



Kilkenny County Council

Cootes Lane to Ring Road Active Travel Scheme

**Preliminary Construction Environmental
Management Plan**

Kilkenny County Council County Hall, Johns Street, Kilkenny	21079-pCEMP Issue PL1	Kilgallen & Partners Consulting Engineers Danville Business Park Co. Kilkenny
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REVISION HISTORY

Client	Kilkenny County Council
Project	Cootes Lane to Ring Road Active Travel Scheme
Title	Preliminary Construction Environmental Management Plan

Date	Detail of Issue	Issue No.	Origin	Checked	Approved
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TABLE OF CONTENTS

1. Introduction	1
1.1 Introduction	1
2. Construction Phase Waste	2
3. Anticipated Hazardous Waste	2
4. Excavated Material	2
5. Construction Methodology	3
6. Control of Noise	3
6.1 Control of Noise	3
6.2 Potential Sources and Control.....	3
7. Control of Debris, Dust and Mud	3
8. Protection of Ground and Surface Water	4
9. Hazardous Materials	4
10. Construction Works Management	4
10.1 Construction Phase.....	4
10.2 Working Hours	4
10.3 Cranes, Lifting of Equipment and Road Closures.....	4
10.4 Site Security Arrangements, Public Health and Safety and Site Access & Egress.	4
10.6 Site Storage.	5
11. Housekeeping	5
12. Communication with adjacent landowners	6

Cootes Lane to Ring Road Active Travel Scheme

1. INTRODUCTION

1.1 Introduction

Kilgallen & Partners Consulting Engineers Ltd have been commissioned by Kilkenny County Council to prepare a preliminary Construction Environmental Management Plan relating to an application to Kilkenny County Council for planning permission for an active travel scheme ('the proposed development') of a new bridge crossing and shared space from Cootes Lane to the Ring Road.

The scheme design is based on Kilkenny County Council Development Standards and the relevant national design guidance.

The planning application is for development of a new pedestrian bridge and footways linking Cootes Lane to the Ring Road.

