

CONSTRUCTION MANAGEMENT PLAN
(PRELIMINARY)
FOR THE PROPOSED EXTENSION TO
LUCAN SHOPPING CENTRE,
NEWCASTLE ROAD,
LUCAN,
CO. DUBLIN

Reference 17/097

17th May 2021

Engineering Design • Safety • Project Management • Commercial • Industrial • Residential • Domestic

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Proposed Extension To Lucan Shopping Centre, Newcastle Road, Lucan, Co. Dublin

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Construction Management Plan (Preliminary)

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17th May 2021

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1.0 Introduction

The Construction Management Plan shows how a contractor will effectively deal with the construction works on this site.

The Construction Management Plan has been prepared in accordance with South Dublin County Council Development Plan Paragraphs 11.6.1 'Water Management', 11.6.3 'Environmental Hazard Management', and 11.6.5 'Waste Management'

The Development site is the existing Lucan Shopping Centre site situated on the Newcastle Road.

The development will consist of the construction of two storey retail extension to the existing Lucan Shopping Centre. The extension is located within the existing car park to the north of the existing shopping centre. The proposed development includes all associated on and off-site development works, bin store, cycle and car parking, landscaping and boundary treatments.

There are no demolitions to the existing buildings on site, there will be removal and modifications of carparking hardstanding, modifications to basement escape stairs, rerouting of services and excavations.

The construction works will be restricted by the following requirements;

- The site will be fully hoarded preserving the surrounding car parking.
- The adjoining retail facilities will be operational as normal.
- The site access and egress will be kept separate using best practice to remove clashes with the customers to the adjoining retail units and minimise interfering with traffic using the basement carpark.

The proposed Construction Management Plan will be updated by the Main Contractor taking account of best practice and consultation with the local authority.

2 Noise & Vibration Management

2.1 Objectives

To minimise the generation of noise and vibration from construction activities occurring on site and its impacts on surrounding residents, businesses and works. Establish and maintain good relations with community and adjacent neighbours.

2.2 Key Management Issues

Noise will be generated on the project site during construction by vehicles movements, generators, heavy machinery (e.g. excavators and rock breakers) and handheld machinery and tools. Some vehicle noise may be generated by vehicles using transport corridors to and from the site.

Construction of the proposed development will include ground preparation, earthworks, concrete works and building construction.

2.3 Construction Period

Construction operating hours will not occur outside the hours approved by South Dublin County Council. It is intended that all works will be conducted within operating hours 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays (unless with written approval by the local authority).

It is estimated that the overall construction period shall be approx.. 12 months. however it must be noted that this is dependent on weather conditions, regulatory timelines, utility supplier timelines and sales.

2.4 Site Actions

No work will take place outside the construction operating hours unless otherwise agreed with the Local Authority. Personnel safety measures shall be implemented wherever noise exceeds 85DB. No construction works shall commence unless the subcontractor has submitted a Works Method Statement which details the schedule of excavation equipment, noise levels these will generate, expected time and duration of use and any measures required to ensure the noise levels are acceptable.

Ensure traffic access to and from the site will be via designated entry and exit points.

When planning for construction work that will include vibration work all practical efforts will be made to reduce vibration for structures within proximity to the site.

2.5 Performance Measures

The following performance measure will be implemented:

The maximum noise levels from any item of plant or equipment will not exceed the recommended level stipulated by the approval authority.

No warnings / notices received from statutory authorities for extending noise levels or work outside the approved work hours as set out in the Local Authority consent.

2.6 Monitoring & Reporting

Routine inspections of plant and equipment will include reference to acoustic performance.

The subcontractors to provide details of acoustic performance of plant and equipment on site as requested.

Any noise complaints or feedback from adjoining properties or from the operational facility on site to be recorded, reported and monitored.

3 Air Quality Control Plan

3.1 Objectives

To maintain the current levels of local air quality during construction activities.

To minimize the generation of dust on the project site.

To implement appropriate controls to suppress dust and other suspended particles in accordance with the consent conditions and risk management requirements.

To minimize all potential odour issues relating to contaminated soil or groundwater.

