

Notification, Risk Assessment & Plan of Work for work with Asbestos



Project

Job Number SOU003492 - ASDA Ferring - AIB/Thermal Debris soil remediation
Site Name ASDA - Littlehampton Road, Ferring, Worthing BN12 6PN
Location Carpark entrance proposed fuel station

Client

Name
Address
Contact
Telephone

Rhodar

Contracts Manager Mark Van Praagh
Position Contracts Manager
Telephone [REDACTED]
Email [REDACTED]
Address Unit 2 Pacific Wharf, Hertford Road, Barking, Essex IG11 8BL [REDACTED]

Revision

Date RAMS created 06/10/2018
RAMS Version Number 1
Internal PRL 2

2.0 Risk Assessment

Employer	Rhodar Limited
Assessor Name	Mark Van Praagh
Project Number	SOU003492 - ASDA Ferring - AIB/Thermal Debris soil remediation
Site	Carpark entrance proposed fuel station
Assessment Date	06 October 2018
Revision	1

2.1 Activity / Process Being Assessed

removal of asbestos thermal insulation debris within existing & proposed excavation.

Includes manual removal of thermal insulation to wall(6m2), removal of barred pipe work containing thermal insulation(12LM) - as far as is reasonably practicable.

Materials are unsealed amosite/chrysotile in poor condition. Works to be conducted under fully controlled conditions.

Provision of asbestos remediation operative, plant, equipment and materials to oversee the following works:

Provision for asbestos trained and face fitted machine driver.

item one

Construction of respirator zone, includes for hygiene station and hygiene shower unit.

Removal of polythene seal to skip under controlled conditions using suppression method.

Levelling of skip content under controlled conditions employing suppression.

On levelling, the content within the skips will be sheeted with polythene then as a precautionary measure the content will be capped using the clean stock piled mud currently on site.

Works to be conducted under precautionary controlled conditions.

item two

Construction of respirator zone, includes for hygiene station and hygiene shower unit.

Installation of a triple layered polythene seal to plant unit.

Lifting strops to be positioned and using the machine the unit will be lowered from standing position on to its side with the strops positioned for re-lift.

Operatives will then complete the seal to the bottom of the plant unit using 3no layers of polythene.

The unit will then be correctly labelled with waste classification and lifted into a sealed skip for its safe disposal.

Operatives will then complete an environmental clean of the ground adjacent the store plant, where surface will be cleaned – as far as is reasonably practicable using h-type vacuum equipment and hand shovels.

Works to be conducted under suitably controlled conditions.

item three

Provision of licensed scaffolding contractor to construction to provide suitable structure and protection for asbestos enclosure construction.

Construction of full protection enclosure, 6mx6m - enclosure will be directly attached to the enclosure.

Operatives' will conduct hand dig around exposed - should the pipe that lead out of the enclosure and out of the proposed dig the pipe work will be removed and the remainder of pipe work leading from the work area will be and the exposed then stump will be encapsulated.

Operative will then remove thermal insulation to exposed wall – as far as is reasonably practicable - using manual tool removal method.

Operatives' will then remove and dispose of back fill materials from the area that plant has been removed from.

This will be completed whilst conducting regular inspections to ensure no further visible ACM'S are present within the soil.

The analyst will make regular inspection of the removed soil to ensure know visible asbestos contamination is present.

Where no visible notifiable ACM'S are present, the surfaces will be clean using H-type vacuum equipment.

The analyst will be invited in to complete a four stage clearance of the working area, and it is anticipated that the reoccupation certificate will detail caveats with regards to the potential of contamination within the back fill materials that remain within the excavation.

Works to be conducted under fully controlled conditions.

2.2 Hazards Identified

Our anticipated exposure levels are assessed six monthly in line with the results obtained during personal monitoring.

Notifiable Asbestos

Pre-cleaning of dust and debris that may contain minor/trace amounts of asbestos debris (<0.010 f/ml)

Removal of Asbestos Debris (Insulation) (<0.060 f/ml)

Removal of Asbestos Insulation Residues to wall (<0.060 f/ml)

Removal of Insulated Pipe Work Complete with Insulation (Wrap and Cut) (<0.020 f/ml)

Non-Licensed Asbestos

Removal of Asbestos Cement (Roofing, Cladding, Gutters, Drainpipes.) (<0.088 f/ml)

Asbestos Waste

Carrying of asbestos waste from the removals enclosure to the Waste Van Skip

Working At Height

Use of Ladders

Working on tower scaffold

Working adjacent excavation

Fire

Aerosols/propellants

Electrical Hazards

Gas Cylinders

Confined / Enclosed Space Entry

No risks of this type identified

General

Burns

Cuts & Bruises

Entry into Construction sites

General (non-asbestos) Dusts

Head injury

Live plant and machinery

Loading & Unloading Vehicles

Moving Vehicles

Musculoskeletal injuries

Removal of Redundant Equipment from Boiler Room/Plant Rooms etc.

