

DEMOLITION ENVIROMENTAL HEALTH & SAFETY PLAN

For the Demolition and Associated Works



Project Address

Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP

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Document Control

Preparation	Name	Position	Signature
Prepared by:	Sean McCann	External H&S Advisor	
Reviewed by:	Gary Hickman	Contracts Manager	
Authorised by:	John Hickman	Operations Director	

Record of Adjustment

Date:	Name:	Section:	Description:	Signature	Date:

Changes incorporated in the last revision are marked by red side lining adjacent to the affected text.

Distribution List

Distributed To:	Original Document	Revision A	Revision B	Revision C	Revision D
Client					
Principal Contractor					
Principal Designer					
Site Office					
Office					
Other					

This document will be kept under review and modified to anticipate and reflect the changing circumstances and the standards achieved as the work progresses.

ANY UNSIGNED DOCUMENTS ARE UNCONTROLLED AND ARE NOT TO BE USED AS SITE DOCUMENTS.

PROJECT ORGANISATION

Logo	Project Role	Organisation Name	Contact Details
	<i>Client</i>	TBC	Contact: Tel: Email: Address: Website:
	<i>Principal Designer</i>	TBC	Contact: Tel: Email: Address: Website:
	<i>Designer</i>	TBC	Contact: Tel: Email: Address: Website:
	<i>Structural Engineer</i>	TBC	Contact: Tel: Email: Address: Website:
	<i>Principal Contractor</i>	Mackey Demolition Services Ltd	Contact: John Hickman Tel: 01656338000 Email: jhickman@mackeydemolitionltd.co.uk Address: Access House North Road, Bridgend Industrial Estate, Bridgend, Wales, CF31 3TP. Website: https://www.mackeydemolitionltd.co.uk
	<i>Noise Monitoring Specialist</i>	Crimson Remote Services Ltd	Contact: James Flitton AMIOA Tel: 0330 124 7291 Email: james@crimsonremote.co.uk Address: Ground Floor, Holly Farm, Clipstone Road, Edwinstowe, Nottinghamshire, NG21 9JD Website: https://crimsonremote.co.uk
	<i>Dust Monitoring Specialist</i>	Crimson Remote Services Ltd	Contact: James Flitton AMIOA Tel: 0330 124 7291 Email: james@crimsonremote.co.uk Address: Ground Floor, Holly Farm, Clipstone Road, Edwinstowe, Nottinghamshire, NG21 9JD Website: https://crimsonremote.co.uk
	<i>Vibration Monitoring Specialist</i>	Crimson Remote Services Ltd	Contact: James Flitton AMIOA Tel: 0330 124 7291 Email: james@crimsonremote.co.uk Address: Ground Floor, Holly Farm, Clipstone Road, Edwinstowe, Nottinghamshire, NG21 9JD Website: https://crimsonremote.co.uk
			Contact: James Flitton AMIOA

	<i>Movement Monitoring Specialist</i>	Crimson Remote Services Ltd	Tel: 0330 124 7291 Email: james@crimsonremote.co.uk Address: Ground Floor, Holly Farm, Clipstone Road, Edwinstowe, Nottinghamshire, NG21 9JD Website: https://crimsonremote.co.uk
	<i>Scaffolding Hire Company</i>	Access Scaffolding Group	Contact: TBC Tel: TBC Email: TBC Address: Access House, North Road, Bridgend Industrial Estate, Bridgend, CF31 3TP Website: TBC
TBC	<i>Asbestos Surveying Contractor</i>	TBC	Contact: Tel: Email: Address: Website:
	<i>Asbestos Removal Contractor</i>	ARTICO Enabling Services Ltd	Contact: TBC Tel: 01792 961 544 Email: info@articoenv.com Address: Access House, North Road, Bridgend Industrial Estate, Bridgend, CF31 3TP Website: https://www.articoenv.com
	<i>Visiting External H&S Inspector</i>	Secellus Safety Solutions Ltd	Contact: Sean McCann Tel: 07367293725 Email: sean@perses.org.uk Address: 36 Venturefair Drive, Edinburgh, EH17 8WD Website: https://www.perses.org.uk

Introduction

This document has been prepared in accordance with Regulation 12(2) of the Construction (Design and Management) Regulations 2015. The Demolition Management Plan (DEMP) describes the management and site arrangements to ensure that, as far as is reasonably practicable, the works can be carried out safely and without risk to the environment.

Mackey Demolition Services Ltd recognises that it is our responsibility as Principal Contractor to develop and monitor this Demolition Environmental Management Plan, and to ensure it is kept up to date throughout the duration of the contract and accurately reflects the on-site situation.

The Ecological surveys supplied by the client and the CDM Principal Designer must be kept available on site and included in Appendix 3 of this DEMP.

It should be noted, however, that the Pre-construction Project Information Pack must not be interfered with in any way! References can and should be made to terms originating in that Pre-Construction Project Information Package. Still, any amendments, additions, or deletions must be recorded only within this DEMP.

All amendments, additions or deletions must be recorded in the "Record of Adjustments" pages, with relevant information being added to the document by the appointed persons.

No alterations or additions should be made to this DEMP without the prior knowledge and approval of the principal contractor and the site management.

Aims and Targets:

The objective of the Demolition Environmental management Plan is to demonstrate that Ecological and Health & Safety management is planned into the work undertaken on this project to achieve the following: -

- To put into practical effect the commitment made in our Company Environmental Policy.
- To ensure a positive attitude and responsibility of all those involved in the project to achieve Ecological & Health & Safety targets.
- To develop further good Ecological management practices.
- To achieve high standards of Health & Safety performance.

Our Health & Safety Targets for this Project are:

- The achievement of a 'no lost time' accident rate.
- To ensure that all works undertaken have a minimal Health, Safety and Environmental impact on the surrounding area.

GENERAL STATEMENT OF HEALTH AND SAFETY FOR THIS PROJECT

The safety and health of our employees demand at least the same degree of attention and emphasis as that placed on our mainstream activity, which encompasses quality, proficiency, efficiency, environmental and financial awareness. We also recognise our responsibilities for the health and safety of others who may be affected by our activities.

Our main aim is to create a working environment in all construction projects that is free of work-related accidents, dangerous occurrences, and ill health. To this end, we will pursue continuing improvements from year to year.

We undertake to discharge our statutory duties by:

- Identifying hazards on construction sites, assessing the risks related to them and implementing appropriate preventative and protective measures.
- Providing and maintaining a safe plant and work environment.
- Establishing and enforcing safe methods of work.
- Recruiting and appointing personnel who have the skills, abilities and competence commensurate with their level of responsibility.
- Ensuring that technical competence is maintained through the provision of refresher training as appropriate.
- Promoting awareness of health and safety and of good practice through effective communication of relevant information.
- Furnishing the resources needed to meet these objectives.

All employees, designers and contractors on their part are encouraged to give their fullest co-operation and to contribute actively towards achieving a work environment that is free of accidents, dangerous occurrences and ill health.

Our health and safety policy will be reviewed at suitable intervals to monitor its effectiveness and to ensure that it reflects changing needs and circumstances.

Signed for and on behalf

of **Mackey Demolition Services Ltd** Date: 25 March 2026

Project Introduction

This Demolition Ecological Management Plan, incorporating ecological Surveys, Studies and Risk and Impact Assessments has been developed in accordance with the CDM 2015 Regulations. This method statement describes the Demolition Contractor's site organisation and arrangements for managing health and safety. It provides information and procedures for all site personnel (and visitors) on health, safety, and welfare matters.

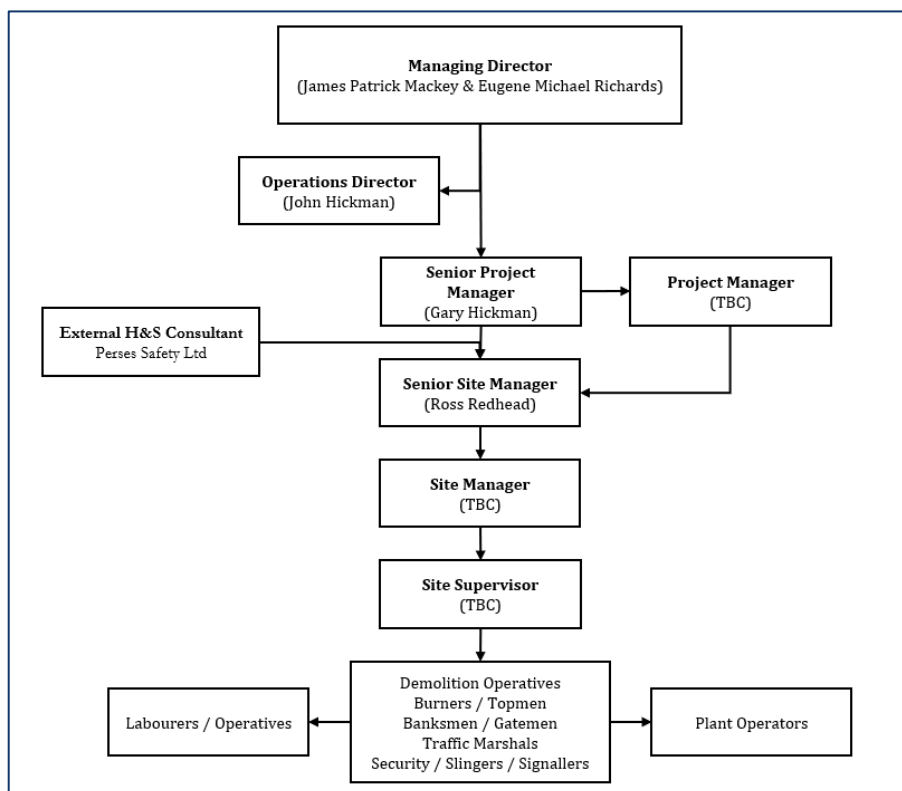
The following Health & Safety Plan refers to the demolition and associated works at Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP. This document is not definitive and may vary to ensure the safety of all those directly involved or otherwise. Any variation from the described method of works and associated arrangements will be discussed with the Client and principal contractor before being submitted in writing to the Principal Designer for approval and before the revised works commence. This document will be amended to suit the approved revisions.

