

Figure 2.1: Locality Map

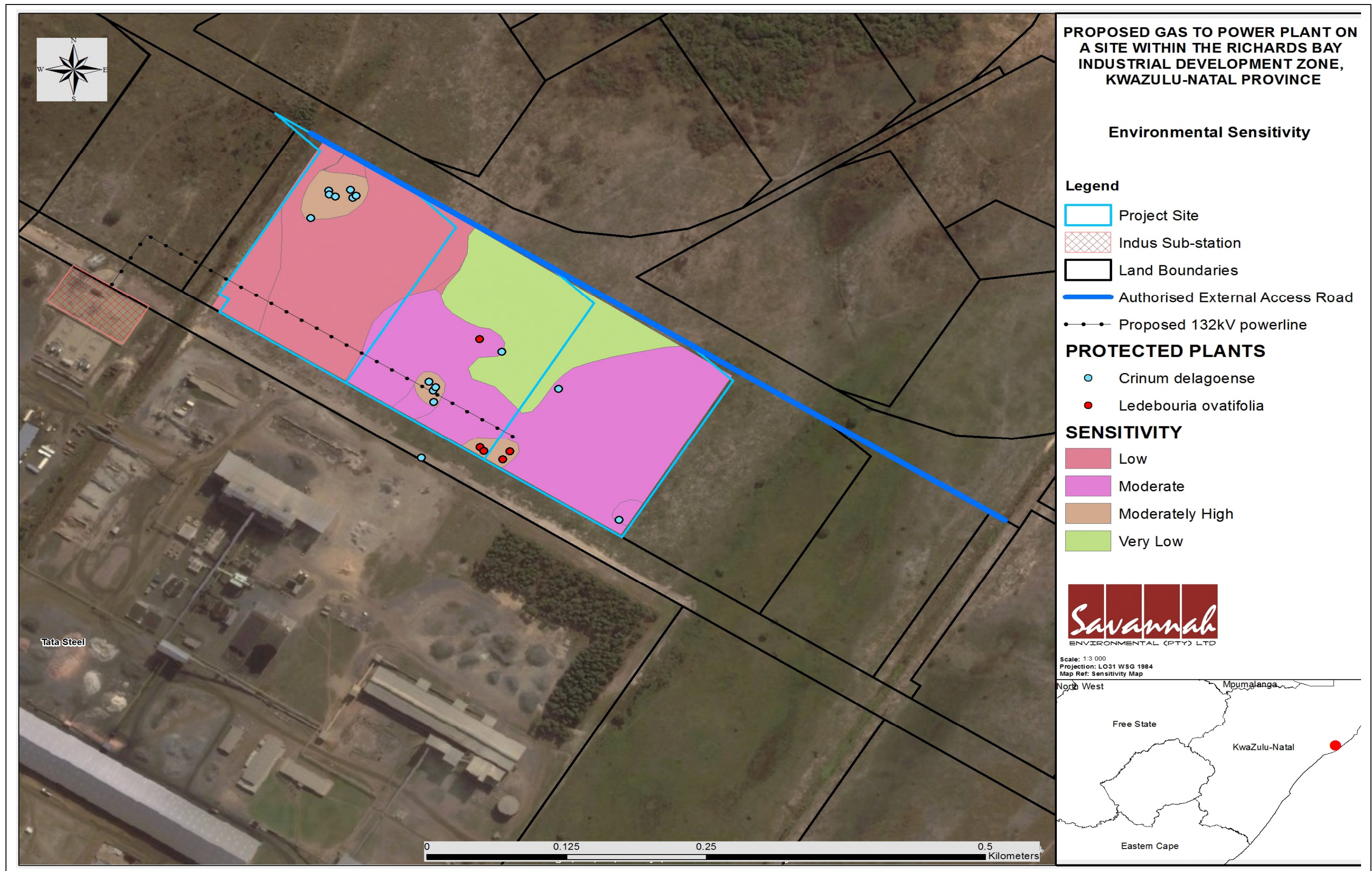


Figure 2.2: Environmental sensitivity map for the project study area illustrating ecologically sensitive areas in relation to the gas to power plant as well as protected plant species

