

General Specification for Civil Engineering Works**2006 Edition****AMENDMENT NO. 2/2020****VOLUME 2****SECTION 21 MARINE WORKS****SUBMISSIONS**

(a) Clauses 21.25 & 21.26 **Add “for approval” after “the Engineer” in sub-clauses (1) and (2).**

(b) Clause 21.26A **Add the title of the new clause to read as follows:**

Particulars of transportation of imported fill material

Add the new clause as follows:

(1) The following particulars of fill material imported from sources outside Hong Kong shall be submitted to the Engineer for information:

- (a) Expected departure and arrival dates,
- (b) Name of vessel,
- (c) Routing of delivery vessel, and
- (d) Vessel position tracking and monitoring arrangement.

(2) The particulars shall be submitted to the Engineer for information at least 24 hours before the commencement of transportation of fill material to the Site.

(c) Clause 21.27 **Add “for approval” after “the Engineer” in sub-clauses (1) and (3).**

(d) Clauses 21.28 & 21.29 **Add “for approval” after “the Engineer”.**

(e) Clauses 21.30 & 21.31 **Add “for approval” after “the Engineer” in sub-clauses (1) and (2).**

(f) Clause 21.32 **Add “for approval” after “the Engineer” in sub-clause (1).**

(g) Clause 21.33 **Add “for approval” after “the Engineer”.**

- (h) Clauses 21.34 & 21.35 **Add “for approval” after “the Engineer” in sub-clauses (1) and (2).**

HANDLING AND STORAGE OF MATERIALS

- (i) **Add “TRANSPORTATION,” before on the above section heading.**
- (j) Clause 21.36A **Add the title of the new clause to read as follows:**

Transportation of imported fill material

Add the new clause as follows:

(1) Imported fill material for marine works which is provided by the Contractor from sources outside the Site shall not be transported in a manner that will result in contamination, unauthorised loading or leakage of material.

(2) All vessels transporting imported fill material to the Site shall be equipped with a tracking device (Global Positioning System (GPS) or equivalent system approved by the Engineer) for real time tracking and monitoring of their travel routings, speed, anchorage points, etc. The Contractor shall provide means of access by software or an equivalent mobile application to the vessels’ GPS tracking devices for the Engineer to monitor the real time movement of the vessels. Unless otherwise permitted by the Engineer, the Contractor shall ensure that a back-up positioning system is available on board each vessel so that the monitoring will not be disrupted when the tracking device is out of service for any reason.

(3) The Contractor shall monitor the transportation of imported fill material from its source to the Site, and shall produce and/or keep logs and other records to demonstrate compliance with sub-clause (1) of this Clause. The Contractor shall submit on a daily basis copies of such logs and records to the Engineer, in a manner and format agreed by the Engineer, for checking.

(4) The Contractor shall make all necessary arrangements with and obtain the necessary approvals from the relevant local or overseas authorities for the tracking and monitoring arrangements.

TRIALS FOR SUBMARINE OUTFALLS

- (k) Clause 21.73 **Add “for approval” after “the Engineer”.**

TESTING: PARTICLE SIZE DISTRIBUTION, PLASTICITY INDEX AND COEFFICIENT OF UNIFORMITY OF FILL MATERIAL FOR MARINE WORKS

- (l) Clause 21.90 **Add “for approval” after “the Engineer” in sub-clause (1).**

TESTING: RELATIVE DENSITY, WATER ABSORPTION, AGGREGATE IMPACT VALUE, TEN PERCENT FINES VALUE, AGGREGATE ABRASION VALUE, SOUNDNESS, RESISTANCE TO FRACTURE AND WEIGHT OF ROCK ARMOUR AND ROCK FOR UNDERLAYER

- (m) Clause 21.94 Add “for approval” after “the Engineer” in sub-clause (1).

TESTING: TIMBER FOR FENDERING SYSTEMS

- (n) Clause 21.103 Add “for approval” after “the Engineer”.

APPENDIX 21.2 SPECIFICATION FOR REINFORCED CONCRETE IN MARINE ENVIRONMENT (TO BE READ IN CONJUNCTION WITH SECTION 16 AND THE AMENDMENTS)

PART 1: CONCRETE WORKS

SUBMISSIONS

- (o) Clauses 21.2.8 & 21.2.9 Add “for approval” after “the Engineer”.
- (p) Clause 21.2.10 Add “for approval” after “the Engineer” in sub-clause (3).

**Quality Management & Standards Unit
Civil Engineering and Development Department
29 December 2020**