Management of Health & Safety During the Demolition Phase

The management of Health and safety in the demolition phase will be the implementation of:-

1. The company's Policy for Health, Safety and Welfare.
2. Where appropriate, risk assessments in accordance with the Management of Health and Safety at Work Regulations 1999.
3. Method statements for specific activities where a significant risk is identified.
4. Weekly safety inspections by site management superimposed by independent safety audits of work in progress to ensure compliance with procedures identified in both the method statements and risk assessments, together with statutory regulations.

The structure of the management team for this project is below;



OPERATIONS DIRECTOR – John Hickman (Visiting)

Qualifications: CCDO Demolition Director, CCDO Level 7 NVQ, Construction Senior Management Level 7 NVQ Diploma, Site Environmental Awareness Training Scheme (SEATS), Directors & Officers Leadership Roles and Responsibilities Course,>NNLW Awareness, Temporary Works Supervisor, D90.

Responsibilities: Manages resource allocation, including the timely provision of staff, plant, and equipment, liaising with the site team to ensure adequate resourcing throughout all project phases.

SITE MANAGER – Ross Redhead (Full-Time / On-site)

Qualifications: CCDO Demolition Supervisor (NVQ completed), Asbestos Awareness, First Aid Trained, MEWP/Scissor Lift, Safety Passport, Slinger Banksman, Demolition Awareness, Manual Handling, Mobile Tower (PASMA), Environmental Awareness Training, Non-Licensed Asbestos Training.

Responsibilities: The demolition Site Manager supervises all site operations and ensures projects are completed safely, on schedule, and within budget. They coordinate workers, carry out risk assessments, enforce safety regulations, and communicate with clients, contractors, and regulatory authorities. Site Managers guarantee that demolition activities comply with UK safety standards, including those established by the Health and Safety Executive and best-practice guidelines from the National Federation of Demolition Contractors.

CONTRACTS MANAGER – Gary Hickman (Visiting)

Qualifications: CCDO Demolition Manager, CCDO Level 6 NVQ, Construction Senior Management Level 7 NVQ Diploma, NNLW Awareness, Temporary Works Coordinator, D90.

Responsibilities: Oversees the planning, coordination, and safe execution of all demolition activities on site, ensuring full compliance with relevant legislation, including the Health and Safety at Work etc. Act 1974, CDM 2015, and Control of Substances Hazardous to Health (COSHH), where applicable.

Collaborates closely with site supervisors, environmental officers, and subcontractors to integrate demolition works with other site operations such as soft strip, structural dismantling, plant operations, and debris management, minimising disruption to neighbours and maximising operational efficiency.

Responsible for risk assessments, method statements, and maintaining high standards of safety, environmental control (including dust and noise mitigation), and quality throughout the project lifecycle.

ASBESTOS MANAGER – (To be confirmed) (Full-Time / On-site)

Qualifications: UKATA Asbestos Manager. (To be confirmed)

Responsibilities: Ensures the safe and efficient execution of all asbestos removal identified within surveys or encountered during activities, consistently adhering to all relevant regulations and best practices, including CAR 2012.

Collaborates effectively with project managers and site supervisors to seamlessly integrate asbestos removal activities with other site operations such as soft strip, dismantling, preparatory works, and crown/holder removal, minimising disruption and maximising efficiency.

DEMOLITION SITE SUPERVISOR – (To be confirmed) (Full-Time / On-site)

Qualifications: CCDO - Supervisor, Asbestos Awareness, First Aid Trained, MEWP/Scissor Lift, Slinger Banksman, Demolition Awareness, Manual Handling, Mobile Tower (PASMA), Environmental Awareness Training, Non-Licensed Asbestos Training.

Responsibilities: Directly manages day-to-day site operations, ensuring all work is carried out safely, efficiently, and in compliance with legislation, including the Health and Safety at Work etc. Act 1974, CDM 2015, and relevant environmental and quality standards.

Coordinates closely with the demolition project manager, subcontractors, and operatives to implement method statements, risk assessments, and control measures for activities such as soft strip, structural demolition, plant operations, and debris management, maintaining high standards of safety and environmental control, including dust, noise, and waste mitigation.

Monitors workforce performance, site housekeeping, and adherence to project schedules, providing guidance and support to ensure work progresses smoothly while minimising disruption to neighbours and the surrounding community.

Demolition Operatives: Demolition operatives are responsible for safely dismantling and removing buildings and structures. Their duties include using hand and power tools, operating machinery, clearing debris, and adhering to strict health and safety procedures on site. They must work in accordance with regulations set by organisations such as the Health and Safety Executive and follow industry guidance from the National Federation of Demolition Contractors to ensure work is completed safely and efficiently.

CPCS Demolition Plant Operators: Certified and experienced operators will manage all demolition plant operations, including high-reach excavators and smaller machines, ensuring the efficient and safe execution of all mechanical demolition activities outlined in the tender.

Traffic Marshals: Essential for the safe movement of vehicles and personnel on site during all material handling and logistics.

First Aiders and Fire Marshalls: Trained personnel readily available on site to respond to any medical emergencies or fire incidents, ensuring compliance with health and safety regulations during all activities, including awareness of smoke generation risks from hot works.

Burners / Topmen: Trained operatives responsible for carrying out controlled steel cutting during demolition works, ensuring all hot works are undertaken safely and in accordance with site permits and procedures.

Gatemen: Responsible for controlling site access, logging visitors and deliveries, and ensuring only authorised personnel and vehicles enter the site.

Security: Personnel providing site security through the means of temporary CCTV monitoring systems used to prevent unauthorised entry, theft, or vandalism. These systems will be linked to a manned and off-site monitoring centre.

Slings / Signallers: Qualified operatives who attach loads and guide lifting operations, ensuring safe communication with plant operators during lifting activities.

Project Location & Site-Wide Elements

Site Address

TY Cambria, 29 Newport Road, Cardiff, CF24 0TP

Site Location



Mackey Demolition Services Ltd are aware of the following:

Local residents may need to be informed of any large vehicle movements to and from the demolition site. The demolition works, site plant, and equipment will be moved to the project site during periods of low vehicular traffic.

Emergency vehicle routes emergency service access and egress will be kept clear at all times

Liaison will continue throughout the duration of the project to keep the project management team, adjoining owners, occupiers and receptors updated on the current project status and any changes in circumstances.

The Client will be the main conduit for contact and liaison with the adjoining residents.

The works defined will take place within the demolition site areas, which are within the project site boundaries. All demolition operations, site plant, machines and operatives will be contained within the site boundaries. No over-sailing of any boundaries by any plant and equipment will be permitted on this project. No access and use of any adjoining land shall be allowed, unless by the direction and consent of the client.

Parking on the verges or the approaches to the site is strictly forbidden.

Programme & Duration.

- The demolition programme will be completed in one continuous phase
- Demolition is scheduled to start the week ending (TBC) and will continue for **22 weeks**.
- Demolition will consist of the phased removal of the building and below ground structures as identified on site plans and structural survey reports, below ground structures and foundations will be removed to a maximum depth of 2 metres.

MONITORING

1. Active and reactive monitoring of fauna, Birds and mammals and insects on the project will be implemented as follows, in accordance with the Company Policy for Environmental Management.
 - a. In addition to daily Noise, Dust and Vibration monitoring on site, the site manager will, on the first working day of each week, conduct a safety check of the site including all environmental monitoring
 - b. Compliance Audits for project Health and Safety and Environmental monitoring will be conducted by an independent external safety auditor every 4 weeks.
2. Copies of the documents mentioned within this Section will (a), after being used at the site meetings, be filed within the safety file kept in the site office, and (b) be forwarded to the Client's Principal Designer for monitoring purposes.

The stated objective is to ensure that all work carried out on Mackey Demolition Services Ltd sites is done safely and considers all ecological matters as reported in the site ecological survey and that suitable arrangements for monitoring and reporting are in place

Apart from meetings as described, Mackey Demolition Services Ltd own in-house meetings, held at two weekly intervals, which will also discuss and record: -

- Any change in Regulations / Legislation
- Site Audits
- Accidents / Occurrences
- Training
- Ecological developments on site such as nesting birds, bees etc

Site Safety audits will be held regularly, at least monthly. The results of the audit will be presented in a report to company management. Any required action will be initiated immediately, and a copy of the audit report will be retained in the site copy of the Health and Safety File, together with a record of the active term. A copy of any required action will be lodged in the contract file and included in discussions at in-house meetings.

Subcontractors will similarly be monitored, although some may have their own acceptable systems. This will be discussed at Subcontractors' site meetings and minuted with a copy to the site Health and Safety file.