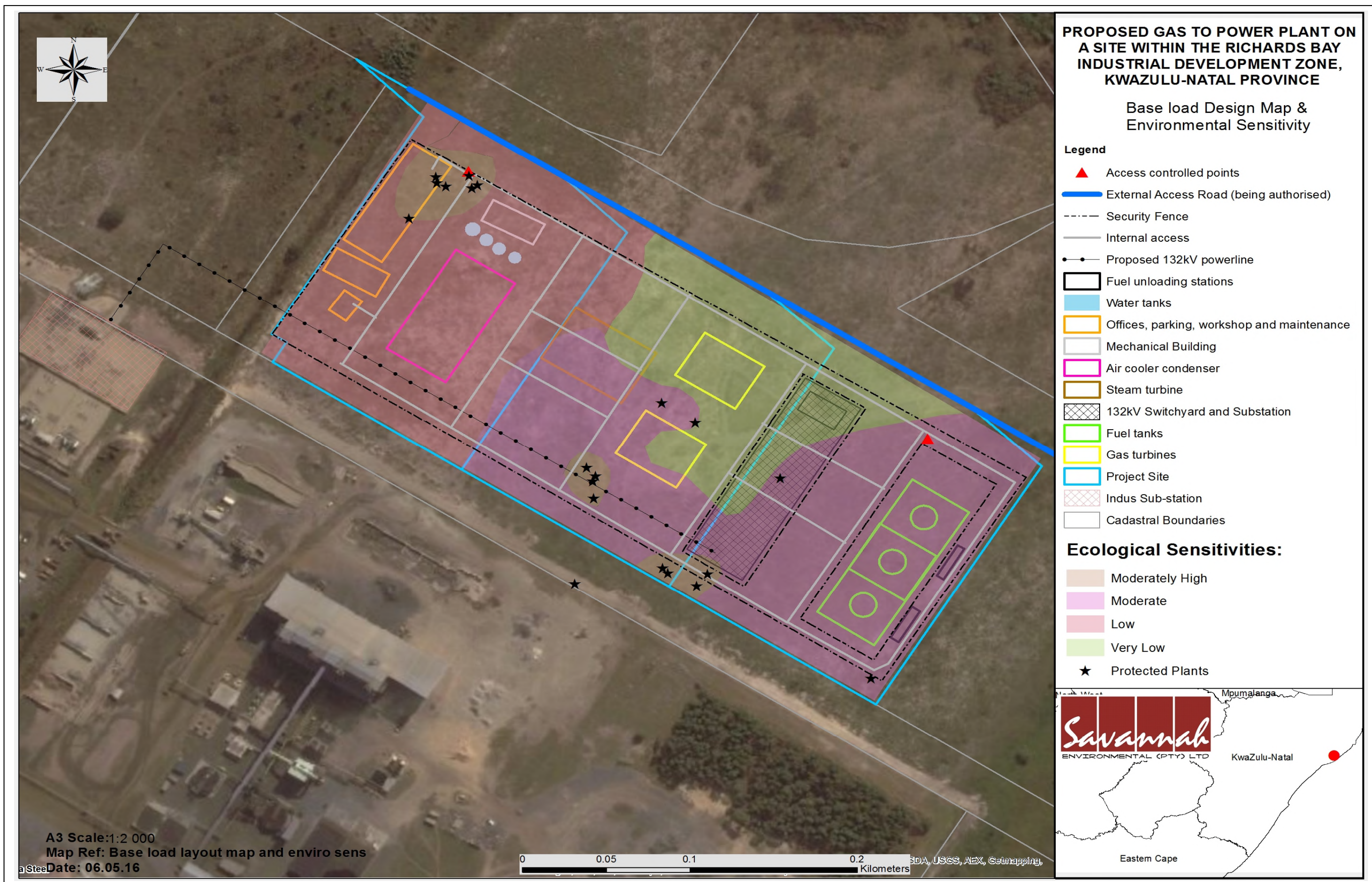


Figure 2.3: Environmental sensitivity map for the project study area illustrating ecologically sensitive areas in relation to the gas to power plant as well as protected plant species at Base load operational design