Slips, Trip or fall

Trapping Hazards

Working adjacent to 'live' retail/commercial premises visited by general public and occupied by staff

Electrical

110V equipment

Power Tools

Use of Electric Drills

Use of Recip-Saws

Noise and Vibration

Environmental Noise

NPU noise

Generator Noise

Vibrating tools (HAVS)

Zoonose

No risks of this type identified

Biological & Environmental

working within excavation

Lighting

Chemical

Irritant / Harmful

Respiratory Irritants

2.3 Significant Site Specific Risks

Hand/arm vibration

Confined space

Working from height

Noise

Control measures for the significant site specific risks are detailed in the plan of works

2.4 People at Risk

Supervisor / Operative

Analyst

Main Contractor

Auditor

2.5 Control Of Substances Hazardous To Health

Type - Product - (Hazard) - Risk Rating after Control

Pine Disinfectant - (Non-Hazardous) - Low

Propane - (Highly Flammable) - Low

Spray Fix - (Highly Flammable) - Low

Concept Colt - (Non-Hazardous) - Low

Idenden 30/330 - (Non-Hazardous) - Low

2.6 Manual Handling

Activity - (Risk Assessment) - Risk Rating after Control

Site Equipment - (MH-009 MH-017 MH-018 MH-019 MH-021 MH-026 MH-027 MH-028 MH-031 MH-032/33) - Low

Plant - (MH-005 MH-006 MH-010 MH-011 MH-012 MH-023 MH-024 MH-030 MH-034) - Low

Lifting & Moving 10Kva Transformers - (MH-001) - Medium
 Lifting and handling 5000CMH NPU - (MH0-14/015) - Medium
 Lifting & carrying Liquids/ Chemicals up to 20-30kg/l - (MH-020) - Medium
 Lifting & carrying boxes up to 30kg - (MH-022) - Medium
 Unhitching and manually handling DCU - (MH-037) - Medium

2.7 Environmental

Aspect - (Impact) - Risk Rating after Control

Asbestos Waste - (Pollution) - Low
 Chemicals (lubricants/ Foams/ Glues/ Surfactant) - (Pollution) - Very Low
 Drainage of DCU Water - (Pollution) - Low
 Fuel Oils/ Diesel - (Pollution) - Low
 Non Hazardous Wastes - (Pollution) - Low
 Waste Timber & Polythene - (Pollution) - Very Low

2.8 Control Measures

Control Measures

Asbestos - All staff will work in accordance with the plan of work. All personnel trained to remove ACM.

Fire - All combustible materials to be removed. Appropriate fire extinguishers on site as required and ensure that emergency provisions are in place, persons are trained and drills are carried out.

Slips, trips and falls - The site will be kept tidy, well lit & all staff will wear safety shoes. Tools/machines with trailing cables will be plugged into nearest socket to work point. All 110v cables to be elevated.

Manual handling - All site staff are trained in manual handling and will work in accordance with CSP HS/06.

Working from height (Steps/Hop-Ups/Podium Steps & Ladders) – All equipment to be inspected by trained personnel and recorded before use. Only to be used where scaffolding is not practicable.

Electrical Equipment/110v - Supervisor and operatives to inspect all electrical appliances on a daily basis. Portable appliances are tested in accordance with manufacturers' instructions.

Hand arm vibration - All staff will work in accordance with the plan of work and CSP HS/13.

Moving vehicles - Vehicle and pedestrian routes to be segregated and all vehicle movements will be supervised. All staff working outside including contractors will wear hi-visibility clothing.

Live Electrics (110v) - All 110v equipment PAT tested and certified. Checks made on a daily basis.

Poor lighting - Temporary 110v lights shall be installed to all work areas.

Contact with hazardous substances - COSHH risk assessments available on site. Staff are to read the instructions on the container and follow them. All chemical and fuels to be assessed and stored correctly.

Elevated noise - All staff will work in accordance with the plan of work and CSP HS/13

Excavation - Effective means of communication are essential, Client will provide earth support works as per temporary works design to create safe access and egress including working zone within excavation. Vision panels will be installed for regular inspection by the client engineer. Scaffolding will provide edge protection

Public-pedestrian routes to be segregated and all movements will be supervised. All staff working outside including contractors will wear hi-visibility clothing.

2.9 Risk Rating

Consequence:	5
Likelihood:	2
Result	10

MED

2.10 Next Formal Review Date

This risk assessment is specific and valid only during the contract period. Supervisors are required to monitor site conditions to ensure that hazards and risks assessed remain the same throughout the work. Any changes to hazards or risks posed will require a re-assessment, and such amendments must be made by the contracts manager.