Dust Noise and Vibration

- ✓ We will ensure that, so far as is reasonably practicable, dust, noise and fumes do not cause a nuisance to the community surrounding the place of business or site on which we are working.
- ✓ Information about matters such as noise at work, methods for containing spills, emission controls etc. This may be specifically prepared for the Company or consist of publications and advice from appropriate bodies (e.g. Environment Agency and/or Health & Safety Executive).
- ✓ Noise levels will be controlled with regard to active, relevant legislation including the control of pollution Act 1974 and the Environmental Protection Act 1990, to the environmental Health officer's satisfaction.
- ✓
- ✓ Every attempt practicable will be made during the course of this contract to reduce the impact that our demolition noise and vibration has on the surrounding environment. The measures that will be taken will be within the guidance of the BSI Code Of Practice for Noise and Vibration Control on Construction and open Sites (BS 5228:2009) and will include the following.
- ✓ Noise levels will be controlled with regard to active, relevant legislation including the control of pollution Act 1974 and the Environmental Protection Act 1990, to the environmental Health officer's satisfaction.
- ✓
- ✓ Every attempt practicable will be made during the course of this contract to reduce the impact that our demolition noise and vibration has on the surrounding environment. The measures that will be taken will be within the guidance of the BSI Code Of Practice for Noise and Vibration Control on Construction and open Sites (BS 5228:2009) and will include the following.

Receptors	Hazard
Local residents Users of the adjacent shops and commercial premises Pedestrians accessing surrounding live buildings. Operatives Visitors to site	Complaints from users of adjacent buildings and pedestrian routes Noise induced hearing loss Vibration white finger Ground based vibration travel HAV – Hand Arm Vibration

- Noise will be controlled by using modern machinery, maintained in good condition and were practicable fitted with sound deadening devices.
- Where possible the use of hydraulic breakers will be minimised to avoid disturbance to others in leu of the machines hydraulic gr and concrete pulveriser attachments.
- Should any work be necessary which may involve exposure by operatives to levels of vibration above the daily exposure limit or action values (ELV or EAV), a separate and specific assessment will be carried out, records will be kept by the site supervisor and maintained on site throughout the works.
- Our Site Supervisor will monitor all work involving exposure to vibration.

Exposure is most likely to occur when using the following items:

- Hydraulic Breaker – noise produced normally in excess of 107db.
- Abrasive Wheel – noise produced normally in the region of 107dB.
- Hand-held breakers – noise produced normally in excess of 100db

Throughout the contract, the Site Supervisor will monitor noise generating activities to ensure that noise levels are kept within the control limits, the success of this will be assessed on whether complaints regarding noise from workers / neighbours of the site are received, all monitoring activities will be recorded within the site diary and shall be made available for inspection on request.

Should activities be undertaken that risk noise being generated in excess of 85db, breaching the following two types of hearing protection will be used when noise levels are produced:

Appendix A Noise Vibration and Dust Monitoring.

Arrangements For The Co-Ordination of Contractors

It is the responsibility of the Site Management Team, in conjunction with the Principal Contractor, to monitor and develop the Demolition Ecology Management Plan to ensure coordination with other contractors during demolition. This will be by ensuring that:

- ✓ A common approach is developed for managing all ecological issues by everyone involved in the demolition phase.
- ✓ Assessments are prepared by contractors under the Management of Health and Safety at Work Regulations 1999.
- ✓ The provision and use of designated welfare arrangements.
- ✓ The implementation of the DEMP to include the provision of risk assessments.
- ✓ Where necessary, ensure modification of the DEMP according to experience and any additional information received from contractors.

Information For Contractors

- Information on Ecology and Environmental requirements will be provided to all contractors before the commencement of any site operations through safety induction training for all site personnel.
- Programme and planning meetings with contractors will also be held regularly, during which health and safety issues will be raised.

Selection Procedures

1. **Contractors** appointed during the demolition/construction phase will be required to demonstrate they are competent to undertake the work required and that their employees have received an adequate level of training. This will be done by reference to previous performance standards, and all contractors will be required to complete a health and safety questionnaire prior to appointment. Method statements and risk assessments must be provided by contractors and authorised by site management prior to any work being commenced. Method statements and risk assessments will be stored in a contractor's register in the site office.
2. **Evidence of training** does not in itself prove competence, and any operative who is considered not to be "competent" when using work equipment will be stopped from using such equipment, irrespective of whether they have evidence of training or not. The decision will rest solely with the Site Managers.

Communication & Co-Operation

1. Project, Client and Sub-Contract Review Meetings will be the means for communicating and passing information to all members of the project team, including the client, the client's representative, designers, Principal Designer, contractors and others whose health and safety may be affected due to the demolition work. The scheduling of these meetings will be developed by the Principal Contractor.
2. An "open door" approach should be adopted by all parties involved in the project. This will help encourage a sense of co-operation, involvement and personal responsibility from all parties to complete this project safely and successfully.
3. Co-operation between all contractors is expected so that the activities of one contractor will not create a risk to the health and safety of another.
4. Arrangements for providing coordination on health and safety issues on site will be made through daily pre-start coordination meetings to determine specific work areas and work tasks. These will maintain contact by site managers and supervisors with employees and contractor representatives.
5. All site managers and supervisors are to allow and encourage any representations to be made concerning health and safety issues on site by the workforce.
6. Where variations in design work or planned procedures are necessary during the demolition phase, these should be appropriately assessed in respect of health and safety implications, and any information will be circulated to members of the project team, including the Principal Designer.
7. Regular site progress, design and project review meetings will be held and are a suitable forum for ensuring that the above requirements are met, in addition to other means of liaison with relevant parties due to daily changes.
8. Health and safety issues at these meetings should be high on the agenda and not be passed over at the end of the meeting due to lack of time. Items raised and discussed will be minuted, actioned where appropriate and form part of the documentation for this Health and Safety Plan.

The following points will be included under the heading of Ecological and Environmental issues:

1. Recommendations and action taken or outstanding as recommended within the site ecological and environmental risk assessments
2. following regular monitoring by site management or independent sources (i.e. ongoing Environmental monitoring and audits).
3. Pre-planning in light of project progress and work programmed before the next meeting, including updating the Demolition Environmental Management Plan.
4. Inter-relationship of contractors works to ensure coordination and cooperation.

Reviews

Reviews will be conducted throughout the project as each phased is completed so that records can be made of compliance with and the standards achieved in regard to the Demolition Environmental Management Plan.

The initial review will be determined by the Principal Contractor and thereafter by any relevant parties involved in the demolition project.

STANDARD PROCEDURES

Site Survey & Statutory Authorities

Before commencement of works: -

1. A visual site survey will be carried out to assess all the site-wide elements that affect the method and sequencing of work, the precautions that are to be taken regarding the health & safety and welfare of site personnel and visitors, the general public and property outside the boundaries.
2. Mackey Demolition Services Ltd has been informed that the Client has made all the appropriate Statutory Authorities aware of their intentions and that all necessary Notices and Licenses have been obtained (planning permission/conditions, etc.).)

Note: The Client will apply for the Section 81 demolition counter-notice. Mackey Demolition Services Ltd have not yet received a copy of the Section 81 counter-notice. Upon receipt, a copy will be displayed on site.

3. The Client will supply all the necessary information regarding the presence of any ecologically sensitive flora, fauna, insects and reptiles, and any environmentally sensitive receptors within the location of the project
4. Maps, plans or onsite information will be provided to Mackey Demolition Services Ltd to enable them to identify and protect all known flora, fauna, insects and reptiles throughout the site. Mackey Demolition Services Ltd will liaise with The Client regarding this matter before the demolition works commence.
5. The Client will be sending a notification to all the owners and occupiers of the adjacent buildings or areas informing them of the nature of the work, commencement date and working hours.
6. Liaison will continue throughout the duration of the project to keep the adjoining owners and occupiers updated with the current project status and any change of circumstances.

Site Establishment

1. The site will be enclosed with a full solid hoarding to a height of 2.4 metres
2. The principal Contractor will be enclosing the site along all these vulnerable boundaries with 2.4 m-high double-clipped Heras-style fencing with monaflex sheeting fitted
3. It is the intention of Mackey Demolition Services Ltd not to further undermine these measures in any way during the progress of the demolition work. However, during the course of the works, Heras fence panels will be erected in specified areas at the project site to enhance boundary security and create drop zones and exclusion zones.
4. All the gates and fences will be continually checked and maintained throughout the life of the project. The demolition site's main entry gates are to be opened periodically during working hours to allow access.
5. A gate Marshall(s) shall attend during the site gates' opening hours to prevent unauthorised access. Banksman will attend during the arrival and departure of all site plant and equipment.
6. The gate marshal will guide all vehicles in and out of the site when it is safe to do so and when the public and any pedestrians have been forewarned by the gate marshal of the vehicle's intentions.
7. Appropriate signs will be strategically placed around the site perimeter boundary fences, warning the general public that demolition and stripping out work is in progress. The signs will also display our full company name and address, as well as contact telephone numbers, " Caution Demolition in Progress Keep Out " and " Hard Hat Area are two important signs that are to be posted.
8. **Smoking Area** – to be provided outside of the welfare unit to include a bucket filled with sand for the extinguishing and discarding of used cigarettes.

