



ENVIRONMENTAL SCREENING REPORT: PROPOSED GROMIS-NAMA-AGGENEIS 400KV IPP INTEGRATION POWER LINE, NORTHERN CAPE PROVINCE

Spatial Maps of Impact ratings

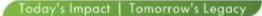
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Prepared for:



Prepared by:

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1.1. INTRODUCTION

This report is the product of the 'Mapping Process and Explanatory Notes' compiled by Enviroworks (Du Plessis, 2020) as part of the Screening Process for the development a new 400 kV power line from the Gromis substation via the Nama substation towards the Aggeneis substation in the Northern Cape Province for Independent Power Provider's (IPP) integration. This report is an appendix of the main Environmental Screening Report (Mostert, 2020) and should be read in conjunction with it.

Eskom proposes to develop a new power line from the Gromis substation via the Nama substation towards the Aggeneis substation in the Northern Cape Province.

In order to ensure that the Namaqualand electricity network is compliant and that there is sufficient line capacity to accommodate potential Independent Power Producers (IPPs) within the Namaqualand area, it is proposed to develop the new Gromis-Nama-Aggeneis 400 kV line and establishment of a 400/132 kV yard at the Nama substation. This Screening Assessment aims to assess possible route (hereafter referred to as corridor) alternatives for the proposed new power line. This project follows after a Strategic Environmental Assessment (SEA) was undertaken by CSIR that identified nationwide corridors for the strategic expansion of Electricity Grid Infrastructure (EGI).

As part of the Environmental Screening Process, a set of Specialist's identified impacts related to the proposed project according to their specialist field. Each impact was rated by the Specialists according to a standardised Impact Rating methodology. As part of the mapping process, each impact rating was then spatially mapped to the alternative corridors. The section below illustrates the resulting Impact Rating maps of each of the identified impacts.



2. SOCIO-ECONOMIC IMPACTS

2.1. Social Impacts

a. Construction phase

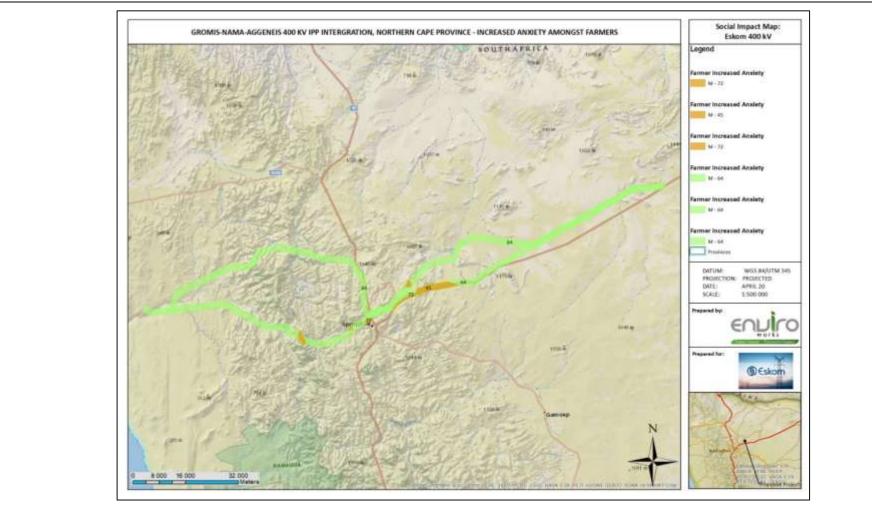
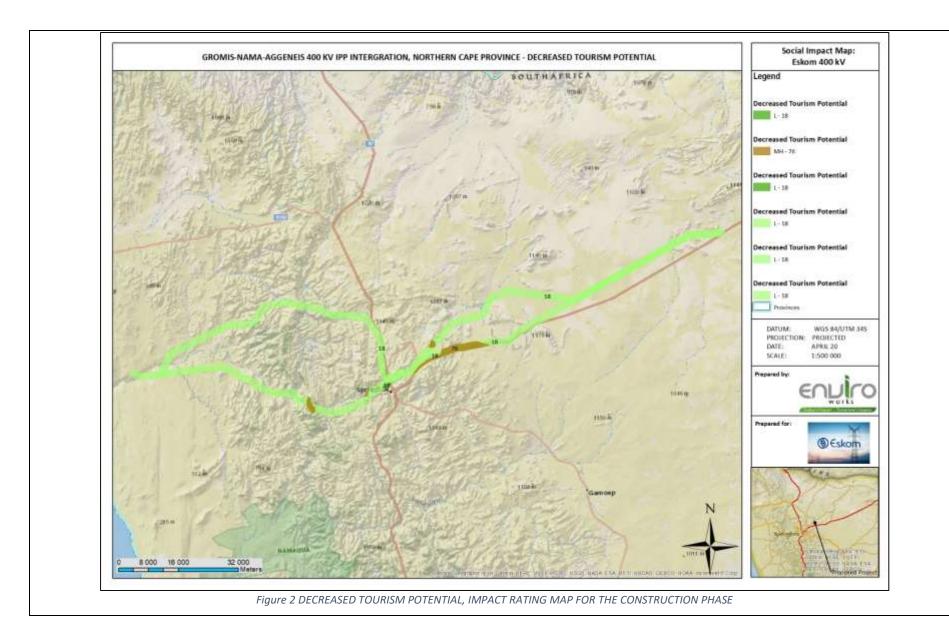
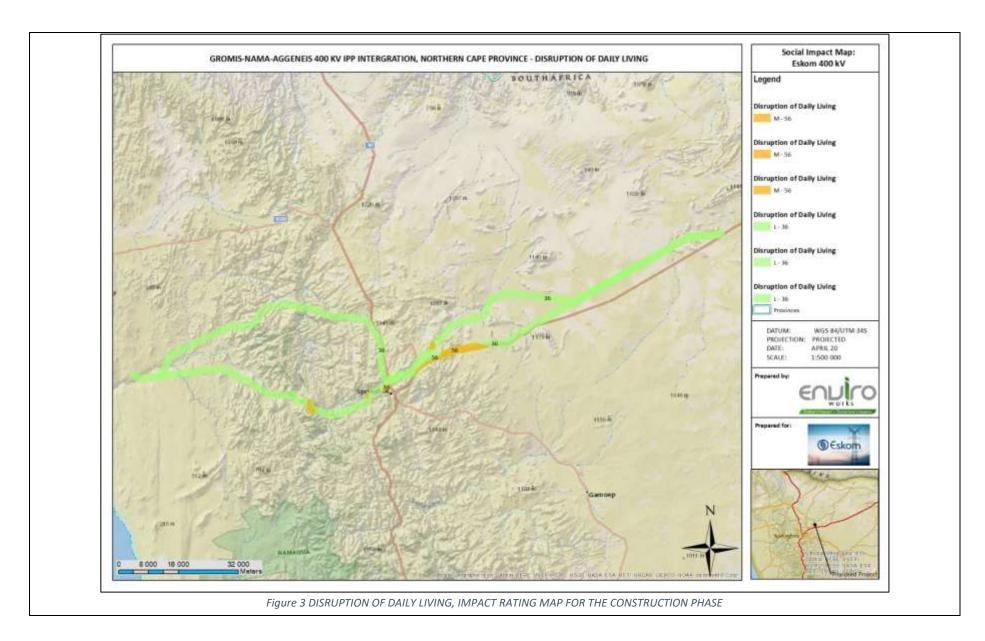


