

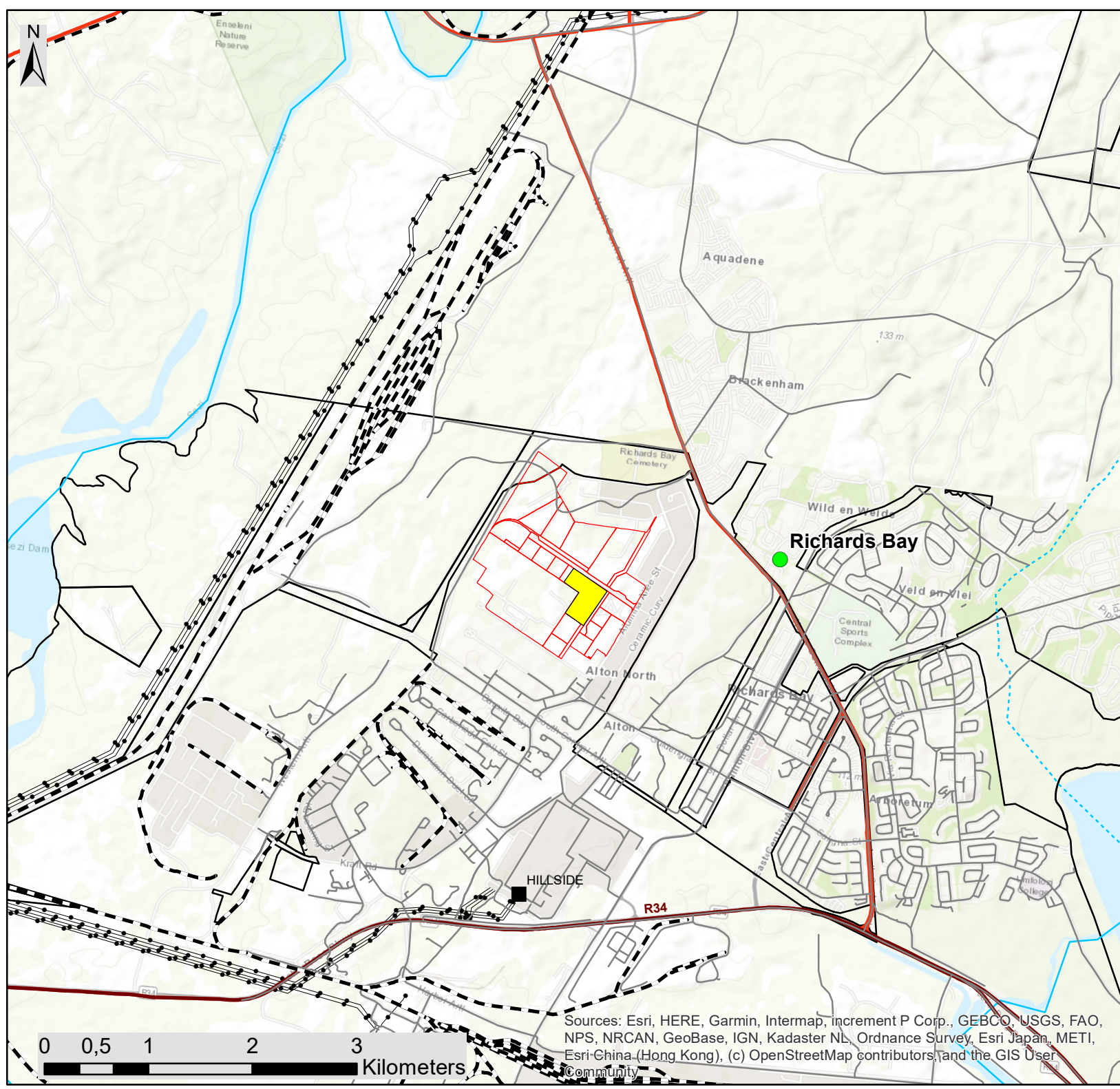
Phankwe Richards Bay Gas Power 3 CCPP, KwaZulu-Natal Province