3.2 Key Management Issues

Heavy machinery (mobile and fixed) that may contribute to emissions (diesel pollution) to the atmosphere. Exposed soils and unsealed vehicle access routes that may contribute to dust generation and affect local air quality, impact on native fauna and flora and reduce residential amenity.

The generation of dust from the site potentially can be a major nuisance to local activities as well as creating unacceptable working conditions.

The key measures to addressing this issue are as follows:

- Limit areas of disturbance.
- Cover mulch or rapidly re-vegetate areas where practicable to minimize wind erosion and install mitigation devices to reduce the transfer of spoil and dust. Ensure a water tanker is available to dampen approaches, access roads and other susceptible surfaces.

3.3 Site Actions

Construction phase air quality impacts shall be minimised or avoided by the incorporation of appropriate air quality control measures. The installation and application of air quality controls during the construction phase shall be in accordance with the following principles:

- Ensure all equipment used and all facilities erected on site are designed and operated to control the emission of dust, fumes and any other air impurity into the atmosphere.
- Spray earthworks, roads and other surfaces as necessary with water.
- Traffic areas shall be clearly defined by guide posts or other suitable barriers to prevent unnecessary vehicle movement onto other areas.
- A water tanker will be employed as required to dampen work areas and exposed soils to prevent the emission of excessive dust from the site.

- Trucks transporting material from the site shall be covered immediately after loading to prevent wind-blown dust emissions and spillages. The covering will be maintained until immediately before unloading the trucks.
- The tailgates of all trucks leaving the premises will be securely fixed prior to landing or immediately after unloading to prevent loss of materials.
- Subcontractors will maintain all construction equipment to ensure exhaust emissions complement with the relevant air regulations.
- Cleared vegetation demolition materials and other waste material will not be burnt on the site and no fires of any kind shall be lit.

4 Construction Traffic & Parking Management Plan

4.1 Objectives

To address the traffic issues arising from the construction of the project and to establish general guidelines and standards.

4.2 Key Management Issues

It is anticipated that construction of the development will result in a peak workforce of an estimated 30 workers. Construction traffic and parking on the project site is subject to constraints imposed by site conditions and public traffic movements. The primary issues that affect construction activity on this site include:

- General site access and egress.
- Interaction with existing facilities and operations.
- The location and amount of parking.
- The timing and extent of materials deliveries.
- Traffic conflicts with both existing vehicles and other construction traffic.
- Traffic congestion and conflicts on external roads.
- Signage and directions.

4.3 Site Actions

4.3.1 Access & Parking

- Construction traffic will use designated access and egress routes to the project. The site access gates will be clearly marked "For Construction Access only."
- Parking for construction works and visitors will be provided on site in a designated area which may change from time to time to facilitate works.
- All materials will be stored within the site boundary and will not be stored on adjacent roads or footpaths.
- Temporary road closures and relocations during the construction period, if required, will be subject to coordination with the Local Authority, Fire Brigade, Dublin Bus, the Gardaí and other appropriate authorities. Existing hydrants will remain accessible or will be relocated if required.

4.3.2 Material Handling

- Materials handling will be predominately by forklift and or mobile crane.

4.3.3 Signage

- The Construction Manager will be responsible for providing the external directional signage and on-site signage regrading traffic management and the updating and maintenance of the signs as required. On-site signage, speed limits and speed reducers will be used to ensure drivers use appropriate routes through the site and to and from the site access points.

4.4 Performance measures

The principle measures that will be used include:

- Access provided prior to works commencing.
- Provision of fencing and gates.
- No complaints received from adjoining operation or from statutory authorities.
- No parking outside designed area.

4.5 Monitoring & Reporting

The Construction manager will report when required on the implementation of the Traffic and Parking Management Plan. The plan will be periodically updated to include but not be limited to:

- Access points in use.
- Location of parking areas.
- Variations to traffic management plans.
- Identification of any safety or operational incidents and actions taken to address the conditions that caused the incidents.
- Monitoring complaints and corrective actions.
- Details of signage on internal and external roads.

