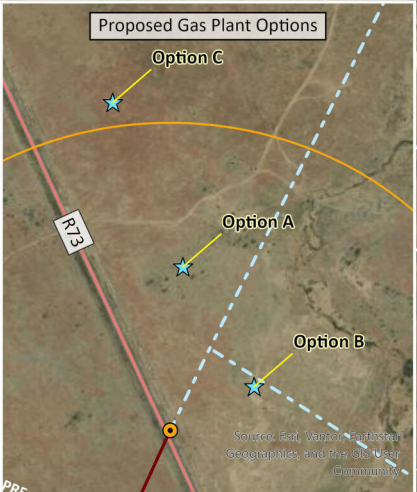
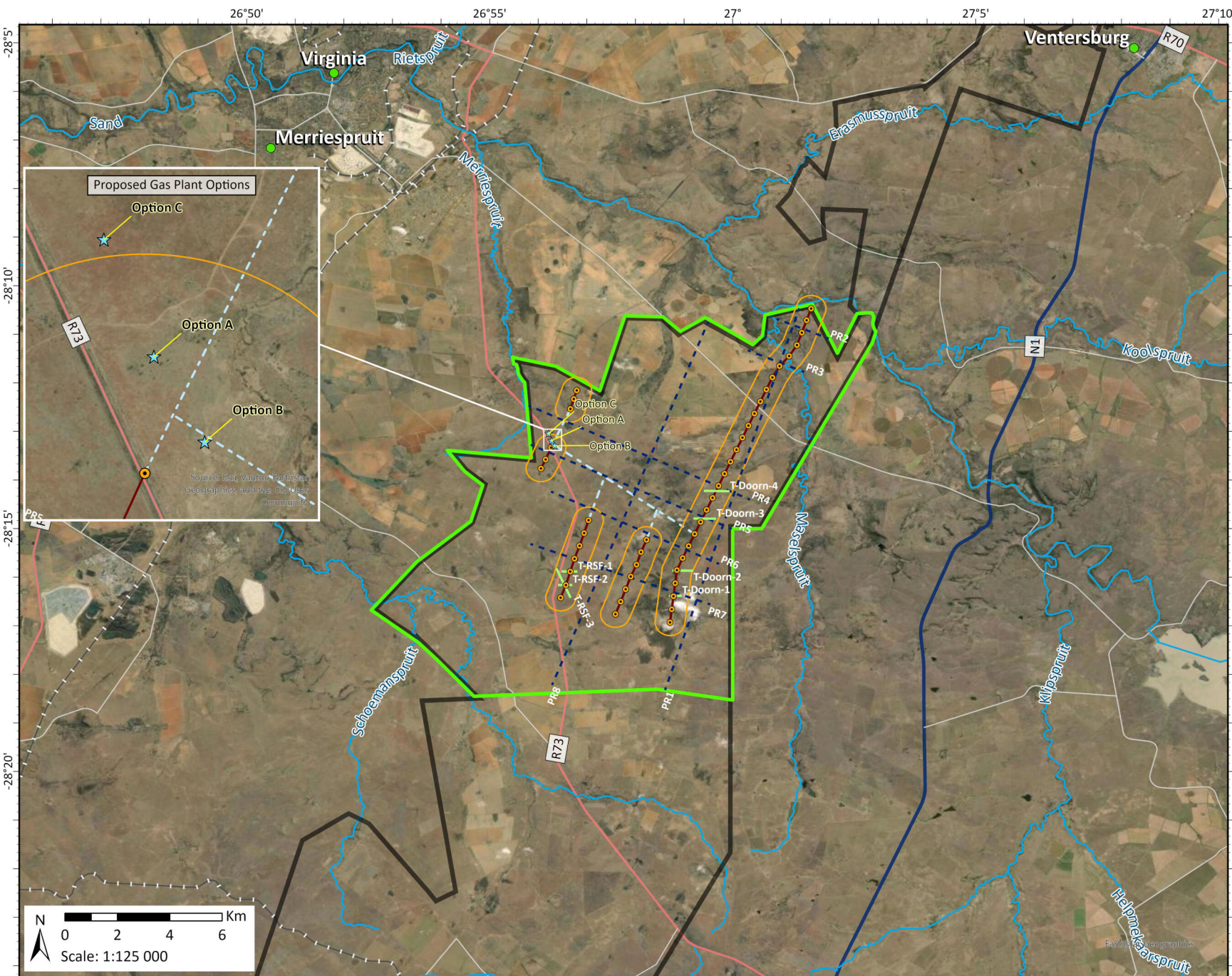




Locality Map

Motuoane Production Right EIA

Legend

- Production Right Application Area
- ER315
- Towns
- Railway Line

Roads

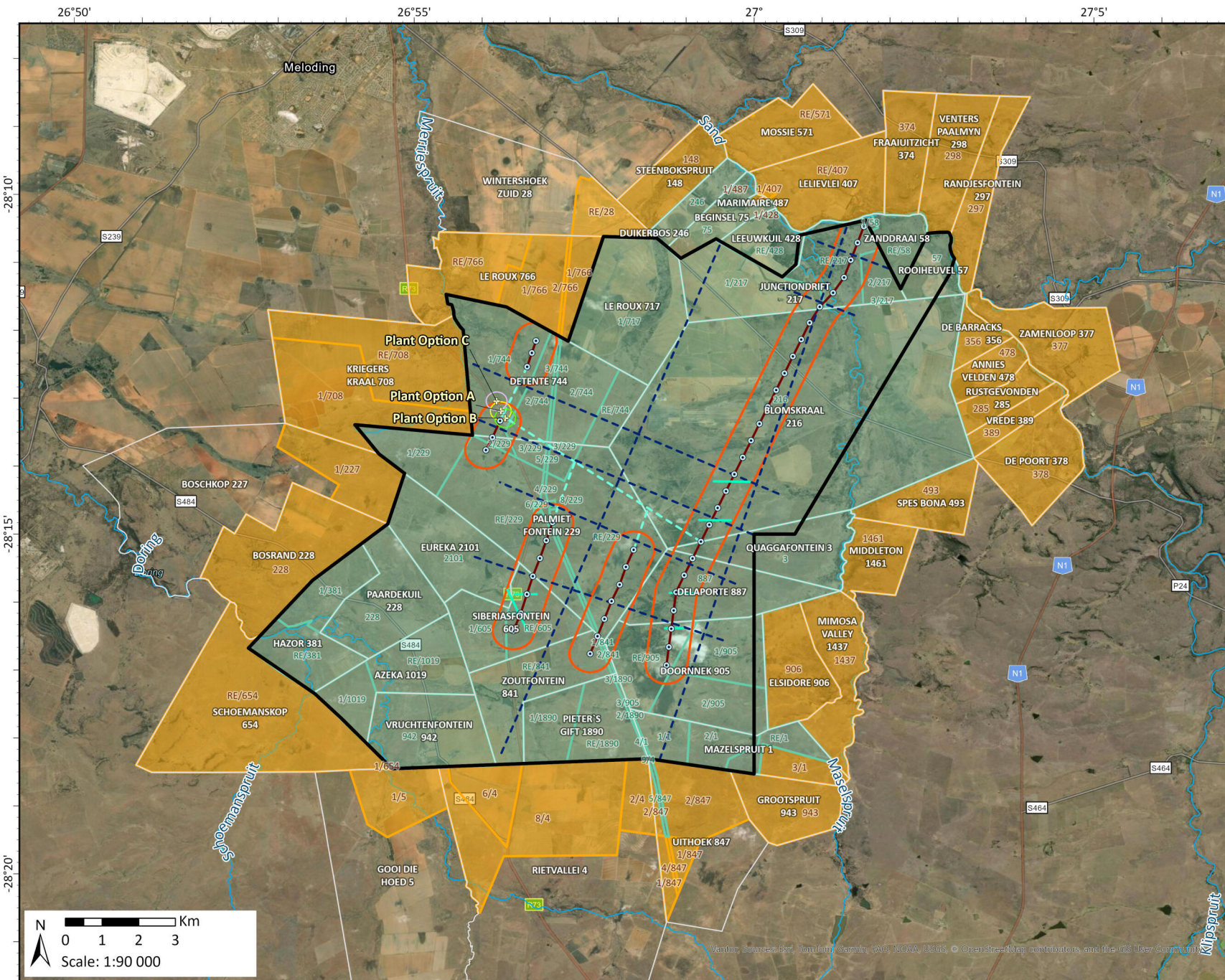
- National Road
- Arterial Road
- Secondary Road
- NFEPA Rivers
- Proposed Wells (Along Gathering Lines)
- Proposed Gas Plant Options
- Well Corridor (500m)
- Proposed Gathering Lines to Proposed Plant
- Gathering Lines

Seismic Lines

- PRA16 Area 2D Seismic Lines
- PRA16 Area Telluric Lines

Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1709_Locality
Data Sources:
CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/06/10
EIMS Ref: 1709
Compiled: JW
Reviewed: VM
Approved: LW

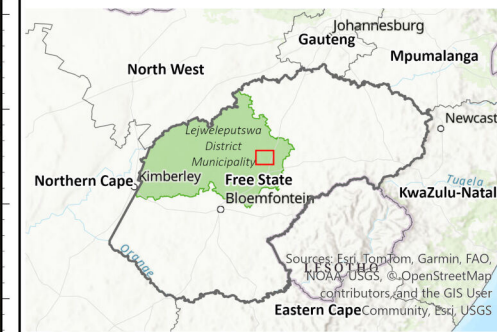


Property Map Proposed Layout

D3 Energy Production Right EIA

Legend

- Production Right Application Area
- NFEPA Rivers
- Parent Farms
- Affected Farm Portions
- Adjacent Farm Portions
- Proposed Gas Plant Options
- Option A - Assessment Area
- Option B - Assessment Area
- Option C - Assessment Area
- Preliminary Well Locations
- Proposed Gas Plant Options
- Option A - Assessment Area
- Option B - Assessment Area
- Option C - Assessment Area
- Preliminary Well Locations
- Seismic Lines
- PRA16 Area Seismic Lines
- PRA16 Area Telluric Lines
- Gathering Lines
- Gathering Lines 500m Buffer
- Proposed Gathering Lines to Proposed Plant
- Gathering Lines