Figure 1 INCREASED ANXIETY AMONGST FARMERS, IMPACT RATING MAP FOR THE CONSTRUCTION PHASE

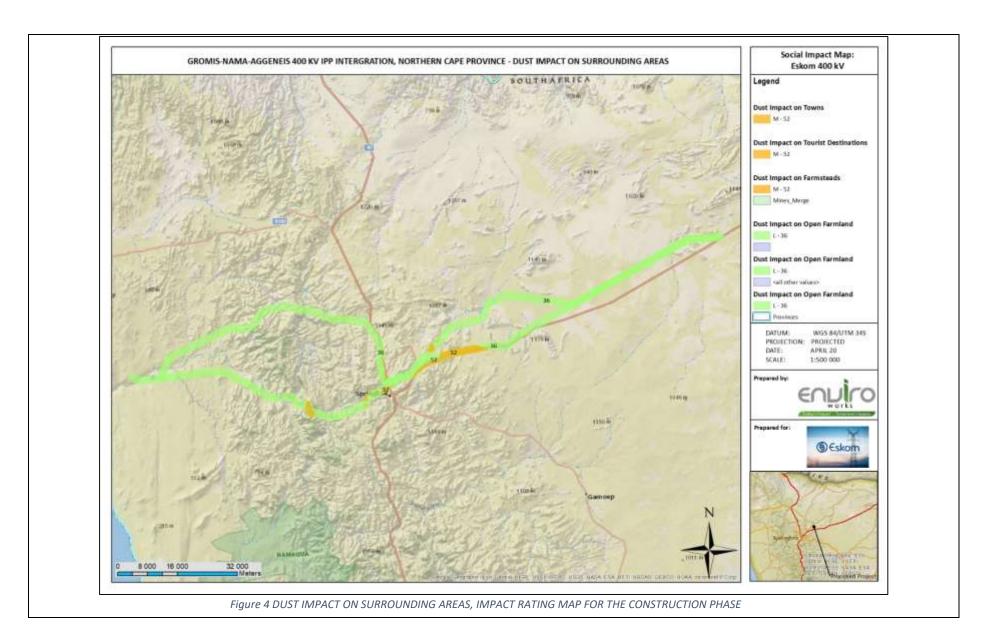




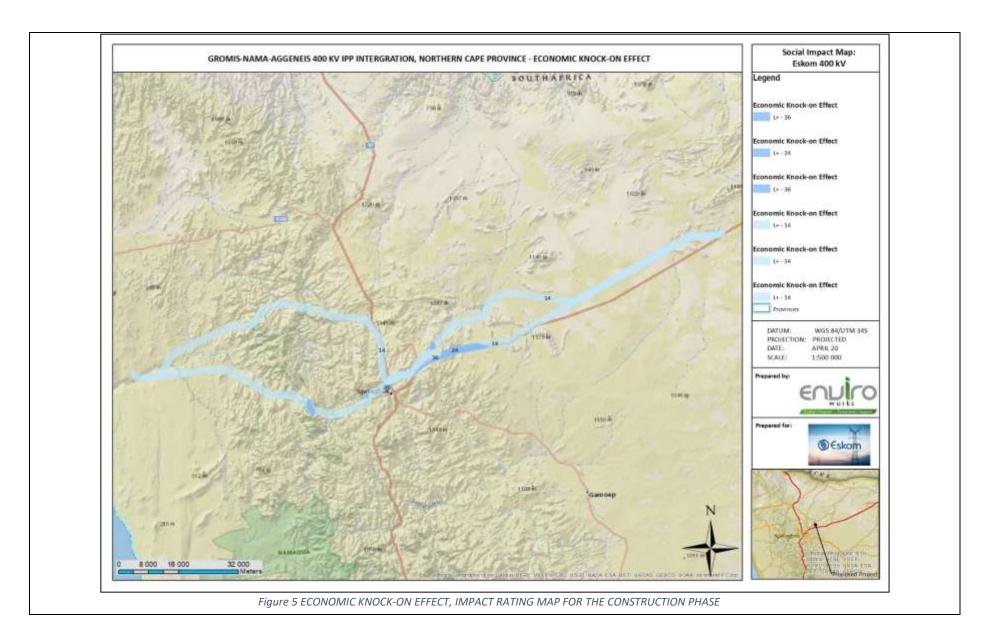




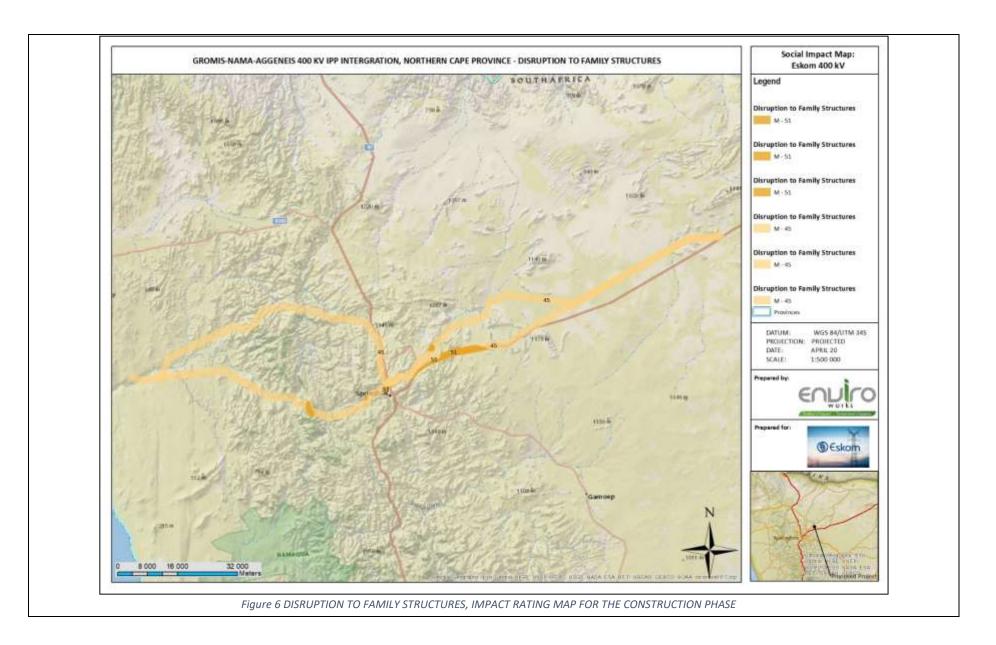




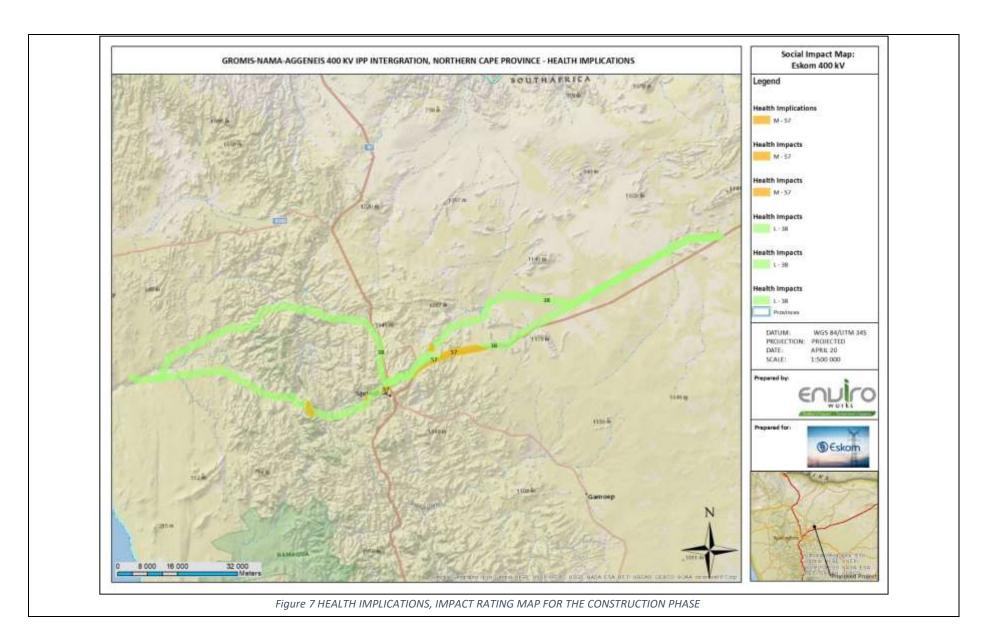




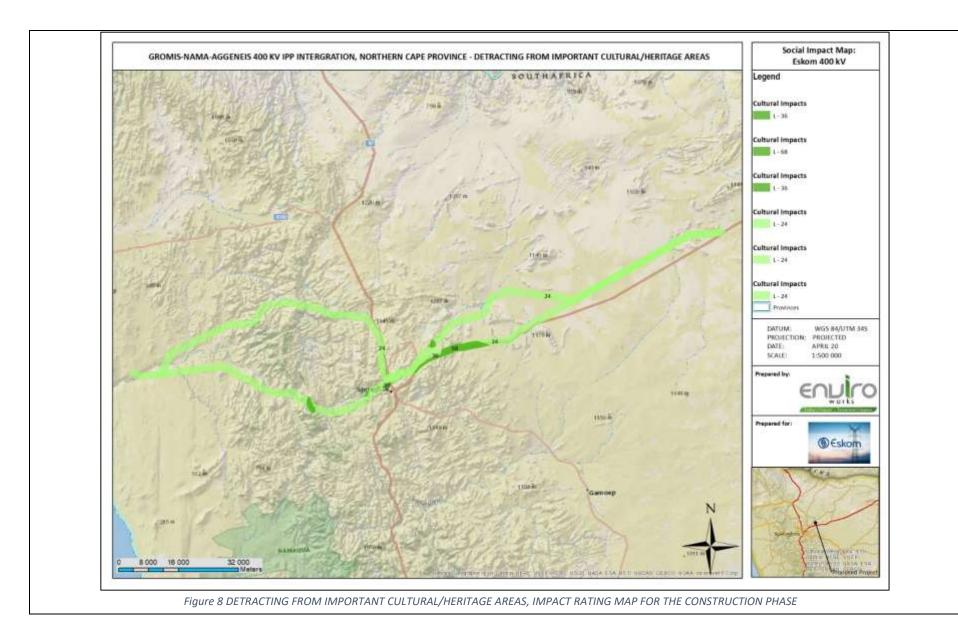




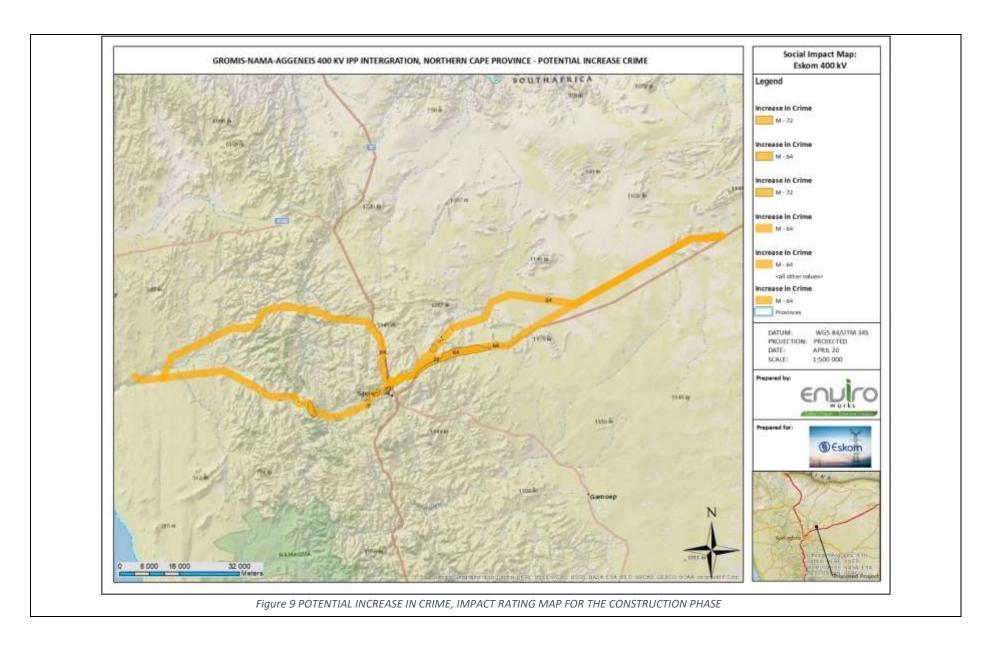




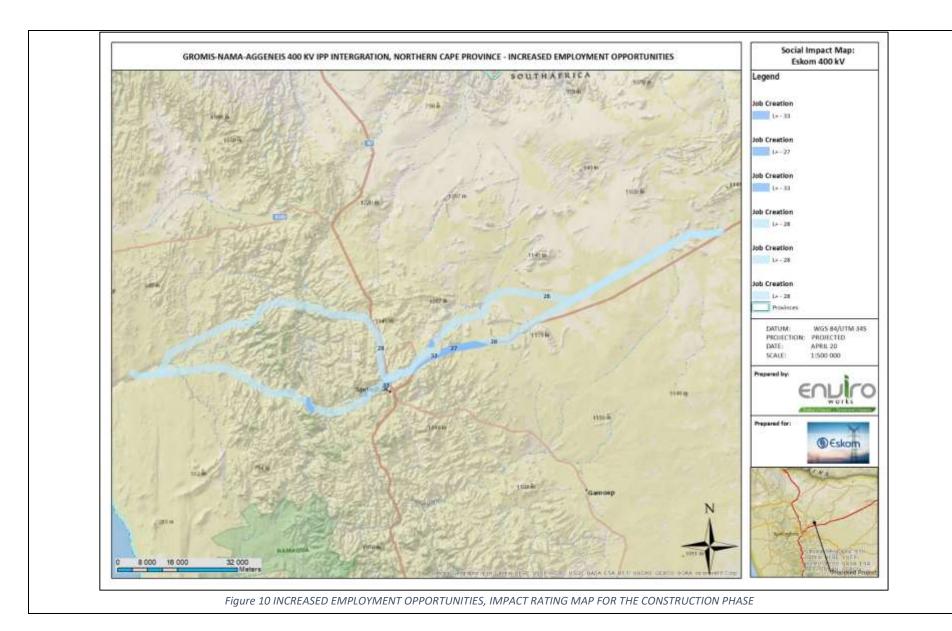




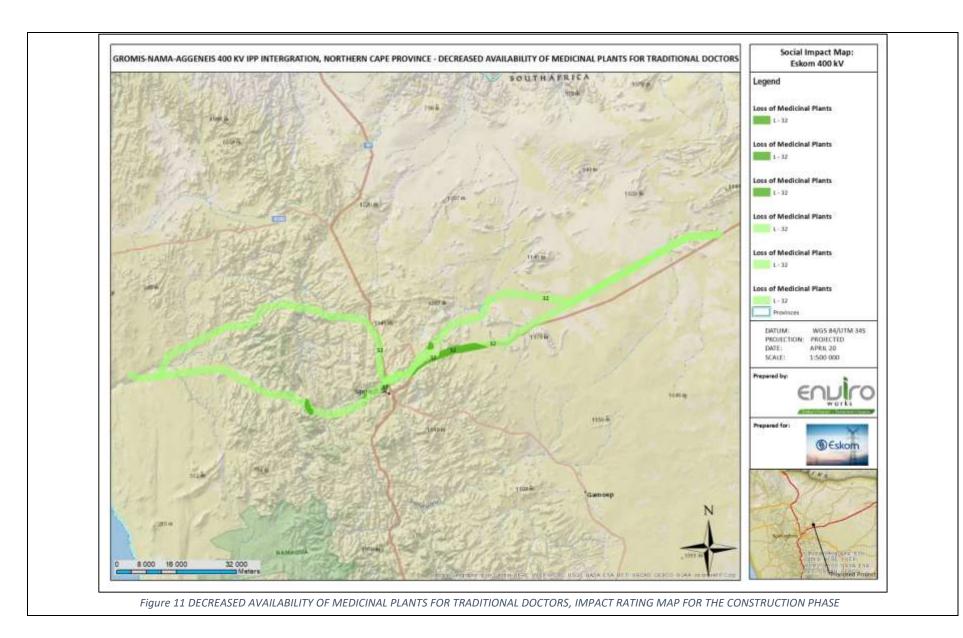




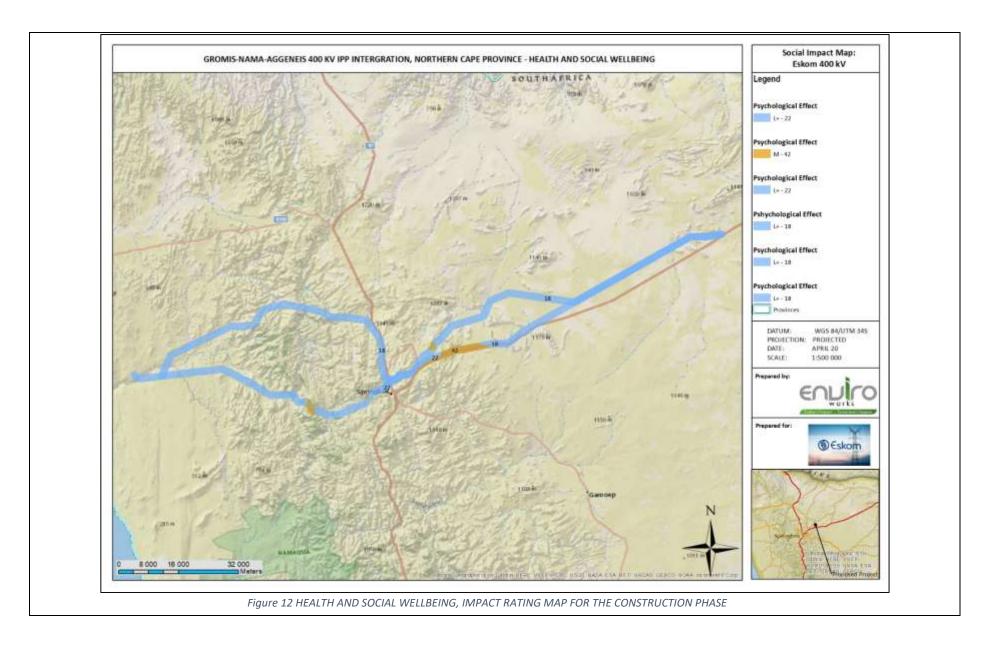




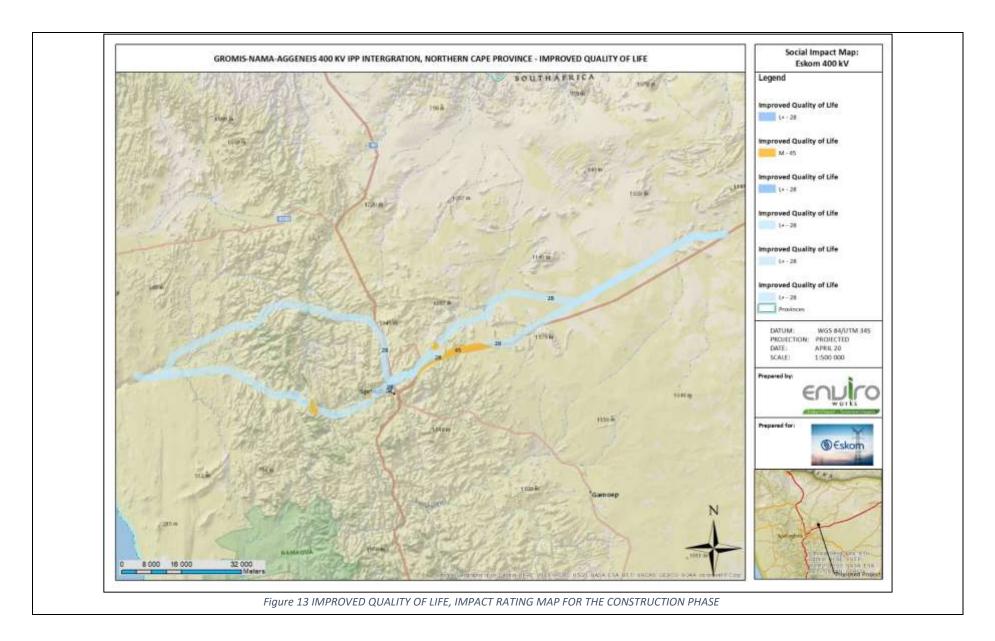




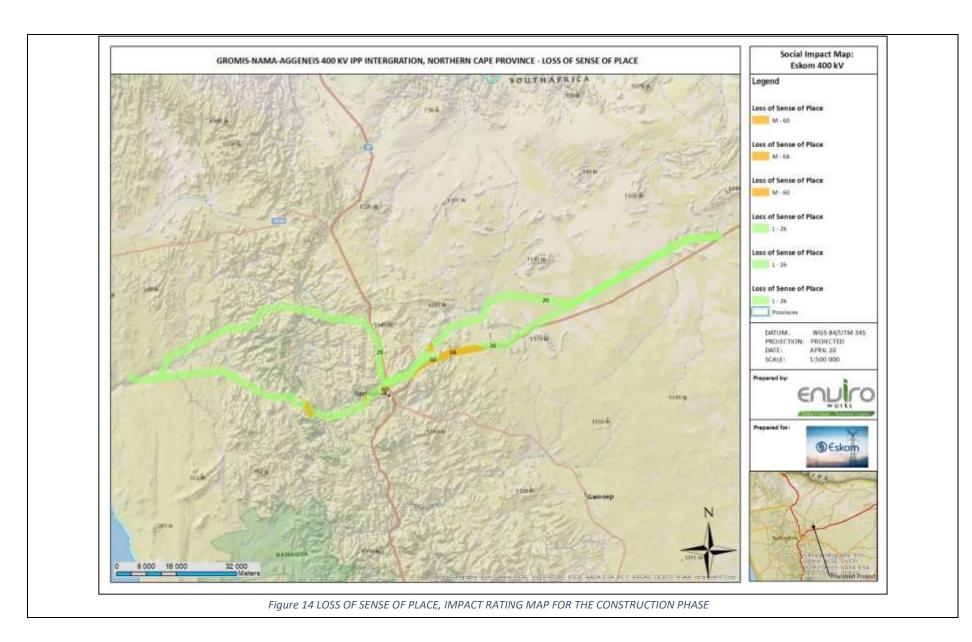




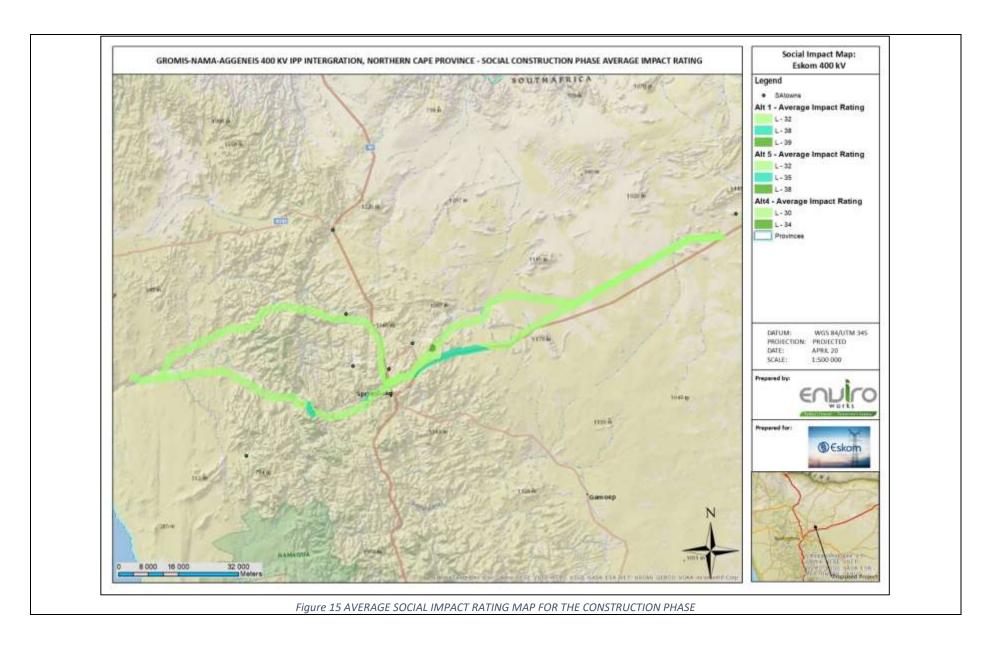






