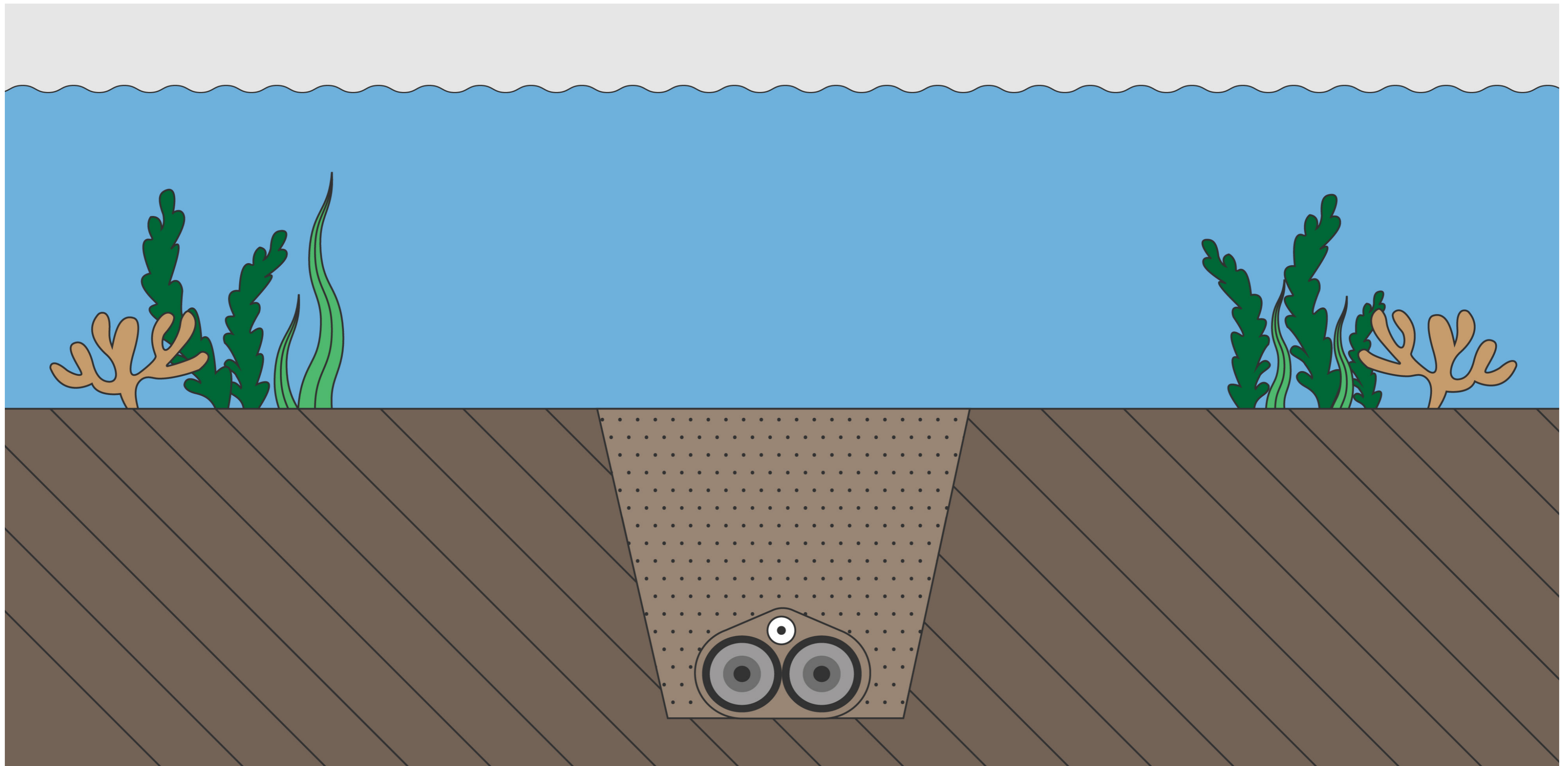


THE SUBMARINE CABLE

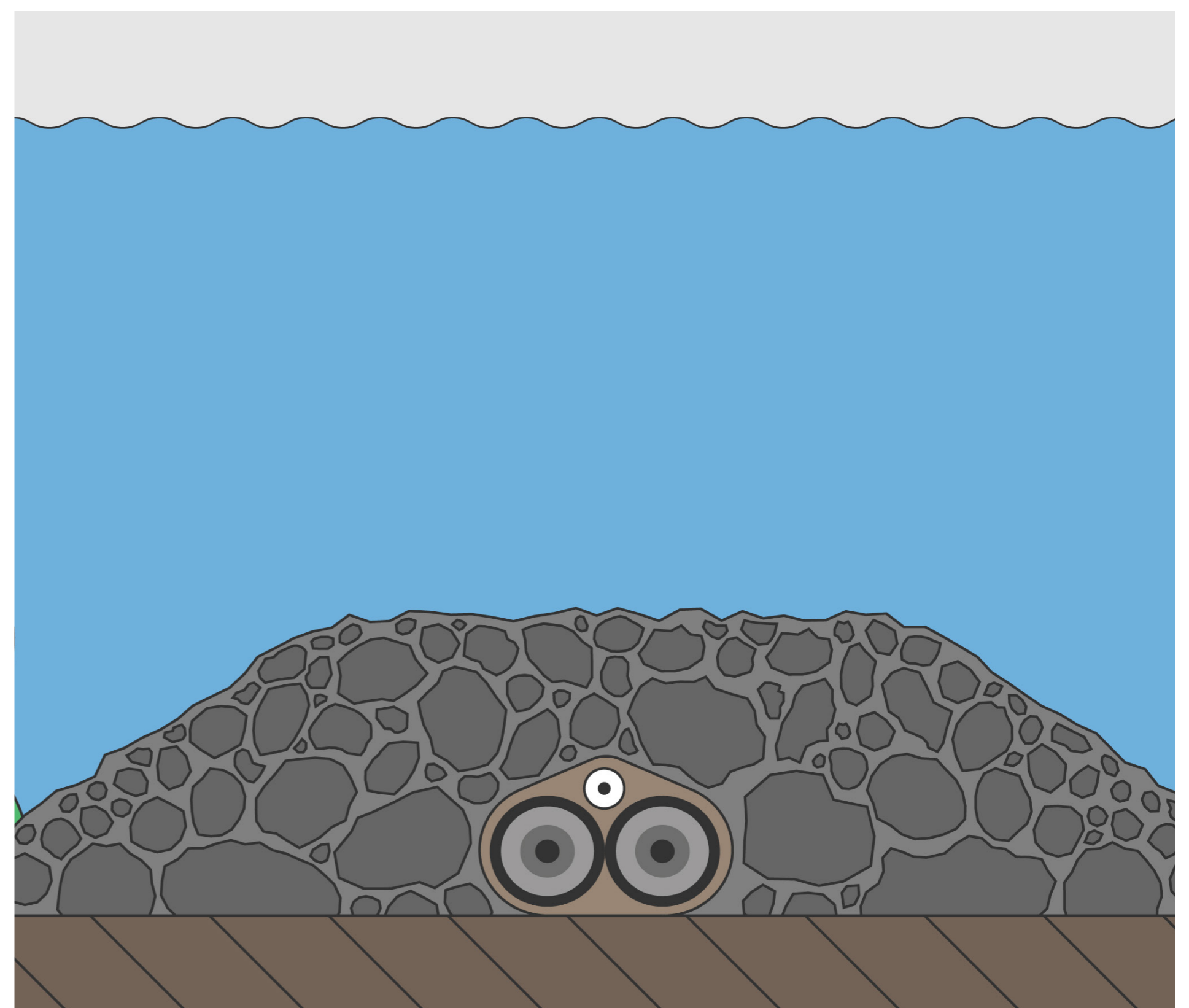


Cross-section of Bundled Submarine Cable Buried in the Seabed

CABLE DESIGN

The submarine cable will consist of two mass impregnated cables, which are up to 150mm in diameter and made of a copper conductor encased by insulation layers and steel armouring for protection.

The two cables will be installed tied together in a bundled configuration with a smaller fibre-optic cable for monitoring and telecommunications. This means that only one trench is needed to bury the cable which reduces the footprint on the seabed. The bundled cables will be buried about 2m below the seabed – the depth is determined by the geology and the risks of anchors or fishing gear snagging the cable, and it may be increased or reduced depending on the conditions. In some places, for example where the cable crosses other buried cables, it may be laid on the seabed with rocks placed on top to provide protection.



Cross-section of Bundled Submarine Cable laid on the Seabed with Rock Protection



Typical Cable-Lay Vessel (courtesy: NKT)

CABLE INSTALLATION

The submarine cable is installed by a cable-lay vessel, which feeds the cable from a turntable into the sea and down to the seabed. The cable may be directed into a pre-prepared seabed trench (pre-lay trenching) or laid on the seabed and a second vessel follows afterwards to prepare a trench into which the cable is positioned (post-lay trenching). After the trenching and cable installation is completed, the trench is mechanically backfilled or natural processes infill the trench with sediment.