Locality Map

Legend

- Town
- Substation
- +— Railway Line
- Secondary Roads
- Regional Road
- Main Road
- Existing Power Line
- Perennial River
- Non-perennial River
- RBIDZ Phase 1F
- Phankwe Richards Bay Gas Power 3 CCPP

Scale: 1:70 000
Projection: GCS_WGS_1984
Ref: Richards Bay Locality Map



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri-China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Phankwe Richards Bay Gas Power 3 CCPP, KwaZulu-Natal Province

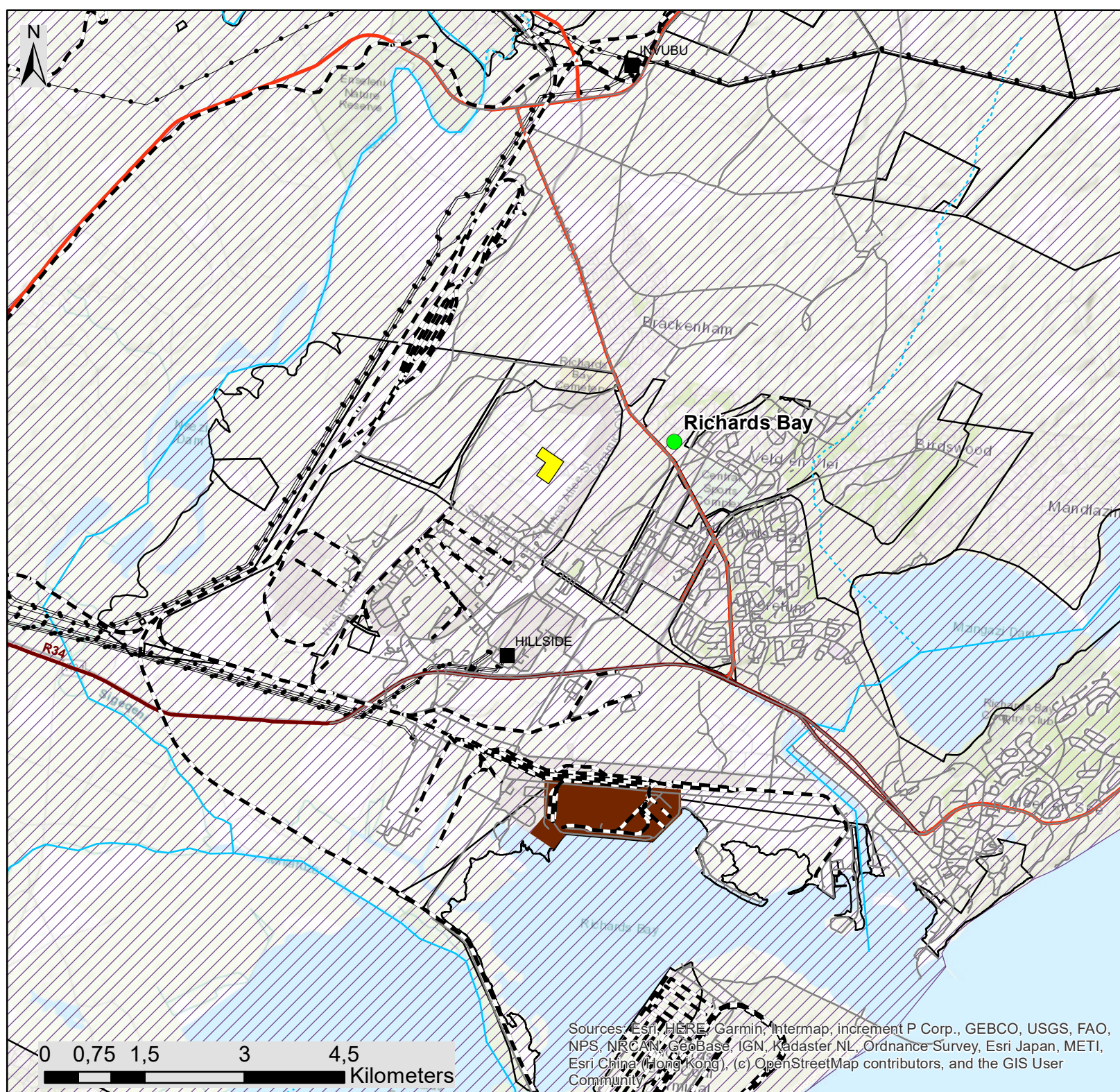
Transmission and Strategic Infrastructure Map