3.0 Site Establishment

Site Arrival

- Greet the client project manager, digger driver & analyst to discuss works.
- All plant will be checked prior to use.
- Check all operative and plant certification, DOP (Expiry and actual capacities of NPU).
- Carry out briefings including risk assessment, Plan of Work & toolbox talks.
- The VOW will be signed.
- Once the above is complete the Hygiene Facility will be set up. **No works must start until the Hygiene Facility is fully operational**
- Welfare facilities will be provided on site in the canteen and client toilets.

Special Instructions - Client Instructions

1. This is a CSCS card site 2. PC site induction 3. This site is adjacent a live store & residential area. Queries from staff/public to be directed to CM

Personal and Respiratory Protective Equipment

Hard Hats

Hand Protection - Anti - Abrasion / General Purpose

Safety Boots

Hi -Vis Clothing

Hearing Protection

Ear Defenders

Ear Plugs

RPE - Orinasal Half Masks with P3 filter

RPE - Powered Full Face Respirator with P3 filter

Permit to Work

Permit to Dig to be issued by PC

Isolations

N/A

Emergency Details

Nearest A&E Hospital

Worthing Hospital - Lyndhurst Road, Worthing, West Sussex BN11 2DH

A&E Telephone Number

999

Distance To A&E From Site

4.3miles

Fire Evacuation & Muster Points

On hearing the fire alarm (verbal or air horns) leave the enclosure immediately and leave the building by the nearest available exit highlighted on the Plan of Work drawing.

Contaminated muster point: Beside Rhodar Hygiene Unit

Non-contaminated muster point: At primary entrance to waste ground

Local Fire & Rescue Services

Follow site procedures and dial 999 in an emergency - recommended procedure by the fire service.

Fire Risk & Precautions

Low - All materials that could burn are removed before work commences.

Fire Extinguisher & First Aid Kit Location

AFFF fire extinguisher to be placed outside the air lock/enclosure. Two First Aid Kits will be on site at all times at the work area and in the vehicle.

Onsite Emergency Communications Via:

Supervisor Mobile/verbal

Contacts

Supervisor	Company	Contact Number	Email
Dave Harman	Rhodar	07577 972979	d.harman@rhodar.co.uk
Onsite Contact	Company	Contact Number	Email
Principal Designer	Company	Contact Number	Email
Principal Contractor	Company	Contact Number	Email
Other Licence Holders	Company	Contact Number	Email
0	0	0	

Project Timings

Maximum number of employees engaged on the project at any one time

0

Start Date	End Date	Operating Hours	
23/10/2018	10/11/2018	08.00-16.00	
Days	Nights	Weekdays	Weekends
Yes	No	Yes	No

4.0 UKAS Laboratory and Air Monitoring

Company

Name of Company	Contracted To
EE	ASDA

Personal Monitoring

The company has a personal monitoring strategy which aims to carry out personal monitoring on at least 10% of our sites, based upon risk, type and individual carrying out the works, together with the availability of an analyst to carry out the personal monitoring. Where constant monitoring or leak tests are being carried out, every effort should be made to carry out personal monitoring, please refer to company policy for further details.

Smoke Test

Prior to works commencing the enclosure will be smoke tested and will be witnessed by:

Appointed Analyst

Types of Air Monitoring required

Rhodar Site Van
Background
Reassurance
Leak Air Testing
Hygiene Facility tested at end of works unless specified in scope
4 Stage Clearance

5.0 Asbestos Survey

Details

Company
EE

Survey Type

Survey Date

Available On Site?
Yes

6.0 Management Details

Site Supervisor

The site manager or supervisor will be present on site throughout the works.

Contracts Manager

The Contracts Manager shall brief the supervisor prior to the works commencing and may make random visits to site, together with regular communication with the site supervisor.

Auditing

In house or independent auditors may visit site to carry out unannounced audits, this is in line with the company policy CSP HS/15.

Site Supervisory staff must ensure that all operatives involved in the works have read or have had read to them the Plan of Work. Each Operative will then indicate that they fully understand the Plan of Work by signing it. Each time a new operative starts work on the site they must be fully inducted into the method of work and sign the appropriate verification.

Any changes to the Plan of Work will be communicated via a toolbox talk & signatures will be recorded in the site diary. For fuller details please refer to applicable CSP CP/10.

Plan of Work Amendments

Site supervisory staff have limited authority to make minor amendments to the Plan of Work on site, all amendments must be communicated to the Contracts Manager. Such amendments need to be recorded on the Plan of Work and the diagrams amended as required. Amendments will be summarised in the Amendments Section of the Site Diary which must always be retained on site for the duration of the works. Please refer to CSP AA/01 for the amendments that Supervisors can and cannot carryout.

