

Markievicz bridge Refurbishment Works

**Preliminary Safety and Health Plan
224138-PUNCH-XX-XX-HS-CS-0001**

April 2025

Document Control

Document Number: 224138-PUNCH-XX-XX-HS-CS-0001

Status	Rev	Description	Date	Prepared	Checked	Approved
A0	C01	Planning	16/04/2025	P. McDowell	K. O’Riordan	K. O’Riordan

Foreword

The Client requires full implementation of all relevant Safety and Health Regulations by the design team and contractor to ensure the proposed works to Markievicz Bridge are carried out safely and in accordance with relevant guidance and legislation.

1. The Client has appointed in writing a competent PSDP.
2. The PSDP has notified the HSA (Appendix I) and has prepared a Preliminary Safety and Health Plan.
3. The PSCS must prepare Site Specific Risk Assessments and the Developed or Final Construction Stage Safety and Health Plan.
4. The PSCS must hold a site induction meeting, to bring to the attention of all relevant personnel, the contents of any Safety & Health Plan method statements & site specific risk assessments.
5. The PSDP will ensure compliance of all temporary works designers and specialist designers with their duties under the Regulations.
6. The PSCS must assemble and collate the relevant records for inclusion in the Safety File.
7. The PSDP will compile the Safety File and deliver it to the Client upon completion of the Works.

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1 Introduction

This Preliminary Safety and health Plan has been prepared for the proposed refurbishment works to Markievicz Bridge in Sligo Town, Co Sligo. PUNCH Consulting Engineers will be acting as PSDP for the duration of the project.

Contractor to co-ordinate and co-operate with the PSDP, PSCS and other designers in accordance with the Safety Health and Welfare at Work (Construction) Regulations 2013 and any subsequent amendments.

The purpose of this plan is to identify features of design and construction affecting Safety and Health to the Project Supervisor for the Construction Stage (PSCS) for the development of the Construction Stage Safety and Health plan.

This plan has been prepared in accordance with the requirements of the Regulation 12(1) (a) of S.I. No. 291 of 2013, of the Safety, Health and Welfare at Work (Construction) Regulations 2013. This revision of the preliminary plan has been prepared based on information provided by the designers, Client and by reference to the attached appendices of this document.

The information contained in this plan has been prepared prior to grant of planning permission, the appointment of the Contractor or the commencement of work onsite. It does not take account of any matters or information which may come to light after that time.

A copy of this Safety and Health Plan is to be made available to all identified project personnel and any subsequent revisions to the plan will be circulated to all parties.

On appointment, the contractor for the execution of the works shall be appointed as Project Supervisor Construction Stage (PSCS) in accordance with the requirements of the Health, Safety and Welfare at Work (construction) Regulations 2013.

2 Description of the Project

2.1 Project Description

The project consists of the following:

2.1.1 Pier Scour Repairs

Scour has occurred upstream and downstream of spans 1 - 6 as detailed in drawing 224138-PUNCH-XX-XX-DR-C-0201, submitted as part of this application. Scour repairs are to be carried out in conjunction with a series of dewatering works, involving sequential installation of staged cofferdams, or similar, around each span. Dewatering is generally preferred to underwater repairs as it allows the quality of the work to be better controlled, safer access and working, and often avoids the use of more expensive plant and repair techniques. There are various proprietary dewatering systems available, including water-filled plastic tubes or systems of sheeting and scaffold type support.

Once dewatered loose material should be removed by hand excavation until competent material is reached. A letterbox formwork is proposed to facilitate the repair of the masonry pier and associated concrete skirt, as shown in: 224138-PUNCH-XX-XX-DR-C-0201. A high early strength, self-compacting concrete is proposed.

Following the removal of concrete formwork the protrusion formed as a result of the letterbox formwork should be removed. Any remaining voids in the masonry pier should be consolidated with low pressure liquid grout.

2.1.2 Riverbed Scour Repairs

The riverbed should first be reduced to the proposed formation level, if and where required. Subsequently a geotextile layer should be laid and granular fill material added, as detailed in 224138-PUNCH-XX-XX-DR-C-0202 and 224138-PUNCH-XX-XX-DR-C-0203. A rock riprap layer should be placed lush with riverbed material (to the natural finished level).

All repairs are to be in accordance with CIRIA C742 Manual on Scour at Bridges and other Hydraulic Structures, including supplementary guides.

2.1.3 Cleaning, Removing Vegetation & Repointing of Masonry

The proposed works include the removal of vegetation and cleaning of the bridge in its entirety. Masonry repair and repointing is required throughout the bridge extents. All areas of loose and friable mortar should be chipped out and re-pointed along with the existing areas of mortar loss.

The Transport Infrastructure Ireland document 'Specification for Road Works Series 2400 - Brickwork, Blockwork and Stonework' (CC-SPW-02400) provides guidance on the masonry repointing of historic structures. A lime mortar shall be used for repointing masonry and reconstruction of historic structures and all lime mortar works must be carried out in compliance with Clauses 2450 to 2465 of the TII specification.

Consultation with the Heritage Consultant and Department will be required to agree on the mortar classification used in repair works. This also complies with Clause 2458 of the TII specification. Consultation with statutory bodies including Inland Fisheries Ireland (IFI) and National Parks and Wildlife Services (NPWS) will also be required to mitigate environmental concerns.

Repairs to be carried out in accordance with guidance set out in The Architectural Heritage Impact Assessment carried out by Molloy & Associates Conservation Architects.

The proposed masonry repairs are outlined in 224138-PUNCH-XX-XX-DR-C-0100.

2.2 Site Location

Markievicz Bridge lies along the R870, crossing over the Garavogue River in Sligo Town. The bridge is located c. 600m southwest of the Michael Hughes bridge where the N4 crosses the Garavogue. The location of Markievicz Bridge is illustrated below in Figure 1

The bridge is accessible to southbound vehicular traffic only, with two lanes of southbound vehicular traffic in addition to a single footpath on the west (downstream) side of the bridge. The left lane of

vehicular traffic provides access to Abbey Street and Teeling Street. The right lane provides access to Sligo Town Centre via Castle Street.

The management of construction traffic on the public road network both around and on approach to Markievicz Bridge is an important part of the overall project and must be actively managed by the Contractor to the satisfaction of Sligo County Council.

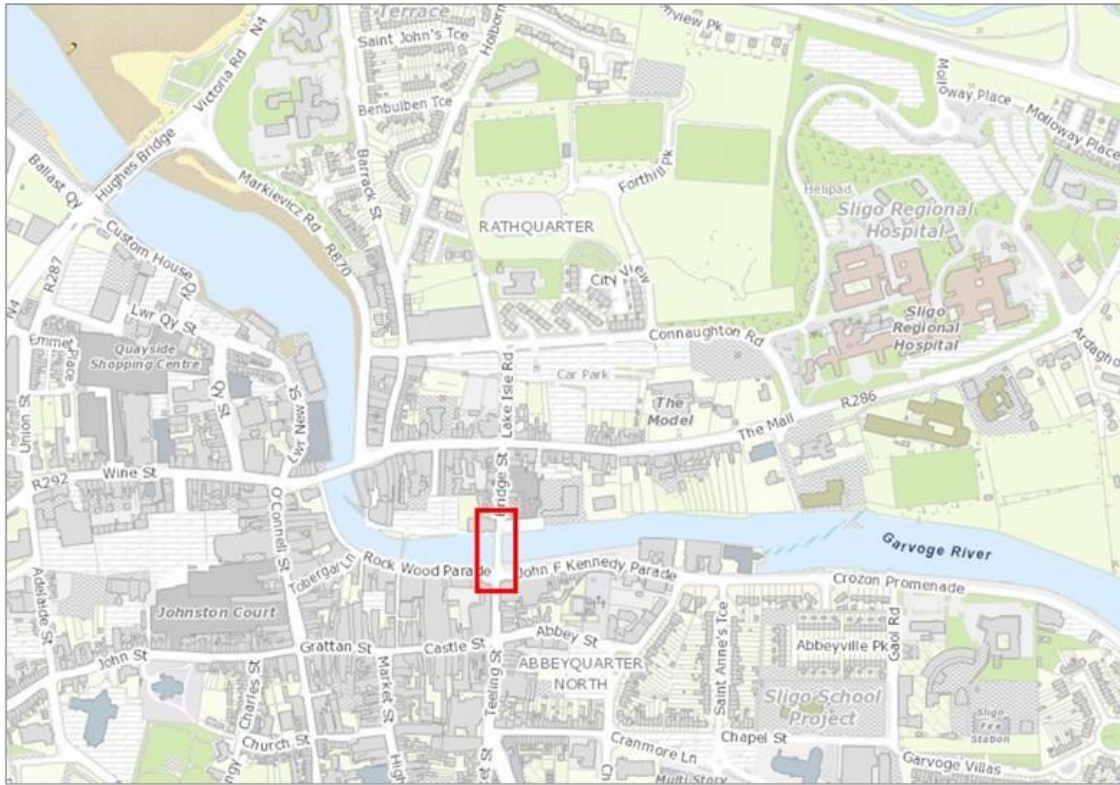


Figure 1. Location of Site

2.3 Details of Client, Designers, PSDP and Other Consultants

The table below outlines the design team at Planning stage of the project.

Role on the Project:	Name & Address:	Contact Name, E-mail & Phone Number
Client	Sligo County Council County Hall, Riverside, Co. Sligo.	Michael Ryan mryan@sligococo.ie 071 911 1111
Project Manager / Civil & Structural Engineer	PUNCH Consulting Engineers Carnegie House, Library Road, Dun Laoghaire, Co. Dublin.	Paul Casey pcasey@punchconsulting.com Kevin O'Riordan kdoriordan@punchconsulting.com 01 271 2200
Conservation Architect	Molloy & Associates Conservation Architects, Marlay, Proby Square, Blackrock, Co. Dublin.	Maol Íosa Molloy info@molloyassociates.ie
Mechanical & Electrical Engineer	Not Applicable	Not Applicable
Arborist	Not Applicable	Not Applicable
Ecologist	MKO Tuam Road, Co. Galway, H91 VW84	Pat Roberts proberts@mkoireland.ie 091 735611
Archaeologist	Mizen Archaeology, The Forge, Innishannon, Co. Cork	Julianna O'Donoghue julianna@mizen.ie 023 8858707
Quantity Surveyor	Not Applicable	Not Applicable
Project PSDP / H&S Co-Ordinator	PUNCH Consulting Engineers Carnegie House, Library Road, Dun Laoghaire, Co. Dublin.	Leonard Brennan lbrennan@punchconsulting.com 01 271 2200

2.4 Arrangement for Communicating and Coordinating with Designers, PSCS and others as Appropriate

2.4.1 Design Stage

The principal form of communications between Client, Designers and PSDP will be regular email communication and scheduled meetings.

2.4.2 Construction Stage

Progress of the works will be monitored by means of regular progress meetings, which will be attended by representatives of all designers, the PSDP, the Contractor and PSCS as necessary. These meetings will review general safety management of the project and compliance with the Regulations.

The PSDP will also undertake unscheduled site visits to review general safety management of the project and compliance with the Regulations.

The PSDP will convene meetings as required to deal with specific issues such as traffic management, temporary works and the like. These meetings will typically include the relevant designer, the PSDP, the Contractor, the PSCS and the specialist supplier/designer.

It shall be in the responsibility of all the design team members and contractors to notify the PSDP and PSCS of any changes in writing.

The PSDP will promptly bring to the attention of the PSCS any design decisions that they are aware of.

The PSDP will notify the PSCS of any design decisions and provide them with sufficient information i.e. copies of documentation etc., in order for them to carry out the necessary assessments before the revised work is carried out and to give directions regarding same when the assessment has been completed.

The PSDP will be copied with the minutes of all onsite meetings where design decisions are involved and all written instructions of confirmation of verbal instructions issued by the Design Team.

Health and Safety must be headed up as an item to be addressed at all Project Site meetings, including the contractor's meetings with designer's sub-contractors, suppliers, employees etc. and ensure that meetings have minutes documented.

2.5 Existing Information Made Available by the Client

2.5.1 Topographical Survey

A topographical survey has been provided as part of the tender package as well as a bathymetric survey of the Garvogue River from Hughes Hydro Surveys Ltd.

2.5.2 Existing Services

The layouts of existing services have been obtained and have been provided as part of the Planning Application package; however, no guarantees are given as to the accuracy of record drawings services locations. It will be the contractor's responsibility to confirm and locate services before commencing any section of the works and make themselves aware of any services which may impact on the works. It is recommended that the Contractor undertakes a full GPR survey within the site boundary to ascertain existing underground services. Utility providers to be contacted in advance of any excavations.