Legend

- Town
- Existing Substation
- +— Railway Line
- Secondary Roads
- Regional Road
- Main Road
- Existing Power Line
- Perennial River
- - - Non-perennial River
- ▨ Strategic Gas Pipeline Corridors
- Port of Richards Bay
- Phankwe Richards Bay Gas Power 3 CCPP

Scale: 1:70 000
Projection: GCS_WGS_1984 .
Ref: Richards Bay Regional Map

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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community


0 0,75 1,5 3 4,5
Kilometers



Phakwe Richards Bay Gas Power 3, KwaZulu-Natal Province


Layout Map (indicative infrastructure areas)

Legend


 RBIDZ Phase 1F


 EIA Footprint


Indicative Infrastructure Areas

 Anxillary Building and Water Treatment Building Hub

 Gas and Steam Turbine Units

 Utility Gas Yard (incl. conditioning equipment)

 Water Retention Pond

 Raw water, demineralised water, and fire water storage tanks

Scale: 1:4 000
Projection: GCS_WGS_1994
Ref: PRBGP3 - Layout

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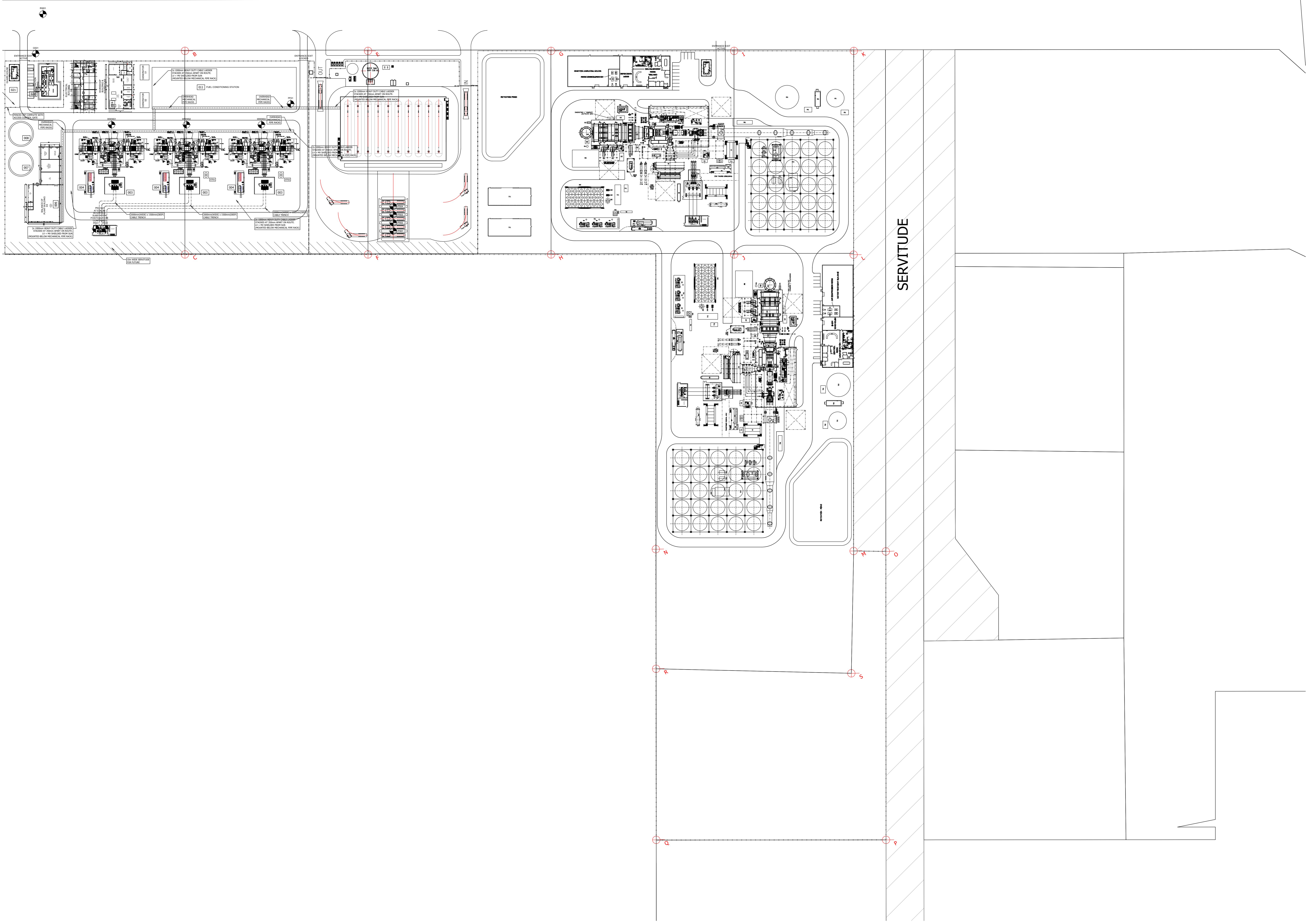