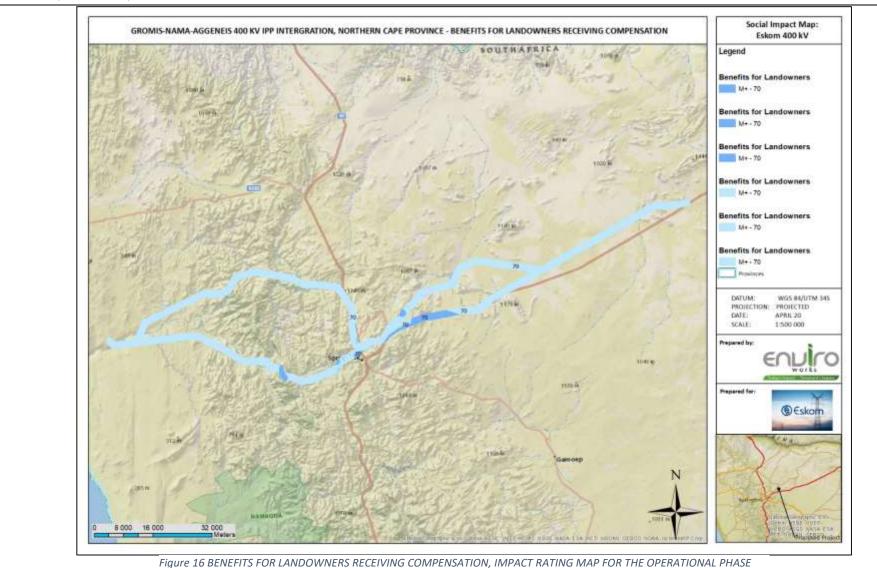




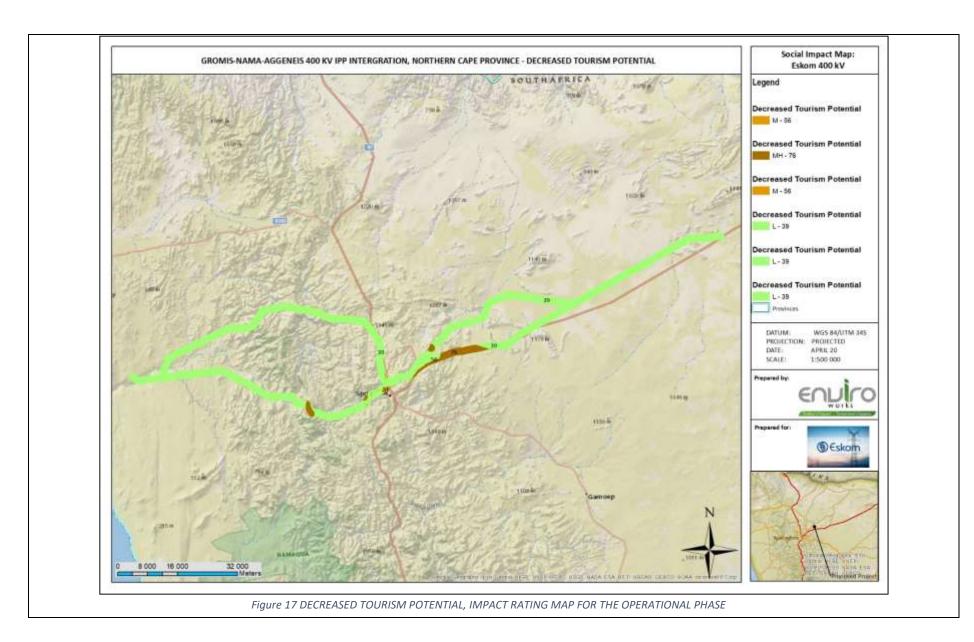




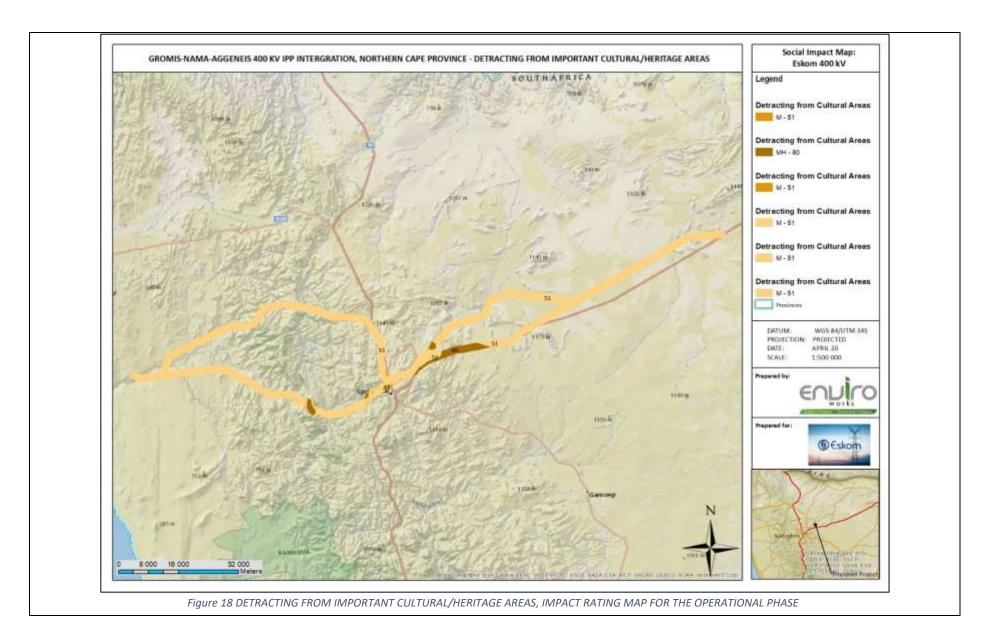
b. Operational phase



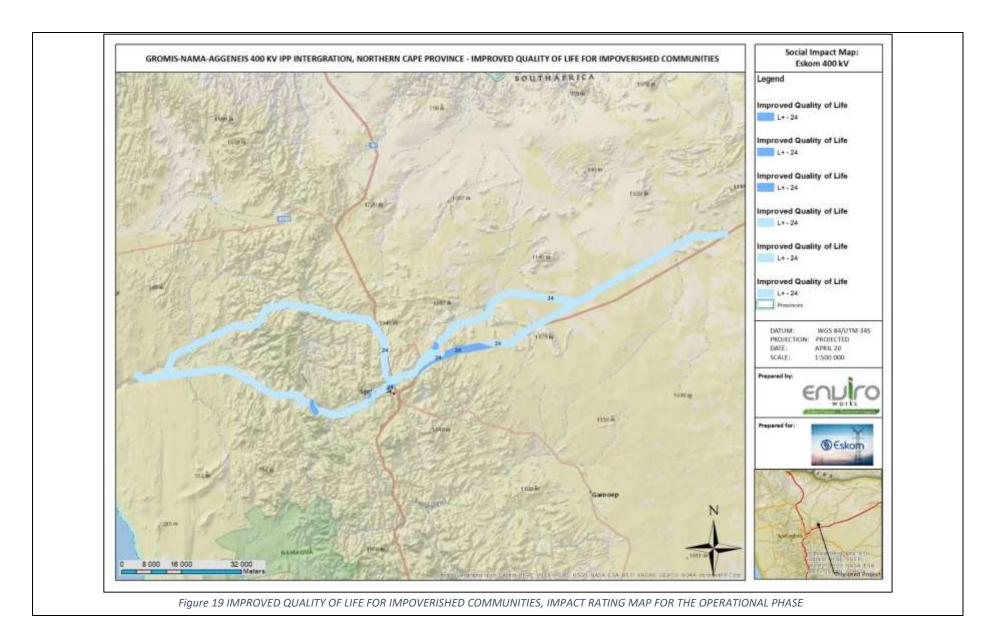




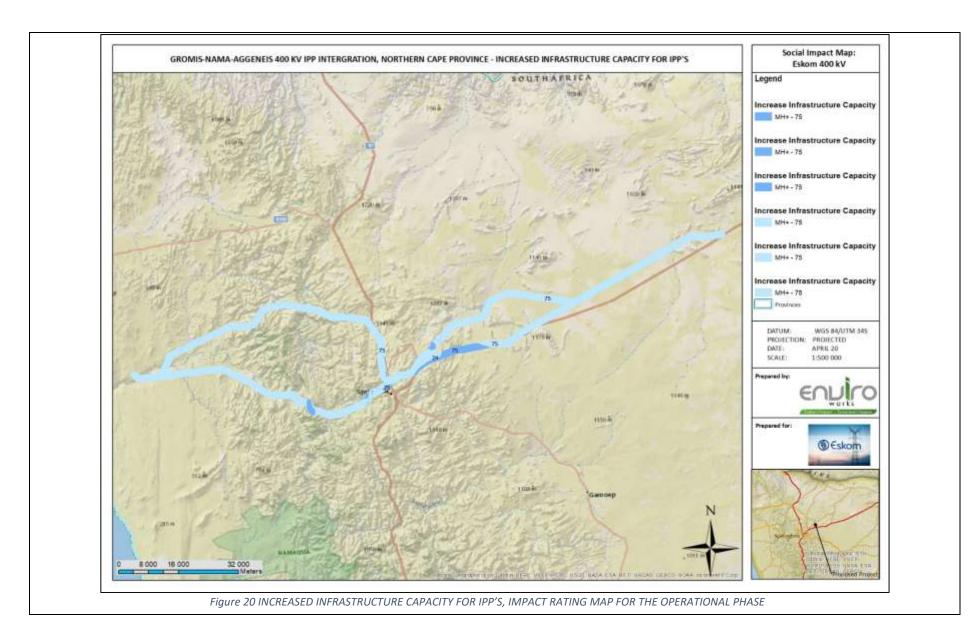




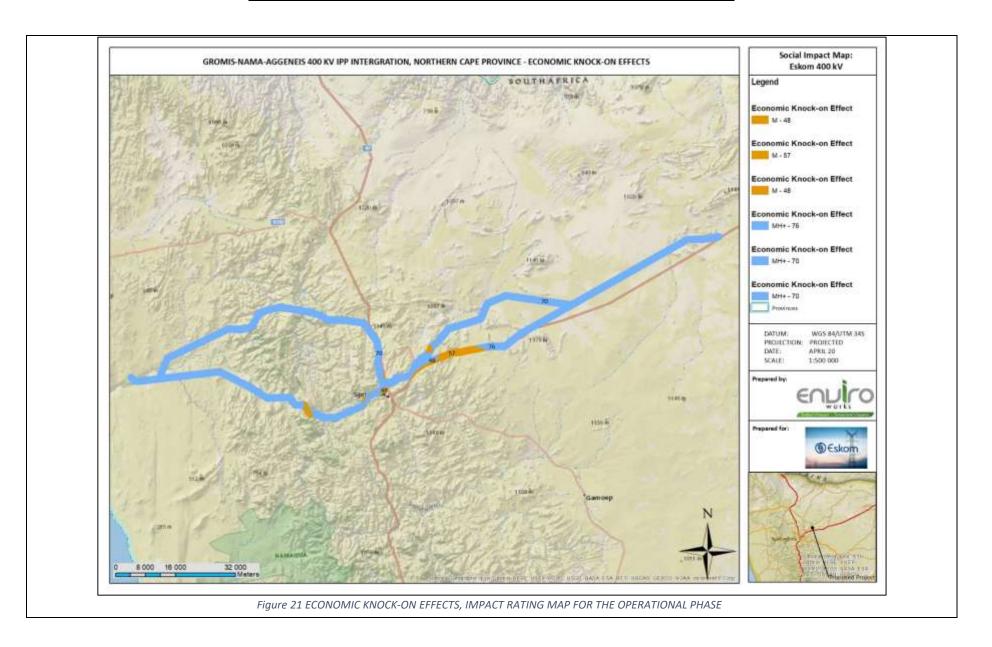




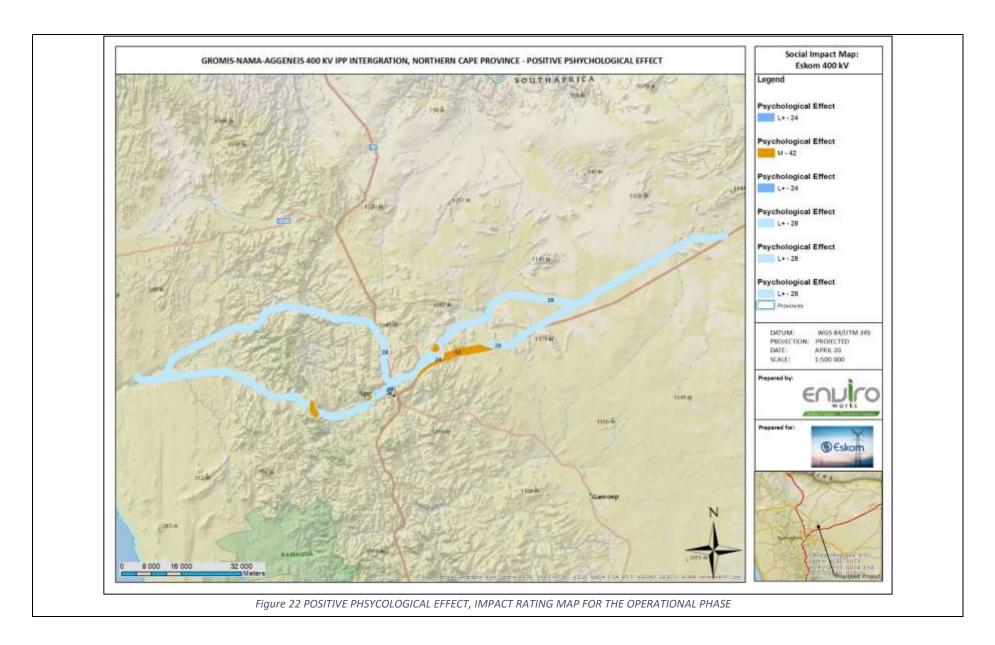




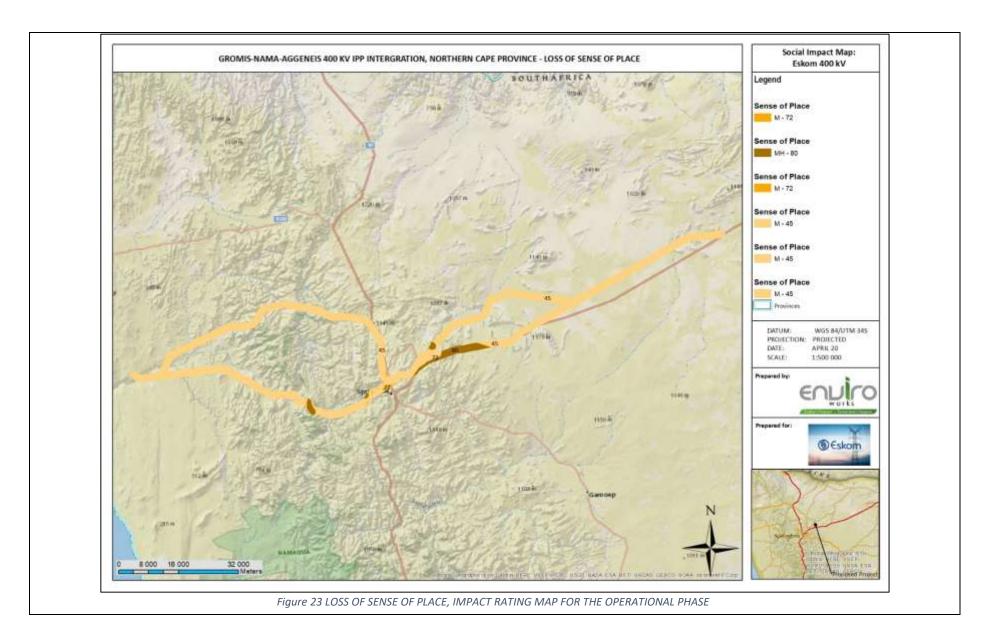




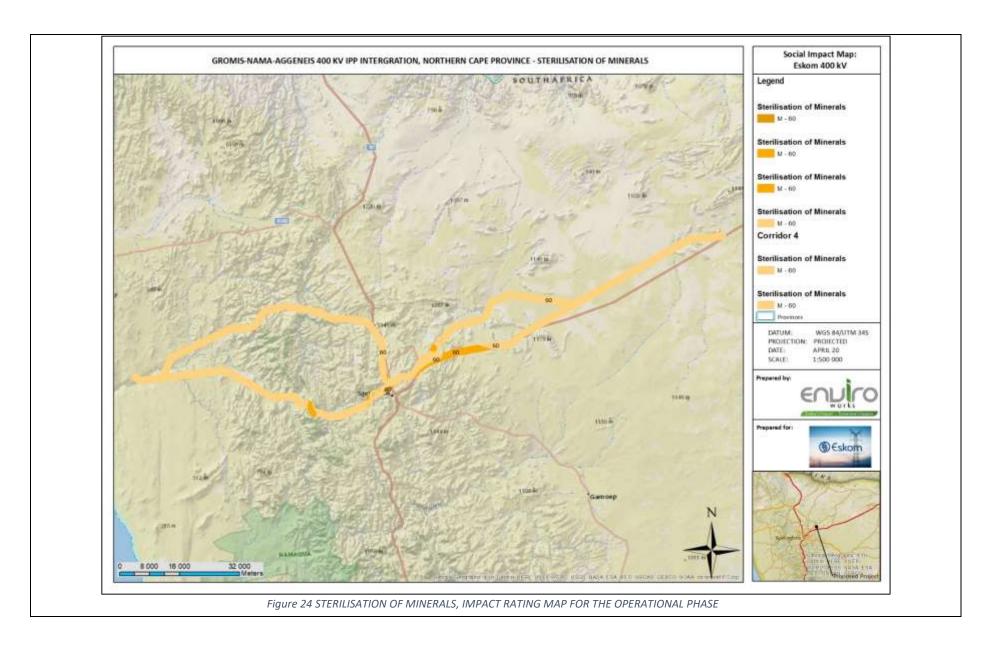




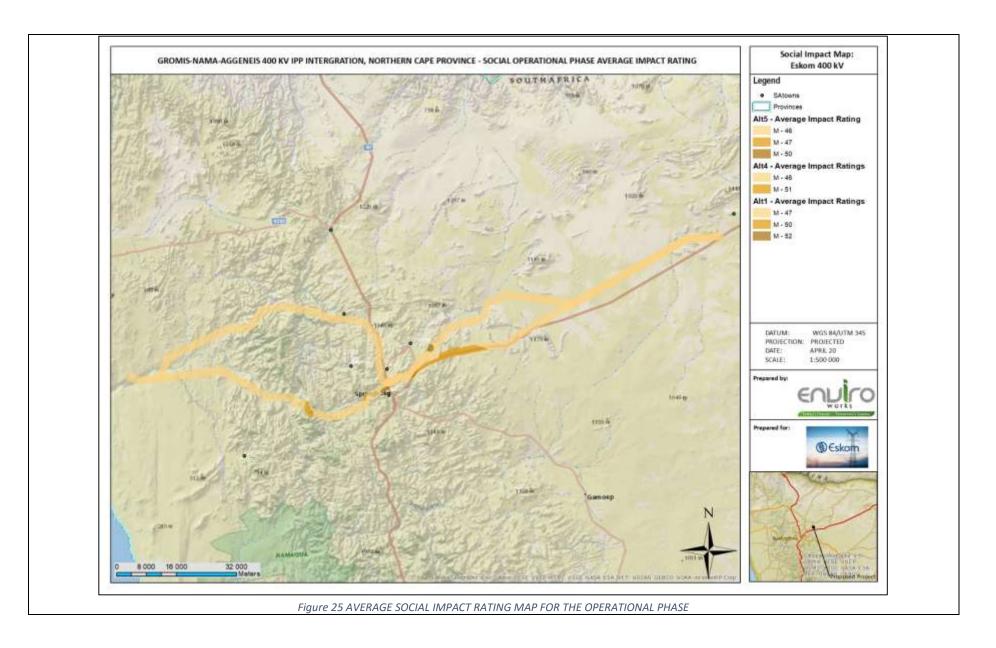








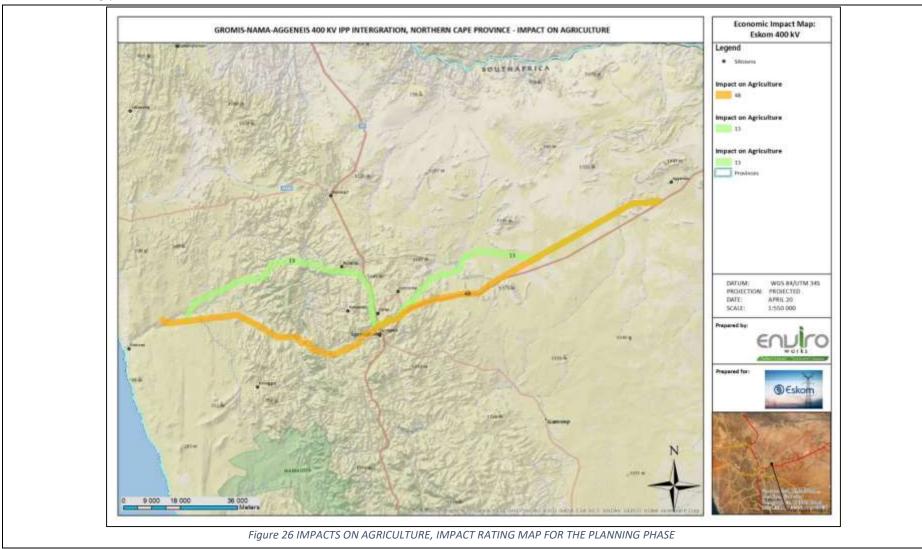




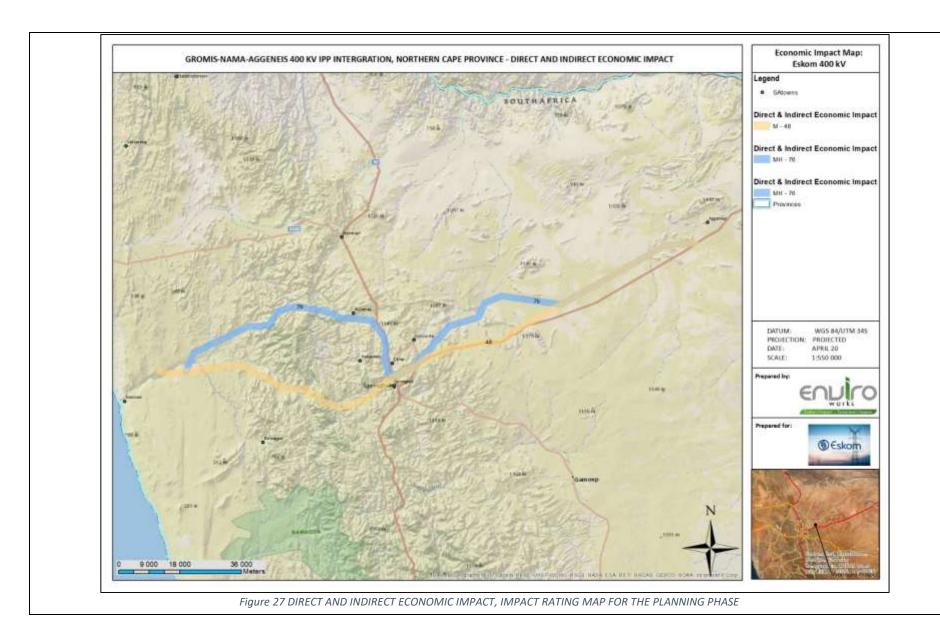


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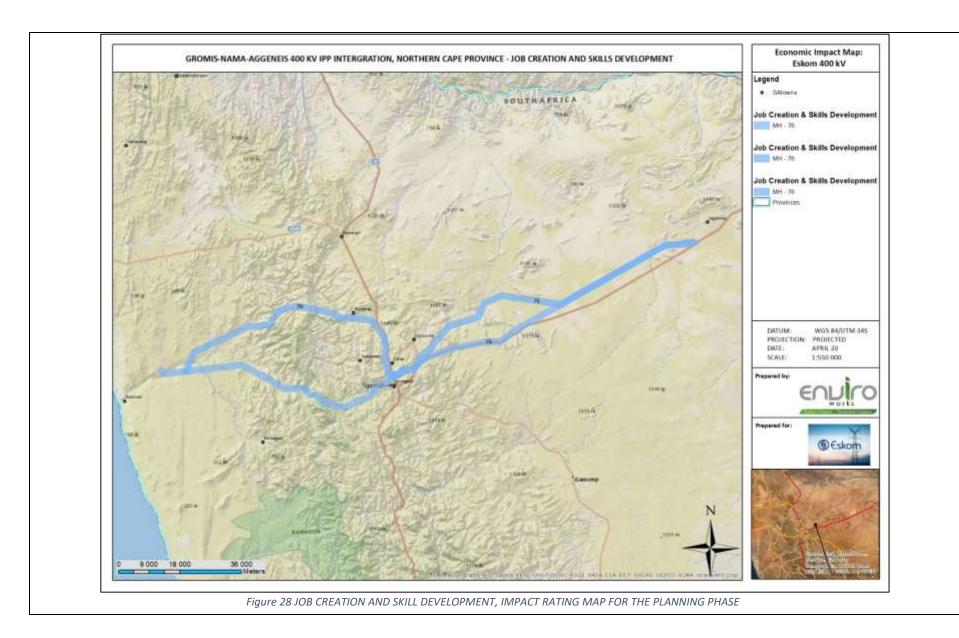
a. Planning phase



