

# Leydens Wholesalers & Distributors Dublin, No. 158A

## Preliminary Construction & Environmental Management Plan

210178-DBFL-Z0-XX-RP-C-0003

INFRASTRUCTURE



February 2023



DBFL CONSULTING ENGINEERS





|                 |  |      |     |
|-----------------|--|------|-----|
| Project Title:  | Leydens Wholesalers & Distributors Dublin, No. 158A      |      |     |
| Document Title: | Preliminary Construction & Environmental Management Plan |      |     |
| File Ref:       | 210178-DBFL-Z0-XX-RP-C-0003                              |      |     |
| Status:         | P3 - Planning  | Rev: | P01 |
|                 | S - Issued   |      |     |

| Rev.  | Date     | Description         | Prepared      | Reviewed       | Approved       |
|-------|----------|---------------------|---------------|----------------|----------------|
| Draft | 29/08/22 | Draft Planning      | Dieter Bester | Kevin Sturgeon | Kevin Sturgeon |
| Draft | 29/09/22 | Draft Planning      | Dieter Bester | Kevin Sturgeon | Kevin Sturgeon |
| P01   | 10/10/22 | Issued for Planning | Dieter Bester | Kevin Sturgeon | Kevin Sturgeon |
| Draft | 19/01/23 | Draft Planning      | Dieter Bester | Kevin Sturgeon | Kevin Sturgeon |
| P02   | 10/02/23 | Issued for Planning | Dieter Bester | Kevin Sturgeon | Kevin Sturgeon |

### Disclaimer

This document has been prepared for the exclusive use of our Client and unless otherwise agreed in writing with DBFL Consulting Engineers no other party may use, make use of or rely on the contents of this document. The document has been compiled using the resources agreed with the Client and in accordance with the agreed scope of work. DBFL Consulting Engineers accepts no responsibility or liability for any use that is made of this document other than for the purposes for which it was originally commissioned and prepared, including by any third party or use by others of opinions or data contained in this document. DBFL Consulting Engineers accepts no liability for any documents or information supplied by others and contained within this report. It is expressly stated that no independent verification of any documents or information supplied by others for this document has been made. DBFL Consulting Engineers has used reasonable skill, care and diligence in compiling this document and no warranty is provided as to the report's accuracy.

### Copyright

The contents and format of this report are subject to copyright owned by DBFL Consulting Engineers unless that copyright has been legally assigned by us to another party or is used by DBFL Consulting Engineers under licence. This report may not be copied or used for any purpose other than the intended purpose.



## Contents

|     |  |    |
|-----|--|----|
| 1   | INTRODUCTION .....                         | 4  |
| 2   | PROPOSED DEVELOPMENT .....                 | 5  |
| 2.1 | Development Description .....              | 5  |
| 2.2 | Development Location .....                 | 6  |
| 3   | SITE WORKS .....                           | 8  |
| 3.1 | Works Sequence .....                       | 8  |
| 3.2 | Site Setup .....                           | 9  |
| 3.3 | Demolition Works .....                     | 9  |
| 3.4 | Infrastructure Works .....                 | 10 |
| 3.5 | Earthworks .....                           | 11 |
| 3.6 | Structure .....                            | 11 |
| 3.7 | Construction Phasing .....                 | 11 |
| 4   | CONSTRUCTION TRAFFIC MANAGEMENT PLAN ..... | 12 |
| 4.1 | General Site access / Egress .....         | 12 |
| 4.2 | Staff and Parking .....                    | 13 |
| 4.3 | On Site Accommodation .....                | 13 |
| 4.4 | Minimisation of Movement and Impact .....  | 13 |
| 4.5 | Public Roads .....                         | 14 |
| 5   | WORKING HOURS .....                        | 15 |
| 6   | NOISE & VIBRATION .....                    | 16 |
| 7   | POLLUTION CONTROL .....                    | 18 |
| 7.1 | Contamination of Watercourse .....         | 19 |
| 8   | ECOLOGY .....                              | 22 |
| 9   | ARBORICULTURE .....                        | 23 |



|    |  |    |
|----|--|----|
| 10 | ARCHAEOLOGY .....                          | 24 |
| 11 | DUST CONTROL.....                          | 25 |
| 12 | SITE COMPOUND FACILITIES AND PARKING ..... | 26 |
| 13 | CONCLUSION.....                            | 29 |

## Figures

|             |  |    |
|-------------|--|----|
| Figure 2-1  | Location of Subject Site (Google Earth)..... | 7  |
| Figure 3-1  | Scope of Demolition Works .....              | 9  |
| Figure 12-1 | Indicative Site Compound Location .....      | 26 |



## 1 INTRODUCTION

This document is an initial Preliminary Construction & Environmental Management Plan (PCEMP) associated with the construction of the proposed development. It includes an outline description of the proposed works and they will be managed for their duration. It includes details of the Preliminary Construction Management Traffic Plan.

