

LKIL042 Kilkenny Linear Park Construction Environmental Management Plan Rev.B

November 2015



Contents

- 1.0 Introduction**
 - 1.1 Site Location**
- 2.0 Proposed Development Description**
- 3.0 Site Management**
- 4.0 Construction Programme**
- 5.0 Working Methods**
 - 5.1 Method Statements**
- 6.0 Environmental Control Measures**
 - 6.1 Controlling Sediment run-off**
 - 6.2 Noise & Vibration**
 - 6.3 Air Quality, Dust & Emissions**
 - 6.4 Environmental Approvals, Licences & Permits**
 - 6.5 Control of Pollution**
 - 6.6 Ground Contamination**
 - 6.7 Drainage & Water Quality**
 - 6.8 Monitoring**
- 7.0 Protection of Buried Services**
- 8.0 Archaeology & Heritage**
- 9.0 Biodiversity & Ecology**
- 10.0 Storage of Materials**
- 11.0 Waste**
- 12.0 Sourcing of Materials**
- 13.0 Access by the Public**
- 14.0 Welfare**
- 15.0 Logistics Transport & Roads / Site access / Site Hours**
- 16.0 Emergency plans**

Appendix A – Site Location

Appendix B - Outline Landscape Proposal

Appendix C - SAC & SPA boundaries

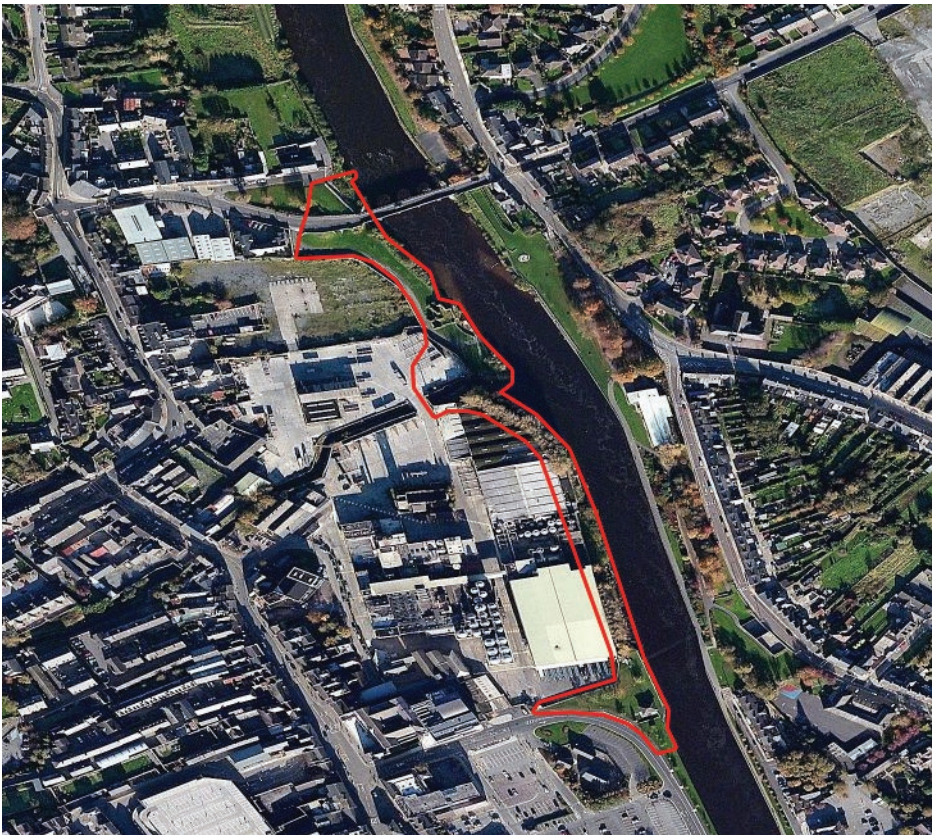
1.0 Introduction

This purpose of this outline Construction Environmental Management Plan (CEMP) is to detail how environmental impacts of the proposed Scheme for the Kilkenny Linear Park are likely to be managed during construction and how they have been mitigated during the design of the scheme. The CEMP will be further developed by the Contractor once they have been appointed and prior to works commencing on site.