9. There is a vehicle access road to the rear of the site that will remain accessible throughout the project for access to adjacent buildings
10. There is a local parking suspension on east Grove and this will remain in force for the duration of the project

Welfare Arrangements

The following have been provided on this site in compliance with Schedule 2 of the Construction (Design and Management) Regulations 2015

- Site Canteen complete with sink, hot and cold running water
- Microwave / small cooker for heating food
- Water urn/kettle to provide boiling water
- Adequate number of tables/seats
- Facility for drying work clothing
- Adequate levels of heating, lighting and ventilation
- Adequate number of w.c. 's and urinals - mains connected where possible, or in the absence of a water and drainage connection, an adequate number of chemical flushing toilets will be provided
- A facility for operatives to wash their hands with warm water has been provided for

Site management is required to ensure that all site welfare facilities are maintained in a clean and serviceable condition throughout this project.

*In the case of TRANSIENT sites, the guidance in the HSE construction information sheet No. 46 will be adopted in terms of what is practicable.

All site personnel are reminded of their legal duty under Section 7(b) of the Health & Safety at Work etc. Act 1974 to:- Not intentionally or recklessly interfere with anything provided in the interests of health, safety and welfare

Emergency Procedures

Emergency Contacts

	Accident and Emergency	Nearest Accident and Emergency Hospital: University Hospital of Wales (A&E / Emergency Unit) Heath Park Way, Cardiff, CF14 4XW Tel: 02920747747 or Emergency: 999
	First Aider	Ross Redhead (Emergency First Aid at Work)
	Emergency telephone	Fire, Accident, Emergency Dial 999 (Site Telephone) Ross Redhead - 07980 149153
	Evacuation assembly point	To the rear of the site on East Grove.

	what3words	What3Words of the site: ///bonus.burns.oppose
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Other Useful Contacts:

Environmental Protection Agency (EPA)	Contact: 0800 80 70 60
Local HSE Office:	Contact: 0300 003 1747
National Gas Emergency Service:	Contact: 0800 111 999
BT/Openreach:	Contact: 0800 023 2023

Emergency Procedures:

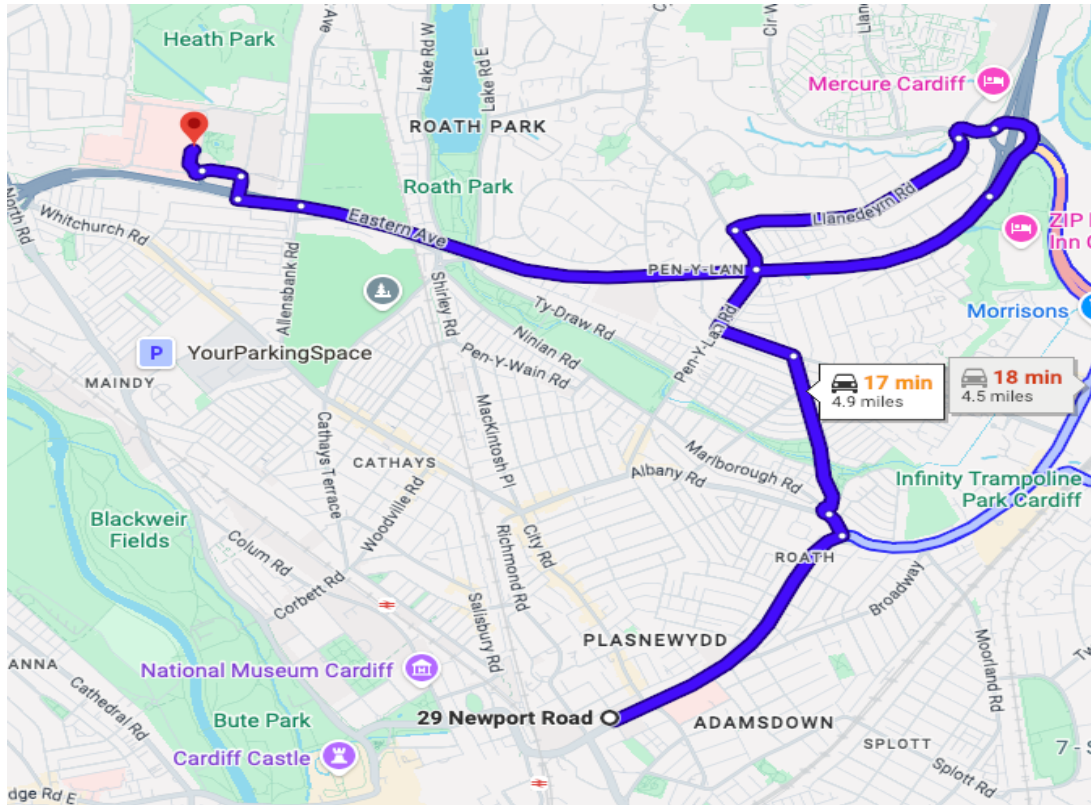
This section outlines the management procedure to ensure that physical measures are provided effectively if required. This section concentrates on fire; however, there may be other problems, such as flooding in excavations and tunnels, work near waterways, or the risk of asphyxiation or exposure to toxic gases. These must be integrated into the emergency procedure.

Where the existing site is occupied, liaise with and agree emergency procedures with the other occupiers and the client, ensuring that the means are in place to advise each other straight away in the event of an emergency. Site management will be responsible for preparing a site-specific emergency plan that accurately reflects the arrangements in place to minimise risk to all persons in the event of such an emergency. Escape routes should be designed to enable the simultaneous evacuation of all persons within the vicinity.

The following matters are to be considered: appropriate arrangements which must be made with all persons affected, being informed of such arrangements:

- Means of detection and giving warning of fire. This may be via an alarm system in complete or partially completed buildings, or by simpler means such as bells/horns on more basic sites.
- An effective plan for evacuation with responsible persons appointed to ensure the evacuation is carried out quickly, safely and without panic, with all persons accounted for and any plant and processes being shut down safely.
- All means of escape, such as gangways, doors and ladders, etc., must be kept clear at all times, and escape routes should be frequently surveyed, due to the constant change and nature of the construction process. Where high structures and restricted access are involved, this is particularly important.
- Effective communication with emergency services will normally be affected by telephone at the start of the project. It is equally important that accurate details of address, access points, etc., be provided to the emergency services at this time.
- Adequate firefighting equipment should be provided, and site personnel trained in its use. This equipment should be well-maintained.
- When working on nearly completed projects, it is important that the fire exits are known to all persons within the working areas and that safe access and egress are maintained. At this stage, fire-resistant doors should be installed.
- All of the above arrangements must be regularly reviewed and updated.

Directions to the Nearest Accident & Emergency



Miles	Start: Ty Cambria, 29 Newport Road, Cardiff, CF24 0TP
0.0	Head toward East Grove
0.7	Turn left onto Albany Rd/A469
344 ft	At the roundabout, turn right onto Waterloo Rd
0.5	Turn left onto Colchester Ave
0.2	Turn right onto Pen-Y-Lan Rd
0.2	Continue onto Cyncoed Rd
0.1	Turn right onto Llanedeyrn Rd
0.6	At the roundabout, take the 3rd exit onto Circle Wy
0.1	At the roundabout, take the 3rd exit onto the Eastern Ave/A48 ramp to M4(W)/M4(Gn)/City Centre/Canol-Y-Ddinas
0.3	Merge onto Eastern Ave/A48
1.7	Take the exit toward University/Hospital/Ysbyty'r/Brifysgol
0.1	Take The Gateway to your destination University Hospital of Wales
	Arrive: A&E Royal Devon and Exeter Hospital (Wonford), Barrack Road, Exeter, UK

Site Safety & First Aid

1. The site will be designated as a hardhat area, and all other protective clothing, footwear, and equipment will be worn and used by all operatives whilst working within the project site boundaries, including safety harnesses to prevent and arrest falls from heights. Mobile working platforms with safety rails will be used to provide safe, high-level working platforms.
2. A first aid kit commensurate with the number of operatives will be kept, as will be the accident report book in the site office. All operatives will be made aware of their location. The site will be manned by a full-time competent Site Supervisor. All site supervisors and a majority of the operatives are first-aid trained and hold valid certificates.
3. Mr Ross Redhead (07980 149153) is available in the case of an emergency.

Reporting Injuries, Diseases, and Dangerous Occurrences Regulations 1995.

These regulations make reporting accidents and ill health a legal requirement for every employer, the self-employed or anybody in control of a building site or premises of work. All major injuries, death, disease and dangerous occurrences are to be reported by any of the following methods to the Incident Contact Centre.

Phone:	0845 3009923 (8.30am – 5.00pm)
Internet:	https://www.hse.gov.uk/riddor/reporting/how-to-make-riddor-report.htm#forms
By Post:	Incident Contact Centre, Caerphilly Business Park, Caerphilly CF83 3GG.

Categories to Report.

Major injuries or death.

If there is an accident connected with work and your employee, or a self-employed person working on your premises or site, is killed or suffers a major injury (including as a result of physical violence), or a member of the public is killed or taken to hospital, you must notify the Incident Contact Centre without delay. Notifiable major injuries are

1. A fracture other than to fingers, thumbs or toes.
2. Amputation.
3. Dislocation of the shoulder, hip, knee or spine.
4. Loss of sight. (temporary or permanent)
5. Chemical or hot metal burn to the eye or any penetrating injury to the eye.
6. Any injury resulting from electric shock or electric burn leading to unconsciousness, or requiring resuscitation, or requiring admittance to a hospital for more than 24 hours.
7. Unconsciousness caused by asphyxia or exposure to a harmful substance or biological agent.
8. Acute illness requiring medical treatment, or loss of consciousness arising from absorption of any substance by inhalation, ingestion or through the skin.
9. Acute illness requiring medical treatment where there is reason to believe that this resulted from exposure to a biological agent or its toxins or infected material.