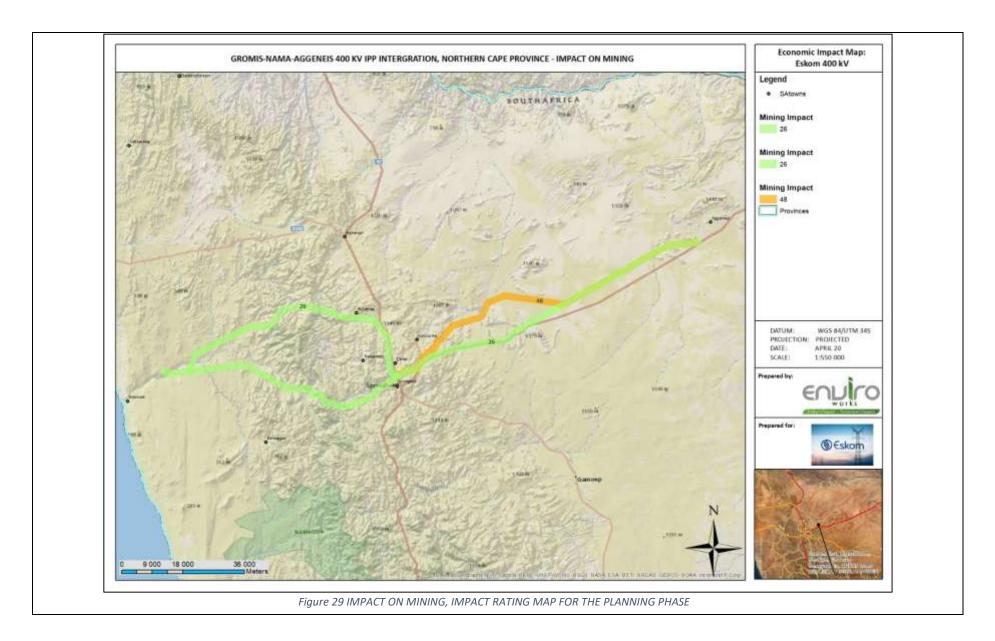




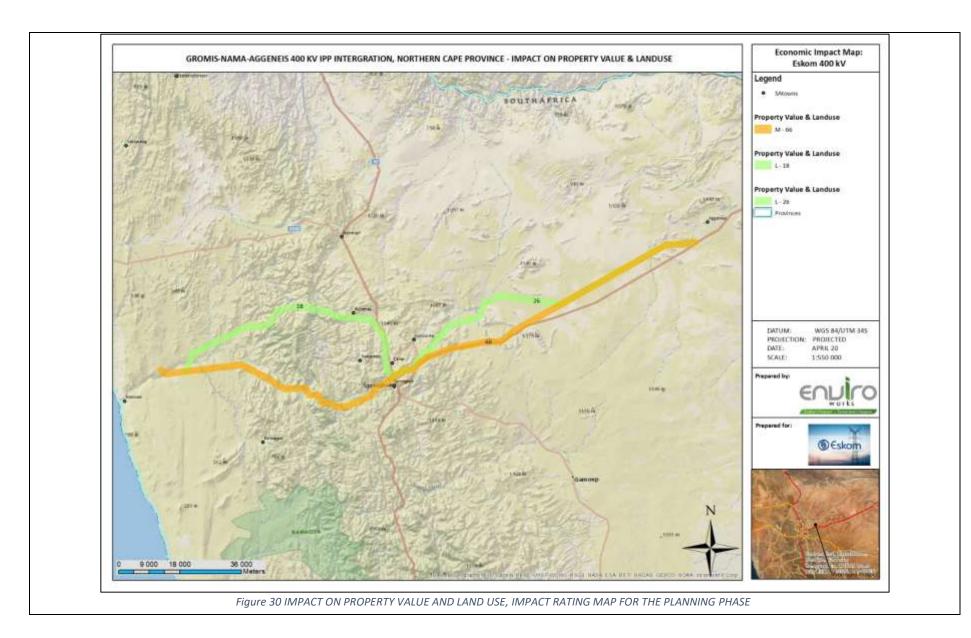




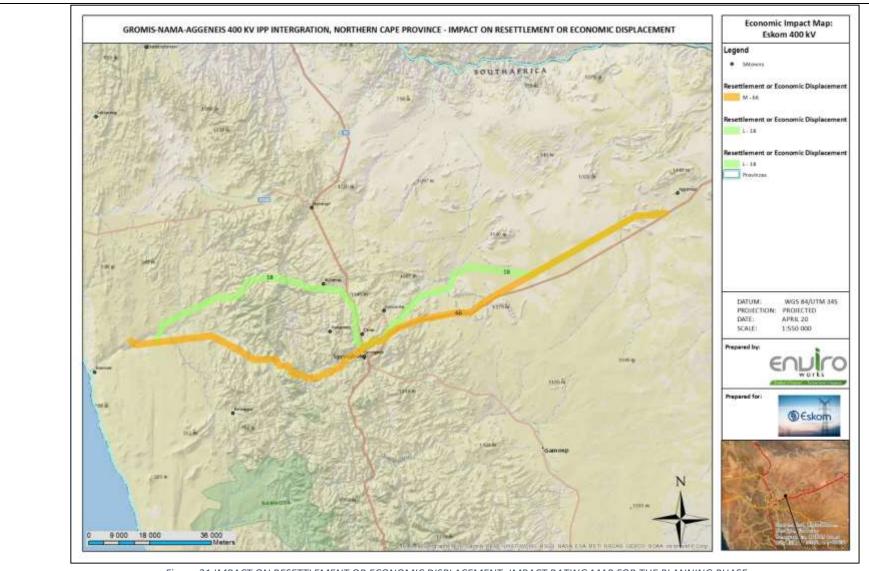






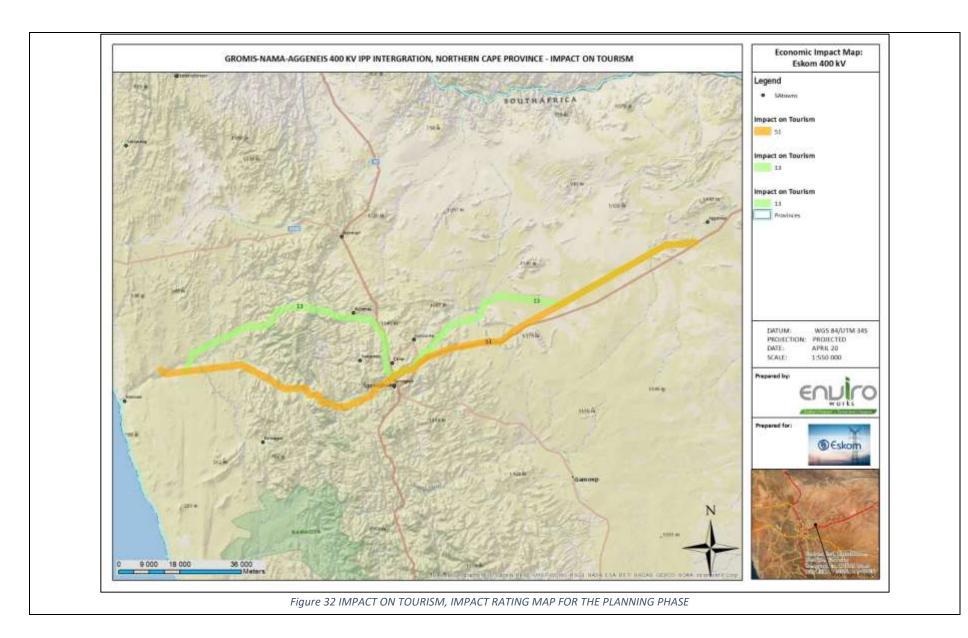




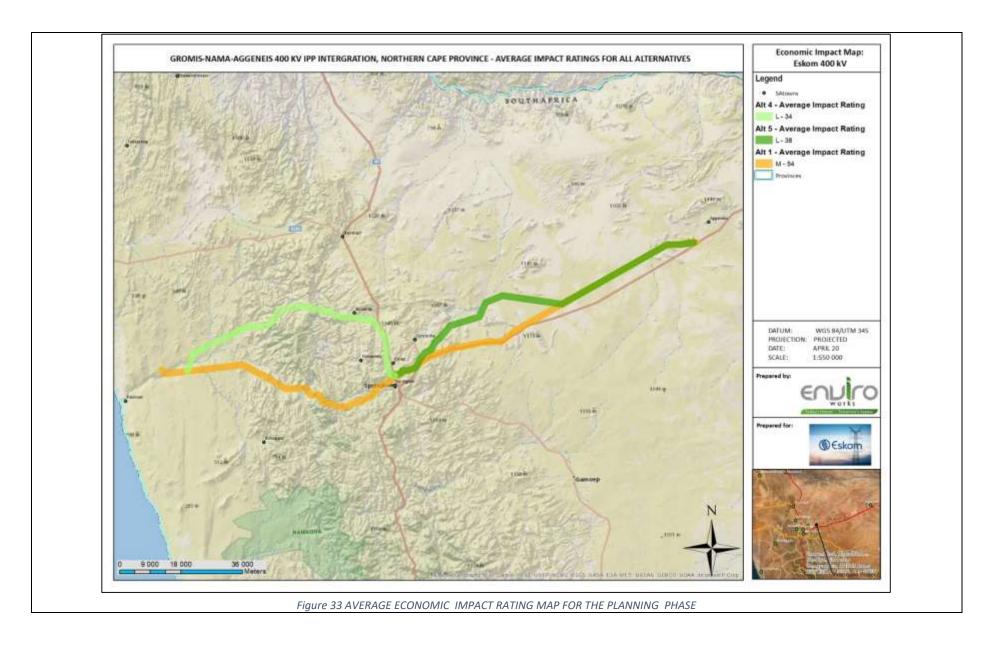






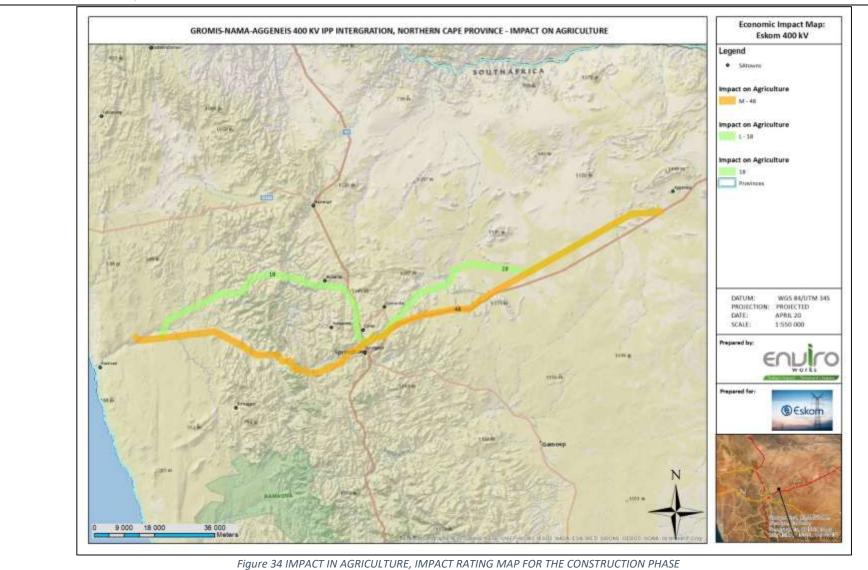




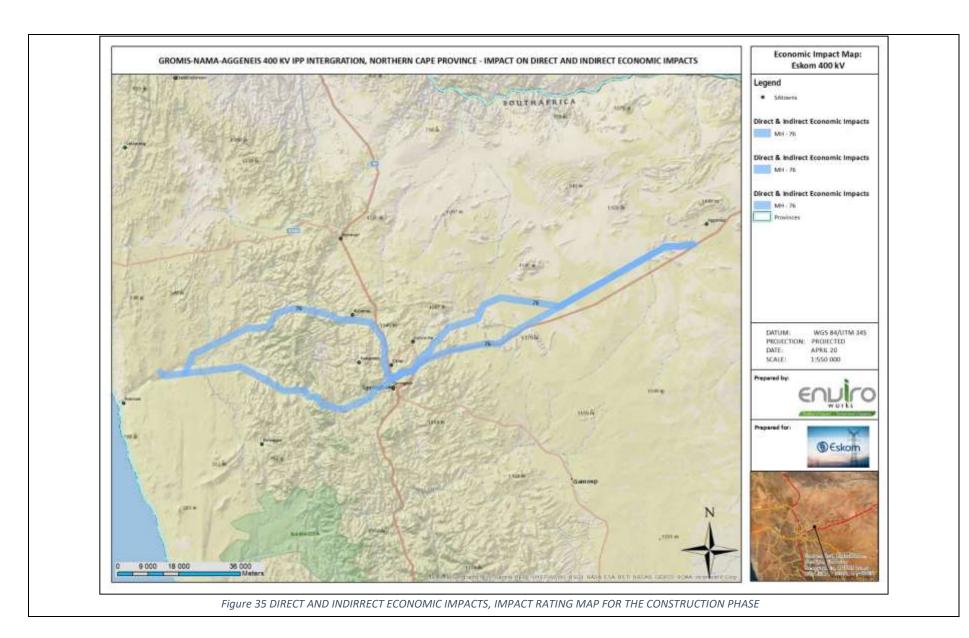




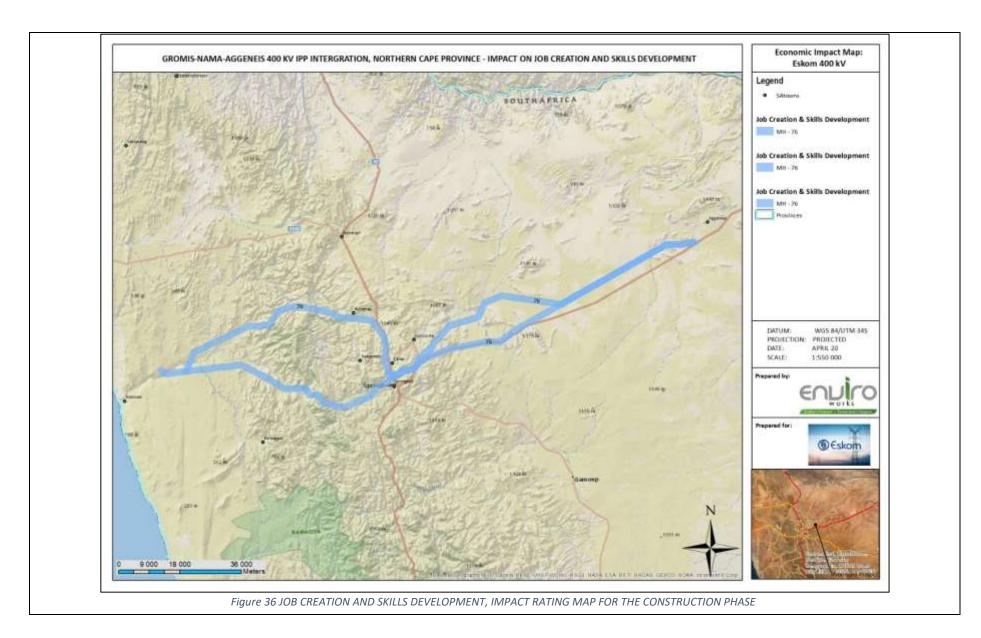
b. Construction phase



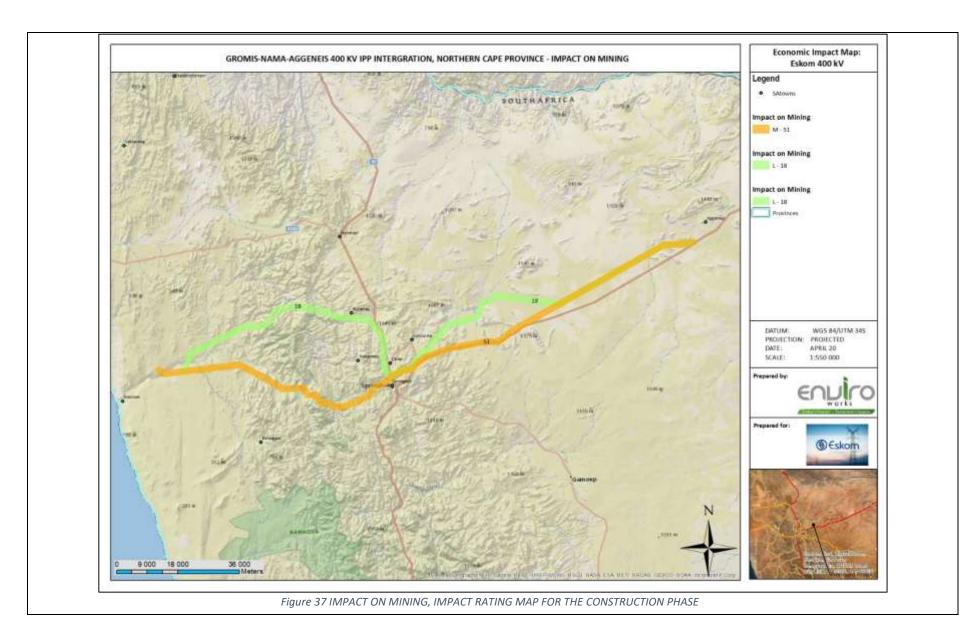




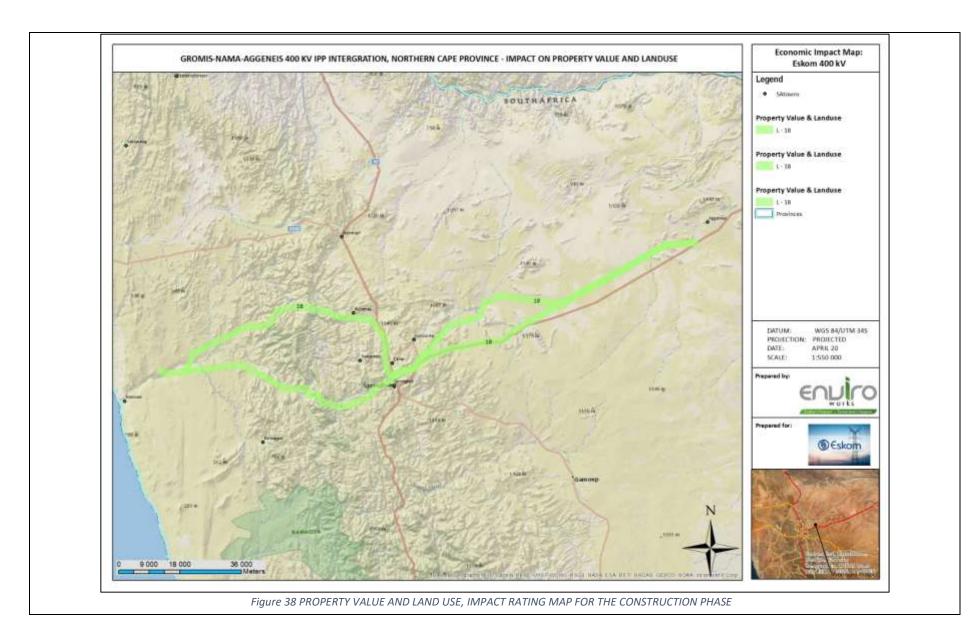




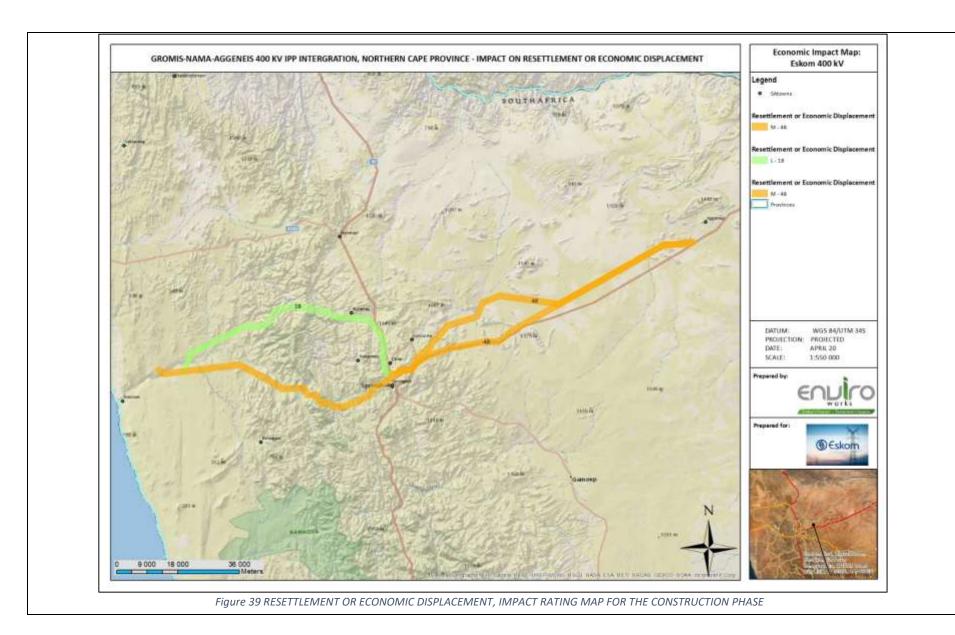




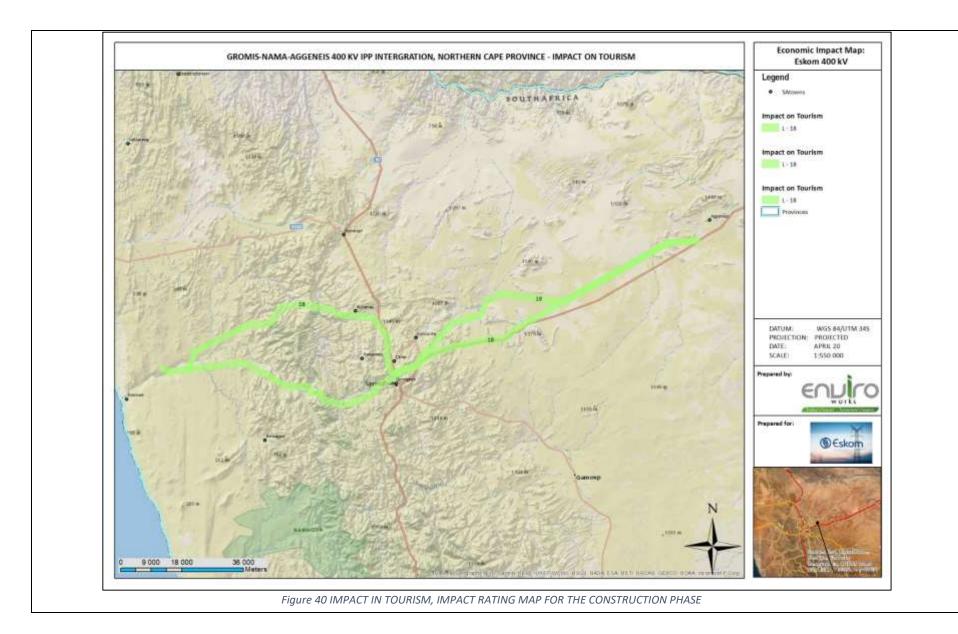




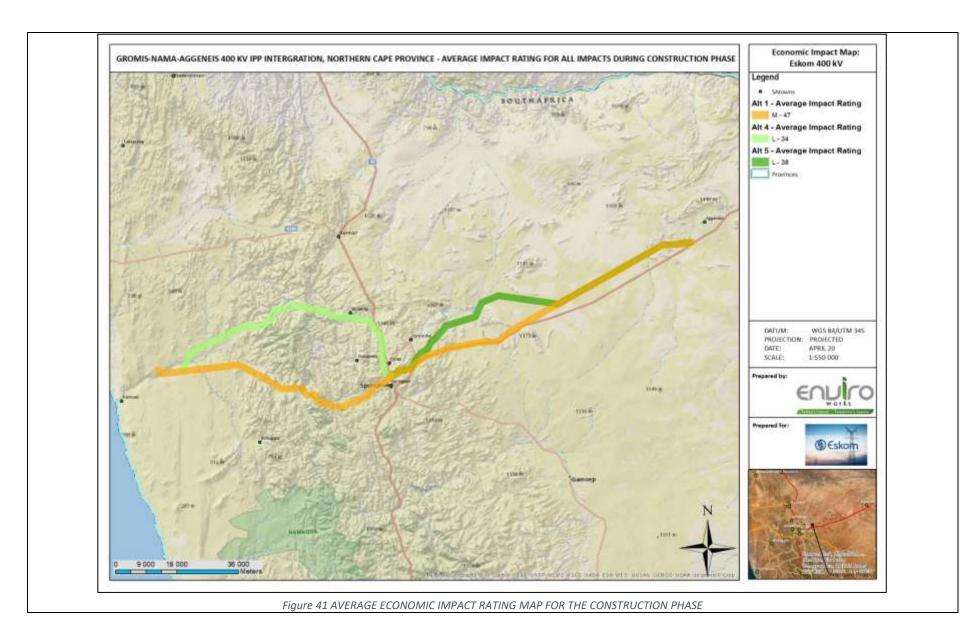














c. Operational phase

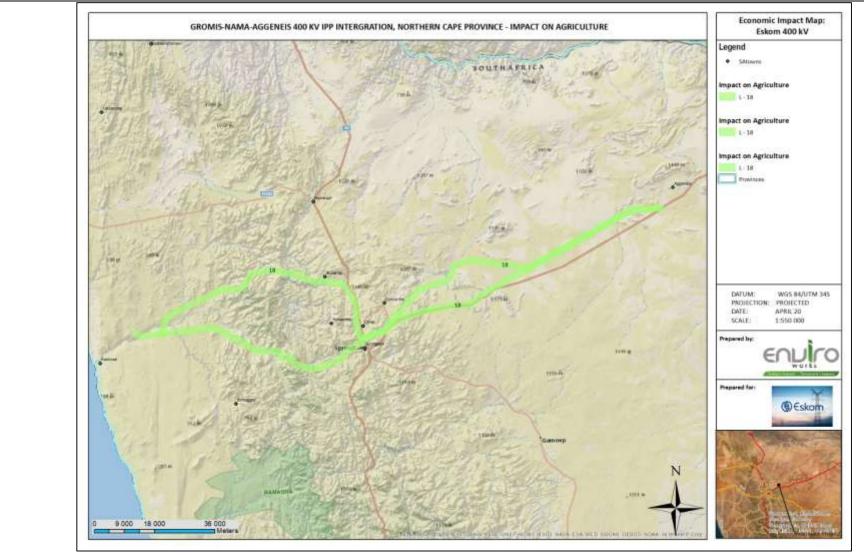
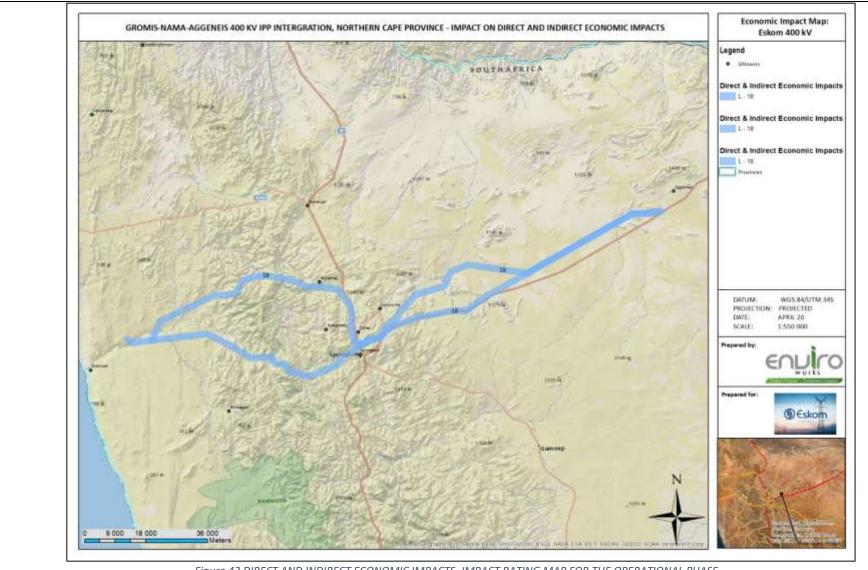
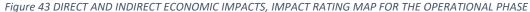


