

Health & Safety Department

Construction Environmental Management Plan

MMDP-CEMP-01



APPROVAL

DOCUMENTATION RESPONSIBILITY	NAME	TITLE	DATE
Prepared By:	Aji Varghese	EHS Advisor	04/09/2024
Reviewed By:	Jason McCarthy	EHS Advisor	06/09/2024
Approved By:	Timothy O'Leary	EHS Manager	06/09/2024
Comments Done By:	Jason McCarthy	EHS Advisor	29/09/2025
Approved By:	Timothy O'Leary	EHS Manager	30/09/2025

REVISION SUMMARY

REVISION	DATE	DESCRIPTION OF REVISION
0	04/09/2024	Initial draft
1	30/09/2025	Updated to incorporate comments regarding working hours/nearest watercourse
2	14/05/2026	Updated to change red line boundaries
3	26/06/2026	Update with comment on site hours & environmental policy

SECTION 1 - INTRODUCTION

This Construction Environmental Management Plan (CEMP) has been prepared to communicate key planning and environmental obligations relating to the management of construction activities of apartment/duplex scheme comprising 67 social housing units and 1 community facility with associated landscaping at Gerald Griffin Street/Burkes Avenue, Blackpool, Cork. The plan sets out the requirements for:

- a) Storage of construction and waste materials on site.
- b) A site layout map indicating where materials and waste will be temporarily stored prior to use, disposal/recovery
- c) Mitigation measures for noise, Dust and vibration.
- d) Measures for the containment of construction related fuel and oils.
- e) Ecological sensitive areas
- f) Environmental Management

The Construction Environmental Management Plan is a “live” document and will be read in conjunction with site-specific method statements and plans as required prior to each phase of the works.

This document has been prepared to support the main project specification. It addresses environmental management issues which are to be coordinated, carried out, supervised and monitored daily on site.

MMD Construction will be responsible for ensuring that all works are carried out in accordance with the procedures outlined in this document. MMD Construction will ensure that appropriately skilled site supervisors and operatives are assigned to this project.

MMD Construction are committed to maximising sustainable construction and minimising the environmental effect of our projects on society. This approach is rooted in the recognition that active engagement in environmental protection and economic balance is necessary for long term development. Our company environmental policy is communicated, implemented and reviewed in line with our 14001 Environmental Quality Certified Management Systems.

1.1 LIVE DOCUMENT

The CEMP will be reviewed on a regular basis. Updates to the CEMP may be necessary due to any changes in environmental management practices and / or contractors. As explained in more detail in the later sections, the procedures agreed in this CEMP will be audited regularly throughout the construction phase to ensure compliance.

1.2 OBJECTIVE / PURPOSE

This CEMP outlines the approach to the management and minimisation of environmental impacts during the construction activities of apartment/duplex scheme comprising 67 social housing units and 1 community facility with associated landscaping at Gerald Griffin Street/Burkes Avenue, Blackpool, Cork, with the primary aim of avoiding, reducing or offsetting any adverse impacts.

The CEMP identifies the legislative, planning and policy framework within which the Proposed Development is being constructed, and how those requirements will be met. It also details the key roles and responsibilities for individuals involved in the construction of the Proposed Development, as well as the training requirements for all employees in relation to managing environmental considerations.

The objective / purpose of this document is to communicate key environmental obligations that apply to MMD Construction, contractor organisations, their sub-contractors and employees while carrying out any form of construction activity on site.

1.3 SITE LOCATION

Project Title:	<i>Social Housing Development, Gerald Griffin Street/Burkes Avenue, Blackpool</i>
Location	<i>Gerald Griffin Street/Burkes Avenue, Black Pool, Cork</i>



*Aerial View of Development Site
Figure:1*



The proposed development site marked in red

Figure:2

1.4 DEVELOPMENT DESCRIPTION

The project involves the construction of apartment/duplex scheme comprising 67 social housing units and 1 community facility with associated landscaping, utilities and boundary treatments on a brownfield infill at Gerald Griffin Street/Burkes Avenue, Blackpool. The proposal comprises a 3-storey block facing onto Gerald Griffin Street (within the ACA) with 4 staggered apartment blocks behind building up to 7 stories and fronting onto North Monastery Road to the west (5 stories visible above level of North Monastery Road, outside the ACA).

1.5 LEGAL COMPLIANCE

In the construction of the development and as part of the environmental management MMD Construction will adhere to all relevant Irish and EU environmental legislation, Board Direction BD-007878-21 ABP-308923-20, guidelines and best practice measures during the construction phase, including legislation relating to ecology and biodiversity, air, water/groundwater, noise, dust and vibration. All employees and subcontractors will comply with the CEMP and associated management plans in order to adhere to relevant legislation and to meet relevant best practice measures during the construction phase.

This CEMP will be regularly reviewed and updated to ensure continued legal compliance.