7.0 Managers Declarations

Declaration

I confirm that I have planned and written the ASB5 Notification, Risk Assessment and Plan of Work for these asbestos works in accordance with the Rhodar Asbestos Abatement Policy and the requirements of CAR 2012 and supporting health and safety legislation.

Note: This document is not valid unless it has a secondary authorisation and a site release authorisation in ink in accordance with the Group Asbestos abatement policy.

Contracts Manager Signature

Name Mark Van Praagh
Date 06/10/2018

Secondary Signature

Name
Date

Site Release Authorisation

Name
Date

8.0 Verification of Work

Declaration

I have read or have had explained to me the risk assessment and Plan of Work for this job, in conjunction with all relevant CSPs and SAFEguard. The supervisor has conducted all relevant tool box talks.

I fully understand the plan of work, what I have been asked to do and I agree to work to all company procedures and SAFEguard rules. I sign below to acknowledge this.

Name

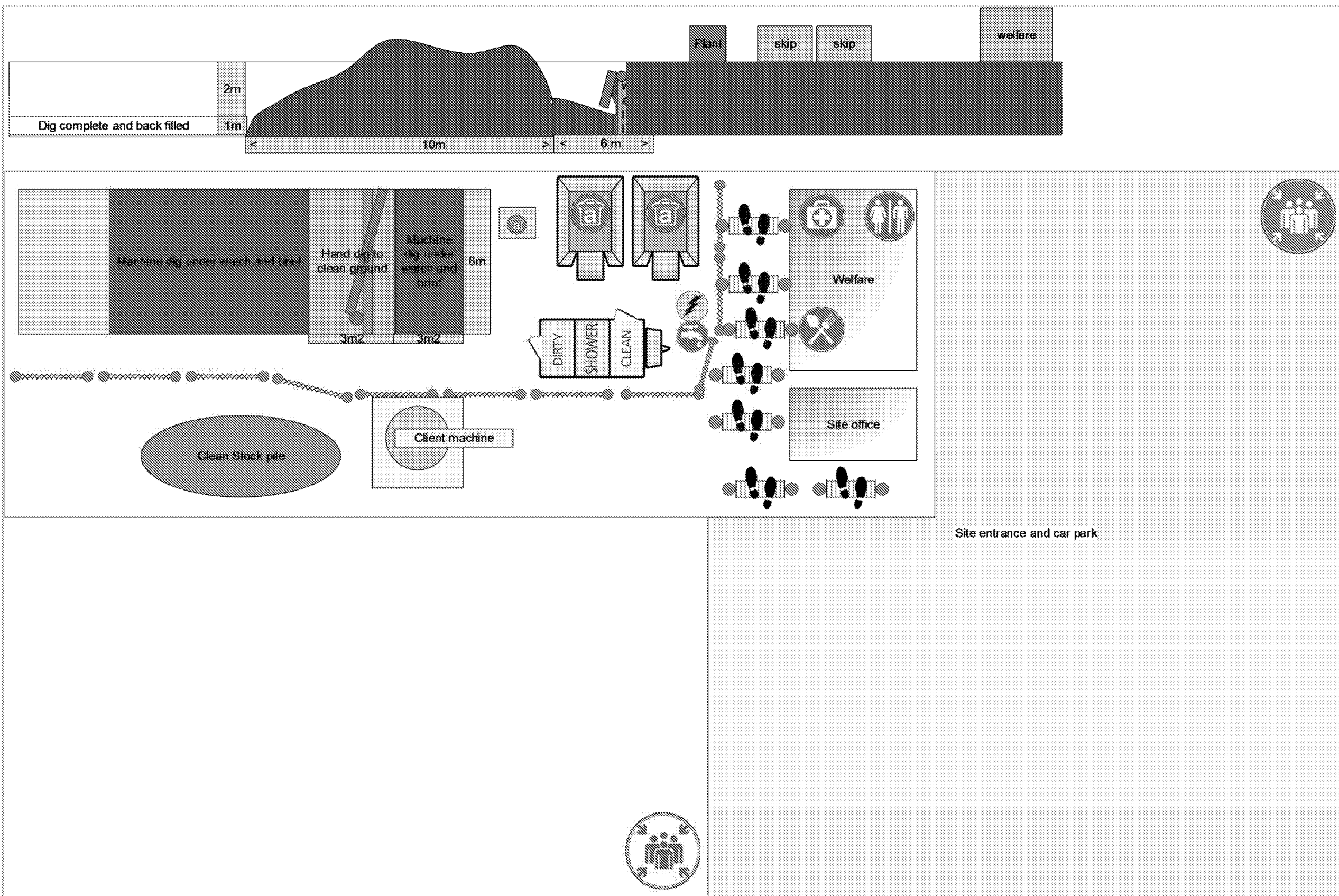
Signature

Date

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OVERVIEW DIAGRAM - LOCATION

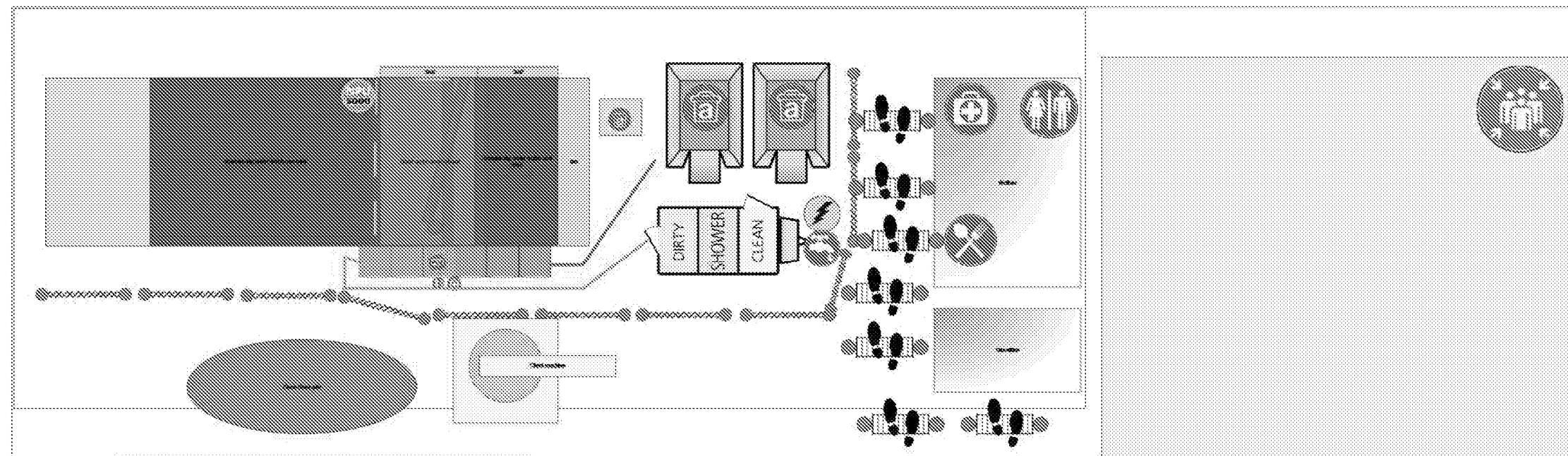
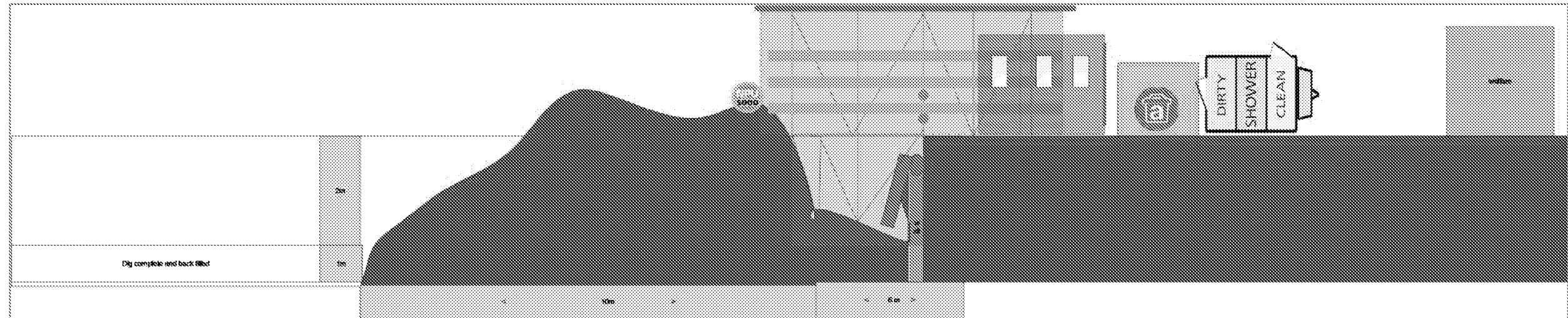
- MEWP
- Scaffold Tower
- Toilets
- Welfare
- Primary Decontamination Equipment
- Modular Hygiene Unit
- Mobile Hygiene Unit
- Pedestrian route
- Respirator Zone
- Enclosure
- Airlock
- Baglock
- Transit Route
- Waste Route
- Escape Route
- Skip
- Van
- Temporary Fencing
- Viewing Panel
- Ccrv
- Non-Contaminated Muster
- Contaminated Muster
- Spill kit
- Fire Exit
- Negative Pressure Unit (Rated)
- H-Type Vacuum
- Rolling Head
- Dustless Blaster
- Injection Machine
- First Aid kit
- Fire Extinguisher
- Generator
- Power Supply
- Water Supply
- Asbestos Waste
- Drain