0 0,125 0,25 0,5 0,75
Kilometers

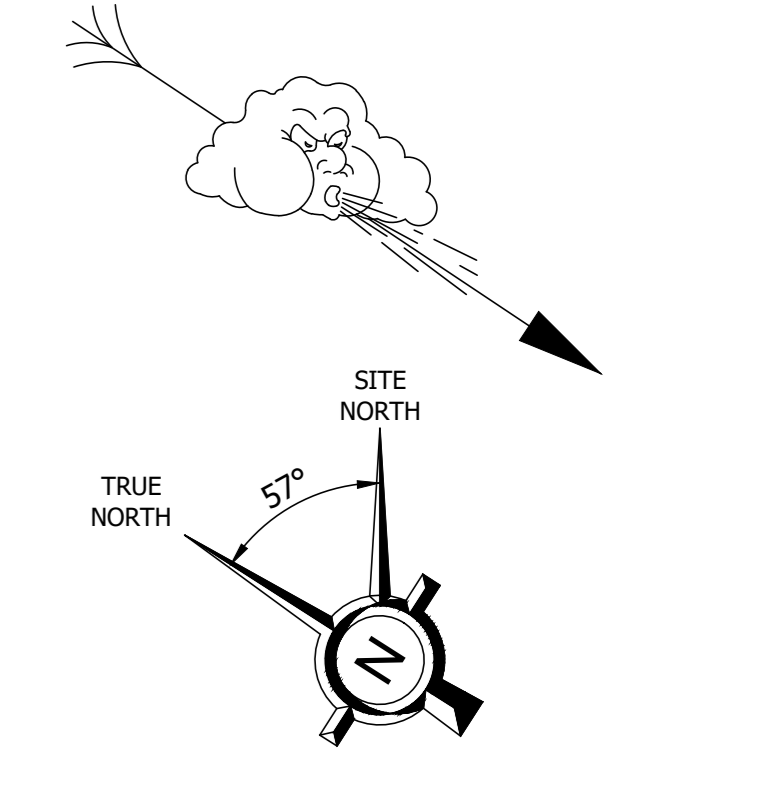
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

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 Jacques Robitaille

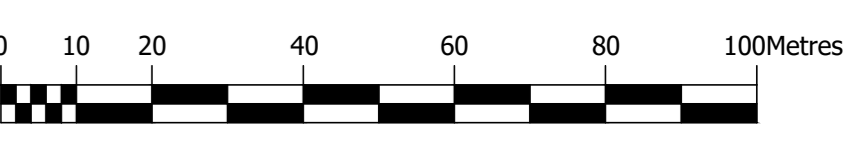
GENERAL NOTES:
 All levels, heights and dimensions to be verified on site where applicable and to be checked against drawings.
 Any errors, discrepancies, queries or omissions to be brought to the attention of SDE immediately prior to the commencement of any work.
 All work to be carried out in strict 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.



