

Engineer's Design Risk Assessment

For

**Construction of replacement retaining wall & associated site works at
St Joseph's Hospital, Mullindrait, Stranorlar, Co. Donegal.**

September 2026

Client: Health Service Executive Capital & Estates - North West

1.0 Particular Risks.

1.1 Below is a Non-exhaustive List of Work involving Particular Risks to the Safety and Welfare of persons at work, as per schedule 1 of the Safety, Health and Welfare at Work (Construction) Regulations 2006 to 2008:

1. Work which puts persons at work at risk of:

- (a) falling from a height;
- (b) burial under earthfalls; or
- (c) engulfment in swampland.

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 construction site.

While work at height is not in itself a particular risk, if it is aggravated by other circumstances then it must be regarded as a particular risk.

2. Work which puts persons at work at risk from chemical or biological substances constituting a particular danger to the safety and health of such persons or involving a statutory requirement for health monitoring.

3. Work with ionising radiation requiring the designation of controlled or supervised areas as defined in Article 20 of Directive 80/836/ Euratom.

4. Work near high-voltage power lines.

5. Work exposing persons at work to the risk of drowning.

6. Work on wells, underground earthworks, and tunnels.

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

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

9. Work involving the use of explosives.

10. Work involving the assembly or dismantling of heavy prefabricated components.

2.0 Designer's Assessment of safety and health hazards/risks.

Project number: 1900
Date: 04.09.2026

Project: Replacement retaining wall
Assessed by IP
Checked by BO'B

Nr	Works activity /Hazard	Probability (P)	Severity (S)	Risk (P x S)	Design Control Measures / Actions
1	Site Establishment				
1a	Site Access, personnel, vehicles, deliveries & removals	2	2	4	Detailed plans to be provided by Main Contractor for safe working arrangements including Traffic management, storage, loading & unloading area
1b	Set up of site offices, facilities, site fencing	2	2	4	Care to be taken when delivering, unloading & placement of site facilities. These should not restrict the operation of the existing harbour working. Works area / site to be fenced off to prevent public access to the construction site
1c	Existing Structures, overhead cables, buried Services (falling materials, injury, electrocution, hazardous materials)	2	2	4	Due to the presence of existing buildings care needs to be taken, a comprehensive inspection/ survey of the site is required prior to work commencing to locate (and decommission where necessary) any existing under or over ground services & hazardous materials or chemicals contained in the building or building fabric.
1d	Hazardous materials - chemical, bacterial, biological, weils disease				standard safe practises to be utilised, safe handling procedures to be followed, any hazardous materials uncovered to be reported and safely removed and disposed off site
1e	Asbestos survey & removal	1	3	3	Any asbestos to be reported and safe removal & disposal procedures to be followed

2	Excavations				
2a	open excavations, drainage installation, collapse of excavations, trips, falls	2	2	4	Standard precautions, temporary protection works, excavation shoring & propping, barriers, signage. Only qualified staff to undertake works
2b	Underground services	2	3	6	standard service location surveys to be carried out prior to undertaking works
2c	Hazardous materials / substances, cuts & abrasions	2	2	4	standard precautions to be taken, material analysis where required, PPE to be used as required for task. Materials removed from site to be disposed off safely, responsibly and to licensed waste management operator
2d	Noise, vibration, dust	3	2	6	Noise & vibration levels should not exceed safe working levels. All PPE required for safe working to be utilised
2e	Confined spaces - manholes, chambers	2	2	4	standard safe practises to be applied, use appropriate PPE, only trained personnel to carry out works in confined spaces
3	New constructions				
3a	Noise, dust, vibration	3	3	9	Demolition works may produce noise, dust and vibration. All PPE required for safe working to be utilised.
3b	working with concrete & reinforcement steel - cuts, abrasions, trips, falls	2	2	4	standard safe practises to be applied, use appropriate PPE, only trained personnel to carry out works in confined spaces
3c	Mechanical & electrical works	2	2	4	standard safe practises to be applied, use appropriate PPE, read M & E Engineers risk assessment
3d	Multiple trades on site at one time	2	2	4	plan all works, ensure all trades people on site are aware of works being undertaken by other trades and works by one trade should not pose a risk / hazard to other trades people working simultaneously
3e	General site risks, trips, falls, cuts, abrasions, shocks	2	2	4	standard safe practises to be applied, use appropriate PPE, only competent personnel to carry out works

4	Site handover				
4a	Site clearance construction waste	2	2	4	All construction waste to be removed from site and safely disposed to licenced waste disposal provider unless agreed
4b	removal of site facilities and site fencing	2	2	4	All temporary constructions to be removed from site and site left in a safe manner which would provide no risk to personnel using the building / site after handover.
4c	Handover, future operation & maintenance of building / site	2	2	4	Safety file to be compiled by Main Contractor and provided to HSE at handover stage.
5	Other activities in the vicinity				
5a	The construction site is in part of the Hospital grounds and part of the grounds of the adjoining dwelling house. The hospital will have staff working at the hospital and will also have members of the public visiting the hospital who may be unfamiliar with the general site layout	2	2	4	Contractor to provide adequate signage and traffic management plans for the duration of the works

Other parties please take note: These are designer's risk evaluations of the design options carried out in-house for the purpose of our complying with designers' duties under the Safety, Health and Welfare at Work (Construction) Regulations 2006. The evaluations relate only to those aspects/elements of the project which we are responsible for designing under the terms of our appointment by our client. Other parties should not rely on these evaluations for their own purposes; in particular, contractors, who must deal with and control all risks arising during construction, must carry out their own definitive risk assessments *ab initio* for that purpose.