The contractor will be required to prepare, maintain and operate in accordance with a CEMP. The CEMP will be required to meet the requirements of ISO 14001 and ISO 14004 for Environmental Management Systems. It shall contain particulars of controls the contractor will employ to safeguard the environment and will detail how sensitive areas of the site will be protected during construction of the works.

1.1 Site Location

The site in question is located along the western bank of the River Nore within the Kilkenny City Centre boundaries and it's width will consist of, on average, a 15m wide corridor. A large extent of the proposed scheme is located within the Diageo St.Francis Abbey Brewery and is proposed to form part of the larger masterplan of the Diageo site and extends as far north as Green's Bridge and south to the Tea Houses.



2.0 Proposed Development Description

The proposed development shall consist of a 15m wide strip located alongside the western bank of the River Nore forming a city Linear Park intended to link the city with the existing Nore River Walk north of the site. The proposal has designated the area to the south of the site (The Tea Rooms on Bateman Quay) as the gateway to the Park which will be achieved in the form of a contemporary interpretation of the archways found across Kilkenny city. The area associated with the Tea rooms will be designed as a seating / viewing area along the river.

It is the intention to retain and position artefacts from the Diageo site as Sculptural elements throughout the Park to animate spaces and acknowledge the site's former use. A 3m wide shared pedestrian and cycle route is proposed as the primary circulation route through the Park and shall meander along the river's edge, allowing access to a series of spaces, varying in scale and function. The sequence of spaces will provide seating and gathering spaces to sit and enjoy the River Nore and elements and features to interact with. The most significant feature of the Park is the River Nore itself. The proposals aim to create a variety of experiences along the linear route to retain interest, excitement and exploration. The planting strategy aims to create structure and year-round interest, to enhance the existing habitats and in doing so, improve the site's biodiversity.

The Park's design is powerfully influenced by the site's rich history and archeology, which is reflected in many aspects of the proposal.

A skate friendly area positioned adjacent to the Central Access Scheme's western abutment provides a facility that integrates with the planting and circulation strategy while the existing canoe & boat slip will be retained, both facilitating land and water based activities.

The park transitions from a city linear park adopting a more naturalising river walk from the existing Mill ruins north of the CAS. The treatment of the park will soften and become more naturalising utilising gravel paths to reinforce the sense of a riverside garden.

3.0 Site Management

Though the site will be in overall control of the Contract Manager day-to-day management shall be by a full time foreman briefed in detail of his responsibilities relating to environmental control measures. As soon as contact details are known they will be incorporated into the main contractors Environmental Construction Management Plan. Operatives will be site inducted and made aware of their environmental responsibilities.

4.0 Construction Programme

The programme of works associated with the River Nore and its bank will give consideration to any requirements arising from the designation of the river as an SAC or SPA / Natura 2000 site. The contractor will be required to develop working method statements for all the key construction operations.

5.0 Working Methods

The Contractor shall be cognisant that they will be working in close proximity to a designated SAC & SPA site and all working methods should reflect the sensitivities associated with the site designation.

Works adjacent to river bank: Where works risk the stability of the bank, methods to protect its stabilisation and maintenance must be employed. Sheet piling is not an option due to the impact it would have on destabilisation of the river bank. The park has been designed to avoid any direct works to the bank or river.

5.1 Method Statement

Will include the following headings:

- ☐ Location of the activity and access/ egress arrangements
- ☐ Work to be undertaken and methods of construction
- ☐ Plant and materials to be used
- ☐ Labour and Supervision Requirements
- ☐ Health, safety and environmental considerations
- ☐ Any permit or consent requirements

6.0 Environmental Control Measures

The Inland fisheries Ireland and the National Parks & Wildlife Services (NPWS) shall be consulted by the Design team and ultimately the main contractor prior to any temporary or permanent works on the site.

The contractor will be required to prepare, maintain and operate in accordance with a CEMP. The CEMP will be required to meet the requirements of ISO 14001 and ISO 14004 for Environmental Management Systems.

To minimise disturbance to birds: no temporary lighting shall be permitted.

The construction operations and activities will potentially give rise to noise, vibration and dust, have an adverse visual impact and cause disturbance to wildlife, their habitats and to archaeological remains. Construction may also cause minor, intermittent and short term disruption to traffic.