Please refer to Appendix E for service provider record drawings.

2.5.3 Existing Safety File

The client was requested to issue safety files associated with the site for inclusion in the Preliminary Health and Safety Plan. The client has confirmed that there is no existing safety file of the site.

2.5.4 Geotechnical Ground Investigation

None carried out.

2.5.5 Asbestos Survey

Not applicable for the works being undertaken.

However, in the unlikely event of asbestos being present, the contractor will be responsible for the coordination and safe removal of all asbestos material using a nominated specialist sub-contractor in advance of being permitted to carry out any demolition / removal works on the site.

2.5.6 Lead Survey

Not applicable for the works being undertaken.

However, in the unlikely event of lead being present, the contractor will be responsible for the coordination and safe removal of all lead material using a nominated specialist sub-contractor in advance of being permitted to carry out any demolition / removal works on the site.

2.5.7 Structure Surveys

Each designer and the contractor will carry out appropriate inspections of the site to determine physical details and potential hazards.

2.5.8 Welfare Facilities

The contractor must provide their own stand-alone welfare facilities for the duration of the works. The designated location of the Contractor's compound has been shown in PUNCH Consulting Engineer's sketch drawing: 224138-PUNCH-XX-XX-SK-CS-0006 located with the Preliminary Traffic Management Plan forming part of this Planning Application package.

2.5.9 Environmental & Archaeological Surveys

Environmental and Archaeological surveys and reports have been provided as part of the Planning Application package.

3 Project Programme

3.1 Timescale

It is estimated that the programme for the refurbishment works will last 3 months from the date of commencement; however the Client and PSDP intend to allow adequate time for the contractor to complete the works in a safe manner. The works need to be carefully programmed to maintain a management system that protects the safety and health of all employees and other persons not directly involved with the project that might come into contact with the works throughout the contract.

4 Clients Considerations and Management Requirements

4.1 Structure and Organisation

The Employer is Sligo County Council. The project will be subject to periodic inspection by the Employer's design team.

4.2 Safety Objectives of the Project and Arrangements for Monitoring and Review

4.2.1 Policy

It is the Client's objective to protect the safety of those engaged in Construction Works and those affected by such undertakings by the best practicable means.

This is to be achieved by:

- a) Employing the highest recognised safety standards in planning and execution,
- b) Compliance with relevant statutory provisions,
- c) Provision of necessary training and development to staff,
- d) Deployment of necessary resources to ensure compliance,
- e) Monitoring and auditing of compliance.

4.2.2 General Principles of Prevention

The General Principles of Prevention shall be applied in accordance with the Safety, Health and Welfare at Work Act 2005 and Schedule 2 of the Safety, Health and Welfare at Work (Construction) Regulations 2013.

4.2.3 Specific Objectives

- a) Avoidance of any notifiable accidents within the contractor's workforce, or visitors to site.
- b) Avoidance of road traffic accidents on surrounding roads.
- c) Avoidance of environmental nuisance whether by vibration, noise, dust, pollution or other incident.

4.2.4 Client Considerations and Management Requirements

The parties responsible for the compilation and implementation of the Safety & Health Plan are as follows:-

Client

The client has appointed a competent PSDP in writing, will supply all relevant Safety Files and safety information to the PSDP for inclusion in the Preliminary Health and Safety Plan, and will appoint a competent PSCS in writing.

Project Supervisor for the Design Process (PSDP)

PUNCH Consulting Engineers has been appointed in writing by the client as PSDP. The Health and Safety co-ordinator will co-ordinate the Health and Safety aspects of the project's design, including the preparation of the Preliminary Safety & Health Plan and the Safety File.

Designers

Any person who carries on a trade, business or other undertaking in connection with which they (a) prepares a design, (b) arranges for any person under his control to prepare a design. This applies to all design work undertaken.

Project Supervisor for the Construction Stage (PSCS)

The person appointed by the client in writing to manage the construction work, control, co-ordinate and implement the health and safety requirements during the construction phase. The PSCS will also provide all necessary information to the PSDP to complete the Safety File.

Contractor/Sub-Contractor

Any person engaged by the Main Contractor to carry out construction works under the direction of the Main Contractor/Project Supervisor for the Construction Stage.

Safety Officer

The person(s) appointed, in accordance with Regulation 26 of the Safety, Health and Welfare at Work (Construction) Regulations 2013, to advise the contractor(s) as to the observance of statutory requirements, exercise a general supervision of the observance of the statutory requirements, and the promotion of the safe conduct of work generally.

Site Representative

The person appointed/elected in accordance with Regulation 23 of the Safety, Health and Welfare at Work (Construction) Regulations 2013, who may obtain safety information from the Project Supervisor for the Construction Stage (PSCS), make representations to the PSCS or contractor(s) onsite, investigate accidents and dangerous occurrences, make representations to HSA inspectors, carry out safety inspections, investigate potential hazards and complaints, and accompany HSA inspectors whilst they are onsite.

Project Supervisor for the Construction Stage/Safety & Health Plan

The Project Supervisor for the Construction Stage must comply with the Safety, Health and Welfare at Work (Construction) Regulations 2013. It is the responsibility of the Project Supervisor for the Construction Stage to develop the Safety & Health Plan for the Construction Stage. This involves the implementation of the Safety Health Plan and any required amendments.

All Contractors must make available to the Project Supervisor for the Construction Stage any information that will have implications to the safe maintenance of the facility for inclusion in the Safety File as the work progresses.

Selection of the Project Supervisor for the Construction Stage

It is intended, unless otherwise agreed between the Project Manager and the client, that the successful tenderer shall be appointed as the Project Supervisor for the Construction Stage in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013. The PSCS will be required to provide details of their competency to undertake the role of PSCS.

The Project Supervisor for the Construction Stage will receive a copy of the Preliminary Safety & Health Plan, as part of the tender documents. The Preliminary Safety & Health Plan details the Particular Risks involved in this project.

It shall be the responsibility of the Project Supervisor for the Construction Stage to develop the Preliminary Safety & Health Plan into the Construction Stage Safety & Health Plan PRIOR to commencing work on this project. Please refer to competency Assessment for Contractor/PSCS in Appendix D.

The Project Supervisor for the Construction Stage must forward a copy of the Construction Phase Safety & Health Plan to the Client/Project Supervisor for the Design Process for approval PRIOR to commencing any works onsite.

4.2.5 Arrangements for Monitoring and Review

- a) The PSDP will ensure that the design is in compliance with the General Principles of Prevention.
- b) Each Permanent Works Designer will certify compliance with their duties under the Safety Health and Welfare at Work (Construction) Regulations 2013 in the attached format or similar approved. (Appendix B).
- c) Temporary works designers will certify compliance with their duties under the Safety Health & Welfare at Work (Construction) Regulations 2013 in the attached format or similar approved. (Appendix B).
- d) The Contractor will submit a report on general health and safety matters at each progress meeting.
- e) The Contractor will submit a schedule of inspections to be carried out by the Contractor's safety officer and submit any reports to the Project Manager and PSDP.

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- f) The Contractor will maintain a log of all accidents, incidents and near misses on any site. Any such event shall be immediately notified to the Project Manager. The Contractor is to continually take account of all such events in preparation of method statements throughout the course of the works. Reporting of near misses to be incentivised to allow for the identification of hazards and amendments to work practices.

4.3 Permits and Authorisation Requirements

- a) A Permit-To-Work will be required for interruption of all live services and should include details of the service, a statement on proof of isolation, certificates and records of services including a map (if applicable) of the services diverted.
- b) Temporary works shall not be executed until the relevant Temporary Works Design Certificate has been signed by the Relevant Temporary Works Designer and the PSDP and returned to the Contractor.
- c) A Permit-To-Work will be required for all hot works and a fire watch shall be maintained until there is no longer a risk of fire.
- d) Should the Contractor be aware of such activities that require a permit to work then they must be drawn to the attention of the Project Supervisor and be included within the Safety and Health Plan for Construction.
- e) A Permit-To-Work (from local management) will be required for all works which may affect the services, alarm systems or access/circulation in any facility.
- f) Any asbestos removal shall not be undertaken until a copy of all notifications to or permits received from the Health and Safety Authority or Local Authority is issued to the PSDP/Client.

4.4 Emergency Procedures

- a) The Contractor will draw up an Emergency Plan in compliance with Section 11 of the Safety Health & Welfare at Work Act 2005.
- b) The Contractor will brief all site personnel on the emergency procedures.
- c) The Contractor is to provide access and facilities at all times for Fire Service and maintain an emergency evacuation procedure throughout the progress of the works. A competent person should be appointed to act as fire marshal and the proposed fire emergency procedures are to be described in the Safety and Health Plan for Construction. The adopted procedures are to be brought to the attention of all operatives and visitors to the site.
- d) Care should be taken to ensure all emergency routes are to remain open throughout the duration of the works for both the site and for neighbouring buildings. Materials, stores, skips, site accommodation etc. will be positioned so as to ensure that emergency access/egress remain unobstructed.
- e) The Contractor will brief all site personnel on the emergency procedures.

4.5 Site Rules and Other Restrictions

- a) Prior to commencing works, a Risk Assessment must be completed and a safe system of work must be prepared for inclusion in the Developed Safety & Health Plan. All works must be carried out in accordance with the Developed Safety & Health Plan. Works may not commence until this has been completed.
- b) Prior to works commencing the PSCS / Contractor shall agree, with the employer's representative and surrounding businesses, construction routes and times of access. In all cases pre-work planning shall ensure that:
 - i. Work vehicles are parked safely and not constitute a risk to occupants or others.
 - ii. Access routes are free from obstruction or slip/trip hazards.
 - iii. Surfaces are maintained in a manner that prevents slips due to substance contamination or wet surfaces.

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- iv. All works are carried out with minimum disruption to the existing roads network, businesses. Loading/unloading is carried out at a time that eliminates or reduces the exposure of workers and the public to risk.
 - v. Safe access and egress is provided to the site for personnel, plant, and equipment, and ensure it is maintained for the duration of the project.
 - vi. Safe access is provided and maintained for emergency services / vehicles for the duration of the project.
 - vii. Loading/unloading is carried out at a time that eliminates or reduces the exposure of surrounding businesses.
- c) Where works will be taking place at height / overhead the PSCS must ensure a method statement is prepared prior to works commencing and implemented through the course of the works. While works are ongoing overhead, adequate safety measures are to be in place to protect site personnel and third parties.
 - d) Strict housekeeping and cleaning regime to be established by the contractor.
 - e) The PSCS must ensure that all construction areas are adequately secured against third party / public intrusion by means of exclusion zones / physical barriers. In addition, the PSCS must ensure that Method Statements are prepared prior to works commencing and implemented throughout the course of the works.
 - f) For demolition works a competent person must be appointed to supervise works, adequate safety measures are to be in place (exclusion zones, warning signs, etc.) and a detailed method statement is to be prepared by the PSCS prior to works beginning, and implemented throughout the course of the works. Demolition works to be undertaken in accordance with BS 6187:2011.
 - g) The contractor and all persons engaged by him to provide services or supplies will comply with the Contractors Developed Safety Plan. The Safety Plan or method statements in all cases will be agreed with the Client/PSDP/Design team before works commence.
 - h) The contractor is to implement an appropriate booking in and out system for all site operatives and visitors. Procedures for Safe Pass and other certification methods are to be implemented.
 - i) The parking of Contractors vehicles will not be permitted anywhere other than designated parking areas on the site compound. It is imperative that site traffic maintain low speed both whilst approaching and when on the site compound.
 - j) The contractor shall ensure that each worker:
 - i. Is in possession of a valid safety awareness registration card referred to in Schedule 4 of the Construction Regulations 2013 (Safe Pass or equivalent), and
 - ii. Is in possession of an appropriate valid construction skills registration card referred to in Schedule 5 of the Construction Regulations 2013, if the worker engages in any of the tasks specified in that Schedule, and
 - iii. Has received site-specific safety induction instruction

Please note Site Inductions will be the responsibility of the main contractor after having taken ownership of the site for the duration of the works.

4.6 Activities on or Adjacent to the Site During the Works

Markievicz Bridge shall continue to be in use during the works period. The Contractor must provide a method statement for works in close proximity to adjacent buildings or lands as necessary.

4.7 Arrangements for Liaison between Parties

The Client recognises the need for effective communication and liaison between the parties involved in the project, so that its safety objectives can be delivered.