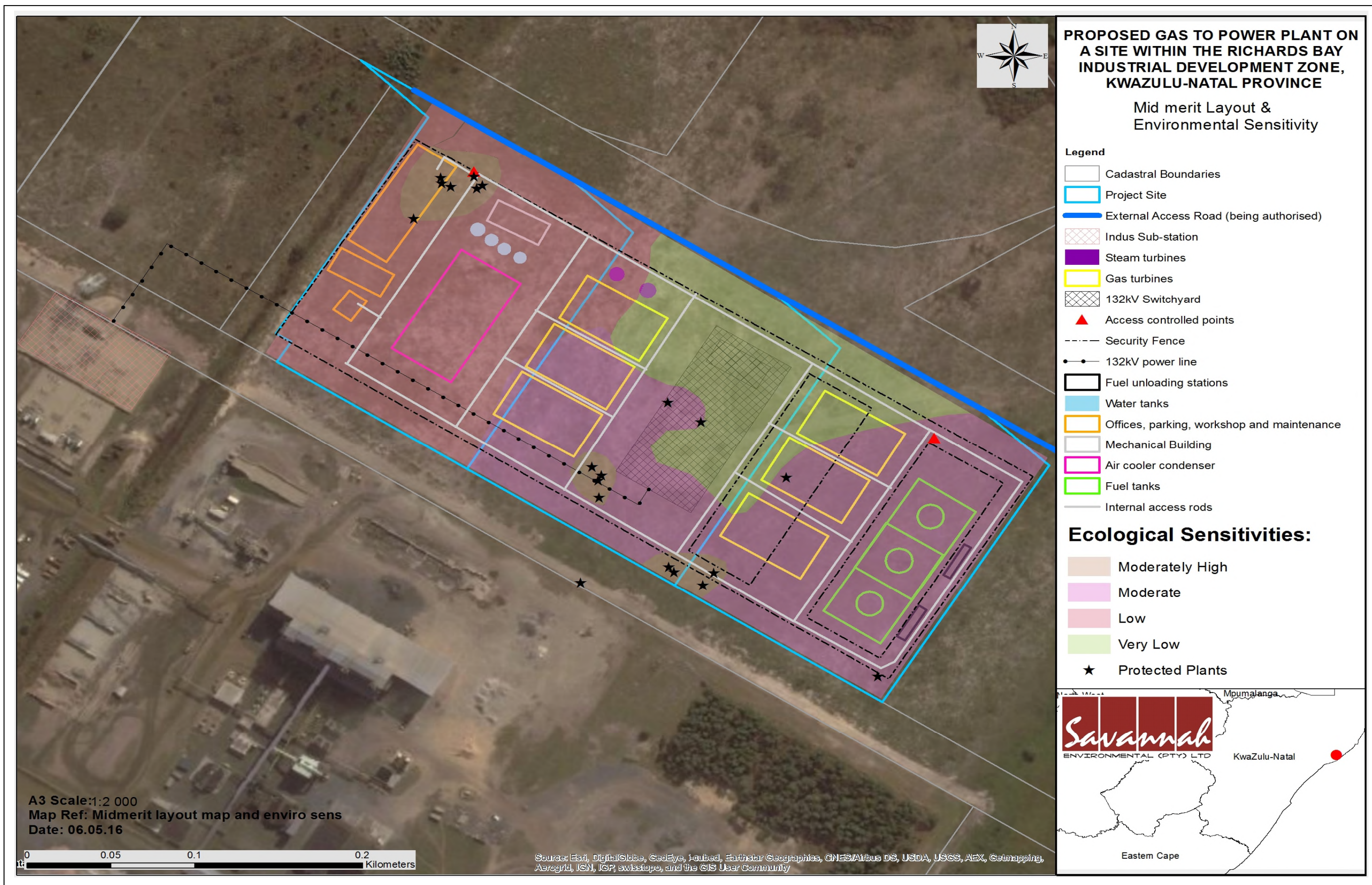