6.1 Controlling sediment run-off

From the commencement of on site works, care will be taken to ensure the minimum amount of debris is deposited onto the roads accessing onto the site or into the River. Measures such as silt fences shall be utilised to avoid contamination of the river by sediment run-off.

6.2 Noise & Vibration

The potential exists for noise impact from the construction phase of the scheme. The impacts associated with the construction phase will be of short-term duration. It will be the responsibility of the appointed main contractor to specify the plant used and the phasing of works to minimise noise pollution generated throughout the duration of the construction phase.

Noise and vibration levels will be kept to a minimum and within specified limits.

Controls on the sequencing of works will be developed and include:

- ☐ Static plant sited away from properties.
- ☐ Machines would be throttled down when standing.
- ☐ Machines would be turned off when not in use
- ☐ Care would be taken when unloading vehicles to minimise noise.
- ☐ Methods statements will be submitted detailing the types of plant proposed for each operation and intended control measures.
- ☐ Assessment and monitoring of ground vibration shall be an on-going operation to ensure that noise does not exceed the agreed / conditioned maximum noise levels.
- ☐ Any compressor brought to site will both have mufflers or silencers fitted, and drip trays beneath the engine.

- ☐ Deliveries will be timed to arrive during daylight hours only.
- ☐ Whilst unloading engines will be switched off.
- ☐ All plant will be properly maintained and operated in accordance with the operators' instructions.
- ☐ Consideration and liaison with local residents can often boost neighbourly relations during the works.

6.3 Air Quality, Dust & Emissions

Care will be taken to ensure both dust and mal odours are minimised. Burning of materials on site will not be permitted.

Works will be controlled by the following specific measures: stockpiles will be sheeted; highways will be damped down and or swept.

6.4 Environmental Approvals, Licences and Permits

Approval will be required from the Natural Parks & Wildlife Services

Approval will be required from the Inland fisheries Ireland

Approval will be required from The Department of Arts, Heritage and the Gaeltacht

Liaise with Kilkenny County Council Heritage Officer.

A Waste permits as appropriate

6.5 Control of Pollution

- ☐ Grout/ concrete washout facilities shall be established away from water courses.
- ☐ Care to be taken to prevent spilt concrete from entering watercourse or other sensitive areas.
- ☐ Portable toilets and sanitary facilities will be provided for site use.
- ☐ Plant will use biodegradable drilling oils.
- ☐ Plant will be re-fuelled in designated areas only away from watercourses.
- ☐ All site operatives will have immediate access to spill kits when machinery is being used.
- ☐ In the event of a major spillage the contractor's Pollution Control and Incidence Response Plan shall be followed. The first action is to stop the source of pollution, and contain the spillage.

6.6 Ground contamination

Samples of the silt recovered from the river bed and bank shall be sent for testing for the presence of heavy metals, tributyltin and petroleum hydrocarbons among other pollutants prior to the commencement of any works. The results shall be recorded and on-going monitoring throughout the duration of the works must be carried out to assess if any negative impacts are incurring as a result of pollutants generated from the construction operations.

The contractor must be aware and adhere to the current regulations relating to pollution control measures implemented as part of the programme of measures required under Article 12 of the European Communities (Water policy) regulations of 2003 (SI 722 of 2003) aim to prevent the input of hazardous pollutants and limit the input of non-hazardous pollutants into groundwater.

All direct discharges of pollutants into groundwater is prohibited

Drip trays must be utilised for all machinery on site and monitoring undertaking to ensure that there is no risk of overflowing and that they are adequately sized to deal with the specific element of machinery that they are protecting against.

6.7 Drainage & Water Quality

- ☐ The works shall be planned and executed in accordance with Environmental Protection Agency Guidelines
- ☐ The contractor should ensure that operations do not give rise to the discharge of large quantities of dirty water into the watercourses. Measures must be in place to ensure that silt will not be allowed to enter the water system.
- ☐ Mixers and hand tools will not be washed off in the stream or near to watercourses.
- ☐ To prevent run off from stripped ground bunds are to be placed on the downstream side of stockpiles.
- ☐ Water from excavations shall be pumped to land and allowed to settle, or passed through silt traps, before allowed to return to the watercourse.
- ☐ Good site management will ensure that surface water and that ground water will be protected from accidental contamination. There are no surface water drains in the vicinity.
- ☐ Portable toilets and sanitary facilities will be provided for site use.
- ☐ Plant will be re-fuelled away from watercourses and the estuary.
- ☐ All site operatives will have immediate access to spill kits when machinery is being used.
- ☐ Mixers and hand tools will not be washed off within the Reserve or in tidal waters.

