three plant species the only plant which poses a risk to human health is Giant Hogweed. The sap from this plant contains a group of chemicals known as furanocoumarins. These chemicals can cause severe blistering/burns if contaminated skin is exposed to sunlight. This reaction can recur for many years. Contact with the eyes can lead to temporary or permanent blindness.

Exposure to the sap can take place during contact with the stems or leaves. The stems and the edges and underside of the leaves bear fine hairs which contain the sap.

Environmental Hazards

The spread of Japanese Knotweed and Giant Hogweed is against the law and we need to guard against this problem.

Working On Site

If possible all intrusive works and vehicle routing should avoid any areas inhabited by invasive species by a nominal margin of 15 metres.

Where working in closer proximity is unavoidable, every effort must be made to avoid tracking soil by vehicle wheels which could spread seeds and rhizomes.

Where contaminated areas cannot be avoided wheel cleaning measures should be put in place to prevent material being inadvertently taken off site.

Exploratory Holes

As far as possible exploratory holes should not be excavated within 7m of a stand of Japanese Knotweed.

Where a 7m buffer zone is not possible then all materials arising between ground level and 3m below ground should be considered potentially contaminated with fragments of rhizomes.

No exclusion zones have been recommended for stands of Giant Hogweed or Himalayan Balsam but it would appear to be sensible to adopt where site conditions allow the same 7m zone used for Japanese Knotweed.

Where a 7m buffer zone is not possible e.g. on sites with widespread infestations, then all materials arising between ground level and 1m should be considered potentially contaminated with seeds.

Personal Protective Equipment

On sites containing either Japanese Knotweed or Himalayan Balsam or both no special PPE will be required. Normal PPE will suffice.

Where human contact with Giant Hogweed is unavoidable, staff should wear a hooded disposable overall impermeable gloves and a full face visor.

Plant hairs can penetrate light fabrics.

Care should be taken when removing PPE as deposited sap may remain active for several hours.

Cut material also remains active for several hours.

Sample Collection, Handling and Carriage

Samples should be collected in the normal containers required for geotechnical and geo-environmental testing.

The receiving laboratory should be informed which samples may contain fragments or seeds of invasive species.

The sample labels should notify persons handling the samples of the environmental hazard and that special disposal arrangements will be required.

Any spilled material must be gathered up and contained to await special disposal.

All bulk samples should be double bagged and tied (and labelled) to reduce the risk of spillage.

Similarly, all tub samples should be bagged and tied (and labelled).

Samples to be transported in cool boxes should be bagged and tied prior to placing in the cool boxes.

Sample Disposal

All samples (double bagged) must be either returned to the site on completion of the testing and the client notified or properly disposed of at the client's cost.

Reference and identification cards are appended in Appendix E

Himalayan Balsam

Species Description

Scientific name: *Impatiens glandulifera*

AKA: Policeman's Helmet, Indian Balsam, Jac y Neidiwr (Welsh)

Native to: West and central Himalayas

Habitat: Found mostly on river banks and in damp woodland, can grow in other damp habitat

A tall, attractive, annual herb with explosive seed heads. Although easy to identify as a mature plant with its pink-purple flowers, fleshy stem and characteristic leaves, the seedlings and last year's dead stems of this annual are more difficult to spot.

Introduced as a garden plant in the early 19th century and first recorded in the wild in 1855. Often favoured by the general public for its aesthetic appeal and is still deliberately planted on occasion. Now widespread in the UK, especially along urban rivers. Spreads solely by seeds, which are small and easily carried by wind or water.

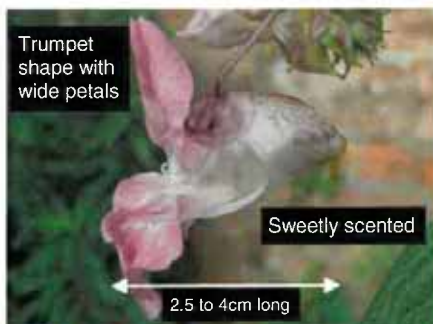
Out-competes native species in ecologically sensitive areas, particularly river banks. Where it grows in dense stands along river banks it can impede flow at times of high rainfall, increasing the likelihood of flooding. Die back of extensive stands over winter can leave river banks bare and exposed to erosion.

Himalayan balsam is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England and Wales. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features



Identification throughout the year

Can be identified at most times of the year: March-June by its seedlings, stem and leaf shape, from July to September by its stem, leaf shape and flowers. More difficult to identify over winter (October to February), look for hay like remains and distinctive root structure.

Hay like remains in winter

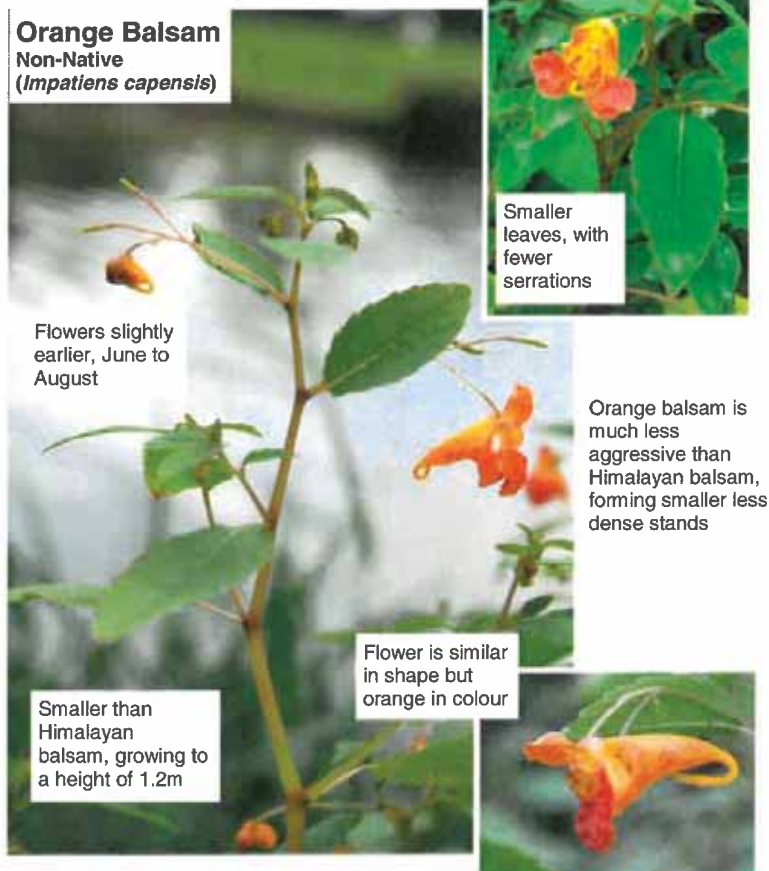


Root structure in winter



Similar Species

Orange Balsam
Non-Native
(*Impatiens capensis*)



Distribution

Widespread and common across the whole of the UK. Primarily on riverbanks and in other damp areas.

Source: NBN Gateway. Check website for current distribution



References and further reading:

- Blamey, M, Fitter, R and Fitter, A (2003) *"The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora"*. A & C Black
- Preston, C D, Pearman, D A and Dines, T A (editors) (2002) *"New Atlas of the British and Irish Flora"*. Oxford University Press
- Stace, C (1999) *"Field Flora of the British Isles"*. Cambridge University Press

Giant Hogweed

Species Description

Scientific name: *Heracleum mantegazzianum*

AKA: Efwr enfawr (Welsh)

Native to: Caucasus mountains in south west Russia and Georgia

Habitat: Widespread, most common on river banks

Easy to identify when fully grown by height, size of leaves and size of flowers. Can be confused with native hogweed when not fully grown or when growth is stunted (e.g. regrowth after cutting).

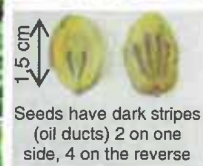
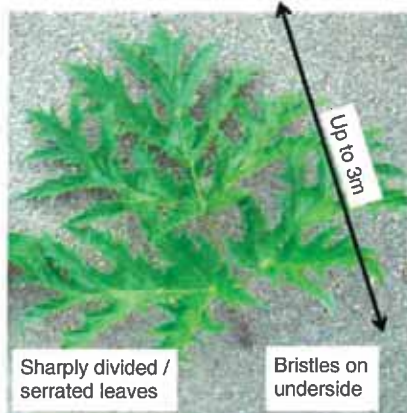
Introduced as an ornamental. First recorded wild in the UK in the late 19th century. Spreads solely by seeds, mainly through deliberate planting, wind dispersal and in water courses. Now common across much of the UK. Contact with any part of this plant must be avoided as even minute amounts of sap can cause blistering of the skin following exposure to sunlight. Other negative impacts include out-competing native flora, river bank erosion and increase in flood risk. Can cause delays/ additional costs on development sites where the plant must be removed as controlled waste in order to comply with legislation.

Giant hogweed is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such it is an offence to plant or otherwise cause this species to grow in the wild. Under the Environmental Protection Act 1990, giant hogweed is also classified as controlled waste.

For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features



Identification through- out the year

Winter

Summer

Spring



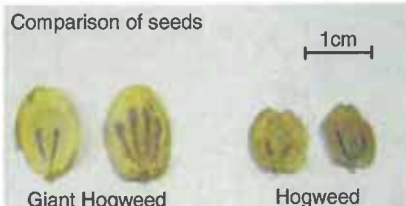
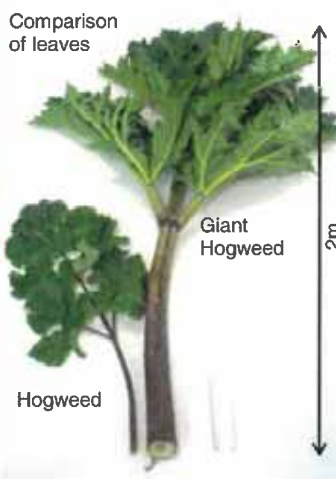
Similar Species



Hogweed
Native
(*Heracleum sphondylium*)

When in full height it is difficult to confuse giant hogweed with any other plant. While still growing or stunted, possibly as a result of disturbance, it can be confused with some other native plants. The most likely species with which it might be confused is hogweed.

Key differences between hogweed and giant hogweed include the height, width of stem, size of leaf, size of flower head and size of seed.



Distribution

Widespread and common across much of the UK. Extensive infestations are found particularly in Scotland and the north of England. Less abundant in Cornwall. Often associated with large rivers.



Source: NBN Gateway. Check website for current distribution

References and further reading:

- Blamey, M, Fitter, R and Fitter, A (2003) "The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora." A & C Black
- Booy, O and Wade, P M (2007) "Giant Hogweed Management in the United Kingdom". RPS Group plc
- Pyšek P, Cock, M J W, Nentwig, W & Ravn, H P (2007) "Ecology and Management of Giant Hogweed (*Heracleum mantegazzianum*)". CAB International
- Stace, C (1999) "Field Flora of the British Isles". Cambridge University Press

Japanese Knotweed

Species Description

Scientific name: *Fallopia japonica*

AKA: Japanese Bamboo, Pysen saethwr (Welsh), *Polygonum cuspidatum*, *Reynoutria japonica*

Native to: Japan, Taiwan, northern China

Habitat: Common in urban areas, particularly on waste land, railways, road sides and river banks

Tall herbaceous perennial with bamboo like stems. Often grows into dense thickets. Characteristic leaves and stems, persistence of last year's dead canes and distinctive rhizome (underground root-like stems) enables year round identification.

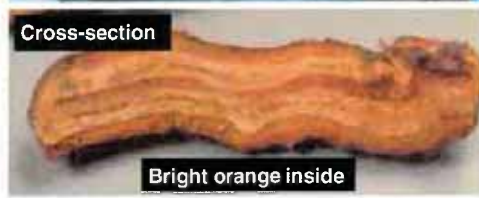
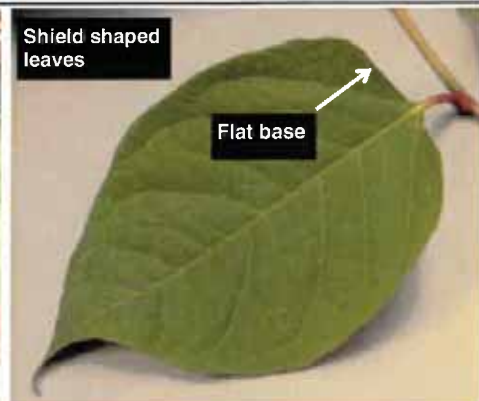
Introduced in the early 19th century as an ornamental plant. Now common and widespread across the UK. Spreads rapidly in the wild by natural means and as a result of spread by humans. Spread is solely by vegetative means, either fragments of rhizome or stem. Does not produce seed in the UK. Negative impacts include outcompeting native flora, contributing to river bank erosion and increasing the likelihood of flooding. Can also cause significant delays and cost to development as well as structural damage (it can grow through asphalt and some other surfaces).

Japanese Knotweed is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such it is an offence to plant or otherwise cause Japanese knotweed to grow in the wild. Under the Environmental Protection Act 1990, Japanese Knotweed is classified as controlled waste.