This project is currently at planning stage. At construction stage, this preliminary document will be issued to the contractor to be further developed into their final Construction and Environmental Management Plan for the project.

This PCEMP seeks to demonstrate how works can be delivered in a logical, sensible and safe sequence with the incorporation of specific measures to mitigate the potential impact on people and the surrounding environment.

The construction and environmental items addressed in this plan include noise and vibration, traffic management, working hours, pollution control, ecology, archaeology, arboriculture, dust control, road cleaning, compound / public health facilities and staff parking.



## 2 PROPOSED DEVELOPMENT

### 2.1 Development Description

Malkey Limited intend to apply for permission for development (Large-scale Residential Development (LRD)) at this c. 0.55 hectare site at the former Leydens Wholesalers & Distributors, No. 158A Richmond Road, Dublin 3, D03 YK12. The site is bounded to the north-east by Richmond Road, to the west/south-west by No. 146A and Nos. 148-148A Richmond Road (pending application ABP Reg. Ref. TA29N.312352), to the south/south-west by a residential and commercial development (Distillery Lofts) and to the east/south-east by the Former Distillery Warehouse (derelict brick and stone building). Improvement works to Richmond Road are also proposed including carriageway widening up to c. 6 metres in width, the addition of a c. 1.5 metre wide one-way cycle track/lane in both directions, the widening of the northern footpath on Richmond Road to a minimum of c. 1.8 metres and the widening of the southern footpath along the site frontage which varies from c. 2.2 metres to c. 7.87 metres, in addition to a new signal controlled pedestrian crossing facility, all on an area of c. 0.28 hectares. The development site area and road works area will provide a total application site area of c. 0.83 hectares.

The proposed development will principally consist of: a Large-scale Residential Development (LRD) comprising the demolition of existing industrial structures on site (c. 3,359 sq m) and the construction of a mixed-use development including artist studios (c. 749 sq m), a creche (c. 156 sq m), a retail unit (c. 335 sq m), and a gym (c. 262 sq m), and 133 No. residential units (65 No. one bed apartments and 68 No. two bed apartments). The development will be provided in 3 No. blocks ranging in height from part 1 No. to part 10 No. storeys as follows: Block A will be part 1 No. storey to part 4 No. storeys in height, Block B will be part 1 No. storeys to part 10 No. storeys in height (including podium) and Block C will be part 1 No. storeys to part 9 No. storeys in height (including podium). The proposed development has a gross floor area of c. 14,590 sq m and a gross floor space of c. 13,715 sq m.

The development also proposes the construction of: a new c. 204 No. metre long flood wall along the western, southern and south-eastern boundaries of the proposed development with a top of wall level of c. 6.4 metres AOD to c. 7.15 metres AOD (typically c. 1.25 metres to c. 2.3 metres in height) if required; and new telecommunications infrastructure at roof level of Block B including shrouds, antennas and microwave link dishes (18 No. antennas enclosed in 9 No. shrouds and 6 No. transmission dishes, together with all associated equipment) if required. A flood wall and telecommunications infrastructure are also proposed in the adjoining Strategic Housing



Development (SHD) application (pending decision ABP Reg. Ref. TA29N.312352) under the control of the Applicant. If that SHD application is granted and first implemented, no flood wall or telecommunications infrastructure will be required under this application for LRD permission (with soft landscaping provided instead of the flood wall). If the SHD application is refused permission or not first implemented, the proposed flood wall and telecommunications infrastructure in the LRD application will be constructed.

The proposed development also provides ancillary residential amenities and facilities; 25 No. car parking spaces including 13 No. electric vehicle parking spaces, 2 No. mobility impaired spaces and 3 No. car share spaces; 2 No. loading bays; bicycle parking spaces; motorcycle parking spaces; electric scooter storage; balconies and terraces facing all directions; public and communal open space; hard and soft landscaping; roof gardens; green roofs; boundary treatments; lighting; ESB substation; switchroom; meter room; comms rooms; generator; stores; plant; lift overruns; and all associated works above and below ground.

## 2.2 Development Location

The site, excluding the Richmond Road upgrade works, has an area of circa 0.55ha and is accessed from Richmond Road. The subject brownfield site, previously occupied by Leyden's Wholesalers and Distributors, Dublin is bound to the west and southwest by a site upon which a recently submitted SHD application has been made to An Bord Pleanála (decision pending ABP Reg. Ref. TA29N.312352). To the north lies the Richmond Road corridor. The subject site is bound to the south-east by Distillery Lofts residential and commercial premises whilst to the east lies the remains of a previous commercial building which is in a state of disrepair. The site location is shown in *Figure 2-1* below.