Drawing

ENCLOSURE SETUP

-  MEWP
-  Scaffold Tower
-  Toilets
-  Welfare
-  Primary Decontamination Equipment
-  Modular Hygiene Unit
-  Mobile Hygiene Unit
-  Pedestrian route
-  Respirator Zone
-  Enclosure
-  Airlock
-  Baglock
-  Transit Route
-  Waste Route
-  Escape Route
-  Skip
-  Van
-  Temporary Fencing
-  Viewing Panel
-  CCTV
-  Non-Contaminated Muster
-  Contaminated Muster
-  Spill kit
-  Fire Exit
-  Negative Pressure Unit (Rated)
-  H-Type Vacuum
-  Roving Head
-  Dustless Blaster
-  Injection Machine
-  First Aid kit
-  Fire Extinguisher
-  Generator
-  Power Supply
-  Water Supply
-  Asbestos Waste
-  Drain



ENCLOSURE VOLUME CALCULATION			
Enclosure Height	3.5 m		
Enclosure Length	6 m		
Enclosure Width	7 m		
Enclosure Volume		196 m3	
Plus Working Post			m3
Plus Airlocks	3 (No of cubes)	6 m3	
Plus Baglocks	3 (No of cubes)	6 m3	
Roof Volume		208 m3	
Roving Head Allow	0 m	0 %	
Roving Head 45 degree cone	No	0 %	
Total Adjustment for Roving Head		0 %	
Adjusted Volume		208 m3	
Flow & Airchanges Required	12 per hour		
Capacity of Air-movers Required		2496 m3/hr	
	1X5000	NPU	



Plan of Works

SCOPE OF WORKS

Item one (22/10/18)

- Construction of respirator zone, includes for hygiene station and hygiene shower unit.
- Removal of polythene seal to skip under controlled conditions using suppression method.
- Levelling of skip content under controlled conditions employing suppression.
- On levelling, the content within the skips will be sheeting with polythene then as a precautionary measure the content will be capped using the clean stock piled mud currently on site.
- Works to be conducted under precautionary controlled conditions.

Item two (23/10/18)

- Construction of respirator zone, includes for hygiene station and hygiene shower unit.
- Installation of a triple layered polythene seal to plant unit.
- Lifting strops to be positioned and using the machine the unit will be lowered from standing position on to its side with the strops position for re-lift.
- Operatives' will then complete the seal to the bottom of the plant unit using 3no layers of polythene.
- The unit will then be correctly labelled with waste classification and lifted into a sealed skip for its safe disposal.
- Operatives will then complete an environmental clean of the ground adjacent the store plant, where surface will be cleaned – as far as is as reasonably practicable using h-type vacuum equipment and hand shovels.
- Works to be conducted under suitably controlled conditions.

Item three(24/10/18)

- Provision of licensed scaffolding contractor to construction to provide suitable structure and protection for asbestos enclosure construction.
- Construction of full protection enclosure, 6mx6m - enclosure will be directly attached to the enclosure.
- Operatives' will conduct hand dig around exposed - should the pipe that lead out of the enclosure and out of the proposed dig the pipe work will be removed and the remainder of pipe work leading from the work area will be and the exposed then stump will be encapsulated.
- Operative will then remove thermal insulation to exposed wall – as far as is reasonably practicable - using manual tool removal method.
- Operatives' will then remove and dispose of back fill materials from the area that plant has been removed from.
- This will be completed whilst conducting regular inspections to ensure no further visible ACM'S are present within the soil.

Plan of Works

- The analyst will make regular inspection of the removed soil to ensure know visible asbestos contamination is present.
- Where no visible notifiable ACM'S are present, the surfaces will be clean using H-type vacuum equipment.
- The analyst will be invited in to complete a four stage clearance of the working area, and it is anticipated that the reoccupation certificate will detail caveats with regards to the potential of contamination within the back fill materials that remain within the excavation.
- Works to be conducted under fully controlled conditions.

HYGIENE FACILITY

The unit is to be set up and checked that it is fully operational prior to commencing any asbestos related works in accordance with CSP H5/04 (page 52).

Transit/waste routes will be boarded using 18mm ply boarding, boarding will be sheeted Corex to create a cleanable route.

Operatives will transit to the hygiene facility as the facilities cannot be connected directly to the work areas due to location and blocking waste routes.

SITE SET UP

An exclusion zone will be set up around the work area using fencing supplied by the PC, warning notices visible to prevent unauthorised access.