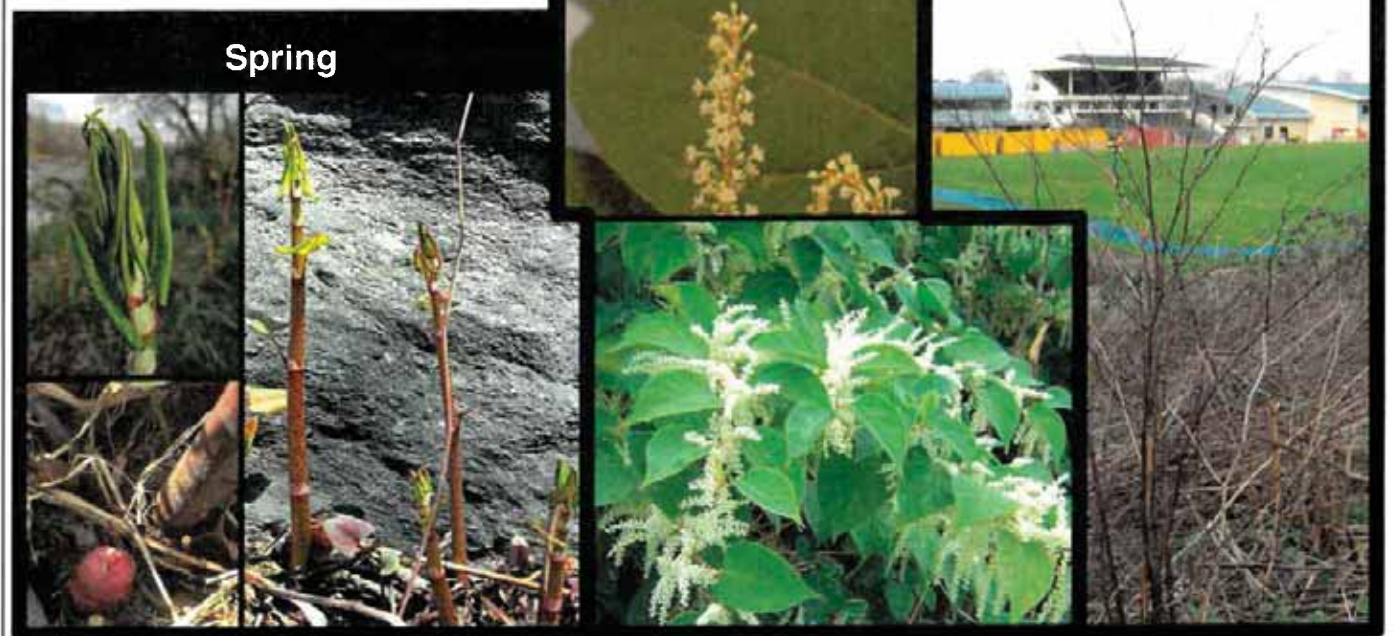
For details of legislation go to www.nonnativespecies.org/legislation



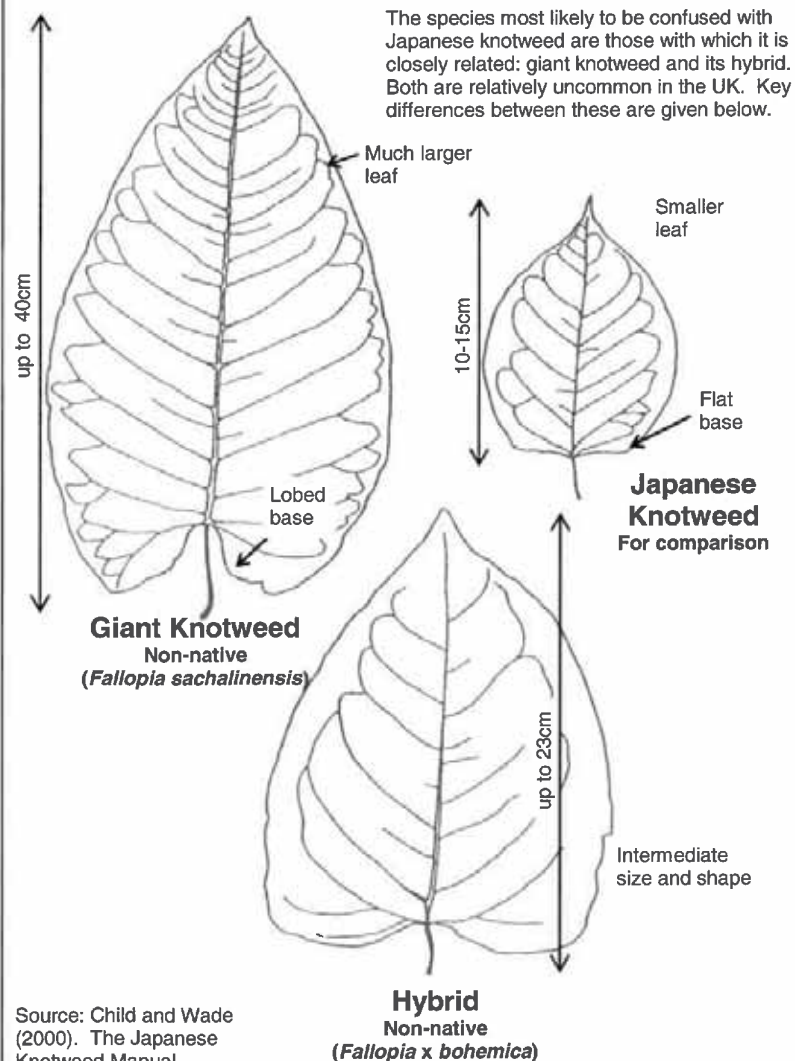
Key ID Features



Identification throughout the year



Similar Species

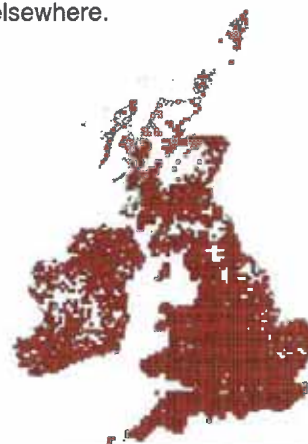


Source: Child and Wade (2000). The Japanese Knotweed Manual

Distribution

Widespread and common across the UK. Notably extensive infestations are found in the south-west of England, south Wales and Greater London, however similarly extensive populations can also be found elsewhere.

Source: NBN Gateway. Check website for current distribution



References and further reading:

- Blamey, M, Fitter, R and Fitter, A (2003) "The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora." A & C Black
- Child, L E and Wade, P M (2000) "The Japanese Knotweed Manual". Packard
- Environment Agency (2006) "The Japanese Knotweed Code of Practice". Environment Agency
- Preston, C D, Pearman, D A and Dines, T A (editors) (2002) "New Atlas of the British and Irish Flora". Oxford University Press
- Stace, C (1999) "Field Flora of the British Isles". Cambridge University Press

Appendix E – Service Plans

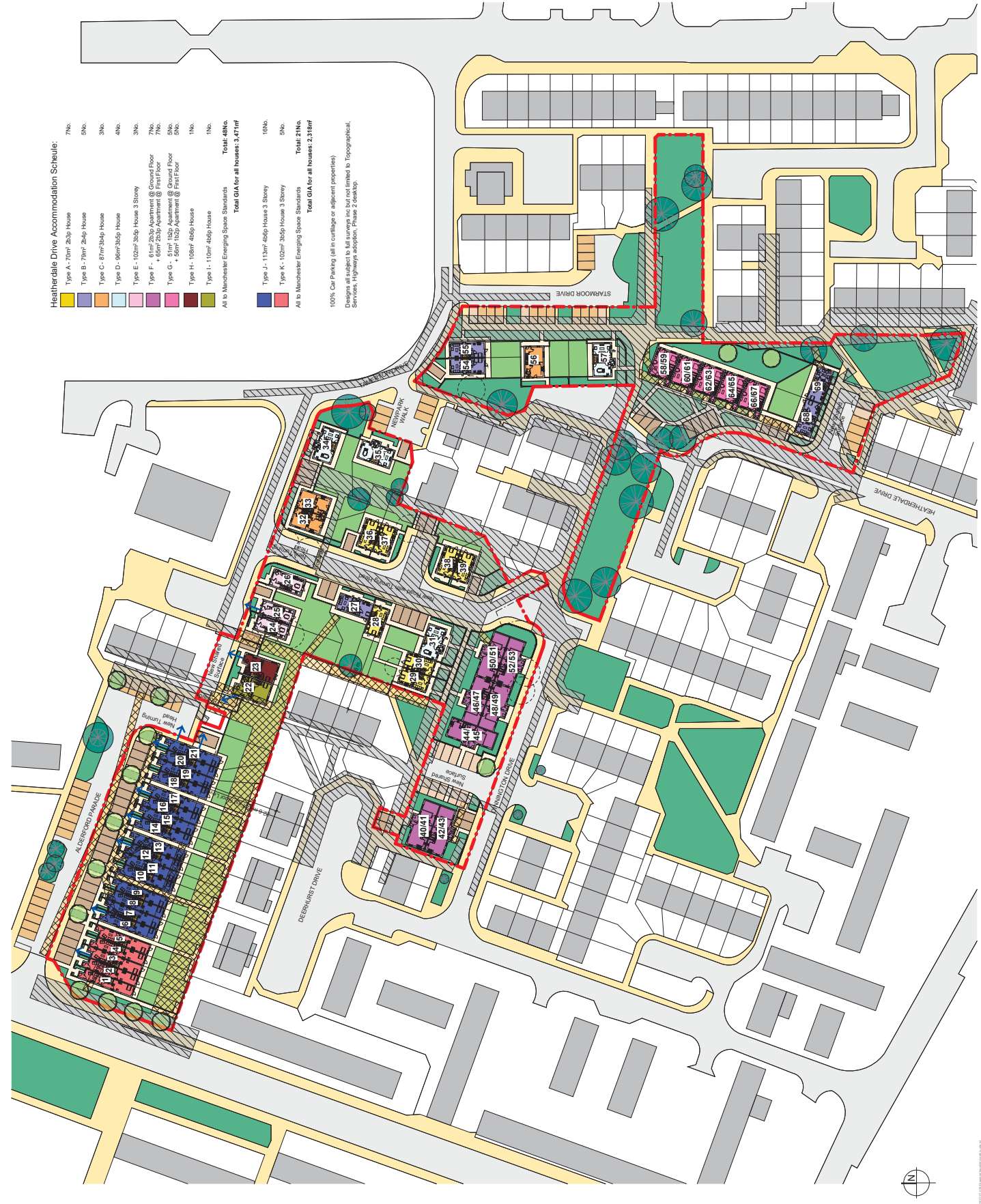
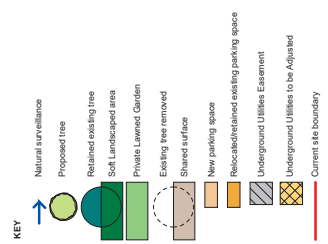
1. The information in this document is for the use of the client and is not to be used for any other purpose without the written consent of Bowker Sadler Architects.
2. The information in this document is for the use of the client and is not to be used for any other purpose without the written consent of Bowker Sadler Architects.
3. The information in this document is for the use of the client and is not to be used for any other purpose without the written consent of Bowker Sadler Architects.
4. The information in this document is for the use of the client and is not to be used for any other purpose without the written consent of Bowker Sadler Architects.
5. The information in this document is for the use of the client and is not to be used for any other purpose without the written consent of Bowker Sadler Architects.

Heatherdale Drive Accommodation Schedule:

- Type A - 70m² 2bhp House
- Type B - 70m² 2bhp House
- Type C - 87m² 3bhp House
- Type D - 90m² 3bhp House
- Type E - 102m² 3bhp House 3 Storey
- Type F - 61m² 2bhp Apartment @ Ground Floor
- Type G - 51m² 1bhp Apartment @ Ground Floor
- Type H - 108m² 4bhp House
- Type I - 110m² 4bhp House

- All to Manchester Emerging Space Standards
- Total: 48No.
- Total GIA for all houses: 3,471m²
- Type J - 110m² 4bhp House 3 Storey
- Type K - 102m² 3bhp House 3 Storey
- All to Manchester Emerging Space Standards
- Total: 21No.
- Total GIA for all houses: 2,318m²

100% Car Parking (all in curtilage or adjacent properties)
Designs all subject to full surveys inc but not limited to: Topographical, Services, Highways adoption, Phase 2 desktop.