Figure 2-1 Location of Subject Site (Google Earth)



## 3 SITE WORKS

### 3.1 Works Sequence

The proposed order of construction of key elements is subject to detailed review by the Contractor at construction stage and in general will be as follows:

- Site Setup.
- Service terminations and identification of any services on the site by the utility providers.
- Provision of temporary power, lighting and water services.
- Set up of site accommodation and welfare facilities.
- Identification of the trees that are required to be removed and the removal of these along with scrub and vegetation, in accordance with the arboriculture report.
- Identification of trees to be retained and protection of same.
- Identification of any hazardous materials on site
- Designation of exclusion zones for the demolition/dismantling.
- Demolition and site clearance.
- Undertaking remaining site investigations / sampling.
- Earthworks, including cut and fill and disposal of excess material off site.
- Construction of new flood defence wall.
- Construction of superstructure, roofs and glazing / windows / facades.
- Internal fit out.
- External site works/ infrastructure.
- Construction of external / hardstanding areas.
- Landscaping.

If required, prior to construction archaeological test trenching, should be carried out under licence, by a suitably qualified archaeologist. Where possible, enabling or other groundworks should be deferred until after the archaeological test trenching programme has been completed. Any enabling or demolition works that must be carried out prior to completion of the testing programme should be the subject of a programme of archaeological monitoring by a suitably qualified archaeologist.

## 3.2 Site Setup

Immediately after access to the site is made and it is secure, the site compound will be established set out in chapter 12 of this report. Existing site services will be identified/isolated in conjunction with the ESB and the provision of a temporary builder's power supply.

The site will be secured with hoarding on all open sides and accessible approaches.

## 3.3 Demolition Works

Demolition works will be carried out by a suitably qualified demolition contractor, who will be required to submit a detailed method statement including the sequence of works, segregation and disposal process and outline all proposed health and safety measures. Demolition extents are indicated in Figure 3-1 below.



*Figure 3-1 Scope of Demolition Works*

Demolition works require the provision of temporary fencing on site to define any exclusion zones or protected areas. The works will be separated from outside traffic and passing public. Protective screens will be used, where necessary, to ensure that no debris enters the grounds of the neighbouring properties which are the proposed Richmond Road Phase 1 development to the west and The Distillery to the east.



Demolition warning signage will be erected around the site and the main site safety notice will be erected at the site entrance outlining the safety requirements for the site. Task specific signs will be erected inside the site as required.

The relevant utility suppliers will be contacted to arrange disconnection for each utility service identified on-site in accordance with the current legislation, *"Safety, Health and Welfare at Work (Construction) Regulations (2013)"*.

Possible utilities include but not limited to:

- Electricity – ESB Networks;
- Telecommunications – Virgin Media;
- Gas – GNI.

Prior to starting construction, a Materials Management Plan will be carried out. This would cover handling of any potentially contaminated material prior to removal off site and during construction and would include the following steps:

1. Carry out trial pits on site in areas that were inaccessible pre-demolition of existing structures
2. Identify and delineate any areas that require remediation and management at the site to mitigate against risk to human health and the environment
3. Develop a dig plan for the site construction works
4. Detail a workplan to ensure material generated during excavation is categorised, segregated and managed appropriately on site prior to re-use or removal off-site
5. Provide waste classification information to receiving sites of any materials being disposed of.

### 3.4 Infrastructure Works

The site infrastructure works include the provision of the permanent entrance to the site and the connection of all the utilities and services required for the site. Provision of the permanent infrastructure to the site will be carried out as early as possible in the programmed works.

Engagement with the service and utility providers will be entered into early in the design stage to allow for adequate planning of utility infrastructure.



It is the aspiration of the applicant to minimise disruption of existing services and public roads and pathways in the providing of services to the site, this will be done in consultation with the service providers and Dublin City Council.

Indicative Enabling Works Methodology is as follows:

- Live services will be terminated and where possible will be removed off site, with the cooperation of the utility providers.
- Temporary power and water services will be arranged for the site accommodation and welfare facilities. The site accommodation and welfare facilities will be set up in a location as not to be in the way of the construction, and at a point close to the site entrance.
- During any demolition works, all work done will be according to method statements detailed by both contractor and consultant method statements.
- Dust suppression will be carefully monitored and controlled with the careful use of water.
- Noise levels will be controlled and works undertaken in such a way as to minimise the detrimental impact on adjoining property and local residents.

### **3.5 Earthworks**

Earthworks will consist of reducing existing levels for the proposed sub-structure and foundations. Excess material will be disposed offsite to a suitably licensed facility in accordance with the construction waste management plan.

### **3.6 Structure**

The construction will follow traditional methods with temporary works to support excavations. Foundations will bear on adequate bearing strata and will be piled or conventional pad footings as existing ground conditions dictate. Superstructure will be a concrete structure with lateral support provided by stair & lift cores, along with shear walls where necessary.