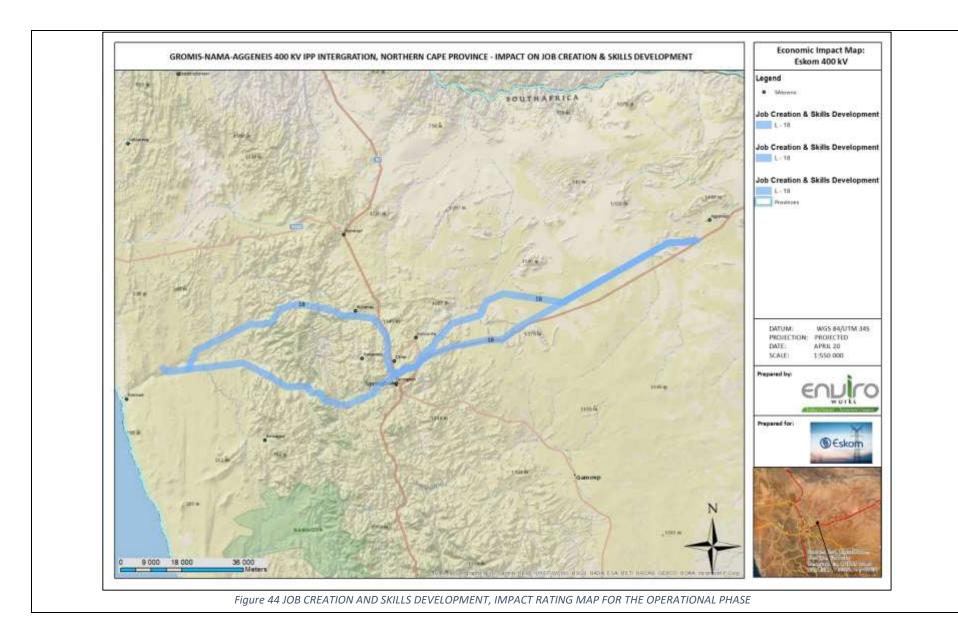
Figure 42 IMPACT ON AGRICULTURE, IMPACT RATING MAP FOR THE OPERATIONAL PHASE



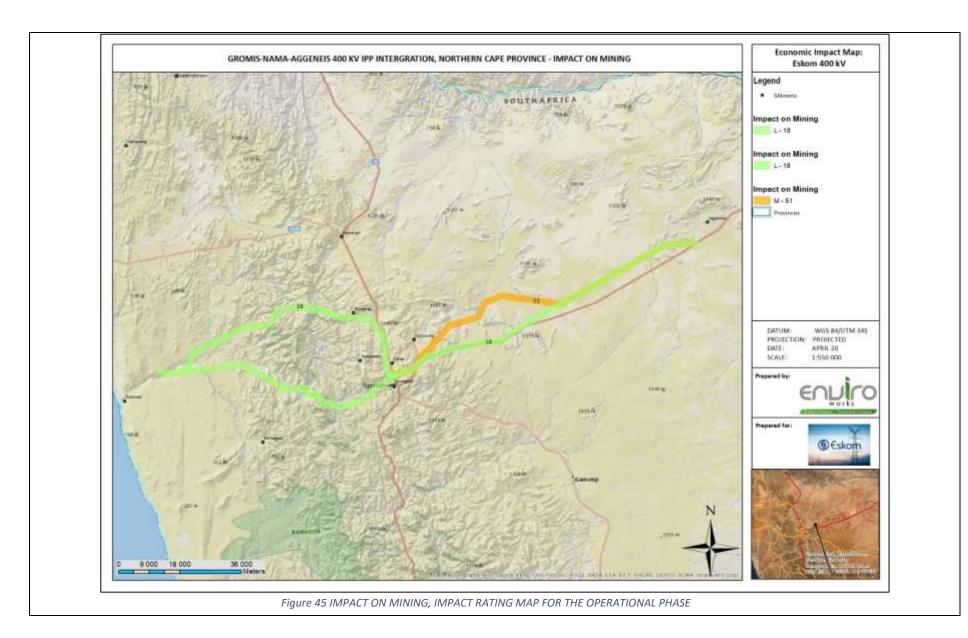




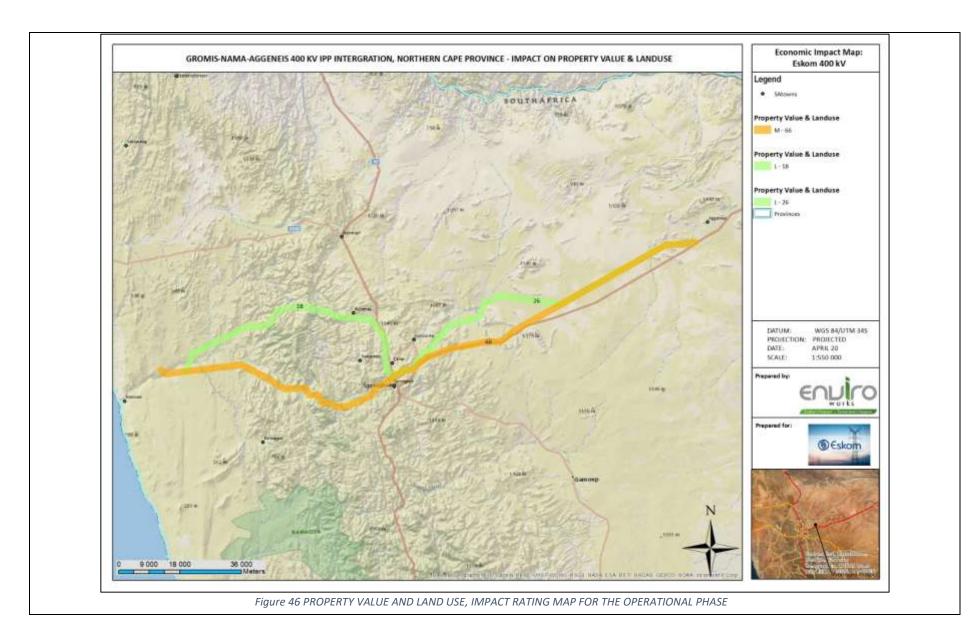




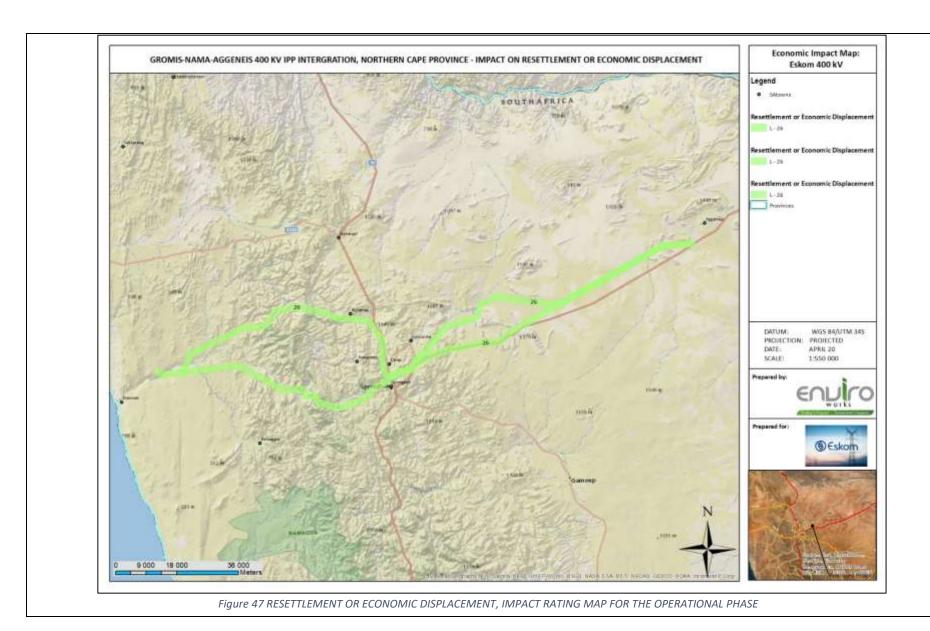




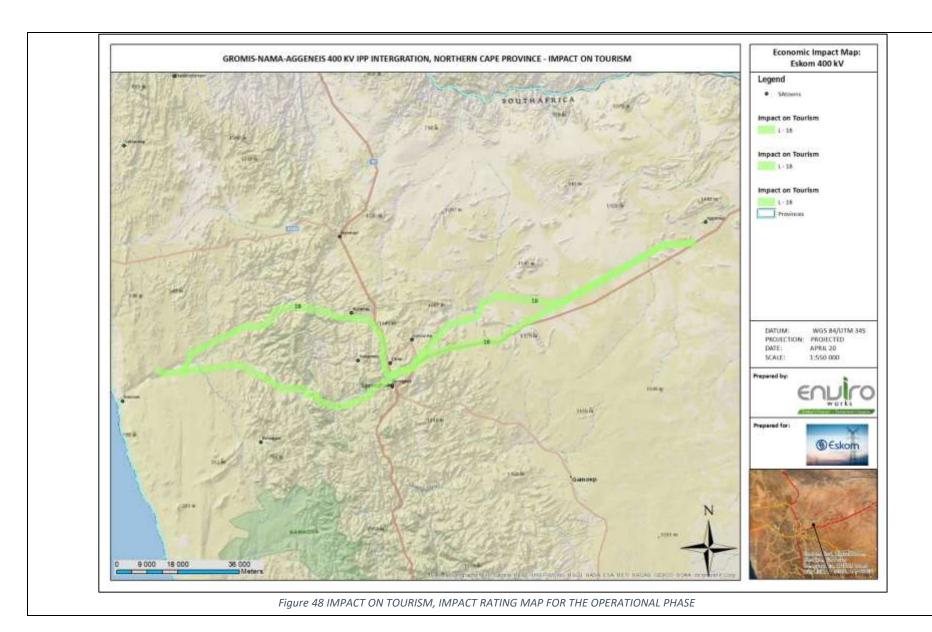




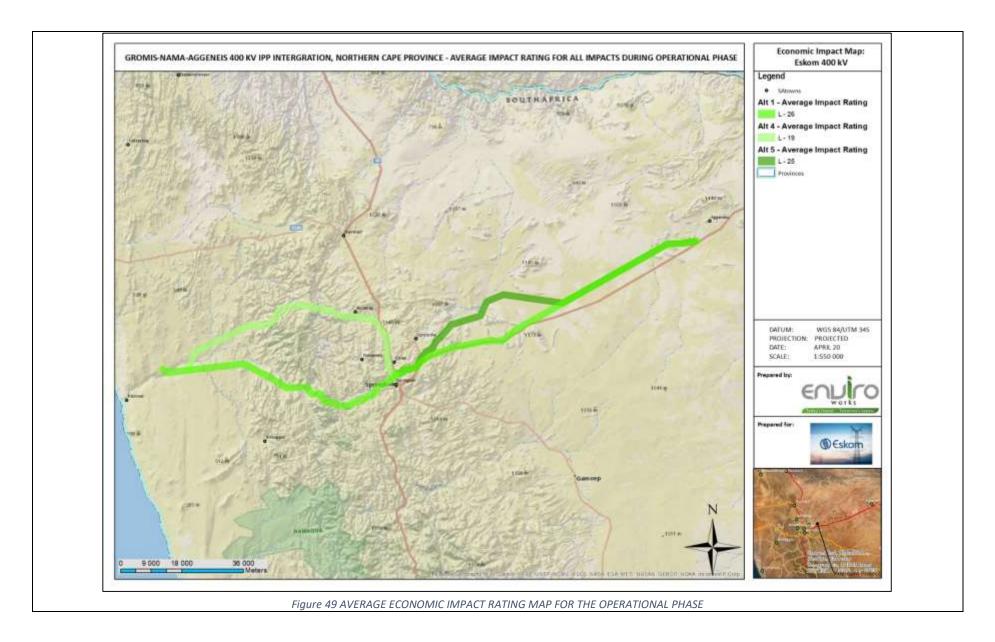






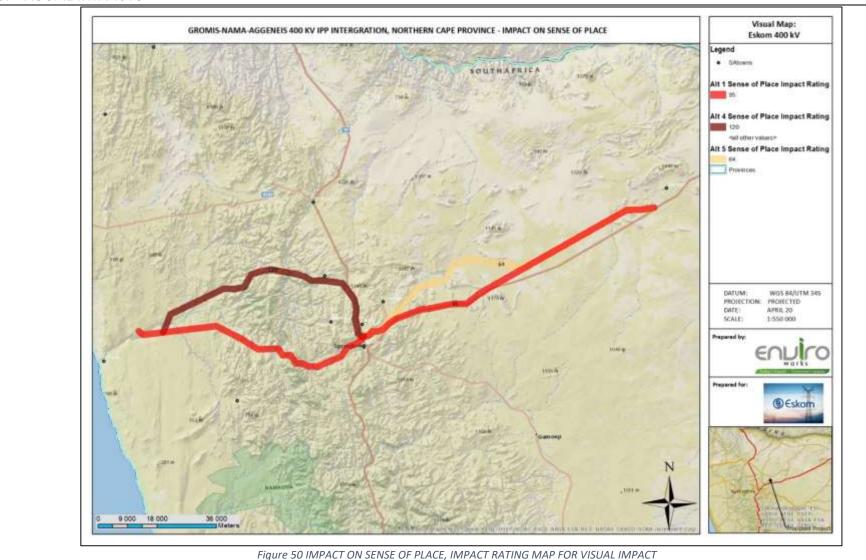




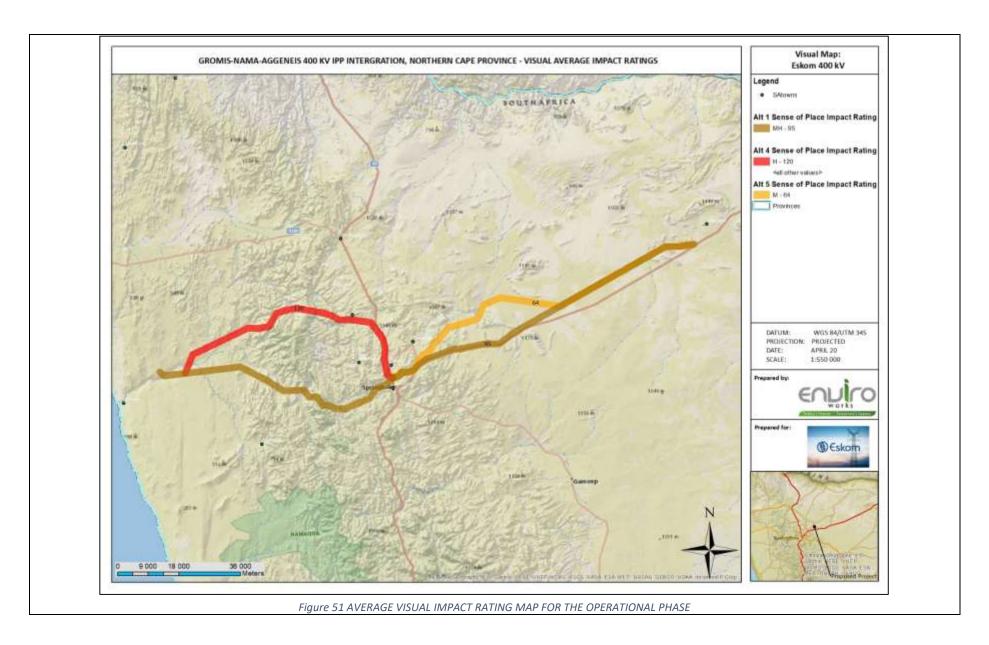




3. VISUAL IMPACTS



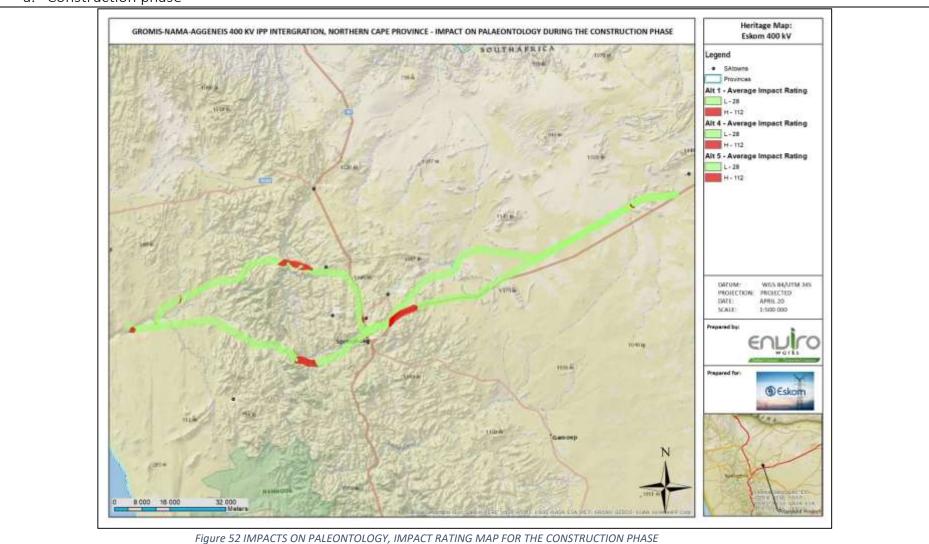




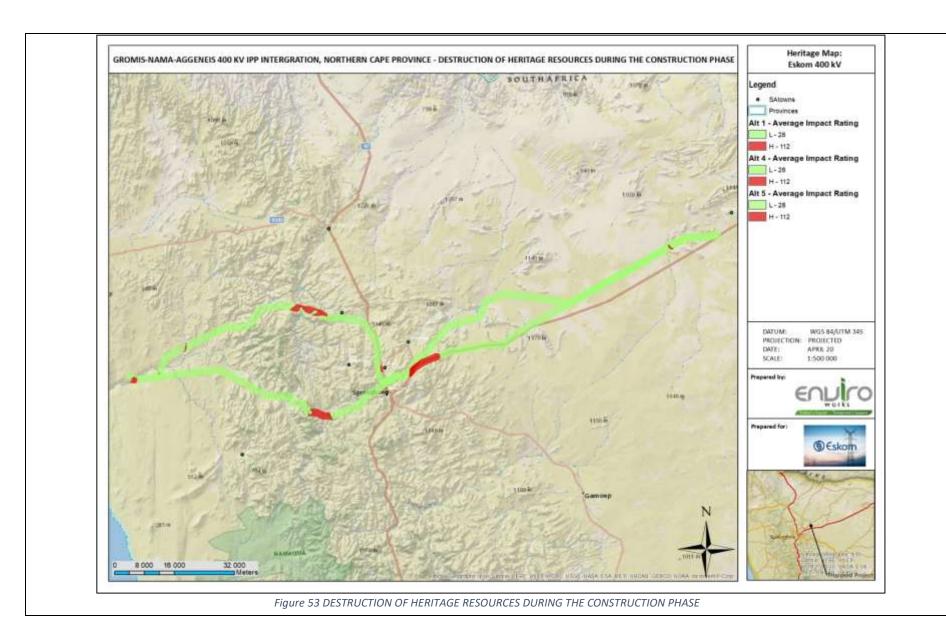


4. HERITAGE IMPACTS

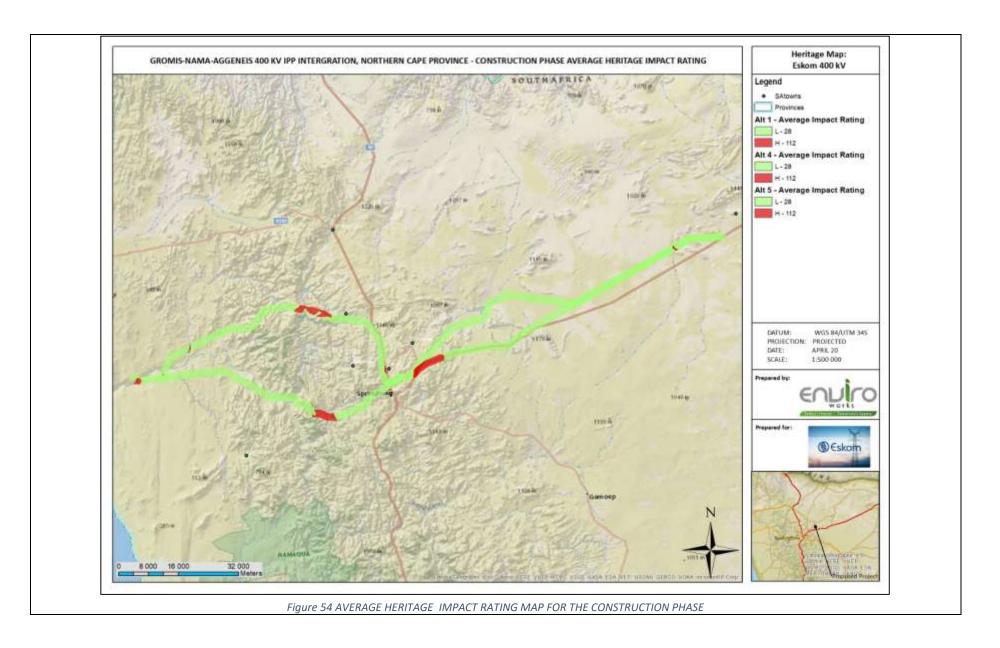
a. Construction phase



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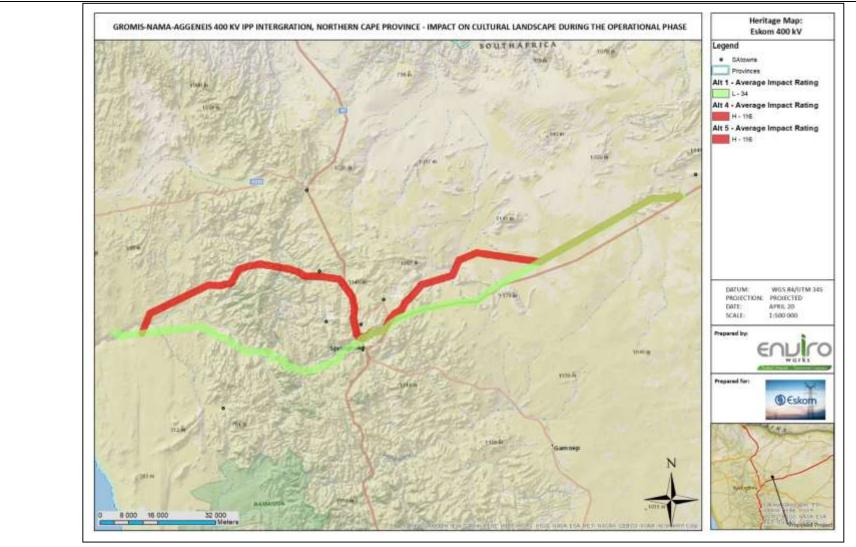