F	08.11.23	AC	UATW extension area amended	CL
E	30.03.23	AC	PHS investigation: PHS to be updated	CL
D	14.07.23	AC	PHS 2023 & accommodation schedule	CL
C	04.07.23	AC	How UATW is linked to adjacent Parks &	CL
B	31.03.23	AC	Advised PHS services amended	CL
A	20.03.23	AC	Advised PHS services amended	CL

BOWKER SADLER ARCHITECTURE

Heatherdale House | Heatherdale | Romiley | Stockport | S16 3DY
0161 488 7383 | office@bowker-sadler.co.uk | www.bowker-sadler.co.uk

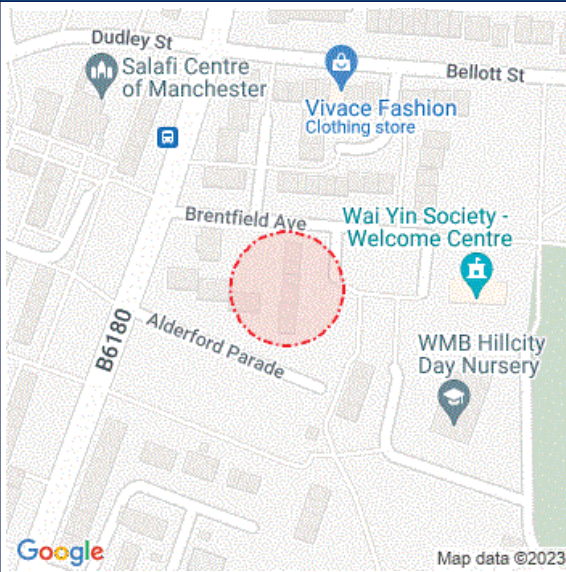
Client: Mosscaire St. Vincents

Site Plan with Underground Utilities

Scale	Ref: 1:500	Drawn	Checked	Date
Project	21-026 - BSA	Zone	Low	Form
Number	0052	Revision		

Information

Enquirer			
Name	Mr Jack Smith	Phone	0151 227 3155
Company	Sutcliffe Ltd	Mobile	Not Supplied
Address	18-20 Harrington Street Old Swan Liverpool Merseyside L2 9QA		
Email	jack.smith@sutcliffe.co.uk		

Enquiry Details		Site Map
Enquiry type	Planned Works	
Work category	Excavations Non Utility	
Work type	Multiple excavations site (deeper than 1.5m)	
Work type buffer*	50 metres	
Start date	27/11/2023	
End date	01/12/2023	
Scheme/Reference	Cheetham Hill	
Search location	m8 0tf	
Confirmed location	383996 400834	
Site size	50 metres diameter	
Site Contact Name	Michael Wiggins	
Site Phone No.	01512273155	
Description of Works	Excavation / Drilling	Please note that the above map only displays the location of the proposed work site and will not display any of the Members’ pipes and cables. It is imperative that this area accurately reflects the proposed work site.
	* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.	

Affected LSBUD members

(LSBUD Members who have assets registered on LSBUD within the vicinity of your search area.)

Asset Owner	Phone/Email	Emergency Only	Status
Cadent Gas	0800688588	0800111999	Await response
Electricity North West Limited	08001954141	08001954141	Await response

Status explanation

Await Response means that the asset owner will contact you. This is typically by sending the plan response but they may ask for further information before being able to do so, particularly if any payments or authorisations are required.

Email Additional Info means that the asset owner needs further information about your works to assess your enquiry before providing a response. Please provide any details you have available including plans, method statements etc. if available.

Important notices

It is very important that you correctly understand what the service does and the procedures in order for you to work safely. Please refer to the LSBUD Support Page (www.lsbud.co.uk/lineasearchbeforeudig-support) for further guidance.

This information includes how to provide additional information to the LSBUD Members who request it to provide a response to your enquiry.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date and time of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineasearchbeforeUdig (LSBUD) accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lsbud.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

List of not affected LSBUD members

(LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area.)

Angus Energy	AWE Pipeline	B & D Energy Limited
Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)	Box Broadband
BP Exploration Operating Company Limited	BPA	Cambridgeshire County Council Climate Change and Energy Services
CATS Pipeline c/o Wood Group PSN	Cemex	Centrica Storage Ltd
CNG Services Ltd	Concept Solutions People Ltd	ConocoPhillips (UK) Teesside Operator Ltd
D.S.Smith	Diamond Transmission Corporation	DIO (MOD Abandoned Pipelines)
DIO (MOD Live Pipelines)	E.ON UK CHP Limited	EDF Energy Renewables Ltd
EirGrid	Eleclink Limited	Energy Assets Networks
ENI & Himor c/o Penspen Ltd	EnQuest NNS Limited	EP Langage Limited
ESB CCGT Power station (Carrington Gas Pipeline)	ESP Utilities Group	ESSAR
Esso Petroleum Company Limited	euNetworks Fiber UK Ltd	EXA Infrastructure
Exolum Pipeline System	Fulcrum Electricity Assets Limited	Fulcrum Pipelines Limited
Gamma	Gas Networks Ireland (UK)	Gateshead Energy Company
Gigaclear Ltd	Harbour Energy	Heathrow Airport LTD
Humbly Grove Energy	IGas Energy	INEOS FPS Pipelines
INEOS Manufacturing (Scotland and TSEP)	INOVYN ChlorVinyls Limited	INOVYN Enterprises Limited
Intergen (Coryton Energy or Spalding Energy)	Jurassic Fibre Ltd	Kensa Utilities
Last Mile	Mainline Pipelines Limited	Manchester Jetline Limited
Manx Cable Company	Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited
Moray East Offshore Windfarm	MUA Group Limited	National Gas Transmission
National Grid Electricity Distribution	National Grid Electricity Transmission	Neos Networks
Northern Gas Networks Limited	Northumbrian Water Group	NPower CHP Pipelines
NTT Global Data Centers EMEA UK Ltd	NYnet Ltd	Ogi
Oikos Storage Limited	Ørsted	Palm Paper Ltd
Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos	Phillips 66
Portsmouth Water	Premier Transmission Ltd (SNIP)	Redundant Pipelines - LPDA
RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)	RWEnpower (Little Barford and South Haven)	SABIC UK Petrochemicals
SAS Utility Services Ltd	Scottish and Southern Electricity Networks	Scottish Power Generation
Seabank Power Ltd	SES Water	SGN
Shell	Shell NOP	SP Energy Networks
Spring Fibre Limited	Squire Energy Networks	SSE Generation Ltd
SSE Transmission	SSE Utility Solutions Limited	Storengy

Tata Communications (c/o JSM Construction Ltd)	TfL – London Underground HV Cables (Road Side Cables)	Total Colnbrook Pipelines
Total Finaline Pipelines	Transmission Capital	Trojan Energy Limited
UK Power Networks	Uniper UK Ltd	University of Cambridge Granta Backbone Network
Vattenfall	Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd
Voneus Limited	VPI Power Limited	Wales and West Utilities
West of Duddon Sands Transmission Ltd	Westminster City Council	Zayo Group UK Ltd c/o JSM Group Ltd

Non-LSBUD members (Asset owners not registered on LSBUD)

(The following Non-LSBUD Members may have assets in your search area. It is **YOUR RESPONSIBILITY** to contact them before proceeding.

Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.)

Asset Owner	Preferred contact method	Phone	Status
Arelion UK Ltd	check-network@arelion.com		Not Notified
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Equans	nrsua.uk@equans.com	0800 130 3600	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Lumen Technologies	plantenquiries@ocugroup.com	02087314613	Not Notified
Manchester City Council	https://www.manchester.gov.uk		Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrsua@sky.uk	02070323234	Not Notified
Sota	sota.plantenquiries@ocugroup.com		Not Notified
United Utilities	WastewaterDeveloperServices@uuplc.co.uk	08707510101	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified

Disclaimer

Please refer to LSBUD's Terms of Use for full terms of use available at www.lsbud.co.uk

The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LSBUD will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LSBUD, including but not exclusively those set out above. Therefore, LSBUD cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LSBUD and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Appendix F – Calibration Certificates

Calibration Certification

Please note that hire equipment will be used for these works as our equipment is currently undergoing calibration. Calibration Certification can be provided for the hire equipment during the active hire period and post works, if requested.

Appendix G –Insurances

Our Ref: 18918201
29th March 2023

VERIFICATION OF INSURANCE

We, the undersigned Brokers, hereby certify that the following described insurance is in force at this date:-

NAME OF INSURED -	Sutcliffe Projects Ltd
TYPE OF INSURANCE -	Professional Indemnity
INSURERS -	Royal & Sun Alliance Insurance Ltd and QBE UK Ltd
PERIOD -	1 st April 2023– 31 st March 2024
LIMIT OF INDEMNITY –	£1,000,000 any one claim unlimited in the policy period but in the aggregate in respect of Pollution/Contamination and in the aggregate in respect of Asbestos

This document is furnished to you as a matter of information only. The issuance of this document does not make the person or organization to whom it is issued an additional Insured, nor does it modify in any manner the contract of insurance between the Insured and the Underwriters. Any amendment, change or extension to such contract can only be effected by specific endorsement attached thereto.

Should the above-mentioned contract of insurance be cancelled, assigned or changed during the above policy period in such manner as to affect this document, no obligation to inform the Holder of this document is accepted by the undersigned or the Underwriters.

Yours sincerely,



Peter Spengler
Insurance Broker
Direct Dial - 0151 494 4437
Email - pspengler@butterworthspengler.co.uk

Butterworth Spengler Insurance Brokers is a trading style of:

Butterworth Spengler Professional Risks Ltd	Butterworth Spengler Commercial Ltd	Butterworth Spengler (CycleSure) Ltd
No. 06808611	No. 05058549	No. 01593973

Registered address: Elmwood House, Ghyll Royd, Guiseley, Leeds, LS20 9LT

Managing Director: J Lacey ACII

Group Directors: J D Jaycock ACII; M L Robinson ACII; J Banks; R Bell

Telephone calls to our offices are recorded for training and security purposes.

Authorised and Regulated by The Financial Conduct Authority – Reg. Nos.:306470/313062/496086.

Appendix H – Manual Handling

Manual Handling – Guidance

Statistics provided by a major ground investigation contractor show that 33% of all manual handling injuries on site are sustained by drilling support staff (engineers, geologists, loggers etc.). Most of such injuries are avoidable.

Back pain, muscular strains and the like are seldom the result of lifting something very heavy but more a combination of bad technique, poor planning and a lack of personal preparation. Let us start with the premise that most sufferers of musculoskeletal injury are guilty of one or more of these factors. Harsh words but a reality.

This guidance does not attempt to explain basic manual handling techniques. There are numerous explanatory guides and commercial films available which do just that and it is the duty of your employer to ensure that you have received suitable training for the tasks expected of you. What this Guidance Document attempts to do is highlight common causes of manual handling injury in the tasks that GI support staff carry out.

It is then up to you to take notice and take care!!!

Handling Core Boxes

Other than by dragging a core box (which is not good practice as it can cause damage to the core sample) lifting must be carried out by two people.

Even with short boxes where some people are able to reach both rope handles, attempting to lift by oneself places enormous strain on the back, chest and arm muscles.

The key issue is therefore making sure that you have assistance. SF core samples should be restricted to a maximum of 2 metre lengths unless there is exceptional reasons for longer lengths as these will be very heavy.

Handling Sample Bags, Bentonite etc

Commonly injury is caused not so much because of the weight of the bagged material but more the "lift and twist" action that is employed when loading into the van or pick-up truck and the fact that often the bags are wet and dirty and therefore the correct technique of "holding close to the chest" is avoided.

The correct movement is lift, turn, set down, push into place NOT lift and turn simultaneously and DO NOT over-reach.

A piece of wood will help to slide bags into position if headroom prevents comfortable handling inside the vehicle. Also take note of the maximum weight that your vehicle is permitted to carry. You should be able to control the weight of each bag.

Handling Cool Boxes.

Cool boxes can be notoriously heavy and only so because of the person that loads them. If that is you – think of others who might not be as strong as yourself.

Again over-reaching is found to be a detrimental factor when loading into vans.

Hitching/unhitching of trailers

Most trailers have jockey wheels. Most accidents are caused by people who cannot be bothered to use them. Wind up, wind down - no lifting involved.

If the jockey winding mechanism is stiff, report it for repair. Do not rely on others doing it. !

Haste, bravado and lack of planning

None of us intend to have an accident. However some of us take on more than we can chew, are too proud to ask for assistance or do not think the task through. As with any task, manual handling needs to be planned and where a combined lift is undertaken, agreement between the parties on how the task will be performed is essential.

Adverse Ground Conditions

Footwear with good grip and ankle support helps prevent slipping which in turn helps you keep balance and do the task as planned. Many back injuries stem from slips.

Over-reaching

Not all lifting tasks are possible from the ideal ergonomic stance especially during loading and unloading of vans This is where planning and improvisation to minimise awkward handling is paramount.

Finally

Gymnasts, athletes, sports players, all prepare with a warm up exercise to help combat injury. Maybe at work we would feel self-conscious about this but keeping generally fit is important to help avert manual handling sprains and strains.

Lifting and Carrying Sutcliffe Health and Safety Policy

Extract 7.0 of Sutcliffe Health and Safety Policy – Nov 2011 – Issued Jan 2014

A policy is followed where by Managers do not ask members of staff to lift, move or carry any load that is likely to cause injury.

Staff are made aware that they have a responsibility to ensure that they use the currently recommended method of lifting as out lined below at all times and take care when carrying heavy or awkward loads.