### **3.7 Construction Phasing**

The subject development will be developed in a single Phase. If both the subject development and the adjacent Richmond Road Phase 1 development is granted, both developments would be constructed simultaneously.



## 4 CONSTRUCTION TRAFFIC MANAGEMENT PLAN

### 4.1 General Site access / Egress

All traffic for required works will enter the site via Richmond Road and will be routed to the site via the primary road network in the area. Warning signage will be provided for pedestrians and other road users on all approaches in accordance with Chapter 8 of the Traffic Signs Manual and the Contractor's Traffic Management Plan.

As part of Construction Stage Safety Plan for the works, a Traffic Management Plan (TMP) will be prepared in accordance with the principles outlined below, and shall comply with the requirements of:

Chapter 8 of the Department of the Environment Traffic Signs Manual, current edition, published by The Stationery Office, and available from the Government Publications Office, Sun Alliance House, Molesworth Street, Dublin 2.

Guidance for the Control and Management of Traffic at Road Works (June 2010) prepared by the Local Government Management Services Board.

Any additional requirements detailed in the Design Manual for Roads and Bridges & Design Manual for Urban Roads & Streets (DMURS).

All major deliveries/removals that may affect access for emergency vehicles or cause blockage to the existing road system shall be undertaken outside normal working hours and shall be agreed in advance. Trucks will turn around within established site areas.

During demolition, the majority of vehicle movements will result from the removal of material, typically carried out by 8-wheel trucks and Roll on/Roll off rubbish skips. All excavated suitable material from construction of proposed infrastructure works will be reused for construction and fill activities where possible and appropriate. Any unsuitable material will be disposed of off-site at a suitably licensed landfill facility.

Construction traffic will include the following categories:

- Private vehicles owned and driven by site construction and supervisory staff.
- Excavation plant and dumper trucks involved in site development works and materials delivery vehicles.
- Mobile crane for lifting of prefabricated units.



With the objective of actively managing all vehicle movements via the site access / egress on Richmond Road, appropriate Traffic Management Procedures will be put in place to have a safe and coordinated access and egress of construction vehicles to the site as they pass by the local sensitive areas such as schools, businesses and local residential areas. Speed limit signs will be posted as well as warning signs to notify construction vehicles of nearby schools and residential areas and alert these people of the construction site. The contractor will liaise with both primary and secondary schools regularly in relation to significant site works to avoid clashing school activities. Prior to commencement on site and further to discussions with key stakeholders including the local schools it may prove beneficial to have an operative manning the site access to minimise disruption to school related traffic during school start and finish times.

#### **4.2 Staff and Parking**

On-site employees will generally arrive before 08:00, thus avoiding the morning peak hour traffic, and will generally depart after 18:00. Construction traffic will not be permitted to park on the public roads or within the general area outside the main site. In general, the impact of the construction period will be temporary in nature. A temporary site parking area will be located within the construction compound as discussed in Chapter 12 of this report.

#### **4.3 On Site Accommodation**

Facilities will be provided by the contractor within the confines of the site hoarding as follows;

- Adequate materials drop-off and storage area;
- Set down areas for trucks;
- Dedicated staff parking and visitor parking;
- Staff welfare facilities i.e. toilets etc.

Refer to Chapter 12 for further details on the construction compound layout.

#### **4.4 Minimisation of Movement and Impact**

Construction vehicle movements and their impact will be minimised through;

- Consolidation of delivery loads to / from the site and management of large deliveries on site to occur outside of peak periods;
- Delivery of materials by HGV's will not be permitted to site during school drop off and pick-up times;
- Use of precast / prefabricated materials where possible;



- “Cut” materials generated by the construction works to be re-used onsite where possible, through various works;
- Scheduling of movements to outside peak traffic times and school pick-up / drop-off times.

#### 4.5 Public Roads

The following measures will be taken to ensure that the site and surroundings are kept clean and tidy;

- A regular programme of site tidying to be established to ensure a safe and orderly site.
- Mud spillages on roads and footpaths outside the site to be cleaned regularly and will not be allowed to accumulate.
- Wheel-wash facilities or similar will be provided for vehicles exiting the site if deemed appropriate or when significant vehicle movements are planned (e.g. disposal of topsoil from site).
- Dedicated road sweeper will be put in place if site conditions require.
- Provision will be made for the cleaning by a road sweeper etc. of all access routes to and from the site, during the works. Road cleaning shall be undertaken daily during the completion of the works. A wheel wash facility will also be provided on site to clean site traffic leaving the site. Wastewater generated at this washing facility will be suitably treated on site and all settled silts will be disposed offsite to a licensed landfill.
- All road sweeping vacuum vehicles will be emptied off site at a suitably licensed facility.



## 5 WORKING HOURS

Working hours will be strictly in accordance with the granted planning conditions with no works on Sundays or Bank Holidays. If work is required outside of these hours, written approval will be sought by the contractor from the Local Authority.

