Translink Mid and East Antrim Method Statement: Site 10D

The marine works comprise the repair and construction of enhanced rock armour sea defences below Mean High Water Springs (MHWS) along the seaward face of the railway embankment on the western shore of Larne Lough (inlet from the Irish Sea), between Magheramorne and Whitehead, forming part of the coastal railway between Belfast and Larne.

The current site area comprises of a c.310m length of grassed embankment and informal rock armour, with apparent voids, lack of dense placement of units, and scour of the grassed embankment where the armour is lacking. The works will involve the placement of rationalised, and newly enhanced rock armour revetments. The revetments will tie into the existing defences, including grass embankment, rock armour, and pitched stone revetment adjacent to 2no. culverts. The revetments will be split into 3No. sections to accommodate 2No. existing culverts and changes in existing defence type.

The works will include:

- Removal of displaced and failed armour stone below MHWS, and re-use of this armour within the proposed revetments as appropriate.
- Re-profiling and preparation of the embankment toe and lower slope.
- Installation of geotextile filter layers below MHWS.
- Placement of double-layer interlocking rock armour below MHWS.
- Tie-ins with existing revetments at each end.
- Use of plant operating from the foreshore and embankment, with tidal working and temporary environmental controls where required.

Programme and Phasing of Works
The project is programmed to mobilise in Feb 2027. While the end date for construction is currently to be confirmed, it is anticipated that it can be completed within a single construction season and a single 12-month marine licence period.

First Licence Year (2027)
All marine works are planned to be undertaken within the first licence year and will include:

- Site mobilisation and establishment of a temporary construction compound located landward of MHWS.
- Delivery and stockpiling of armour stone and geotextile materials.
- Vegetation clearance and removal of existing material.
- Re-profiling of the embankment toe and lower slope below MHWS.
- Installation of geotextile filter layers.
- Placement of new and enhanced revetment below MHWS, including tie-ins with existing defences.
- Environmental mitigation measures, inspections, site reinstatement and demobilisation.

Overview of Proposed Works
The proposed works comprise repairs and enhancement to existing sea defences along the bank of Larne Lough, adjacent to the coastal railway between Belfast and Larne. The scheme involves construction of double-interlocking rip-rap rock armour revetment, installed over the

existing embankment slope and tied into existing defences at both ends.

The construction sequence is as follows:

- Site mobilisation and establishment of a temporary construction compound located landward of MHWS
- Delivery and stockpiling of armour stone and geotextile materials
- Vegetation clearance and removal of existing material
- Re-profiling of the embankment toe and lower slope below MHWS
- Installation of geotextile filter layers
- Placement of new and enhanced revetment below MHWS, including tie-ins with existing defences
- Environmental mitigation measures, inspections, site reinstatement and demobilisation

Access to the works will be primarily via the railway (under controlled T3 possessions), with limited access from the foreshore.

Temporary Structures Below Mean High Water Spring (MHWS)

Temporary measures below MHWS are limited in scale and duration and include:

- Temporary access platforms formed from placed rock and compacted granular material on the embankment face to facilitate plant movements.
- Floating containment booms deployed in the Lough along the working frontage during construction to intercept any accidental release of oils or fine materials.
- Short-term placement of rock armour stones as ballast to secure geotextile during low-tide installation.

No permanent cofferdams, piling, or fixed marine structures are proposed below MHWS.

Ultimate fate of temporary works and materials:

- Temporary access formations and working platforms will either be incorporated into the finished revetment profile or fully removed.
- Floating booms, fencing, welfare facilities, and temporary surfacing/geotextiles used for compounds or storage areas will be removed on completion, and affected land reinstated to pre-works condition.
- No temporary materials will be left in the marine or intertidal environment.

Additional details environmental control measures is provided in the associated cover letter (TSD-JBAU-XX-XX-RP-EN-XXXX-S0-P01-Marine_Licence_Letter_Site_10D).

Measures to Safeguards for the Marine Environment

A comprehensive suite of measures is proposed to protect the River Foyle estuary and its designated features, including the Larne Lough Special Protection Area (SPA) and Ramsar. Also including the Larne Lough Area of Special Scientific Interest (ASSI). The Habitat Regulations Assessment (HRA) for the project contains the following mitigation measures that are to be implemented:

- Industry standard pollution prevention measures, particularly addressing the risks of fuel and concrete spills.
- A pre-works check will be completed as close to the construction works starting as possible to identify any new potential Otter holts or resting areas within the site area. Prior to works commencing each day, the works area and immediate vicinity will also be checked for Otter. Should an Otter be encountered on site during the works, all works should cease immediately, and advice be obtained from an experienced ecologist.

- Where possible, works should be carried out in daylight hours. If works must be carried out at night, any artificial worksite lighting should be minimised. Any floodlights should be fitted with a directional cowl to avoid light-spill onto the watercourse.

An outline Construction Environmental Management Plan (CEMP) has been produced for the project, which contains environmental control measures relating to noise and vibration; air quality and dust; landscape and visual amenity; biodiversity, flora and fauna; historic environment; water resources and pollution prevention; flood risk; ground conditions, contamination and hazardous materials; waste management; lighting and carbon and sustainability. A detailed CEMP is to be produced once a Principal Contractor has been appointed for the project.

Minimising Interference with Other Uses of the Sea and Foreshore

- Works are confined to a narrow frontage immediately adjacent to the rail embankment, limiting spatial disturbance.
- Construction will be phased in short sections to avoid prolonged obstruction of the foreshore or estuary.
- No permanent loss of foreshore access is proposed; any temporary restrictions will be short-term and related only to active construction periods.
- Advance coordination with statutory stakeholders and compliance with marine licence conditions will ensure navigation, fisheries, and recreational uses are not significantly affected.