- LEGEND:**
- 1 GAS TURBINE
 - 3 LUBE OIL RESERVOIR
 - 5 LUBE OIL COOLER (A)
 - 6 LUBE OIL COOLER (B)
 - 9 LUBE OIL ACCUMULATOR
 - 13 CONTROL OIL UNIT
 - 17 GT COOLING AIR COOLER
 - 19-1 GT FUEL GAS HEATER (A)
 - 19-2 GT FUEL GAS HEATER (B)
 - 36 GT FUEL GAS INLET FILTER
 - 42 CO2 FIRE-FIGHTING SYSTEMS FOR GT
 - 43 TURBINE CONTROL PACKAGE
 - 45 GT EXHAUST DUCT
 - 48 PLANT AIR COMPRESSOR (A)
 - 49 PLANT AIR COMPRESSOR (B)
 - 50 INS AIR RECEIVER
 - 51 SER AIR RECEIVER
 - 52 INS. AIR DRYER (A)
 - 53 INS. AIR DRYER (B)
 - 57 GT INLET AIR SILENCER
 - 59 GT INLET AIR FILTER
 - 69 TRANSFORMER AREA OIL SEPARATOR
 - 70 GT FUEL GAS FLOW METER
 - 92 JACKING OIL PUMP UNIT FOR GENERATOR
 - 101 STEAM TURBINE GENERATOR
 - 103 GEN SHAFT SEAL OIL EQUIPMENT
 - 107 GEN HYDROGEN GAS DRYER
 - (NOT SHOWN UNDER STG)
 - 109 GEN HYDROGEN GAS SUPERVISORY ANALYZER RACK
 - (NOT SHOWN UNDER STG)
 - 111 GEN HYDROGEN GAS SUPERVISORY MONITORING RACK
 - (NOT SHOWN UNDER STG)
 - 113 MAIN TRANSFORMER
 - 115 GEN. EXC. TRANSFORMER
 - 117 GEN. EXC. CLB. PACKAGE
 - 121 UNIT AUX TRANSFORMER
 - 123 SFC TRANSFORMER
 - 125 GEN. SFC CLB. PACKAGE
 - 139 GEN. LOOP SEAL TANK
 - 160 GT 2C COOLER
 - 162 GT 4S COOLER
 - 164 GT 4S COOLING AIR FILTER
 - 170 TRIP VALVE BOARD
 - 182 GT ENHANCED COOLING AIR COOLER
 - 184 GT ENHANCED COOLING AIR COMPRESSOR
 - 190 GT ENHANCED COOLING AIR DRAIN MIST SEPARATOR
 - 192 GT ENHANCED COOLING AIR COOLER PUMP (A)
 - 194 GT ENHANCED COOLING AIR COOLER PUMP (B)
 - 201 HEAT RECOVERY STEAM GENERATOR
 - 204 STACK
 - 215 HRSG PRE-HEATER RETICULATION PUMP
 - 219 HRSG BLOW DOWN TANK
 - 221 HRSG BLOW DOWN PTT
 - 305 LUBE OIL PURIFIER
 - 308 GLAND STEAM CONDENSER
 - 331 CONDENSATE EXTRACTION PUMP (A)
 - 332 CONDENSATE EXTRACTION PUMP (B)
 - 333 CONDENSATE EXTRACTION PUMP (C)
 - 334 HP/IP FEED WATER PUMP (A)
 - 335 HP/IP FEED WATER PUMP (B)
 - 342 SAMPLING EQUIPMENT
 - 344 CHEMICAL DOSING EQUIPMENT
 - 345 ST FLASH TANK
 - 346 CLOSED COOLING WATER COOLER
 - 348 CLOSED COOLING WATER PUMP (A)
 - 349 CLOSED COOLING WATER PUMP (B)
 - 353 EMERGENCY D/G PACKAGE
 - 355 CLOSED COOLING WATER EXPANSION TANK
 - 503 GT COOLING AIR FILTER
 - 506 CEMS ENCLOSURE
 - 510 ACC
 - 511 ACC DRAIN POT
 - 512 ELECTRICAL PACKAGE FOR ACC
 - 513 CONDENSATE TANK
 - 529 ACC DRAIN PUMP (A)
 - 530 ACC DRAIN PUMP (B)
 - 531 SCR SKID
 - 532 HRSG BURNER SKID
 - 533 DUCT BURNER BLOWER SKID
 - 541 CONDENSER VACUUM DUCT (A)
 - 542 CONDENSER VACUUM DUCT (B)
 - 701 DEMIN. WATER STORAGE TANK
 - 702 DEMIN. WATER PUMPS
 - 703 RAW / FIRE WATER STORAGE TANK
 - 704 RAW WATER PUMPS
 - 705 FIRE PUMP HOUSE
 - 706 HYDROGEN TRAILER
 - 707 AMMONIA STORAGE / UNLOADING
 - 709 FUEL GAS ABSOLUTE SEPARATOR
 - 710 GAS COMPRESSORS / SCRUBBERS, DRAIN TANK & PRV STN
 - 711 ENCLOSED AUX. BOILER PACKAGE
 - 712 UTILITY GAS YARD INCLUDING CONDITIONING EQUIP
 - 713 ACC TRANSFORMERS
 - 714 GT TRANSFORMERS
 - 715 BOP / HRSG & CCW MCC / PDC
 - 716 BOP / HRSG & CCW TRANSFORMERS
 - 717 MAIN ELECTRICAL PACKAGE
 - 718 NITROGEN TANK