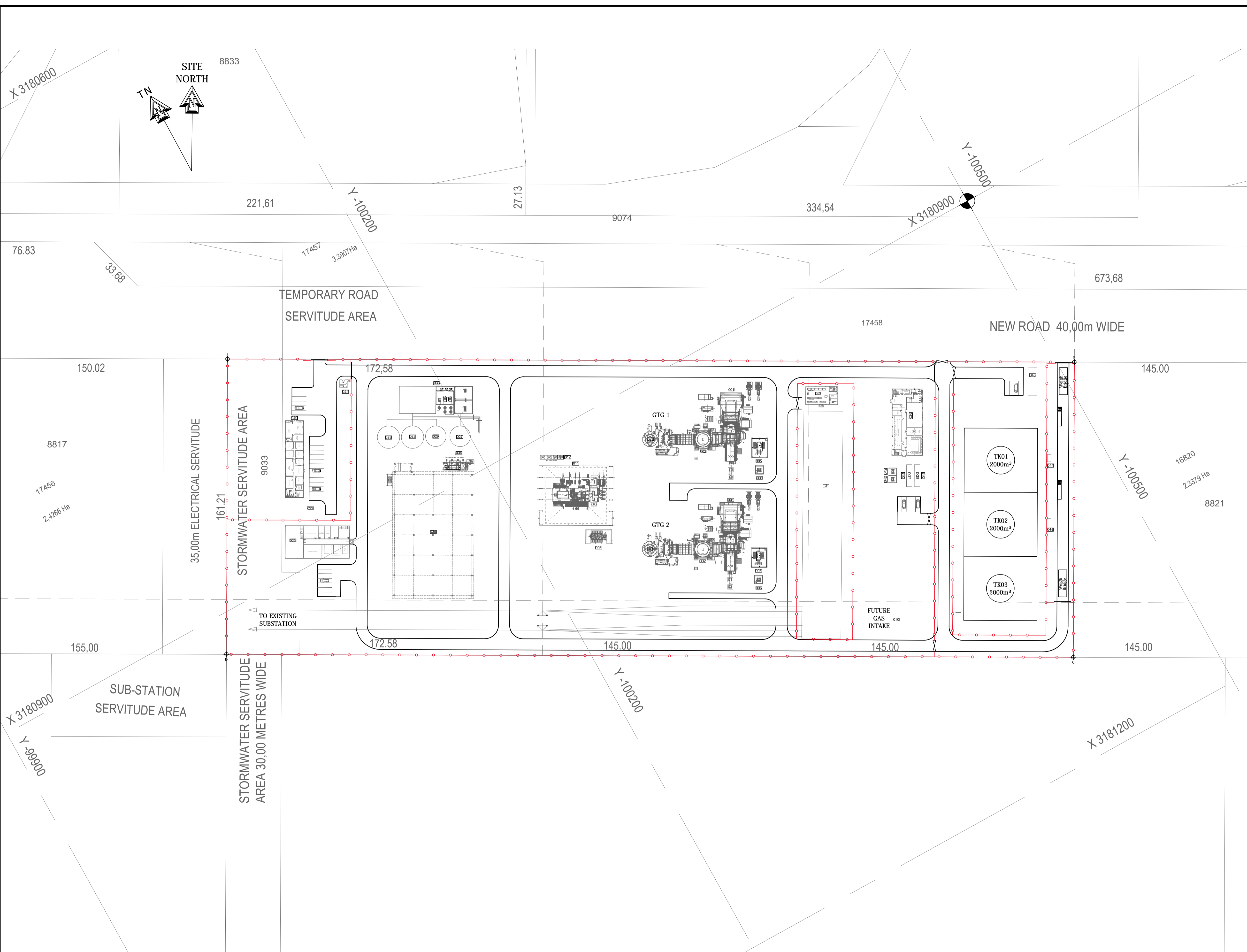


