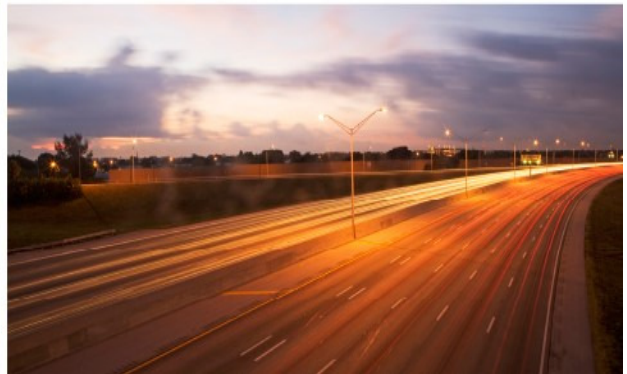




Preliminary Construction & Environmental Management Plan

Proposed Residential Development at Beaumont Road /
Beaumont Grove / Grace Park Court / Ellenfield Road, Beaumont,
Dublin 9

September 2026

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This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015)

Issue	Date	Prepared by	Checked by	Approved by
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Comments

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We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above.

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1. Introduction

Waterman Moylan in conjunction with the applicant and his professional team have prepared the following preliminary Construction & Environmental Management Plan (CEMP) for the implementation of the construction phase of the proposed residential development at Beaumont Road, Beaumont, Dublin 9.

The proposed development, on a site of approximately 0.58Ha will consist of 100 no. apartments/duplexes.

This plan sets out typical arrangements and measures that will be implemented during the construction phase of the project to manage, minimise or mitigate potential environmental impacts that may arise from the construction of the proposed development.

The purpose of this report is to provide effective, site-specific procedures and mitigation measures to monitor and control environmental impacts, providing guidance to the main Contractor who will be required to develop the Final Detailed Construction & Environmental Management Plan for the site in advance of commencing works on site and to implement same during the works.

This Construction & Environmental Management Plan is a live document and indicative only. It should not be construed as representing the exact method or sequence in which the construction works shall be carried out.

As is normal practice, the Main Contractor for the project is responsible for the method in which any construction works are carried out and to ensure that best practices and all legal obligations including Local Authority requirements and Health and Safety legislation are complied with.

The main contractor is also responsible for the design and installation of all temporary works required to complete the permanent works. This plan can be used by the Main Contractor to develop their final Construction & Environmental Management Plan. The Applicant reserves the right to deviate from the contents of this report, while still complying with all relevant Local Authority requirements and legislation.

Construction Waste Management is dealt with under separate cover.

As a minimum, the CEMP should be formulated in accordance with best international practice including but not limited to:

- CIRIA, (2001), Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors, (C532) Construction Industry Research and Information Association;
- CIRIA (2002) Control of water pollution from construction sites: guidance for consultants and contractors (SPI56) Construction Industry Research and Information Association
- CIRIA (2005), Environmental Good Practice on Site (C650); Construction Industry Research and Information Association
- BPGCS005, Oil Storage Guidelines;
- Eastern Regional Fisheries Board, (2006), Fisheries Protection Guidelines: Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites;
- CIRIA 697, The SUDS Manual, 2007; and
- UK Pollution Prevention Guidelines (PPG) UK Environment Agency, 2004.

2. The Site

The proposed Large Scale Residential Development (LRD) will comprise 100 no. apartments/duplexes (17 no. studios, 45 no. 1-beds, 27 no. 2-beds and 11 no. 3 beds) within 4 no. blocks ranging in height from 3 to 6 storeys. All residential units will be provided with associated private balconies/terraces to the north/ south/ east/ west elevations. Provision of internal amenity space and lobby/reception area at ground floor of the apartment block. Vehicular/pedestrian/cyclist access from Grace Park Court and pedestrian/cyclist and emergency access via Ellenfield Road. All associated site development works including import, export and reuse of material to achieve appropriate site levels, infrastructure and enabling works including water services provision and upgrades, public utilities, open spaces (including play areas), surface car parking, set down areas, cycle parking areas/buildings, landscaping and boundary treatment works, plant areas (at ground and roof level), green roofs, roof mounted photovoltaic (PV) panels, ESB substation, and waste storage.