It will provide for the attendance of its designers at regular meetings on-site. It will facilitate contacts between the contractor and any third parties and will institute a procedure to involve and inform all relevant parties. The Contractor will nominate a specific liaison officer who will deal with such matters.

Ongoing communications are expected in regard to the following:

- a) Method statements.
- b) In the event of unforeseen circumstances or situations occurring on site, particularly where they may affect “Particular Risk” elements or the time scale for the project.
- c) Changes/possible changes to design affecting overall constructability of the facility.
- d) Co-ordination, management of the design, construction of temporary works requirements.
- e) Reports of any accidents or incidents/dangerous occurrences that may occur.
- f) Report of any visits by the Health & Safety Authority.
- g) Whether delays and/or changes to the programme result in health & safety issues.

The Project Supervisor (Construction) should bring to the attention of the Project Supervisor (Design) any significant safety issues or implications of which he becomes aware

4.8 Security Arrangements

Construction sites by their nature pose high risks for members of the public, surrounding businesses, etc., and all work areas shall be securely hoarded off, with appropriate signage to deter trespassers.

4.9 Risk Assessments

The “Designer” is a person or company engaged in work related to the design of a project. The term design, in the Safety, Health and Welfare at Work (Construction) Regulations 2013, means the preparation of drawings, particulars, specifications, calculations, bills of quantities in so far as they contain specifications or other expressions of purpose according to which a project, or any part or component of a project, is to be executed. The Designer is therefore any person who is engaged to do such work, including:

- a) Architects;
- b) Engineers;
- c) Surveyors;
- d) Contractors carrying out design work;
- e) Specialist suppliers.

Designers are required under Regulation 15 of the Construction Regulations 2013 to produce and circulate to the design team and PSDP, written risk assessments indicating how risk has been managed in the design process, and what residual risks remain in the final design. The control measures assumed or required in order to control the risks must also be provided in writing.

Design Risk Assessments prepared by the design team will be made available to the PSDP and PSCS.

Design Risk Assessments prepared by the design team to be submitted with each design package for review/comment.

4.10 Traffic Management Plan

The PSCS shall produce a traffic management plan in accordance with Chapter 8 of the Traffic Signs Manual, showing how traffic related risks will be minimised. Traffic management plan to be agreed by the Client.

The following (non-exhaustive list) should be addressed in the traffic management plan:

- a) What active measures will be taken to protect pedestrians, cyclists and vehicular traffic during site entry and exit by plant, machinery and deliveries.
- b) Details of truck movements to and from the site during the construction period;
- c) What signage will be erected to ensure safe traffic movement.
- d) Arrangements to allow the continued use of Markievicz Bridge during the works period.
- e) What active measures will be taken to protect river navigation traffic,

The main contractor is to implement an appropriate booking in and out system for all site operatives and visitors. Procedures for Safe Pass and other certification methods are to be implemented.

The parking of Contractors vehicles will not be permitted anywhere other than designated parking areas on site. It is imperative that site traffic maintain low speed whilst approaching and when on the site.

A Preliminary Traffic Management Plan has been submitted as part of this planning application. The content of this report is preliminary only, the contractor must develop his own construction management plan to fully account for the proposed works. The Contractor must adopt the requirements of this Preliminary Traffic Management Plan into their own Construction Traffic Management Plan and must agree same with Sligo County Council prior to commencement on site.

4.11 Noise, Dust and Vibration

The Project Supervisor for the Construction Stage (PSCS) is to ensure so far as is reasonably practicable, that noise and vibrations are kept to a minimum and that all works are carried out in compliance with the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations 2006 and the Safety, Health and Welfare at Work (Control of Vibration at Work) Regulations 2006.

During the construction and demolition phases, the proposed development shall comply with British Standard 5228 'Noise Control on Construction and open sites Part 1 - Code of practice for basic information and procedures for noise control.

Noise levels from the proposed development shall not be so loud, so continuous, so repeated, of such duration or pitch or occurring at such times as to give reasonable cause for annoyance to a person in any premises in the neighbourhood or to a person lawfully using any public place. In particular, the rated noise levels from the proposed development shall not constitute reasonable grounds for complaint as provided for in B.S. 4142 - Method for rating industrial noise affecting mixed residential and industrial areas.

4.12 Environment

The site is located over and immediately adjacent to the Garavogue River. The site and its environs will be occupied by staff and visitors. Every effort shall be taken by the Main Contractor to ensure that the safety health and welfare of visitors, employees & other third parties is not jeopardised during the project works.

A detailed environmental assessment by MKO forms part of the planning submission. The Contractor is to ensure all works are in accordance with this documentation and any resulting conditions associated with a planning grant.

4.13 Contractor's Developed Safety Plan

The Contractor and all persons engaged by him to provide services or supplies will comply with the Contractors Developed Safety Plan.

The Contractor shall be confined to the site boundary. The extent and location of these areas will be agreed with the contractor and will be sufficient to safely execute the works.

Particular care is required in regard to the following:

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- a) Contractor shall treat all services as live. Refer to the code for precautions to be taken in their handling and their removal.
 - b) Work vehicles are parked safely and do not constitute a risk to occupants or others.
 - c) Access routes are free from obstruction or slip/trip hazards.
 - d) Surfaces are maintained in a manner that prevents slips due to substance contamination or wet surfaces.
 - e) All works are carried out with minimum disruption to the existing roads network or businesses.
 - f) Safe access, and egress, is provided to the site for personnel, plant, and equipment, and ensure it is maintained for the duration of the project.
 - g) Safe access is provided, and maintained, for emergency services / vehicles for the duration of the project.
 - h) Where works will be taking place at height / overhead the PSCS must ensure a method statement is prepared prior to works commencing, and implemented through the course of the works. While works are ongoing overhead adequate safety measures are to be in place to protect site personnel and third parties.
 - i) Strict housekeeping and cleaning regime to be established by the contractor in regard to protection of access routes used or accessed by members of the public and staff in all buildings. Under no circumstances should flammable liquids or materials be stored in stairwells or fire escape routes at any time.
 - j) The PSCS must ensure that all construction areas are adequately secured against third party / public intrusion by means of exclusion zones / physical barriers. In addition the PSCS must ensure that Method Statements are prepared prior to works commencing, and implemented throughout the course of the works.
 - k) For any demolition works a competent person must be appointed to supervise works, adequate safety measures are to be in place (exclusion zones, warning signs etc.) and a detailed method statement is to be prepared by the PSCS prior to works beginning, and implemented throughout the course of the works.
 - l) The contractor and all persons engaged by him to provide services or supplies will comply with the Contractors Developed Safety Plan. The Safety Plan or method statements in all cases will be agreed with the building management before works commence.
 - m) The contractor shall ensure that each worker:
 - i. is in possession of a valid safety awareness registration card referred to in Schedule 4 of the Construction Regulations 2013 (Safepass or equivalent) and,
 - ii. is in possession of an appropriate valid Construction Skills Registration Card referred to in Schedule 5 of the Construction Regulations 2013 if the worker engages in any of the tasks specified in that Schedule, and,
 - iii. has received site-specific safety induction instruction. Government guidelines and restrictions in relation to COVID-19 are also to be covered as part of induction.
 - iv. has completed the Construction Industry Federation (CIF) COVID-19 online induction and is in possession of a valid digital card.

5 Environmental Restrictions and Existing On-Site Risk Safety Hazards

5.1 General Safety Hazards

It is estimated that the programme for the refurbishment works will last 3 months from the date of commencement; however the Client and PSDP intend to allow adequate time for the contractor to complete the works in a safe manner. The works need to be carefully programmed to maintain a management system that protects the safety and health of all employees and other persons not directly involved with the project that might come into contact with the works throughout the contract. See overleaf for a non-exhaustive list of hazards that may be encountered in this project.

The following is a non-exhaustive list of hazards that may be encountered in this project.

General Safety Hazards		
Overhead cables	Hazardous chemicals	Scaffolding
Live Traffic	Hedge Cutting	Sharps
Road Plant and Equipment	Horticultural plant and equipment	Site tidiness
Inappropriate speed on adjacent roads	Hydraulic jacks	Skips
Access/Egress	Infectious disease	Asbestos
Bitumen Boilers	Inspection pits	Spraying
Biohazards	Interaction between road users and workers	Stepladders Trestles and staging
Abrasive wheels	Interfacing with property owners	Storage areas
Cartridge tools	Kitchens/canteens	Stores
Chainsaws	Dust	Fragile Roof Coverings
Compressed air	Ladders	Transport on site
Compressed air power tools	Lifting operations	Use of strimmers
Concrete/steel saws	LPG	Use of chlorine gas
Confined space entry	Manual handling	Use of fluorine gas
Delivery of petrol/diesel	Mobile access platform	Use of woodchipper
Driving vehicles	New employees	Vibration
Electric hacksaw	Noise	Visitors in unsupervised areas
Electrical equipment	Office housekeeping	Visual display units
Electricity	Office safety	Weil's disease
Emergency/night work	Operation of plant and equipment	Welding
Excavations	Outdoor work	Welfare
Field work	Pillar drill	Work at heights
Form work	Pillar grinder	Work at/near water/open tanks
Gas Cylinders	Personal protective equipment	Work in water
Grass cutting	Planting	High groundwater table
Grinding wheel	Pruning	Work adjacent to large fuel storage areas
Harmful agents	general maintenance	Work adjacent to large chemical storage areas
Ground contamination	Steam	Dust explosion
Rotating equipment	Hot surfaces	Bird droppings

5.2 Boundary and Access including Temporary Access

The contractor is not permitted to occupy or obstruct footpaths or driveways in the vicinity site. All access routes must be kept free of any material which could cause a slip/trip/fall accident. Delivery vehicles may not park outside the designated site. The site entrance/access route will be as agreed with the client. Each site entrance/access route will be as agreed with local Management. Please refer to Preliminary Traffic Management Plan for proposed entrance/access route.

5.3 Adjacent Land Uses

The vicinity of the site is generally characterised as an urban environment.

The Contractor must provide a method statement for works in close proximity to adjacent buildings or works as necessary.

5.4 Existing Storage of Hazardous Materials

None envisaged at present however, any hazardous materials encountered during the works is to be carefully stockpiled and stored in a designated location on site with appropriate signage in advance of appropriate removal.

5.5 Location of Existing Services

Refer to Section 2.5.2 above.

Please refer to Appendix E for service provider record drawings.

5.6 Ground Conditions

Refer to Section 2.5.4 above.

5.7 Existing Structures

The National Inventory of Architectural Heritage provides the following description of Markievicz Bridge:

“Seven-arch bridge over river, built 1673. Repointed coursed rubble limestone walls centred on triangular cutwaters to piers to upriver (east) elevation on mass concrete bases having rendered pyramidal capping with margined tooled cut-limestone coping to benchmark-inscribed parapets. Series of seven segmental arches with margined tooled limestone ashlar block-and-start voussoirs (east) or rough hewn limestone voussoirs (west). Sited spanning Garvogue River.”

5.8 Health Hazards

There is a risk associated with the works being carried out at the river location and the associated excavation of soil, which poses the risk of Leptospira or ‘Weils’ disease which is caused by a bacterium found in the urine of rats.

5.9 Asbestos

None envisaged at this stage of the project. Refer to Section 2.5.5 above.

Please also refer to HSA publication “Asbestos Containing Materials (ACM’s) in Workplaces - Practical Guidelines on ACM Management and Abatement”.

(Appendix 1 of the HSA document gives photographic examples of ACM’s. Appendix 2 outlines specific guidance for ACM’s (removal, maintenance etc.)).

5.9.1 Asbestos Removal

Asbestos removal shall not commence until:

- A copy of all notifications to or permits received from the Health and Safety Authority or Local Authority is issued to the PSDP/Client
- Arrangements have been made for disposal of waste at an EPA approved land fill site or waste brokerage.

- c) Arrangements have been made for containing and/or filtering of wastewater resulting from showering and other Removal activities.
- d) Containment, decontamination system, and waste bag out area are appropriately constructed.
- e) Tools, equipment and material waste receptacles are on-site.
- f) Suitable barricades and warning signs are established to restrict access to the work area to removal associated personnel only.
- g) All other preparatory steps have been taken and applicable notices posted, and permits are obtained from the HSA etc.
- h) A visitor and employee log-in log-out system is in place at the job site. All persons entering the site will be required to sign in and sign out.
- i) Sufficient differential pressure is established inside containment area or smoke test verification has taken place and been witnessed by the client or clients representative.

5.10 Lead

Not applicable for the works being undertaken.

However, in the unlikely event of lead being present, the contractor will be responsible for the coordination and safe removal of all lead material using a nominated specialist sub-contractor in advance of being permitted to carry out any demolition / removal works on the site.