Dangerous Occurrences.

1. Collapse, overturning or failure of load-bearing parts of lifts or lifting equipment.
2. Explosion, collapse or bursting of any closed vessel or associated pipe work.
3. Failure of any freight container in any of its load-bearing parts.
4. Plant or equipment coming into contact with overhead power lines.
5. Electrical short circuit or overload causing fire or explosion.
6. Any unintentional explosion, misfire, failure of demolition to cause the intended collapse, projection of material beyond a site boundary or injury caused by explosion.
7. Malfunction of breathing apparatus while in use or during testing immediately before use.
8. Collapse or partial collapse of a scaffold over five metres high, or erected near water, where there could be a risk of drowning after a fall.
9. A dangerous occurrence at a pipeline.
10. The unintended collapse of any building or structure under construction, alteration or demolition where over five tonnes of material falls, or a wall, floor, or any false work falls.
11. An explosion or fire causing suspension of normal work for over 24 hours.

Reportable Diseases.

1. Poisons.
2. Skin diseases.
3. Lung diseases.
4. Infections.

5. Others, e.g. occupational cancer.

Note. The enforcing authority may be the Health & Safety Executive or the Local Authority. In either case, the construction site (demolition) injury or dangerous occurrence will be reported to the Area Health & Safety Executive office applicable to the site (see Health & Safety Welfare Site Arrangements form).

Contractors (CDM) Regulations.

Contractors making reports under RIDDOR must immediately inform the Principal Contractor, who may wish to investigate the incident and consider changing the Construction Phase Health & Safety Plan.

Records.

The Principal Contractor, Mackey Demolition Services Ltd, will keep records of all reportable injuries and dangerous occurrences, noting the following information:

1. Date and time of the accident, including injuries or dangerous occurrences.
2. Personnel details.
3. Full name.
4. Occupation.
5. Nature of injury or condition.
6. Location of accident or dangerous occurrence.
7. Brief description of the circumstances.

All causes of accidents will be investigated to:

1. Identify the cause to initiate measures to prevent recurrence.
2. Gather information for use in any proceedings.
3. Confirm or refute any claim.
4. Prepare notifications to the enforcing authority.

Procedure to determine:

- ✓ The cause.
- ✓ Who was involved?
- ✓ When, where and why it occurred.
- ✓ Consider how it could have been prevented.

Arrangements for dealing with minimising the effects of

Injuries.

First aid arrangements and equipment must be in place before any work commences. The Principal Contractor's Site Supervisor is to arrange for the supply of the materials, signs and regulation information. The Principal Contractor's Site Supervisor is to ensure that all site personnel know the location of the aforementioned in accordance with RIDDOR (Risk of Injury, Disease, or Dangerous Occurrences Regulations) and COSHH (Control of Substances Hazardous to Health Regulations).

Disease.

Adequate welfare arrangements and equipment will be in place before work commences, including first aid and washing facilities.

Dangerous Occurrences.

The Principal Contractor's Site Supervisor will ensure that all site personnel are fully informed and trained on carrying out operations or handling materials that may result in a dangerous occurrence. This will be carried out by issuing specific method statements. Face-to-face instruction with written confirmation and the operator's signature to prove understanding of the instruction, as required by RIDDOR.

Fire, Explosion.

The Principal Contractor's Site Supervisor will ensure that all planned safety measures have been provided, that is, that all fire precautions in accordance with the regulations are supplied, and that all first-aid appliances comply with relevant British Standards, including regular service and maintenance. All hazardous materials shall be stored and handled in accordance with the suppliers' instructions and the company's health and safety policy instructions.

Fire Safety

Fire Risk

The site supervisor and all operatives must continually assess the risk of fire throughout the demolition and strip-out project. Identify sources of fuel, ignition, and oxygen.

Sources of Fuel

The sources of fuel that can be found on demolition sites are wood, waste, textiles, such as carpets, curtains and furniture, flammable substances such as diesel and petrol, acetylene and propane, while hot cutting, waste paper and the debris that is usually left behind by the last tenants before the demolition begins.

Sources of Ignition

Live electrical services can cause a fire. Hot cutting methods. Cigarettes, heaters, generators, petrol-powered plant and the reaction of some chemicals can all be sources of ignition.

Sources of Oxygen

The general atmosphere has the right amount of oxygen to initiate a fire. This can be increased in high winds and with forced-air ventilation or air conditioning. Oxygen cylinders used for hot cutting.

Fire Risk Mitigation

Not much can be done to remove the oxygen found in the atmosphere, whereas the sources of ignition and fuel on a demolition site can be easily identified. Fuel sources must be reduced to the smallest practical amounts and segregated from ignition sources as much as possible. The following actions will help create a low-risk environment in the event of a fire on a demolition site.

1. Identify all live services on site. The rooms or buildings containing live services must be locked off and segregated from the rest of the site. Only authorised persons are to enter. No work is to take place in these rooms or buildings unless to terminate the services.
2. Follow the procedures for Hot Works as laid out in the Hot Works Permit.
3. All flammable substances to be stored correctly away from sources of ignition and 5 metres from any boundary. Diesel can only be stored in approved bunded fuel tanks. Gas cylinders must be stored within a segregated fenced off area.
4. Waste bins are to be placed at least 5 metres away from the welfare, plant, equipment, fuel storage and boundaries of the site.
5. Whilst soft stripping, remove all the arisings on a regular basis to the waste bins. Do not stockpile waste within the buildings.
6. No smoking whilst working in the buildings or on site. A smoking area will be designated outside the welfare unit. All cigarettes are to be extinguished in a bucket of sand placed in the smoking area.

PRINCIPAL FIRE PLAN

Due to the nature of demolition activity, areas are subject to frequent change. It is the responsibility of Mackey Demolition Services Ltd to formulate the evacuation procedures to be carried out in the buildings to be demolished and in associated areas under its control.

Mackey Demolition Services Ltd will liaise with The Client to finalise and co-ordinate the details of the "Demolition Fire Plan" procedures before any demolition work proceeds.

In principle, the demolition Fire plan procedures are:

- A “Gas Operated Fog Horn” will be used to sound an audible emergency signal. The alarm signal will be a series of short blasts lasting approximately 10 to 12 seconds, every 20 seconds.
- In the event of a Fire being discovered, all site/workplace operatives will evacuate the area where the Fire has been discovered and assemble at the “Muster Point” outside the welfare units.
- All operatives will be instructed to inform the site supervisor of the Fire position and intensity. At no risk to any person, the area will be checked to ensure that no personnel are in or have been trapped in the area of the Fire.
- The site foreman/workplace supervisor will check and record that all site/workplace operatives and visitors are accounted for, and if not, record their last place of work or location. This information will be reported to the Fire and Rescue Service by the Site supervisor upon their arrival.
- No attempt will be made to re-enter the affected area. The Site supervisor will direct the Fire and Rescue Service to the Fire and inform them of the location and its intensity.
- All Fire precautions and emergency procedures will be re-addressed by the Fire and Rescue Service and the site supervisor before any work commences.
- All muster points, routes of escape, and routes of access and egress for emergency vehicles will be established, together with the distribution of all necessary first-aid appliances, fire blankets, and alarms, before the contracted works commence.
- All parties carrying out duties and/or working on the site will be instructed regarding these matters during the site induction talk.

Fire Safety Equipment

- Suitable fire extinguishers will be available on-site for the duration of the work.
- The emergency muster point, fire alarms, and emergency call points shall be identified, and operatives will be made aware upon commencement of works on site.
- The emergency muster point will be located near the workplace as shown below.

	Fire Emergency Telephone	A mobile phone will be with the Site Supervisor/Manager at all times.
	Water Fire Extinguisher	A water fire extinguisher will be available on-site throughout the project.
	Foam Fire Extinguisher	A foam fire extinguisher will be available at the refuelling area as a fire prevention measure.
	Fire Blanket	A fire blanket will be available in the site welfare food preparation area.
	Emergency Evacuation Point	Site Entrance Gate

FIRE SAFETY INSTRUCTIONS TO STAFF

ACTION IN CASE OF FIRE AND DIRECTIONS FOR DEALING WITH FIRE

FIRE INSTRUCTIONS

If you discover a fire,

1. Raise the alarm at the nearest call point (Site Office). Or shout "FIRE, FIRE, FIRE"
2. If you are unable to tackle the fire without taking personal risk, leave the area immediately.

On hearing the fire alarm (GAS OPERATED FOG HORN).

1. Proceed immediately to the assembly point.

ASSEMBLY POINT

EAST GROVE

2. Use the quickest route of escape.
3. Do not stop to collect personal belongings.
4. Do not enter or re-enter the building until you are told it is safe to do so.

WHEN DEALING WITH FIRE

- If a person's clothing is on fire, wrap a blanket, rug or similar article closely around them and lay them on the ground to prevent flames reaching the head.
- If petroleum products are involved, stay as far away as possible. Do not try to deal with the fire yourself.
- Shut the doors and, if possible, the windows of the room in which the fire is discovered.

IT IS IN YOUR OWN INTEREST

- To study this notice, to know what to do in the event of a fire and how to use the fire appliances.
- To make yourself familiar with all means of escape in case of a fire, and to avoid any obstruction of the escape routes at all times.

Environmental Requirements

COSHH Assessments

Before work begins, Mackey Demolition Services Ltd will compile CoSHH assessments for substances to be used on the site.