The subject site is located at Beaumont Road, Beaumont, Dublin 9. The subject site is approximately 0.58 hectares. The subject site is bounded by the Beaumont Grove Road to the northeast, by the Grace Park Court and Beaumont Road to the southeast and by Grace Park Court to the southwest and existing neighbouring houses to the north and west.

The location of the site is shown in Figure 1. Please refer to Waterman Moylan Drawing No. 20-048-P2010-Site Location Map for the exact site location and surrounding lands.

Figure 1: Site Location Map



The overall site area is approximately 0.58 Ha. The site is currently brownfield area with car parking area and existing former properties to the west of the overall site. The site is bounded in the north by large, scaled trees.

It falls from southeast to northwest gently with the high point of c. 42.09m OD observed to the southwest and the low point of c. 39.24m OD to the northeast.

The roads located within the subject site will range between 40.20m and 41.15m OD Malin.

3. General Site Set Up and Pre-Commencement Measures

Detailed condition surveys (including photographs) may be carried out on certain adjacent / adjoining third party buildings prior to any work being carried out on the site. The purpose of the survey would be to record the condition of the properties before the works commence. Copies of these survey reports would be provided to the third-party owners.

A detailed condition survey (including photographs) may be carried out on the roads and footpaths surrounding the site. The purpose of the survey would be to record the condition of the streets and footpaths around the site prior to the works commencing.

A site compound(s) including offices and welfare facilities will be set up by the main contractor in locations to be decided.

Prior to any site works commencing, the main contractor will investigate / identify the exact location of and tag all existing services and utilities around and through the site with the assistance of the relevant Dublin City Council technical divisions and utility companies.

Typical working hours for the site would be 07.00 to 18.00 Monday to Friday and 08.00 to 14.00 Saturday. No Sunday or Bank Holidays work will generally be permitted. The above working hours are typical; however, special construction operations may need to be carried out outside these hours in order to minimise disruption to the surrounding area.

4. Site Security and Hoarding Lines

Hoarding lines and site security will be set up within the development site as required.

Hoarding and security fencing will be required on the public roads during the construction works and for construction of the new realigned entrance to the site.

Prior to construction commencing on site, a detailed construction traffic management plan will be prepared and submitted by the appointed contractor to Dublin City Council.

The traffic management plan will identify staging areas, delivery of materials, strategy for large concrete pours, removal of demolition waste, traffic routes etc.

Access gates will be operated by a flagman who will divert incoming / outgoing vehicles / pedestrians and general traffic as necessary.

5. Designated Storage Area and Site Compound

A site compound(s) including offices and welfare facilities (canteen, drying room, toilets, lockers and first aid) will be set up by the main contractor in locations to be decided within the subject site.

The main contractor will be required to schedule delivery of materials daily. The main contractor will be required to provide a suitable area within the site compound for the secure storage of materials.

Measures will be implemented throughout the construction stage to prevent contamination of the soil and surrounding watercourses from oil and petrol leakages and significant siltation. Integrally bunded oil and storage tanks will be used or alternatively a suitable bunded area will be installed for oil and petrol storage tanks in order to provide protection from accidental spills. Spill kits will be provided by the Contractor to cater for any other spills that may accidentally occur on site.