It is anticipated that normal working hours may be 8am to 7pm Monday to Friday and 8am to 2pm on a Saturday. Working outside these hours will be subject to agreement with the Local Authority.

Deliveries of material to site will be planned to avoid high volume periods to avoid clashing with school activities. There may be occasions where it is necessary to have deliveries within these times. The Contractor will develop, agree and submit a detailed Traffic Management Plan for the project prior to commencement.



## 6 NOISE & VIBRATION

During the construction works the Contactor shall comply with:

- BS 5228: 2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites, Part 1, and Part 2.
- Guidelines for the Treatment of Noise and Vibration in National Road Schemes (NRS, Revision 1, 2004).
- Safety, Health and Welfare at Work (General Application) Regulations 2007, Part 5 Noise and Vibration.

The following noise limits and considerations related to noise and vibration have been indicated in the Noise & Vibration Impact Assessment report by AWN Consulting Limited.

- The noise limits to be applied for the duration of the works are those specified in the A Category of BS 5228. These limits are summarised below and will be applied at the nearest sensitive receptors to the works.
  - a) Night (23:00-07:00) = 45dB
  - b) Evening (19:00-23:00) = 55dB
  - c) Daytime (07:00 – 19:00) and Saturdays(07:00 – 13:00) = 65dB
- The total noise (LAeq) which should not be exceeded during daytime is therefore 70dB.
- Vibration limits to be applied for the works are those specified in the BS 7385.
- BS 7385 states that there should typically be no cosmetic damage if transient vibration does not exceed 15 mm/s at low frequencies rising to 20 mm/s at 15 Hz and 50 mm/s at 40 Hz and above.

In general, the contractor shall implement the following mitigation measures during the proposed works:

- Limiting the hours during which site activities are likely to create high levels of noise or vibration are permitted;
- Establishing channels of communication between the contractor/developer, Local Authority and residents;
- Appointing a site representative responsible for matters relating to noise and vibration;
- Monitoring levels of noise and/or vibration during critical periods and at sensitive locations;



- All site access roads will be kept even so as to mitigate the potential for vibration from lorries;
- Selection of plant with low inherent potential for generation of noise and/ or vibration;
- Erection of barriers as necessary around items such as generators or high duty compressors;
- situate any noisy plant as far away from sensitive properties as permitted by site constraints and the use of vibration isolated support structures where necessary.



## 7 POLLUTION CONTROL

All works carried out as part of these infrastructure works will comply with all Statutory Legislation including the Local Government (Water Pollution) acts, 1977 and 1990, Inland Fisheries Ireland (IFI), "*Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters*" and will be carried out in compliance with the Environmental Section of Dublin City Council.

The Site Management Team will maintain a record of all receipts for the removal of toilet or interceptor waste off site to insure its disposal in a traceable manner. These will be available for inspection by the Environmental Section of Dublin City Council.

During the phases of demolition, large amounts of refuse is produced predominantly from the soft strip of the buildings scheduled for demolition, in which all furniture, fixings, trimmings and waste rubbish which remain inside the buildings will be segregated and sorted. Any items wished to be retained by the client is to be pointed out to the contractor prior to commencement of the works. Any deleterious materials will be identified prior to the commencement of the works and removed in accordance with the statutory regulations. Refuse produced during demolition between floor levels will be lowered by teleporters or similar.

During phases of the construction of infrastructure, refuse is produced predominantly by delivery package material such as protective timber pallets, polymer straps and plastic covers. Additional refuse may include discarded construction materials, material containers, contractor's sundries, hoarding/shutter boards, and tools.

Waste skips will be provided in designated skip drop zones during both demolition and construction.

All relevant refuse from both demolition and construction is to be disposed off-site to licensed disposal facilities for processing and recycling where possible.

The Natura Impact Statement report by Enviroguide Consulting describes the mitigation measures to be implemented to prevent the contamination of ground water and watercourses. Contamination of Groundwater. As per the enclosed Enviroguide NIS report, the following

Shallow groundwater may be encountered during the construction works of the building foundation excavation, though the finished floor levels of the proposed buildings are well above the existing site levels. The following measures will be taken:



- Where water must be pumped from the excavations, water will be managed in accordance with best practice standards (i.e., CIRIA – C750) and regulatory consents. Water will not be discharged to open water courses (e.g., the Tolka River) and will be disposed to foul sewer as per the conditions of a consent/licence issued under Section 16 of the Local Government (Water Pollution) Acts and Regulations that must be obtained from Irish Water.
- Any such discharge licence will be subject to conditions regarding the flow (rates of discharge, quantity etc.); effluent quality prior to discharge and pre-treatment (e.g., settlement/filtration, hydrocarbon separation etc.) and monitoring requirements. All dewatering will be undertaken in strict compliance with the conditions of the discharge licence for the project.
- A treatment system will be installed for the duration of the Proposed Development to meet the requirements of the discharge licence and will typically include a number of stages of settlement and filtration to remove sludge, suspended solids, free-phase hydrocarbons (oils), dissolved phase hydrocarbons and lime from cement.
- A monitoring programme will be implemented to ensure that water quality criteria set out in the discharge licence are achieved prior to discharging to the sewer.
- Excavation works should be carried out at low tide regimes (in the event that there is a tidal influence on shallow groundwater at the site).

