Project:	Port of Cork Expansion Works						
Client	Port of Cork Company						
Subject	Maritime Usage Licence Application – Marine Strategy Framework Directive						
Appendix	4.6						
Orig. by	DM	**Appr. by**	POC	**Date**	05/12/2025	**Doc. Ref:**	CORE2-AYE-RE-XX-TN-MA-0004

4.6 Marine Strategy Framework Directive

The EU's Marine Strategy Framework Directive (MSFD) was established to safeguard the marine ecosystem and biodiversity, which are crucial for human health and marine-related economic and social activities. The Directive underscores the importance of preserving and, where possible, restoring the marine environment to maintain biodiversity and ensure clean, healthy, and productive oceans and seas. The scope of the MSFD is broader than that of the Water Framework Directive (WFD), covering a greater range of biodiversity components and indicators.

The MSFD identifies negative impacts such as pollution, biodiversity loss, seabed damage, overexploitation, the spread of non-indigenous species, marine litter, underwater noise, ocean warming, and acidification. The MSFD descriptors are indicated in Table 1.

Table 1: Descriptors under the MSFD.

Descriptor	Description
D1 Biodiversity	Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions
D2 Non-indigenous species	Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems
D3 Commercial Fish and Shellfish	Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock
D4 Food Webs	All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity
D5 Eutrophication	Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters

D6 Seabed Integrity	Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected
D7 Hydrographical Conditions	Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems
D8 Contaminants	Concentrations of contaminants are at levels not giving rise to pollution effects
D9 Contaminants in Seafood	Contaminants in fish and other seafood for human consumption do not exceed levels established by Union legislation or other relevant standards
D10 Marine Litter	Properties and quantities of marine litter do not cause harm to the coastal and marine environment
D11 Energy, including underwater noise	Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment

MSFD assessment of the proposed Site Investigation operations:

- **D1 Biodiversity:** Negligible/minor impacts on species, habitats, or ecosystem functionality.
- **D2 Non-indigenous Species:** It is anticipated that vessels to be used will be mobilised from within Ireland which will minimise risk of introduction or spread of invasive species form other regions.
- **D3 Commercial Fish and Shellfish:** Negligible impact on the population and health of commercial species.
- **D4 Food Webs:** Negligible anticipated disruption to trophic relationships or food chain dynamics.
- **D5 Eutrophication:** Negligible anticipated contribution to nutrient enrichment.
- **D6 Seabed Integrity:** Negligible anticipated detrimental impacts on the physical and biological structure of the seabed.
- **D7 Hydrographical Conditions:** Negligible anticipated alteration of hydrological characteristics, including water flow, temperature, and salinity.
- **D8 Contaminants:** Negligible anticipated release or increase in levels of harmful substances.
- **D9 Contaminants in Seafood:** No anticipated accumulation of hazardous substances in the marine food chain.
- **D10 Marine Litter:** No anticipated contribution to marine debris or pollution.
- **D11 Energy, including underwater noise:** Negligible/minor short term anticipated increase in energy inputs or underwater noise levels.

The findings indicate that the proposed Site Investigation works will have no significant impacts on the various MSFD biological, hydromorphological and physico-chemical descriptors within the marine environment.