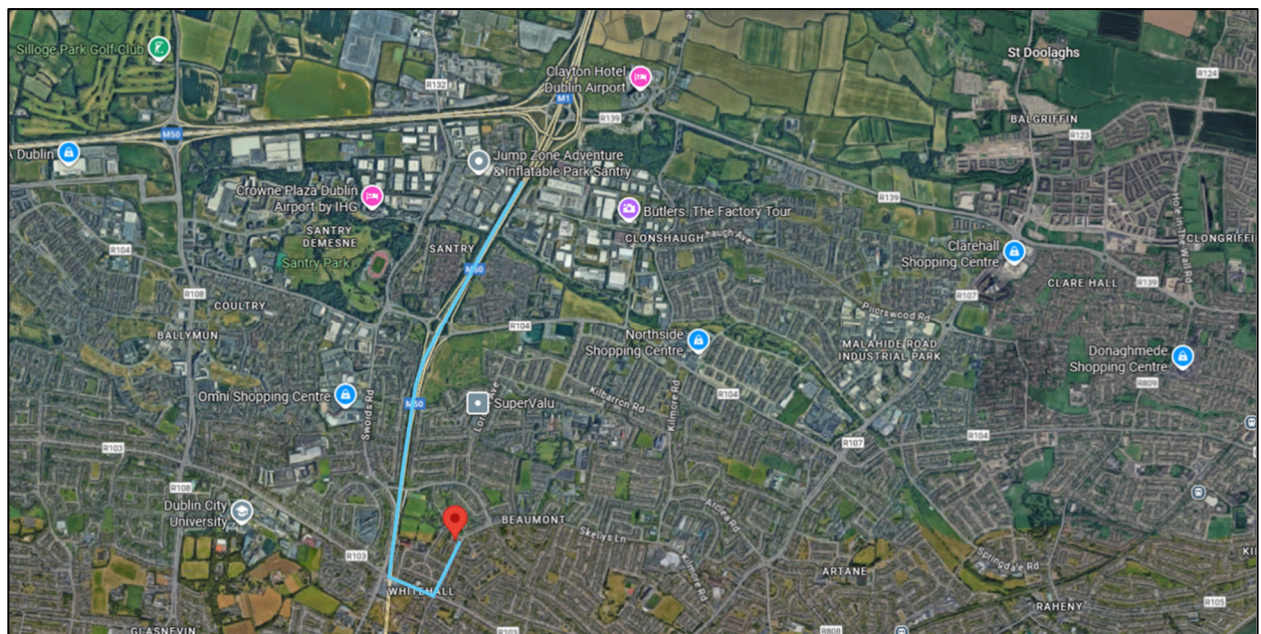
6. Construction Traffic Routes

The proposed development is bounded by the Beaumont Grove Road to the northeast, by the Grace Park Court and Beaumont Road to the southeast and by Grace Park Court to the southwest. Construction deliveries and site access will be facilitated primarily via Beaumont Road, which links to Collins Avenue Road, then to the R132, and onward to the M50, as shown in Figure 2. Given the fact that these roads, i.e. Beaumont Road, Collins Avenue Road, R132 and M50 are two-way roads, they can be used for the route both to and from the site.

A restriction on using any of the surrounding residential roads for Construction traffic will be put in place.

Due regard will be paid to minimising any impacts by construction vehicles on the existing developments in the area. Should routes become an issue, then the position will be reviewed by the Project Team and changes made.

Figure 2: Construction Access Routes



7. Deliveries

Deliveries and access to the construction site as described in section 5 above.

In the event that large concrete pours are required which may result in congestion at the entrance to the site, the deliveries will be organised such that concrete trucks will queue at a pre-determined staging point and will then be called in by radio as appropriate to the site, via a pre-determined route and to the required access gate.

Set procedures and designated wash-out areas will be provided, or alternatively vehicle wash-out will be prohibited if a suitable wash-out area is not identified.

All delivery vehicles will be co-ordinated as required by a flagman on duty at the relevant access point.

All large pours will be carefully co-ordinated with the roads department at Dublin City Council.

8. Parking and Storage

A small amount of parking will be available on site. The closest bus stop near the area is stop ID: 217, c. 20m south of the subject site and is serviced by Dublin Bus, route 14 and 16 with a frequency of 10 to 15 min.

Site management will organise additional off-site parking and shared car arrangements if required.

For those who wish to cycle to and from the development, dedicated cycle parking will be provided for the duration of the works within the site. Shower facilities and lockers will also be provided, and cycle links will be maintained at all times.

A Construction Stage Mobility Plan will be prepared by the contractor alongside the Construction Management Plan before starting on site.

The main contractor will be required to schedule delivery of materials on a daily basis. If necessary, the main contractor will be required to provide a secure material staging compound on the site.

9. Construction Program

The development provides for a preliminary 24-month construction period commencing in 2027 with completion in 2029/30.

10. Hours of Operation

10.1 Proposed Working Hours

The proposed working hours for the redevelopment of the site are set out below:-

- Monday - Friday : 07h00 – 18h00
- Saturday : 08h00 – 14h00

10.2 Mitigation Measures

In order to mitigate the impact of construction activities both during and after trading hours, the following measures are proposed:

- Scheduling of deliveries to avoid interference with the peak hour traffic movements
- Scheduling of noisier activities during the middle of the day;
- Noise mitigation measures as Section 12 of this Plan; and
- Vibration mitigation measures as per Section 12 of this Plan.