## 7.1 Contamination of Watercourse

The below measures will be implemented to prevent the release of hydrocarbons, polluting chemicals, sediment/silt and contaminated waters into the receiving surface water network and into the Tolka River:

- To prevent elevated levels of erosion and sedimentation at the Site during the Construction Phase, surface water at the Site will be managed and controlled for the duration of the construction works, until the permanent surface water drainage system (including attenuation and storage) for the Proposed Development is complete.
- When cofferdams are being kept dry by pumping, the discharge must be routed to an approved settlement facility before return to the river.
- Every care must be taken to insure against spillage of concrete or leakage of cement grout within cofferdams.



The following Construction Best Practise will be implemented:

- Location of stilling/settling ponds will take into account groundwater vulnerability at the site and will be located in suitable areas.
- Discharge water generated during placement of concrete will be stored and removed off site for treatment and disposal.
- There will be no washing out of any concrete trucks on site.
- Specific areas for storage, delivery, loading/unloading of materials will be designated, which will have appropriate containment/spill protection measures where required.
- Leachate generation from stockpiles or waste receptacles will be prevented by using waterproof covers.
- Prolonged exposure of contaminated soils or groundwater to the atmosphere will be avoided where practical or unnecessary.
- Appropriate bunding, storage and signage arrangements for all deleterious substances will be used.
- Robust and appropriate Spill Response Plan and Environmental Emergency Plans will be included within the Contractor's CEMP and the details of which will be communicated, resourced and implemented for the duration of the works.
- Control measures and spill clean-up equipment adequate to treat spills at the Site will be available and staff will be trained and experienced in using said equipment.
- A register will be kept of all hazardous substances either used on site or expected to be present. The register shall be available at all times and shall include as a minimum: valid safety sheets; Health & Safety, environmental controls to be implemented when storing, handling, using and in the event of spillage of materials; emergency response procedures/precautions for each material; the Personal Protective Equipment (PPE) required when using the material.
- All existing services will be mapped, and a plan will be put in place to decommission/divert and manage any drains or sewers which are associated with the Site.
- A plan for dealing with any unknown drains or services which may be encountered during the works will be set out and implemented.
- Any drains or sewers which could act as pathways for contamination from the Site will be blocked where required.
- Any surface water inflow into the main areas of excavation will be minimised where possible.



In addition to the above measures, it can be noted that also the following measures will be implemented:

- All oils, fuels, paints and other chemicals will be stored in a secure bunded construction hardstand area. Refuelling and servicing of construction machinery will take place in a designated hardstand area which is also remote from any surface water features (when not possible to carry out such activities off site).
- Discharge from any vehicle wheel wash areas is to be directed to on-site settlement tanks/ponds, debris and sediment captured by vehicle wheel washes will be disposed off-site at a licensed facility.
- The cleaning of public roads in and around the subject site will be undertaken to reduce environmental impacts and care will be taken to prevent any pollution of watercourses from this activity.



## 8 ECOLOGY

An 'Ecological Impact Assessment' has been carried out of the subject site by *Enviroguide*. Reference.

In addition to the recommendation and measures included in the Natural Impact Statement, the above report details the following mitigation measures:

1. Mitigation 1 - Protection of designated sites, River Tolka and associated fish species from surface water run-off
2. Mitigation 2: Pre-demolition Bat Surveys



## 9 ARBORICULTURE

An Arboriculture Report has been prepared by *The Tree File* Consulting Arborists and should be referred to for a detailed description of the tree protection strategy to be adopted in tandem with this Construction & Environmental Management Plan for the proposed development.

The aforementioned report specifically outlines the main requirements in relation to the existing trees on the subject site and these are summarised as follows:

- Identification of development impact to trees.
- Site Monitoring during Construction Works including assessing the impact of plant, equipment, vehicles and compacting of the ground has on the soil profiles.

Reference should be made to the above specialist report and associated drawings for further details and all construction works proposed shall take account of same.



## 10 ARCHAEOLOGY

An archaeological impact assessment has been completed for the site by *Rubicon Heritage*. The results of this assessment indicate that the development site as a whole is an area of archaeological potential and it is expected that any impacts to archaeology would occur as a result of construction groundworks.