6.8 Monitoring

Monitoring shall be an on-going procedure required throughout the duration of the construction period. The monitoring shall cover the following elements to ensure that the quality prior to the commencement is maintained throughout the construction period:

Noise Levels

Archaeology

Flora and Fauna

Habitats

Water Quality

Air Pollution

Ground contamination

7.0 Protection of Buried Services

Throughout the construction process measures shall be taken to protect the existing buried services running through the site.

8.0 Archaeology & Heritage

As the site is rich in archaeology there is a high possibility that elements of significance may be uncovered in the process of delivering the scheme. An archaeologist has been appointed by KCC to assist in the design process and providing essential advice on mitigation measures to incorporate and the on-going monitoring and reporting. A separate archaeology report will be prepared for inclusion into the Part 8 submission and all measures outlined within the report must be strictly adhered to.

9.0 Biodiversity & Ecology

This Plan details the prevention, and mitigation measures that have been incorporated into the scheme to minimise identified environmental impacts.

An Ecological Impact Assessment (EclA) has been carried out by Moore Group Ltd. and all recommendations outlined in the forementioned report must be implemented.

10.0 Storage of Materials

The following measures will be taken to minimise the potential for impacts:

- ☐ Secure storage compounds will be away from the site, and away from watercourses.
- ☐ Oils, fuels and liquids will be stored securely. To prevent vandalism all valves will be tamper proof and lockable.

- ☐ Drums and barrels, including those for fuel oils will be banded, clearly labelled and fitted with flow control taps, and sited away from watercourses.
- ☐ An emergency response plan will be in place to deal with instances of accidental spillages and leakages.
- ☐ Spill kits will be located near to the works area and within storage compounds off site, with staff being trained in their use.

11.0 Waste

Excavated materials will be stored in separate stockpiles prior to sorting for re-use.

Decisions taken to minimise the quantity of residual waste include:

- ☐ Records will be kept in the Site Waste Management Plan.
- ☐ It is not thought any arisings from site will be classed as hazardous

12.0 Sourcing of Materials

- ☐ Granular fill materials will come from the nearest suitable quarry
- ☐ Hardwood timber shall be controlled and records made to allow for the timber source to be identified and shall be used to demonstrate that legal and sustainable sources have been used. Only timber and wood-derived products originating either from independently verifiable Legal and Sustainable sources or from a licensed Forest Law Enforcement, Governance and Trade (FLEGT) partner will be permitted for use.

13.0 Access by the Public

During the works to ensure the safety of operatives and pedestrians a transportation strategy shall be provided outlining the proposed measures to avoid conflict between the two. There will be no access to site for pedestrians and cyclists.

14.0 Welfare

Potable water will be taken from a standpipe close to the site which shall be agreed with KCC, using a metered standpipe key.

Mess huts and welfare facilities including portable toilets will be provided on site for use by operatives. Toilets will be cleaned and emptied regularly by licensed contractors.

15.0 Logistics transport & Roads/ site access during the works period

Deliveries to site will either be by vehicle or be via river, arriving on barge or pontoon. Kilkenny Co.Co. Roads Department will be consulted. If any permits are required they will be acquired prior to commencement.

- ☐ A site speed limit of 10kph will be in force throughout.
- ☐ Roads will be inspected and cleaned when necessary.
- ☐ Vehicles delivering materials to and from the site will be sheeted or covered.
- ☐ Materials will not be delivered to site until needed.
- ☐ Material brought to site from store will use a vehicle suited to the roads.
- ☐ Care will be taken to ensure that no damage is caused to the highway network