In addition, the management at the site will implement a program of consultation for businesses and the community including advance notification of works.

11. Construction Management

11.1 Vehicle Washdown

Where possible, the permanent connection to the public foul sewer will be used temporarily for construction phase subject to the agreement of Uisce Eireann.

Vehicle wash down water will be discharge directly, via suitable pollution control and attenuation to the foul sewer system.

Table 1 Pollution Prevention Measures

Source	Action
Detergents	Use of detergents will be carried out in designated areas draining to the foul sewer.
Fuel/Oil	Fuel/oil stores must be located away from the site drainage system and the edge of watercourses.
	Ensure adequate measures are identified to prevent or contain any spillage such as creating a fall away from any drainage grid or blocking drainage points.
	Prevent oil pollution by: • Suitable bunded storage of fuel/oil, and use of drip trays under plant, and • An oil separator, and/or • On-site spill-kit • Commercially available absorbent granules, pads or booms.
Material Storage	Store drums, oil and chemicals on an impervious base and within a secured bund.
	Ensure topsoil and/or spoil heaps are located at least 10m away from water courses. Consider seeding them or covering with a tarpaulin to prevent silty runoff and losses due to wind.
Leaks and Spills	Storage facilities are to be checked on a regular basis to ensure any leaks or drips are fixed to prevent loss and pollution.
	Ensure appropriate spill response equipment is located near to the material in case of containment failure or material spills and ensure site staff know how to use it.
	Adequate stocks of absorbent materials, such as sand or commercially available spill kits and booms should be available at all times.
Litter	Provide waste bins on-site as appropriate.
Construction Vehicles	Provide vehicle wheel washing.

Concrete, Cement and Bentonite	Washout of these materials will be carried out in a designated, impermeable contained area. The washout water itself will be disposed of off-site or discharged to the foul sewer if authorised.
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12. Control of Noise & Vibration

12.1 Existing Noise Sources

The dominant source of noise in the area of the site is Beaumont Grove Road to the northeast and Grace Park Court and Beaumont Road to the southeast of the site.

12.2 Construction Noise Management

In the absence of any statutory Irish guidance relating to the maximum permissible noise level that may be generated during the construction phase of a project, it is proposed that the construction works will incorporate:

- Best practice measures relating to the control and minimisation of as set out in BS 5228 (2009) Parts 1 and 2 noise during all phases of the work.;
- Selection of quiet plant including proprietary acoustic enclosures to compressors and generators;
- Control of noise sources including reduction of resonance effects by stiffening and / or the application of damping compounds to panels and / or cover plates;
- Control of rattling and grinding noises by fixing resilient materials between the contact surfaces.
- Screening by demountable enclosures;
- The siting of mechanical plant as far away from residential areas as possible; and
- Regular maintenance of all plant;

Ref: British Standard BS 5228 (2009): Code of Practice for Control of Noise and Vibration on Construction and Open Sites Part 1: Noise.

12.3 Construction Vibration Management

In the absence of any statutory Irish guidance relating to the maximum permissible vibration level that may be generated during the construction phase of a project, it is proposed that the construction works will incorporate:

- Selection of quiet plant with low vibration emissions;
- Provision of anti-vibration mounts on reciprocating plant;
- Limitation of vibration from construction activities to the levels recommended in BS 5228;
- Materials to be lowered rather than dropped; and
- Resilient materials to be provided on surfaces onto which materials are being lowered.

Ref: British Standard BS 5228 (2009): Code of Practice for Control of Noise and Vibration on Construction and Open Sites Part 2: Vibration.

13. Environmental Effects

A project arborist Andrew Boe Bsc (HONS) Marbora has been appointed as part of the design team to advise on ecological matters. In this regard the Ecological Section of the Environmental Assessment Report accompanying this application schedules out general mitigation measures that should be employed during the construction stage of the proposed development. A summary of the general mitigation measures is set out below followed by more site-specific measures applicable to this site.

A Visual Tree Assessment (VTA) was carried out from ground level only, and the tree has been classified under the British Standard, as shown in the survey schedule. Where possible, Category 'A' and 'B' trees should be retained and incorporated into new development layouts. Category 'U' trees are not considered suitable for retention.