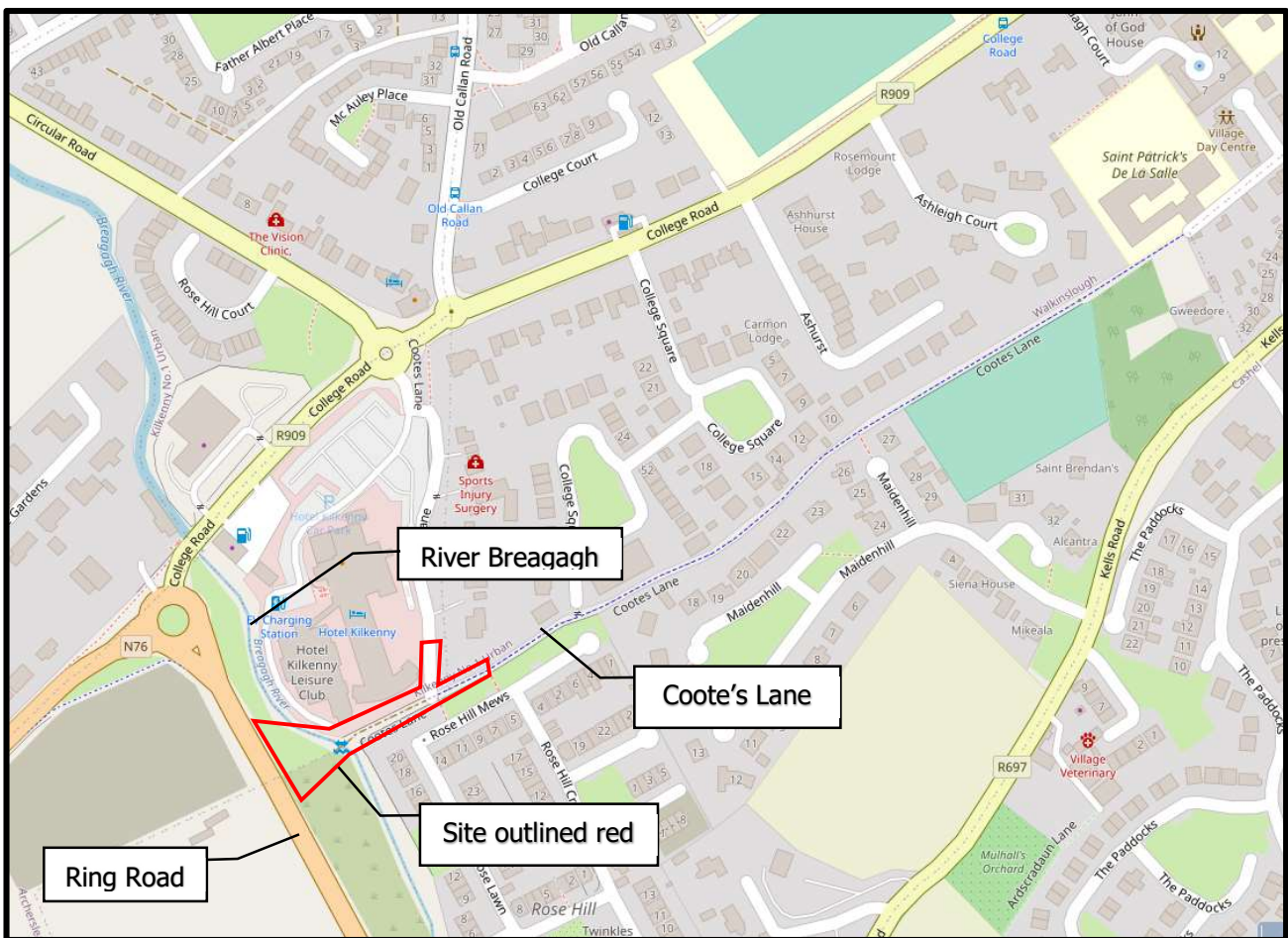


Figure 1-1 Site Location Map

This preliminary Construction Environmental Management Plan has been prepared by Kilgallen & Partners Consulting Engineers with the aim of ensuring that the impact of the construction stage generally is minimised and in particular, ensuring that there will not be any adverse impact on the environment during the construction stage. This report outlines the construction & waste management approach to the development and site infrastructure services for the project, and to identify a waste management programme to be considered for planning stage.

Cootes Lane to Ring Road Active Travel Scheme

The preliminary Construction Environmental Management Plan has been prepared for inclusion with the documents to be submitted in support of the Planning Application for the subject development and will thus become a requirement of the Planning Permission to carry out the Development.

2. CONSTRUCTION PHASE WASTE

Quantities of general construction wastes such as wood, packaging, metals, plastics, bricks, blocks, canteen waste, some hazardous materials (e.g. oils, paints and adhesives), site clearance and residual waste materials will be generated during the construction phase primarily from the construction of the development. Careful management of these, including segregation at source, will help to ensure maximum recycling, reuse and recovery is achieved, in accordance with current local national waste targets. It is expected however that a certain amount of waste will still need to be disposed of to landfill. While it is difficult at this stage to predict precise tonnages of waste expected by the proposed scheme, estimates of the composition of waste materials generated by a typical Irish Construction site from the EPA National Waste Database Report are presented on Table 3.1 below. A more detailed estimate of the anticipated quantities of these materials will be provided in the contractor's waste management plan following appointment of the contractor and detailed design.

Waste Types	%
Soil & Stones	71
Concrete, Bricks, Tiles, Ceramics, Plasterboard	21
Asphalt, Tar and Tar Products	1.5
Metals	1.5
Other Wastes	5
Total	100

Table 3.1: C & D Composition form a typical Irish Construction site (Source EPA 2004)

3. ANTICIPATED HAZARDOUS WASTE

Fuels used during construction will be classed as hazardous and this will be stored for site machinery etc., in suitable tanks with the draw-off points bunded so as to minimise exposure to on-site personnel (and the public) and to also minimise potential for environmental impacts. Waste mixtures contain dangerous substances classified as hazardous waste. On-site storage of any hazardous wastes produced will be minimised with off-site removal organised on a regular basis. Hazardous wastes will be recovered wherever possible and failing this, disposed of appropriately in a licensed hazardous waste facility.