Coord System: GCS WGS 1984

Datum: WGS 1984

Units: Degree

Ref: 1709_Properties

Data Sources:

CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/28

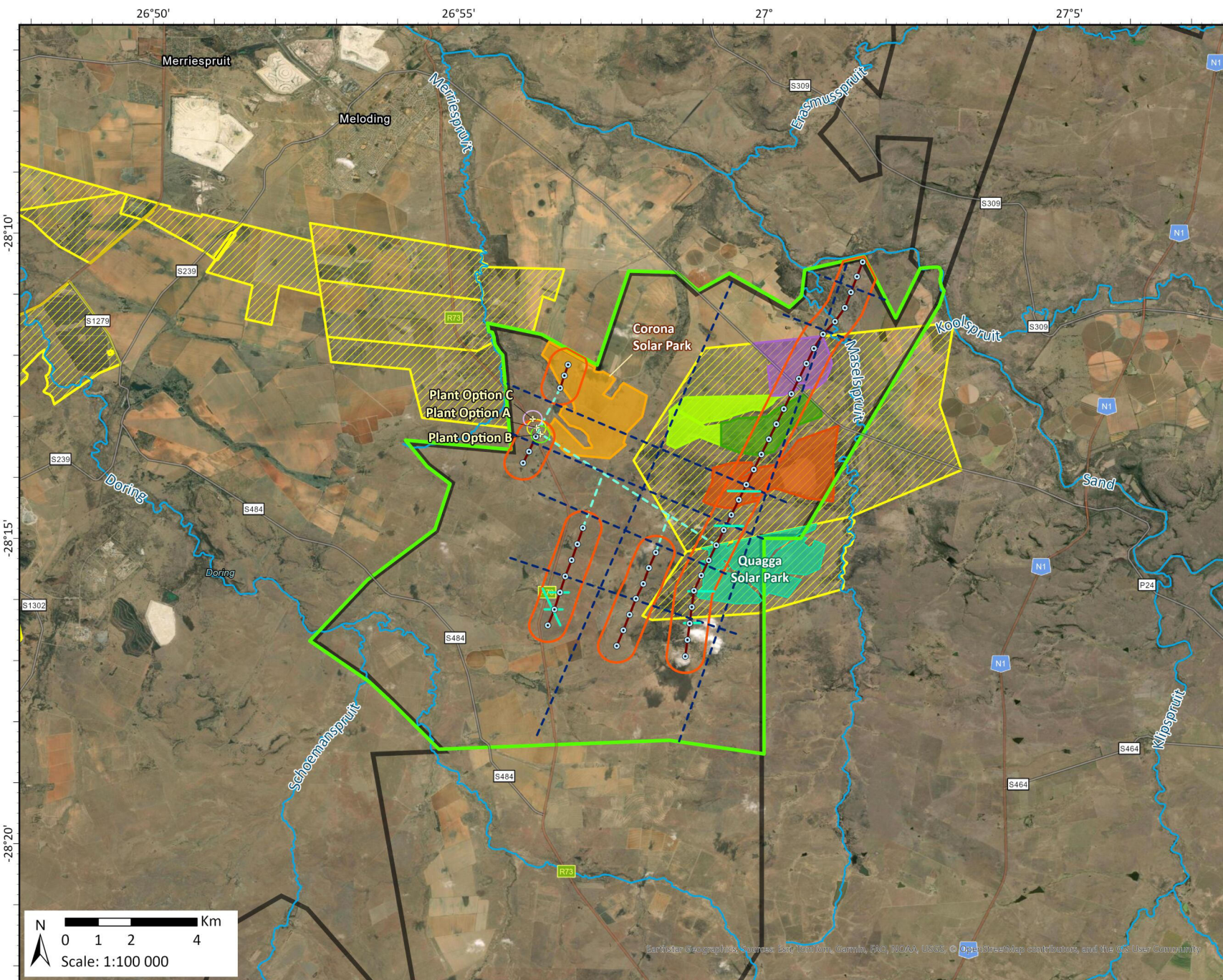
EIMS Ref: 1709

Compiled: JW

Reviewed: VM

Approved: LW





Renewable Energy Map

D3 Energy Production Right EIA

Legend

- Production Right Application Area
- ER315
- NFEPA Rivers
- Quagga Solar Park (240 MW)
- Corona Solar Park (240 MW)
- Option A - Assessment Area
- Option B - Assessment Area
- Option C - Assessment Area
- Seismic Lines
 - PRA16 Area Seismic Lines
 - PRA16 Area Telluric Lines
- Gathering Lines
 - Gathering Lines 500m Buffer
 - Proposed Gathering Lines to Proposed Plant
 - Gathering Lines
- Red Rocket Solar Parks
 - Virginia 1
 - Virginia 2
 - Virginia 3
 - Virginia 4
- Renewable Energy EIA Applications
 - Solar PV

Proposed Layout

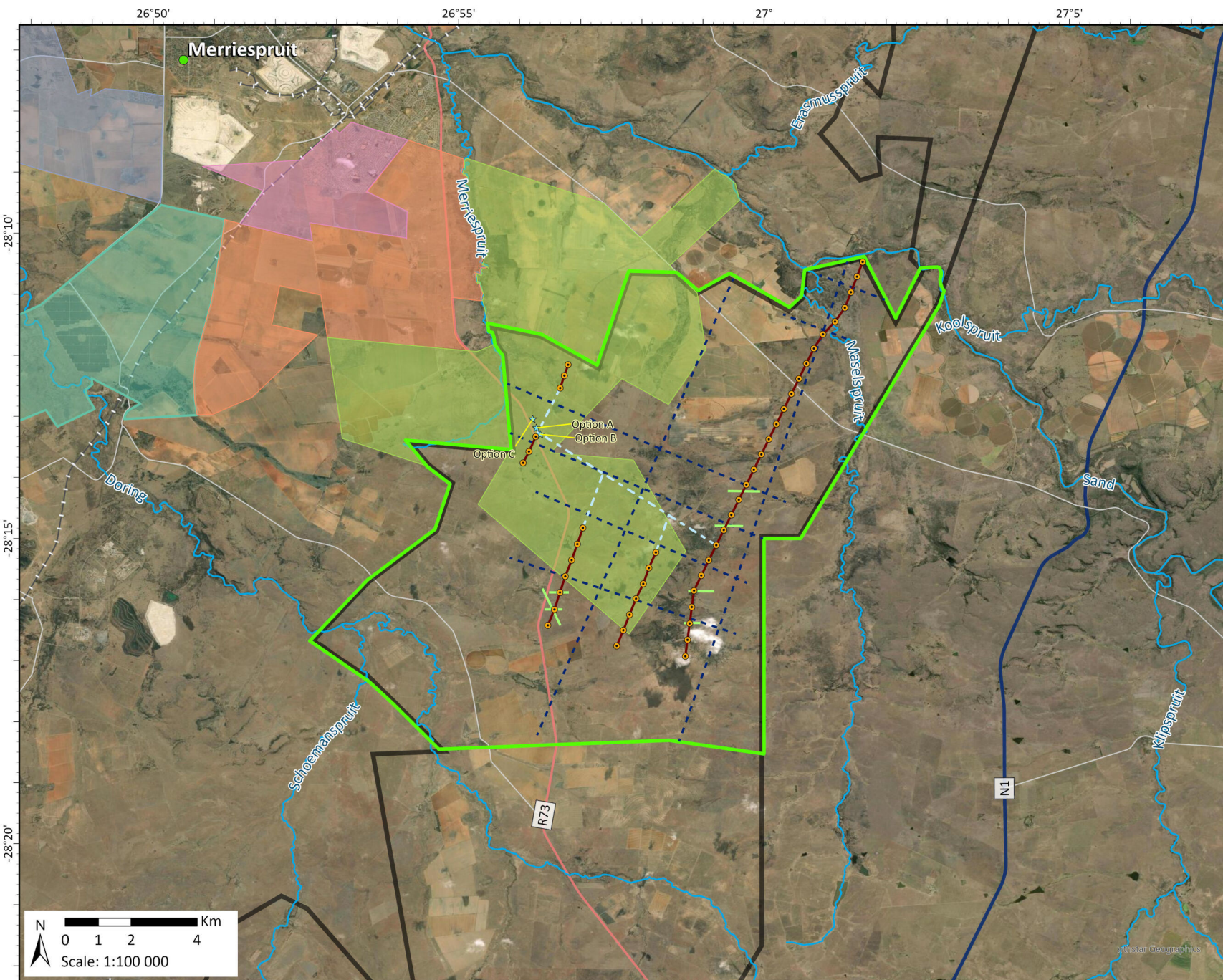
- Preliminary Well Locations



Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1709_Renewables-1
 Data Sources:
 CSG; ESRI; MDB; SANBI; CD:NGI; DFFE