1.6 ENVIRONMENTAL POLICY



Environmental Policy

MMD Construction is committed to the adoption of environmentally responsible policies and practices throughout its operation and maximising sustainable construction and minimising the environmental effect of our projects on society. However, in line with the continuous improvement programme the company focuses on the following:

- Identifying potential environmental opportunities and considering their appropriateness for adoption
- Waste reduction and responsible destruction practices
- Re-cycling of materials
- Minimizing consumption of energy and other natural resources
- Purchase products which have least impact on the environment
- Create partnerships with similar minded suppliers
- Improve the working environment and complying with Irish and EU legislation
- Maximize the use of e-technology to reduce paper usage throughout our operation.

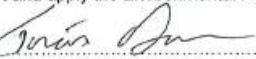
The company also respects the natural environment i.e. water, air, land and the flora and fauna which they support. This is achieved by complying with the relevant EU Directives and their transposition into Irish legislation.

The main Directives are:

- The Habitats Dir 92/43/EEC
- The Water Framework Dir 2000/60/EC
- Waste Dir 75/442/EEC
- Wild Birds Dir 79/409/EEC and 85/411/EEC

The main pieces of relevant National Legislation on the statute books are the numerous Acts of the Oireachtas, Statutory Instruments, section of Instruments and Departmental Guidelines or Requirements, dealing with Environmental issues.

This environmental policy is communicated, implemented and reviewed in line with our 14001 Environmental Quality Certified Management Systems and this statement is distributed to all MMD Construction employees and is available to interested parties. It is the individual responsibility of all persons working for or on behalf of MMD Construction to support and apply the Environmental Policy and Environmental Management Systems as it pertains to their activities.

Name: 

Date: 05/02/2026

Managing Director – Signed on behalf of
MMD Construction (Cork) Ltd.

1.7 GENERAL ENVIRONMENTAL MITIGATION MEASURES

A range of general environmental mitigation measures have been committed to that will help to avoid, reduce or offset potentials impact. Adherence to this CEMP is the primary general mitigation measure, but adherence to the following plans is also required:

- Construction Safety & Health Plan
- Resource waste management Plan
- Construction Management Plan
- Planning Conditions
- Construction Traffic Management Plans
- (Environmental Impact Assessment Report

This is not an exhaustive list

1.8 RECORD KEEPING AND REPORTING

MMD site management team will be responsible for overseeing the implementation of this CEMP and associated management plans and will be responsible for maintaining and monitoring which will be made available for auditing and inspection.

An up-to-date copy of the CEMP and associated documents and records will be maintained at the site.

The site team will be responsible for all record keeping of all environmental monitoring and compliance documentation, this will include but not limited:

- Relevant Management Plans
- Environmental inspection reports
- Waste and chemical inventories
- Register of environmental complaints, and corrective action reports

Records pertaining to waste management operations and practices at this site will be maintained. The records will contain at a minimum the following information:

- The types (including EWC codes) and quantities of all wastes to be removed from the site.
- The names and waste collection permit reference numbers of the agent and transporters of waste leaving the site.
- The quantity of each waste load removed from the site and its classification and disposal facility including permit/licence reference numbers.
- Records of waste management audits.

Site management practices will be strictly implemented to prevent nuisance impacts

1.8.1 REPORTING

Audits will be carried out to provide a regular update on environmental performance and progress at the site. Reporting will include:

- Records of environmental incidents and details of corrective actions undertaken;
- Records of tool box talks;
- The interpretation of the results of any ongoing environmental monitoring;
- A summary of environmental non-conformance at the site and compliance with the provision of the CEMP

1.9 COMPLAINTS MANAGEMENT

The site team is responsible for responding to complaints or queries and must ensure that:

- All complaints are investigated and dealt with appropriately;
- Any corrective actions required are implemented;
- A record is made of all complaints, along with any response and/or actions taken;
- The complaints recorded is periodically reviewed to identify any trends and appropriate actions are taken

The following information must be recorded for all complaints received:

- Stakeholder name;
- Stakeholder address;
- Stakeholder contact details;
- Complaint category type (e.g., noise, dust, waste, traffic)
- Details of the complaint
- Timing and duration of nuisance or pollution
- Any additional information

SECTION 2 - AUDITING AND REVIEW

Audits of the CEMP will be undertaken by the EHS Advisor, with feedback provided to the Project Manager. The audit will check that all necessary current documentation is in place. Visual monitoring and complaints records will be audited to ensure that full records are kept and all necessary information is recorded.

2.1 CORRECTIVE ACTION

Where monitoring identifies an impact on the receiving environment, the EHS Advisor shall be notified immediately. The EHS advisor will conduct an inspection of the location and the surrounds to identify the source of the impact.

If the source of the impact is identified as an emission from the site, the site team is responsible for undertaking corrective action to isolate and minimise the effects of the emission.