Rhodars appointed machine operator will use the PC digger that is currently on site, Rhodar will provide necessary RPE.

35 yard hazardous material skip(s) will be sited as close to the proposed remediation area as possible.

Temporary earth work supports will be completed and per the approved design, the clients PC will need to issue a permit to work before Rhodar enter excavation. Clients appointed engineer will complete inspection of earth work supports on a regular basis.

Elite scaffolding will erect a temporary roof structure and handrails around the work area, this will include for side elevation ranch boarding.

PC to provide suitable water supply, 110V power supply

Pc to provide suitable welfare

Plan of Works

NOISE CONTROL MEASURE FOR RECIPROCATING SAW

Based on previous noise assessment data we anticipate the noise levels within the enclosure to be no more than 100 dB (A).

Ear protection zones shall be marked with notices as far as is reasonably practicable, workers who use the equipment and/or work within 4 metres will wear ear plugs (SNR 37).

Random noise monitoring may be carried out during the works and if so must be documented on the company noise assessment form; this should be sent back to compliance who will add the results to the current database of noise levels recorded during these works.

HAND ARM VIBRATION CONTROL MEASURE FOR RECIPROCATING SAW

The equipment that has been assessed for HAV on this site is Makita JRT3070CT for the removal of redundant pipework.

Based on the recip saw instruction manual the vibration emission is no more than 8.5 m/s². An assessment completed by the contracts manager using the HSE hand arm vibration calculator this piece of equipment can be used for a maximum of 42 minutes trigger time per day.

The site supervisor will take into account the actual trigger time applied during any combined period of use ensuring the maximum time is not exceeded. For this piece of equipment you must not exceed a trigger time of 10 minutes in any one session. Once you have used this piece of equipment for the time specified you must revert to other duties and rotate if necessary the piece of equipment.

Records of any noise and HAV monitoring undertaken will be kept on site by the supervisor and recorded on the noise and vibration exposure record form.

MANUAL HANDLING CONTROL MEASURE

During cutting the pipe work will be supported by second operative. The pipe work will be lifted as cutting takes place to prevent the blade from jamming.

Reciprocating saw to be used to cut the pipe sections. The supervisor will identify the locations where the pipework is to be cut by tagging the cut point with a red tag secured to the pipe with a tie wrap.

Operatives will wear specified gloves and ear defenders.

Plan of Works

The 1m lengths of pipework will then be double wrapped in polythene sheeting and tape sealed in red waste bags at either end to highlight the hazardous material.

Once wrapped it will be taken to an area within the enclosure for storage at the end of the shift.

Waste bags to be filled with a maxim of 3no shovels loads.

PERSONAL DECONTAMINATION

Within the exclusion zone a decontamination zone shall be formed which will be demarcated with red and white barrier tape and warning notices on display.

Correx shall be laid to boarded floor area with a bucket/sponge and a low pressure airless spray sited within decontamination zone for decontamination purposes.

This will include removal of dusts from PPE and wiping down half face respirators.

REMOVAL – SKIP (ITEM ONE)

Operatives wearing white type 5/6 coveralls, half face Respirator, standard gloves, Hi-Vis vests and Hard Hats will enter the work area and commence with the removal of sheeting to skip

The digger operator will remain in his cab throughout the removal with the windows closed at all times. The driver will only operate with nominated banksman in view.

All movements will be operated by the nominated banksman managing the vehicle movements

Operatives and analyst will liaise with the digger operator on levelling of Skip,

The spoil within the skip will be sprayed with fibre suppressant solution applied by a large volume sprayer whilst levelling.

When the skip is levelled, operatives will seal the 'parcel' using the overlap envelope method.

Operatives will then complete an environmental clean of the ground adjacent the store plant, where surface will be cleaned – as far as is as reasonably practicable using h-type vacuum equipment and hand shovels

Plan of Works

Any other bagged waste will then be cleaned externally and double bagged into a second clear bag, wiped down then transported to the waste van on site in accordance with CSP HS/06 (page 65) & CSP AA/09 (page 136).

On completion of the waste removal the digger bucket will be lowered to the ground and the digger switched off, the bucket will be sprayed down with fibre suppression (idenden 30/330 mixed 1 part to 10 parts water) from a hand held low pressure sprayer before the bucket is wiped and cleaned with rags.

When the bucket is cleaned to the satisfaction of the analyst all rags/cloths will be disposed of as contaminated waste and double bagged.

The Supervisor will then conduct a thorough visual of the work area minimum of 30 minutes.

REMOVAL – PLANT DISPOSAL (ITEM TWO)

Operatives wearing white type 5/6 coveralls, half face Respirator, standard gloves, Hi-Vis vests and Hard Hats will enter the work area and commence with the removal of sheeting to skip

The digger operator will remain in his cab throughout the removal with the windows closed at all times. The driver will only operate with nominated banksman in view.