Date: 2026/08/27
 EIMS Ref: 1709
 Compiled: JW
 Reviewed: VM
 Approved: LW



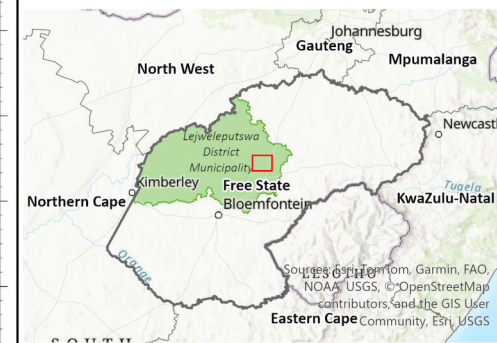


Sibanye Mining Rights Map

D3 Energy Production Right EIA

Legend

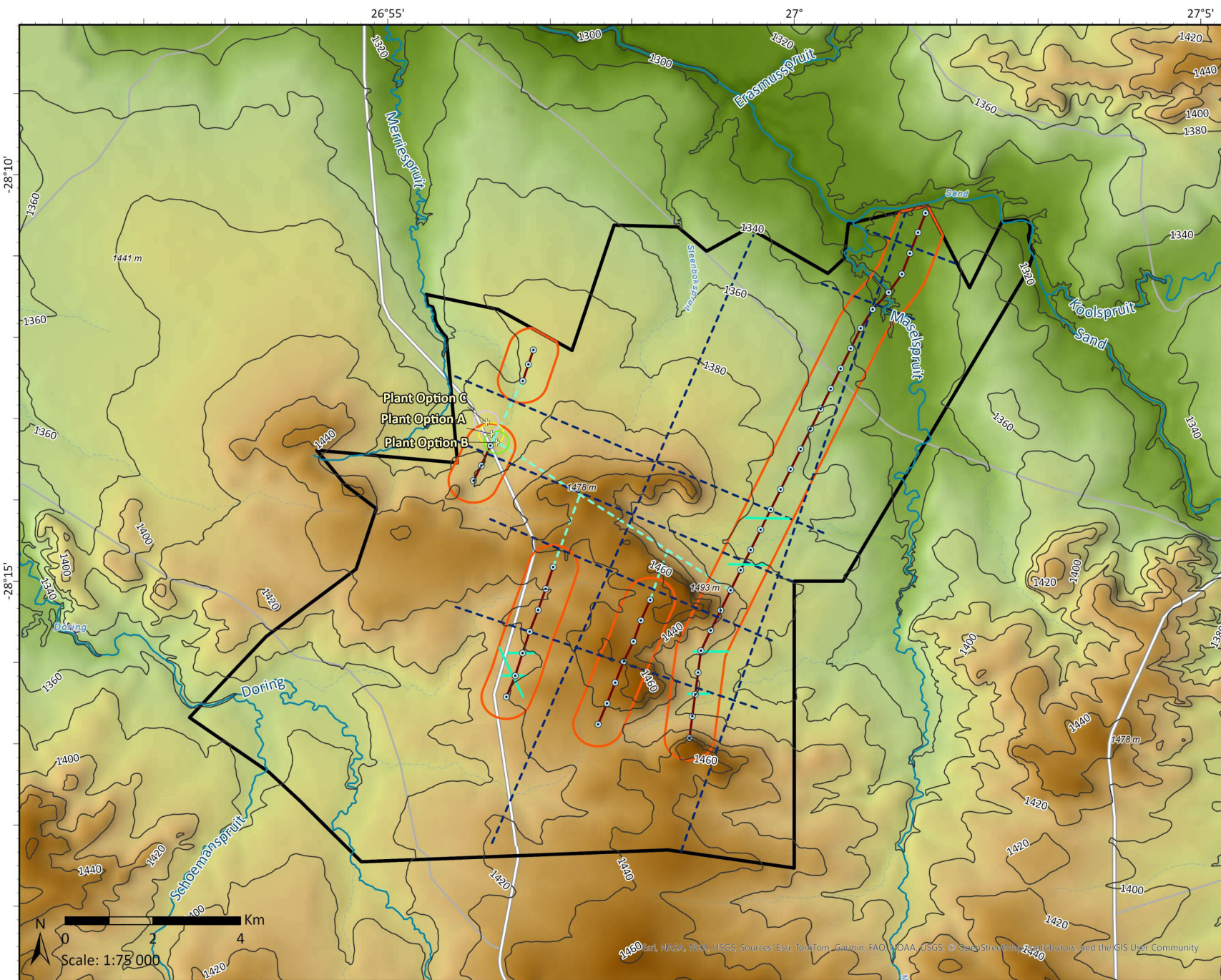
- | | |
|--|-------------------------------|
| Production Right Application Area | PRA16 Area Telluric Lines |
| ER315 | Railway Line |
| Towns | Roads |
| NFEPA Rivers | National Road |
| Proposed Wells (Along Gathering Lines) | Arterial Road |
| Proposed Gas Plant Options | Secondary Road |
| Proposed Gathering Lines to Proposed Plant | Existing Mining Rights |
| Gathering Lines | Bloemhoek Project |
| PRA16 Area 2D Seismic Lines | DBM Project |
| | Hakkies Project |
| | Merriespruit Project |
| | Robijn Project |



Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1709_MiningRightsMap
 Data Sources:
 CSG; ESRI; MDB; SANBI; CD:NGI; DFFE

Date: 2026/09/07
 EIMS Ref: 1709
 Compiled: CMB
 Reviewed: VM
 Approved: LW

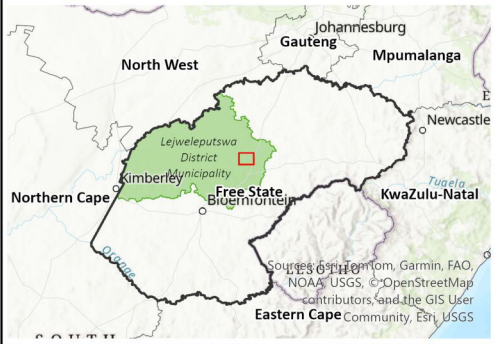




Topography Map

D3 Energy Production Right EIA

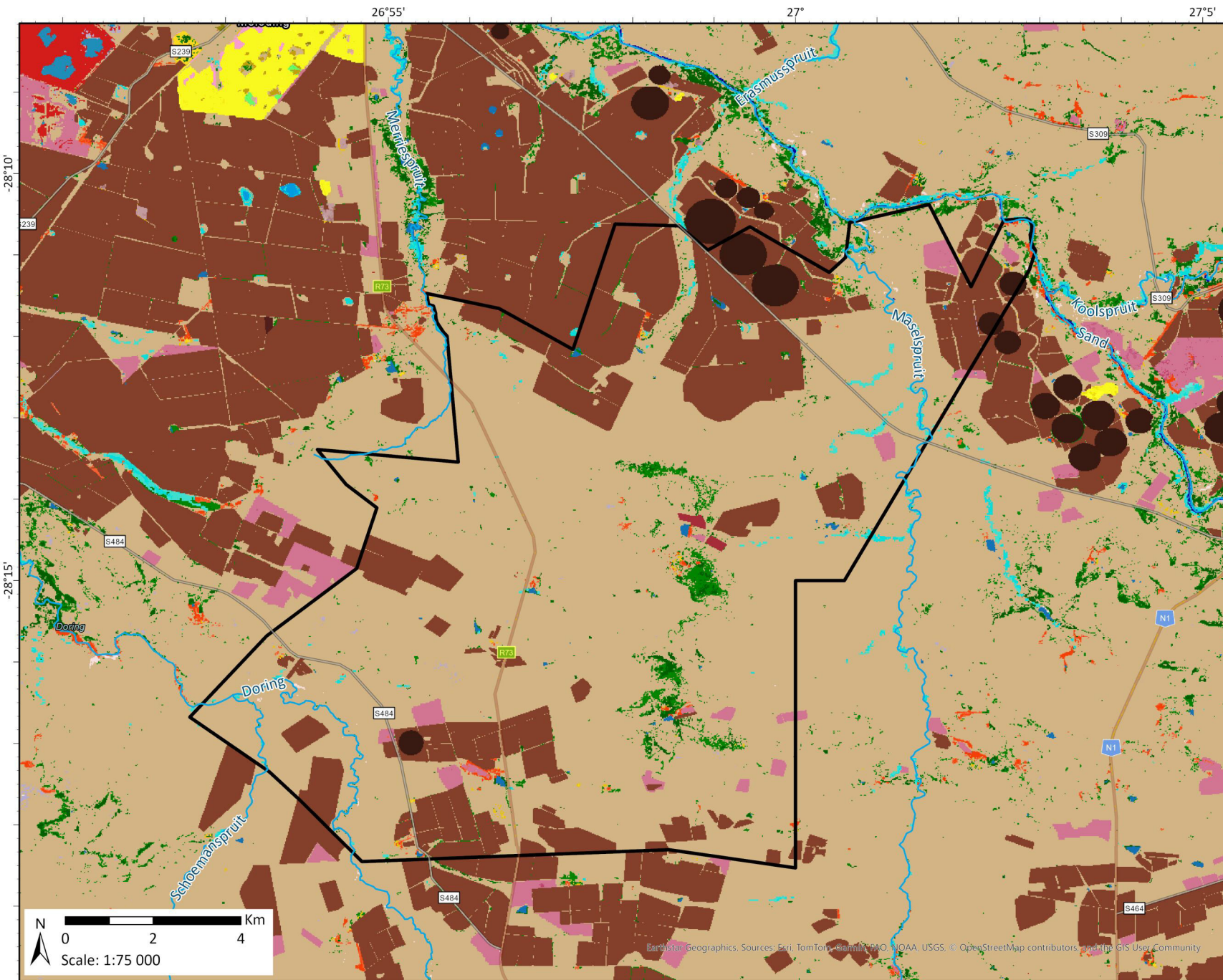
- Legend**
- Production Right Application Area
 - NFEPA Rivers
 - Contours (20m)
- Proposed Layout**
- Preliminary Well Locations
 - Proposed Gas Plant Options
 - Option A - Assessment Area
 - Option B - Assessment Area
 - Option C - Assessment Area
- Seismic Lines**
- PRA16 Area Seismic Lines
 - PRA16 Area Telluric Lines
- Gathering Lines**
- Gathering Lines 500m Buffer
 - Proposed Gathering Lines to Proposed Plant
 - Gathering Lines



Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1709_Topography-1
Data Sources:
CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/27
EIMS Ref: 1709
Compiled: JW
Reviewed: VM
Approved: LW