The following mitigation measures are recommended:

- All ground reduction (including the removal of ground slabs as part of demolitions), should be subject to a programme of archaeological monitoring, under licence, by a suitably qualified archaeologist.
- If archaeological material is encountered, then it will be investigated and fully recorded. However, if significant archaeological material is encountered the National Monuments Service (DoHGLH) will be notified. Resolution of any such significant material will be determined in consultation with the NMS (DoHGLH).
- A written report will be prepared detailing the results of all archaeological work undertaken.
- Any such further mitigation measures required must be agreed in advance with the City Archaeologist (Dublin City Council) and the National Monuments Service (DHLGH).



## 11 DUST CONTROL

The Contractor shall put in place a regime for monitoring dust levels in the vicinity of the site during the works. The level of monitoring and adoptions of mitigation measures will vary throughout the construction works depending on the type of activities being undertaken and the prevailing weather conditions at the time.

The Construction team will monitor the construction regime on an ongoing basis throughout the project to endeavour to minimise impact on a surrounding community.

During the proposed infrastructure works the following mitigation measures shall be implemented to minimise dust emissions:

- Construction techniques shall minimise dust release into the air.
- Spray exposed site haul roads during dry and / or windy weather.
- Provide wheel washing facilities at all exit points.
- Provide tarpaulins over all unacceptable excavated materials being carted off site.
- Control vehicle speeds and impose speed restrictions, (speed can mobilise dust).
- Sweep hard surface roads, inside and outside the site, to ensure roads are kept clear of debris, soil or other material.
- Locate stockpiles away from sensitive receptors, (i.e. Distillery Lofts-apartment block to the East of the subject site).

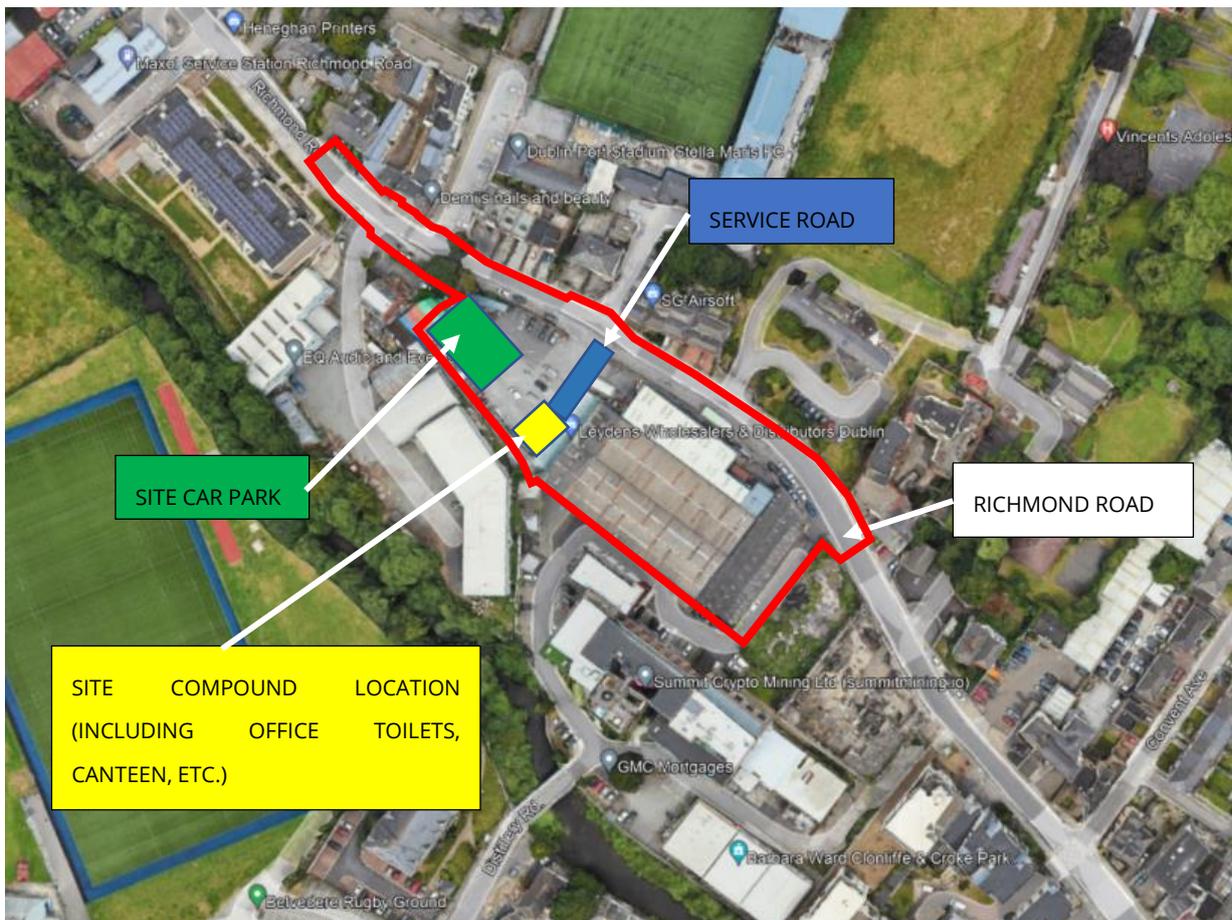
During dry spells and if deemed necessary, monitoring of dust levels shall be carried out using the Bergerhoff Method i.e. analysis of dust collecting jars left on-site (German Standard VDI 2119, 1972). Results will be compared to the TA Luft guidelines (TA Luft, 1972). Should an exceedance of the TA Luft limit occur during construction, additional mitigation measures, for example more regular spraying of water, shall be implemented.