Mackey Demolition Services Ltd will ensure, where appropriate, that the use of hazardous substances is either eliminated or that these substances are substituted for less hazardous materials.

A CoSHH assessment register and safety data sheets will be available throughout the project.

Storage of Fuels

To ensure the safe and efficient operation of the mobile plant, operatives will carry out greasing as part of their routine maintenance schedule. In addition, prior to completion of works each evening (or at required intervals during the day), the mobile plant will be refuelled. Any spill will be cleaned up immediately (on plant, machinery or ground).

Fuel will be stored in suitable double-bunded fuel tanks or delivered directly to the site via approved tanker service. Fuels will be stored securely, under the supervision of security personnel, to prevent unauthorised access.

Spill Kits

Spill kits will be sited within the refuelling area, and in the event of a spillage, operatives will follow the spillage emergency procedure below. All generators and non-mobile plant/equipment will be sited above a drip tray. Fuel will be stored in sealed, double-bunded approved tanks.

Spillages Emergency Procedure

In the event of a spillage, all persons will adhere to the following:

1. All possible means should be taken to contain the product.
2. If a spillage of fuel, or any other substance which poses a hazard to persons or the environment occurs, then it must be cleaned up immediately.
3. Operatives will adhere to COSHH assessments throughout.
4. Suitable gloves must be worn to protect the hands and lower arms when handling fuels, oils and similar substances. Barrier creams and cleansing creams are available and should be used by operatives.
5. The area surrounding the spillage will be cordoned off to enclose the spillage as it is cleaned.
6. No naked flames must be used in the vicinity of spillages or storage areas of flammable substances.
7. Spill kits will be available and placed in prominent locations and clearly identifiable to the workforce. The spill kits will be used in accordance with the manufacturer's instructions. Spare spill kits will be located within the site stores.
8. All waste oils and fuels and contaminated rags, etc, must be disposed of within the appropriate containers.
9. All Environmental Incidents and Near Misses will be investigated, with a preliminary report issued.

Protection of drains and watercourses

1. A comprehensive drainage survey will be undertaken by the Principal Contractor
2. All drains and watercourses that are in use by adjacent occupiers will be protected to ensure no damage during the duration of the project
3. All drain covers and openings will be screened or have bungs installed to ensure no ingress of waste water from the demolition activities
4. Any run off water from the demolition activity will be managed and filtered into a foul drain or suitable interceptor
5. All fuel bunds will be stored away from any surface drains with suitable spill kits available to ensure no ingress of spills into the drains or watercourses

Site Rules

This section explains the company site rules that apply to all employees, contractors and visitors. These rules are in addition to any imposed by the Principal Contractor. Deliberate contravention of these rules will be viewed as a breach of contract, and disciplinary action will be initiated, which could result in dismissal. It must also be noted that contravention of Health & Safety Legislation is a **CRIMINAL OFFENCE** and that a prosecution could be instigated against any individual by the Health & Safety Executive.

1. All employees, contractors and visitors are to report to the Site Supervisor every time they enter the site and are to ensure they have been recorded into the "Site Attendance Register".
2. All employees, contractors and visitors are to receive a site safety induction with specific reference to safety awareness, known hazards and these site rules. They are to sign to confirm that they have received and understood the information provided.
3. All Mackey Demolition Services Ltd sites are HARD HAT, HI-VIS and SAFETY BOOT sites. This applies to anyone entering our sites. Comply or be removed from the site.
4. All suitable PPE is to be worn when appropriate, as identified by work risk assessments and by instruction of the Site Supervisor. This includes gloves, dust masks, goggles, and ear protection.
5. The project site area is to be clearly defined with secure fencing/hoarding and relevant warning signs erected around the site perimeter.
6. Operatives are to confine themselves to the work areas and welfare areas. All other areas are out of bounds.
7. All plant, equipment, materials and waste must be kept within the confines of the site.
8. Public and working areas must be kept clean and clear of obstructions and waste.
9. No machine, item of plant or equipment is to be operated by any person unless they have been trained and are authorised to do so. Evidence of training and competence must be provided.
10. No machine, item of plant or equipment is to be repaired, adjusted or maintained by any person unless they have been trained and are authorised to do so.
11. No work activities shall be undertaken without a traffic management plan being in place. When in place, no person shall cross the safety rope/barrier/fence or interfere with any traffic management unless authorised to do so by the Site Supervisor.
12. Before any excavation work, the area must be CAT-SCANNED and checked for underground services, irrespective of whether the service's drawings are available or not. The Site Supervisor must give their permission for any excavation.

13. Any fault, defect (including damage) or malfunction in any item of machinery, plant, equipment, tool or guard must be reported immediately to the Site Supervisor. Daily safety inspections of all plant, machinery, equipment, tools and vehicles must be conducted before use to check for defects.
14. All plant, machinery, equipment and vehicles must be immobilised when left unattended, for any length of time or parked overnight.
15. No vehicles, plant, machinery, equipment, materials or waste must block the site's access or exit at any time.
16. There is to be NO REVERSING WITHOUT A BANKSMEN of any plant or vehicle on any site, regardless of whether CCTV has been fitted to the vehicle or not.
17. The maximum speed on any site is **10 mph**.
18. Mobile phones will not be used whilst operating any plant or equipment.
19. No person shall use a personal stereo (or similar) while working on site.
20. All hazard notices, warning signs and safety signs displayed on site are to be read, understood and obeyed.
21. No person shall consume/administer, or possess illegal drugs or alcohol at work or whilst travelling to and from the site.
22. Any person who, in the opinion of the Site Supervisor or his nominee, is suspected of being under the influence of alcohol or drugs will be suspended from the site and could be dismissed permanently.
23. Smoking will not be permitted anywhere on site except in designated areas.
24. Electrical circuits are to be isolated or turned off by named and competent electricians only.
25. Site electric power tools are to be 110 volts or less.
26. Working platforms are only to be erected or adapted by authorised personnel.
27. All waste is to be disposed of in the correct container.
28. All liquid spills are to be cleaned up immediately using a proprietary spill kit. Used spill kits are to be bagged, labelled and disposed of as hazardous waste.
29. All emergency procedures relevant to your work area are to be obeyed.
30. Any use of or damage to firefighting equipment is to be reported to the Site Supervisor immediately.
31. Seek medical assistance immediately for any injury (No matter how small) received at work. Report it in person to the Site Supervisor.
32. Accidents and notifiable accidents will be reported to the office and recorded in the site Accident Book by the Site Supervisor.
33. Copies of Mackey Demolition Services Ltd Site Personnel Qualifications and Certificates will be held on site for the duration of the works.

Misconduct

Any person on site, found to have acted in any one of the following ways, shall be subjected to disciplinary procedures and/or dismissal.

1. Wilfully breaching these site rules or the company Safety Policy.
2. Removing any guard or protective device without permission.
3. Operating any plant, equipment or machinery without authority or training.
4. Misusing items provided for first aid.
5. Recklessly interfering with or misusing anything provided in the interest of Health, Safety and Welfare at work.
6. Removing or defacing signs, notices or labels or any other warning device.
7. Misusing any chemical, flammable substance, hazardous or toxic material.
8. Smoking in designated "No Smoking" areas or whilst using flammable substances.
9. Taking part in horseplay, larking about or practical jokes.
10. Making false declarations or interfering with evidence following an accident or dangerous occurrence.
11. Misusing compressed air, electric or pneumatic equipment.
12. Overloading lifting equipment or plant.
13. Deliberately polluting the drains and watercourses within the site

Information and Training

Safety Inductions

A Site Safety Induction talk will be given. This covers items listed for delivery to all personnel prior to commencing work on site. On completion of Site Induction by the Site Supervisor or nominated person, a copy of the Site Safety Induction list is to be completed by the same, in order to record the names and details of all those inducted. Task-specific Toolbox Talks using the GE700 Construction Site Safety Manual will also be given regularly. Once again, all details of those involved will be recorded, and record sheets will be included within the Construction Phase Health & Safety Plan.

First-Aid Training

All Mackey Demolition Services Ltd site supervisors have successfully completed (or are currently undertaking) an HSE-approved First Aid at Work Training Course and will be appointed as qualified first aiders for the project. A copy of the appropriate first-aid certificate must be included in the plan.

Mobile Plant

All site personnel operating the mobile plant, which is subject to a certificate under the CITB Certificate of Training Registration Scheme, will be required to provide site management with copies of the relevant cards that demonstrate their competence on the plant they will operate. Copies should also be included within this plan.

Asbestos Removal

Specialist contractor employees involved in any of the above activities on-site must be fully trained to the appropriate standard to undertake their work safely and competently. Mackey Demolition Services Ltd Site Manager will take steps to ensure that copies of training certificates for personnel involved in these activities are included in this plan and that they are competent to undertake these works safely.

Abrasive Wheels

Full appropriate training is required for all personnel who operate cartridge-operated tools or mount abrasive wheels on-site to ensure safe operation. The Site Manager will take steps to ensure that copies of all training certificates for the relevant personnel are received and placed within the plan.

All Operatives

All operatives will receive suitable and sufficient information, instruction and training, appropriate to allow them to carry out their role on site safely. Site supervision will ensure that all on-site operatives comply with company requirements.