The arboricultural impact of the proposed development has been assessed to determine which trees are suitable for retention within the proposed layout and the specific factors to be considered. The Tree Constraints Plan is a clear and accurate drawing showing the position and dimensions of trees on the site at the time of the initial survey. It also identifies root protection areas, indicating both above- and below-ground constraints posed by the trees.

Full recommendations are provided in the *BS5837 Tree Survey Report*. These recommendations are based on current site conditions and may change as site use develops. A summary of key considerations for the trees is set out below.

Table 2 Management recommendations

Ref.	Species	Retention Category	Comments	Recommendations
T001	Field maple (<i>Acer campestre</i>)	B1	This tree will form the constraint to the East side of the site.	Pre construction: No action required. During construction: No action required. Post construction: No action required.
T002	Field maple (<i>Acer campestre</i>)	B1	This tree will form the constraint to the East side of the site.	Sever ivy at base.
T003	Field maple (<i>Acer campestre</i>)	B1	This tree will form the constraint to the East side of the site.	Pre construction: No action required. During construction: No action required. Post construction: No action required.
T004	Field maple (<i>Acer campestre</i>)	B1	This tree will form the constraint to the East side of the site.	Sever ivy at base.

T005	Field maple (<i>Acer campestre</i>)	B1	This tree will form the constraint to the East side of the site.	Sever ivy at base.
T006	Norway maple x40 (<i>Acer platanoides</i>)	B1	This tree will form the constraint to the East side of the site.	Pre construction: No action required. During construction: No action required. Post construction: No action required.
T007	Norway maple (<i>Acer platanoides</i>)	B1	This tree will form the constraint to the East side of the site.	Sever ivy at base.
T008	Horse chestnut (<i>Aesculus hippocastanum</i>)	B1	This tree will form the constraint to the East side of the site.	Sever ivy at base.
T009	Horse chestnut (<i>Aesculus hippocastanum</i>)	B1	This tree will form the constraint to the East side of the site.	Sever ivy at base.
T010	Horse chestnut (<i>Aesculus hippocastanum</i>)	B1	This tree will form the constraint to the East side of the site.	Sever ivy at base.
T011	Leyland cypress (<i>X Cuprocyparis leylandii</i>)	C1	This tree will form the constraint to the East side of the site.	Pre construction: No action required. During construction: No action required. Post construction: No action required.
T012	Common ash (<i>Fraxinus excelsior</i>)	C1	In proposed communal area.	Pre construction: No action required. During construction: No action required. Post construction: No action required.
T013	Maple (<i>Acer sp.</i>)	B1	Outside site	Pre construction: No action required. During construction: No action required. Post construction: No action required.

- A project ecologist will be appointed to oversee all works.
- The watercourses onsite and drains will be protected from dust, silt and surface water throughout the works.
- Local silt traps established throughout site.
- Mitigation measures on site include dust control, stockpiling away from watercourse and drains
- Stockpiling of loose materials will be kept to a minimum of 40m from watercourses and drains.
- Stockpiles and runoff areas following clearance will have suitable barriers to prevent runoff of fines into the drainage system and watercourses.
- Fuel, oil and chemical storage will be sited within a bunded area. The bund will be at least 50m away from drains, ditches or the watercourse, excavations and other locations where it may cause pollution.
- Bunds will be kept clean and spills within the bund area will be cleaned immediately to prevent groundwater contamination. Any water-filled excavations, including the attenuation tank during construction, that require pumping will not directly discharge to the stream. Prior to discharge of water from excavations adequate filtration will be provided to ensure no deterioration of water quality.
- Petrochemical interception and bunds in refuelling area
- Prior to site clearance the ecologist and arborist will assess the site works and oversee habitat protection measures. These would include tree protection measures in the vicinity of the oak treeline and riparian corridor.
- Relevant guidelines and legislation (Section 40 of the Wildlife Acts, 1976 to 2012) in relation to the removal of trees and timing of nesting birds will be followed e.g. do not remove trees or shrubs during the nesting season (1st March to 31st August). Should this not be possible, vegetation will be inspected by an ecologist for nesting birds prior to removal.