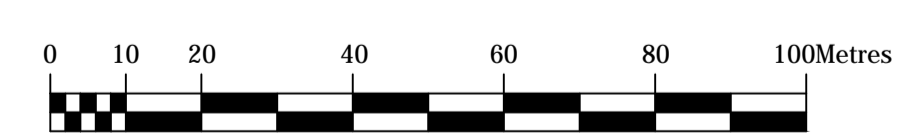
Figure 2.3: Environmental sensitivity map for the project study area illustrating ecologically sensitive areas in relation to the gas to power plant as well as protected plant species at mid-merit operational design

GENERAL NOTES:
 All levels, heights and dimensions to be verified on site where applicable and to be checked against drawings.
 Any errors, discrepancies, queries or omissions to be brought to the attention of SDE immediately prior to the commencement of any work.
 All work to be carried out in strict accordance with local authority requirements, National Building Regulations and relevant standards.
 Where applicable, contractors to locate and identify existing services on site and protect these from damage throughout the duration of the works.
 This drawing must not be scaled. Only figured dimensions shall be followed.
 Only drawings referenced as "For Construction" shall be used for construction purposes.

SCHEDULE	
ITEM	DESCRIPTION
001	GAS TURBINE
002	STACK
003	HEAT RECOVERY STEAM GENERATOR
005	GENERATOR STEP UP TRANSFORMER (GSU TX)
006	UNIT TRANSFORMER
010	GAS LET-DOWN AND METERING (FUTURE)
011	STEAM TURBINE GENERATOR
012	STEAM TURBINE FIN FAN COOLERS
021	132KV SWITCHYARD
022	ADMIN BUILDING
023	WORKSHOP AND MAINTENANCE BUILDING
024	SECURITY OFFICE
026	POWER PLANT CONTROL BUILDING
027	RAW AND FIRE WATER TANK (2000m ³)
028	DEMIN WATER TANK (2 x 1000m ³)
029	PARTIALLY TREATED WATER TANK
033	MECHANICAL BUILDING
034	FEED WATER PUMPS
035	AIR COOLER CONDENSERS
039	SWITCHYARD ELECTRICAL AND CONTROL ROOM
040	GATEHOUSE (IN 022)
041	EMERGENCY DIESEL GENERATOR
042	AUXILIARY TRANSFORMER
043	FUEL OFFICE AND LAB
044	OFFLOADING STATION