The site team is required to monitor implementation of any corrective actions to ensure that they are carried out and are effective and deficiencies are rectified to avoid recurrence.

SECTION 3 – TRAINING AND COMMUNICATION

3.1 TRAINING

Environmental training will be delivered and assessed throughout the construction period, to ensure the relevant aspects of the CEMP and associated construction plans are communicated to the project team, employees, subcontractors and visitors.

MMD Construction will ensure that the training is appropriate for the level of works being undertaken. Training is provided in the format below;

- Site inductions including awareness of environmental sensitivities, reporting procedures, spill kits, designated re-fuelling areas, chemical use and storage etc.
- Daily Pre-Start Meetings
- Environmental Tool Box Talks
- Incident and Near Miss reports/TBT

Only suitably qualified personnel will conduct tasks, conducting specialised environmental monitoring, management of waste, management of chemical stores etc.

3.2 TOOLBOX TALKS

Toolbox talks will be conducted on at least a weekly basis or as the need arises due to a new or introduced hazards, risks or environmental aspects. Toolbox talks will be held by the project safety officer detailing items discussed, along with persons responsible for any actions and a suitable date by which actions shall be completed.

3.3 COMMUNICATION

All employees, subcontractors, client representatives and other interested parties will be included in consultation on safety, health and environment matters through daily pre-start consultation, toolbox talks, project meetings, incident reporting, incident investigation, quality audits, safety audits and ongoing workplace inspections by supervisors.

Information and specific training will be communicated to employees through toolbox meetings, job pre-start meetings, safety alerts, notice boards and inductions.

The project manager and site supervisor will ensure that issues are resolved, and feedback given to employees, subcontractors and interested parties through the above channels.

3.4 SITE ENVIRONMENTAL AWARENESS

The following general site Environmental Rules will apply for the construction phase of the proposed development. These general rules will be communicated to all site personnel via the site induction training and they will be posted across the site at strategic locations, such as the site entrance, canteen and near the entrances to buildings.

GENERAL SITE ENVIRONMENTAL RULES

- DO** Report any signs of pollution or environmental damage to the site foreman/environmental manager no matter how small;
- DO** Report any spills, incidents or near misses that occur on site immediately to the site foreman;
- DO** Refuel only in designated areas with spill kits available

- DO NOT** Dispose of anything into a river or stream or onto land. All waste must be sent to the designated site waste management areas;
- DO NOT** Throw litter, all waste must be sent to site waste management contractor;
- DO NOT** Drive plant or machinery outside the authorised working boundaries of the site.

IF IN DOUBT, ASK – THE SITE SUPERVISOR FOR FURTHER INFORMATION.

SECTION 4 - ENVIRONMENTAL SITE MANAGEMENT

4.1 HOUSEKEEPING

MMD Construction will emphasise the importance of good housekeeping during the construction phase. Housekeeping is an important part of good environmental practice and it helps everyone to maintain a more efficient and safer site. The site should be tidy, secure and have clear access routes that are defined.

- Adequately plan the site with designated area of materials and waste storage
- Collect different types of waste as it is produced and arrange frequent removal
- Keep the site and external area clean
- Ensure no wind-blown litter or debris leaves the site
- Ensure that materials and plant area are properly managed. Lightweight materials to be secured
- Keep hoardings tidy and repair as necessary
- Frequently clean wheel washing facilities
- Maintain haul routes in a clean and tidy condition
- Adequate refuelling of site vehicles with appropriate protections in place for refuelling operations
- Ensure the site is secure

4.2 WORKING HOURS

Working hours during site clearance and construction shall be from 8:00am to 6:00pm Monday to Friday, 7:30am to 4:00pm. Activities outside these hours shall require the prior approval of the CCC Housing Directive.

4.3 CONSTRUCTION SITE LIGHTING

MMD Construction will keep any site lighting at the minimum brightness necessary for adequate security and safety. Any Directional lighting required will be used so that it does not intrude on nearby properties.

4.4 CONSTRUCTION SITE SECURITY

MMD construction shall ensure that the construction site is secured with fencing, gates, locks and clear signages. MMD shall also be responsible for securing and protecting its assets and facilities. Site security is an important component of good environmental management. Often, vandals cause damage that harms the environment by;

- Opening taps on tanks containing fuel, or cutting fuel lines;
- Setting materials/waste on fire;
- Destroying works in progress;
- Playing on plant-damaging it and using it to cause damage;
- Tipping out other liquids from drums and containers;

CCTV monitoring will be used for site security, detect theft and misconduct. CCTV will cover almost all areas including offices and storage yards.