13.1 Measures to Minimise Nuisance

The measures to be operational at this site in order to minimise nuisance to nearby residents and the general public will include:

- Use of properly designed access and egress points to minimise impact on both external traffic and amenity of residents;
- Check on each departing vehicle at exit from site to public road;
- Use of banksman and/or traffic lights to control exit of construction vehicles onto public road;
- Controlled off-site HGV holding area where deliveries are called up as required. No HGV's waiting outside site;
- Issue of instructions and maps on getting to site to each sub-contractor to avoid 'lost' HGV's disrupting traffic;
- Establishment and maintenance of HGV holding areas within the site;
- Ongoing assessment of the most appropriate routes for construction traffic to and from the site;
- Interface with operation of HGV traffic from adjacent railway and port terminals; and
- Restriction of work hours to industry standard working hour.

13.2 Site Control Measures

The designated and operational on-site control measures, which will be established and maintained at this site, will include:

- Designated hard routes through site;
- Each departing vehicle to be checked by banksman;
- Wheel wash facility at egress point;
- Provision and facilities to cover lorry contents as necessary;
- Controlled loading of excavated material to minimise risk of spillage of contents;
- Spraying/damping down of excavated material on site by dedicated crews;
- Use of known routes for lorries to monitor impact on local area
- Road Sweeping facility to clean local roads if mud or spillage occurs.
- Hazardous materials to be stored in a designated area on site with appropriate drip trays/bunding and fire extinguishers to contain any spillages.

13.3 Site Specific Environmental Risk - Dirt and Dust

Nuisance dust emissions from construction activities are a common and well recognised problem. Fine particles from these sources are recognised as a potential significant cause of pollution. The main contractor will be required to demonstrate that both nuisance dust and fine particle emissions from the site are adequately controlled and are within the acceptable limits.

Once particles become airborne it is very difficult to prevent them from dispersing into the surrounding area, thus the main consideration will be to combat dirt and dust at source. The objective will be to contain any dirt or dust within the site, which is large enough for comprehensive control measures.

The main problems, which may arise during the early part of construction, will be controlled by the measures described above and by the following measures:

- The use of hardcore access route to work front;
- A regime of 'wet' road sweeping can be set up to ensure the roads around the immediate site are as clean and free from dirt / dust arising from the site, as is reasonably practicable. This cleaning will be carried out by approved mechanical sweepers.
- Footpaths immediately around the site can be cleaned by hand regularly, with damping as necessary.
- High level walkways and surfaces such as scaffolding can be cleaned regularly using safe 'wet' methods, as opposed to dry methods.
- Vehicle waiting areas or hard standings can be regularly inspected and kept clean by brushing or vacuum sweeping and will be regularly sprayed to keep moist, if necessary.
- Vehicle and wheel washing facilities can be provided at site exit(s) where practicable. If necessary vehicles can be washed down before exiting the site.
- Netting can be provided to enclose scaffolding in order to mitigate escape of air borne dust from the demolition.
- Vehicles and equipment shall not emit black smoke from exhaust system, except during ignition at start up.
- Engines and exhaust systems should be maintained so that exhaust emissions do not breach stationary emission limits set for the vehicle / equipment type and mode of operation.

- Servicing of vehicles and plant should be carried out regularly, rather than just following breakdowns.
- Internal combustion plant should not be left running unnecessarily.
- Exhaust direction and heights should be such as not to disturb dust on the ground and to ensure adequate local dispersal of emissions.
- Where possible fixed plant such as generators should be located away from residential areas.
- The number of handling operations for materials will be kept to a minimum in order to ensure that dusty material is not moved or handled unnecessarily.
- The transport of dusty materials and aggregates should be carried out using covered / sheeted lorries.
- Material handling areas should be clean, tidy and free from dust.
- Vehicle loading should be dampened down and drop heights for material to be kept to a minimum.
- Drop heights for chutes / skips should be kept to a minimum.
- Dust dispersal over the site boundary should be minimised using static sprinklers or other watering methods as necessary.
- Stockpiles of materials should be kept to a minimum and if necessary, they should be kept away from sensitive receptors such as residential areas etc.
- Stockpiles where necessary, should be sheeted or watered down.
- Methods and equipment should be in place for immediate clean-up of spillages of dusty material.
- No burning of materials will be permitted on site.
- Earthworks excavations should be kept damp where necessary and where reasonably practicable.
- Cutting on site should be avoided where possible by using pre-fabrication methods to facilitate any temporary works that may be required to enable the demolition.
- Equipment and techniques for cutting / grinding / drilling / sawing etc, which minimise dust emissions and which have the best available dust suppression measures, should be employed.
- Prior to commencement, the main contractor should identify the demolition operations which are likely to generate dust and to draw up action plans to minimise emissions, utilising the methods highlighted above. Furthermore, the main contractor should prepare environmental risk assessments for all dust generating processes, which are envisaged.
- The main contractor should allocate suitably qualified personnel to be responsible for ensuring the generation of dust is minimised and effectively controlled.
- Demolition works to incorporate water spray to reduce dust.