-  Think before doing anything Stand as close to the load as possible. Spread the feet to create a stable base Bend the knees and keep the back in a natural line. Do not bend the knees fully, as this will leave little power to lift.
-  Grasp the load firmly by using the whole of the fingers and palms of the hands.
-  Keep the arms as close as possible to the body
-  Raise head with chin tucked in.
-  Hold the load close to the centre of the body

A briefing with the site supervisor will be completed before works commence

Appendix I – Operatives Qualifications

NPORS
Operator

www.npors.com
+44 (0)1806 351240

Name: **Michael Wiggins**

Reg No: **728331**

Expires: **See Overleaf**



NPORS[®]

Reg No: 728331

Initial - 22/11/2021

Category

N304 Cable Avoidance Tools

Expiry Date

30/11/2024

To check the validity of this card please scan the QR code on the front of the card or call **+44(0)1606 351240**, email **Info@npors.com**

Certificate of attendance

Presented to:

MICHAEL WIGGINS

**Who has attended the following
training course**

LONE WORKING

On

05/10/2021

Date: 21-Feb-22

Cert: #

Steve Rawlings

Director

Certificate of attendance

Presented to:

MICHAEL WIGGINS

**Who has attended the following
training course**

MANUAL HANDLING TRAINING

On

15/09/2021

Date: 21-Feb-22

Cert: #

Steve Rawlings

Director

Certificate of attendance

Presented to:

MICHAEL WIGGINS

**Who has attended the following
training course**

WORKING AT HEIGHT AWARENESS

On

04/10/2021

Date: 21-Feb-22

Cert: #

Steve Rawlings

Director

Certificate of attendance

Presented to:

MICHAEL WIGGINS

**Who has attended the following
training course**

ASBESTOS AWARENESS

On

14/09/2021

Date: 21-Feb-22

Cert: #

Steve Rawlings

Director



CERTIFICATE OF ATTENDANCE

This is to certify that: Michael Wiggins

Attended a presentation on: 27th October 2023

**'Radon – Awareness to Action in
Construction'**

Given by Marcus Emmerson of PAGEo

Signed:

M. Emmerson

Approximate Professional Development Value 1 Hour



This is a certificate awarded to

Michael Wiggins

on successfully completing

Managing Safely

a course approved and validated by the

Institution of Occupational Safety and Health

in association with

Cosensa Learning & Development Ltd

Approved Centre: 1340

Signed on behalf of IOSH

Vanessa Hamood-Williams
Chief Executive

Richard Mac Millan
Course Organiser



cosensa
Learning and Development

Date: 7 June 2023

Cert No: 931165

Possession of this certificate does not confer exemption from accredited qualifications which lead to membership of IOSH.



**high
performance**
CONSULTANCY

CERTIFICATE OF ACHIEVEMENT

This certificate is presented to:

Michael Wiggins

For successfully completing part of the in house Health and Safety training programme within Sutcliffe on the subject of:

MANUAL HANDLING AWARENESS

Date: 09/02/2023

Signed: **A.Williams**

Expiry: 08/02/2024



**high
performance**
CONSULTANCY

CERTIFICATE OF ACHIEVEMENT

This certificate is presented to:

Michael Wiggins

For successfully completing part of the in house Health and Safety training programme within Sutcliffe on the subject of:

**WORKING AT HEIGHT & USE OF
LADDERS AWARENESS**

Date: 09/02/2023

Signed: **A.Williams**

Expiry: 08/02/2024

Appendix J – Plant Specifications



Dando Drilling International

Dando Terrier

The compact, versatile Dando Terrier rig has been designed specifically for sampling and testing for geotechnical and environmental analysis. Crawler mounted for easy site access in difficult conditions, the Terrier is simple to operate and maintain, extremely reliable and competitively priced. The Terrier is now available in a new lightweight version.



Dando Terrier Features



Weighing 960kg (970kg approx. with oils and fuel) the Dando Lightweight Terrier is constructed from high grade aluminium and designed using the latest software. The rig boasts a low ground pressure for when working in fragile, sensitive terrains and provides a wider range of logistic options.



Available as an optional extra, expanded tracks provide increased stability when required, yet still allow the rig to fit through tight, narrow passages.



Blow counter installed alongside the drilling controls at the front of the rig. Large, illuminated digital display for easy reading.



**Made in England
since 1867**

Dando Drilling International Limited
www.dando.co.uk
info@dando.co.uk
tel: +44 (0) 1903 731312
fax: +44 (0) 1903 731315

Dando Terrier Features



Compact manoeuvrable crawler-mounted design ideally suited for long wheel-base transit type vans for fast mobilisation to site and secure storage of all equipment.



2-piece drop hammer for sampling and testing incorporated in mast assembly for recovery of casing and sampling tools. Mast assembly can be detached for remote operation.



Hydraulic tilting undercarriage allows operation on inclined slopes up to 30 degrees from horizontal. Deck area with storage capacity for all required drilling tools.



Rotary concrete coring head available as an option. Useful when concrete and tarmac overlie the area to be sampled.



**Made in England
since 1867**

Dando Drilling International Limited

www.dando.co.uk

info@dando.co.uk

tel: +44 (0) 1903 731312

fax: +44 (0) 1903 739205

Dando Terrier Specification

Chassis	A fabricated box section sub-frame incorporating drop hammer support, controls, engine mounting and tool storage.
Drop Hammer	A two-piece drop hammer runs on two guide bars. The weight is fully guarded and can be quickly changed for either SPT or dynamic probing standards. Next to the front mounted drilling controls a blow counter is installed which is illuminated with large digits for easy reading and an extension loom is provided when operating the mast remotely. Attached to the mast is a 1m measurement scale for the easy monitoring of progress. Hammer Speed: 0-50 blows pm Hammer Drop: 500mm-750mm Hammer Weight: 50kg or 63.5 kg Drilling Depth Capacity: 30m
Drill Mast Assembly	A fabricated, welded steel box section construction, hinge pin mounted to main superstructure, hydraulically raised and lowered. Overall Height: 2.22m-2.85m Pulldown Capacity: 1000 kgf Pullback Capacity: 7000 kgf Width: 655mm (including wheels) 1166m (jacks out) The entire mast assembly with wheels can be detached from the main superstructure for operation in areas of restricted access.
Carrier	A purpose built crawler chassis with rubber tracks fitted with tilt mechanism, allowing rig to operate vertically on slopes inclined up to 30 degrees from horizontal. Crawler Width: 800mm Overall Length (Mast Down): 2.70m Overall Height (Mast Down): 1.48m Total Weight: 1126 kg
Engine & Hydraulic PTO	Hydraulic system, powered by a 16.8HP water-cooled diesel engine, provides power for drilling, rigging and tracking Flow for PTO: 38.88 l/min Max. Working Pressure: 175 bar
Quick Connect Circuit	A quick connect auxiliary circuit is fitted as standard to the Terrier hydraulic system which runs the Terrier sampling hammer as well as other equipment, including sand guzzlers and casing jacks. The circuit is protected by a separate pressure relief valve and has a variable flow control valve fitted to the control panel for fine control.
Options	- Rotary concrete coring head - Remote drilling kit- the whole control panel and mast can be removed and operated up to 30m away from the main base unit - Casing extractor - Expanded tracks



Made in England
since 1867

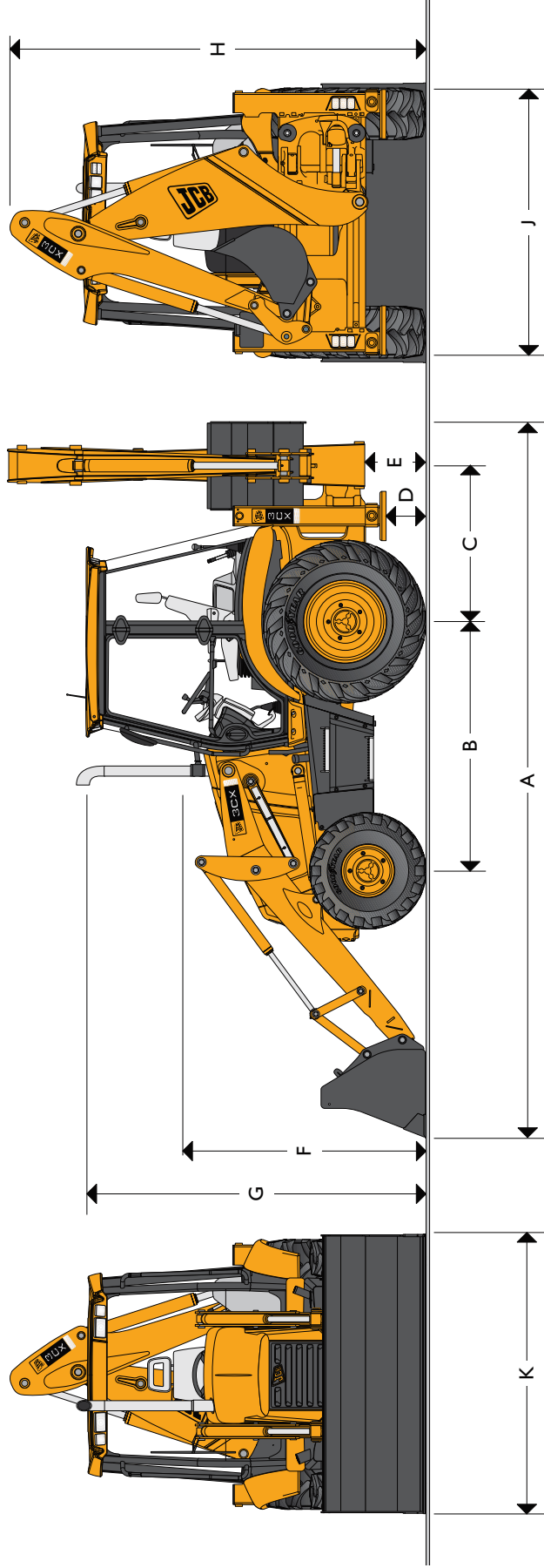
Dando Drilling International Limited
www.dando.co.uk
info@dando.co.uk
tel: +44 (0) 1903 731312
fax: +44 (0) 1903 733305



JCB BACKHOE LOADER | 3CX



MAX. ENGINE POWER 68.5kW (92hp)
MAX. BACKHOE DIG DEPTH: 5.46 metres (17ft 11in)
MAX. LOADER CAPACITY: 1.1m³ (1.44yd³)



STATIC DIMENSIONS

JCB Backhoe Loaders feature heavy duty one piece mainframe, componentised driveline and fully enclosed engine compartment. All fluid and component compartments are lockable using the ignition key.

Machine model	3CX	Machine model	3CX
A Total travel length	m (ft-in)	H Total travel clearance	m (ft-in)
B Axle centreline distance	5.62 (18-5)	J Rear frame width	3.61 (11-10)
C Slew centre to rear axle centre distance	2.17 (7-1)	K Shovel width	2.36 (7-9)
D Stabiliser feet clearance	1.36 (4-6)	J* Rear frame width	2.35 (7-8)
E Kingpost clearance	0.37 (1-2)	K* Shovel width	2.24 (7-4)
F Steering wheel centre height	0.52 (1-8)		2.23 (7-4)
G Cab roof height	1.94 (6-4)		
	2.87 (9-5)		

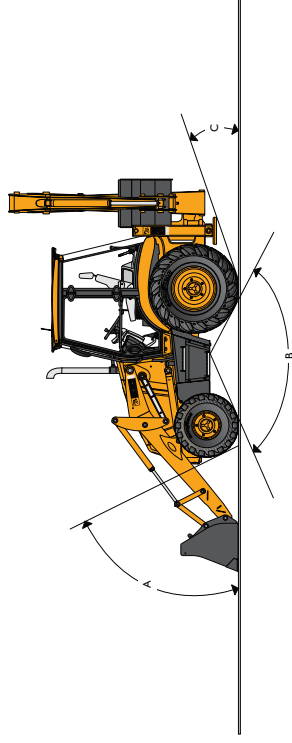
* Narrow option



JCB BACKHOE LOADER | 3CX



GROUND LINE ANGLES



- A Approach angle 66°
- B Interference angle/ramp to ground plane 120°
- C Departure angle 20°

OPERATING WEIGHTS

Operating weight includes machine equipped with cab, 610mm excavator bucket and full fuel tank.

Machine model	3CX
Standard dipper and GP shovel	kg (lb)
Extradig and 6-in-1 shovel with forks	7370 (16250) 8070 (17800)

ENGINE

Four cylinder, direction injection diesel. Gear driven water pump, cast iron engine sump, spin-on oil and fuel filters, water separator, dual element air cleaner; thermostart cold start aid.

Machine model	Naturally aspirated	Turbo
Manufacturer	JCB 1004-42	JCB 1004-40T
Displacement	4.23 Ltr	3.99 Ltr
No. of cylinders	4	4
Bore size	mm	100
Stroke	mm	127
Rated engine RPM	2200	2200
Power ratings		
Gross ISO/TR 14396 and SAE J1995	kW (HP)	68.5 (92)
SAENet ISO 9249 (EEC 80/1269 and SAE J1349)	kW (HP)	63.1 (84.5)
Torque rating		
Gross ISO/TR 14396 and SAE J1995	Nm (lbf ft)	370 (233)
SAENet ISO/TR 9249 (EEC 80/1269) and SAE J1349	Nm (lbf ft)	361 (266)
Max. torque RPM	1400	1400

STEERING

Full power hydrostatic system utilising the main hydraulic pump via a steering priority valve. In the event of engine failure, emergency steering is maintained.