4. EXCAVATED MATERIAL

Excavation for the development will be minimal and due to the constraints of the site, there will be little opportunity to re-use the volume that is generated. The inert material must be removed from site and disposed of in an appropriately licensed tip. Disposal of surplus material arising will be undertaken in accordance with the relevant legislation.

5. CONSTRUCTION METHODOLOGY

It is proposed that in advance of commencement of any construction works a site-specific Construction Environmental Management Plan will be prepared in full for agreement with Kilkenny County Council.

The Contractor appointed to undertake the construction works will ensure that a suitable Construction Environmental Management Plan that is in line with environmental best practices on site are put in place for the duration of the construction works, to include demolition and construction phase waste management programmes. It will also include a concrete management plan which will describe how concrete will be managed appropriately in line with environmental best practices on site, off-site wheel washes and concrete truck washdown.

6. CONTROL OF NOISE

6.1 Control of Noise

It is anticipated the normal working hours within the site shall be Monday to Friday between 0800 hrs and 1800 hrs and Saturday between 0830 hrs and 1400 hrs, with no working on Sundays or Public Holidays unless under exceptional circumstances. Best practical means to minimise noise shall be employed and shall comply generally with the recommendations in BS5228: Noise Control on Construction and Open Sites.

6.2 Potential Sources and Control

All vehicles and mechanical plant used on the works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order for the duration of the works in compliance with BS 5228. Machines in intermittent use shall be shut down in the periods between work or throttled down to a minimum. All compressors shall be "sound reduced" models fitted with properly lined and sealed acoustic covers shall be kept closed whenever the machines are in use and all ancillary pneumatic percussion tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers. Pumps and mechanical static plant shall be enclosed by acoustic shields or screens. Any plant such as generators and pumps which is required to work outside of normal working hours shall be surrounded by an acoustic enclosure which shall restrict the noise level to not less than 5 dB (A) Leq (1 Hr.)

7. CONTROL OF DEBRIS, DUST AND MUD

Footways, roadways and other paved areas used by or adjoining construction traffic shall be inspected on a daily basis and swept as necessary to ensure they are free of debris, dust and mud. Problems of dust occur primarily during dry weather. A proactive regime which anticipates dust problems rather than reacting to them is considered essential. The key features of this regime will include the following measures:

- All disturbed areas shall be stabilised as soon as practicable to prevent or minimise wind blown dust;
- Trafficable areas shall be clearly defined by guide posts or other suitable barriers to prevent unnecessary vehicle movement onto other areas and avoid any accidental damage to adjacent 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;

Cootes Lane to Ring Road Active Travel Scheme

- Trucks transporting material from the site shall be covered immediately after loading to prevent wind-blown dust emissions and spillages. The covering must be maintained until immediately before unloading the trucks;
- The tailgates of all trucks leaving the premises must be securely fixed prior to loading or immediately after unloading to prevent loss of materials;
- Subcontractors will maintain all construction equipment to ensure exhaust emissions comply with the relevant Air Regulations;

8. PROTECTION OF GROUND AND SURFACE WATER

The Contractor is to take measures and apply environmental best practices to ensure that no construction material will contaminate any local groundwater sources.

9. HAZARDOUS MATERIALS

Any hazardous materials used during the course of construction process will require careful handling. Oils, paints, adhesives and chemicals will be kept in a separate contained storage area which will be locked when not in use. Lids will be kept on containers in order to avoid spillage or waste by evaporation. Waste oils, paints and chemicals will require careful handling and disposal. This includes the containers and will be stored in containment trays. These wastes will be disposed of by suitably licensed private contractors or facilities as they arise.

10. CONSTRUCTION WORKS MANAGEMENT

10.1 Construction Phase

Construction is envisaged to be completed in a single phase from mid-May 2023 to August 2023 when the ground is at its driest and the river is at its lowest to minimise the damage to the existing ground. No works will take place on the riverbed. Construction will be halted if inclement weather conditions persist.