A complaints log shall be maintained by the construction site manager and in the event of a complaint relating to dust nuisance, an investigation shall be initiated.



## 12 SITE COMPOUND FACILITIES AND PARKING

The compound shall be constructed using a clean permeable stone finish and will be enclosed with security fencing. A recommended layout for the site compound for both the demolition of existing buildings and construction of required infrastructure works is illustrated as per Figure 12-1 below. The contractor may provide their own layout, which will be subject to approval from both the client and the resident engineer. It is expected that the layout will adapt over the construction period.



*Figure 12-1 Indicative Site Compound Location*

Warning signage will be erected along the approaches to the site on Richmond Road. A series of 'way finding' signage will be provided to route staff / deliveries into the site and to designated compound / construction areas.

Areas within the designated site compound include site accommodation providing suitable washing / dry room facilities for construction staff, canteen, sanitary facilities, first aid room, office



accommodation etc. Access to the compound will be further security controlled and all site visitors will be required to sign in on arrival and sign out on departure.

Recommended security protocols should ensure that entrance gates always remain closed whilst the entrance is not in use. The opening and closing of the security gates will be the responsibility of a designated gate man provided by the contractor, whose role involves controlling the vehicles entering and exiting of the site. All site visitors will be required to sign in on arrival and sign out on departure, recorded details of visitors will be made by the designated gate man and kept at the site office.

All vehicles will be positioned on the site in designated parking spaces, with large delivery and construction vehicles entering, leaving, or manoeuvring within the site to be accompanied by a trained and competent banksman provided by the contractor.

Site Parking will provide a permeable hardstand area for contractors, consultants, and the client. This area is only intended for small vehicles such as passenger vehicles, and vans.

The delivery and storage zone will provide an area for delivery vehicles to offload goods, and the storage of both construction and demolition plant and materials. The area will also provide designated zones for refuelling of plant and processing required materials for construction such as mixing of concrete mortar. If necessary, the area can be used for temporary storage of excavated material that is intended to be disposed of, however, measures of mitigating pollution including dust control need to be implemented.

Skip storage areas will be used for the temporary storage of refuse. Any reusable materials will be set aside in a designated area of the site for transport to licensed recycling facilities. The area is located to allow for easier collection and disposal of refuse to off-site licensed disposal facilities for processing and recycling.

Processed materials may be segregated on site into recommended categories such as:

- Mixed C&D Waste
- Recycling
- Timber
- Scrap Metal
- Clean Rubble



Teleporters will be used for general unloading during the structural and envelope works, unloading over the public roadway and path will be avoided, however if required, all relevant contact, procedures and authorisation will be made with the relevant local authority.

All works carried out within the skip storage areas, delivery and storage zones will need to comply with overall construction methodology, especially with reference to mitigating issues identified as being of risk and/or concern of contributing to pollution, including dust control.

The contractor will strive to maintain a tidy site and to operate a “just in time” policy for the delivery and the supply of materials for the works, particularly the final phase of the works when on site storage will be at a minimum. On completion of the works all construction materials, debris, temporary hardstands etc. from the site compound will be removed off site and the site compound area.



## 13 CONCLUSION

A Construction & Environmental Management Plan (construction stage) will be prepared and agreed with Dublin City Council prior to commencement on site and will incorporate the recommendations of this planning report, recommendations of all specialist reports, and any planning conditions relating to construction relating to construction activities.





**DBFL** CONSULTING ENGINEERS

**Registered Office**

Ormond House  
Upper Ormond Quay  
Dublin 7 Ireland D07 W704

+ 353 1 400 4000  
[info@dbfl.ie](mailto:info@dbfl.ie)  
[www.dbfl.ie](http://www.dbfl.ie)

**Cork Office**

14 South Mall  
Cork T12 CT91

+ 353 21 202 4538  
[info@dbfl.ie](mailto:info@dbfl.ie)  
[www.dbfl.ie](http://www.dbfl.ie)

**Waterford Office**

Suite 8b The Atrium  
Maritona Gate, Canada St  
Waterford X91 W028

+ 353 51 309 500  
[info@dbfl.ie](mailto:info@dbfl.ie)  
[www.dbfl.ie](http://www.dbfl.ie)