ISSUED FOR INFORMATION



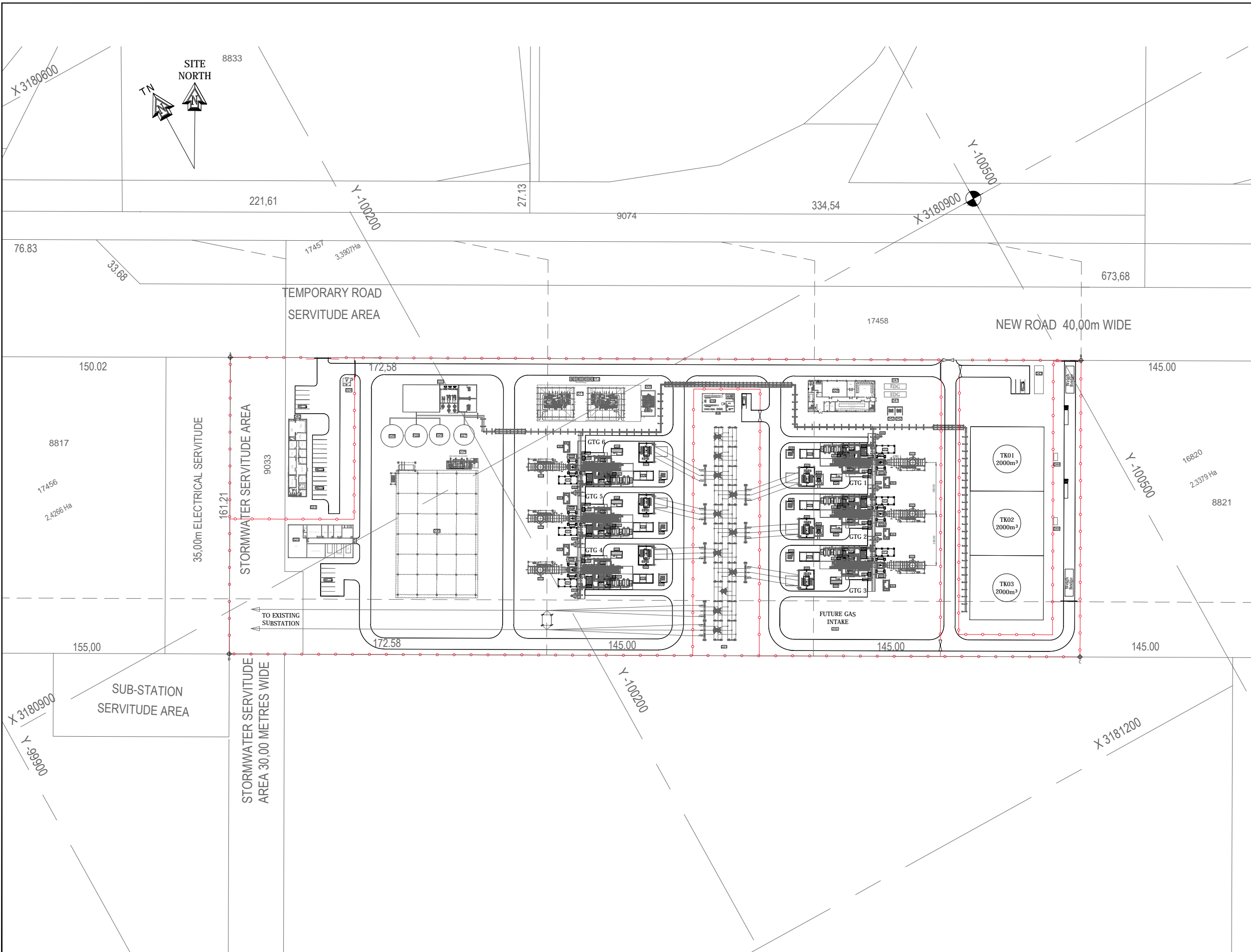
COPYRIGHT RESERVED
 The design as detailed on this document is the property of SDE (Single Destination Engineering Pty Ltd) and / or its Associates and must be returned on demand. It is issued on the strict condition that except with our written permission it may not be re-produced, copied or communicated to any third party by any means whatsoever, nor be used for any purpose other than that stated in the particular enquiry, order or contract for which it is issued. The reservation of copyright in this document extends from earliest date appearing thereon and in respect of the subject matter as it appeared on the relevant and subsequent dates.

Rev.	Description	Name	Date	Approved
A	ISSUED FOR INFORMATION	A.B.	12.04.16	A.S.

Drawn	A. BOTHA
Design	A. STEAD
Checked	K. GAFNER
Approved	K. GAFNER
Date	08.04.2016
Scale	1:1000
Original	A1

single destination engineering
 Power and Process Engineering
 Balblair
 Kildrummy Office Park
 Cnr Witkoppen Road and Umhlanga Avenue
 Paulshof, Sandton
 Email : contacts@sde.co.za
 Website : www.sde.co.za
 Tel: +2711 997 2340 Fax: +2711 997 2360

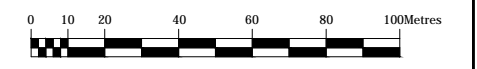
Project	Richards Bay PP RGBP-2
OVERALL POWER PLANT CONCEPTUAL (FRAME 9e)	
Drawing Number	7381 - CPT - SI - 03
Rev.	A



GENERAL NOTES:
 All levels, heights and dimensions to be verified on site where applicable and to be checked against drawings.
 Any errors, discrepancies, queries or omissions to be brought to the attention of SDE immediately prior to the commencement of any work.
 All work to be carried out in strict accordance with local authority requirements, National Building Regulations and relevant standards.
 Where applicable, contractors to locate and identify existing services on site and protect these from damage throughout the duration of the works.
 This drawing must not be scaled. Only figured dimensions shall be followed.
 Only drawings referenced as "For Construction" shall be used for construction purposes.