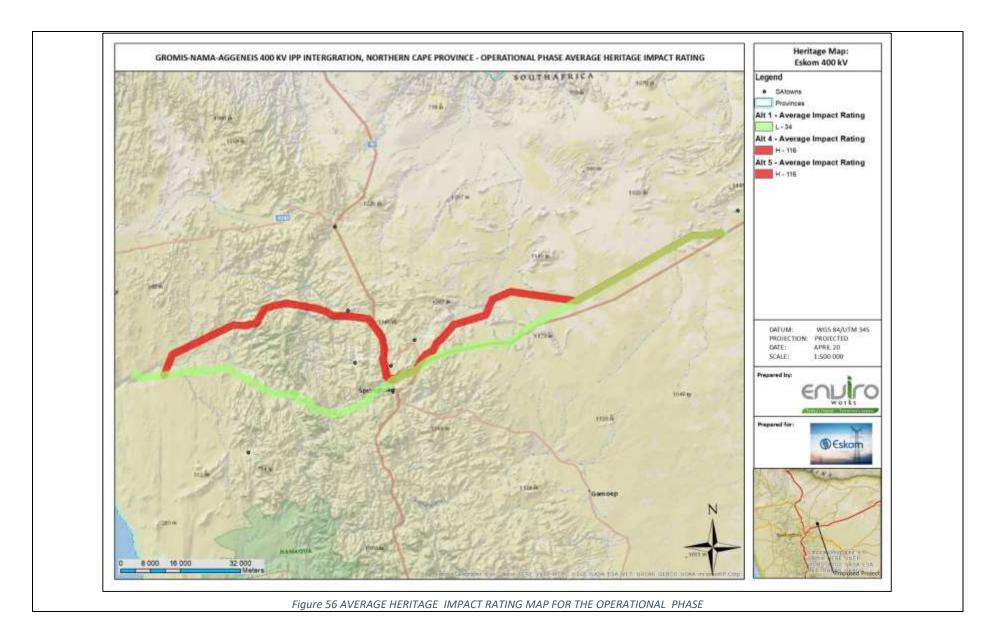


b. Operational phase



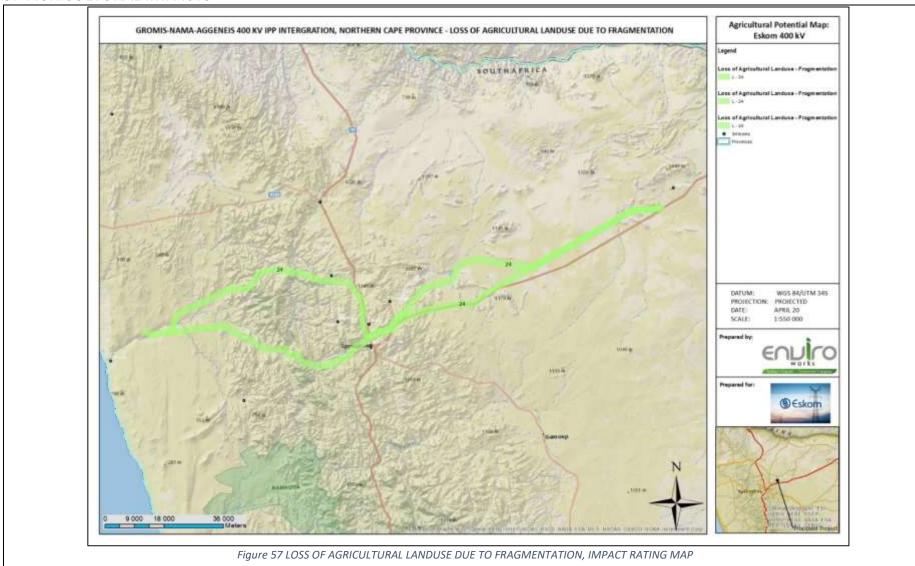




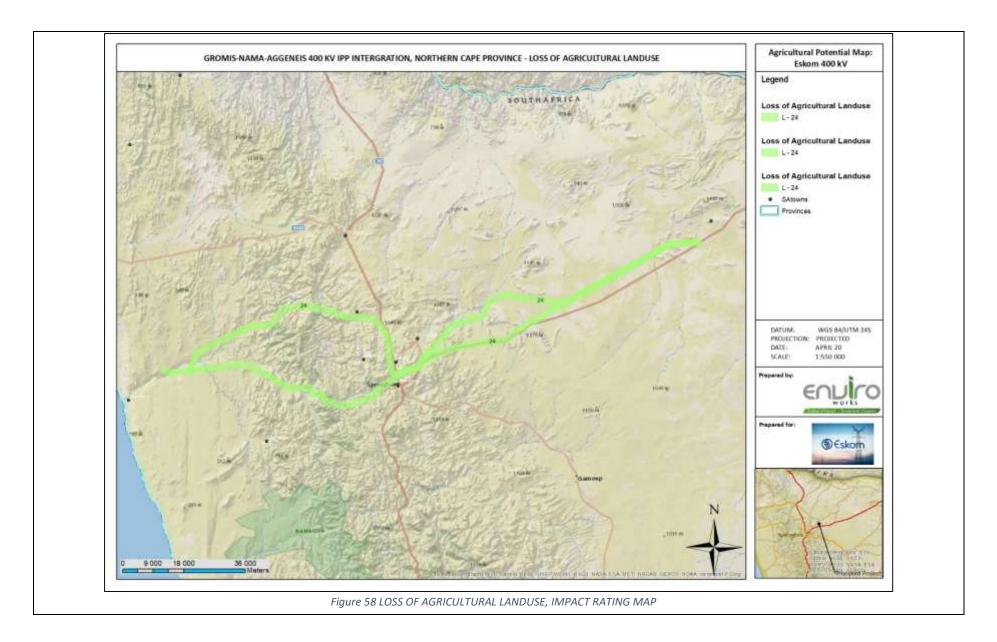




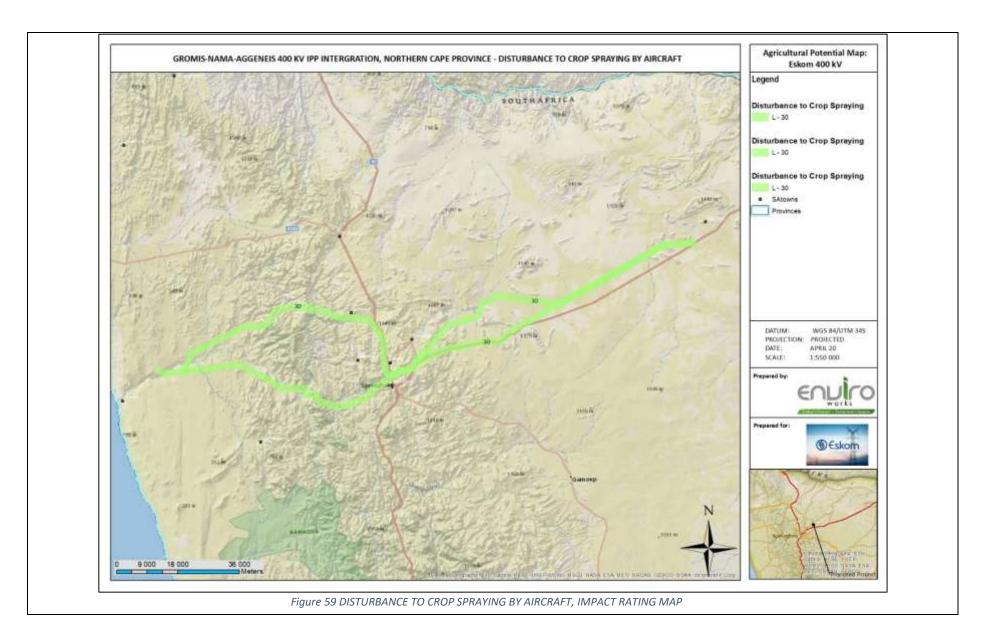
5. AGRICULTURAL IMPACTS



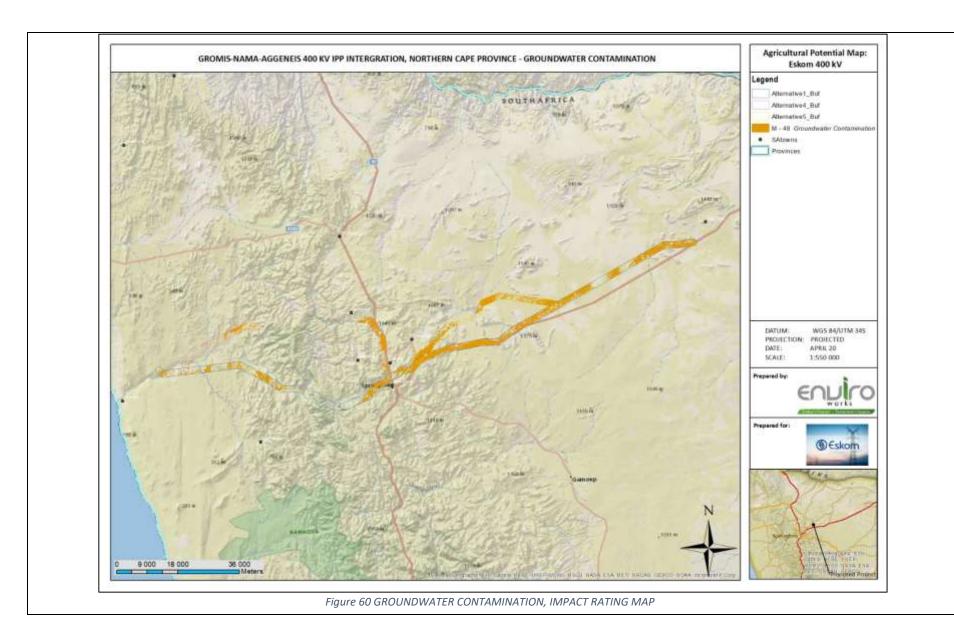




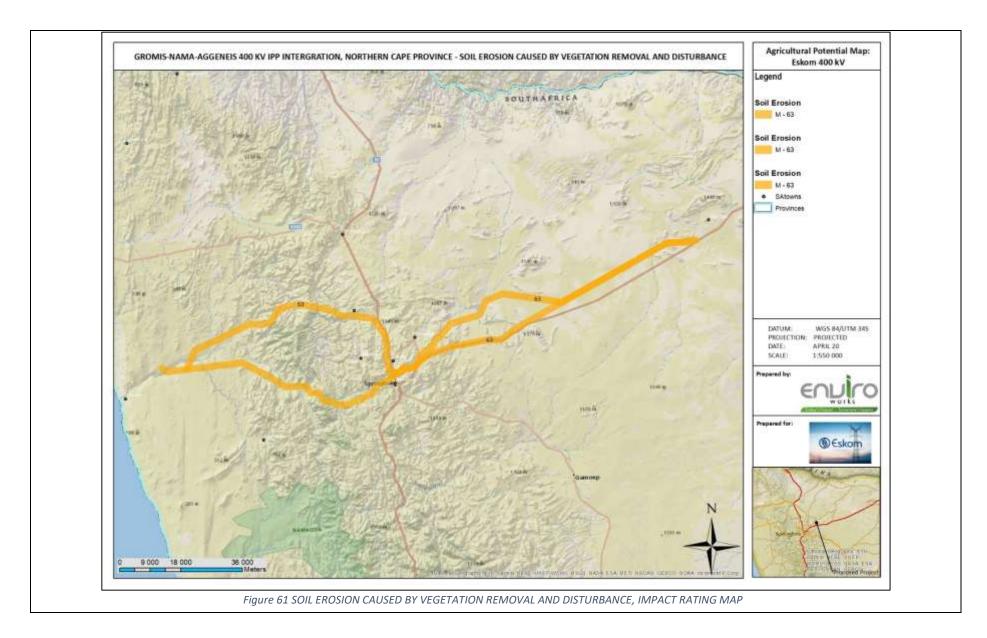




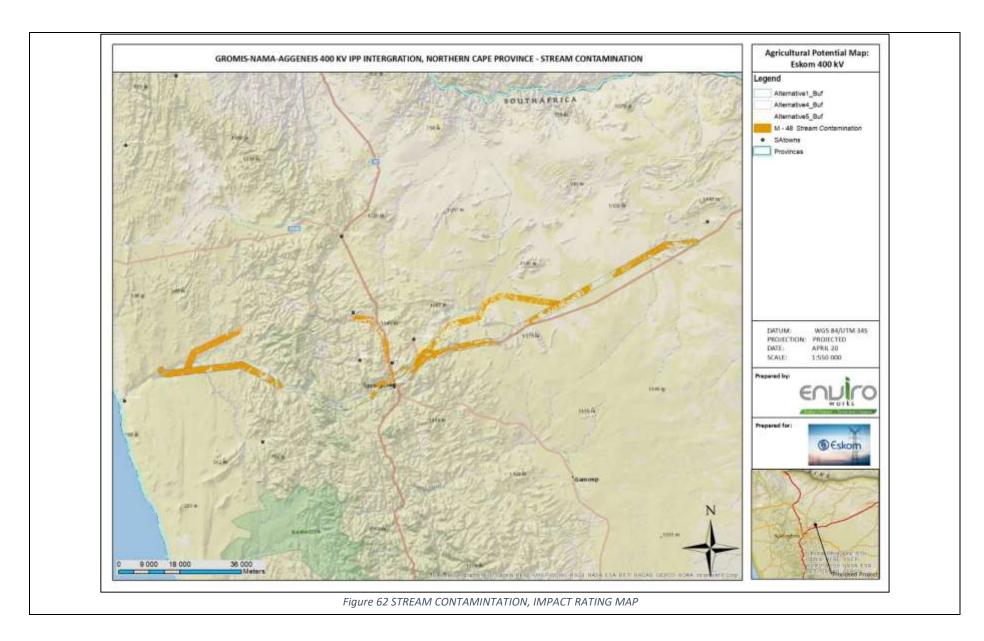




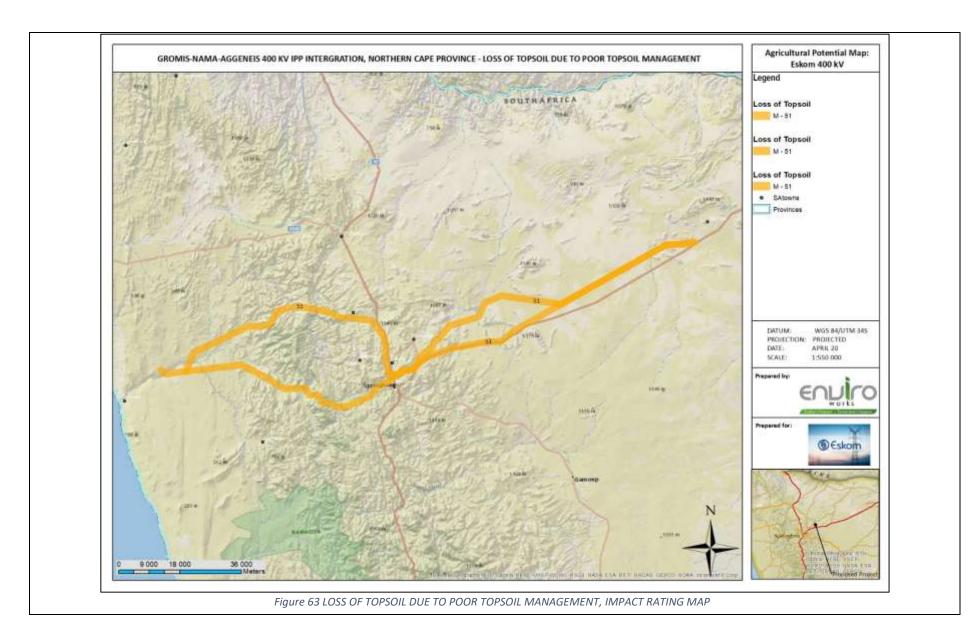




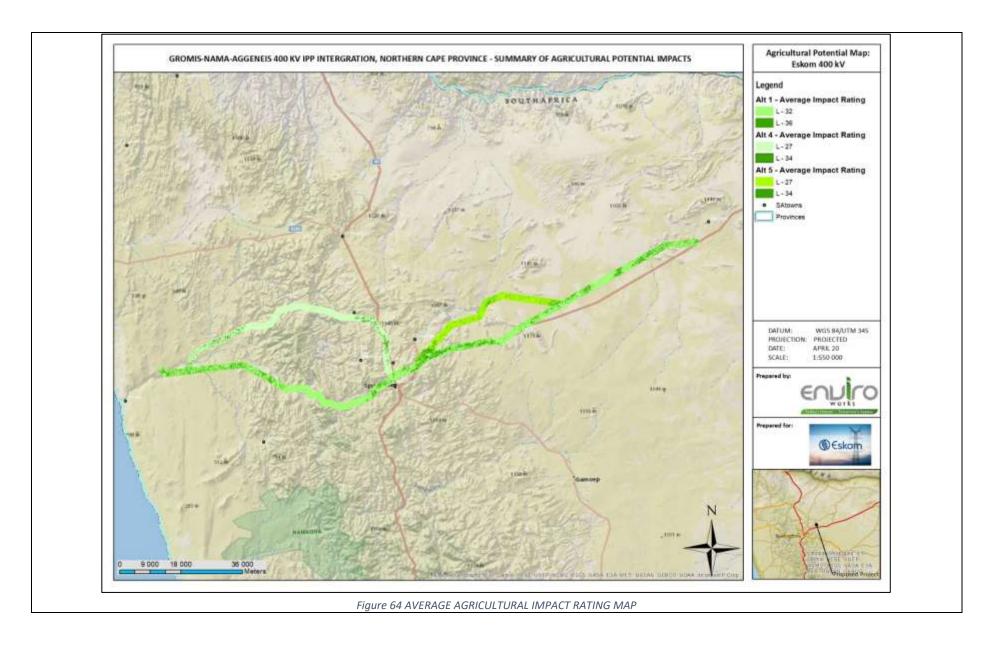






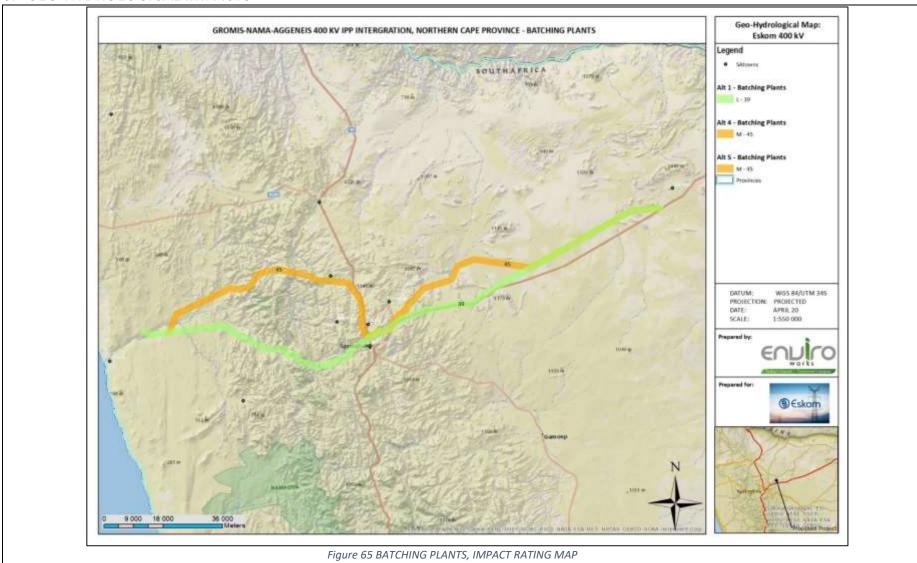




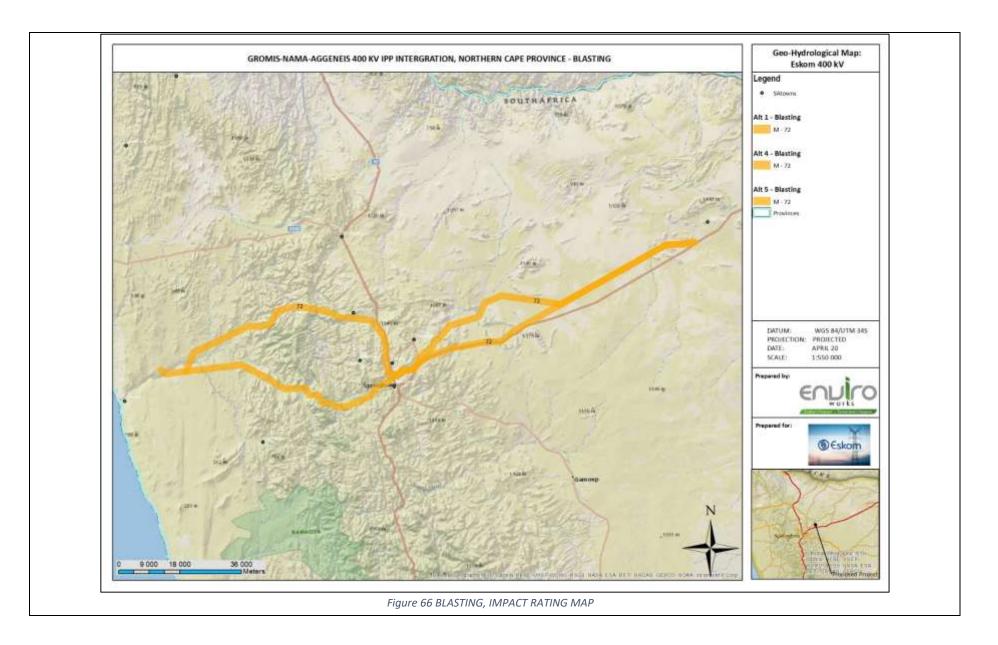




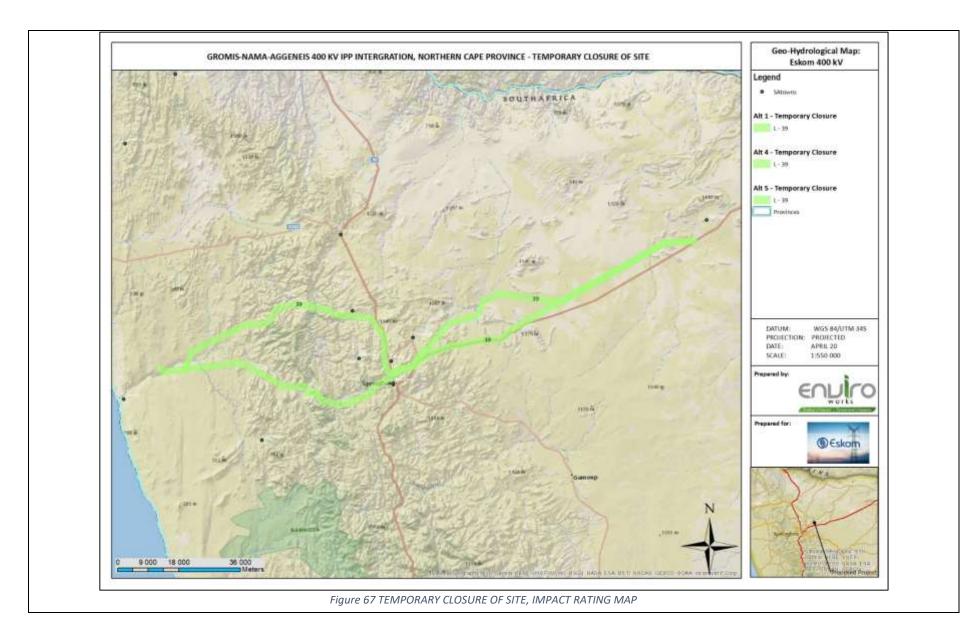
6. GEO-HYDROLOGICAL IMPACTS



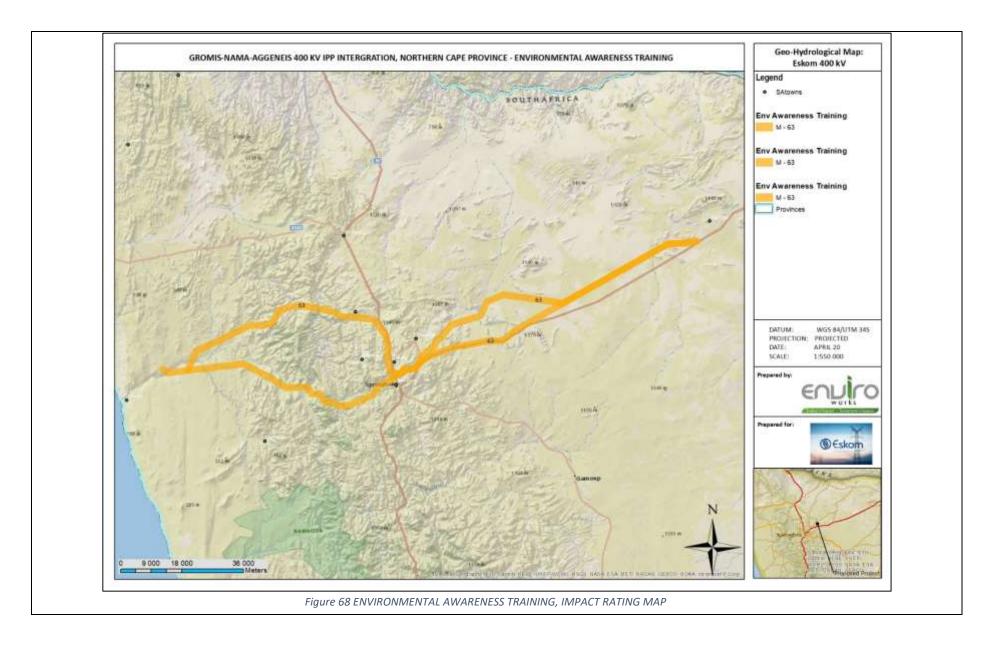




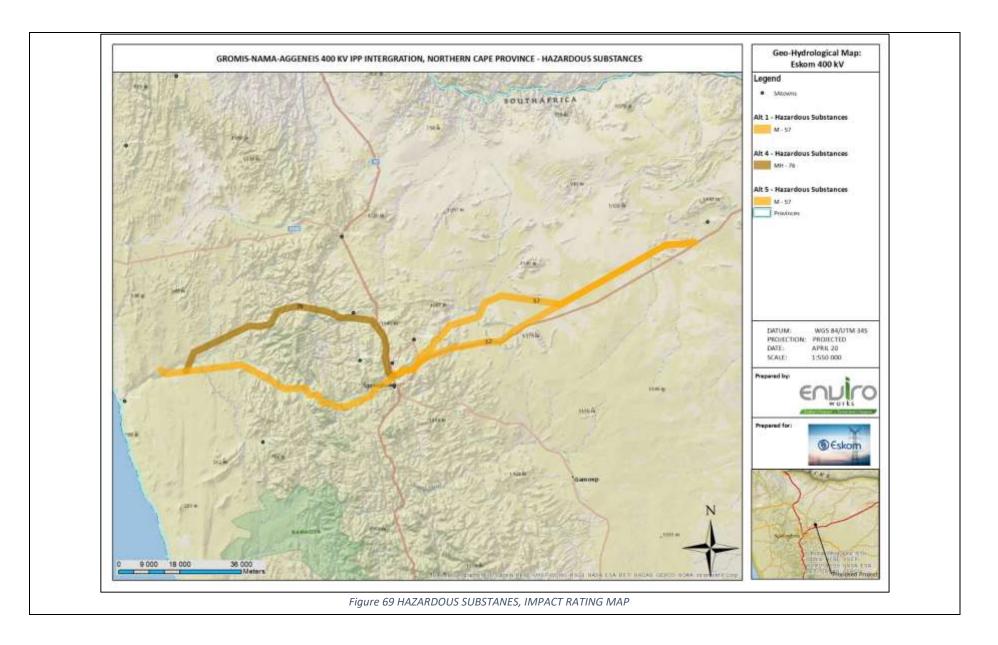




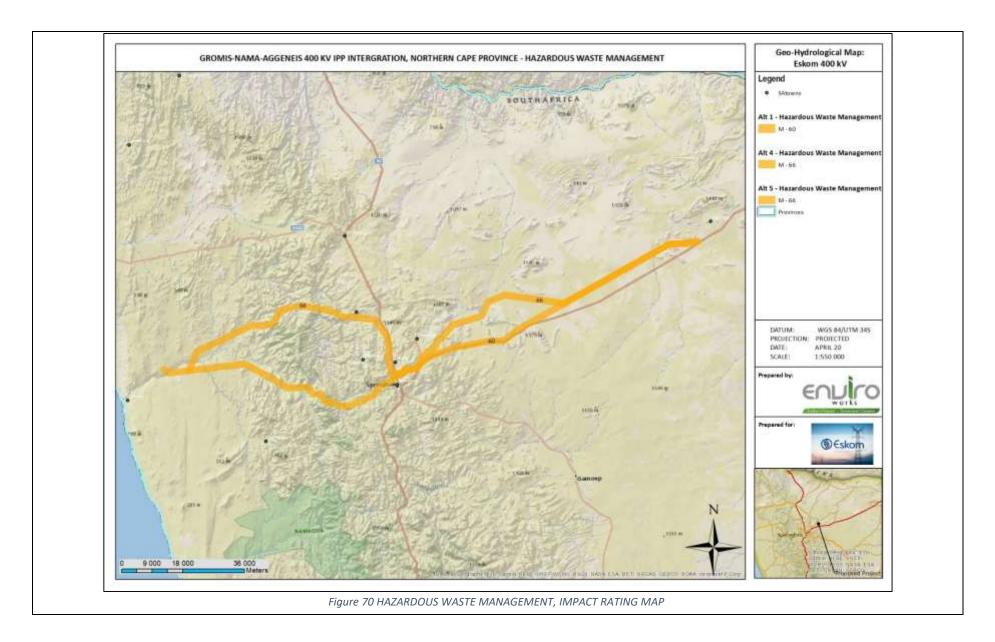




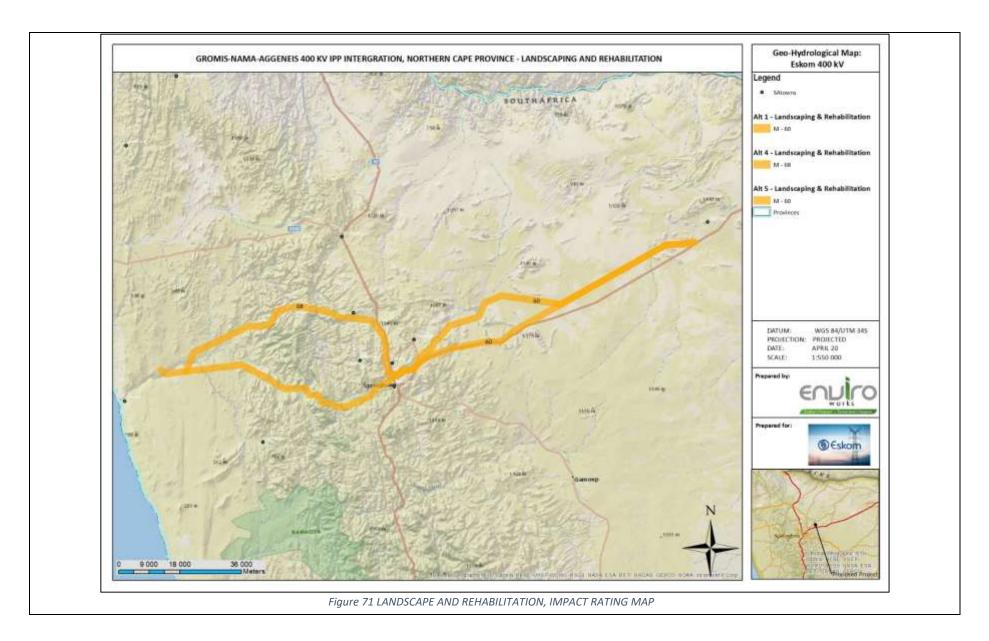




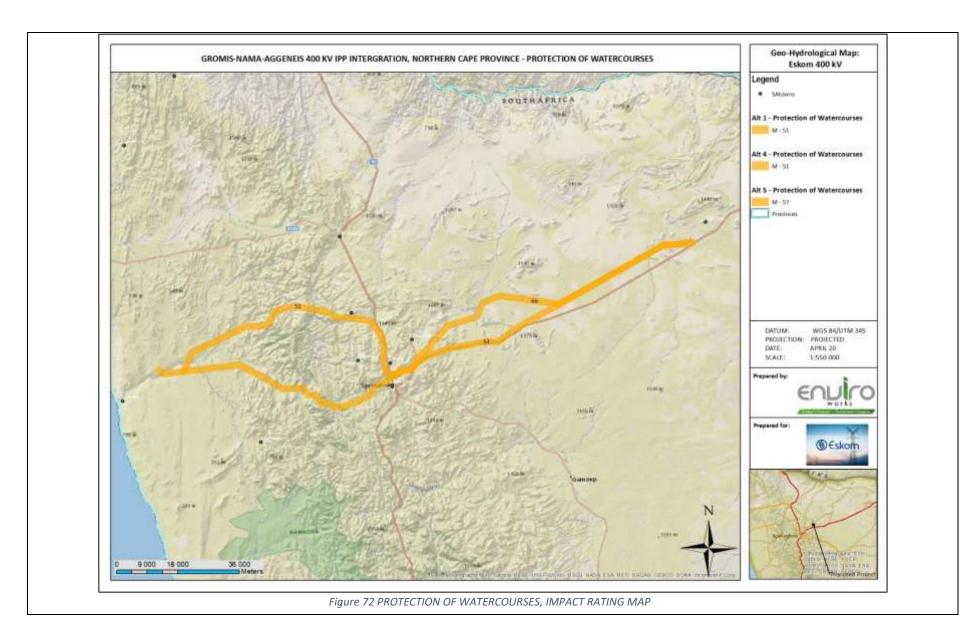




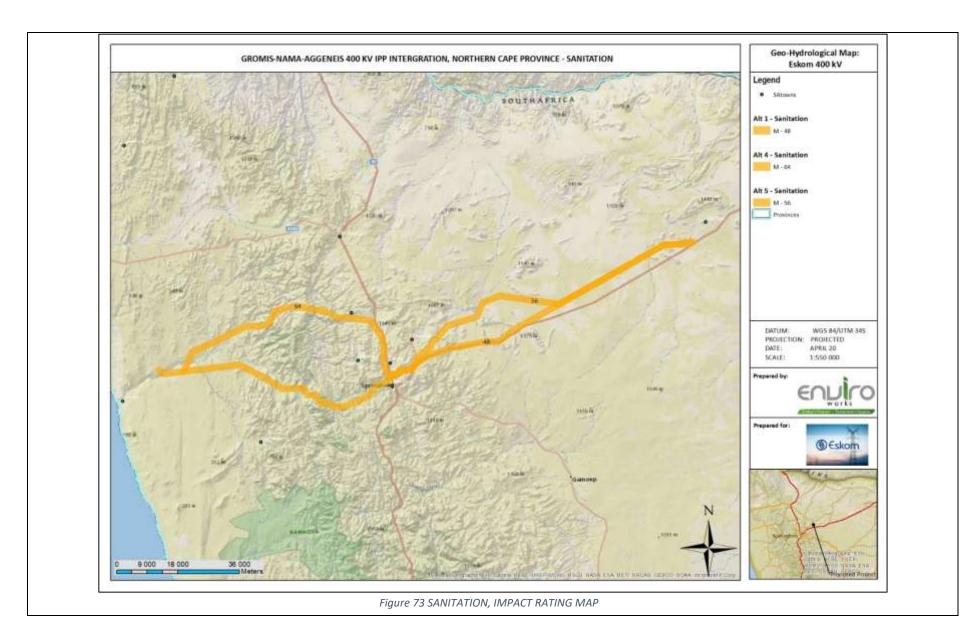




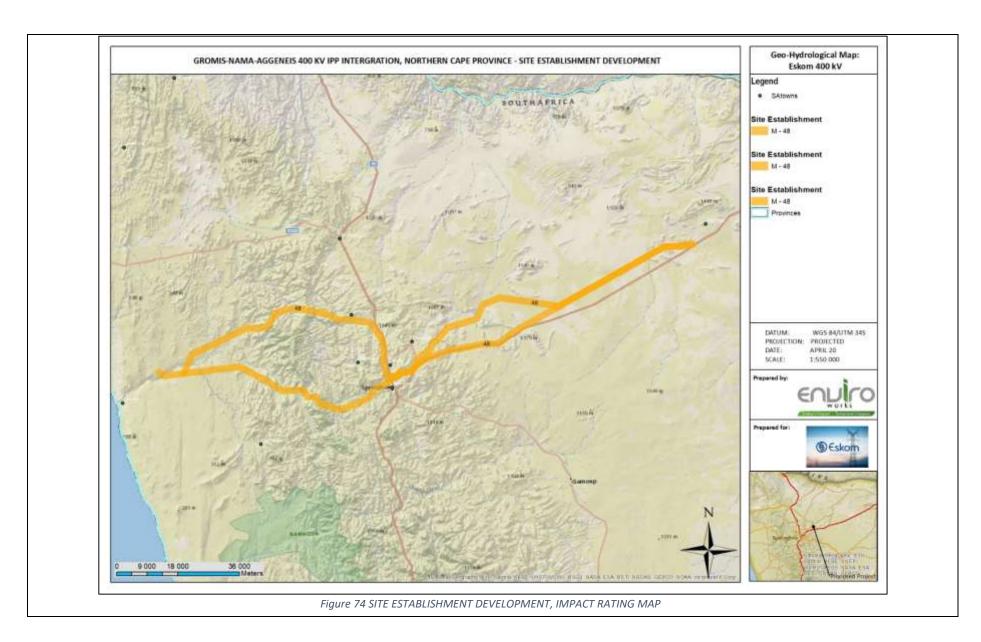




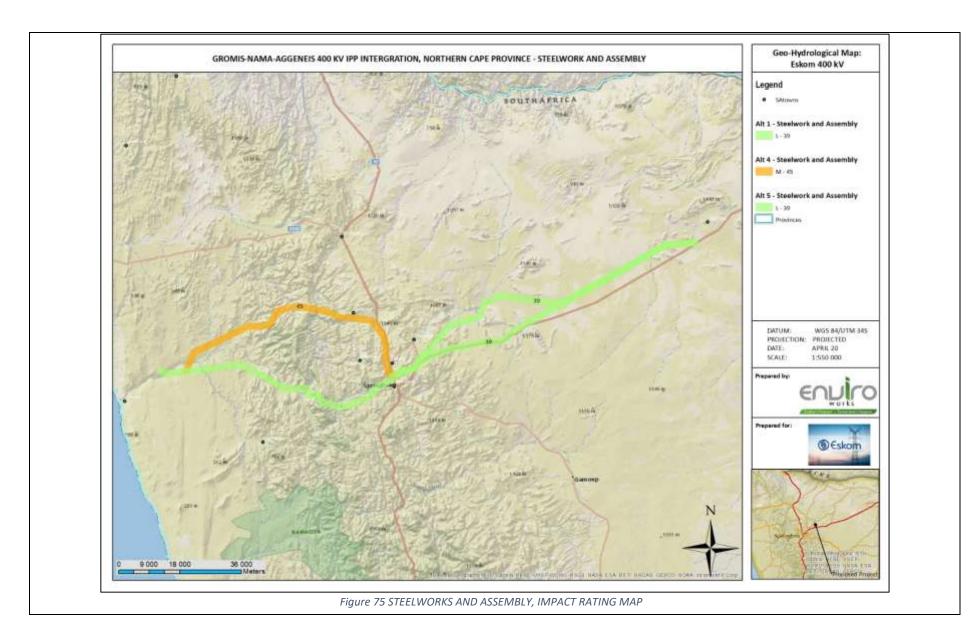