5.10.1 Lead Removal

- a) Employees shall be given lead safety information and training by their employer.
- b) All risks to lead workers shall be considered in a written risk assessment by the PSCS before work starts.
 - i. The risk assessment shall include arrangements to deal with accidents, incidents and emergencies such as an uncontrolled release of lead dust or fume etc.
 - ii. The risk assessment shall include details of PPE required but will generally include suitable respiratory protective equipment (RPE), barrier cream, gloves, eye protection, safety footwear and disposable overalls. The worker must be properly trained in the use maintenance and storage of PPE.
- c) Health surveillance shall be undertaken in accordance with the Safety, Health and Welfare (Chemical Agent) Regulations 2001.
- d) The contractor shall implement procedures to prevent the generation of dust. A specialised vacuum (HEPA) shall be used for all loose debris and dust from paint.
- e) Where removal of paint is required, the contractor shall use a wet based method. All resulting material/debris shall be contained to the site area/collected and disposed of in accordance with the Waste Management Act.
- f) The work area shall be kept clean and ensure lead waste is removed at the end of the day.
- g) The contractor shall ensure that neighbouring workers are not contaminated by any work with lead.
- h) Eating and drinking shall only to be carried out in designated areas that are free from lead contamination.
- i) Always have a good standard of personal hygiene, employees shall wash their hands and face and scrub their nails before eating, drinking or smoking and always wash before going home.
- j) Never bring home lead contaminated clothes or equipment as it could contaminate the car, the home or family members with lead.

5.11 Existing Structures Hazardous materials

None envisaged for the works being undertaken.

5.12 Health Risks Arising From Clients Activities

None envisaged at this stage of the project.

6 Significant Design and Construction Hazards

6.1 Design Assumptions and Control Measures

The following general hazards may be encountered and need to be taken into account by the Contractor:

Hazard	Control Measure
Drowning	<p>The contractor must ensure that site crews are wearing personal flotation devices during operations in the river.</p> <p>Contractor to ensure that personnel do not enter the river on their own. A minimum of two site personnel must be present and maintain a line of sight with one another at all times.</p>
Fluctuations in River Levels / Flow	<p>Due the ecological constraints associated with the Works, construction/demolition activities will be undertaken during the Fisheries Season (July 1st - September 30th). Therefore, the Works shall be undertaken during periods coinciding with (typically) the driest period of weather.</p> <p>Fuels, oils, greases and hydraulic fluids will be stored in bunded compounds at least 50m from watercourses. All inactive plant/materials to be similarly stored remote from the watercourse.</p> <p>Regular monitoring of weather patterns and river levels to be undertaken during the course of the day during the works period.</p>
Conflict between Contractor Operations and Subcontractor / Client / Third Part Activities	<p>Contractor shall generally work within the designated areas and follow rules stipulated by the Client, and carefully manage the movement of personnel and materials entering and leaving the work areas.</p> <p>Contractor to manage movement of personnel and works on and around the bridge. Risk assessments for each area of work to be completed by contractor to ensure a conflict of works does not occur.</p> <p>Appropriate traffic management systems to be set in place to mitigate conflict with public traversing the bridge (vehicle and pedestrian)</p>
Services	<p>The contractor shall satisfy themselves as to the accuracy of any information which may be provided, prior to any work on services. No service may be interrupted without prior written approval of the service owner.</p>
Dust, Noise & Vibration	<p>The contractor must minimise the potential nuisance from dust, noise and vibration.</p>
Working at Height	<p>Is considered to be a particular risk unless the contractor complies fully with the working at height regulations and such codes of practice as the HSA Code of Practice for Safety in Roof Work 2016 and HSA Code of Practice for Access and Working Scaffolds 2008.</p>
Safe System of Work	<p>The HSA document: Safe System of Work Plan (SSWP)</p>

6.2 Arrangements for Co-Ordination of Ongoing Work and Handling Design Changes

- a) The PSDP will review the Safety Plan as it is developed by the PSCS and ensure that residual risks identified in the Preliminary Safety & Health Plan are adequately controlled. The PSDP will channel any queries to the original designers as appropriate.
- b) Value engineering or other proposals submitted by the Contractor will be considered and accepted only if they introduce positive safety features. All proposals will therefore be submitted with completed design risk assessments.
- c) Design changes arising on the Client side will be subject to the normal risk minimisation design process. Design changes will be implemented by means of a written Change Order / Determination. The PSDP will liaise as necessary with the relevant designer(s) and the PSCS to carry out the design risk assessment.

6.3 Significant Health and Safety Risks Likely to be Encountered - Works Involving Particular Risks

6.3.1 Works which put persons at work at risk of burial under earthfalls, engulfment in swampland or falling from a height, where the risk is particularly aggravated by the nature of the work or processes used or by the environment at the place of work or site.

- a) It is not possible to eliminate this particular risk as the works involve:
 - i. Excavations at bridge abutments and piers
 - ii. Works at height associated with masonry cleaning and repointing
- b) Risks associated with this hazard are deemed to be within a reasonably competent contractor's ability to foresee and deal with.
- c) In this regard, collective measures are considered more appropriate than individual harness systems (which must be certified before use). These risks will be controlled by the implementation of the normal regulations/codes of practice (HSA Code of Practice for Safety in Roof Work 2016) and safe working systems.
- d) Adequate precautions should be taken by the contractor to safeguard operatives when working at height and protect the area below where operatives are working to prevent injury or accident to others by items that are dropped.

6.3.2 Works which put persons at risk from chemical or biological substances constituting a particular danger to the safety and health of such persons or involving legal requirements for health monitoring.

- a) The works may involve exposure to:
 - i. Bitumen & Asphalt
 - ii. Glues, Solvents and Sealants
 - iii. Silica
 - iv. Lead
 - v. Man Made Mineral Fibres
 - vi. Asbestos
 - vii. Fuel/Oil
 - viii. Gas Oil
 - ix. Chemicals
 - x. Blue Cat Diesel Additive
 - xi. Hydraulic Oil
 - xii. Engine Oil

- b) Work on foul drainage lines and septic tanks will pose a risk of exposure to four groups of pathogens potentially present in such wastes: bacteria, viruses, protozoa and helminths. Appropriate PPE and hygiene practice must be employed.
- c) Workers are potentially at risk from exposure (infections) to various biological agents, which may include:
 - i. Leptospira or 'Weils' disease which is caused by a bacterium found in the urine of rats.
 - ii. Health risks associated with coming into contact with pigeon droppings (e.g. histoplasmosis, cryptococcosis, and psittacosis).
 - iii. Covid-19 which is caused by the coronavirus is an illness that can affect your lungs and airways.
- d) Employers are required, under the Safety, Health and Welfare at Work (Biological Agents) Regulations, to assess the risk of 'incidental exposure' to biological hazards, which would include the examples above. Good occupational hygiene practices should be implemented.

6.3.3 Work with ionising radiation requiring the designation of controlled or supervised areas as defined in Directive 96/29/Euratom4.

- a) None envisaged within the scope of works to be undertaken in this project.

6.3.4 Works near high voltage power lines.

- a) The contractor is to carry out all necessary precautions to locate all the underground services. Any new services encountered which have not been highlighted previously are to be immediately reported to the permanent works designer & PSDP before the works progress. Please refer to the Code of Practice of Avoiding Danger from Underground Services published by the Health and Safety Authority. Reference should also be made to the "Avoidance of Electrical Hazards when digging" and "Avoidance of Electrical Hazards when Working Near Overhead Electric Lines" published by ESB will mitigate the risks.
- b) Contractor to contact all service providers in advance of excavation works. Method statement to be agreed with the PSDP/Employer's Representative in advance of the works. All ground openings to be initiated using open hole cautious digging to detect services. Hand digging only immediately adjacent to services.
- c) Contractor to ensure all supplies are isolated before commencing works.
- d) Observation, detection and application of the "Code of Practice for Avoiding Danger from Underground Services", published by the Health & Safety Authority, the "Avoidance of Electrical Hazards when Digging" and "Avoidance of Electrical Hazards when Working Near Overhead Electric Lines", published by the ESB will mitigate the risks.

6.3.5 Work exposing persons at work to the risk of drowning, for example: works significantly below water table, work to bridges, culverts, work on or near the sea, lakes, ponds, reservoirs.

- a) The site location is within the Garavogue River. Rising water levels due to increased river flows are a hazard at the bridge location. This can lead to fast flow of water through the river channel. The presence of this watercourse represents a Particular Hazard to the works that must be actively managed and mitigated throughout the entirety of the works.
- b) Excavations below ground level may result in collection of surface water during rainfall and standing water in the excavations.
- c) Contractor is to cover such excavations and all excavations to be fenced off.
- d) Appropriate pumping and backup systems are to be used to eliminate the risk. Water levels to be maintained below the excavation level.

6.3.6 Work on wells, underground earth work and tunnels, for example: excavated wells, underground earth works, tunnels, underpinning.

- a) None envisaged within the scope of works to be undertaken in this project.

6.3.7 Work carried out by divers at work having a system of air supply

- a) None envisaged within the scope of works to be undertaken in this project.

6.3.8 Work carried out in a caisson with a compressed-air atmosphere.

- a) None envisaged within the scope of works to be undertaken in this project.

6.3.9 Work involving the use of explosives.

- a) None envisaged within the scope of works to be undertaken in this project.

6.3.10 Work involving the assembly or dismantling of heavy prefabricated components for example: heavy steel structural frame elements, heavy pre-cast concrete frame elements or heavy prefabricated plant items.

- a) This project will involve the Assembly/Dismantling of heavy bags of aggregate and rock armour. The Contractor is to use safe methods of work when doing so. Works to be constructed in a logical bottom-up sequence, minimising temporary works.

6.3.11 Work Adjacent to Fuel Storage Facilities.

- a) None envisaged within the scope of works to be undertaken in this project.

6.3.12 Risk of Hitting Buried Services During Excavation Works

- a) The contractor must take due care/caution to avoid potential harm/damage. The contractor is to carry out all necessary precautions to locate all underground services. Please refer to the Code of Practice of Avoiding Danger from Underground Services published by the Health and Safety Authority. Reference should also be made to the "Avoidance of Electrical Hazards when digging" and "Avoidance of Electrical Hazards when Working Near Overhead Electric Lines" published by ESB.
- b) Contractor to contact all service providers in advance of excavation works. Method statement to be agreed with the PSDP/Employer's Representative in advance of the works.
- c) All ground openings to be initiated using open hole cautious digging to detect services. Hand digging only immediately adjacent to services.
- d) Any new services encountered which has not been highlighted previously are to be immediately reported to permanent works designer & PSDP before the works progress.
- e) Contractor to ensure all supplies are isolated before commencing works.

6.3.13 Noise, vibration, fumes and excessive dusting

- a) Noise and vibration shall be kept to a minimum and the Contractor shall take all necessary steps to abate these to avoid inconvenience to others.
- b) Attention is drawn to the recommendations given in BS 5228-1:2009: "The Code of practice for noise and vibration control on construction and open sites. Noise" and BS 5228-2:2009: "Code of practice for noise and vibration control on construction and open sites. Vibration" also to the requirements of the Safety, Health and Welfare at Work (General Application) Regulations 2007-2010.
- c) Wheel washing facility to be provided at the exit point from the site.

6.3.14 Risk of Temporary Structural Instability

- a) Risk associated with collapse of any element of the structure during construction due to any temporary instability occurring during the coordinated construction sequence.
- b) Main contractor construction sequence to be agreed with specialist suppliers where applicable and the design team.
- c) Temporary propping and temporary works design to be designed by the temporary works designer. Temporary works certificate to be approved by all relevant parties before temporary works can be implemented.
- d) Contractor/temporary works designer to address issues of temporary instability to structural elements.

6.3.15 Musculoskeletal Injury and ill Health from Manual Handling

- a) Please refer to Manual Handling in the Irish Construction Industry- Summary Report published by the Health and Safety Laboratory for task-specific recommendations to reduce the risk of musculoskeletal injury and ill health from manual handling.

https://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Manual_Handling_in_the_Irish_Construction_Industry_-_Summary_Report.pdf

6.3.16 Site Access

- a) Site Access from John F. Kenedy Parade, which will be subject to a road closure and associated diversions.
- b) Adequate signage is to be provided with necessary protection measures taken to ensure adjacent roads and footpaths are kept clear of construction materials.
- c) Traffic / pedestrian management is also required during the works. A Traffic Management Plan is to be put in place in accordance with the Department of the Environment, Traffic Signs Manual, Chapter 8.