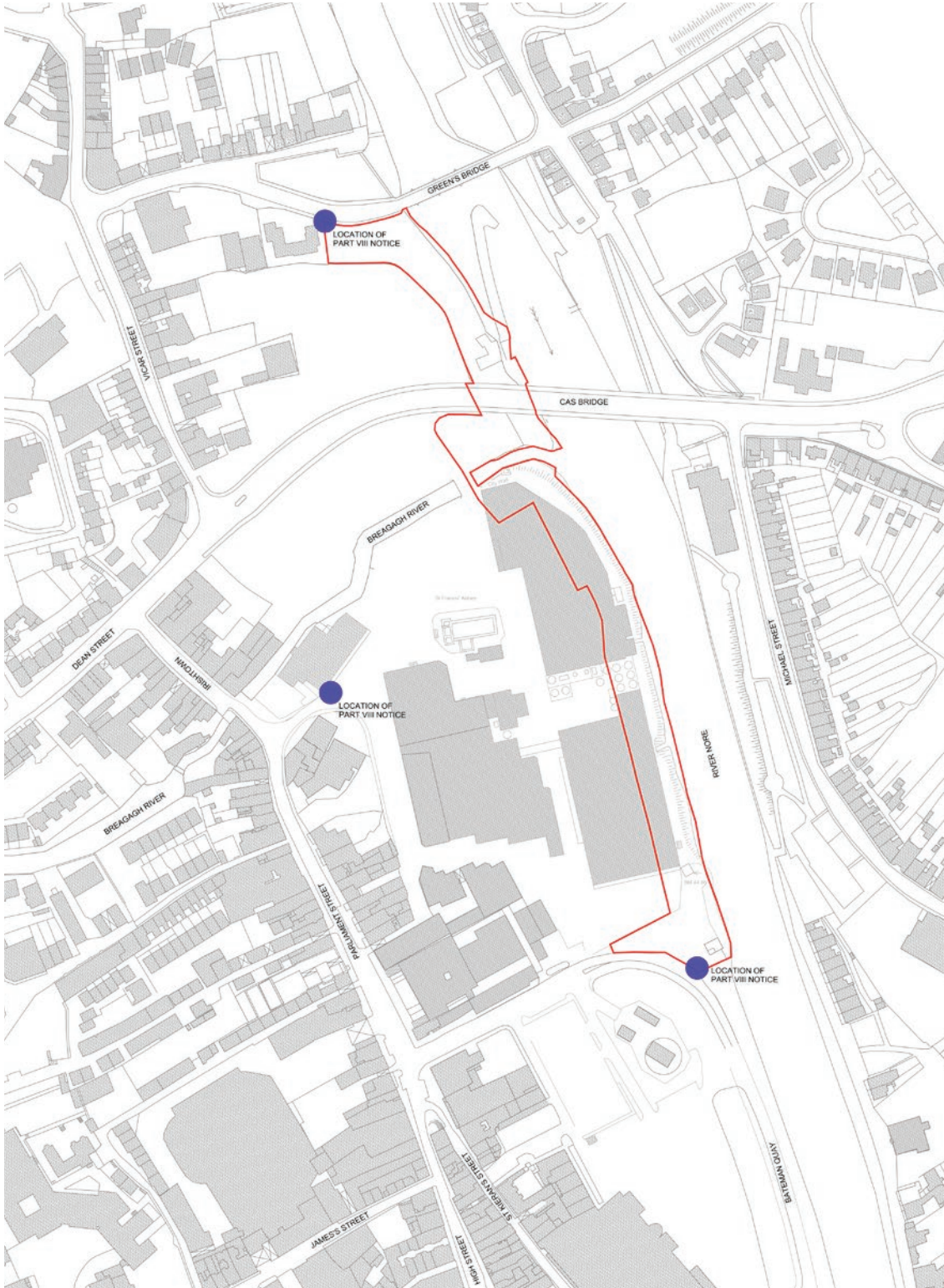
16.0 Emergency Plans

In the event of plant breaking down in close proximity to the river bank, there will always be another item of plant available to retrieve the broken down vehicle to a point of safety.

Vehicular Plant will not stand within close proximity of the river bank outside of working hours, instead being moved to a place of safety.