All movements will be operated by the nominated banksman managing the vehicle movements

Operatives and analyst will liaise with the digger operator movement of plant unit.

Operative will lay 2no sheet of polythene on the floor next to the plant item lifting strops will be position under the polythene to enable safe lifting of plant.

The dig driver will roll the plant onto the polythene. Operatives will now wrap the plant and seal with cloth tape, a red asbestos bag will be fixed to the parcel.

The digger driver will now lift the plant using lifting strops and place the plant unit within the sealed skip.

Operatives will then complete an environmental clean of the ground adjacent the store plant, where surface will be cleaned – as far as is as reasonably practicable using h-type vacuum equipment and hand shovels

Plan of Works

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When the bucket is cleaned to the satisfaction of the analyst all rags/cloths will be disposed of as contaminated waste and double bagged.

The Supervisor will then conduct a thorough visual of the work area minimum of 30 minutes.

REMOVAL – PIPE WORK AND EARTH REMOVAL (ITEM THREE)

Before works start the pipe work will be confirmed it is redundant, isolated and drained down to protect from substances contained in the pipe work.

The client has confirmed the pipe isolated and the pipework is cut at the entry point to the working area.

Operatives will enter the enclosure in full face respirators, general purpose gloves and red category 3 type 5/6 overalls & using mobile scaffold towers for safe access.

Access to the pipework will need to be gain by hand digging around the buried pipe work, soil from the immediate area will be dug using hand held shovels and placed directly into red asbestos bags for its safe disposal.

At least 20-30cm of exposed pipework is required to be cut to reduce the risk of disturbing the edges of the insulation when cutting it. Therefore wetting is required to the cutting points of pipe work, insulation residue to removed from the required sut point location..

The pipework will be inspected for suitable breaks in the pipes where flanges can be unbolted or pipe hangers removed, or the bare pipe cut. Where such breaks do not occur naturally, or if they are not at convenient position.

Where small sections of ACM residue are to be removed, the pipe cleaned with hand tools, wire brushes scoring pads.

When all the pipe work has been removed using the wrap and cut all the wall within the wall within excavation cleaned using wire brushes and scrapers **as far as is reasonably practical**



Plan of Works

Operatives will now commence with the removal of insulation residue to wall.

Drop sheets will be placed to the ground surface to avoid further contamination of ground.

When the insulation residue is found, the ACM will then be sprayed using an atomiser device with liquid fibre suppressant (idenden 30/330 mixed 1 part to 10 parts water)..

Only then when saturated will the ACM will be removed and peeled/scraped off in sections using hand tools e.g. scrapers, screwdrivers, wire brushes to remove the spray coating sections, continuously spraying through suitable atomising devices to guard against any possible dry patches.

The insulation residue will be removed using scrapers whilst utilising the H-type vacuum cleaner to provide shadow vacuum controls.

The residue will be removed in a systematic across the face of the wall.

All surfaces will be cleaned manually using a combination of scrapers, wire brushes, emery cloths and scouring pads to remove any debris and residues from surfaces.

Operatives will now complete hand dig of dug ground to assess for ACM’S

Where larger deposits of residue are located, operatives will hand pick and place into red asbestos bags.

Operatives will systematically and thoroughly check soil to removing all traces of ACM’S.

When all the materials have been removed and bagged, a final clean will be carried out to the surfaces, they will be vacuumed using an H-type vacuum and wiped with damp disposable rags to remove all visible traces of dust and debris.

All ground surfaces will be inspected for hidden ACMS (sfarp) and any suspect areas will be scraped back to a flat surfaces.

The Supervisor shall enter the enclosure to check area

Waste Bags and debris will not be allowed to accumulate on the floor.

Bags will be removed by end of each shift following standard procedures.

Plan of Works

Fine cleaning will then take place throughout the area using H type vacuums to remove dust and debris and all surfaces thoroughly cleaned using tak rags and damp cloths.

On completion of the works and when The enclosure shall be visually inspected by our appointed supervisor, this should take a minimum of 2 hours. Before being passed to the analyst for the 4 stage clearance.

FOUR STAGE CLEARANCE

On completion of the removal works a four stage clearance will take place in accordance with **CSP AA/09** (page 141).

WASTE REMOVAL

All waste will be removed from the enclosure as per **CSP AA/08** (page 136).

SITE CLEARANCE

On completion of all works we shall conduct a site clearance involving the removal of all plant, equipment and carryout a site walk around with the analyst to verify that all work areas, transit routes are cleared.

On completion a post remediation checklist should be completed by the supervisor covering all areas of work.

Plan of Works