Machine model	3CX - 2	3CX - 4
Axles	Steer only	Steer drive
Steering turns - lock to lock	2¼	2¼
Kerb - kerb turning circle - unbraked	m (ft-in)	m (ft-in)
Loader clearance circle - unbraked	8.1 (26-7)	8.1 (26-7)
Kerb - kerb turning circle - braked	10.4 (34-1)	10.4 (34-1)
Loader clearance circle - braked	6.9 (22-8)	6.9 (22-8)
Loader clearance circle - braked	9.5 (31-2)	9.5 (31-2)

(Depending on tyre size, ground conditions etc.)

ENGINE SUPPORT SYSTEM

Engine support system is designed for ease of daily checks, routine maintenance and longer service intervals.

Fuel type	Diesel.
Fuel filter	Replaceable spin-on cartridge plus water/sediment separator.
Air cleaner	Dual, dry element cyclonic type.
Oil filter and lubrication	Full flow, spin-on type filter.
Cooling system	Hot climate specification, pressurised 7 psi (0.5 bar) suction fan. Pressurised recovery tank with integral filler neck.

ELECTRICAL AND INSTRUMENTATION

12 volt negative ground, utilising wiring and connectors meeting IP69 water ingress test standard. Central fuse panel supplemented with main circuit breakers at battery positive terminal.

Gauges	Tachometer engine coolant temp, fuel level, hourmeter, clock.
Warning system	Audible and visual system for engine oil, transmission, park brake, battery, air cleaner, alternator.
Battery	115 A/hr.
Pre-wire	Radio speakers (cab), beacon (all).
Horn	Controlled from both front and rear.
Alternator	75 amp. 85 amp option on turbocharged engine.
Front working lights	2 twin beam fixed position.
Rear working lights	4 adjustable.



JCB BACKHOE LOADER | 3CX



TRANSMISSION

The JCB Transmissions are designed and built specifically for JCB Backhoe Loaders. They feature synchronised shifting in all gears. Powershuttle between forward and reverse. Ground speeds are designed to maximise production. An optional 4 speed powershift transmission enables effortless and fast gear changes. Gears are selected through a twist grip control on the column mounted forward/reverse level

Machine model	3CX	3CX
Manufacturer	JCB	JCB
Type	Synchromshuttle	Powershift
Torque converter	305mm (12")	305mm (12")
Torque converter ratio	3.0:1	2.54:1
Gears forward/reverse	4/4	4/4
Gear selection	Manual	Powershift
Shuttle control – F/R	Power shuttle	Power shuttle
Travel speeds	kph (mph)	kph (mph)
Tyres equipped	Front 12.5 x 18 Rear 18.4 x 26	
Gear 1	5.5 (3.4)	5.2 (3.2)
Gear 2	8.9 (5.5)	9.7 (5.9)
Gear 3	19.1 (11.9)	22.4 (13.8)
Gear 4	36.1 (22.4)	40 (24.7)

FRONT AXLE

JCB front axles are designed and built specifically for backhoe loaders and accept a wide variety of tyre combinations.

Machine model	3CX – 2	3CX – 4
Type		JCB steer drive with torque proportional
Axle ratings	kg (lb)	kg (lb)
Static load rating		16500 (36375)
Dynamic load rating		5500 (12125)
Oscillation angle	16°	16°
Steering ram	Powered track rod	Powered track rod

REAR AXLE

JCB rear axles are designed and built specifically for backhoe loaders and accept a wide variety of tyre combinations.

Machine model	3CX
Type	JCB Epicyclic hub reduction with torque proportional
Limited slip	Option
Axle ratings	kg (lb)
Static load rating	21000 (46296)
Dynamic load rating	7000 (15435)

CAB

Excellent visibility (and safety) is provided by the extra large tinted glass areas of 6.4 sq m (70 sq ft). Cab frame is ROPS and FOPS approved for maximum operator protection. ISO standard 3471 and 3449 (SAE J1040 and J231).

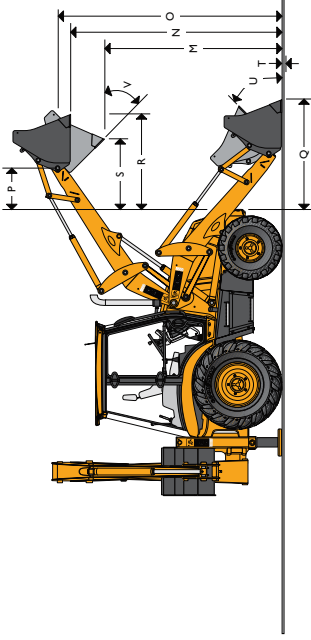
- A fully adjustable seat with lumbar support combines with ergonomically positioned controls to minimise operator fatigue.
- The in-cab noise levels are the lowest in the business for maximum operator comfort.
- A radio location is provided as standard plus twin speakers for stereo sound.
- Cab provides easy access through either a single door or two door frame. Rear side windows open either partially or fully for extra ventilation. Standard features include: lap seat belt, 3 speed fresh air/recycle heater, front and rear screen wash/wipers, front and rear horn, exterior mirrors, and flat easy-clean floormat.
- The instrument panel is positioned to the right-hand side for ease of viewing from either the loading or excavating position and has an optional lockable cover for vandal proofing. Engine speed, fuel and coolant temperature gauges, (and clock on cab builds) are mounted in the panel.
- A high performance air conditioning system is optionally available on turbo builds providing the operator with a cool working environment when working in high temperatures.
- Optional JCB Precision Controls give the operator the ultimate in operator comfort with low effort controls mounted in the arm rests of an air suspension seat.
- Static or mechanical suspension seat gives the operator a comfortable operating position.
- An optionally available heated air suspension seat gives the operator the ultimate comfort with automatic compensation for weight.



JCB BACKHOE LOADER | 3CX



LOADER DIMENSIONS



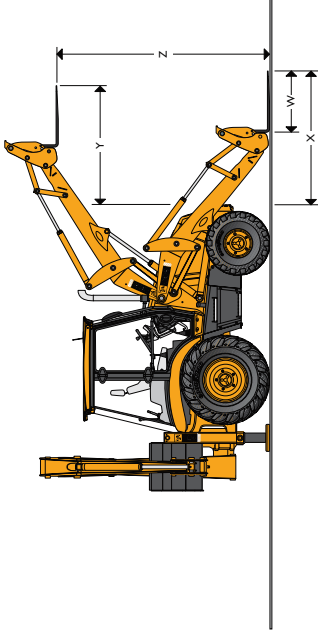
LOADER DIMENSIONS

	GP shovel	6-in-1 shovel
	m (ft-in)	m (ft-in)
Overall width with bucket		
M Dump height	2.74 (9-0)	2.72 (8-11)
N Load over height	3.23 (10-7)	3.20 (10-6)
O Loader hinge pin height	3.45 (11-4)	3.45 (11-4)
P Pin forward reach	0.36 (1-2)	0.36 (1-2)
Q Reach at ground (toe plate horizontal)	1.42 (4-8)	1.37 (4-6)
R Max. reach at full height	1.20 (3-11)	1.15 (3-9)
S Reach at full height fully dumped	0.83 (2-9)	0.78 (2-7)
T Dig depth	0.07 (0-3)	0.10 (0-4)
U Roll back at ground	45°	45°
V Dump angle	43°	43°
Law opening width	–	0.95 (3-1)

LOADER DIMENSIONS – Forklift Performance Data

	6-in-1 shovel mounted forks	Quickhitch mounted forks
	m (ft-in)	m (ft-in)
W Forks – tine length	1.1 (3-7)	1.1 (3-7)
Forks – tine width	0.08 (0-3.1)	0.08 (0-3.1)
X Forks reach at ground level	2.66 (8-9)	2.03 (6-8)
Y Forks reach at full height	2.25 (7-5)	1.72 (5-8)
Z Forks lift height – max.	2.92 (9-7)	3.27 (10-9)
Fork spacing – min	0.2 (0-8)	0.2 (0-8)
Fork spacing – max	2.17 (7-3)	1.03 (3-4)
SVL @ 500mm load centres	1000 (2205)	2000 (4410)
	kg (lb)	

LOADER ATTACHMENTS



LOADER ATTACHMENTS – Direct Mount

Loader buckets are listed according to size and application. Numbers listed below models are bucket shipping weights. All buckets are drilled to accept optional auxiliary cutting edge or teeth. Flat top box section provides rigidity and assists in bucket levelling.

	G.P. Shovel	
	Capacity SAE	
Width mm (ft-in)	Rated m³ (yd³)	Struck m³ (yd³)
2235 (7-4)	1.0 (1.32)	0.83 (1.09)
2350 (7-8)	1.1 (1.44)	0.91 (1.19)
	6-in-1 Clamshovel	
	Capacity SAE	
Width mm (ft-in)	Rated m³ (yd³)	Struck m³ (yd³)
2235 (7-4)	1.0 (1.32)	0.76 (1.00)
2350 (7-8)	1.0 (1.32)	0.76 (1.00)

LOADER

JCB loaders provide parallel lift self levelling on the up and down cycle enhancing load retention and use of optional pallet forks. High capacity buckets combined with high lift and breakout forces maximise productivity.

	G.P. Shovel	6-in-1 Clamshovel
Bucket breakout force	kgf (lbf)	6500 (14340)
Loader arm breakout force	kgf (lbf)	5300 (11685)
Lift capacity to full height (2235mm wide)	kg (lb)	3320 (7320)
Lift capacity to full height (2350mm wide)	kg (lb)	2980 (6555)
6-in-1 bucket clamp force	kg (lb)	3300 (7270)
	–	2940 (6480)



JCB BACKHOE LOADER | 3CX



BRAKES

The JCB braking system ensures effective, fade-free braking. The self-adjusting, multi-disc arrangement is inboard mounted and is oil immersed for minimum maintenance and a long operating life.

- A 3 position switch allows the selection of 2 wheel drive with two wheel braking; 2 wheel drive with four wheel braking or 4 wheel drive with four wheel braking
- All machines are fitted with servo assisted brakes as standard for low effort braking.
- Twin brake pedals provide tighter turning circle and enhanced steering control on slippery ground.
- Automatic compensation ensures 'straight' machine braking.
- Disc diameter: 220 mm (8.7 in). Friction area: 129,000 sq.mm (200 sq. in) per brake.
- The independent parking brake is mounted on the transmission output shaft and will hold the machine on 1:3 gradients. It is an over-centre type, adjustable within the cab, with transmission disconnect to prevent premature brake pad wear. Park brake disc diameter: 280 mm (11 in). Friction area: 5416 sq.mm (8.4 sq. in).

TYRES

Front

12.0 x 18, 12PR Industrial
12.5 x 18, 10PR Industrial
335/80 x 18, Radial Traction
400/70 x 18, Radial Industrial

Rear

12.5 x 20, 10PR Industrial
16.9 x 28, 12PR Traction or Industrial
18.4 x 26, 12PR Traction or Industrial
16.9 x 28, Radial Traction
480/80 x 26, Radial Industrial

SMOOTH RIDE SYSTEM (Optional)

The JCB Smooth Ride System (SRS) consists of a dry nitrogen and oil filled accumulator installed in line with the loader lift cylinders. When activated, the Smooth Ride System allows the loader arms to float. This action counteracts variations in road or site surfaces and provides the operator with a smooth ride.

Activation
Electric Switch on Instrument Panel. Manually controlled by the operator for maximum benefit and user flexibility.

JCB POWERSLIDE

Exclusive to JCB, this option enables the excavator's sideshift carriage to be hydraulically powered across the rearframe by the operation of a pedal in the cab. With this feature there is no need to 'push' the carriage across with the bucket avoiding ground damage and the need to relocate the whole machine.

HYDRAULIC SYSTEM

The Open Centre system uses twin gear pumps and Hydraulic Speed Control (HSC) with a power modulation valve that automatically varies hydraulic power to match digging conditions for extra performance and power:

- Open centre hydraulic system using simple and reliable high efficiency gear pumps.
- A Power Modulation Valve automatically varies the hydraulic power to match digging conditions to improve performance and efficiency – automatically dumps one pump when 4th gear selected on powershift models
- The HSC switch enables controlled use of hydraulic response depending upon application.
- Easily used, ergonomically positioned levers give excellent control of the loader and backhoe, thus reducing operator fatigue.
- An independent pump powers the Extradig dipper so that it can extend or retract without breaking the digging cycle. This allows faster cycle times and simultaneous use of the telescopic and normal excavator actions in operations such as grading and bank dressing
- A full flow 10 micron filter ensures that oil stays free of contaminants.

Engine	Naturally aspirated		Turbo	
	l/min (gal/min)		l/min (gal/min)	
Main pump output	73 (16)		79 (17.5)	
Second pump output	51 (11.5)		57 (12.5)	
System relief pressure	bar (lbf/sq in)		bar (lbf/sq in)	
	227 (3300)		227 (3300)	

SERVICE CAPACITIES

Machine model	3CX
Cooling system	ltr (gal)
Fuel tank	23 (5)
Engine oil with filter	160 (34.5)
Gearbox with filter	10 (2.2)
Rear axle	16 (3.5)
Front drive axle	16 (3.5)
Hydraulic system incl. tank	132 (29)



JCB BACKHOE LOADER | 3CX



BACKHOE ATTACHMENTS – Standard Profile Bucket

Width* mm (in)	Capacity SAE		Weight (+ Teeth)		Teeth
	Rated m ³ (ft ³)	Struck m ³ (ft ³)	kg (lb)		
305 (12)	0.06 (2¼)	0.05 (1¾)	102 (225)		3
400 (16)	0.09 (3)	0.07 (2½)	109 (240)		3
457 (18)	0.12 (4¼)	0.09 (3)	116 (256)		3
610 (24)	0.17 (6)	0.13 (4½)	140 (310)		4
800 (32)	0.24 (8½)	0.17 (6)	162 (355)		5
950 (37)	0.30 (10½)	0.21 (7¼)	198 (435)		5

* Including sidecutters. Width less sidecutters deduct 25mm (1 in).