10.2 Working Hours

It is envisaged that primarily standard working hours for the construction industry will be adhered to during the course of the construction phase (i.e. working hours normally permitted by Kilkenny County Council include 08:00 – 18.00 Monday to Friday and 8.00 – 14.00 Saturdays). No general works are envisaged to be carried out on Sundays. Should there be a need to work Sundays/Bank Holidays, a written request will be made to Kilkenny County Council for permission to do so. Any conditions from Kilkenny County Council relating to out of hours working will be followed including any required notifications to relevant parties

10.3 Cranes, Lifting of Equipment and Road Closures

It is envisaged that the bridge will be constructed in one or two individual prefabricated sections and transported to site for lifting into position using a mobile crane at road level. Craning from the road will require traffic management in the form of lane restrictions or a possible road closure.

10.4 Site Security Arrangements, Public Health and Safety and Site Access & Egress.

To prevent access and egress by unauthorised persons, timber hoardings/temporary fencing panels shall be erected to delineate all site works from public areas located adjacent to the development.

A site compound will be set up prior to any construction work, in agreement with Kilkenny County Council. The site compound shall be established away from the River Breagagh, it is envisaged that one self-contained welfare unit shall be established with small office area, a washroom with full-flushing toilet and drying room and canteen/kitchen seating area. This self-contained welfare unit includes for a plant room housing the low-noise, low-emission diesel generator with sensor batteries and water tank.

There will be no on-site parking provisions for Site Operatives and Visitors.

10.6 Site Storage.

Due to the site restrictions, storage of materials will be minimal. No large materials will be stored on site until such times as they are required.

At no time during the project will materials or other items be placed outside the hoarding/fencing lines.

11. HOUSEKEEPING

C&D waste will arise on the Project mainly from:

- excavation for abutments;
- unavoidable construction waste e.g. packaging, material surpluses;
- damaged materials

Materials shall be ordered so that the quantity delivered, the timing of the delivery and the storage is not conducive to the creation of unnecessary waste.

Materials will be ordered to fit site dimensions to prevent off cuts and build up of scrap waste on site.

In-situ materials such as in-situ cast concrete, blockwork, rendering materials etc. will be ordered only as required and only sufficient mixes will be produced each day to suit daily requirements, thus eliminating daily surplus waste.

Materials will be securely stored on site and handled correctly to reduce damage to a minimum. Materials will remain packaged until they are ready to be used.

Operations will be programmed and deliveries sequenced to ensure only the minimum materials will be required on site at any one time. This will further reduce the risk of damage to materials. The limited supply will also have the effect of encouraging economical use of materials by site personnel.

Individual responsibility will be assigned to sub-contractors for the consignment to site of raw materials and management of their own waste for activities such as concreting, plastering, plumbing, electrical works etc. This will ensure that available resources are not expended wastefully.

Concrete waste, masonry, wood, plastics and other C&D waste materials will be collected in receptacles with mixed C&D waste materials, for subsequent separation and recovery at a remote facility. Packaging will be segregated for recycling. Wherever possible, segregation at source will be applied to waste materials

Hazardous wastes will be identified, removed and kept separate from other C&D waste materials in order to avoid further contamination prior to disposal to a licensed facility. Before undertaking any works giving rise to Hazardous Waste, a detailed methodology shall be prepared for dealing with the material.

It is anticipated that waste materials will have to be moved off site.

Cootes Lane to Ring Road Active Travel Scheme

It is anticipated that the main contractor appointed to construct the Project will have the appropriate authorisations for the collection and movement of waste off-site and disposal to facilities which have the appropriately Licenses, Permits and / or certificates of Registration in line with current legislation. If this is not the case, the main contractor will engage specialist waste service contractors who do possess the requisite authorisations.

12. COMMUNICATION WITH ADJACENT LANDOWNERS

The Contractor will make provision for initial and ongoing communication(s) through site management with all adjacent landowners and outline the Construction and Construction Waste Management Plan, to assure adjacent landowners that site will function as an independent controlled environment during construction.