All site operatives receive, as a matter of policy, "Awareness" training in the following:

- Emergency Procedures
- Risk Assessment Training
- Manual Handling
- Working at Height
- Working in Confined Spaces
- Fire Safety
- Asbestos
- Slip Trips Falls
- COSHH
- Lone workers

Site Safety Induction Training:

It is Mackey Demolition Services Ltd's policy to provide site-specific Health & Safety Inductions prior to commencing work on our sites. Inductees' names will be recorded on a Site Safety Induction record sheet prior to their start on site.

In order to assist site management when delivering Health & Safety Inductions, the following list shows standard requirements for said inductions, bearing in mind that all inductions are site-specific: -

1. Explain the management structures for the site.
2. Explain the first-aid arrangements on site - i.e. first aider / first aid box/book, etc.
3. It is mandatory to wear specific PPE when required, e.g. mask/goggles/ear defenders, etc.
4. It is mandatory for all site personnel to wear safety helmets and safety footwear at all times.
5. Welfare arrangements on site - where on-site / keep clean / reporting of defects, etc.
6. Explain Fire Precautions - alarm sounds, location of fire points, fire exits and escape routes
7. Notification of unsafe conditions/practices - removal from site after three notifications
8. Unsafe conditions/practices - inform site personnel of reporting procedures
9. Reporting of Accidents / Incidents - report all injuries to site management
10. Issue a list of site rules and instruct each individual to be aware of the content
11. Environmental Awareness training for all site management staff
12. Parking of vehicles - what / where.
13. Excavation - no working within unsupported trench areas (if applicable)
14. Storage of materials - designated areas for LPG / HFL, etc.
15. Housekeeping arrangements - disposal of debris and waste/storage of materials, etc.
16. Scaffold - replace handrails after loading out, do not remove ties, boards, etc.
17. All works must be carried out in compliance with Risk Assessments / Method Statements
18. Ensure subcontractors comply with site rules and conditions
19. Record Safety Inductions

The above list is non-exhaustive; however, covering the topics listed, where relevant, would constitute adequate initial Health & Safety Induction training for a new arrival to the site.

Health and Safety File

We will liaise with the CDM Principal Designer to determine the nature, extent and format of the information required for the Health and Safety File.

However, in accordance with the Guidance for the Construction (Design & Management) Regulations, it is anticipated that the following items will be expected:

Activity:	Description:
Description of the Project:	A brief description of the works carried out.
Key Structural Principles:	Key structural principles incorporated in the design of the structure (<i>e.g. bracing</i> and safe working loads for floors & roofs, etc.
Residual Hazards:	Residual hazards and how they have been dealt with (<i>for example, surveys or other information regarding contaminated land, buried services</i>) and residual hazards associated with the materials used.
Removal or Dismantling of Installed Plant:	Information regarding the removal or dismantling of the installed plant and equipment (for example, lifting equipment).
Cleaning & Maintenance:	Health and Safety Information about equipment provided for cleaning and maintaining the structure.
Services:	The nature, location and markings of significant services, including firefighting systems.
Information & "As Built" Drawings:	Information and "As Built" drawings of the structure, its plant and equipment

Legislation and Standards

All works will be carried out in full compliance, where reasonably practicable, with the following articles:

Legislation

- ✓ The Health and Safety at Work Act 1974,
- ✓ The Road Traffic Acts, 1972 and 1974,
- ✓ The Control of Pollution Act, 1974,
- ✓ The Wildlife & Countryside Act 1981
- ✓ Environmental Protection Act 1990.

Regulations

- ✓ The Construction (Design and Management) Regulations (CDM) 2015.
- ✓ The Health & Safety (First Aid) Regulations 1981,
- ✓ The Road Vehicles (Construction and Use) Regulations 1986,
- ✓ The Electricity at Work Regulations 1989,
- ✓ The Personal Protective Equipment Regulations 1992,
- ✓ Workplace Health & Safety Welfare Regulations 1992,
- ✓ The Manual Handling Operations Regulations 1992 (MHR) (As amended 2002),
- ✓ The Health & Safety (Consultation with Employees) Regulations 1996,
- ✓ The Safety Signs and Safety Signals Regulations 1996,
- ✓ Construction (Health, Safety and Welfare) Regulations 1996,
- ✓ Confined Space Regulations 1997,
- ✓ The Waste Management (Licensing) Regulations 1998,
- ✓ The Provision and Use of Work Equipment Regulations (PUWER) 1998,
- ✓ The Lifting Operations and Lifting Equipment Regulations (LOLER) 1998,
- ✓ The Management of Health and Safety at Work Regulations (MHSWR) 1999,
- ✓ The Control of Lead at Work Regulations 2002,
- ✓ The Regulatory Reform (Fire Safety) Order 2005,
- ✓ The Control of Vibration at Work Regulations 2005,
- ✓ The Control of Noise at Work Regulation 2005,
- ✓ Working at Height Regulations 2005 (As amended 2007),
- ✓ The Control of Asbestos Regulations 2012,
- ✓ Control of Substances Hazardous to Health (CoSHH) 2002 (As amended 2013),
- ✓ The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995 (As amended 2013),
- and
- ✓ Conservation & Habitat & species Regulations 2017

Appendix A Noise Vibration and Dust Monitoring Specification.

COMPLETE WIRELESS VIBRATION MONITOR FOR THE INFRA SYSTEM

INFRA C22

Wireless Triaxial Vibration Monitor

The INFRA system is used to monitor construction activities, blasting, train traffic, road traffic, vibration in buildings etc.

- All-in-one datalogger and vibration sensor
- Up to 4 month of continuous monitoring on internal rechargeable batteries
- Built-in 3G modem with 2G fallback
- Micro-SD memory card
- Simultaneous bar graph and waveform registration
- Watertight (IP67)
- OLED color display
- Digital signal processing
- Post-processing, presentation and remote management in INFRA Net
- Multi button keypad
- Wireless



INFRA C22 measures according to the following national and international standards:

DIN 4150-3 Anlage	1 – 315 Hz	SN 640 312a	5 – 150 Hz
ISEE Seismograph	2 – 250 Hz	Acceleration	5 – 300 Hz
AS 2187.2-2006	2 – 250 Hz	SS 4604866 Spräng	5 – 300 Hz
Arrêtè	1 – 150 Hz	SS 025211 Schakt	5 – 150 Hz
ICPE	1 – 150 Hz	SS 025211 Schakt	2 – 150 Hz
IN 1226	1 – 150 Hz	NS 8141:2013 Byggverk	3 – 400 Hz
SBR-A	1 – 100 Hz	NS 8141:2001 Byggverk	5 – 300 Hz
SBR-B, RMS 125 ms	20 mm/s 1 – 80 Hz	NS 8176 Komfort, RMS 1s	20 mm/s 1 – 80 Hz
Toronto bylaw 514	1 – 100 Hz	SS 4604861 Komfort, RMS 1s	20 mm/s 1 – 80 Hz
Toronto bylaw 514	2 – 250 Hz	SS 4604861 Komfort, RMS 1s	700 mm/s ² 1 – 80 Hz
Turkey Mining and Quarry	2 – 250 Hz	OfM 9/1997 dB	55-117 dB 1 – 80 Hz
BS 7385	1 – 300 Hz		



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Technical Data

DIRECTION OF SENSITIVITY

C22 measures triaxial vibration.

MEASURING

The unit has built in digital signal processing, which processes all incoming data in real time according to the selected standard. The unit measures maximum values for each interval and at the same time, it records time history data when the vibration level exceeds the user preset threshold.

SAMPLING

The geophone signals are sampled at 4096 Hz using a high resolution A/D converter for a wide dynamic range. When a preset trigger level is exceeded a time history is recorded.

RECORDING

Recording time is up to 40 seconds, with 1 second pre-trig.

POWER SUPPLY

Internal Lithium-Ion batteries that easily can be changed.

MEASURING RANGE

Frequency range 1 Hz - 500 Hz. The Geophones have a calibrated sensitivity within $\pm 2\%$. Maximum vibration level is 250 mm/s (10 in/sec) dependent on the selected standard.

SENSOR ELEMENT

The sensor elements are rugged high quality velocity sensing geophones with long term stability and wide dynamic range.

IDENTITY

The serial number of the unit and important metadata always follows the recorded data. This makes it possible to trace data to a certain unit.

MEMORY

Micro SD industrial memory card. 1 GB in standard configuration.

DATA TRANSFER

All data is buffered on the memory card and is sent when the next cellular communication takes place. If cellular communication is not possible, data is kept for transfer at a later time.

DATA AND SERVICE MESSAGES

Data and service messages are sent via INFRA Net for maximal flexibility.

CALIBRATION

The unit has an internal memory for identity, calibration factors, calibration date etc.

USER INTERFACE

With a keyboard and display settings can be changed. The display also shows battery status, signal strength, and the latest events.

REMOTE OPERATION

Settings can be changed remotely using INFRA Net.

MECHANICAL & ENVIRONMENTAL

Watertight aluminum house with rubber seals. It has holes for bolts passing through in both horizontal and vertical direction.

Material: Powder coated aluminum house and polycarbonate antenna cover.

Dimension: 146 x 127 x 89 mm (5.8 x 5.0 x 3.5 in)
(Including antenna cover, excluding connector and standoffs.)

Protection class: IP67

Weight: 1820 grams (4.0 lbs) incl 2 batteries
Operating temperature: -20 to $+50$ °C (-4 to 122 °F)

CE APPROVAL

EMC: 2014/30/EU

LVD: 2014/35/EU

RoHS: 2011/65/EU (2015/863)



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COMPLETE WIRELESS NOISE MONITOR FOR THE INFRA SYSTEM

INFRA C50

Wireless Sound Level Meter

IEC 61672-1:2013 Class 1 (pending)

High-Performance, fully wireless noise monitoring for Demanding Environments; monitor construction activities, blasting, train traffic, road traffic etc.