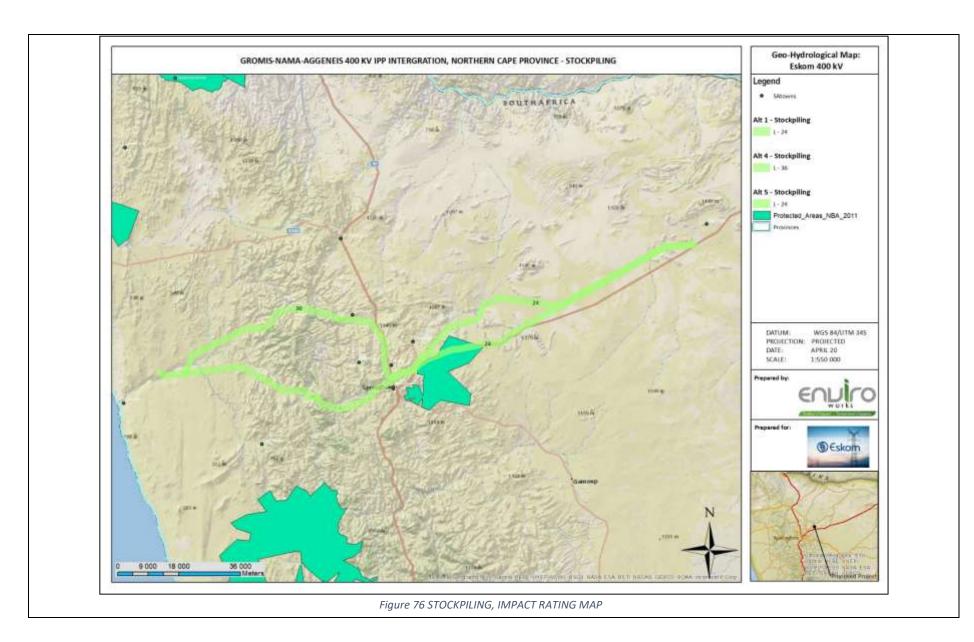




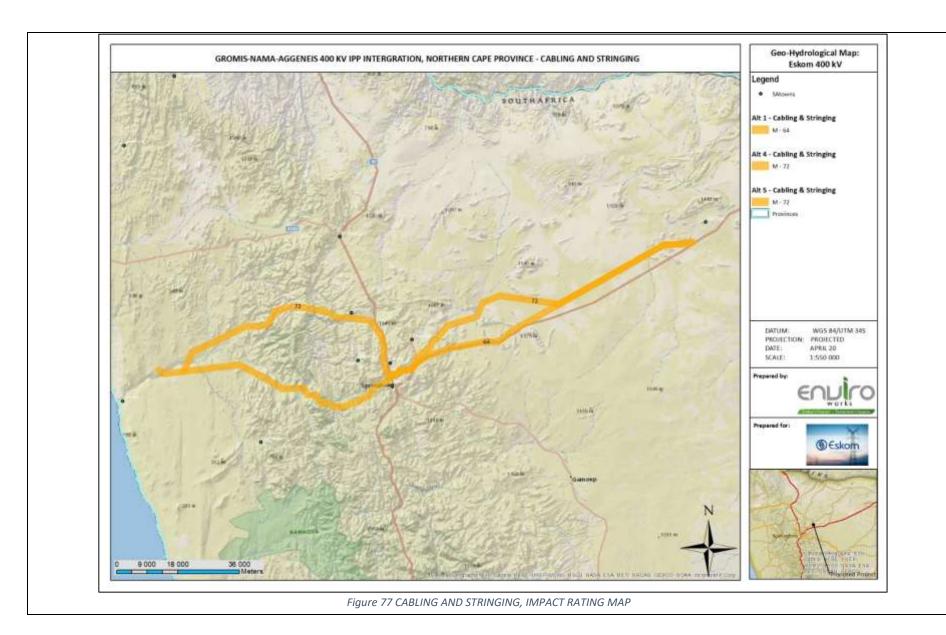




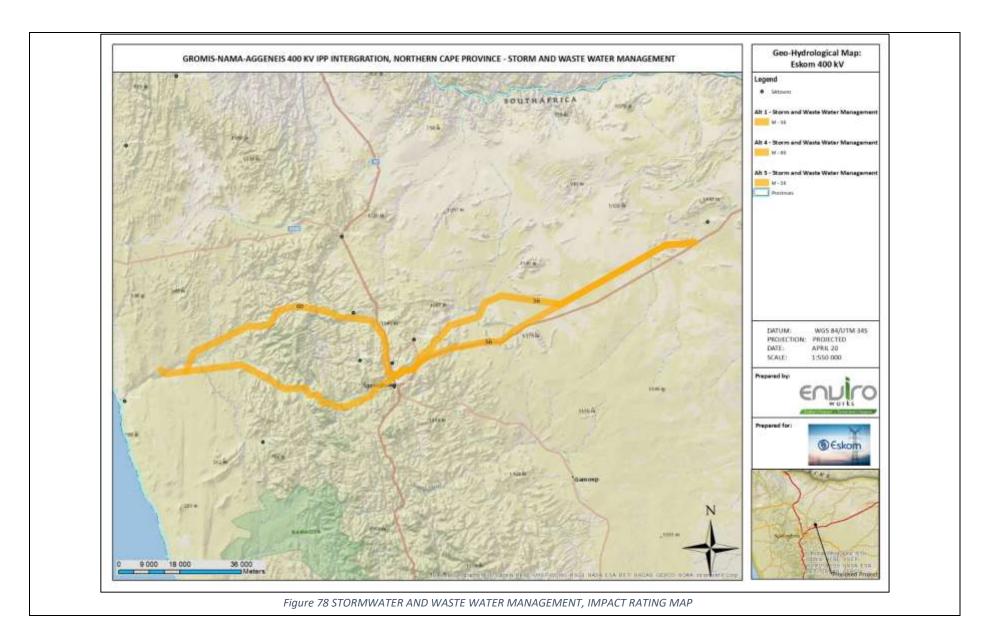




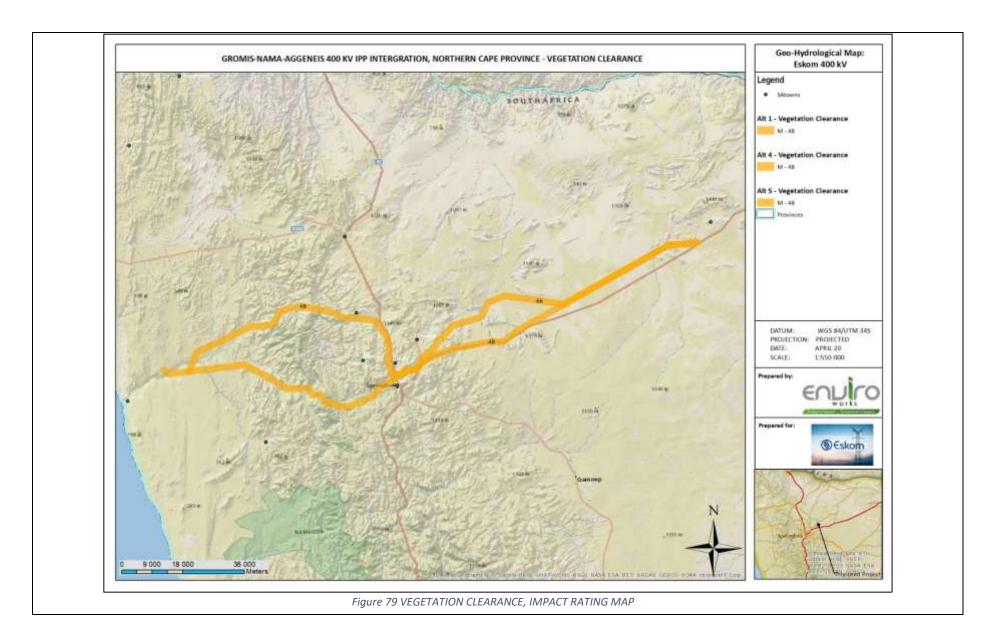




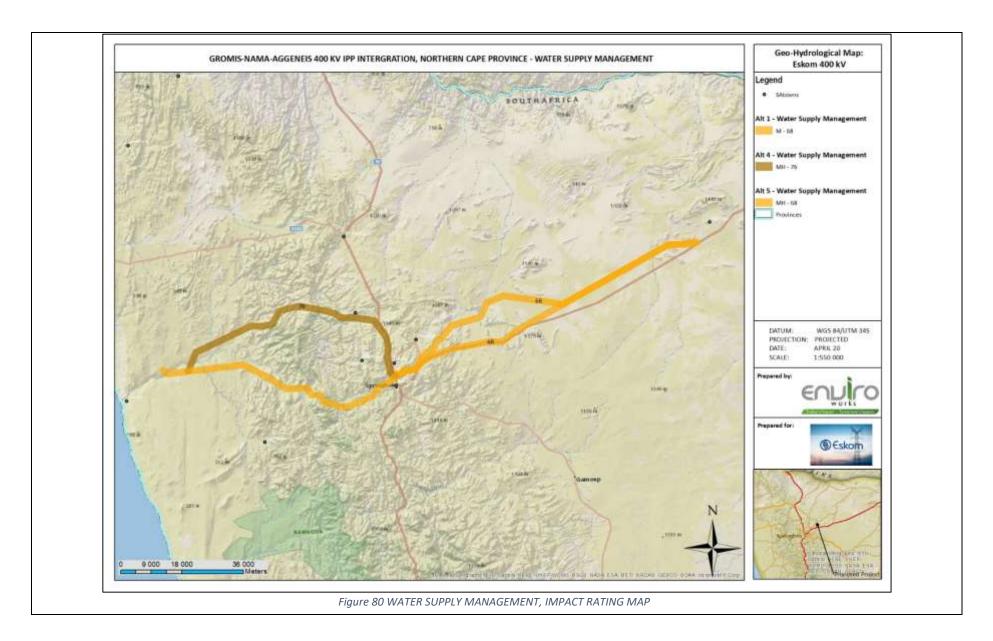




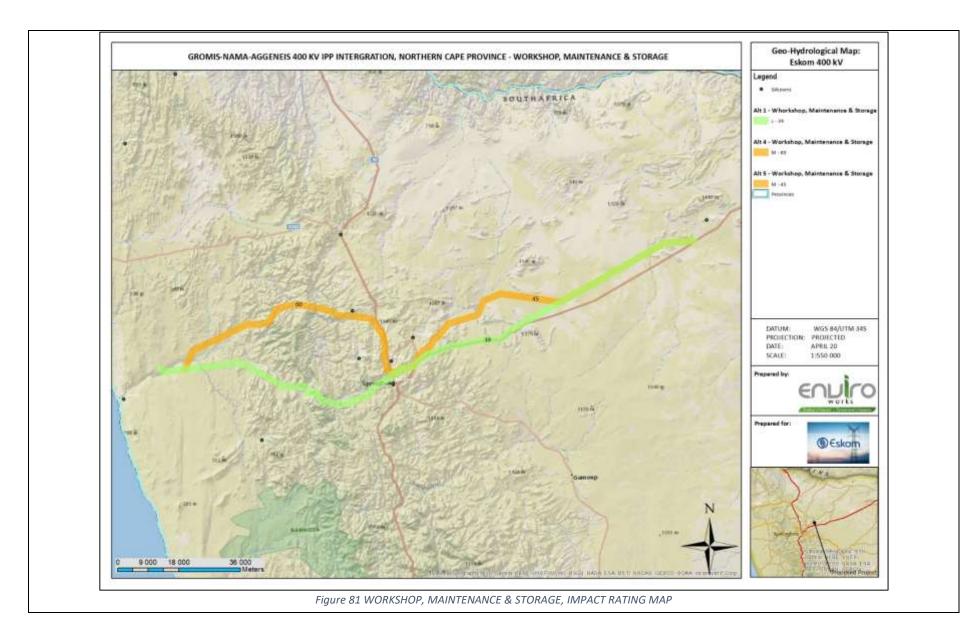




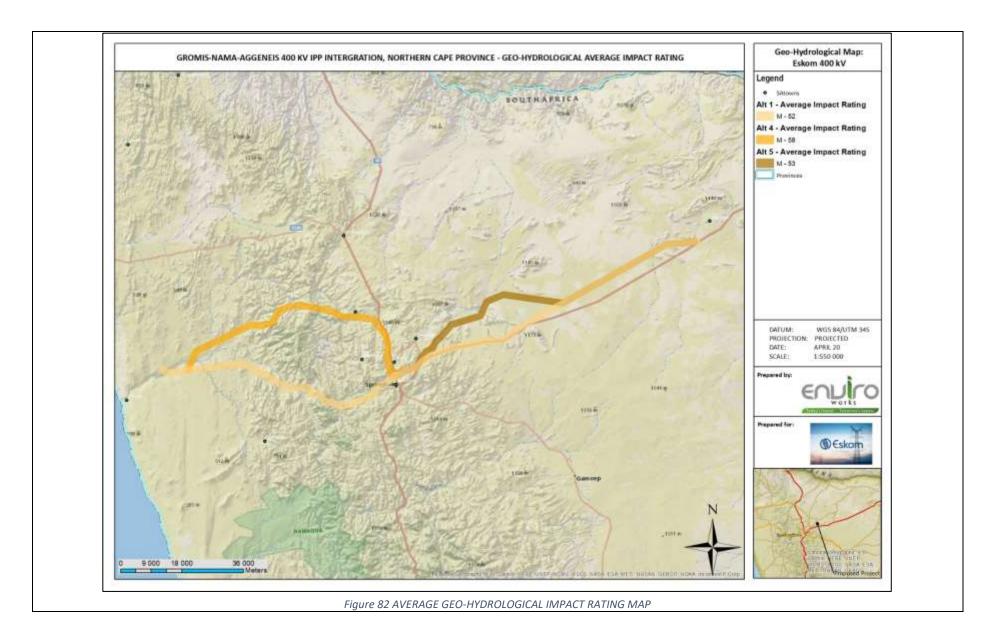








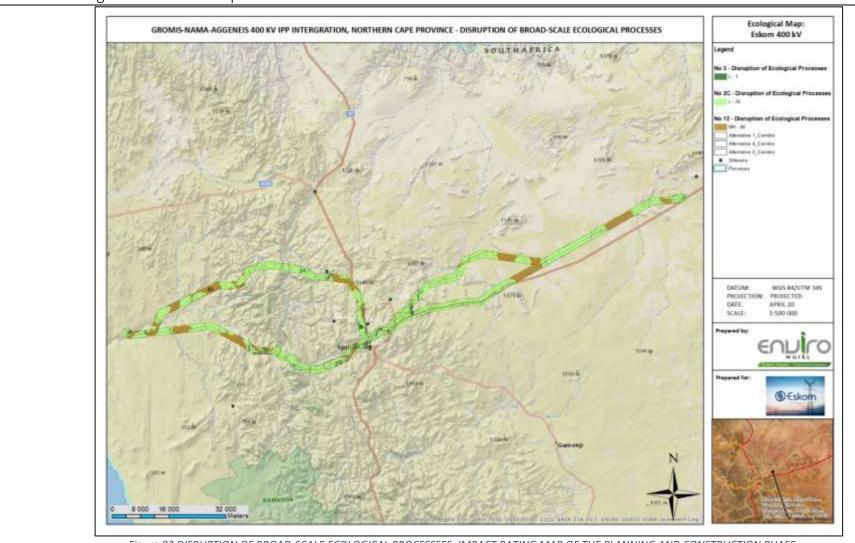






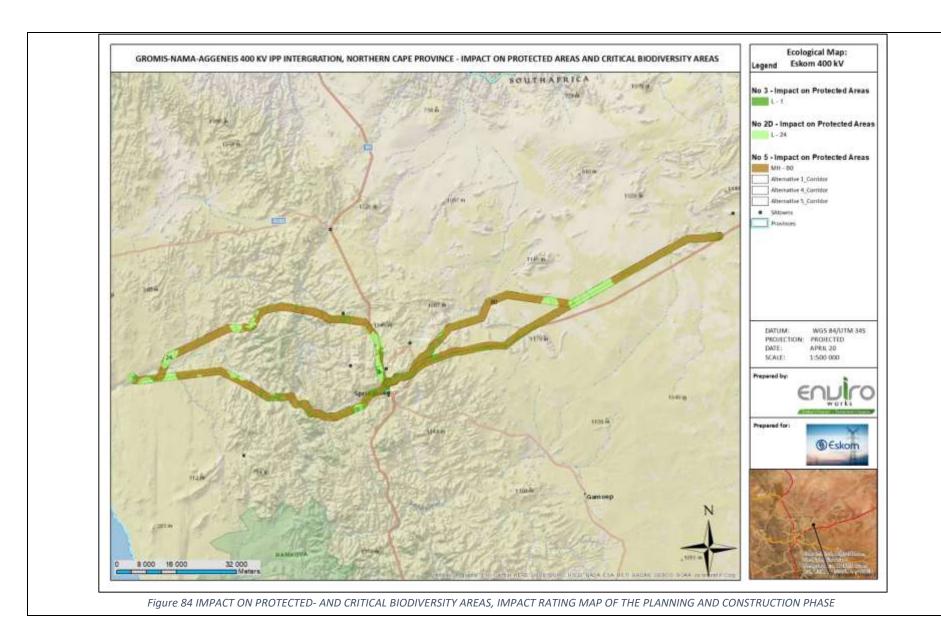
7. BOTANICAL AND FRESHWATER IMPACTS

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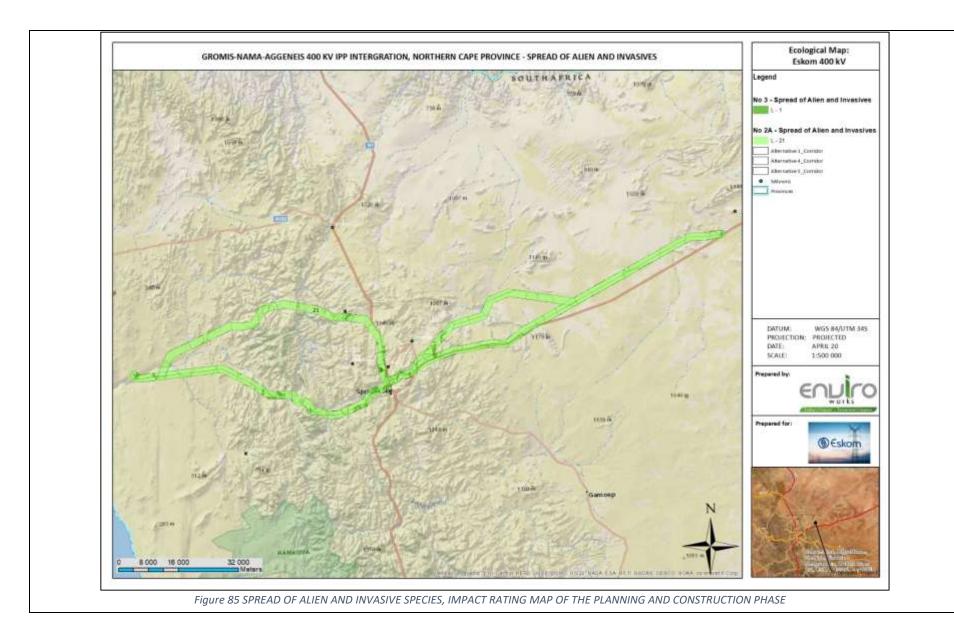




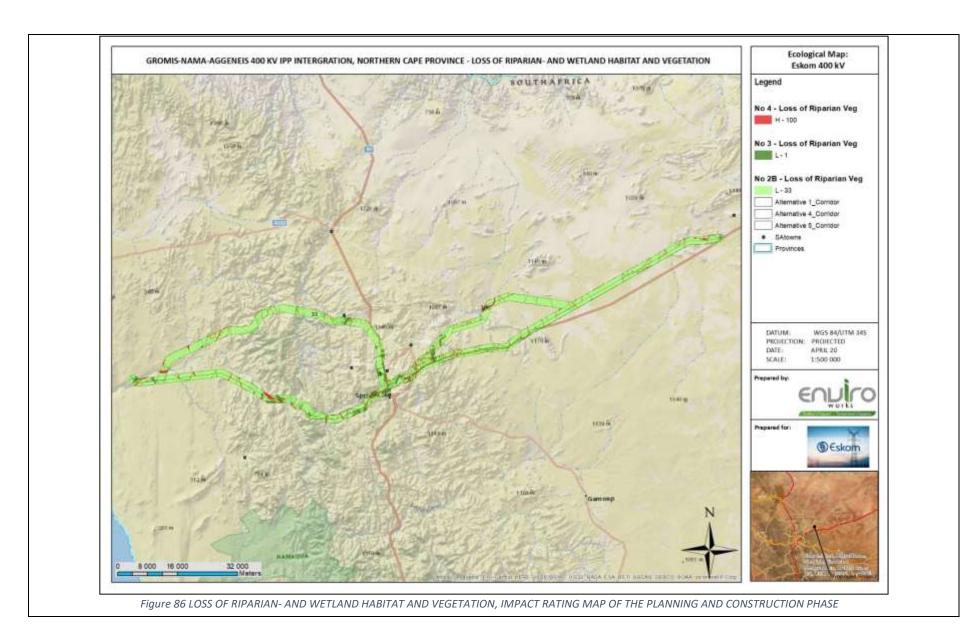




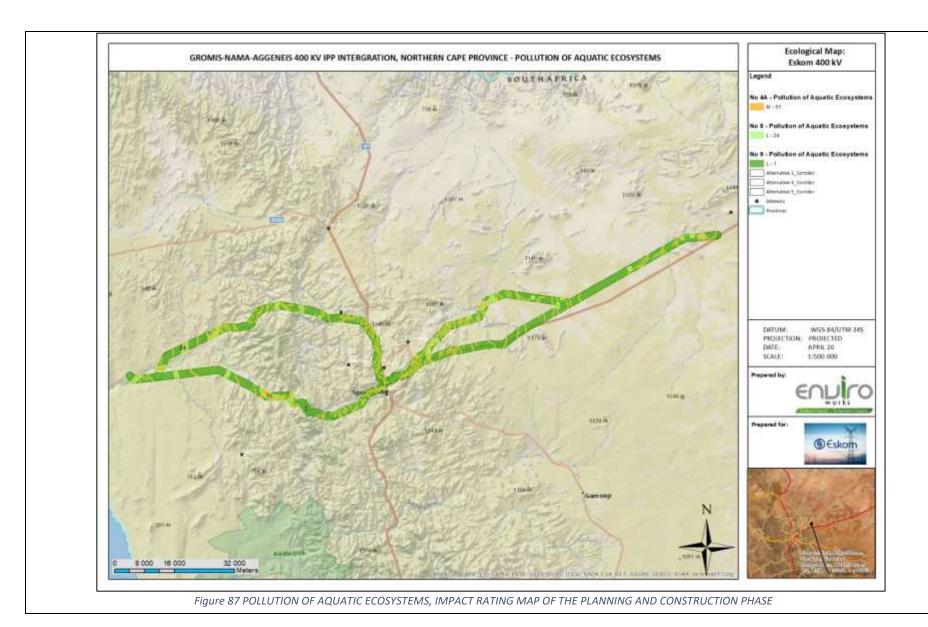




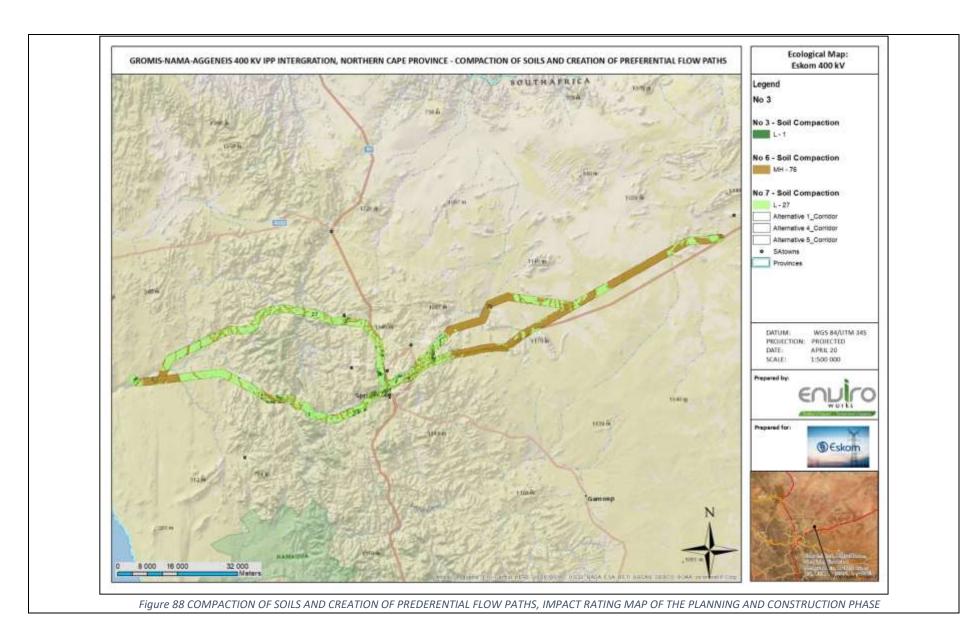




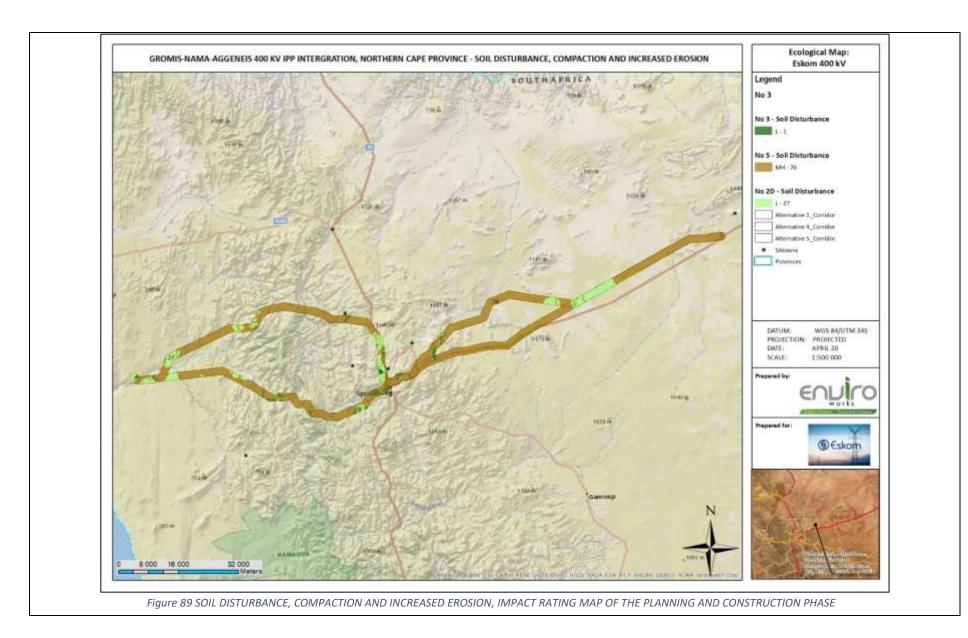




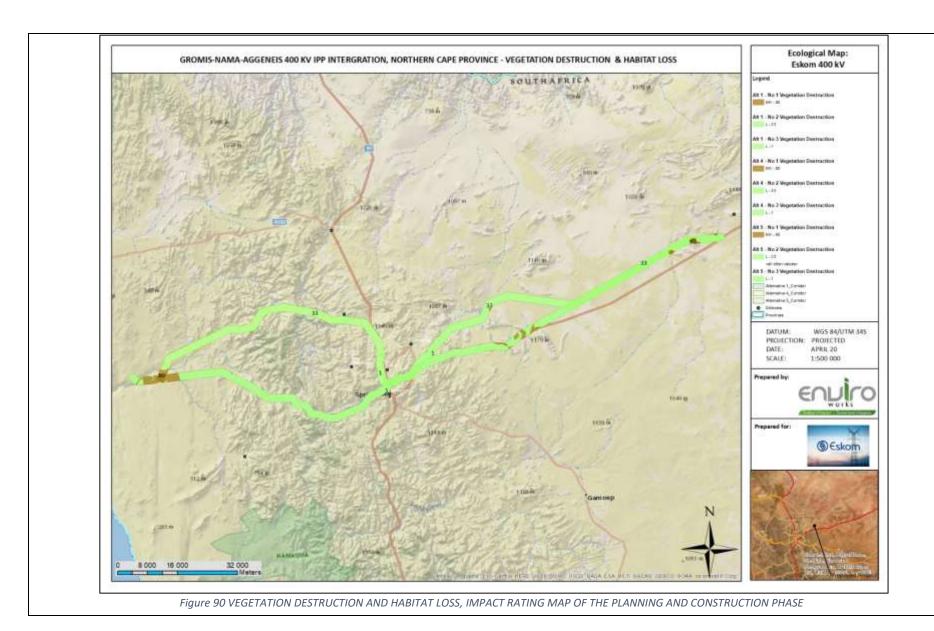




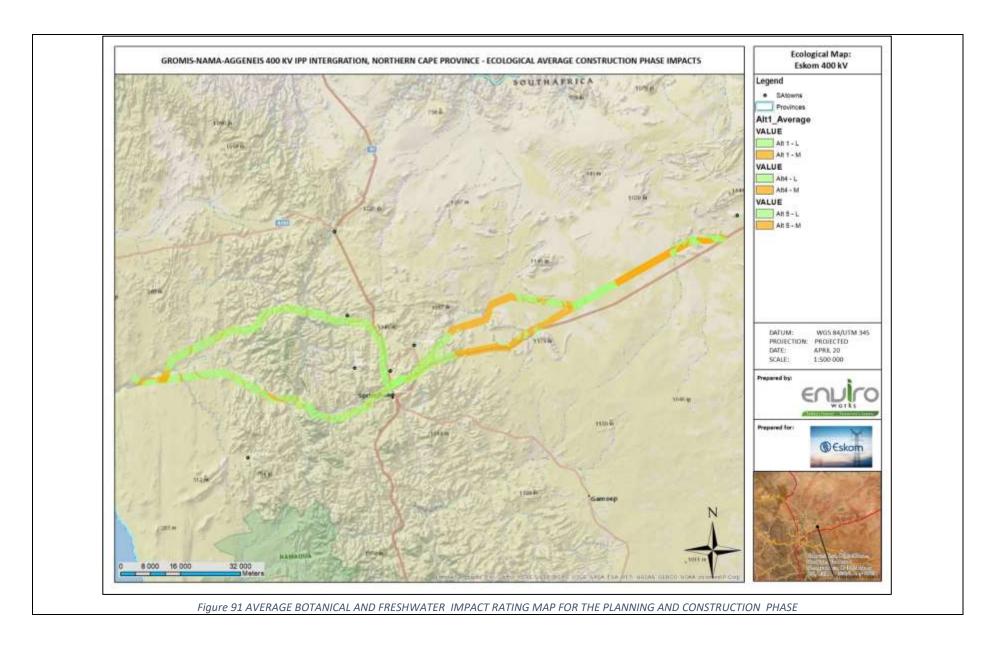














b. Operational phase

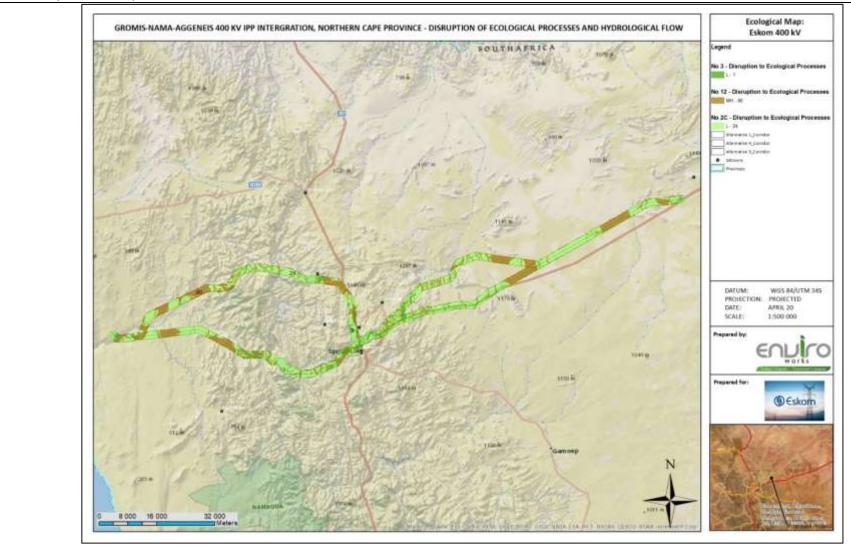
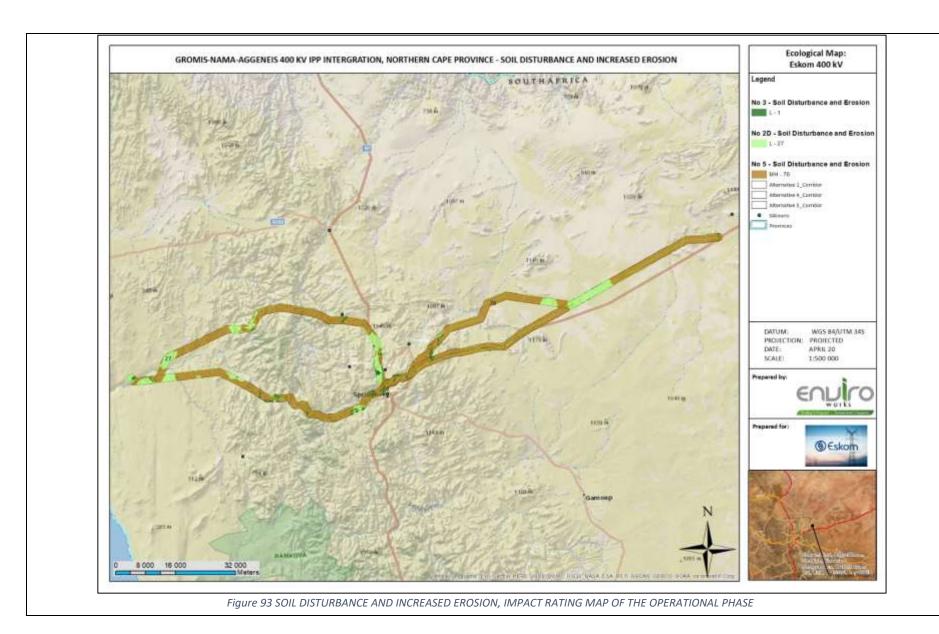
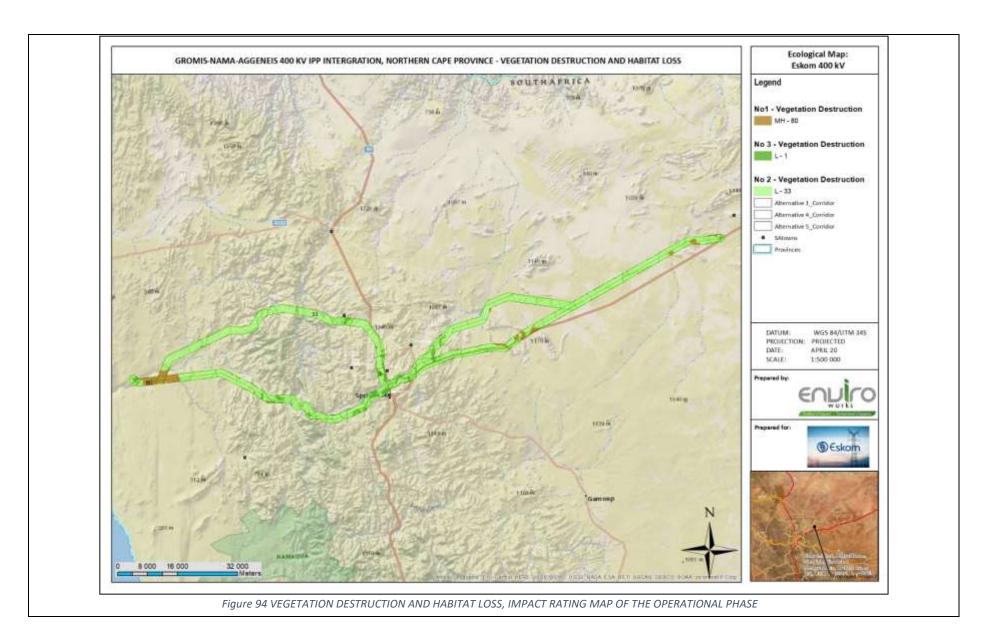