Land Cover Map

D3 Energy Production Right EIA

Legend

- | | | |
|--|---|--|
| Production Right Application Area | eroded lands | residential informal (low veg / grass) |
| NFEPA Rivers | bare riverbed material | village scattered (bare & low veg / grass combo) |
| Land Cover | other bare | village dense (bare & low veg / grass combo) |
| contiguous low forest & thicket | cultivated commercial permanent orchards | smallholdings (tree) |
| dense forest & woodland | commercial annual crops pivot irrigated | smallholdings (bush) |
| open woodland | commercial annual crops non-pivot irrigated | smallholdings (low veg / grass) |
| contiguous & dense plantation forest | commercial annual crops rain-fed / dryland | smallholdings (bare) |
| open & sparse plantation forest | fallow land & old fields (trees) | urban recreational fields (bush) |
| low shrubland (other) | fallow land & old fields (bush) | urban recreational fields (grass) |
| sparsely wooded grassland | fallow land & old fields (grass) | urban recreational fields (bare) |
| natural grassland | fallow land & old fields (low shrub) | commercial |
| natural rivers | residential formal (tree) | industrial |
| natural pans (flooded @ observation times) | residential formal (bush) | roads & rails (major linear) |
| artificial dams (including canals) | residential formal (low veg / grass) | mines: extraction pits, quarries |
| artificial flooded mine pits | residential formal (bare) | mine: tailings and resource dumps |
| herbaceous wetlands (currently mapped) | residential informal (tree) | fallow land & old fields (wetlands) |
| herbaceous wetlands (previously mapped) | residential informal (bush) | |
| dry pans | | |

Coord System: GCS WGS 1984

Datum: WGS 1984

Units: Degree

Ref: 1709_LandCover-1

Data Sources:

CSG; ESRI; MDB; SANBI; CD:NGI; DFFE

Date: 2026/08/27

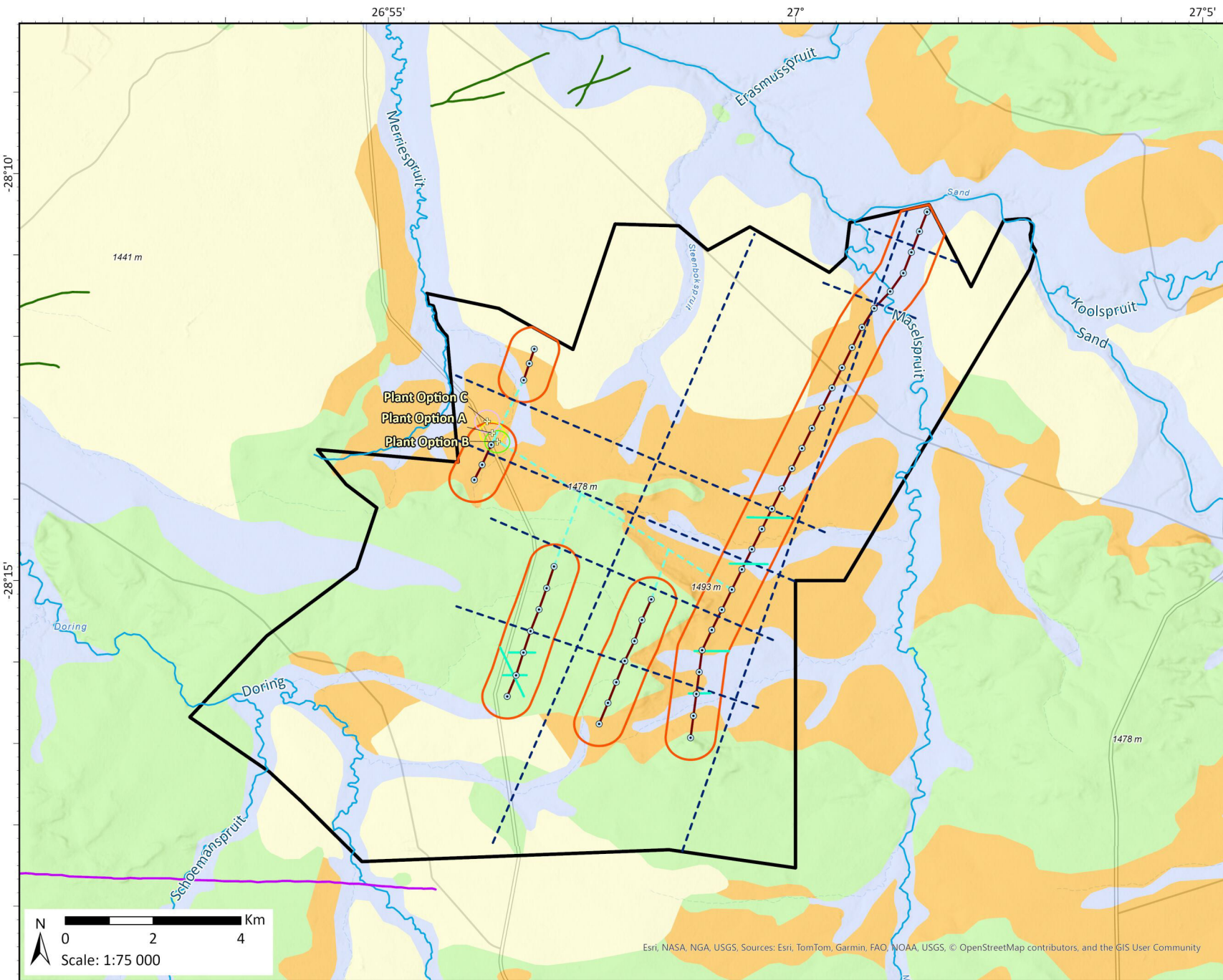
EIMS Ref: 1709

Compiled: JW

Reviewed: VM

Approved: LW



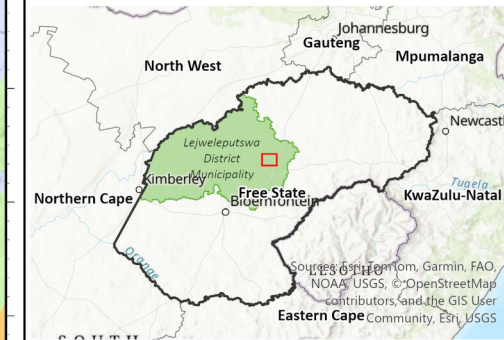


Simplified Geology Map

D3 Energy Production Right EIA

Legend

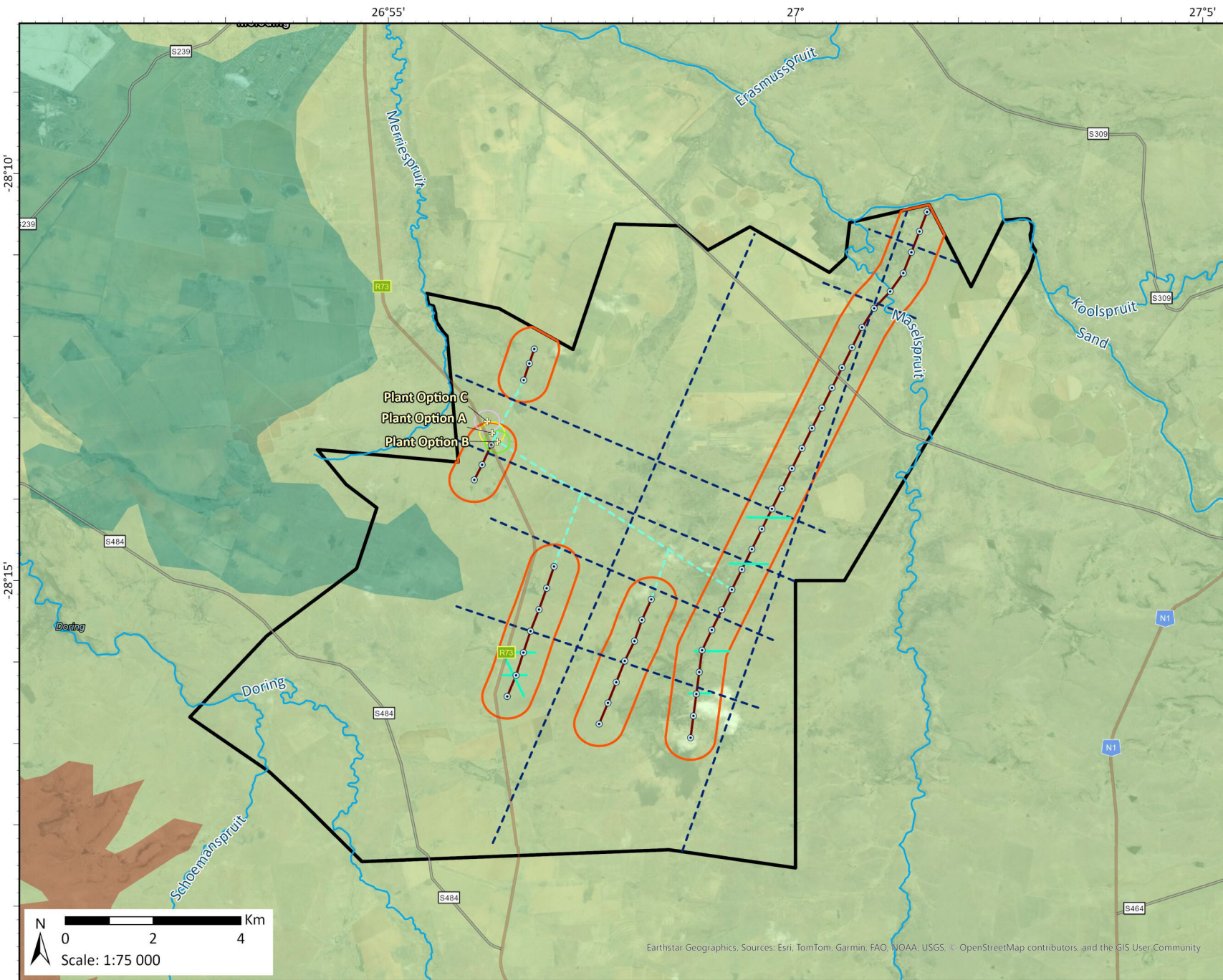
- Production Right Application Area
- NFEPA Rivers
- Dyke, dolerite
- Dyke, kimberlite
- Geological Subgroup**
 - ADELAIDE - Mudrock, subordinate sandstone
 - Aeolian sand
 - Alluvium
 - KAROO DOLERITE - Network of dolerite sills, sheets and dykes, mainly intrusive into the Karoo Supergroup
- Proposed Layout**
 - Preliminary Well Locations
 - Proposed Gas Plant Options
 - Option A - Assessment Area
 - Option B - Assessment Area
 - Option C - Assessment Area
- Seismic Lines**
 - PRA16 Area Seismic Lines
 - PRA16 Area Telluric Lines
- Gathering Lines**
 - Gathering Lines 500m Buffer
 - Gathering Lines
 - Proposed Gathering Lines to Proposed Plant



Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1709_SimplifiedGeology-1
Data Sources:
CSG; ESRI; MDB; SANBI; CD:NGI; CGS

Date: 2026/08/27
EIMS Ref: 1709
Compiled: JW
Reviewed: VM
Approved: LW





Simplified Soils Map

D3 Energy Production Right EIA

Legend

Production Right Application Area

NFEPA Rivers

Soils

Dominant Soil: Lithic Leptosols (LPq)
Soil Association: Black and red, strongly structured clayey soils with high base status (association of Vertisols, Phaeozems, Kastanozems and Nitisols. In addition one or more Leptosols, Calcisols and Cambisols may be present)

Dominant Soil: Haplic Lixisols (LXh)
Soil Association: Red, massive or weakly structured soils with high base status (association of well drained Lixisols, Cambisols, Luvisols)

Dominant Soil: Calcic Luvisols (LVk)
Soil Association: Soils with a marked clay accumulation (association of Luvisols, Planosols and Solonetz. In addition one or more Plinthosols, Vertisols and Cambisols may be present)

Proposed Layout

Preliminary Well Locations

Proposed Gas Plant Options

Option A - Assessment Area

Option B - Assessment Area

Option C - Assessment Area

Seismic Lines

PRA16 Area Seismic Lines

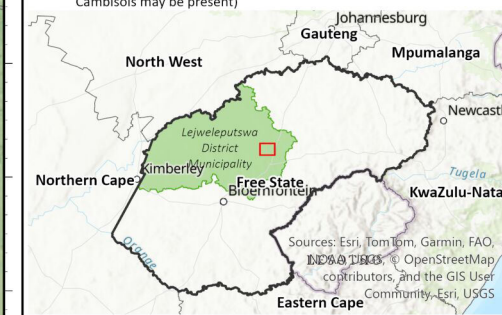
PRA16 Area Telluric Lines

Gathering Lines

Gathering Lines 500m Buffer

Proposed Gathering Lines to Proposed Plant

Gathering Lines



Coord System: GCS WGS 1984

Datum: WGS 1984

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Data Sources:

CSG; ESRI; MDB; SANBI; CD:NGI; ARC

Date: 2026/08/27

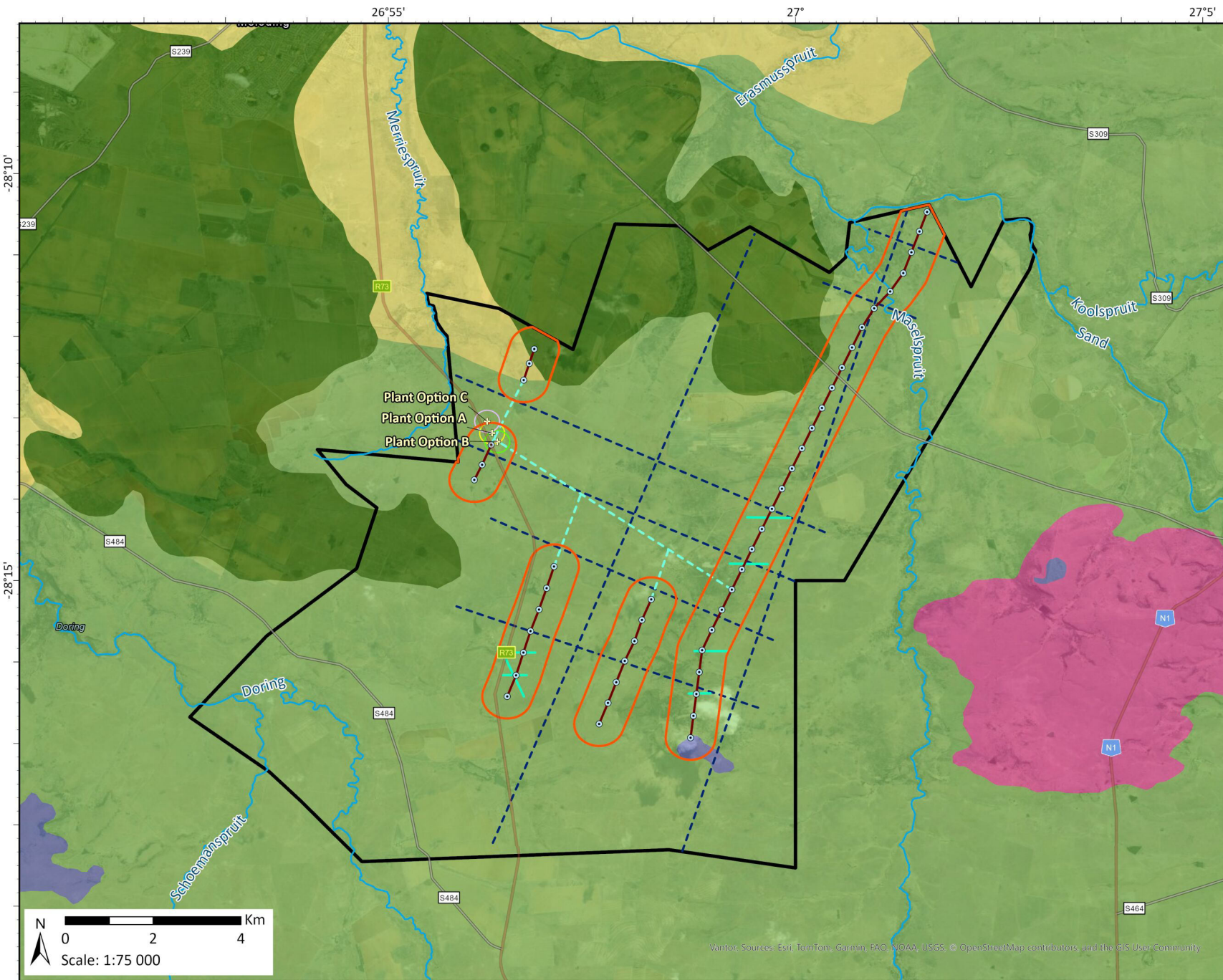
EIMS Ref: 1709

Compiled: JW

Reviewed: VM

Approved: LW





Vegetation Status Map

D3 Energy Production Right EIA

Legend

- Production Right Application Area
- NFEPA Rivers
- Vegetation Status**
 - Bloemfontein Karroid Shrubland
Conservation Target: 28%
RLE2022 Ecosystem Threat Status: Least Concern
 - Central Free State Grassland
Conservation Target: 24%
RLE2022 Ecosystem Threat Status: Least Concern
 - Highveld Alluvial Vegetation
Conservation Target: 31%
RLE2022 Ecosystem Threat Status: Least Concern
 - Vaal-Vet Sandy Grassland
Conservation Target: 24%
RLE2022 Ecosystem Threat Status: Endangered
 - Winburg Grassy Shrubland
Conservation Target: 28%
RLE2022 Ecosystem Threat Status: Least Concern

Proposed Layout

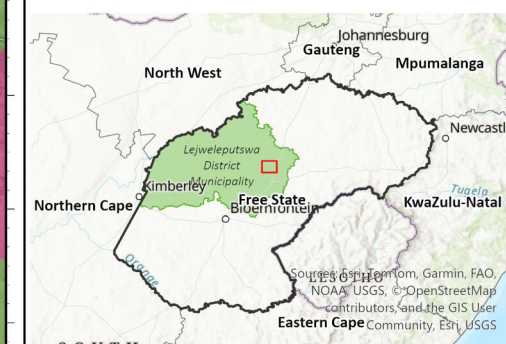
- Preliminary Well Locations
- Proposed Gas Plant Options
- Option A - Assessment Area
- Option B - Assessment Area
- Option C - Assessment Area

Seismic Lines

- PRA16 Area Seismic Lines
- PRA16 Area Telluric Lines

Gathering Lines

- Gathering Lines 500m Buffer
- Gathering Lines
- Proposed Gathering Lines to Proposed Plant