Key benefits

- Fully wireless operation with 6 weeks continuous monitoring
- Real-time remote access via computer or smartphone
- Rugged, weatherproof design for outdoor deployment
- High-precision measurements compliant with IEC Class 1 (pending)
- Integrated audio recording and spectral analysis
- Built-in 4G Modem with GPS



INFRA C50 technical features and functionalities:

- L_{eq} & L_{max} dBA Fast or Slow
- L_{eq} & L_{max} dBC Fast, Slow or Peak
- Selectable interval time between 1 second and 1 hour
- Spectral analysis: Octave bands or Third-octave bands (dBZ)
- Statistics: L_{90} , L_{50} & L_{10}
- Audio recordings
- Customizable time period settings



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Technical Data

MEASURING

The unit has built in digital signal processing, which processes all incoming data in real time. The unit measures maximum and average values for each interval continuously.

SAMPLING

The microphone signals are sampled at 64000 Hz.

RECORDING

When a preset trigger level is exceeded, a time history is recorded. This does not affect interval measurements. Recording time is 5 seconds with 1 second pre-trig. Recordings are downsampled to 8000 Hz for data saving purpose.

POWER SUPPLY

Internal rechargeable Lithium-Ion batteries that easily can be swapped or charged during operation.

The INFRA C50 consumes approximately 200 mW power in normal use. Run time is up to six weeks, depending on amount of data and recordings. Can be complemented further with external sources; mains and solar solution.

MEASURING RANGE

Frequency range: 10 Hz - 20000 Hz
Level range (outdoor): 31 dB - 132 dB (lower power)
Level range (indoor): 26 dB - 123 dB

IDENTITY

The serial number of the unit and metadata always follows the recorded data. This makes it possible to trace data to a certain unit.

MEMORY

Micro SD industrial memory card. 1 GB in standard configuration.

DATA TRANSFER

All data is buffered on the memory card and is sent when the next cellular communication takes place. If cellular communication is not possible, data is kept for transfer at a later time.

DATA AND SERVICE MESSAGES

Data and service messages are sent via INFRA Net.

CALIBRATION

The unit has an internal memory for identity, calibration factors, calibration date, etc. The unit also utilizes charge injection (automatic) and field calibration (manual) to ensure correct measurements.

USER INTERFACE

With the built-in GUI (Graphical User Interface) measurement data can be viewed directly in the display. The display also shows battery status, signal strength, information about the unit, and the latest events.

MOUNTING

The INFRA C50 can easily be attached to 1/4" tripod mounts. Sigicom can also provide accessories for wall and pole mountings.

MECHANICAL & ENVIRONMENTAL

Weather proof aluminum housing with rubber seals. Designed for outdoor monitoring.

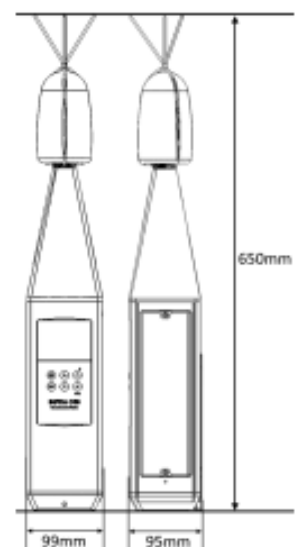
Material: Anodized aluminum and plastic housing.

Dimension: 650 mm x 99 mm x 95 mm (25.6 x 4.0 x 3.7 in)

Weight: 2,7 kg (5.9 lb)

Including batteries 3,55 kg (7.8 lb)

Units have been tested from -40 to +50 °C (-40 to +122 °F).



APPROVALS

IEC 61672-1:2013 Class 1 - **Under type approval process!**



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Dustroid®

Real-time dust monitor

Dustroid is an Online Particulate Monitoring system to measure the concentration of dust particles in the ambient air. It is capable of monitoring various particulate size ranging from 1 micron to 100 microns such as Ultrafine Suspended Particulate Matter (UFPM), Suspended Particulate Matter (SPM), Respiratory Suspended Particulate Matter (RSPM) and Total Suspended Particulates (TSP).



Heated Inlet- Dehumidifies the sample to nullify the effect of humidity for better accuracy.
(only available in Pro variant)



Retrofit Design- Plug and play design for ease of implementation.



Compact- Light-weight and compact system that can be installed at 12-15 feet (4-5 m) height.



On-device Calibration- On-site device calibration capability using on-device calibration software.



Identity And Configuration- Each equipment carries its unique identity with geo-tagging through wireless configuration.



Internal Storage- Internal data storage capacity of upto 8 GB or 90 days.



Over-The-Air Update- Automatically upgradeable from a central server without any onsite visit.



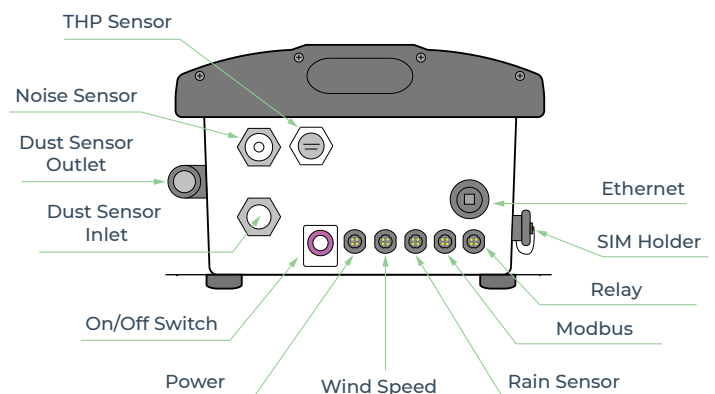
Network Agnostic- Supports a wide range of connectivity options like GSM / GPRS / WiFi / LoRa / NBIoT / Ethernet / Modbus.



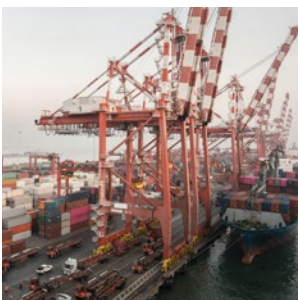
Real-Time Data- Continuous monitoring and real-time data transfer at configurable intervals.



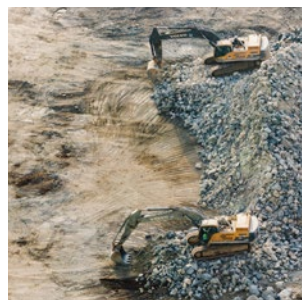
Weather Resistant- IP66 Grade (certified) enclosure for endurance against harsh weather.



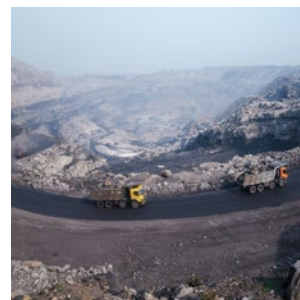
Dustroid® Usecases



Seaports



Construction



Mining & Quarrying



Public Spaces

Specifications

Size	360mm (H) x 328mm (W) x 200mm (D)
Weight	6.5 Kg (instrument weight)
Material	Aluminum Magnesium Alloy, Mild-steel (With Powder Coating), FRP
Certifications	CE & FCC Certified, PTCRB Certified Communication Module

Parameters

ID	Parameter	Range	Resolution	Min. Detection	Drift	Working Principle	Measurement Principle	Flow Rate	Expected Sensor Life
OZPM_1	Suspended Particulate Matters with size less than 2.5µ (PM _{2.5})	0-5000 µg/m ³	0.1 µg/m ³	1 µg/m ³	N.A.	Optical Particle Counter	Continuous Flow Active Monitoring	1 L /min	5000 hours
OZPM_2	Suspended Particulate Matters with size less than 10µ (PM ₁₀)								
OZPM_3	Ultra-fine Particulate Matters with size less than 1µ (PM ₁)								
OZPM_4	Total Suspended Particulates (TSP)	0-30 mg/m ³	0.01 °C	-40 °C	N.A.	Solid State Semiconductor Sensing	Passive Monitoring	N.A.	2 years
OZTEMP_1	Temperature	-40 °C to +125 °C							
OZHUM_1	Humidity	100% Rh							
OZPRES_1	Barometric Pressure	300-1100 hPa	0.18 Pa	300 hPa	N.A.				

External Modules (optional)



Rain Sensor

- ⚙️ Tipping Bucket
- 📏 In mm / inch



Wind Sensor

- ⚙️ Ultrasonic sensor
- 🌀 359°, 0-40 m/s



Noise Sensor

- ⚙️ Capacitance
- 🔊 Upto 140 dB

ID	Parameter	Range	Resolution	Min. Detection	Working Principle	Expected Sensor Life
OZWSD_1	Wind Speed	0-40 m/s	0.1 m/s	0.1 m/s	Ultrasonic	3 years
	Wind Direction	0-359°	1°	1°		
OZRAIN_1	Rainfall Monitoring	N.A.	0.5 mm	0.5 mm	Tipping bucket	2 years
OZN_1	Ambient Noise	Up to 140 dB	1 dB	0.5 dB	Capacitive	

Accurate Air Quality Monitoring And Advanced Data Analytics