MMD Construction will implement an appropriate booking in-and-out system for all site personnel and visitors

4.5 INCIDENT PREPAREDNESS AND RESPONSE

Emergency response contacts and procedures

A list of emergency contacts is in the table below;

Contact	Telephone No.
Emergency Services	999/112
Site Contracts Manager	TBA
EHS Advisor	0874857869
PSDP	0877972921
ESB Emergency Services	1850 372 999
Bord Gais Emergency	1850 20 50 50
Irish Water Emergency	1850 278 278
Local Garda Station	(021) 452 2000
Local City Council	(021) 492 4000
Local EPA Office	(021) 487 5540
HSA	01 614 7000

Emergency Response

In the event of an incident the Project Manager and the EHS Advisor must be notified immediately.

The likelihood of an incident can be minimised by effective planning. MMD Construction and Subcontractors risk assessments and method statement should include provisions for environmental risk and mitigation.

The Project Manger and EHS Advisor will identify substances to be used during the works and will ensure that the below are available for the activities;

- Copies of the materials safety data sheets of the substances being used;
- Details of environmental and health and safety storage, handling and transportation;
- Emergency response equipment and locations in the event of an incident;
- Appropriate PPE for the tasks.

Project Emergency Plan (EP). The plan will identify emergency contact details, fire stations, spill kits, assembly points and their location.

Upon the commencement of the construction phase MMD Construction will assess the number of spill kits required and the appropriate deployment areas across the site. These areas will be in or directly adjacent to where they are needed. The contents of a spill kit will depend on the area of use, but are likely to include;

- Absorbent granules, pads and socks;
- PPE, including gloves, goggles and overalls. (Always check the Safety Data Sheet)
- Sheeting and bags

4.6 AIR QUALITY

Dust and emissions arising from construction activities can cause health risks to receptors and nuisance and annoyance to residence and members of public. Construction dust can originate from numerous sources during the construction phase. The level of dust emitted will be dependent on the activity undertaken, the location of the activity on site and the nature of the dust. The generation and dispersion of the dust will be influenced by other meteorological factors such as wind speed and direction and/or periods of dry weather. Construction traffic movements have potential to generate dust emissions as vehicles travel along the public road routes away from the site.

4.6.1 Dust

Dust control measures will be used onsite where there is the potential for air pollution from dust traveling across the landscape or through the air.

MMD Construction will take all due care for all surrounding facilities to ensure that dust will be kept to a minimum.

Damping down areas will be use in site, due to its ease of implementation and excellent results. Water will be applied at regular intervals, depending on the atmospheric conditions.

Wheel Wash

The debris that naturally occurs from construction work can cause a lot of dust, dirt and rubble to travel across the site on vehicle tyres. Not only does the debris travel across different points of the site, but this can also overflow onto public roads causing a lot of distress to the school and surrounding residents. The site must adhere to strict environmental regulations so that trucks do not leave the site with contaminants on their tyres and deposit them on to public roads.

The **ECO BATH** wheel wash system ensures that all trucks and other vehicles don't contravene any site rules regarding track-out of sediment or other prohibited materials from the construction site onto public roads.



The Eco bath is a simple drive-through system with clever design features and a modular construction that makes it adaptable to construction sites. The 11m long central bath allows up to three complete wheel revolutions through the water, while removable, internal grids of steel angle flex open the tyre treads, allowing dirt to fall out, and the water washes the surface of the treads. When installed above ground, 3m access ramps are supplied and a sturdy horizontal road can also be provided in 4m sections for additional dry vibration cleaning. Using a combination of ramps and horizontal road sections, any length of configuration can be supplied.

4.7 NOISE

The operation of plant and machinery, and general construction site activities are potential sources of noise that will require management across the site.

Effective planning of on-site activities will significantly reduce the likelihood of impacts to off site receptors. Integrating measures to minimise noise at all times is the best way to indicate that noise is being managed satisfactorily on site.

MMD Construction will do an effective planning of on-site activities and that will significantly reduce the likelihood of impacts of noise.

The operation of plant and machinery, and general construction site activities are potential sources of noise that will require management across the site.

Mitigation Measures

- Limit construction operations to the hours of 8:00am to 6:00pm from Monday to Friday.
- MMD Construction will do 'pull out' material method to existing structures where this is possible to keep noise levels to a minimum. (This will minimize breaking out activities)
- Limit reversing movement of vehicles on site by implementing one-way systems for site traffic.

MMD Construction will stop the site activities if any complaints received from the nearby communities and will put additional control measures to keep noise levels minimum.

4.8 VIBRATION

MMD Construction will take all appropriate measures to mitigate vibration from construction activity and for Evaluation of Human Exposure to Vibration in Buildings.

MMD Construction will do 'pull out' material method to existing structures where this is possible to keep vibration levels to a minimum. (This will minimize breaking out activities)

Use well-maintained equipment with proper vibration isolation systems or mounts to reduce the transmission of vibrations.

MMD Construction Contracts manager will Maintain a point of contact with nearby residents, businesses, and stakeholders to address concerns and provide information about the construction process and mitigation measures in place

Mitigation Measures

- Use high-quality, low-vibration tools.
- Use the right tool for the job.
- Follow manufacturer instructions for use and maintenance.
- Inspect and maintain power tools regularly for wear and damage that could increase vibration exposure.