6.4 Materials Requiring Particular Precautions

- a) All building materials shall be handled strictly in accordance with the relevant Material Safety Data Sheet.
- b) The works may involve exposure to:
 - i. Bitumen & Asphalt
 - ii. Glues, Solvents and Sealants
 - iii. Silica
 - iv. Lead
 - v. Man Made Mineral Fibres
 - vi. Asbestos
 - vii. Fuel/Oil
 - viii. Gas Oil
 - ix. Chemicals
 - x. Blue Cat Diesel Additive
 - xi. Hydraulic Oil
 - xii. Engine Oil

6.5 Safety of Non Construction Personnel

Main elements of public safety to be addressed in the developed construction Safety Plan and should include procedures in regard to the following (Note this list is not exhaustive):

- a) Site access/egress
- b) Construction works site entrance
- c) Danger to visitors while moving around the site
- d) Work adjacent to occupied areas
- e) Out of hours work to be planned to ensure public safety
- f) Material storage should not cause trip hazards
- g) All waste materials to be secured

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- h) Removal of asbestos (including storage, transport and disposal etc.)

6.6 Specific Measures for Reducing Risk

It is envisaged at the Design Stage that the following non-exhaustive list of specific measures for reducing risks will be addressed in the Construction Stage Health and Safety Plan:

- a) The 2013 Safety, Health and Welfare at Work (Construction) Regulations and all relevant amendments will apply.
- b) The 2007 Safety, Health and Welfare at Work (General Application) Regulations and 2012 Safety, Health and Welfare at Work (General Application) (Amendment) Regulations will apply.
- c) All relevant Irish Codes of Practice and Guidelines will be applied, and where none exist, the relevant UK or EU document will be used.
- d) All personnel operating any equipment shall be trained in its use.
- e) All personnel of whatever function who are present at the works must wear appropriate PPE.
- f) Suitable firefighting equipment shall be provided and maintained on the site. A fire watch must be maintained for an appropriate period after any hot works.
- g) Provision of adequate ear protection when working with or near machinery.
- h) Securing of the site against unauthorised access.
- i) Labelling of dangerous chemical substances and other substances and provision of appropriate protective masks and clothing. Providing secure storage facilities for hazardous materials.
- j) Procedures will be implemented to ensure that all specialist construction activities are planned and executed by suitably qualified and experienced personnel.
- k) All Contractors' staff shall be made aware of the hazards mentioned above before commencing work onsite.

6.6.1 Requirements for Temporary Works

Where the works include elements of design (including the design of temporary works to ensure safe working at height), the Contractor will also be considered a designer for the purpose of the Safety Health & Welfare at Work (Construction) Regulations 2013. The Project Supervisor (Construction) must ensure that the design of all temporary works and other elements be carried out by a competent engineer and are carried out in accordance with the requirements of the Safety Health & Welfare at Work (Construction) Regulations 2001 & 2013.

It is recommended that an overall temporary works co-ordinator be appointed to oversee and be responsible for the management and co-ordination of all temporary works (design & construction) onsite.

Temporary Works in this contract are expected to include, but are not limited to:

- a) Barriers or fall restraint systems to provide safe working conditions at unprotected edges.
- b) Scaffolding for working at height.
- c) Traffic management

6.6.2 Requirements for Method Statements

The PSDP recommends that all activities are subject to agreed Method Statements.

- a) Access, set down/storage areas, parking and sanitary facilities.
- b) Security.
- c) Overall management procedures for the design and construction of temporary works.
- d) Overall control, management of hot works and related fire safety requirements.
- e) Overall phasing, sequencing of works elements, taking into account maintenance of fire escapes and evacuation routes and avoidance of nuisance.

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- f) With regards to asbestos, the Contractor shall provide a method statement and Removal plan with risk assessments and procedures covering each of the identifiable asbestos removal areas. All procedures used must provide containment of asbestos debris and not allow airborne contamination of adjacent areas.
 - g) With regards to lead, the Contractor shall provide a method statement and Removal plan with risk assessments and procedures covering each of the identifiable lead removal areas. All procedures used must provide containment of lead debris and not allow airborne contamination of adjacent areas.

6.7 Potential Hazards that require to be assessed by the Design Team

The PSDP recommends that all activities are subject to agreed Method Statements.

- Working adjacent and over a substantial watercourse (Garavogue River)
- Working adjacent to/on a live public road
- Interface between construction works and neighbouring residents

7 Safety and Health for the Construction Stage

7.1 Responsibilities

Regulation 16, Duties of the project supervisor for the construction stage, safety and health plan.

The project supervisor for the construction stage shall:

- a) Further develop, as necessary, before the commencement of the construction work, the safety and health plan for the construction site prepared under Regulation 12, in this Regulation called “the plan”.
- b) Make adjustments to the plan where required to take account of the progress of the work and any changes which occur.
- c) Take account as regards to the plan, at all times during the construction stage, of section 20 of the Act and of other work activities taking place on the site.
- d) Include in the plan specific measures concerning work which involves a particular risk including, but not limited to, any risk referred to in Schedule 1;
- e) Include in the plan rules for the execution of the construction work, which rules are required for the purposes of the safety, health and welfare of persons at work; and
- f) Ensure that the plan and any rules contained in it are in writing and that they are brought to the attention of all contractors and other relevant persons who may be affected by them.

7.2 Contents of Safety and Health Plan

The following items should be addressed in Health and Safety Plan (note list is not exhaustive):

7.2.1 General

- a) Description of Project.
- b) Health and Safety objectives for Project.
- c) Site Location Map.
- d) Site Layout drawing(s).
- e) Site Working hours.

7.2.2 First Aid / Emergency Procedures and Provisions

- a) First aid personnel.
- b) Emergency telephone numbers.
- c) First aid procedures, facilities and associated signage.
- d) Site evacuation procedures and assembly points.
- e) Hazardous Materials Data Sheets.

7.2.3 Management

- a) Project Resources and Programme.
- b) Health and Safety Management Systems.
- c) Health and Safety Site Rules / Induction Register.
- d) Sub-Contractors' Health and Safety Policies.
- e) Health and Safety Authority / Enforcement and Prohibition Notices.
- f) Monitoring and Review of Project.

7.2.4 Procedures

- a) Information and training/induction onsite.

- b) Monitoring of Compliance.
- c) Health and Safety Plan updates and liaison with Project Supervisor (Design) and Client.
- d) Development of Contractor Design items and co-ordination with Design Team.
- e) Hoarding and inspection of hoarding and access control.
- f) Traffic management.
- g) Waste storage and removal.

7.2.5 Site Rules

- a) Contractor to include site rules in Safety and Health Plan.

7.2.6 Health and Safety Risks

- a) Risk Assessments.
- b) Method Statements.
- c) Shoring of banks on excavations 1.25m or deeper.
- d) Protection and access for works at height.
- e) Craning and lifting of structural elements.
- f) Installation of roofs.
- g) Slip, trips and falls.
- h) Lifting and Manual Handling.
- i) Electrical Systems Manual.
- j) Mechanical Systems Manuals.
- k) Plant and Equipment Safety Certificates (fall protection).

7.2.7 Particular Risks to Health and Safety

- a) Risk Assessments.
- b) Method Statements.
- c) Project Related Permits.
- d) Design Variations.

7.2.8 Welfare Provisions

- a) Storage facilities.
- b) Sanitary facilities.
- c) Dining facilities.

8 Safety File

8.1 Responsibilities in Relation to the Safety File

8.1.1 Regulation 8 - Duties of Clients- Safety File

- 1) A client shall keep available:
 - a. Any safety file referred to in Regulation 13 or 21, and
 - b. Any information delivered to a client in relation to the file for inspection by any person who may need information in the file for:
 - i. The purpose of compliance by that person with any duties imposed under the relevant statutory provisions, or
 - ii. For that person's own information when carrying out any construction work on the structure to which the safety file relates.
- 2) It is sufficient compliance with paragraph (1) by a client and every subsequent owner of a structure who disposes of the client's or owner's interest in the structure involved if the client or subsequent owner delivers the safety file for that structure to the person who acquires the interest.
- 3) A person to whom a safety file is delivered in accordance with paragraph (2) shall keep the safety file available for inspection in accordance with paragraph (1).

8.1.2 Regulation 13 - Duties of Project Supervisor for the Design Process

The project supervisor for the design process shall:

- 1) Prepare a written safety file appropriate to the characteristics of the project, containing relevant safety and health information, including any information provided under Regulation 21, to be taken into account during any subsequent construction work following completion of the project, and
- 2) Promptly deliver the safety file to the client on completion of the project.

8.1.3 Regulation 21 - Duties of Project Supervisor for the Construction Stage

The project supervisor for the Construction Stage shall:

- 1) Coordinate arrangements among contractors to ensure the provision of relevant information, in writing, necessary for the project supervisor for the design process to complete the safety file referred to in Regulation 13, monitor the implementation of the arrangements and take any necessary corrective action, as set out in Regulation 20, and
- 2) Provide in writing to the project supervisor for the design process all relevant information necessary for that project supervisor to complete the safety file referred to in Regulation 13.

8.2 Format of the Safety File

The format of the safety file is to be agreed and approved with the Client.

The Safety File materials, including as-built or as-installed drawings in Autocad and PDF format, should be presented both in hard copy (1nr) and on USB key (1nr) to the PSDP.

- The Hardcopy shall be presented in 4-hole A4 presentation binder which shall contain:
 - A Table of Contents and clearly tabbed sections.
 - A drawing register.
 - All drawings to be minimum A3 size colour prints. Drawings to be folded and presented in individual clear plastic pockets.
 - PSCS is responsible for printing the entire safety file

8.3 Delivery of Safety file and its Constituents

The Safety File should be delivered to the Client by the Project Supervisor Design Process (PSDP) at Taking-Over Certificate stage. In order to achieve this objective, the PSCS must provide all the required materials not later than 2 weeks prior to this date.

The PSDP will accept material on an ongoing basis during the works; however the PSDP will not accept extraneous material/large product brochures which require culling to identify a specific product and its operational/maintenance requirements.

8.4 Content of Safety File

The purpose of the Safety File is to record information for the end user of the facility, focusing on any significant health and safety risks that will need to be addressed during subsequent operation, maintenance, repair and other construction work. The information must be relevant and readily accessible to users.

A list of the requirements for a Safety File is set out below in a checklist. This is an indicative list which may not be relevant to every project. The PSDP will identify the required information in each case.

8.4.1 Safety Checklist Details

8.4.1.1 Project Information

- a) Detailed project description
- b) Site location
- c) Planning documents including grant of planning, planning drawings, planning reports etc.
- d) Project directory detailing Name, address, telephone, fax, email & website address and company contact of contractor, sub-contractors, temporary works designers, the design team and details of any other consultants
- e) Details of all authorities and public utilities contacted during the project, including copies of all consents and approvals obtained. (Name, address, telephone, fax, email & website address and company contact if available)

8.4.1.2 Health and Safety

- a) AF1 notification
- b) AF2 notification
- c) Preliminary Health and Safety Plan
- d) Construction Stage Health and Safety Plan
- e) Specific hazards in maintenance and repair
 - i. Details of all construction methods and materials that may present significant residual hazards with respect to cleaning, maintenance, deconstruction, recycling and demolition.
 - ii. Details of any substances used which may need risk assessment during future repair or refurbishment. Examples include mineral wool or similar insulation, surface coverings that may be toxic, etc.
 - iii. Details and working loads of safety provisions included in the building such as harness attachments, roof access routes, fixed ladders, lifting appliances, window cleaning arrangements etc.
 - iv. Lock out provisions for temporary repair or maintenance of hazardous energy including electrical services, machinery, mechanical plant etc.
 - v. Information and risk assessments for areas of the building where maintenance or repair poses a specific risk.
- f) Statutory Certificates and legal documentation - Fire Certificate and conditions; Disability Access Certificate [DAC] and conditions

-
- g) Asbestos removal
 - h) Hazardous material removal
- 8.4.1.3 Design drawings and specification
- a) Civil and structural engineering drawings and specifications
 - b) Architect drawings, specifications and schedules
 - c) Mechanical and electrical drawings and specifications
 - d) Any other consultant drawings and specifications
 - e) Ground investigation report and surveys
 - f) Lift specifications
 - g) Precast concrete drawings and specifications
 - h) Steel drawings and specifications
- 8.4.1.4 Building services
- a) Mechanical O&M manual
 - b) Electrical O&M manual
 - c) Lift O&M manual
- 8.4.1.5 Construction materials
- a) Fit out and finishes (including certification, maintenance, warranties & associated drawings)
 - b) Shell and core (including certification, maintenance, warranties & associated drawings)
 - c) Siteworks (including certification, maintenance, warranties & associated drawings)
 - d) Mechanical and electrical (including certification, maintenance, warranties & associated drawings)
 - e) Any operational requirements and constraints of a general nature that are not covered elsewhere is the Safety File.
 - f) Maintenance procedures and schedules
- 8.4.1.6 Certification
- a) Substantial completion certificates
 - b) Subcontractors letter of confirmation
 - c) Product warranties
 - d) Building air tightness certification
 - e) Electrical certification
 - f) Mechanical certification
 - g) BCAR certification
 - h) CCTV survey report & footage
 - i) Drainage testing
 - j) Watermain testing
- 8.4.1.7 As Built Drawings
- a) Drainage as built
 - b) Electrical as built
 - c) Mechanical as built
 - d) M&E site services as built

e) Watermain as built

8.4.1.8 Sign Off on Safety File

- a) The Project Supervisor Design Stage must;
- i. Confirm that the Safety File has been checked for accuracy and relevance
 - ii. Confirm that the file provides satisfactory information on the relevant maintenance issues within the scope of the contract
 - iii. Confirm that the as-built and as-installed drawings are, as far as they are aware, an accurate representation of the completed project

Appendix A (AF1 Form)

Approved Form (AF 1)

Regulation 10

Particulars to be notified by the Client to the Health and Safety Authority before the design process begins

NOTE:

This form is to be used to notify of any project covered by the Safety, Health and Welfare (Construction) Regulations 2013, which will last longer than 30 days or 500 person days. It can also be used to provide changes in appointments since initial notification of projects.

