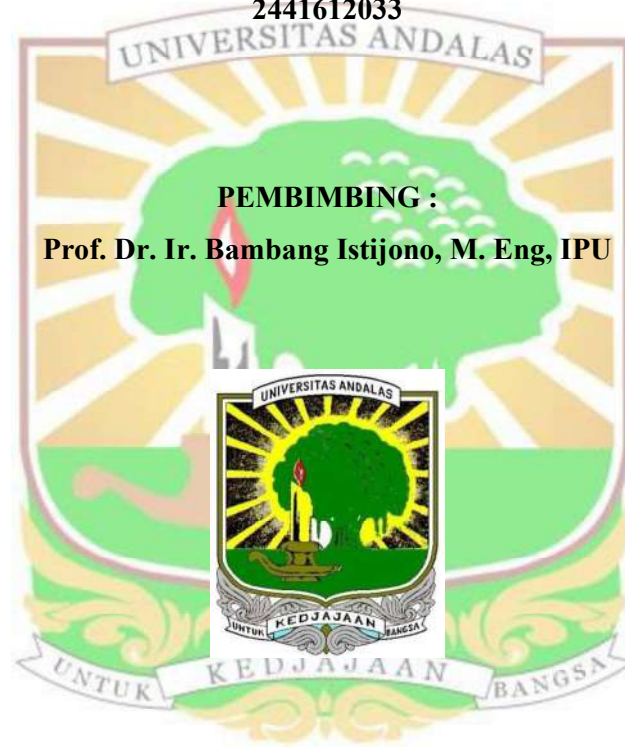


***DETAILED ENGINEERING DESIGN* PROYEK PENGGANTIAN  
SEGMENTAL TIANG LISTRIK JARINGAN DISTRIBUSI TEGANGAN  
MENENGAH 13.8 KV DI PERTAMINA HULU ROKAN**

**LAPORAN TEKNIK**

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## **ABSTRACT**

*This Detailed Engineering Design includes the design for the replacement of existing 13.8 kV distribution poles that have substandard or damaged reliability and integrity and the replacement of all necessary accessories including equipment attached to the segmental poles such as ACSR (Conductor), distribution transformers, load breakers, reclosers and capacitor banks. This study contains Electrical, Civil and QA/QC disciplines to produce related results such as design basis, one line diagram, datasheet, standard installation drawings, power line layout drawings, material take off and procedures needed to support construction implementation.*

*According to the scope of work, the selection of areas that will be part of the replacement of the poles will be divided into 3 areas, namely the Duri HO, Bangko and Batang areas. Detailed engineering design is carried out based on input data from the Assest integrity and reliability team regarding which segments need to be replaced in the three areas.*

*Site surveys are carried out to support the data needed in carrying out detailed engineering design such as taking coordinate data, plotting the position of new poles, including interfaces with existing facilities such as existing pipelines, existing electricity poles, buildings and other public facilities.*

*To facilitate the implementation of the construction of the installation of new segmental electric poles, this detailed engineering design also carried out a constructability workshop and also a SAFOP (Safety and operability) workshop as an effort to reduce facility shutdowns that can result in loss of crude oil production or LPO (Loss production opportunities).*

**Keywords:** *Detailed Engineering Design, Pertamina Hulu Rokan, Electric Poles, Safety & Operability, Loss production opportunities.*