SECTION 5 - ECOLOGY AND BIODIVERSITY

5.1.2 Japanese Knotweed / Invasive Species

MMD Construction shall take measures to remove if any invasive species such as Japanese Knotweed are found at the site.

5.1.3 Tree removal

Any tree removal required before and during construction phase shall be done as per the approval from local authorities.

5.1.4 Watercourses

River Lee is located approx. 700m away from the site.

SECTION 6 – CONSTRUCTION SCHEDULE

6.1 SITE CONSTRUCTION COMPOUND

All construction support activities will be controlled within the site construction compound including office facilities, toilets, canteen etc.

Materials and waste handling and storage of fuel and refuelling will be within the confines of the site compound.

Adequate warning signs will be on display to illustrate the required PPE and environmental risks associated when entering the construction site. Materials shall be sourced as locally as possible to minimise environmental pollution from vehicle movements.

Contractor's parking shall be within the site boundary to ensure the surrounding properties are not affected by construction traffic.

All sensitive areas identified on site will be protected with suitable fencing as required, these areas to be highlighted with signage outlining the necessary controls to be followed when working near or in these zones.

6.2 STORAGE OF CONSTRUCTION AND WASTE MATERIALS ON SITE

6.2.1 Materials and waste store area

The site management shall identify a suitable location to keep materials and stockpile within the MMD site premises.

6.2.2 Material Use

All stored materials will be protected to minimise dust and debris from polluting the surrounding areas
We will Ensure:

- There is an adequate water supply on the site.
- Disposal of run-off water from dust suppression activities is in accordance with the Onsite Waste Water Management Plan. (If required)
- Site fencing to minimise noise and dust pollution (Temporary works design required).
- Regular cleaning of hard standings using wet sweeping methods, no dry sweeping of any areas.
- Loading of material into lorries within designated hardstanding bays/areas.
- When necessary, clean public roads and access routes using wet sweeping methods.
- All vehicles carrying loose or potentially dusty material to or from the site are fully sheeted. All vehicles leaving site must ensure there is no debris to the rear of the vehicles that could dislodge after leaving site.
- Water suppression: (Water helps to damp down clouds of **dust**). Care must be taken to ensure suspected solids are removed from dirty water used for damping down construction generated dust to prevent damage to the surrounding areas.

- Carry out site inspections regularly to monitor compliance with dust control procedures.

6.2.3 Disposal/Recovery (Recycling)

By placing the waste hierarchy at the centre of our approach we partner with contractors to reduce waste production. All waste collected from site is taken to specialist facilities ensuring that as much as possible is recycled or recovered. Waste that cannot be recovered is often used to create a fuel for the production of sustainable energy. This includes the compliant treatment and recovery of contaminated soil to land remediation, and the collection and reprocessing of hazardous and non-hazardous waste. Recycled aggregates, soils and timber materials for the construction.

- Our waste disposal company uses efficient and innovative technology to ensure that waste plasterboard collected is put back into the manufacturing process.
- Recovering and recycling the waste they generate conserves our precious natural resources, reduces environmental impact and supports the development of a more circular economy.
- Waste oil is tested, treated and processed at their licenced facilities.

SECTION 7 – WASTE MANAGEMENT

7.1 Waste Reuse & Recycling

All reasonable measures will be taken to avoid the generation of waste which requires offsite disposal by exploring the possibility of recycling / reuse of the material. A recycling programme will be developed to ensure that all packaging waste is recycled as far as possible.

Electrical waste materials such as electrical components, fluorescent tubes and wiring will be recycled where possible or collected by a reputable waste management contractor.

7.2 Hazardous waste

Hazardous waste must be stored and handled in compliance with the relevant legislation and dispose of as per EPA guidelines. Example are: Asbestos, lead base paint, fuel & oils, used spill kits etc.

7.3 Waste Storage

Any wastes will be stored in designated, secure, and signed areas with adequate clean up and spillage control.

Waste skips will be placed around the construction site for all contractors to dispose of waste material as soon as it is generated and brought back to the compound once full and placed in the appropriate skips.

Separate storage containers will be used to store liquid hazardous wastes such as waste oils/COSHH materials. SDS must be available at all times and COSHH risk assessments must be completed.

7.4 Waste Disposal

Waste contractors will hold the necessary waste permits and / or waste licences for all waste facilities to which the waste from the site is taken.

The contractor must ensure that all waste removed from site is disposed of correctly and transferred to the correct waste management facility.

All material designated for offsite disposal will be classified based on laboratory analysis for landfill classification suites to enable classification of the material as inert, non-hazardous, or hazardous, in accordance with Council Decision 2003/33/EC and Directive 1999/31/EC.

