



**CONSULTING
ENGINEERS**
progress delivered

Farm 136, Portion 38

Tergniet, Mosselbay, Western Cape

Electrical Services Report

Revision 4 – February 2025

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KLS Electrical (PTY) LTD | Reg 2015/450497/07 | Directors: H Van Der Merwe | T Bester

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1. INTRODUCTION

The purpose of this report is to address the availability of electrical supply in the area to accommodate a proposed new residential development on farm 136, portion 38 situated in Tergniet, Western Cape. The local supply authority, in this instance Mosselbay Municipality, was approached for the availability in supply.

2. LOCALITY OF THE SITE

The proposed residential development is situated on farm 136, portion 38, Tergniet, Western Cape. The image below indicates the location for ease of reference:



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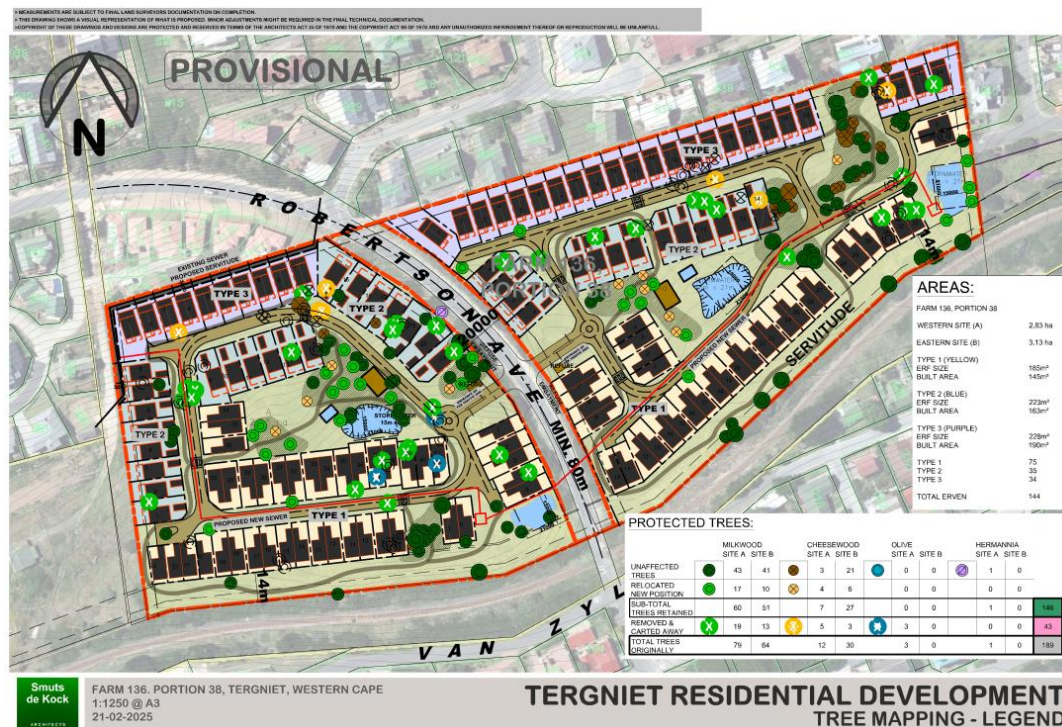
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3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed residential development will include the construction of a new residential housing complex. The new housing complex shall consist of 146 erven total. The erven shall consist of 3 types of erven, type 1, 2 and 3 with erf sizes 185m², 223m² and 228m² respectively. The provisional development plan below indicates the allocation of the various areas and erven:



4. EXISTING ELECTRICAL INFRASTRUCTURE

Mosselbay municipality requested we tie into the existing MV cable between Point view minisub and Galjoen minisub via installation of a new CCV ring main unit (CCV RMU). The CCV RMU shall be installed adjacent to Blesbok street as shown below. A new RMU/MV metering combination unit (CCFVV RMU) shall be installed near the development entrance and link to the CCV RMU for MV metering of the development. A new 70mm² PILC (table 18) cable shall be installed between the CCV RMU and CCFVV RMU. From the CCFVV RMU a new 35mm² Cu XLPE MV cable shall extend to the development's new minisub 1 (MS1) and further extend from MS1 to the development's new minisub 2 (MS2). From MS2 the MV ring shall be extended to the CCFVV RMU to complete the development MV ring. The CCFVV RMU shall be connected to Van Zyl minisub via route underneath the Transnet railway with a new 70mm² PILC (table 18) cable, to complete the municipal MV ring. Wayleaves to be submitted to Mosselbay municipality for all road crossings.

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5. NEW ELECTRICAL DEMAND

For the proposed new residential development, a supply of 802kVA would be required based on the development load calculations in accordance with regulations. An application shall be submitted to Mosselbay municipality for 1000kVA supply to the new development.

Load calculations below:

- Type 1 erven (185m²) of qty 76 – 4500VA x 76 = 342kVA
- Type 2 erven (223m²) of qty 37 – 6000VA x 37 = 222kVA
- Type 3 erven (228m²) of qty 34 – 7000VA x 34 = 238kVA
- Total kVA = 802kVA

The development contribution cost shall be R 6085/kVA and therefore 1000kVA x R 6085 = R 6 085 000.

The preferred tariff scale is scale 4 according to the Mosselbay municipality tariff list.

6. AVAILABILITY OF SUPPLY

The supply authority to the erf is Mosselbay municipality.

Mosselbay municipality indicated the 1000kVA requirement is available for the new development.

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