SCHEDULE	
ITEM	DESCRIPTION
001	GAS TURBINE
002	STACK
003	HEAT RECOVERY STEAM GENERATOR
004	GENERATOR CIRCUIT BREAKER (GCB) & ISOLATOR PHASE BUSBAR
005	GENERATOR STEP UP TRANSFORMER (GSU TX)
006	UNIT TRANSFORMER
008	POWER CONTROL MODULE (PCM)
009	CEMS
010	GAS LET-DOWN AND METERING (FUTURE)
011	STEAM TURBINE GENERATOR
012	STEAM TURBINE FIN FAN COOLERS
021	132kV SWITCHYARD
022	ADMIN BUILDING
023	WORKSHOP AND MAINTENANCE BUILDING
024	SECURITY OFFICE
026	POWER PLANT CONTROL BUILDING
027	RAW AND FIRE WATER TANK (2000m³)
028	DEMIN WATER TANK (2 x 1000m³)
029	PARTIALLY TREATED WATER TANK
033	MECHANICAL BUILDING
034	FEED WATER PUMPS
035	AIR COOLER CONDENSERS
039	SWITCHYARD ELECTRICAL AND CONTROL ROOM
040	GATEHOUSE (IN 022)
041	EMERGENCY DIESEL GENERATOR
042	AUXILIARY TRANSFORMER
043	FUEL OFFICE AND LAB
044	OFFLOADING STATION
060	SPRINT SKID
061	WATER INJECTION SKID
062	AUXILIARY SKID
063	LUBE OIL SKID
064	FIRE PROTECTION SKID
065	STATION TRANSFORMER (GTG1 & GTG2 ONLY)
066	LINE SIDE CUBICLE
068	DEMIN WATER BUFFER TANK
069	GAS DUPLEX FILTER (FUTURE)
070	LIQUID FUEL PUMP SKID
071	LIQUID FUEL OIL FILTER SKID
072	FIN FAN COOLER
080	OILY & USED WASH WATER SUMP

ISSUED FOR INFORMATION



COPYRIGHT RESERVED
 The design as detailed on this document is the property of SDE (Single Destination Engineering Pty Ltd) and / or its Associates and must be returned on demand. It is issued on the strict condition that except with our written permission it may not be re-produced, copied or communicated to any third party by any means whatsoever, nor be used for any purpose other than that stated in the particular enquiry, order or contract for which it is issued. The reservation of copyright in this document extends from earliest date appearing thereon and in respect of the subject matter as it appeared on the relevant and subsequent dates.

Reference Drawings	Drawing No.	Rev.	Revision	Name	Date	Approved
		A	ISSUED FOR INFORMATION	H.B	11.04.16	A.S.

Name	Designation	Date	Name	Designation	Date	Name	Designation	Date

Drawn	A. BOTHA
Design	A. STEAD
Checked	K. GAFNER
Approved	K. GAFNER
Date	27.11.2015
Scale	1:1000
Original	A1

single destination engineering
 Power and Process Engineering
 Batblair
 Kildrummy Office Park
 Cnr Witkoppen Road and Umhlanga Avenue
 Paulshof, Sandton
 Email: contactsde@sde.co.za
 Website: www.sde.co.za
 Tel: +2711 997 2340 Fax: +2711 997 2360

Project	Richards Bay PP RGBP-2
OVERALL POWER PLANT CONCEPTUAL	
Drawing Number	7381 - CPT - SI - 01
Rev.	A