- Work and surrounding areas should be free of litter, construction debris and be maintained in a tidy condition.
- There should be no vegetation burning. All waste vegetation should be chipped or mulched on site and disposed of at approved facilities.
- Ensure that waste on site is stored in a covered container.
- Use overburden to construct temporary noise barriers if possible.

7.5 Waste Records

Records of waste materials will be maintained. This will include copies of all relevant permits / licences, audit reports and site waste docket. The reusing, recycling, and safe disposal of all waste will be carried out using approved licensed waste contractors.

Waste records will be maintained. Audits for waste management procedures will be completed by MMD to ensure that all procedures are strictly adhered to.

7.6 Contractor waste management

MMD have ultimate responsibility for waste generated on and leaving the site under legislation covering duty of care.

It is the responsibility of all contractors to ensure that they operate a clean as you go policy, with all waste removed daily.

MMD must only use licensed waste contractors for the collection and disposal of all waste streams generated.

All licences will be submitted to MMD. All contractors must also maintain a **waste register** and submit a copy including receipts to MMD, who will ensure that all arrangements are, coordinated, controlled, and monitored through site management involvement.

7.7 Measures for containment of construction related fuel and oils

Fuels, oils, grease and hydraulic fluids will be stored in bunded areas well away from drains leading to watercourses.

Refuelling of machinery will be carried out utilising a bunded storage tank conforming to EEC Directives 98/37. A spill control area for refuelling will be set up. MMD Construction will have a 110% bunded container for storage of fuels also set up. The height of the bund for any drum storage area shall be not less than 300

millimetres. MMD Construction will provide a dedicated area for storage of all fuels on site within the Site Compound. All Sub-Contractors will store fuel in bunded storage within this area.

The fuel storage area will be kept a clear distance from any source of ignition or impact. Where refuelling is required, facilities provided shall be adequately covered by fire extinguishers, warning signs, bunding and proper bunded fuel dispensers.

Emergency spill kits shall be available at all refuelling points and fuel storage locations.

Portable generators will be placed on suitable drip trays and any spillages will be cleaned up using spill kit materials.

Containers will be clearly labelled so that appropriate remedial action can be taken in the event of a spillage. SDS will be available in the MMD Construction site office and electronically for all hazardous materials on site.

7.8 Concrete Wash out areas

After concrete is poured at the site, the chutes of ready mixed concrete trucks and hoppers of concrete pump trucks must be washed out into the concrete washout pit before it hardens. In accordance with Best Practice MMD Construction will control and manage all concrete wash outs.

7.9 Road Maintenance

All approach roads to the site and all haul roads will be inspected regularly and kept free from any deposits as a result of site works.

The wheels and underside of all construction traffic leaving the site shall be cleaned, as required to prevent soiling of the public roads. A wheel washing location, including water jets or other approved cleansing method maybe required close to the site exit.

The site is also kept stoned up/hardstanding at all times to ensure the loading and unloading of Trucks will be maintained on washed stone hardcore/hardstanding within the site boundary at all times.

In the event that any public roads become soiled by construction traffic from the site, these roads shall be wet cleaned immediately.

7.10 Storm water

The site drainage in the site will use the following principles:

- Identification of Waste water path ways
- Sedimentation/Settlement Tanks
- Waste water mitigation measures
- Prevention of clean external water sources entering site and becoming contaminated
- Prevention of potential contaminated water sources entering adjacent lands and watercourses

SECTION 8 – ENVIRONMENTAL MANAGEMENT

8.1 Erosion and sediment control

Objective

The objective is to protect open drains and natural drainage lines from sedimentation deposits by minimising erosion of lands and transportation of sediment during construction.

Control Measures

The following measures should be undertaken to minimise erosion:

1. Land clearance should be kept to a minimum.
2. Clearing areas of highly erodible soil that are prone to water erosion should be avoided.
3. Areas that have been eroded should have a dust suppressing agent applied to them if they are being periodically worked to minimise erosion.
4. Keep vehicles to marked, graded and stoned access roads.
5. All excavated material should be temporarily stock piled on the high side of the trench for periods of less than 1 month.
6. Construction plant and machinery is to remain within the construction site for the duration of the contract thus limiting the transfer of soil and other vegetative material from the site.

Performance Criteria

No sedimentation deposits and erosion of lands and transportation of sediments during construction.

8.2 Air QUALITY

Objective

To minimise / avoid the health risks or loss of amenity due to emission of dust to the environment and the loss of soil from the environment.

To ensure there is no health risk or loss of amenity due to dust generation and emission of exhaust gases to the environment.

Construction activities and site operations shall be carried out such that no dust nuisance is caused to nearby facilities.

Control Measures

MMD will take all due care for all surrounding facilities to ensure that dust will be kept to a minimum by implementing the following measures;

- Installation of hardcore haul routes in the site to prevent generation of “mud” being transported around and off site.
- Installation of a wheel wash facility (If applicable).
- Damping down of areas of the site as required.
- All plant, tools and equipment generating dust will have dust suppression and collection equipment attached.