Figure 92 DISRUPTION OF ECOLOGICAL PROCESSES AND HYDROLOGICAL FLOW, IMPACT RATING MAP OF THE OPERATIONAL PHASE

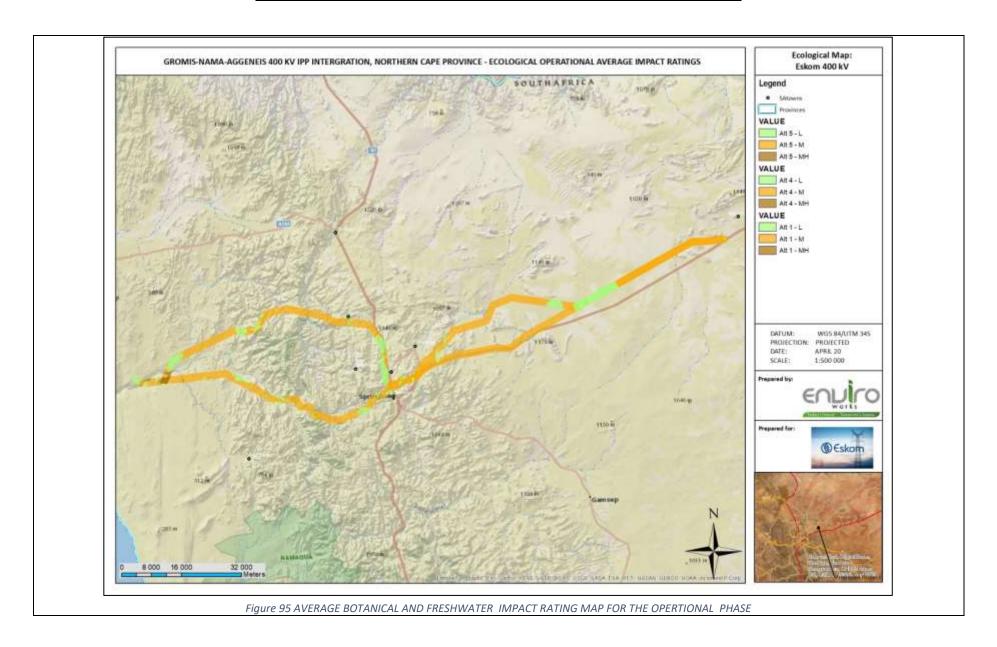






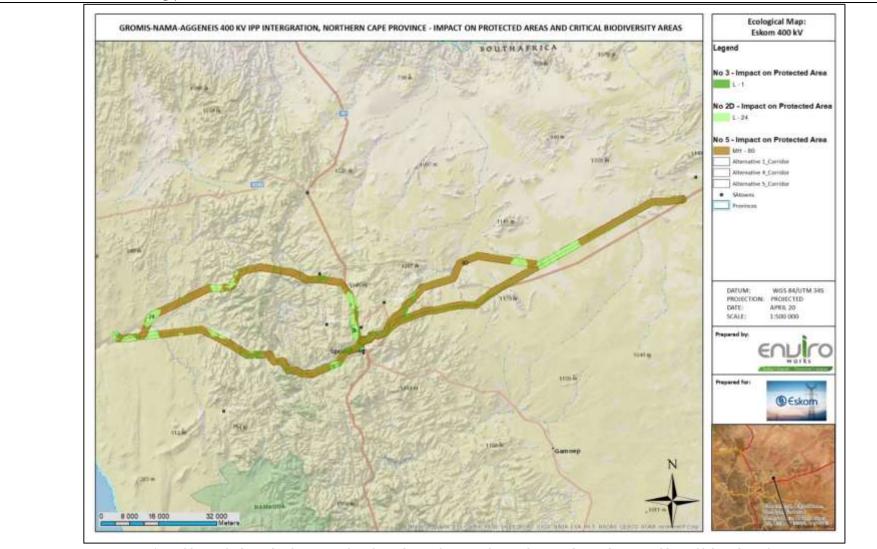






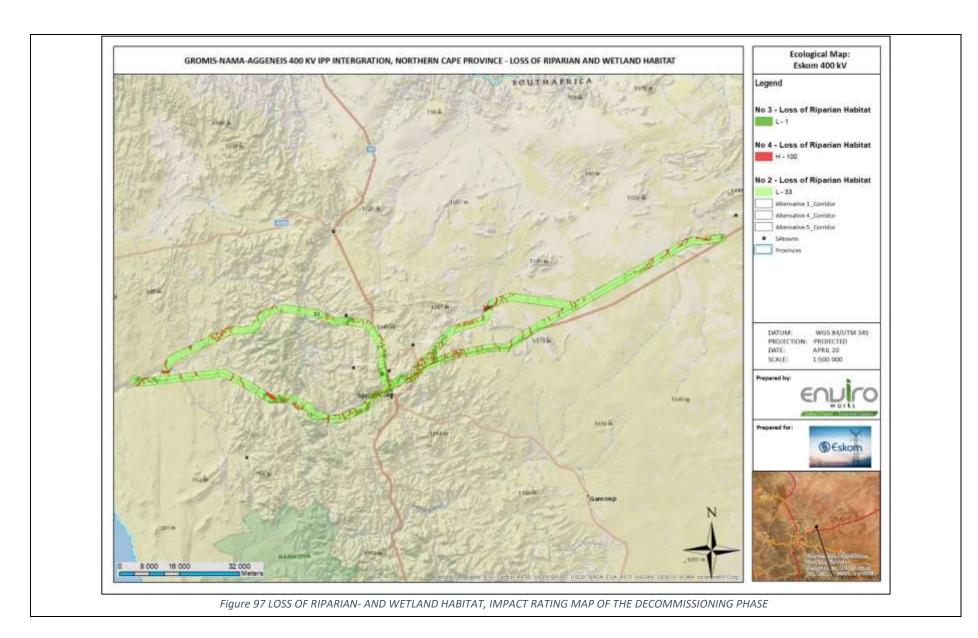


c. Decommissioning phase

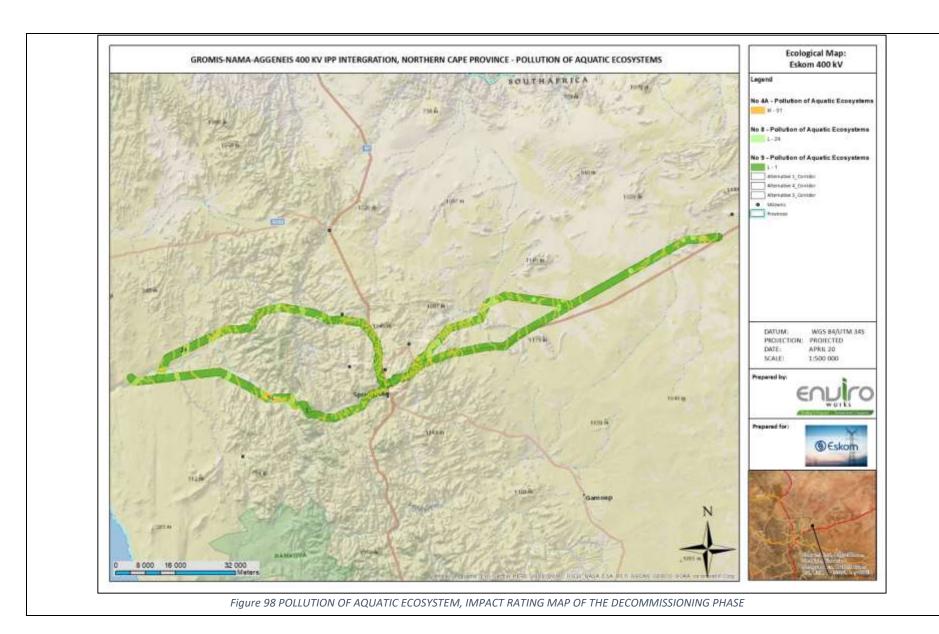


Figure~96~IMPACT~ON~PROTECTED-~AND~CRITICAL~BIODIVERSITY~AREAS,~IMPACT~RATING~MAP~OF~THE~DECOMMISSIONING~PHASE

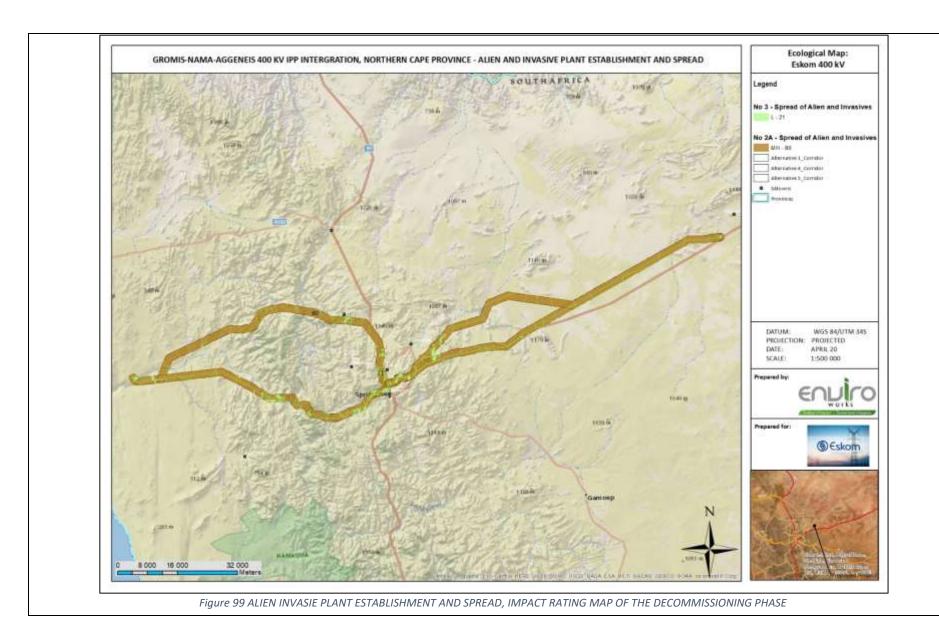




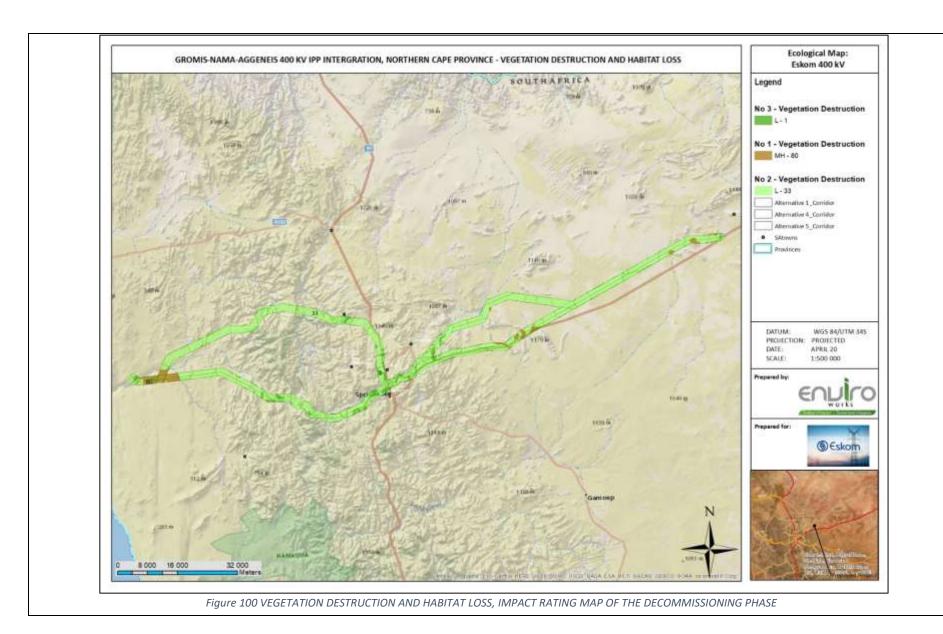




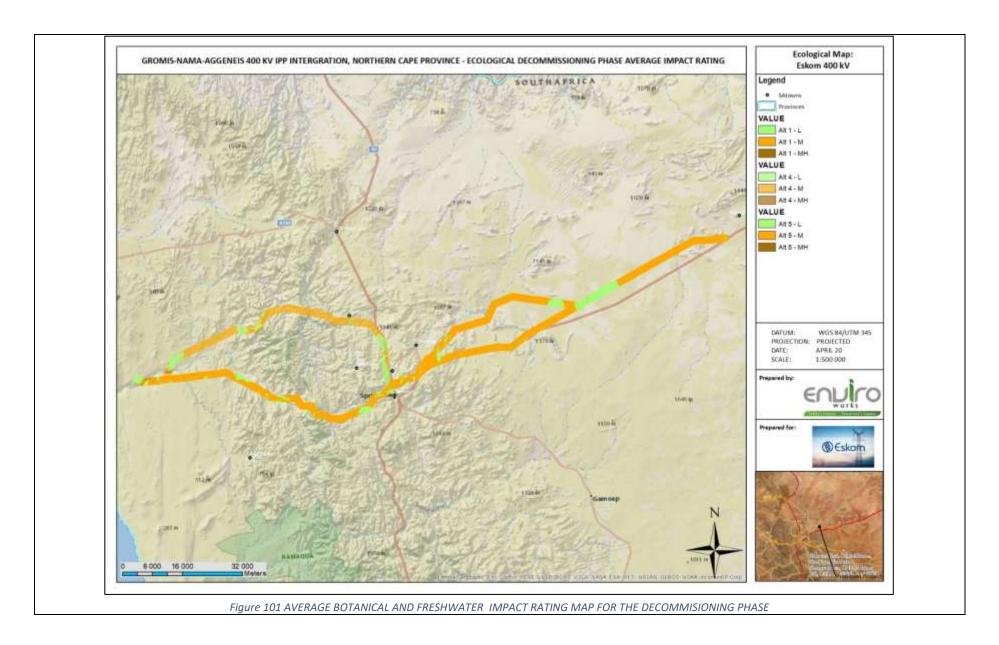






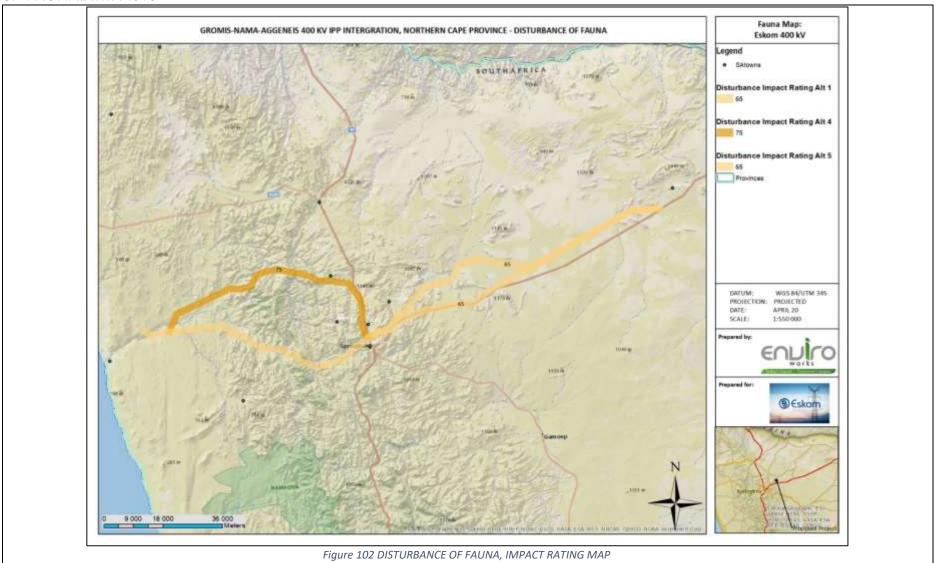




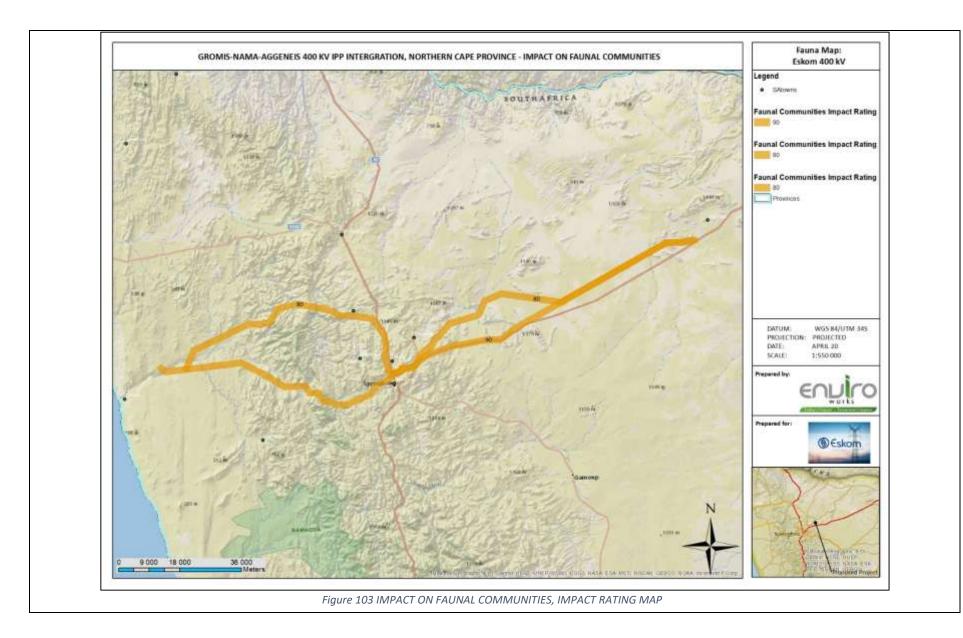




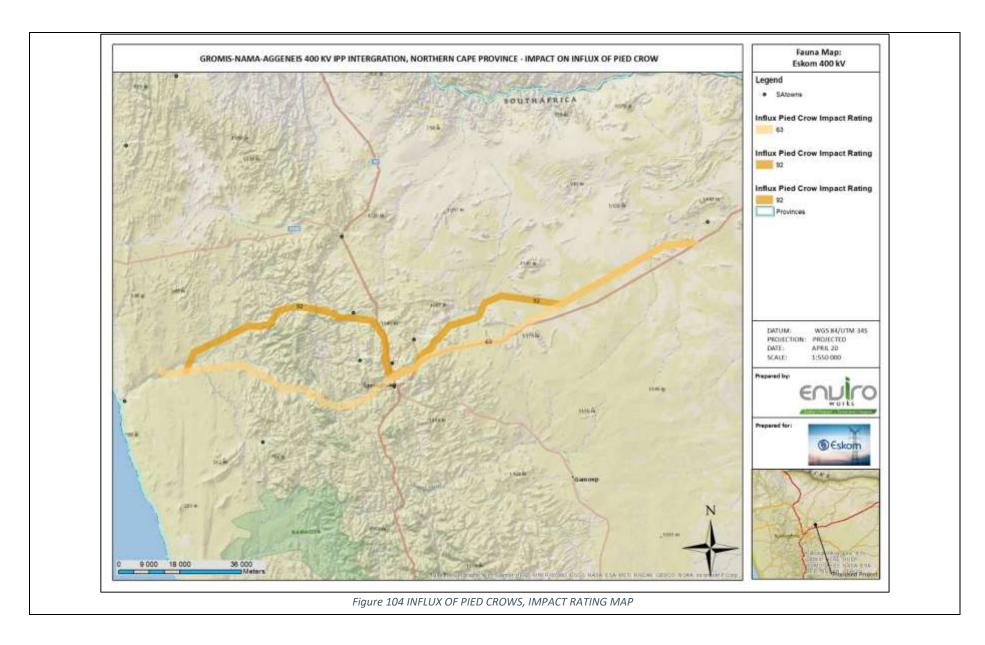
8. FAUNAL IMPACTS



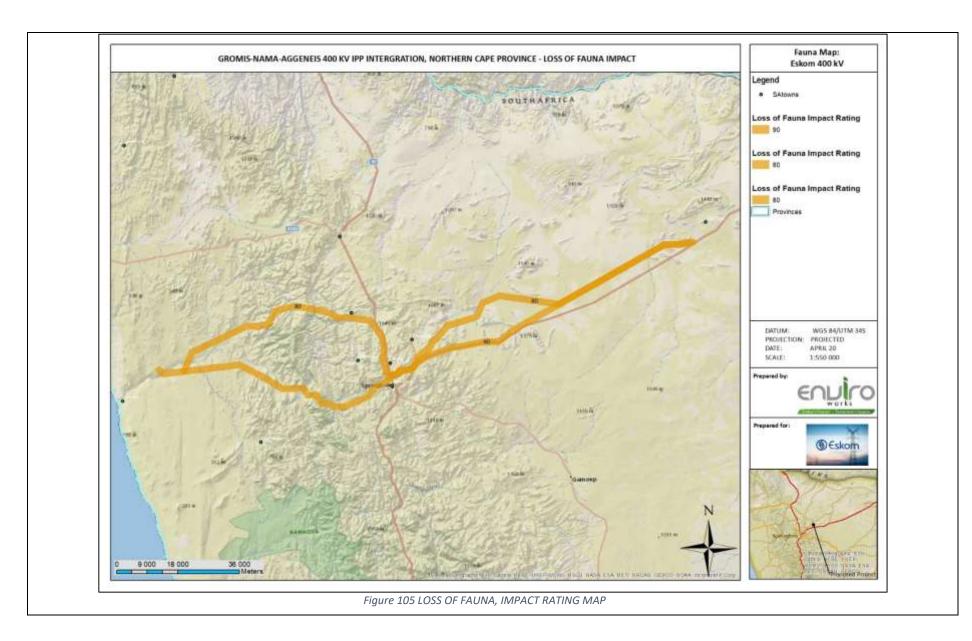




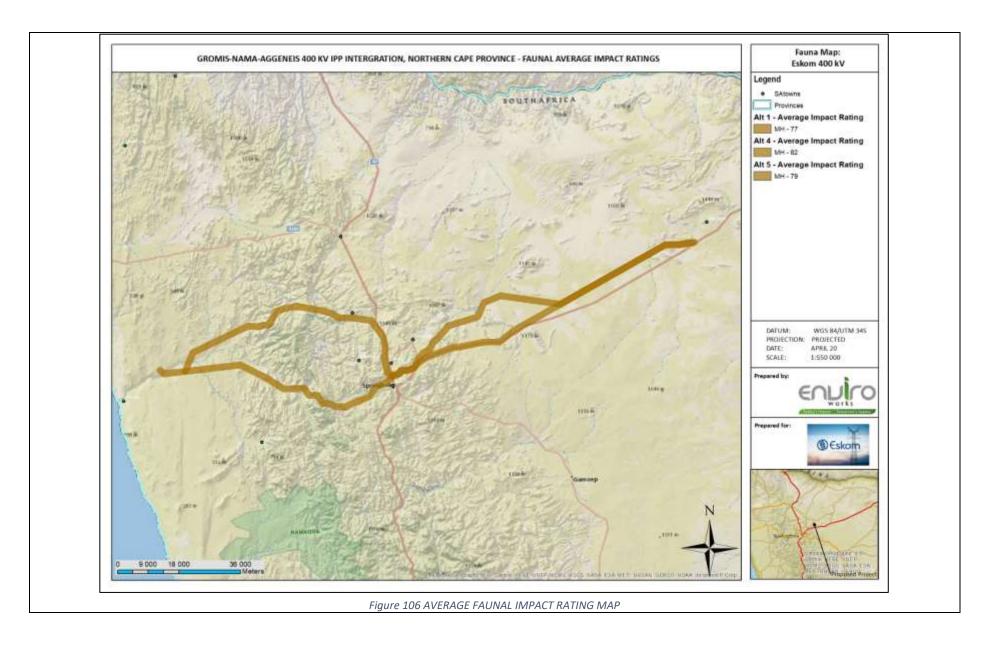






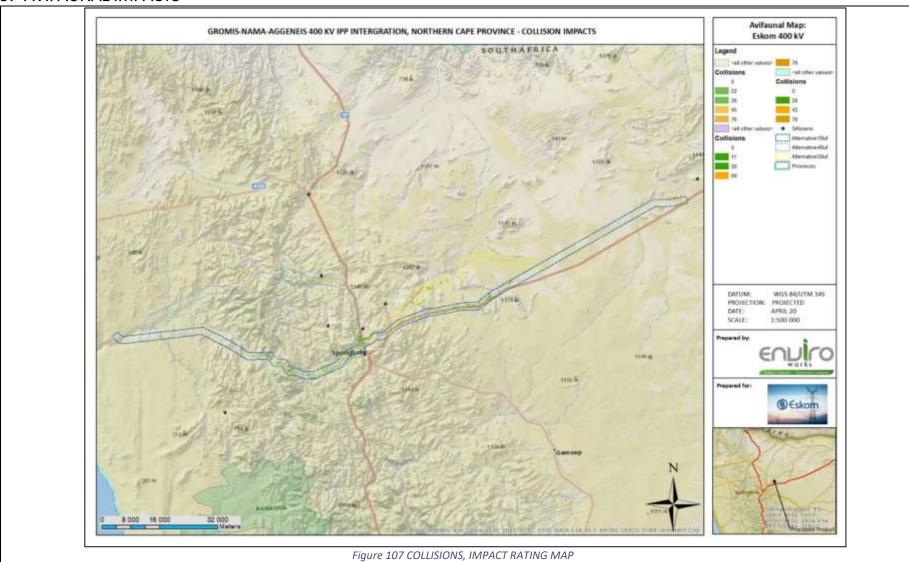




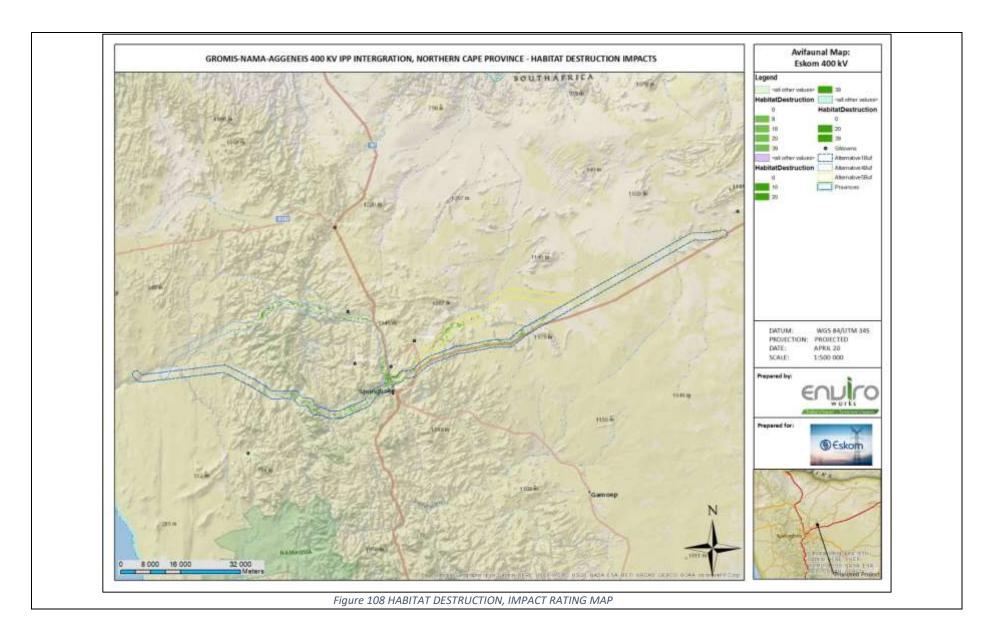




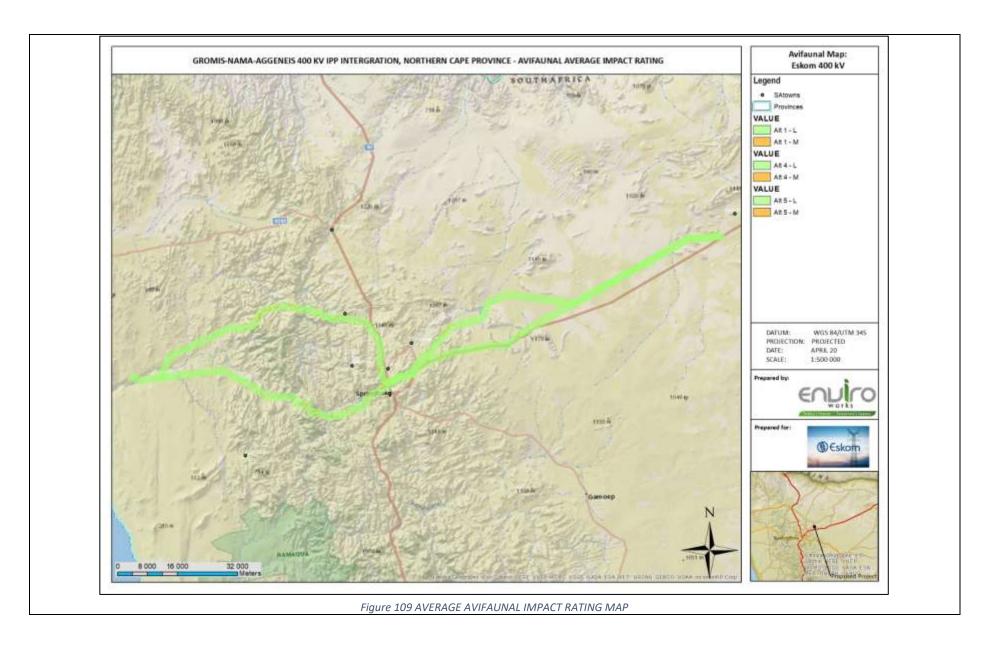
9. AVIFAUNAL IMPACTS













10. REFERENCES

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