2.0 Waste Management Plan

Reference has been made as appropriate for the scale of the development to South Dublin County Council Pre Planning Guidance 13 Construction and Demolition Waste Management Plan.

2.1 Proposals for the Minimisation, Reuse and Recycling of Waste

A selective demolition methodology is to be used. This will ensure that all demolition material is to be reused on site where feasible and demolition waste will only be disposed of if it is not possible to reuse or recycle and it is not possible to sort such material on site during construction.

The types of waste expected to be produced during site preparation of the existing carpark are road finishes, concrete and road fittings. Construction waste will consist of unavoidable waste and damaged materials. The Purchasing Manager will ensure that materials are ordered and delivered to site in a timely manner so as not to create any storage issues on site or create any unnecessary waste.

All surplus fill material arising from the development will be disposed of off-site by a licensed contractor to an appropriate disposal point as required under the relevant legislation.

No hazardous waste is anticipated however in the event any such are discovered these materials will be identified, assessed, handled, stored, treated and removed safely.

The proposed building is to be founded using the basement structure. Excavations will be limited to new loading bay surface and new drainage / service connections. It is envisaged that suitable material will be carefully stored in segregated piles on site for reuse. All excavated material that is intended for reuse or recycling to be tested appropriately before reuse.

All waste material to be kept segregated appropriately and removed to licensed disposal points. Concrete and masonry waste will be segregated at source and stored appropriately to use. Wood, glass and metals will be separated and either recycled if possible or carefully disposed. Skips for waste material to be kept covered to ensure no materials can blow into neighbouring properties.

Contractors are to prepare a Project C&D Waste Management Plan which sets out the necessary arrangements to minimise waste, manage materials on site effectively, prioritise reuse and recycling on site and make sub-contractors responsible for procurement of materials where practicable.

2.2 Estimate Cost of Waste Management

Full quantities and cost estimates of waste are to be produced for tender stage following site investigation and tender design and review on an ongoing basis during construction.

Cost components should include:

- the purchase cost of waste materials (including imported soil);
- handling costs;
- storage and transportation costs;
- revenue generated from sales; and
- disposal costs including landfill tax.

In this manner, it is possible to estimate:

- total waste concrete management costs;
- total waste soil management costs; and
- total waste masonry management costs.

Refer to Standard Form SF2 (Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects) for details.

2.3 C&D Waste Management Roles & Responsibilities

A Construction and Demolition Waste Manager, to be advised, is to be assigned in accordance with "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects" Department of the Environment, Community and Local Government. The Waste Manager will take overall responsibility for the waste minimisation, reuse and recycling for all aspects of waste management at the different stages of the Project. The C&D Waste Manager and suitably trained site crew will distinguish materials for reuse and recycling, ensure maximum segregation at source, co-operate with site manager on the best locations for stockpiling reusable materials, separate materials for recovery and identify and liaise with operators of recovery outlets. Copies of the Waste Management Plan will be available for all site personnel and sub-contractors.

2.4 Record Keeping

All C&D waste is to be recorded for segregation, movement, treatment and to quantify waste items. Materials transferred to and from site should be tracked and verified for validation.

2.5 Waste Auditing

Waste audits are to be carried out at regular intervals during the demolition and construction stages of the project. Each waste audit should be carried out in accordance with the Audit Plan and by an appropriately trained and technically competent "C&D Waste Manager". It is to include the following:

- a study of the on-site waste management practices
- review all stages of the project for opportunities of waste reduction
- full details of raw material inputs and the quantity, type and composition of all waste is to be identified
- audit findings should highlight corrective actions and site practices in order to bring about further waste reductions
- a review system to determine the success or failure of corrective actions

- cost estimates of C&D waste in accordance with Table SF5. (Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects).

Details of C&D waste from site are to be fully traceable in accordance with Table SF4 (Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects). Final details of quantities and types are to be sent to relevant agencies (EPA, County Council Environment Dept, etc.) as required.

Note:

The construction and demolition waste for the proposed Development is to be carried out in accordance with; the Construction and Demolition Waste Management Plan, all relevant waste legislation and the performance requirements of South Dublin County Council.