- Cleaning the site on a regular basis (clean as you go systems)

Performance Criteria

Keep the dust from construction site to minimum

8.3 Hydrocarbon & Chemical Management

Objective

To ensure that chemicals and hydrocarbon are stored and handled appropriately to prevent contamination to groundwater or soil.

Accidental spillages shall be contained and cleaned up without delay ensuring no discharge to groundwaters and nearby surface waters.

Control Measures

- Minimise chemicals and hydrocarbons stored on site
- Store dangerous chemicals, separated and signed as required by relevant codes and standards.
- Store hydrocarbon and other hazardous materials in appropriately bunded structures away from drains and rivers.
- Bunds should be impervious to prevent spilled product from escaping.
- Any spillage should be cleaned up using a spill kit immediately by appropriately trained personnel and reported to the site manager.
- On site spill kits should be checked periodically.
- Maintain and display Safety Data Sheets (SDS) with hydrocarbons and chemicals.
- Maintain SDS folder with easy access for all site personnel in the site Office.
- Restrict the area in which hazardous materials can be stored during construction works.
- Re-fuelling should be limited to small equipment and on hardstand areas only where any spills can be cleaned up immediately.
- Spill trays should be used during refuelling to prevent spillage.
- All vehicles carrying fuel must carry spill kits.

Performance Criteria

Two samples, taken within the Made Ground within TP3 and TP5 as highlighted in **Fig. 4** were sent for WAC (Waste Acceptance Criteria) testing at the UKAS accredited laboratory of Chemtest, Newmarket, UK. The results of the two tests have been compared with the WAC limits for “Inert”, “Stable non-reactive hazardous waste in non-hazardous landfill” and “Hazardous Waste Landfill”.

The results of the WAC tests from TP3 show this material to be “Inert”. The results of WAC testing from TP5 shows the material to be “Stable non-reactive hazardous waste in non-hazardous landfill” due to elevated levels of Sulphate and Total Dissolved Solids. It is recommended that the accepting landfill is contacted prior to disposal of the fill material in order to verify the class of soil for disposal. Individual landfills may require additional testing prior to disposal. Due to limited number of tests undertaken to date, it is not possible at present to estimate the volumes of Inert and Stable non-reactive hazardous waste that may be present on site.



Fig. 4

8.4 Stockpile Management

Objective

To manage stockpiles to minimise dust, erosion and sediment impacts.

Control Measures

- Locate stockpiles away from drainage lines, at least 10m away from natural waterways and where they should be less susceptible to wind erosion.
- Ensure that the stockpiles have slopes no greater than 2:1 (Horizontal: Vertical).
- Stabilise stockpiles that should remain bare for more than 28 days.
- Establish sediment controls around un stabilised stockpiles. Record inspection results in AF3 form periodically.
- Suppress dust generation from stockpiles as circumstances demand.
- Stockpiles should not be located under the drip line of trees.

Performance Criteria

Stockpiles do not create dust, erosion and sedimentation impacts off site.

8.5 Fauna Management

Objective

To protect native fauna from being trapped, Injured or Killed.

Control Measures

- All open trenches should be inspected prior to commencement of work each day for trapped vertebrate fauna such as frogs, birds and mammals.
- If trapped fauna is found then the Health, Safety and Environmental Manager should be contacted to organise removal.
- Wherever possible ensure that all trenches are backfilled during the shift cycle. If unable to do so ramp the side of the trench if left open for longer than 24 hours.
- If injured or dead fauna are found then the Health, Safety and Environmental Manager should be contacted immediately.

Performance Criteria

No native fauna injured or killed as a result of construction activity.

8.6 Archaeology

Objective

MMD will stop site activities and will contact the archaeologist if any potential burials or archaeological materials found in grounds during excavation works.

Spotters will be in attendance for all excavation works undertaken on site This will be maintained throughout the project.

Control Measures

- During construction works, “all soil stripping associated with the construction works is to be monitored by a spotter. Should archaeological material be found during the course of monitoring, the works on site will stop immediately and the Development Application Unit, National Monuments Services, Department of Arts, Heritage and Gaeltacht and the Archaeologist shall be informed.
- Ensure that all site personnel are aware of the potential for archaeological artefacts to be found within the site.
- The Contractor shall not disturb any ancient works without the Architects permission and shall at once hand over to him any object of antiquarian, geological or other interest or value discovered during the progress of the work

Performance Criteria

No damage or loss to archaeological sites and artefacts.

8.7 Groundwater

Control Measures

Construction activities and operations on site shall be carried out in such a manner that no polluting material or contaminated surface water enters any watercourse, storm sewer or public roadway around the site.

No silt or soiled water shall be allowed drain from the development site to the adjacent watercourses or public roadway during site operations.

Performance Criteria

No contamination of watercourses or any drainage systems on site.

