

Title: **Greater East London
strengthening project - Neptune
Substation Scope of Works**

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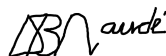


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1. Executive Summary

The Greater East London strengthening project phase 3 includes a project to interconnect Pembroke to Neptune by introducing the 400kV at Pembroke substation. The Pembroke strengthening Project sets a blueprint for the upgrade path of the transformers at Pembroke substation. All these projects were approved under high load scenario assumptions, which did not materialize. The Project Ops Appraisal for the Greater East" London Strengthening Phase 3 project demonstrated that if the Poseidon-Neptune line was to be built it will be carrying extraordinarily little load and is thus not desirable at this stage. The project decided on constructing approximately 50km Neptune -- Pembroke 400kV line with the establishment of 400kV yard at Pembroke substation, initially with one 400/132kV 500MVA transformer and installation of one 132/66kV 160MVA transformer.

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2. Scope of work

2.1 Steel Work

The following items is required:

- 400kV Primary Plant Equipment Steelwork

2.2 Foundations

The following items is required:

- 400kV Primary Plant Foundation

2.3 Earthing

All structures to be earthed to the earth grid

3. Drawings

The following drawings contain the layouts and all associated details:

- Nep12P01-SE-E13: 400kV Feeder 1

4. Authorisation

Name	Designation
Andile Maneli	Middle Manger – Civil
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5. Revisions

Date	Rev.	Compiler	Remarks
July 2022	1	A Kaka	As requested by commercial

6. Development team

The following people were involved in the development of this document:

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