BACKHOE ATTACHMENTS – Deep Profile Bucket

Width* mm (in)	Capacity SAE		Weight (+ Teeth)		Teeth
	Rated m ³ (ft ³)	Struck m ³ (ft ³)	kg (lb)		
305 (12)	0.09 (3)	0.07 (2½)	102 (225)		3
457 (18)	0.16 (5½)	0.13 (4½)	122 (269)		3
610 (24)	0.23 (8)	0.18 (6¼)	142 (314)		4
800 (32)	0.30 (10½)	0.24 (8½)	163 (359)		5
950 (37)	0.38 (10½) [†]	0.30 (10½)	183 (403)		5
1100 (43)	0.48 (8½) [†]	0.34 (12)	203 (448)		6

* Including sidecutters. Width less sidecutters deduct 25mm (1 in). [†] Capacity in cu.yd.

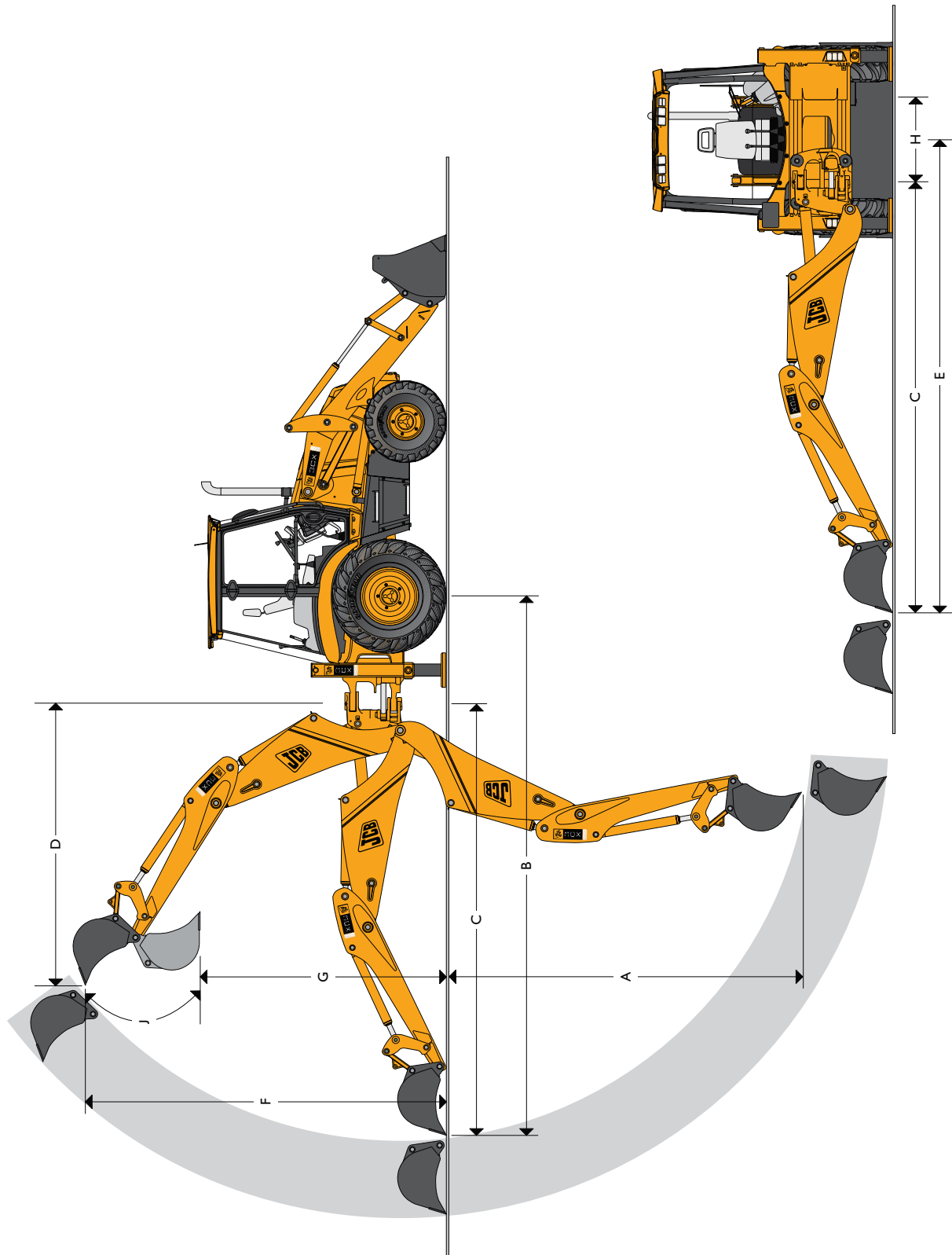
BACKHOE DIMENSIONS

		Standard Dipper m (ft-in)	Extradig m (ft-in)
A SAE max dig depth	Ext	–	5.46 (17-11)
	Ret	4.24 (13-11)	4.24 (13-11)
	Ext	–	5.43 (17-10)
	Ret	4.21 (13-10)	4.21 (13-10)
	Ext	–	5.97 (19-7)
SAE 2ft flat bottom	Ret	4.75 (15-7)	4.75 (15-7)
	Ext	–	7.87 (25-10)
	Ret	6.72 (22-1)	6.72 (22-1)
	Ext	–	6.52 (21-5)
	Ret	5.37 (17-7)	5.37 (17-7)
C Reach – ground level to slew centre	Ext	–	3.66 (12-0)
	Ret	2.74 (9-0)	2.74 (9-0)
	Ext	–	7.09 (23-3)
	Ret	5.94 (19-6)	5.94 (19-6)
	Ext	–	6.35 (20-10)
F SAE operating height	Ret	5.53 (18-2)	5.53 (18-2)
	Ext	–	4.72 (15-6)
	Ret	3.84 (12-7)	3.84 (12-7)
	Ext	–	4.32 (14-2)
	Ret	3.4 (11-3)	3.4 (11-3)
G Maximum loadover height	Ret	1.16 (3-10)	1.16 (3-10)
	Ext	1.05 (3-5)	1.05 (3-5)
	Speed	201°	201°
	Bucket rotation		
H Total kingpost travel			
J Bucket rotation			

BACKHOE PERFORMANCE

		Standard Dipper	Extradig
		kgf (lbf)	kgf (lbf)
Bucket tearout	Speed	4940 (10870)	4940 (10870)
	Power	5700 (12540)	5700 (12540)
Dipper tearout	Ext	—	2085 (4590)
	Ret	3010 (6620)	3010 (6620)
		kg (lb)	kg (lb)
Lift capacity of bucket pivot at full reach	Ext	—	990 (2108)
	Ret	1490 (2740)	1250 (2750)

JCB BACKHOE LOADER | 3CX



Appendix K – COSHH sheets

COSHH Risk Assessment No: 1. Product Name: Universal Absorbent		
Company name: Sutcliffe		Dept. (if applicable): Company vehicles
Describe the activity or work process. <i>(Inc. how long/ how often this is carried out and quantity substance used)</i>	Using spill kits in the event of oil or fuel spillages. Carried out as and when necessary.	
Location of process being carried out?	In company vehicles on company business	
Identify the persons at risk:	Employees ☒ Sub-contractors ☐ Public ☒	
Name the substance involved in the process and its manufacturer. <i>(A copy of a current safety data sheet is attached to this assessment)</i>	As per attached data sheet.	
Classification <i>(state the category of danger)</i>		
☐ Toxic	☐ Oxidising	☐ Gas Under Pressure
☐ Harmful/ Irritant	☐ Flammable	☐ Carcinogen
☐ Corrosive	☐ Explosives	☐ Dangerous for the environment
Hazard Type		
☐ Gas ☐ Vapour ☐ Mist ☐ Fume ☐ Dust ☒ Liquid ☒ Solid ☐ Other (State)		
Route of Exposure		
☐ Inhalation ☐ Skin ☒ Eyes ☒ Ingestion ☐ Other (State)		
Workplace Exposure Limits (WELs) <i>please indicate n/a where not applicable</i>		
N/A		
State the Risks to Health from Identified Hazards		
Risk to health is not classified. Although noted hazardous decomposition products are carbon oxides. For general use it does not pose an extreme risk.		
Control Measures:		
Is health surveillance or monitoring required? Yes ☐ No ☒		

Personal Protective Equipment <i>(state type and standard)</i>			
 ☐ Dust mask		 ☐ Visor	Suitable for chemical splashes
 ☐ Respirator		 ☐ Goggles	
 ☒ Gloves		 ☐ Overalls	
 ☐ Footwear		 ☐ Other	
First Aid Measures			
If contact with eyes. Rinse with plenty of water.			
Storage			
Store from direct sunlight and avoid extreme high temperatures			
Disposal of Substances & Contaminated Containers			
Hazardous Waste ☐ Skip ☐ Return to Depot ☐ Return to Supplier ☒ Other ☐			
(If Other Please State): Dispose of waste material in accordance with all local, regional, national and international regulations.			

Is exposure adequately controlled?	Yes ☒ No ☐
Risk Rating Following Control Measures	
High ☐ Medium ☐ Low ☐	

Assessed by: Colin Jones	Date: 14/12/2022	Review Date: 14/12/2023
--------------------------	------------------	-------------------------

Control of Substances Hazardous to Health (COSHH) Risk Assessment

The following materials may be used on site. Comments follow in regard to their potential harm and method of handling.

Material	Hazard	Preventative Action
Bentonite Pellets	Fine dust. Abrasive if inhaled	Wear appropriate PPE and avoid skin contact.
Cement	Fine dust. Abrasive if inhaled When mixed with water can cause burns	Store in a dry area Wear appropriate PPE and avoid skin contact. Follow manufacturers guidelines
Diesel	Inflammable Skin Irritant	Store safely in designated area. Wear gloves when refuelling plant and equipment
Cold Lay Macadam	NOT classified as dangerous in accordance with Directive 67/548/EEC or EC 1272/2008. However Cold Lay Asphalt contains flux oil, which may be present in quantities of up to approximately 2%. Flux oil in liquid state carries a risk of aspiration, which can lead to rapid and possibly fatal lung damage, and has the hazard classification: Xn R-65 Harmful: may cause lung damage if swallowed' Once the flux oil is mixed with bitumen and aggregate, it is not expected to be likely to enter the lungs, so the finished product 'Cold Lay Asphalt' is not classified as dangerous (See attached information sheet)	Store in a dry area Wear appropriate PPE and avoid skin contact. Follow manufacturers guidelines
HDPE pipe	Non-hazardous	
Pea Gravel	Non-hazardous	

Note: The storage of diesel will be limited to a 20 litre jerry can for refuelling the drilling rig or generator

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH ASSESSMENT FORM				
RISK ASSESSMENT	LOW	X	MEDIUM	HIGH
SUBSTANCE NAME GAS OIL			Assessment REF.	
			CAS NO.	
SUBSTANCE USED IN / AS REFUELLING RIG ENGINE IN WELL VENTILLATED OUTDOOR AREA.			Risk Phrases R40 Limited evidence of a carcinogenic effect. R65 Harmful: May cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking. R51/53 Toxic to aquatic organisms, may cause long term adverse effects in aquatic environment.	
 Harmful			 Hazardous to the Environment	
HAZARDOUS CONSTITUENTS Petroleum Hydrocarbons			Safety Phrases S2 Keep out of the reach of children S24 Avoid contact with the skin S36/37 Wear suitable protective clothing and gloves S43 In case of fire use CO2, dry chemical or foam. Never use water. S61 Avoid release to the environment S62 If swallowed, do not induce vomiting: seek medical advice immediately.	
FREQUENCY OF EXPOSURE Daily	Workplace Exposure Limit. 5mgm	DURATION OF EXPOSURE Up to 10 minutes daily	Maximum Exposure Limit. 10mgm	
EXPOSURE CONTROLS (Refer to MSDS)		TRAINING/INFORMATION/INSTRUCTION		
General Ventilation	Engineering Control	Containment	Special	List any specific training/information or instruction that may be required:-
X			Expert Advice Needed	Avoid fumes, contact with skin, inhalation
FIRST AID MEASURES :- If contact with skin, flush area immediately with cold water, remove contaminated clothing. Seek medical attention if medical symptoms persist. If in eye contact, check and remove contact lenses flush eyes for 15 minutes with water, seek medical attention. Ingestion - DO NOT INDUCE VOMITING, seek medical attention PERSONAL PROTECTIVE EQUIPMENT REQUIRED:- Skin protection – PVC gloves and overalls Eye protection – Goggles				
FIRE FIGHTING MEASURES:- Extinguishing media – Dry powder, CO2, foam Do not use water jet				
EXTINGUISHER TYPES:-				
WATER	FOAM X	CO2 X	DRY POWDER X	
SPILLAGE CONTROL:-		Absorbent mats to be used		
DISPOSAL MEASURES:-		Use licensed landfill site		