SECTION 9 – MANAGEMENT FRAMEWORK

9.1 Roles & Responsibilities

The anticipated roles and responsibilities of the key parties involved in the management of environmental issues during the construction works are set out in the table below.

Position	Name	Contact Details
Project Contracts Manager	TBA	
Site Supervisor	TBA	
EHS Advisor	TBA	
Project Archaeologist	TBA	
Other relevant persons	TBA	

The success of the CEMP is dependent on the clear unambiguous assignment of accountability to key positions within the organisation structure. The accountabilities are assigned as follows.

9.2 Health, Safety & Environmental Advisor

- Develops, implements and reviews health & environmental systems.
- Provides technical advice to management and supervisors
- Conducts inspections of environmental performance and compliance on the project.
- Conducts periodic formal audits of the worksite to monitor environmental performance and identify and implement improvement strategies.
- Monitors the CEMP and oversees all day-to-day environmental matters
- Conducts inspections and periodic formal audits of the worksite to monitor environmental performance and identify and implement improvement strategies.
- Reviews and approves all subcontractor's safe systems of work and any other documentation produced by subcontractors

- Ensuring that the requirements of the CEMP are developed and environmental system elements, including procedures, method statements and work instructions are implemented and adhered to with respect to environmental requirements
- Report to the Construction Manager on the environmental performance of Line Management
- Ensures subcontractor compliance with approved safe systems of work and the maintenance of records to demonstrate compliance.
- Conduct toolbox talks to discuss environmental issues with employees and identify areas for improvement.

9.3 Contracts Manager & Project Manager

- Overall responsibility for the development and implementation of the CEMP
- Allocating resources to ensure the implementation of the CEMP
- Participates in the management review of the CEMP for suitability, adequateness and effectiveness
- Sets the focus of environmental policy, objectives and targets for the Contractor.
- Ensures that a project risk identification, assessment and control process has been undertaken and that all persons working on the project are made aware of the hazards and the risk control requirements.
- Sets and attends scheduled projects meetings when required.
- Ensure the CEMP is submitted to all subcontractors before works commence
- In the event of any Scheme Amendment and or Variations to the CEMP required during the works will be recorded by the Contracts Manager and Safety Advisor

9.3.1 Project Manager

- To report to the Contract Manager on the on-going performance of the CEMP
- To discharge his/her responsibilities as outlined in the CEMP
- To support and augment the CMT and the Environmental Officer through the provision of adequate resources and facilities in the implementation of the CEMP.

9.4 Site Supervisor MMD

- Read, understand and implement the CEMP
- Know the requirements of the relevant law in environmental matters and take whatever action is necessary to achieve compliance.
- Ensure that environmental matters are taken into account when considering Contractors' construction methods and materials at all stages;
- Be aware of any potential environmental risks relating to the site, plant or materials to be used on the premises and bring these to the notice of the appropriate management
- Ensure plant suggested is environmentally suited to the task in hand
- Be aware of any potential environmental risks relating to the Contractors and bring these to the notice of the appropriate management. Subcontractors and employees
- Ensure materials/waste register is completed.
- Directly accountable for setting up the worksite to ensure that all activities can be conducted in a safe manner both for persons working on the site, visitors and members of the public.
- Responsible for ensuring that pre-start communications are held daily with all personnel working on the project including subcontractor personnel.

- Ensure that all incidents are reported to the project manager/ construction contractor manager as soon as possible.
- Conducts visual daily inspections of the work site ensure that HSE procedures are being followed.
- Document's inspections and take immediate and effective action to correct reported and observed breaches.
- Ensure that all personnel working on the site are competent to carry out tasks for which they are assigned by checking evidence of competency and observing work practices.

9.5 MMD Employees

- Must work in a safe manner always and immediately report all incidents, hazards or near misses to the site supervisor.
- Takes all reasonable steps to seek information on the safe working requirements of the project.
- Ensures their own fitness for work.
- Co-operates at all times with site management in ensuring compliance with company health, safety and environmental procedures and statutory requirements.
- Does not work outside area of competency.
- Completes pre-start checks correctly for plant and equipment prior to operation and reports any damage or repairs immediately to the site supervisor.
- Ensure their plant and equipment have the correct spill kits. Check all tools and equipment before each use.
- Actively participate in safety & environmental discussions at tool box talk meetings.
- Active participate in the completion of SPA's and Risk Assessments and included environmental risks.
- Take part in onsite audits when required.

9.6 Subcontractors / Subcontractor Employees

- Ensure that they abide by the same responsibilities as construction contractor employees, as stated above.
- Take all reasonable steps to seek information on the safe working requirements of the project.
- Cooperate at all times with project management in ensuring compliance with company and client, Health and Environment procedures and statutory requirements.
- Sub-contractors undertaking work on the project shall have documented safe systems of work in place prior to commencing work, taking into account the CEMP and include in their method statements.