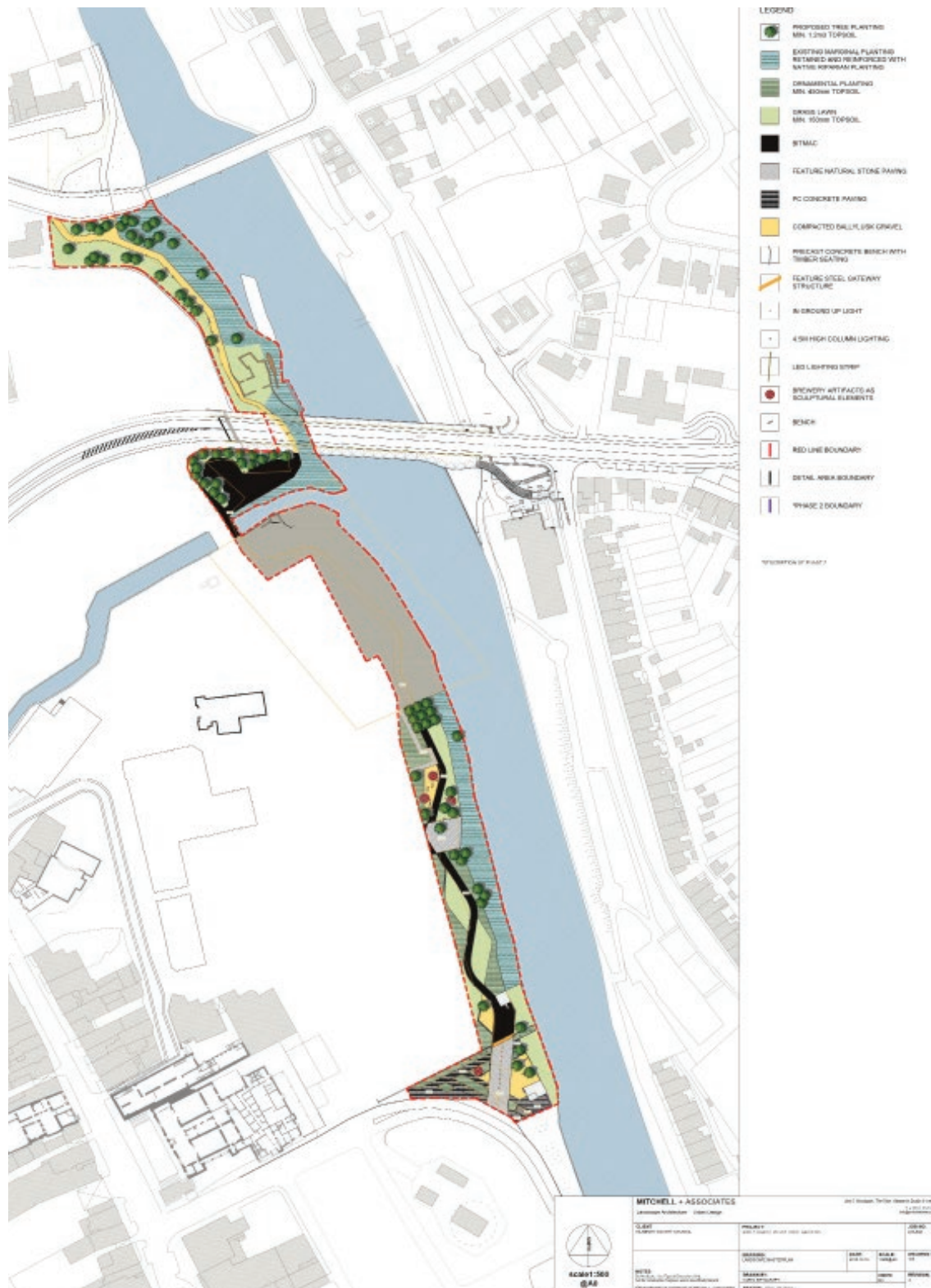
Emergency spillage kits must be made easily available in case of any spillage. All spillages must be recorded and the EPA, NPWS & IFI informed immediately. The source of the spillage must be addressed as priority and the contamination resulting from the spillage dealt with subsequently.

Appendix A Site Location



Appendix B

Outline Landscape Proposal



Unit 5 Woodpark The Rise Glasnevin Dublin 9 Ireland
T + 353 1 454 5066 E info@mitchellassoc.net

VAT No.: IE 1114098RH

Mitchell Landscape Architecture Ltd Company number: 523027 Registered address: 148 Phibsborough Road D7 Directors: Dave Kirkwood Brian McGuinne

Appendix C

SAC & SPA boundaries relative to the site.