13.4 Site Specific Environmental Risk - Groundwater Protection

The excavations for the proposed foundations, percolation areas, drainage pipes, pumping station, water supply, and utilities may impact the ground water in the site.

The site investigation identifies the presence of a water table around 1m BGL. It is therefore anticipated that there should be minor impact upon the groundwater. Excavations below 1m deep in the site has been kept to a minimum. However, in the event that a higher-water table is encountered, then an appropriate dewatering scheme to keep the excavations free from water will be implemented. Specialist contractors in dewatering will provide expert advice on the dewatering and treatment in order to ensure the quality of water leaving site is high.

Typically, improvements to the quality of the discharge of surface water from deep excavations are achieved through the provision of settlement ponds/tanks. Settlement ponds/tanks will be maintained and regularly monitored visually for hydrocarbon sheen and suspended solids.

Periodic laboratory testing of discharge water samples will be carried out in accordance with the requirements of Dublin City Council before discharge back to the surrounding surface water drainage system.

Appropriate discharge licenses will be acquired from Dublin City Council in respect of discharges from dewatering operations.

13.5 Site Specific Environmental Risk - Noise – Risk to Site Operatives

Section 12 of this report deals with the general control of Noise to limit impacts upon the nearby residents. This section deals with noise control to reduce impact on general construction operatives who will be working on the site.

The main contractor will deal with the immediate dangers to hearing etc. associated with high noise levels and the impact of same on construction operatives, by means of risk assessment and mitigation / precautionary measures and equipment, all pursuant to the current health and safety legislation.

The main contractor will carry out a noise assessment in relation to the proposed works at construction stage. This noise assessment will be carried out by a competent person (or specialist firm) with specialist training in this area.

The noise assessment should include the following steps:-

- Identify and list all construction work activities where there is likely to be a significant noise hazard.
- Determine the hazards / nuisance.
- Identify all third parties likely to be exposed to the nuisance.
- Measuring the risk: The level of noise in dBs
- Considering and Implementing Control Measures.
- Control exposure to noise.
- Record the findings of the noise assessment.
- Review and revise.

13.6 Site Specific Environmental Risk - Protection of Soils

Prior to commencing the topsoil strip a protection plan shall be agreed on site with the project Ecologist and the protective measures put into place by the appointed contractor in advance of carrying out any works. This protection plan will provide for suitable protection along all ditches to prevent silt/sediment entering those ditches which would provide a pathway to the Santry River. The protection measures will comprise silt fencing, settlement ponds, diversion ditches and straw bales all as described in Section 13.4 above.

To preserve the topsoil on the site, topsoil will be removed to stockpiles and protected during the construction period for reuse on completion of the works. Topsoil will be stored in mounds and suitably shaped to prevent water logging during wet weather. The stripping of topsoil will be undertaken on a phased basis so that no area is stripped until such time as works are imminent in that area. All topsoil stripping associated with the proposed development will be monitored by a suitably qualified archaeologist and a report prepared. During topsoil stripping a written and photographic record describing the form of the townland boundaries to be impacted upon should be included by the archaeologist in the monitoring report.

Levels of the proposed roads and residential units will be established to minimise the quantity of fill material to be imported to the site. Surplus subsoil will be used to create mounding for landscaping where possible. The scheme will be designed to avoid the need for importation or exportation of sub-soil to/from the site.

Excavations are to remain open for as little time as possible before the placement of fill. This will help to minimise the potential for water ingress into excavations. Surplus sub-soil from excavation works will be stored away from existing drainage features to remove any potential impact.

The provision of wheel wash facilities at the construction entrance to the development will minimise the amount of soil deposited on the surrounding road network. Additionally, the adjoining road network will be cleaned on a regular basis using a road sweeper, as required, to prevent the build-up of soils from the development site on the existing blacktop roads.