Any day on which construction work is carried out (including holidays and weekends) should be counted, even if the work on that day is of short duration. A person day is one individual, including supervisors and specialists, carrying out construction work for one normal working shift.

This Notification is to be made by Registered Post to HSA, Metropolitan Building, James Joyce Street, Dublin 1; or as may be directed by the Authority.

- 1 Client:** Provide name, full address, telephone number and e-mail address for the Client. If more than one Client, please attach details of all Clients on a separate sheet.

Name:	Sligo County Council		
Address:	County Hall, Riverside Co. Sligo F91 Y763		
Telephone:	+353 (0)71 911 1111	E-Mail:	ooconnor@sligococo.ie

- 2 Project Supervisor Design Process and Health & Safety Coordinator:** Provide name, full address, telephone number and e-mail address for the PSDP and Health & Safety Coordinator for the Design Process.


PSDP Name:	PUNCH Consulting Engineers	H&S C. Name:	Leonard Brennan
Address:	Carnegie House, Library Road, Dun Laoghaire, Co. Dublin	Address:	Carnegie House, Library Road, Dun Laoghaire, Co. Dublin
Telephone:	01 271 220	Telephone:	01 271 220
E-Mail:	dublin@punchconsulting.com	E-Mail:	lbrennan@punchconsulting.com

- 3 Project Supervisor Construction Stage and Health & Safety Coordinator, if known:** Provide name, full address, telephone number and e-mail address for the PSCS and Health & Safety Coordinator for the Construction Stage.

PSCS Name:	to be confirmed	H&S C. Name:	
Address:		Address:	
Telephone:		Telephone:	
E-Mail:		E-Mail:	

- 4 Information on Construction Work:** Please provide your details of the following.

Description of Project:	Refurbishment works to Markievicz Bridge, consisting of pier scour repairs, riverbed scour repairs, removal of vegetation and repointing of masonry.
Exact Address of Construction Site:	Bridge Street, Sligo Town, Co. Sligo

Signed:		by or on behalf of the Client
Position:	H&S Coordinator	Date: 13/01/2025

Appendix B (Sample Permanent & Temporary Works Design Certificates)



Form: SHWP1

Permanent Works Designer's Certificate

(For use in connection with the Safety Health and Welfare at Work (Construction) Regulations 2013 by a designer of any element(s) of the permanent works of a project, including specialist suppliers/contractors/others who design any element(s) of the permanent works. Nothing in this certificate shall be construed as imposing on the designer any liability whether in negligence, for breach of duty or otherwise that would not otherwise attach and the certificate is provided on this basis)

PSDP's Certificate Ref. No: _____

1.	Project:	
2.	Designer:	
3.	Designer's client:	
4.	Our appointment was/is in respect of: (eg architectural; structural; M&E...design services)	
5.	Elements/features of the permanent works which we were/are appointed to design (subject to 8 below).	
6.	Main design codes adopted: (if applicable)	
7.	Current project drawings and specifications (schedule may be appended)	
8.	Specialist suppliers/contractors/others who must design elements of the permanent works which we were/are to integrate within the overall permanent works design. (if applicable; schedule may be appended)	
9.	Were particular erection or construction sequencing, or particular risk control measures, which are unusual for the type of project and which would not be apparent to a competent contractor, assumed by us during design? If yes, where are these described?	<input type="checkbox"/> yes <input type="checkbox"/> no

We hereby confirm that we have to date carried out, and will continue to carry out as necessary, the design of those parts of the works which we are appointed to design exercising reasonable professional skill, care and diligence and with due regard to our duties under the Safety Health and Welfare at Work Act 2005 and under the Safety Health and Welfare at Work (Construction) Regulations, 2013 (the 'Regulations') in that we:

1. have taken account of the General Principles of Prevention and any existing Safety File,
2. have provided the PSDP & PSCS as appropriate with relevant information as required by the Regulations, and
3. have cooperated with the PSDP & PSCS and with other designers as necessary.

Signed:

for and on behalf of (Designer)

Date:

We hereby confirm that we have coordinated the activities of the designer named above and the other designers on the project in respect of the taking account of the General Principles of Prevention during the design of the element(s) described above with due regard to our duties as PSDP under the Safety Health and Welfare at Work (Construction) Regulations, 2013.

Signed:

for and on behalf of (PSDP)

Date:



Temporary Works Designer's Certificate

(For use in connection with the Safety Health and Welfare at Work (Construction) Regulations 2013. Nothing in this certificate shall be construed as imposing on the designer any liability whether in negligence, for breach of duty or otherwise that would not otherwise attach and the certificate is provided on this basis)

PSDP's Certificate Ref. No: _____

1.	Project:	
2.	Designer:	
3.	Designer's client:	
4.	Elements/features of the temporary works for which we were/are appointed.	
5.	Main design codes adopted: (if applicable)	
6.	Drawings: (schedule may be appended)	
7.	The intended construction sequence is detailed in:	
8.	Requirements for temporary stability, propping, bearing, bracing, loading restrictions etc are detailed in:	
9.	Certificate(s) by permanent works designer(s) which we have taken particular account of in respect of its/their Item 9: (if applicable; quote the PSDP's Certificate Ref. No.)	

We hereby confirm that we have to date carried out, and will continue to carry out as necessary, the design of those parts of the works which we are appointed to design exercising reasonable professional skill, care and diligence and with due regard to our duties under the Safety Health and Welfare at Work Act 2005 and under the Safety Health and Welfare at Work (Construction) Regulations, 2013 (the 'Regulations') in that we:

1. have taken account of the General Principles of Prevention and any existing Safety File,
2. have provided the PSDP & PSCS as appropriate with relevant information as required by the Regulations, and
3. have cooperated with the PSDP & PSCS and with other designers as necessary.

We confirm we have received all information and cooperation which we required from the designer(s) noted in Item 9.

Signed:

for and on behalf of (temporary works designer)

Date:

We hereby confirm that we have coordinated the activities of the designer named above and the other designers on the project in respect of the taking account of the General Principles of Prevention during the design of the element(s) of the works described above with due regard to our duties as PSDP under the Safety Health and Welfare at Work (Construction) Regulations, 2013.

Erection of the Temporary Works may proceed, subject to the provision of a Temporary Works Method Statement agreed by the Contractor, Temporary Works Erector and PSCS as being adequate.

Signed:

for and on behalf of (PSDP)

Date:

Appendix C (Designer Risk Assessments)

Project Title	Markievicz Bridge Repairs	Prepared	KOR	Approved	PC
Project Number	224138	Date:	17/04/2025	Client	Sligo County Council
Assessment Revision	C01	Project Status	Planning Stage		

Only refer onwards risks that;
a) Are relevant to other designers
b) A reasonably competent contractor could not foresee.
It is the duty of the Client to appoint a reasonably competent Contractor

No.	Hazard identified (SCHEDULE 1 PARTICULAR RISKS)	Applicable to project?		Who is at risk?			Within PUNCH scope and reasonably practicable to eliminate risk?		Using "Principles of Prevention" what action is proposed to either <u>eliminate</u> or <u>control</u> risk?	Refer risk information onwards to:
		Yes	No		Yes	No	Yes	No		
1	Falling from a height, burial or engulfment where work is particularly aggravated by; <ul style="list-style-type: none"> The nature of the work Or process used Or by the environment at the place of work 	✓		Contractor	✓			✓	No works can be commenced at height (temporary scaffolding) until the contractor provides a safe system for access and movement on the temporary works platforms. In this regard, collective measures are considered more appropriate than individual harness systems (which must be certified before use). These risks will be controlled by the implementation of the normal regulations/codes of practice (HSA Code of Practice) and safe working systems.	Contractor and Client
				Public	✓		✓			
				Maintenance	✓			✓		
2	Risk for Chemical or Biological Substances or where the activity has a statutory requirement for health monitoring	✓		Contractor	✓			✓	Risk of Weil's disease contaminated river water. All site personnel to wear appropriate PPE, waders, etc. Contractor is required, under the Safety, Health and Welfare at Work (Biological Agents) Regulations, to assess the risk of 'incidental exposure' to biological hazards. Good occupational hygiene practices should be implemented, e.g. appropriate wash facilities to be provided to site staff prior to eating.	Contractor
				Public		✓				
				Maintenance	✓			✓		
3	Ionisation Radiation (Activities defined in Directive 96/29/Euratom)		✓	Contractor						
				Public						

No.	Hazard identified (SCHEDULE 1 PARTICULAR RISKS)	Applicable to project?		Who is at risk?			Within PUNCH scope and reasonably practicable to eliminate risk?		Using "Principles of Prevention" what action is proposed to either <u>eliminate</u> or <u>control</u> risk?	Refer risk information onwards to:
		Yes	No		Yes	No	Yes	No		
				Maintenance						
4	Work near High Voltage Power lines (1Kv AC or 1.5Kv DC)	✓		Contractor	✓		✓		<p>The contractor must take due care/caution and assume electric cables are within the vicinity to avoid potential harm/damage. The contractor is to carry out all necessary precautions to locate all the underground services. Please refer to the Code of Practice of Avoiding Danger from Underground Services published by the Health and Safety Authority and the ESB Networks Avoidance of Underground Electrical Hazards.</p> <p>All available information on services in the vicinity of the site is to be made known to the Contractor. Refer to Appendix E of the PSHP.</p>	Contractor
				Public	✓		✓			
				Maintenance		✓	✓			
5	Risk of Drowning	✓		Contractor	✓			✓	<p>Works within the river location only to be undertaken during periods of acceptable river flow. Please note that timing of the Works during Fisheries season (for reasons of environmental sensitivity) coincides with lower river flows.</p> <p>All site personnel to wear personal flotation devices during operations in the river. Contractor to ensure that personnel do not enter the river on their own. A minimum of two site personnel must be present and maintain a line of sight with one another at all times.</p>	Contractor
				Public	✓		✓			
				Maintenance	✓			✓		

No.	Hazard identified (SCHEDULE 1 PARTICULAR RISKS)	Applicable to project?		Who is at risk?			Within PUNCH scope and reasonably practicable to eliminate risk?		Using “Principles of Prevention” what action is proposed to either <u>eliminate</u> or <u>control</u> risk?	Refer risk information onwards to:
		Yes	No		Yes	No	Yes	No		
									Entry of public into the works area to be prevented with effective site hoardings where applicable.	
6	Wells, Underground earthworks or Tunnels		✓	Contractor						
				Public						
				Maintenance						
7	Divers requiring Air Supply		✓	Contractor						
				Public						
				Maintenance						
8	Caissons with Compressed Air Atmosphere		✓	Contractor						
				Public						
				Maintenance						
9	Explosives		✓	Contractor						
				Public						
				Maintenance						
10	Assembly/Dismantling Heavy Prefabricated Components	✓		Contractor	✓			✓	Elements associated with the scaffolding and working platforms will require assembly and dismantling. Appropriate lifting and transporting machinery is to be used for the erection and delivery of the bags of aggregate and rock armour.	Contractor
				Public		✓				
				Maintenance		✓				

No.	Hazard identified (ADDITIONAL PARTICULAR RISKS)	Who is at risk?		Within PUNCH scope and reasonably practicable to eliminate risk?		What action is proposed to either <u>eliminate</u> or <u>control</u> risk?	Refer risk information onwards to:
		Yes	No	Yes	No		
11	Rising water levels	Contractor	✓		✓	Works within the river location only to be undertaken during periods of acceptable river flow as appropriate.	Contractor
		Public		✓			
		Maintenance	✓		✓	Works shall be undertaken during periods of dry weather. Regular monitoring of water levels to be undertaken during the course of the work. All materials and plant to be removed from the river overnight.	
12	Slips, Trips and Falls due to the uneven and slippery river bed and river currents. Also linked to risk of drowning even in shallow waters.	Contractor	✓		✓	Contractor to ensure appropriate footwear is used by site personnel working in the river bed.	Contractor
		Public		✓		Refer to Item 5 above.	
		Maintenance	✓		✓		
13	Site Vehicles	Contractor	✓		✓	Site compound, including area for delivery of materials and area for lifting operations to be appropriately demarcated and closed off from the public.	Contractor
		Public	✓		✓		
		Maintenance				Contractor to introduce appropriate traffic management to mitigate risks to the public and Council staff associated with the construction activities.	
14	Lifting of equipment and materials into river channel	Contractor	✓		✓	The Contractor must ensure the appropriate use of banksmen to direct the lifting and placement of equipment within the channel.	Contractor
		Public	✓		✓		
		Maintenance		✓		Appropriate exclusions zones to be prepared and cleared in advance of lifting operations.	