ISSUED FOR INFORMATION



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Reference Drawings	Drawing No.	Rev.	Revision	Name	Date	Approved	Rev.	Revision	Name	Date	Approved

Name	Date	Designation	Name	Date	Designation	Name	Date	Designation
J.R.	21.05.20	K.G.	A.C.	21/04/22	K.G.	A.C.	21/05/01	K.G.








Drawn	A. CELLIERS
Design	A. CELLIERS
Checked	A. CELLIERS
Approved	K.GARNER
Date	2021/02/08

Project	PHAKWE RICHARDS BAY GAS POWER 3
SITE LAYOUT 1800MW COMBINE CYCLE TWO TRAINS OF M701JAC IN (1x1x1)	
Drawing Number	7499 - SIT - SI - 01
Rev.	C

Phakwe Richards Bay Gas Power 3 Combined Cycle Power Plant, KwaZulu-Natal Province

Cumulative Map
Industrial Developments

Legend

-  Substation
-  Secondary Roads
-  Regional Road
-  Main Road
-  Existing Power Line
-  Railway Line
-  Phakwe Richards Bay Gas Power 3 CCPP

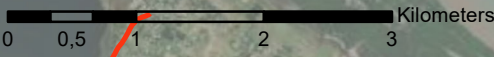
Known Industrial and Energy Developments:

-  Karpowerships (in process)
-  Chlor-Alkali Plant (authorised)
-  Phinda Power 320MW RMPP (authorised)
-  Eskom Richards Bay CCPP (authorised)
-  Fermentech Fertilizer Supplier (existing)
-  Bidvest Tank Terminals (existing)
-  Richards Bay Gas to Power (authorised)
-  Bayside Aluminium Richards Bay (existing)
-  Foskor Richards Bay (existing)
-  Mondi Richards Bay (existing)
-  Port Richards Bay (existing)
-  Richards Bay Coal Terminal (existing)
-  South32 Alluminium (existing)
-  Tata Steel (Richards Bay Alloys) (existing)

Scale: 1: 50 000
Projection: GCS_WGS_1994
Ref: PRBGP3 CCPP - Cumulative Map

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Cumulative mapping is based on available data (Nov 2021)



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Phankwe Richards Bay Gas Power 3 CCPP, KwaZulu-Natal Province