Measures will be implemented throughout the construction stage to prevent contamination of the soil and adjacent watercourses from oil and petrol leakages and significant siltation. Suitable bunded areas will be installed for oil and petrol storage tanks. Designated fuel filling points will be put in place with appropriate oil and petrol interceptors to provide protection from accidental spills. Spill kits will be provided by the Contractor to cater for any other spills.

Dampening down measures with water sprays will be implemented during periods of dry weather to reduce dust levels arising from the development works.

The excavations for the foundations, drainage pipes, percolation areas, foul water pumping station, water supply, utilities and foundations have been designed to be as shallow as possible to reduce excavation depths.

All water pumped from the excavations will require to be treated for silt and deleterious matter (i.e. by the use of silt traps, straw bales or similar as described in Section 13.4 above) and no direct discharge to an existing stream/ditch or sewer will be allowed, even during periods of extreme rainfall. During any discharge of water from the excavations, the quality of the water will be regularly monitored visually for hydrocarbon sheen and suspended solids. Periodic laboratory testing of discharge water samples will be carried out in accordance with the requirements of the discharge licence obtained from the Local Authority.

After implementation of the above measures the proposed development will not give rise to any significant long term adverse impact. Negative impacts during the construction phase will be short term only in duration.

13.7 Site Specific Environmental Risks - Protection of Trees

The erection of protective fencing prior to the commencement of any works on site will prevent encroachment into the root protection area (RPA) of retained trees.

Existing ground levels will be retained within the RPAs. Intrusions into the soil within the RPAs is generally not acceptable and topsoil within it should remain in situ.

The location of all protective fencing will be agreed with the retained Arboricultural Consultant prior to work commencing and will aim to preserve and protect the root systems of retained trees for the duration of the works. Due to the nature of this site root protection fencing may have to allow for pedestrian movement.

Protective barriers around trees are to be erected prior to the commencement of any site works including demolition, top soil stripping or movement, bringing onto site of materials, supplies, or machinery. Any required tree pruning works or removal of poor-quality trees can be undertaken prior to the erection of the barriers. The barriers should be considered essential and should not be removed or altered without prior recommendation by an Arboriculturist and approval of the local planning authority.

For full details on the tree protection measures and the associated Tree Root protection drawings please refer to the Arborist report and drawings included in the application under a separate cover.

14. Duties and Responsibilities

14.1 Main Contractor

The main contractor will have overall responsibility for ensuring that the CEMP is implemented on site. In order to achieve this the main contractor will appoint a suitably qualified Construction Management Team. This document is considered a live document and must be communicated to all personnel on site.

14.2 Construction Director

The Construction Director shall have overall responsibility for the project. This will include the organisation and execution of the CEMP. The Construction Director will be required to ensure that the project is adequately resourced in order to implement the CEMP. He will also be required to regularly review the CEMP to ensure that it is suitable, adequate and effective for the works being undertaken.

It shall also be the duty of the Project Team to ensure that the Contractors CEMP is adequate for their particular areas of expertise and that the plan is being implemented in a safe and competent manner.

14.3 Construction Manager

The Construction Manager will report directly to the Construction Director. Their duties and responsibilities in respect of the CEMP shall be as follows:-

Report to the Construction Director on the performance of the CEMP.

Providing clear instruction and guidance to the Construction Team/Sub-Contractors etc in respect of their responsibilities to comply with the CEMP. In particular making them aware of the CEMP.

Ensuring that adequate resources are made available to implement the CEMP

Co-ordination on site between specialist consultants, contractors, site staff and ensuring that tasks are properly planned to minimise risk to the environment.

Checking method statements from sub-contractors for compliance with the CEMP.

14.4 Construction Staff

Construction staff should all be made aware of the CEMP through toolbox talks/induction. All construction staff will have the responsibility to comply with the CEMP including environmental procedures on site to minimise environmental impacts. All staff will be required to respond quickly if an incident is identified in order to avoid or limit environmental impacts and shall report any such incident to the Construction Manager.

15. Conclusion

This Construction Environmental Management Plan has been prepared with the assistance of the various specialist consultants on the Project Team and should be read in conjunction with their Specialist Reports.

The mitigation measures outlined in this report will be strictly adhered to in the development of the proposed scheme. In this regard, it is considered that the impact upon the environment will be minimised as a result of the mitigation measures proposed.

UK and Ireland Office Locations