No.	Hazard identified (ADDITIONAL PARTICULAR RISKS)	Who is at risk?		Within PUNCH scope and reasonably practicable to eliminate risk?		What action is proposed to either <u>eliminate</u> or <u>control</u> risk?	Refer risk information onwards to:
		Yes	No	Yes	No		
15	Construction Traffic	Contractor	✓		✓	Site hoarding must provide adequate sight lines at construction entrance. No reversing manoeuvres should be permitted at construction entrance and a site operative should be present for vehicular movements at entrance. Contractor to produce construction traffic management plan highlighting method statements to take into account segregation, monitoring and managing of traffic interaction. Adequate Signage to be provided in accordance with CH 8 TSM. Manoeuvring of construction traffic and interaction with private vehicles is to be controlled. Assessment of site lighting required to ensure site well-lit for construction period.	Contractor
		Public	✓		✓		
		Maintenance		✓			
16	Accumulation of debris on temporary works structure	Contractor	✓		✓	Temporary works to be monitored on a minimum weekly basis for identification and removal of accumulated river materials on the structure. Inspections to be undertaken more regularly during and immediately after storm events.	Client
		Public		✓			
		Maintenance	✓		✓		
17	Manual Handling of Heavy Items	Contractor	✓		✓	There should be no manual handling of items weighing more than 25kg. Concrete blocks should be stored either indoors or under covers to prevent them becoming saturated and thus heavier	Contractor
		Public		✓			
		Maintenance		✓			
18	Anti-social behaviour and vandalism	Contractor	✓		✓	Contractor to ensure that the building site is suitably protected from vandalism, theft and trespassing.	Contractor
		Public		✓			

No.	Hazard identified (ADDITIONAL PARTICULAR RISKS)	Who is at risk?	Within PUNCH scope <u>and</u> reasonably practicable to eliminate risk?		What action is proposed to either <u>eliminate</u> or <u>control</u> risk?	Refer risk information onwards to:
			Yes	No		
		Maintenance		✓		
19	Noise, vibration, fumes and excessive dusting. Especially important given the SAC designation of the river	Contractor	✓		✓	Noise and vibration shall be kept to a minimum and the Contractor shall take all necessary steps to abate these to avoid inconvenience to others. Attention is drawn to the recommendations given in BS 5228-1:2009: "Code of practice for noise and vibration control on construction and open sites. Noise" and BS 5228-2:2009: "Code of practice for noise and vibration control on construction and open sites. Vibration" also to the requirements of the Safety, Health and Welfare at Work (General Application) Regulations 2007-2010.
		Public	✓		✓	
		Maintenance		✓		
		Public	✓		✓	
		Maintenance	✓		✓	

Appendix D (Competency Assessment for PSCS/ Contractor)

BPC 2 Competency Assessment for PSCS/Contractor

Client to assess competency, based on information submitted by the PSCS/Contractor



Contractor: Project:

Tick duties being assessed: ☐ PSCS and Contractor ☐ PSCS only ☐ Contractor only

Where details or evidence is specifically requested, these must be attached to this questionnaire and submitted to the client. Questions marked "*" relate specifically to PSCS. All remaining questions must be answered by the Contractor and PSCS.

Section 1:

Client ticks if response is adequate

If you answer "yes", proceed to Section 2. If you answer "no", respond to the remaining questions first.

1.1 Do you have a third-party accredited Safety Management System (e.g. Safe-T-Cert)?

☐ Yes ☐ No →



1.2 Provide an outline of your Safety Statement (e.g. table of contents)

1.3 Provide evidence of how you manage health & safety on your projects

1.4 Provide an example of how you assess risks for construction activities

1.5 Detail how you take account of the General Principles of Prevention

1.6 Provide an example of how you managed hazards for a similar project

1.7 Detail how you assess competency for persons engaged in a project

1.8 Detail how you assess the health and safety resources required

1.9 Detail how you implement and manage time constraints for a project*

1.10 Detail how you take corrective action and issue directions*

Section 2:

Answer all questions.

2.1 Provide details of similar projects previously completed

2.2 Provide details of previous PSCS* and/or Contractor appointments

2.3 Provide details of experience for the staff you propose for this project

2.4 Provide evidence of relevant qualifications and/or relevant safety training for staff

2.5 Provide evidence of membership of trade associations (e.g. CIF, CIOB)

2.6 Detail how safety is communicated and coordinated*

2.7 Provide an example of a previous Safety and Health Plan*

2.8 Describe how you coordinate the implementation of safe working procedures*

2.9 Detail any accidents/incidents associated with your projects

2.10 Detail any previous convictions/enforcement action by the Health and Safety Authority

In accordance with the Statutory Declarations Act 1938, I/we attest to the completeness, accuracy and truthfulness of the statements I/we have made in completing this form and to any information I/we have attached.

Signed by Contractor/PSCS:

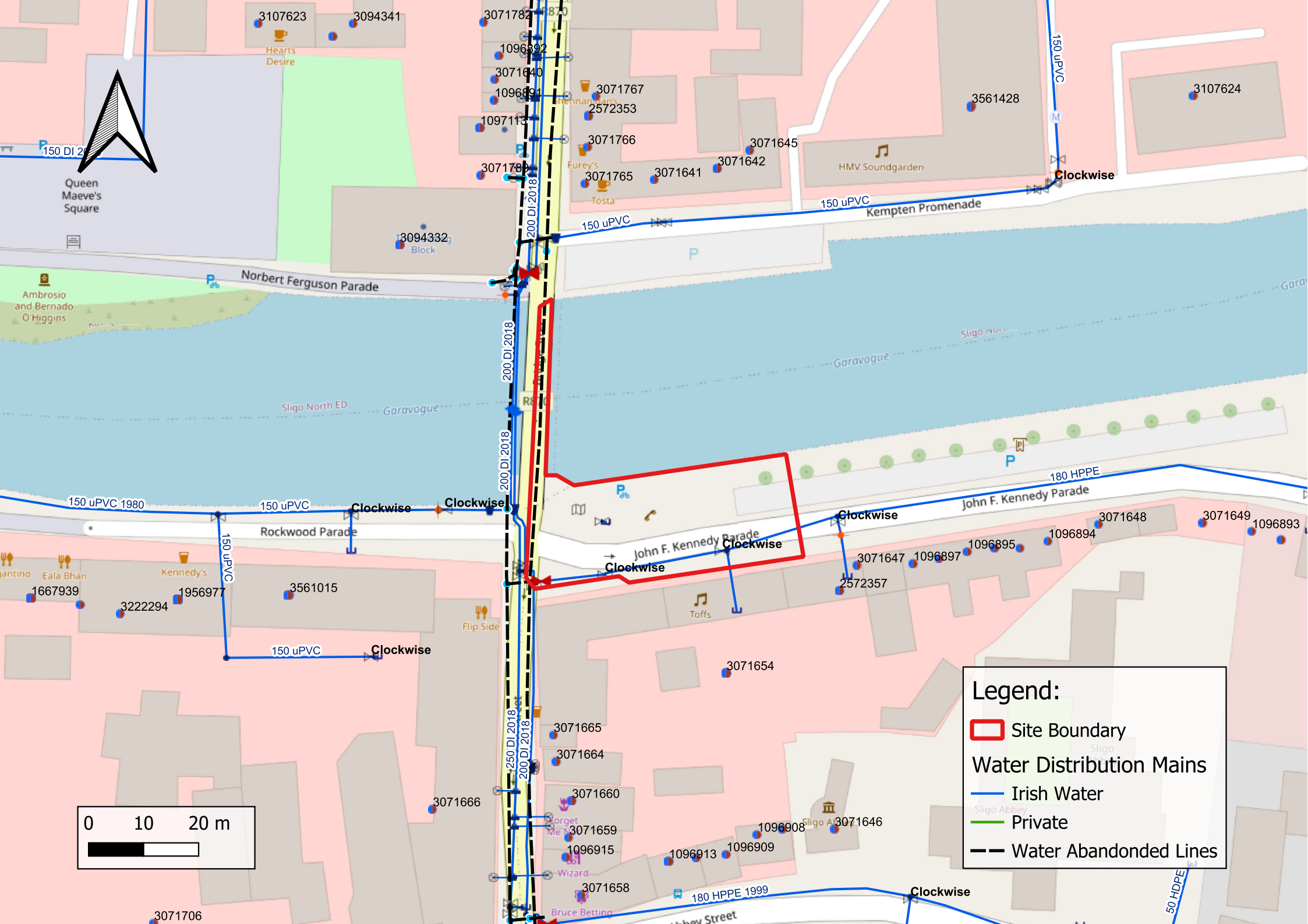
Date:

Submission approved, signed by Client:

Date approved by Client:

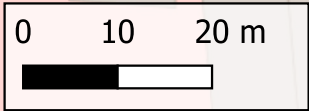
Appendix E (Service Provider Record Drawings)

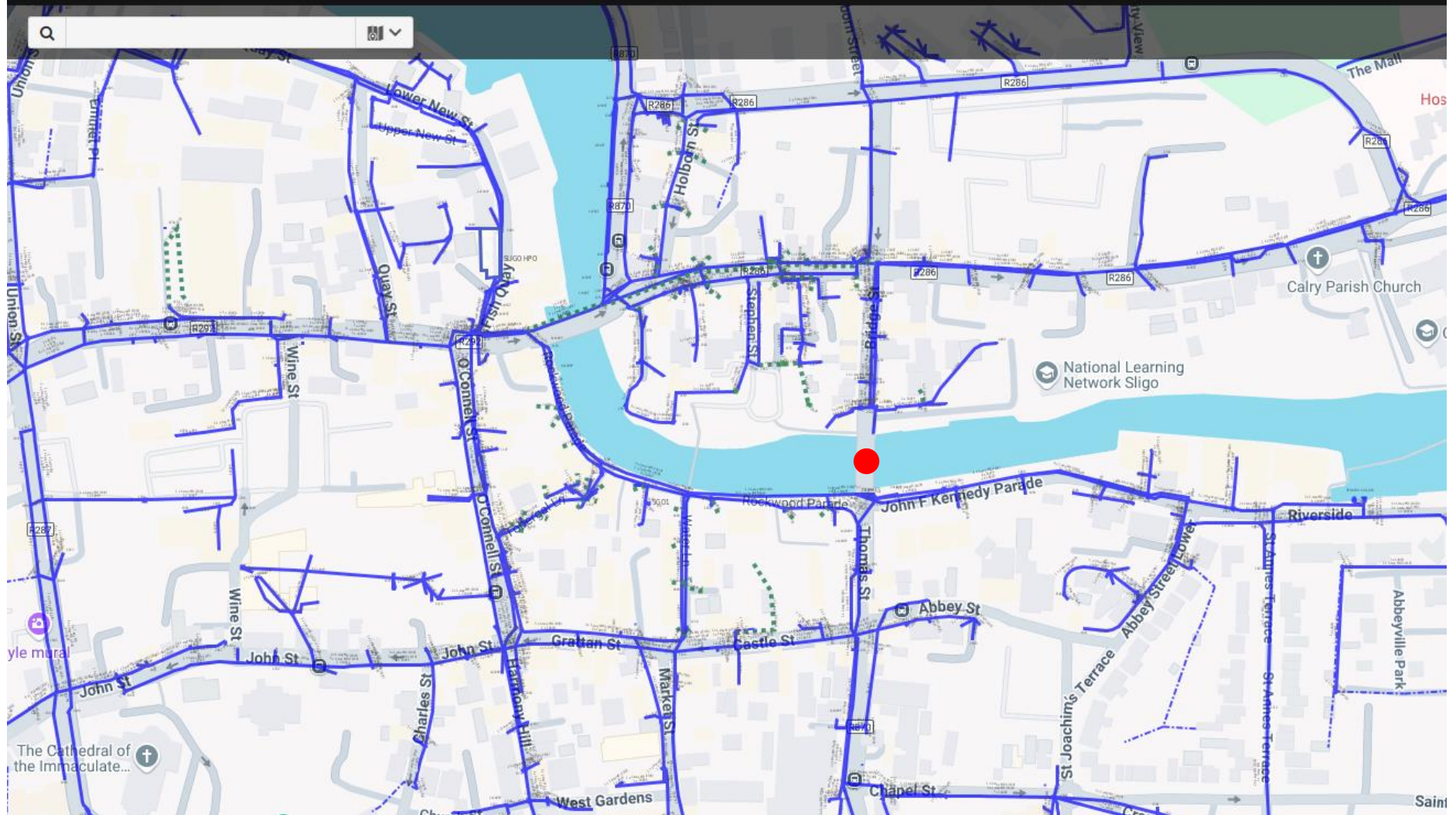




Legend:

- Site Boundary
- Water Distribution Mains**
 - Irish Water
 - Private
 - Water Abandoned Lines







Important Safety Notice: Damage to gas pipelines can result in serious injury or death. Gas network information is provided as a general guide. The exact location and depth of medium or low pressure distribution gas pipes must be verified on site by carrying out necessary investigations, including, for example, hand digging trial holes along the route of the pipe. Service pipes are not generally shown but their presence should always be anticipated.

High pressure transmission pipelines are shown in red. If a transmission pipeline is identified within 10m of any intended excavations then work must not proceed before GNI has been consulted. The true location and depth of a transmission pipeline must be verified on site by a representative of GNI. Contact can be made through 1800 427 747.

All work in the vicinity of the gas network must be completed in accordance with the current edition of the Health and Safety Authority publication, 'Code of Practice For Avoiding Danger From Underground Services' which is available from the Health and Safety Authority (0818 289 389) or can be downloaded at www.hsa.ie.

Legal Notice: Gas Networks Ireland (GNI) and its affiliates, accept no responsibility for the accuracy of any information contained in this document including data concerning location and technical designation of the gas distribution and transmission network (the 'Information'). The Information should not be relied on for accurate distance or depth of cover measurements.

Any representations and warranties, express or implied, are excluded to the fullest extent permitted by law. No liability shall be accepted for any loss or damage including, without limitation, direct, indirect or consequential loss, arising out of or in connection with the use or re-use of the Information.

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Aurora Telecom Duct
Aurora Telecom Sub Duct
Aurora Telecom Inserted Gas Pipe



Aurora Telecom Queries - 01-8926166 (Office Hours)
Aurora_Network_Queries@gasnetworks.ie
Aurora Telecom Emergency Only 1800 427399 / 01 2030120

Transmission Pipe (High Pressure)
Transmission Pipe (Construction Issue)
Distribution Pipe (Medium Pressure)
Distribution Pipe (Low Pressure)
Service Pipe (Medium Pressure)
Service Pipe (Low Pressure)
Strategic Pipe (Medium Pressure)
Strategic Pipe (Low Pressure)
Inserted
Abandoned Pipe

C=? Cover (depth in metres) Pressure Monitor
CP CP Test Point Protection (Slabbing)
End Cap Protection (Sleeve)
Hot Tap Reducer
Installation Service Terminator
Valve Tee
Mains Verification** Transition

** Please contact GNI on 1800-427747 for specific information



GAS NETWORK INFORMATION

Description: Markievicz Bridge
Location: 569280,835948
Plot Date: 17/04/2025 14:49 Scale: 2500 @ A3
Plotted By: 5380 Ref ID: 5380_17042025144954



TITLE: 20250423-042_A3

COLOUR CODE:

BLACK - 38KV & HIGHER VOLTAGE OVERHEAD LINES
 GREEN - MV(10KV/20KV) OVERHEAD LINES
 BLUE - LV (400V/230V) OVERHEAD LINES
 CYAN - 38KV & HIGHER VOLTAGE UNDERGROUND CABLE ROUTES
 RED - MV/LV (10KV/20KV/400V/230V) UNDERGROUND CABLE ROUTES

DATE: 23-Apr-2025

**** SCALE: 1:750**

** SCALE WHEN PRINTED ON AN A3 PAGE
XY COORDINATES DISPLAYED IN IRISH GRID COORDINATE SYSTEM

WARNING

THIS MAP INDICATES THE APPROXIMATE LOCATION OF ESB TRANSMISSION (400KV, 220KV, 110KV, 38KV) AND DISTRIBUTION (20KV, 10KV, 230V/400V) UNDERGROUND CABLES AND OVERHEAD LINES IN THE GENERAL AREA OF THE PROPOSED WORKS. ESB NETWORKS TAKES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE MAP. IT IS THE USER'S RESPONSIBILITY TO INDEPENDENTLY VERIFY THE INFORMATION AND THE LOCATION OF UNDERGROUND CABLES AND OVERHEAD LINES. LOW VOLTAGE (230V/400V) SERVICE CABLES (E.G. HOUSE SERVICES, FACTORY/SHOP SERVICES, PUBLIC LIGHTING LAMP SERVICES, ETC) ARE NOT INCLUDED BUT THEIR PRESENCE SHOULD BE ANTICIPATED. THE DEPTHS OF UNDERGROUND CABLES MUST NEVER BE ASSUMED. BEFORE ANY MECHANICAL EXCAVATION IS UNDERTAKEN, THE ACTUAL LOCATION OF ALL UNDERGROUND ELECTRICITY CABLES MUST BE ESTABLISHED AND VERIFIED ON THE SITE USING:

(A) UP-TO-DATE MAP RECORDS;
(B) CABLE LOCATOR EQUIPMENT OPERATED IN BOTH POWER AND RADIO MODES;
(C) CAREFUL HAND DIGGING OF TRIAL HOLES USING 'SAFE DIGGING PRACTICE'.

REFER ALSO TO 'HSA CODE OF PRACTICE FOR AVOIDING DANGER FROM UNDERGROUND SERVICES'.

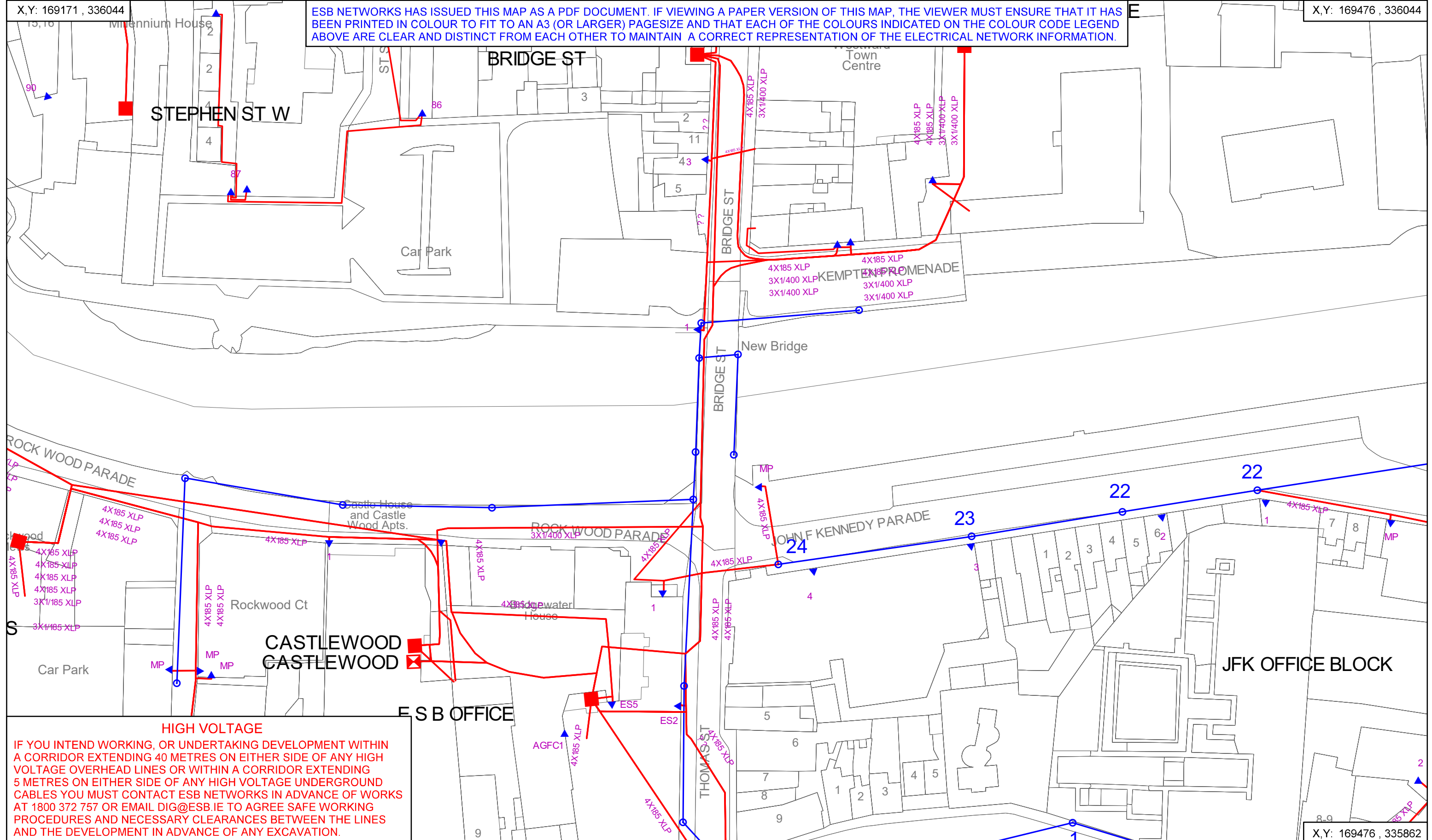
ESB TAKES NO RESPONSIBILITY FOR AND SHALL BEAR NO LIABILITY, HOWSOEVER ARISING, IN RELATION TO ANY DAMAGE, INJURY/DEATH OR LOSS OF SUPPLY AS A RESULT OF DAMAGE OR INTERFERENCE WITH ITS NETWORKS.

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X,Y: 169171 , 336044

ESB NETWORKS HAS ISSUED THIS MAP AS A PDF DOCUMENT. IF VIEWING A PAPER VERSION OF THIS MAP, THE VIEWER MUST ENSURE THAT IT HAS BEEN PRINTED IN COLOUR TO FIT TO AN A3 (OR LARGER) PAGESIZE AND THAT EACH OF THE COLOURS INDICATED ON THE COLOUR CODE LEGEND ABOVE ARE CLEAR AND DISTINCT FROM EACH OTHER TO MAINTAIN A CORRECT REPRESENTATION OF THE ELECTRICAL NETWORK INFORMATION.

X,Y: 169476 , 336044



HIGH VOLTAGE

IF YOU INTEND WORKING, OR UNDERTAKING DEVELOPMENT WITHIN A CORRIDOR EXTENDING 40 METRES ON EITHER SIDE OF ANY HIGH VOLTAGE OVERHEAD LINES OR WITHIN A CORRIDOR EXTENDING 5 METRES ON EITHER SIDE OF ANY HIGH VOLTAGE UNDERGROUND CABLES YOU MUST CONTACT ESB NETWORKS IN ADVANCE OF WORKS AT 1800 372 757 OR EMAIL [DIG@ESB.IE](mailto:Dig@ESB.ie) TO AGREE SAFE WORKING PROCEDURES AND NECESSARY CLEARANCES BETWEEN THE LINES AND THE DEVELOPMENT IN ADVANCE OF ANY EXCAVATION.

ESB OFFICE

X,Y: 169476 , 335862