Sensitivity Map

Legend

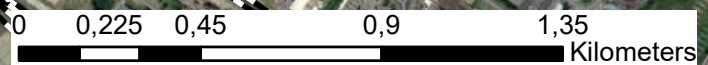
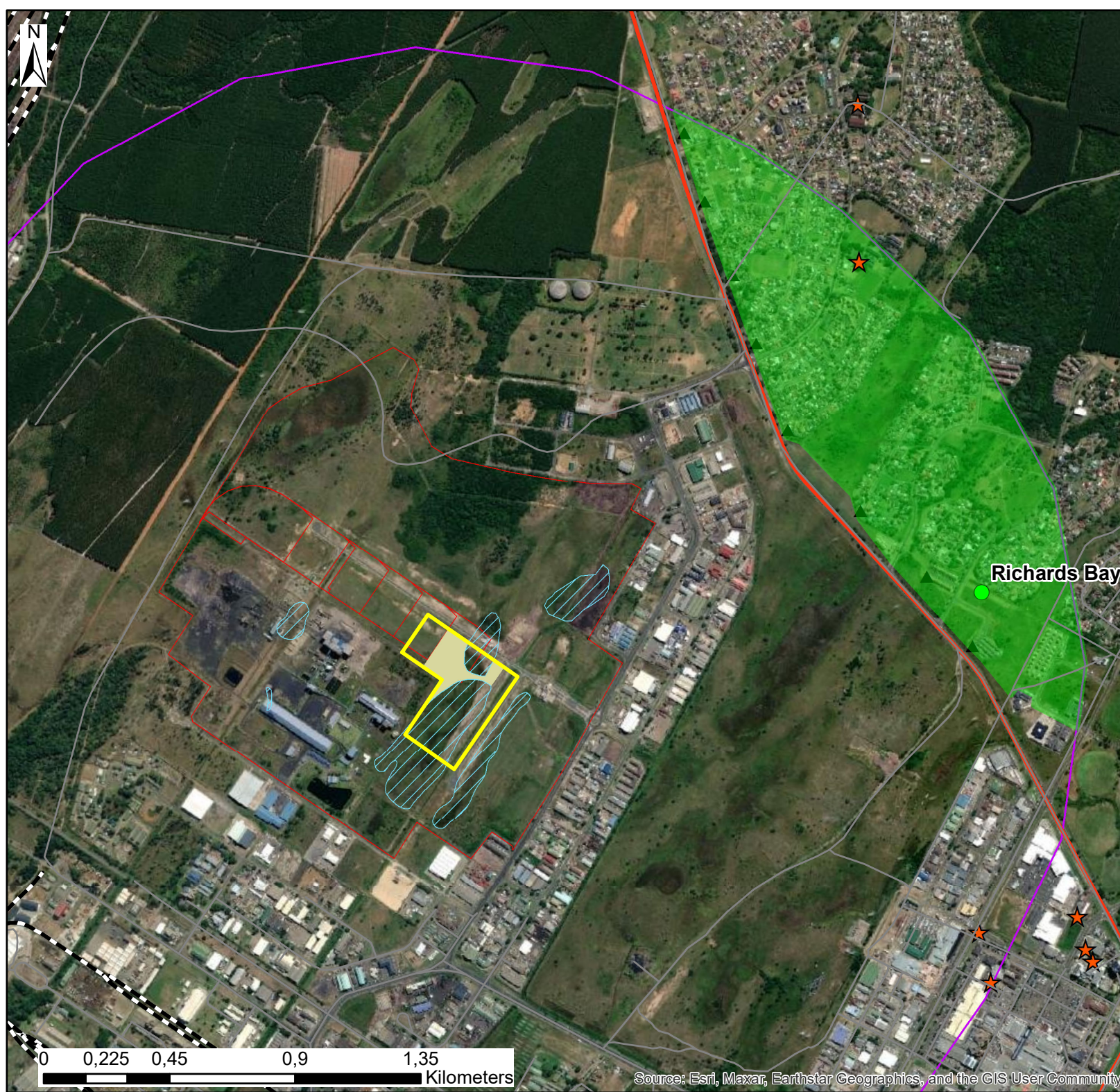
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Environmental Sensitivities

- Sensitive Noise Receptors
- Sensitive Air Quality Receptors
- Noise Sensitivity Area
- Wetlands (NBA, 2018)
- Maputaland Wooded Grassland (Medium sensitivity)
- Noise Buffer (2000m)

Scale: 1:11 000
Projection: GCS_WGS_1984
Ref: PRBGP3 Prelim Sens

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community