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH ASSESSMENT FORM				
RISK ASSESSMENT	LOW	X	MEDIUM	HIGH
SUBSTANCE NAME ORDINARY PORTLAND CEMENT			Assessment REF.	
			CAS NO.	
SUBSTANCE USED IN / AS INSTALLATION OF MONITORING WELLS AND BACKFILLING BOREHOLES			Risk Phrases R36/37/38 Irritating to eyes, respiratory system and skin.	
 Harmful			Safety Phrases S24 Avoid contact with the skin S25 Avoid contact with the eyes S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S36/37/39 Wear suitable protective clothing, gloves and eye/face protection	
HAZARDOUS CONSTITUENTS Lime, calcium silicates, alkalis and soluble chromium. When mixed with water gives rise to potentially hazardous solution.				
FREQUENCY OF EXPOSURE Daily	Workplace Exposure Limit. 5mgm	DURATION OF EXPOSURE Up to 30 minutes daily	Maximum Exposure Limit. 10mg/m ³	
EXPOSURE CONTROLS (Refer to MSDS)		TRAINING/INFORMATION/INSTRUCTION		
General Ventilation	Engineering Control	Containment	Special	List any specific training/information or instruction that may be required:-
X			Expert Advice Needed	Avoid contact with skin, eyes and inhalation of dust
FIRST AID MEASURES :- If contact with eyes wash with plenty of clean water for at least 15 mins and seek medical advice. If contact with skin wash with soap and water and seek medical advice if symptoms persist. If ingested DO NOT INDUCE VOMITING, wash out mouth with water, drink plenty of water. If inhaled move to fresh air and if symptoms persist seek medical advice.				
PERSONAL PROTECTIVE EQUIPMENT REQUIRED:- Skin protection – PVC gloves and overalls Eye protection – Safety glasses Respiratory Protection – Dust Mask				
FIRE FIGHTING MEASURES:- Not combustible				
EXTINGUISHER TYPES:- N/A				
WATER	FOAM	CO2	DRY POWDER	
SPILLAGE CONTROL:- Do not breath in dust. Non toxic – Sweep up				

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH ASSESSMENT FORM				
RISK ASSESSMENT	LOW	X	MEDIUM	HIGH
SUBSTANCE NAME BENTONITES			Assessment REF.	
			CAS NO.	
SUBSTANCE USED IN / AS INSTALLATION OF MONITORING WELLS AND BACKFILLING BOREHOLES			Risk Phrases R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation	
 Harmful			Safety Phrases S24/25 Avoid contact with the skin and eyes S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S36/37/39 Wear suitable protective clothing, gloves and eye/face protection	
HAZARDOUS CONSTITUENTS Quartz				
FREQUENCY OF EXPOSURE Daily	Workplace Exposure Limit.	DURATION OF EXPOSURE Upto 30 minutes daily	Maximum Exposure Limit. 0.4mg/m ³	
EXPOSURE CONTROLS (Refer to MSDS)		TRAINING/INFORMATION/INSTRUCTION		
General Ventilation	Engineering Control	Containment	Special	List any specific training/information or instruction that may be required:-
X			Expert Advice Needed	Avoid contact with skin, eyes and inhalation of dust
FIRST AID MEASURES :- If contact with eyes wash with plenty of clean water for at least 15 mins and seek medical advice. If contact with skin wash with soap and water and seek medical advice if symptoms persist. If ingested DO NOT INDUCE VOMITING, wash out mouth with water, drink plenty of water. If inhaled move to fresh air and if symptoms persist seek medical advice.				
PERSONAL PROTECTIVE EQUIPMENT REQUIRED:- Skin protection – PVC gloves and overalls Eye protection – Safety glasses Respiratory Protection – Dust Mask				
FIRE FIGHTING MEASURES:- Not combustible				
EXTINGUISHER TYPES:- N/A				
WATER	FOAM	CO2	DRY POWDER	
SPILLAGE CONTROL:- Do not breath in dust. Non toxic – Sweep up				
DISPOSAL MEASURES:- Use licensed landfill site				

SAFETY INFORMATION

ULTIPATCH COLD LAY ASPHALT

1. IDENTIFICATION OF SUBSTANCE/ PREPARATION & COMPANY/UNDERTAKING

SUBSTANCE NAME - ULTIPATCH COLD LAY ASPHALT
For further details of the specification refer
to the relevant Technical Data Sheet.

1.1 COMPANY DETAILS

Tarmac Limited Portland House Bickenhill Lane
Solihull Birmingham B37 7BQ
03444 630 046
Emergency 03444 630 046 (during office hours)
pozament@tarmacbp.co.uk

2. HAZARD IDENTIFICATION

- NOT classified as dangerous in accordance with Directive 67/548/EEC or EC 1272/2008.
- However, please note the following:
- ULTIPATCH Cold Lay Asphalt contains flux oil, which may be present in quantities of up to approximately 2%. Flux oil in liquid state carries a risk of aspiration, which can lead to rapid and possibly fatal lung damage, and has the hazard classification: Xn R-65 Harmful: may cause lung damage if swallowed' (In accordance with Directive 67/548/EEC) GHS08 Health Hazard H304: May be fatal if swallowed and enters airways (in accordance with Regulation (EC) 1272/2008)
- Once the flux oil is mixed with bitumen and aggregate, it is not expected to be likely to enter the lungs, so the finished product 'ULTIPATCH Cold Lay Asphalt' is not classified as dangerous.
- The following additional hazards should also be considered:
- ULTIPATCH Cold Lay Asphalt is produced at elevated temperatures (up to a typical maximum of 120°C). Hot materials may burn the skin.

- Fumes from Asphalt are unlikely to be hazardous when laid in open air situations, but there may be a risk to health by continuous inhalation of high vapour concentrations which might arise in poorly ventilated, confined or semi-confined spaces.
- Dusts containing Respirable Crystalline Silica* (quartz) present a greater hazard. Long-term exposure to respirable dust can lead to respiratory system damage and disease. Respirable crystalline silica has been associated with the lung disease silicosis.
- The quartz content of the product will vary, and is related to the type of aggregate used in the production of the asphalt. Advice on the quartz content and other chemical information is available from the supplying unit.
- *Any references to respirable silica only apply if hardened asphalt is cut, drilled, milled or planed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

ULTIPATCH Cold Lay Asphalt is a mixture of aggregate and fluxed bitumen or bitumen emulsions. Bitumen is a hydrocarbon derived from the distillation of petroleum crude oil, but may be synthetic or modified by the use of polymers and other chemicals. Flux oil added to the bitumen is usually petroleum based, and will typically be in the range of 0.7 to 1.8% of the finished product. Water based emulsions will usually be <10% of the finished product. Other additives may be used to modify the characteristics of the finished product. Aggregates used in asphalt may be naturally occurring (e.g. limestone, gritstone, granite, sand etc), artificial (e.g. slag aggregates) or recycled (e.g. road planings, inert construction and demolition waste, glass etc).

Hazardous Ingredients				
Substance Name	EC No	%	DSD Classification	CLP Classification
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics	934-956-3	0.7-1.8	Xn; R65	H304 - Asp. Tox.1
Crystalline Silica*	238-878-4	Variable	Xn; R48/20	H372 - STOT RE1

4. FIRST AID MEASURES

Inhalation: Immediately remove to fresh air. If breathing difficulties are experienced, seek medical attention. If breathing has stopped, commence artificial resuscitation and seek medical attention immediately.

Skin Contact: Burns caused by contact with hot material should be cooled by immediately flushing with large amounts of cold water. Do not attempt to remove anything from the burn area unless required to allow breathing. Seek medical attention. Bitumen may be removed under medical supervision. If skin contact is made without burns, remove soiled clothing and wash skin with soap and water.

Eye Contact: If material is hot, apply the same measures as 'skin contact' above. If the material is cold, immediately and thoroughly irrigate with eye wash solution or clean water. If symptoms develop or persist, seek medical attention.

Ingestion: Do not induce vomiting to avoid the risk of material entering the respiratory tract (aspiration). Get immediate medical attention.

Aspiration: If the product is believed to have entered the lungs (eg as a result of vomiting), take the person to hospital immediately for medical treatment.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Dry powder, foam.

Unsuitable Extinguishing Media:

Do not use water. CO2 is also not suitable.

Special Exposure Hazards in Fire:

Hydrocarbon fumes may be released, along with other hazardous combustion products including smoke.

Special Protective Equipment for Fire Fighters:

Proper protective equipment including suitable respirators or breathing apparatus must be worn.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear overalls, heat resistant safety boots and heat resistant, impervious gloves. Wear suitable respiratory protection in poorly ventilated or enclosed areas. Keep away from ignition sources. See Section 8 for guidance on personal protective equipment. See Section 7 for guidance on handling the product.

Environmental Precautions:

Prevent asphalt from entering watercourses, ditches and drains.

Methods for Cleaning:

Scrape up using suitable mechanical methods. Bitumen may be removed from tools and machinery with a proprietary bitumen remover, but ensure you refer to the suppliers safety data sheet before using.

7. HANDLING AND STORAGE

Handling: Skin contact with the product should be avoided. Inhalation of fumes should be avoided as far as is reasonably practicable. If the formation of vapours is a risk, then additional ventilation should be provided. Handle away from sources of ignition and heat. Do not smoke, eat or drink during use.

Storage: Keep away from heat. Asphalt is normally used upon receipt. Refer to the relevant Technical Data Sheet for the specific product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Take Measures to Prevent:

- (a) Inhalation of vapours/fumes.
- (b) Inhalation of excessive quantities of dust during cutting, drilling, planing or surface treatment of hardened asphalt.
- (c) Accidental ingestion of product.

Exposure Control Limits / Source				
(a) Asphalt Fumes	W.E.L.	5mg/m ³	8hrs	T.W.A
	W.E.L.	10mg/m ³	15 min	T.W.A
Oil Mist (flux oil)	W.E.L.	5mg/m ³	8hrs	T.W.A
(b) Total Dust -	W.E.L.	10mg/m ³	8hrs	T.W.A
Respirable Dust -	W.E.L.	4mg/m ³	8hrs	T.W.A
Respirable Quartz - (Crystalline Silica* SiO ₂)	W.E.L.	0.1mg/m ³	8hrs	T.W.A

W.E.L. = Workplace Exposure Limit

T.W.A. = Time Weighted Average

Inhalation: S51 - Use only in well-ventilated areas.

Eyes, Skin & Hands: S36/ 37/ 39 - Wear suitable protective clothing, gloves and eye/face protection.

Control Measures: Dust caused by cutting or planing hardened asphalt should be controlled by containment, suppression and extraction/ filtration where possible. ULTIPATCH Cold Lay Asphalt should only be laid in well ventilated areas.



Respiratory Protection: Always ensure adequate ventilation and avoid breathing vapour/ fumes. Suitable respiratory protection should be used if required to ensure exposure is below the Workplace Exposure Levels given at the start of this section.



Hand Protection: Impermeable, heat resisting gloves should be worn.



Eye Protection: Goggles should be worn if there is a risk of product entering the eyes (including dust).



Skin Protection: Overalls and/or long-sleeved jackets and full length trousers should be worn to protect skin from burns.

Clean overalls as necessary to prevent product permeating to clothing or skin underneath. Heat resistant safety boots should be worn. The use of skin barrier cream is also recommended. Hands should be washed thoroughly before handling or eating food or drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black, granular solid
Odour:	Strong, characteristic
pH:	Neutral
Boiling Point / Range:	Not applicable
Melting Point / Range:	90 - 100°C
Flash Point:	Above 200 °C
Auto Flammability:	Above 230°C
Flammability:	Not determined
Explosive Properties:	Not determined
Oxidising Properties:	Not determined
Vapour Pressure:	Not applicable
Relative Density:	Above 2.0
Water Solubility:	Insoluble
Fat Solubility:	Not determined

10. STABILITY AND REACTIVITY

Conditions to Avoid:

Sources of ignition and temperatures above 130°C.

Materials to Avoid:

Strong oxidising agents, e.g. chlorates which may be used in agriculture.

Hazardous Decomposition Products:

The substances arising from the thermal decomposition of the bitumen binder and flux oil used in ULTIPATCH Cold Lay Asphalt will largely depend on the particular conditions but may contain the following: Hydrogen Sulphide, Carbon Dioxide, Carbon Monoxide, Water, Particulate Matter (including soot), Sulphur Oxides, Polycyclic Aromatic Hydrocarbons, Unburnt Hydrocarbons, Nitrogen Oxides, Aldehydes, Vanadium Pentoxide.

11. TOXICOLOGICAL INFORMATION

Inhalation:

Inhalation of respirable dust from aggregate contained in asphalt whilst cutting or planing hardened asphalt can lead to respiratory system damage and disease. Inhalation of fumes over a prolonged period may cause irritation of the respiratory system.

Bitumen used in ULTIPATCH Cold Lay Asphalt may release small amounts of hydrogen sulphide gas. With good general ventilation, this is not likely to cause any problems, but in poorly ventilated enclosed spaces, concentrations may build up to hazardous levels.

Skin Contact:

Contact with hot asphalt may cause burns. Prolonged skin contact may cause dermatitis and malignant warts.

Eye Contact:

Contact with hot asphalt may cause burns. Product entering the eyes may cause irritation.

Ingestion:

Ingestion is very unlikely, but if swallowed, flux oil in the product may enter the lungs and lead to rapid and serious lung damage through pulmonary lesions. Seek medical attention immediately. Medical survey for at least 48 hrs.

12. ECOLOGICAL INFORMATION

Environmental Assessment:

When used and disposed of as intended, no environmental effects are foreseen, and asphalt should not pose an ecological hazard.

Mobility:

Low mobility. Will sink in water and form a solid layer on the surface of the ground. Flux oil component will spread on water.

Persistence and Degradability:

Resistant to degradation and will persist in the environment.

Ecotoxicity (flux oil):

Acute toxicity. LC50 96 hours fish > 100 mg/l
 Biodegradability. OECD 306 test. 28 days 74 %

13. DISPOSAL CONSIDERATION

Safe Handling of Residues / Waste Product:

Asphalt made with bitumen is classed as 'non-hazardous' but should be disposed of in accordance with local and national legal requirements. Hardened asphalt can be readily recycled.

14. TRANSPORT INFORMATION

Special Carriage Requirements:

Not classified as dangerous for transport.
 Product should be kept covered. Flammable materials, and containers that do or may become pressurised should be kept away from hot asphalt to avoid the risk of fire and explosion.

15. REGULATORY INFORMATION

Classification: Not classified as dangerous.

However, consideration of the following risk & safety phrases is recommended:

67/548/EEC

Risk Phrases:

R34 - May cause burns.

R36/37 - Irritating to eyes and respiratory system.

Safety Phrases:

S36/ 37/ 39 - Wear suitable protective clothing, gloves and eye/face protection.

S51 - Use in well ventilated areas.

EC1272/2008

Hazard Statements:

H304 - May be fatal if swallowed and enters airways

H317 - May cause skin irritation

H335 - May cause respiratory irritation

H372 - Causes damage to organs through prolonged or repeated exposure (relates possible lung damage if exposed to respirable silica* that may be released if hardened asphalt is cut, drilled, milled or planed.)

Precautionary Statements:

P102 - Keep out of reach of children

P261 - Avoid breathing dust/fume/vapours.

P271 - Use only outdoors or in a well ventilated area.

P281 - Use personal protective equipment as required (see Section 8)

16. OTHER INFORMATION

Training Advice:

Wear and use of PPE.

Recommended Uses and Applications:

Industrial and construction applications.

Further Information:

Contact Product Technical Support at Tarmac Limited using the details given in Section 1.

HSE Guidance Note EH40/2007

PPE Regulations 1992

COSHH Regulations 2002

Environmental Protection Act 1990

HSE Crystalline Silica EH59

Dangerous Substances Directive (DSD) 67/548/EEC

Classification, Labelling and Packaging

Regulations (CLP) EC1272/2008

Further copies of this Safety Data Sheet may be obtained from Tarmac Limited.

Prepared in accordance with Annex II of the REACH Regulation (EC) 1907/2006

LEGAL NOTICE

The information in this Safety Data Sheet was believed to be correct at the time of issue. However, no warranty is made or implied as to the accuracy or completeness of this information.

If you have purchased this product for supply to a third party for use at work, it is your duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and any of the precautions which should be taken.

This Safety Data Sheet does not constitute the user's own assessment of workplace risk, and it is the user's sole responsibility to take all necessary precautions when using this product.

Appendix L – Leptospirosis

Leptospirosis

Leptospirosis, commonly known as Weil's Disease is a blood infection caused by the bacteria *Leptospira*.

It is spread in the urine of infected animals most commonly rats, mice, cows, pigs and dogs.

Work areas most likely to be at risk are

-  refurbishment or demolition works
-  known areas of rat infestation or previous infestation
-  works near to canals, rivers or sewers.

You can get leptospirosis if:

-  soil or freshwater (such as water from a river, canal or lake) that contains infected urine gets in your mouth, eyes or a cut
-  you touch an infected animal's blood or flesh

It's very rare to get leptospirosis from pets, other people or bites.

There is no vaccine for humans

Control Measures

Where works are needed to be carried out in areas where Weil's disease is known or assumed to be present, control this risk by:

-  wearing protective clothing like gloves
-  following good basic hygiene including regular hand-washing and avoiding hand to mouth/eye etc contact
-  taking rest breaks, including meals and drinks, away from the work area;
-  washing cuts and grazes immediately with soap and running water Cover all cuts, abrasions and other breaks in the skin with waterproof dressings and/or gloves.

Symptoms

These are the early symptoms of leptospirosis

-  a high temperature, or you feel hot and shivery
-  a headache
-  been feeling sick (nausea), you're being sick, or you have diarrhoea
-  aching muscles and joints
-  red eyes
-  loss of appetite

If you experience any of these symptoms after working in a contaminated area please see you GP.

Appendix M – COVID-19 Requirements for Construction Sites

COVID19 – Requirements for Construction Sites

Background

Whilst it is crucial that you are prepared for disruption to projects, health, safety and protection of the environment should be at the top of your list as managers and leaders. Follow and keep up to date with the official advice. To protect yourself and others from coronavirus, it is so important to know how the virus is spread.

Coronavirus is spread in sneeze or cough droplets. To infect you, it has to get from an infected person's nose or mouth into your eyes, nose or mouth. This can be direct or indirect (on hands, objects, surfaces). Keep this in mind. It will help you remember all the things you need to do to protect yourself and others from the virus.

Procedure if someone falls ill:

If a worker develops a high temperature or a persistent cough while at work, they should:

-  Return home immediately
-  Avoid touching anything
-  Cough or sneeze into a tissue and put it in a bin, or if they do not have tissues, cough and sneeze into the crook of their elbow.

They must then follow the guidance on self-isolation and not return to work until their period of self-isolation has been completed.

Managers should follow this as strictly as possible and communicate this advice with workers so that they are following more hygienic procedures onsite and are more protected from the disease.

Sutcliffe employee decisions are governed by Sutcliffe latest COVID-19 absence policy.

Operational Management is governed as follows:

Site Arrangements

Operationally it is a mandatory requirement to follow this guidance (where it is appropriate to the site concerned). Risk assessments and method statements are to be reviewed and agreed to reflect these requirements.

The key areas to focus on are:

-  Reducing density of workforce and management and maintaining separation.
-  Project Hygiene
-  Eliminating need to travel by public or shared transport
-  Projects should request a relaxation of working hours restrictions where they exist in order to enable a phasing of operations (shifts) to reduce number of operatives on site and to relieve pressure on transport.

A supplementary induction / supervisor induction and revised site rules and risk assessment relating to COVID19 actions must be undertaken.

Contractor requirements – At the Pre Start meeting set out requirements for revised/supplementary risk assessments and method statements including these operating requirements.

Specified Tasks requirements – we have reviewed guidelines and Government advice in relation to specific tasks which for special, safety or operational reasons may require more than one person for their completion where social distancing requirements cannot be observed i.e. teams have to work in close proximity to each other for planned, defined tasks or works.

These will be subject to specific contractor Risk assessment and Method Statements which must be detailed, whilst social distancing guidelines remain in force.

General social distancing requirements shall be maintained in all other respects for the work place.

Do not relax social distancing requirements.

Where the completion of a work task is essential, and people need to work closer than 2m, then the task should be risk assessed in line with the hierarchy of control.

-  Can interaction be eliminated, isolated or controlled?
-  Can interaction be reduced? i.e. How can we minimise the time people are together?
-  Risk assess the use of additional PPE (Overalls, Goggles (not light eye protection), RPE, disposable gloves etc.).
-  Introduce more regular hand washing and use of sanitisers as part of the task as appropriate

Fundamentally avoid whenever possible work within 2 metres of another – this is the basis of all of method-statements and site procedures at present

-  In situations where we have to work within 2 metres in the short term (this should be limited to no more than 60 minutes in the under 2m distance zone) and it is essential to the project follow the general principles described in the site operating procedures
-  Any such situations will require
 - Operational specific Risk Assessment and Method Statement and a specific permit to work signed off by the project lead (a separate Risk Assessment and Method Statement per event – no “blanket” approach will be considered).
 - Designated supervision from Sutcliffe to ensure compliance with the enhanced controls and timescales
-  Full 5 point PPE including full goggles (not light eye protection) and facemasks. PPE disposal / cleaning as per the site
-  Good hygiene controls still apply. Washing hands for 20 seconds with soap and hot water, using tissues for coughs and avoid touching your face alongside social distancing are still the main points to remember

The following should be considered as protection against the spread of COVID 19 when conducting this assessment of risk within the 2m zone:

-  Respiratory Protection in accordance with suitability and selection protection(HS(G) 53) below
-  Eye protection which prevents cross contamination to the eyes (goggles not Light Eye Protection)
-  Disposable gloves

Facilities and guidance will need to be provided for the safe removal and disposal of this additional PPE along with hand washing / hand sanitising facilities provided at the same location.

Respiratory protective equipment

HS(G) 53 provides guidance on the suitability and selection of RPE and must be followed wherever reasonably practicable to do so, however in the current situation the hierarchy to be followed is set out below and must be strictly adhered to:

-  FFP3, or equivalent RPE, that has been formally face fit tested using the qualitative face fit test approach. If not available then,
-  FFP2 or N95, or equivalent RPE that has been formally face fit tested using the qualitative face fit test approach.
-  If qualitative face fit testing is not available follow the normal fitting of any RPE as shown in the HSE poster 'Using Disposable Respirators' whilst paying particular attention to the user seal check being conducted under observation by another person
-  If none of above are available then work ceases until the necessary PPE is in place

This is a sensitive issue. As no worker who exhibits symptoms should be at work (in which case they should self-isolate and not travel or present themselves for work), and where our workforce observes good hygiene. Current NHS / PHE guidance is that they do not recommend use of face masks outside of a clinical environment, but we also owe a general duty of care to our employees and subcontractors.

The following will be included and are to be implemented on any sites that are continuing to work:

COVID 19 information should be added to Tool box talks and briefings are to be held regularly with site management teams, supervisors and workers

Consumables – Please ensure you have secured supplies of cleaning materials and consumables to maintain good hygiene on site. FFP2/3 respirators are a challenge to procure, and this is likely to get worse over the next few weeks – months. They are being allocated primarily to the health services. This will remain under review.

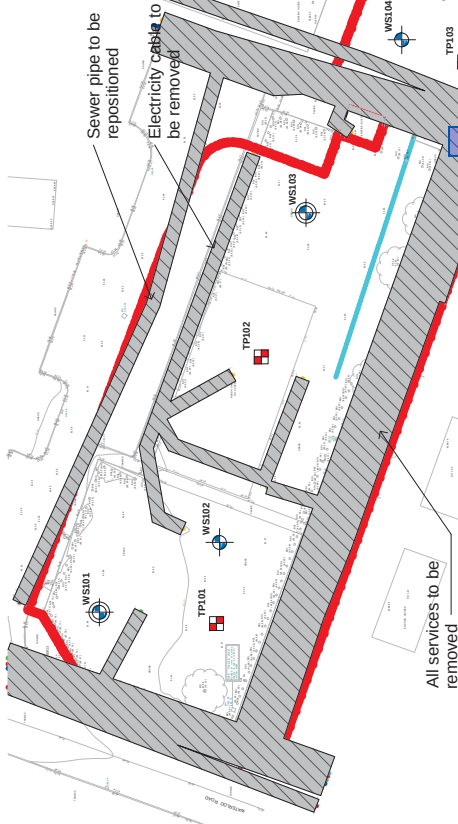
Site behaviour including social media – there are a lot of people watching from outside site and a lot of people on site who don't want to be on site, don't think the measures go far enough or otherwise disagree with how or why we are continuing to work lawfully.

Please continue to monitor for any workers you may identify as 'forced' to work or who may present with COVID-19 symptoms.

Any disrespectful behaviour including offensive social media posts, malicious complaints to HSE, Police, etc. offensive behaviour like spitting, etc. must be dealt with locally, and reported up the chain.

You may need to consider newsletters to local residents.

Drawing Ref. – 33716-SUT-ZZ-00-DR-G-7251 (N) & 33716-SUT-ZZ-00-DR-G-7252 (S)



Legend

Dynamic Sampling Borehole (WS)

Dynamic Sampling Borehole with Gas Installation (WS)

Trial Pit Excavation (TP)

Structural & Civil Engineering

Building Services

Pre Planning Services

Head Office

0113 277 7000

www.sutcliffe.co.uk

Head Office

0113 277 7000

www.sutcliffe.co.uk

Client

MSV HOUSING

Project

CHEETHAM HILL, MANCHESTER

Drawing Title

SITE INVESTIGATION LOCATIONS
ON EXISTING PLAN
(SOUTHERN SECTION)

PRELIMINARY DRAWING		11/23	DE	DB
Rev	Description	Date	By	Chkd
P01	Drawn By	NOV 2023	D EVANS	
	Checked By		D BOWEN	
	Project Number	Scale at A1	Status	Revision
	NTS	33716LG	P	01
Sheet Number		33716-SUT-ZZ-00-DR-G-7251		

Drawing Status

FOR INFORMATION