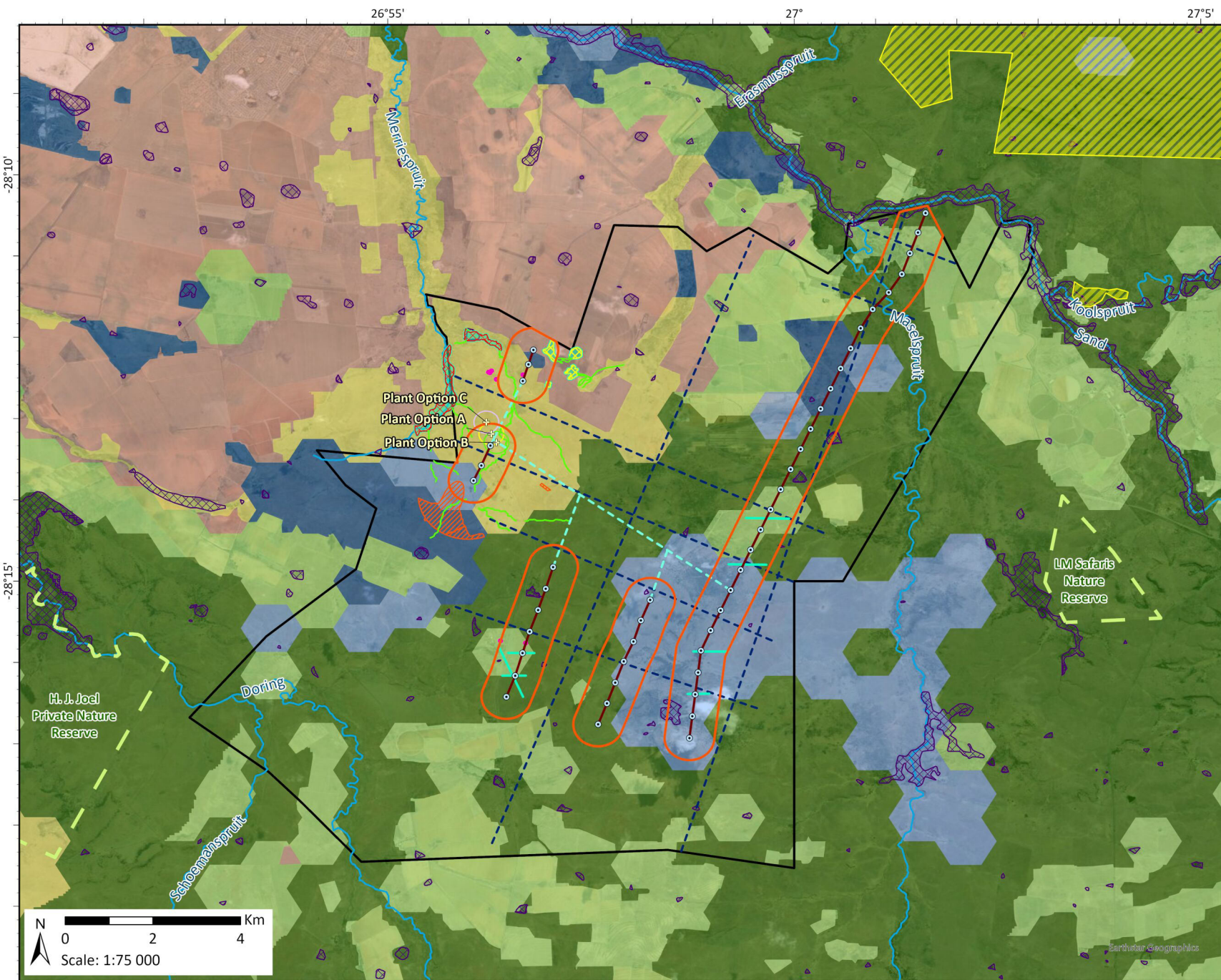


Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1709_VegStatus-1
 Data Sources:
 CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/27
 EIMS Ref: 1709
 Compiled: JW
 Reviewed: VM
 Approved: LW



Vendor Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

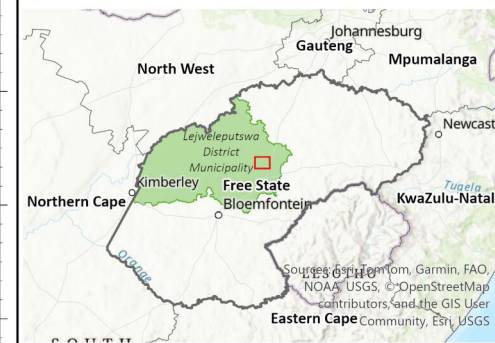


Desktop Sensitivity Map

D3 Energy Production Right EIA

Legend

- Production Right Application Area
- NFEPA Rivers
- NFEPA Wetlands
- Protected Areas (SAPAD)
- Heritage No-Go Areas (2016)
- Heritage Features (No-Go Area - 2024)
- Rocky Grassland (High Sensitivity - 2024)
- Wetland Sensitivities (2024)
 - High
 - Medium
 - Low
- Wetland No-Go Areas (15m Buffer)
- 2015 Free State Terrestrial CBAs
 - CBA1
 - CBA2
 - Degraded
 - ESA1
 - ESA2
 - Other
- Proposed Layout
 - Preliminary Well Locations
 - Proposed Gas Plant Options
 - Option A - Assessment Area
 - Option B - Assessment Area
 - Option C - Assessment Area
- Seismic Lines
 - PRA16 Area Seismic Lines
 - PRA16 Area Telluric Lines
- Gathering Lines
 - Gathering Lines 500m Buffer
 - Gathering Lines
 - Proposed Gathering Lines to Proposed Plant



Coord System: GCS WGS 1984

Datum: WGS 1984

Units: Degree

Ref: 1709_LN3-1

Data Sources:

CSG; ESRI; MDB; SANBI; CD:NGI; DFFE

Date: 2026/08/27

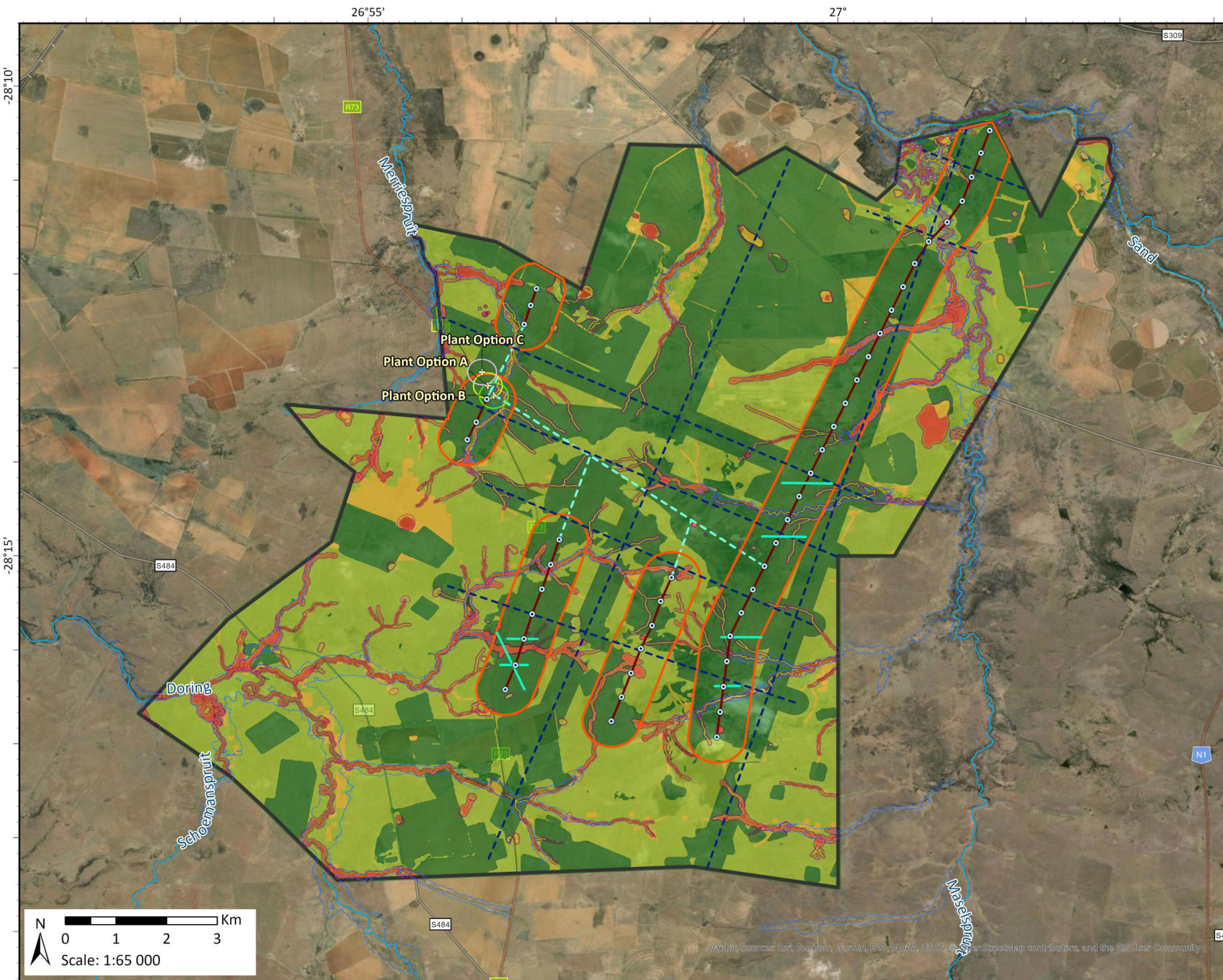
EIMS Ref: 1709

Compiled: JW

Reviewed: VM

Approved: LW

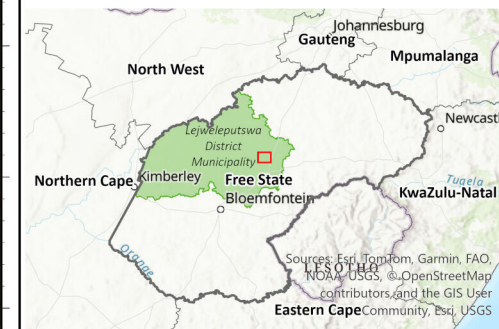




Sensitivity Intensity Map Proposed Layout

D3 Energy Production Right EIA

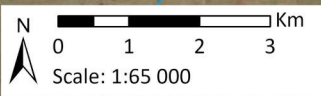
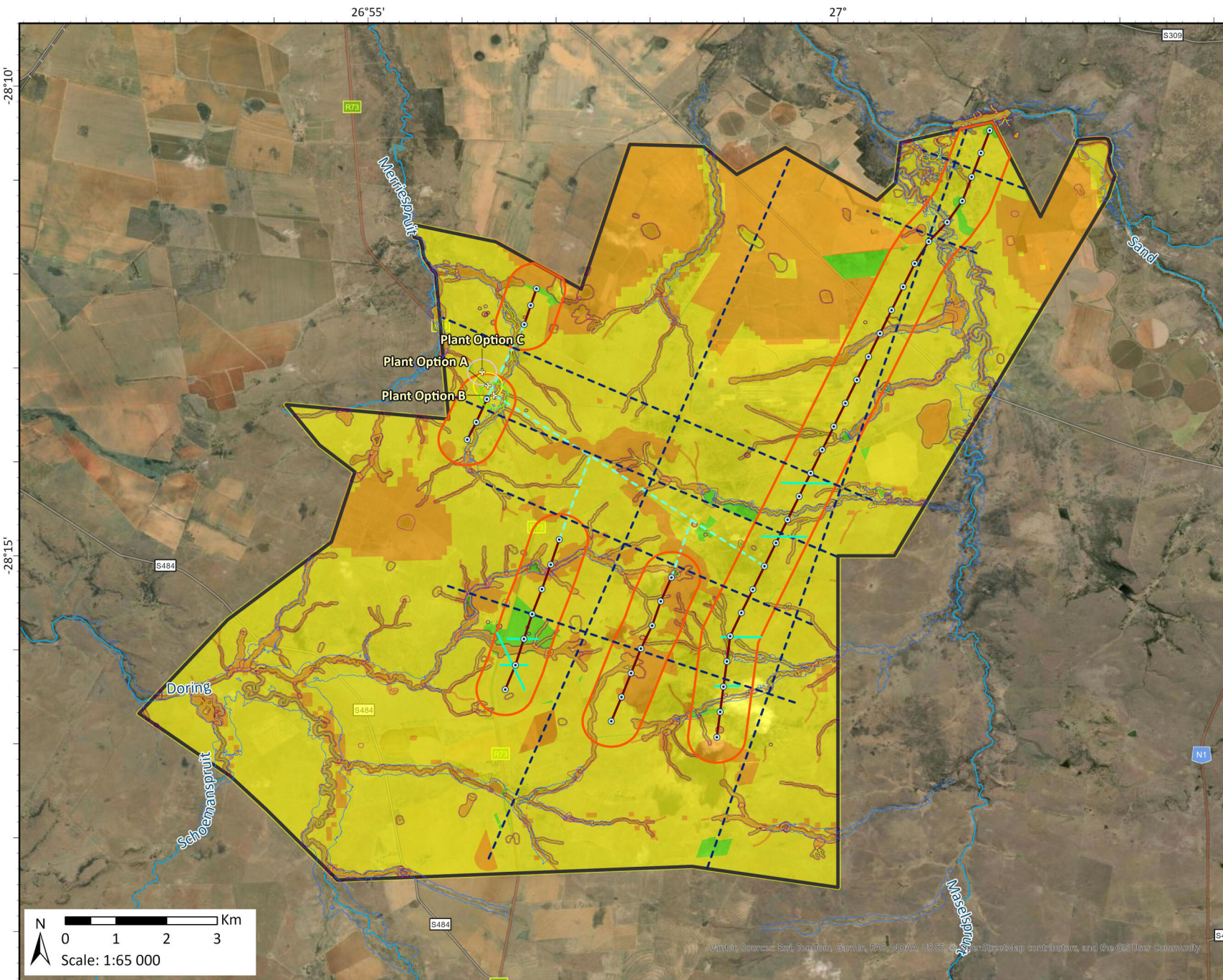
- Legend**
- Production Right Application Area
 - NFEPA Rivers
 - Sensitivity Intensity**
 - 1.00 - 4.00
 - 4.01 - 5.00
 - 5.01 - 6.00
 - 6.01 - 9.00
 - Heritage Buffers
 - Freshwater Buffer (15m)
 - Freshwater Buffer (32m)
 - 1:100 year floodline
 - Proposed Layout**
 - Preliminary Well Locations
 - Proposed Gas Plant Options
 - Option A - Assessment Area
 - Option B - Assessment Area
 - Option C - Assessment Area
 - Seismic Lines**
 - PRA16 Area Seismic Lines
 - PRA16 Area Telluric Lines
 - Gathering Lines**
 - Gathering Lines 500m Buffer
 - Proposed Gathering Lines to Proposed Plant
 - Gathering Lines



Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1709_SensitivityMap
Data Sources:
CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/28
EIMS Ref: 1709
Compiled: JW
Reviewed: VM
Approved: LW





Maximum Sensitivity Map Proposed Layout

D3 Energy Production Right EIA

Legend

- Production Right Application Area
- NFEPA Rivers
- Maximum Sensitivity**
 - Low
 - Medium
 - High
- Heritage Buffers
- Freshwater Buffer (15m)
- Freshwater Buffer (32m)
- 1:100 year floodline
- Proposed Layout**
 - Preliminary Well Locations
 - Proposed Gas Plant Options
 - Option A - Assessment Area
 - Option B - Assessment Area
 - Option C - Assessment Area

Seismic Lines

- PRA16 Area Seismic Lines
- PRA16 Area Telluric Lines

Gathering Lines

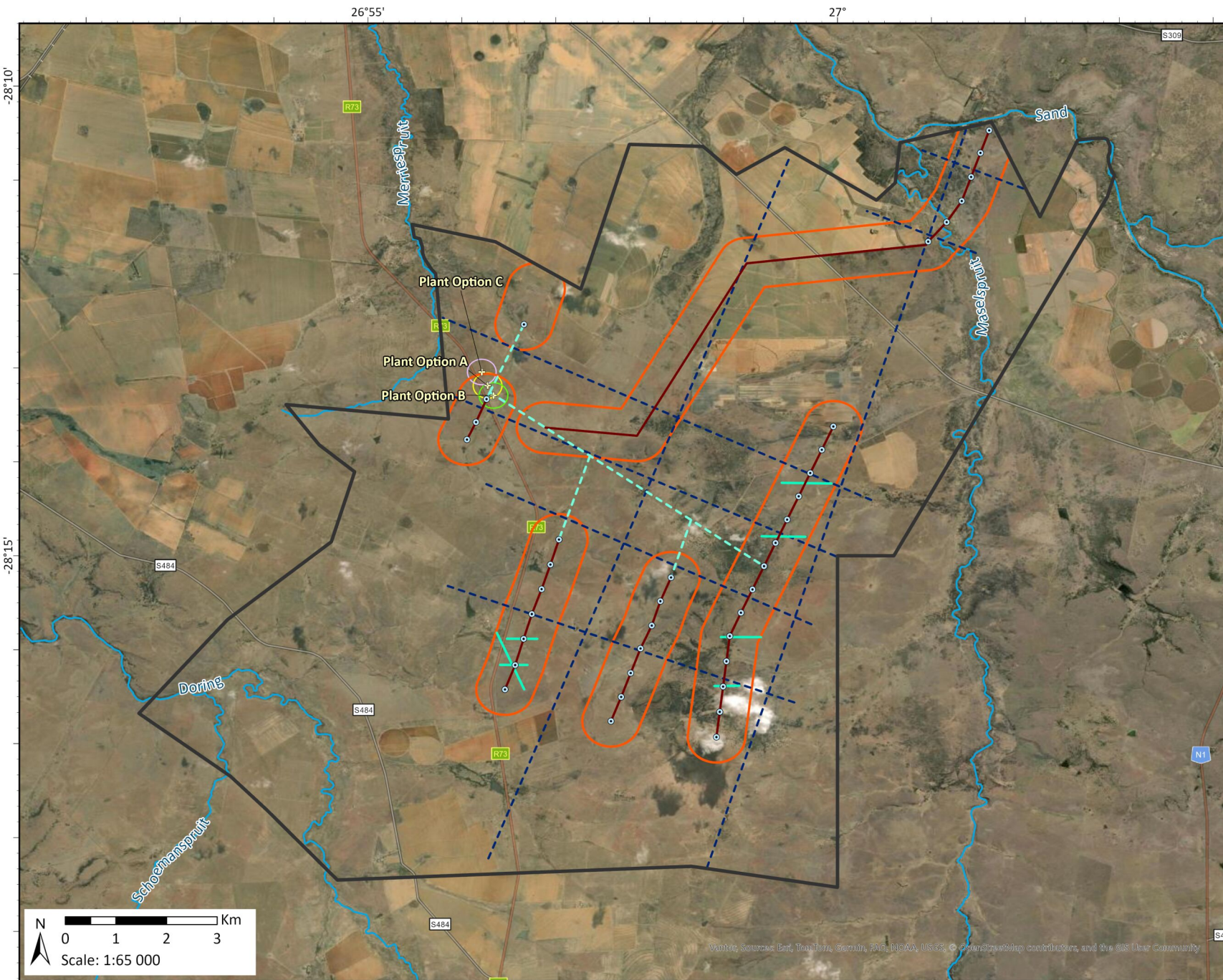
- Gathering Lines 500m Buffer
- Proposed Gathering Lines to Proposed Plant
- Gathering Lines

North West
Gauteng
Mpumalanga
Johannesburg
Newcastle
Northern Cape
Kimberley
Free State
Bloemfontein
KwaZulu-Natal
Tugela
Lejweleputswa District Municipality
S484
N1
S309
S462
R73
Marnesspruit
Sand
Marnesspruit
Doring
Schoemanspruit
Marnesspruit

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community

Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1709_SensitivityMap
Data Sources:
CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/28
EIMS Ref: 1709
Compiled: JW
Reviewed: VM
Approved: LW



Alternative Layout Map

D3 Energy Production Right EIA

Legend

Production Right Application Area

NFEPA Rivers

Alternative Layout

Proposed Gas Plant Options

Option A - Assessment Area

Option B - Assessment Area

Option C - Assessment Area

Preliminary Well Locations

Seismic Lines

PRA16 Area Seismic Lines

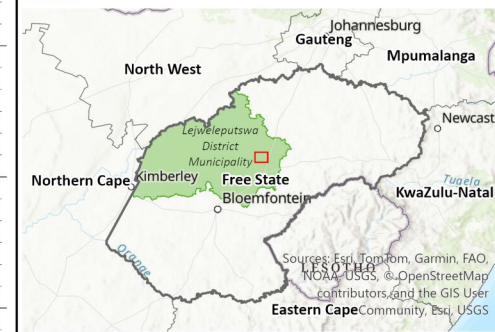
PRA16 Area Telluric Lines

Gathering Lines

Alternative Gathering Lines

Proposed Gathering Lines to Proposed Plant

Gathering Line 500m Buffer



Coord System: GCS WGS 1984

Datum: WGS 1984

Units: Degree

Ref: 1709_AlternativeLayout

Data Sources:

CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/27

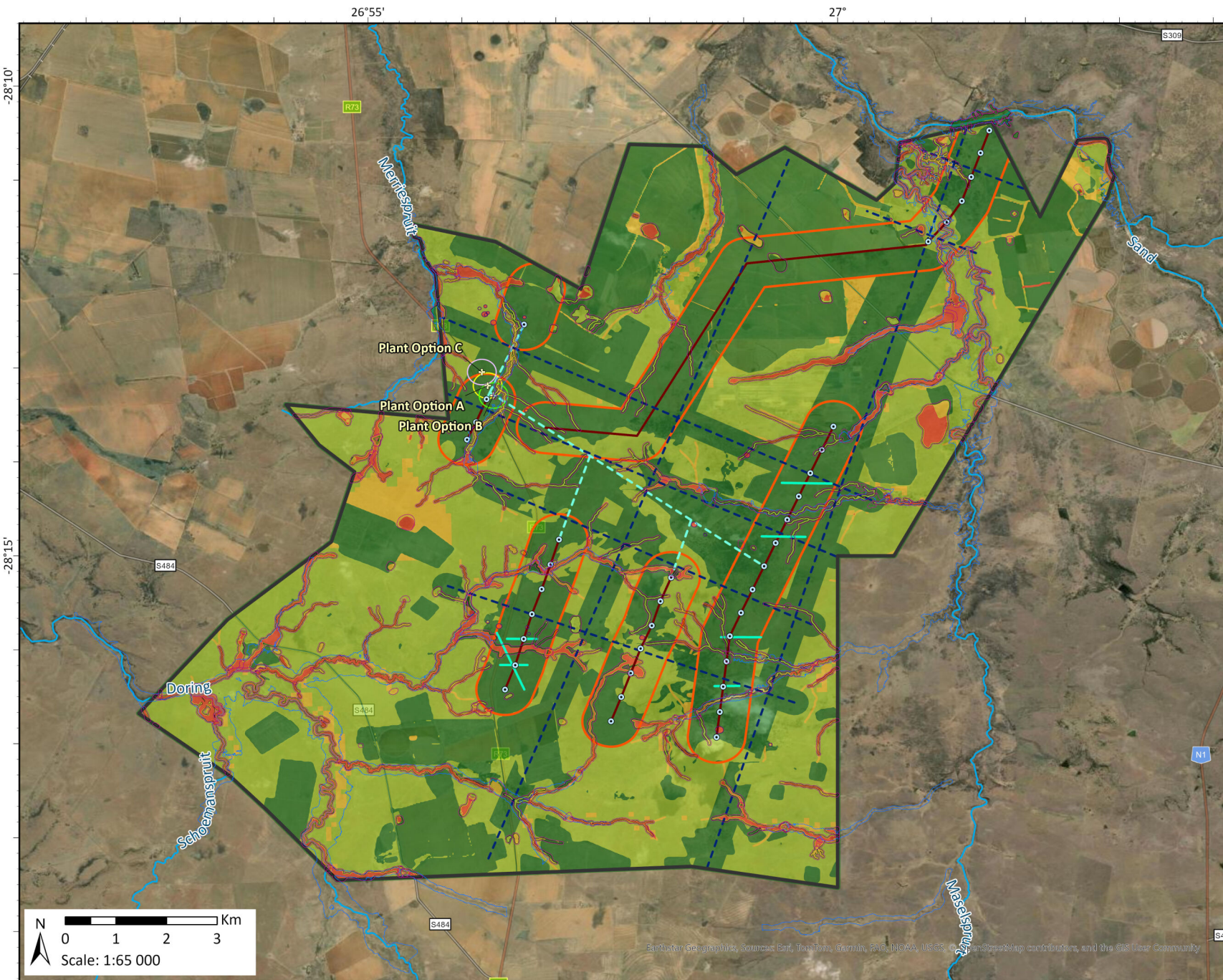
EIMS Ref: 1709

Compiled: JW

Reviewed: VM

Approved: LW





Sensitivity Intensity Map

Alternative Layout

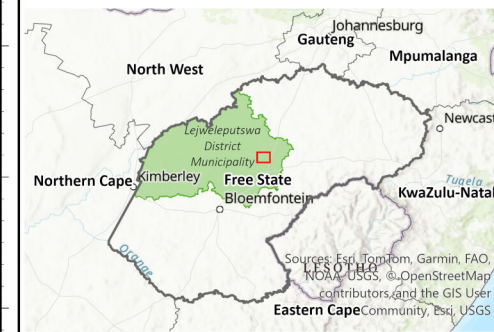
D3 Energy Production Right EIA

Legend

- Production Right Application Area
- NFEPA Rivers
- Heritage Buffers
- Freshwater Buffer (15m)
- Freshwater Buffer (32m)
- 1:100 year floodline
- Sensitivity Intensity**
 - 1.00 - 4.00
 - 4.01 - 5.00
 - 5.01 - 6.00
 - 6.01 - 9.00

Alternative Layout

- Proposed Gas Plant Options
- Preliminary Well Locations
- Option A - Assessment Area
- Option B - Assessment Area
- Option C - Assessment Area
- Seismic Lines**
 - PRA16 Area Seismic Lines
 - PRA16 Area Telluric Lines
- Gathering Lines**
 - Alternative Gathering Lines
 - Proposed Gathering Lines to Proposed Plant
 - Gathering Line 500m Buffer



Coord System: GCS WGS 1984

Datum: WGS 1984

Units: Degree

Ref: 1709_SensitivityMap

Data Sources:

CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/28

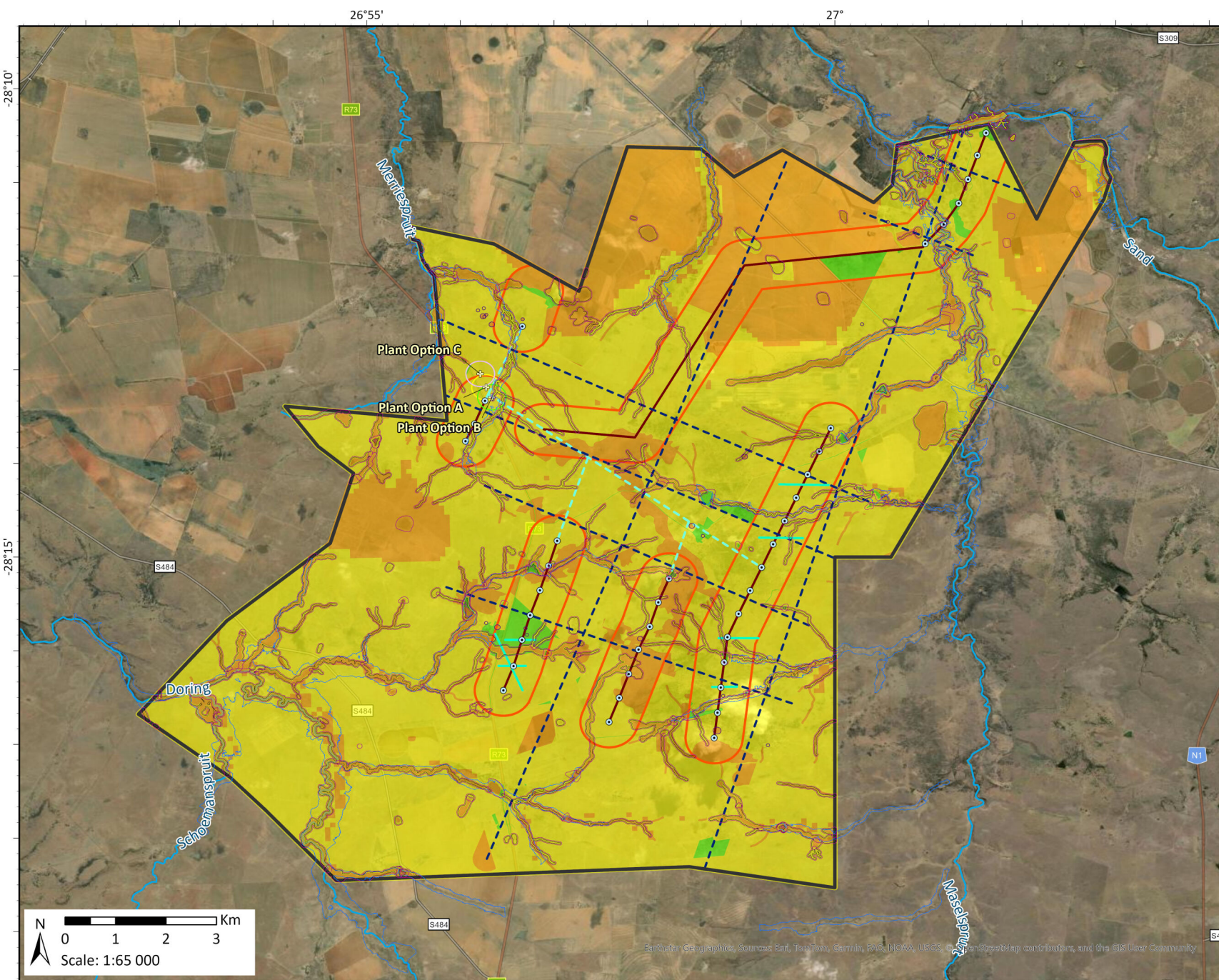
EIMS Ref: 1709

Compiled: JW

Reviewed: VM

Approved: LW





Maximum Sensitivity Map Alternative Layout

D3 Energy Production Right EIA

Legend

Production Right Application Area

NFEPA Rivers

Heritage Buffers

Freshwater Buffer (15m)

Freshwater Buffer (32m)

1:100 year floodline

Maximum Sensitivity

Low

Medium

High

Alternative Layout

Proposed Gas Plant Options

Preliminary Well Locations

Option A - Assessment Area

Option B - Assessment Area

Option C - Assessment Area

Seismic Lines

PRA16 Area Seismic Lines

PRA16 Area Telluric Lines

Gathering Lines

Alternative Gathering Lines

Proposed Gathering Lines to Proposed Plant

Gathering Line 500m Buffer



Coord System: GCS WGS 1984

Datum: WGS 1984

Units: Degree

Ref: 1709_SensitivityMap

Data Sources:

CSG; ESRI; MDB; SANBI; CD:NGI

Date: 2026/08/28

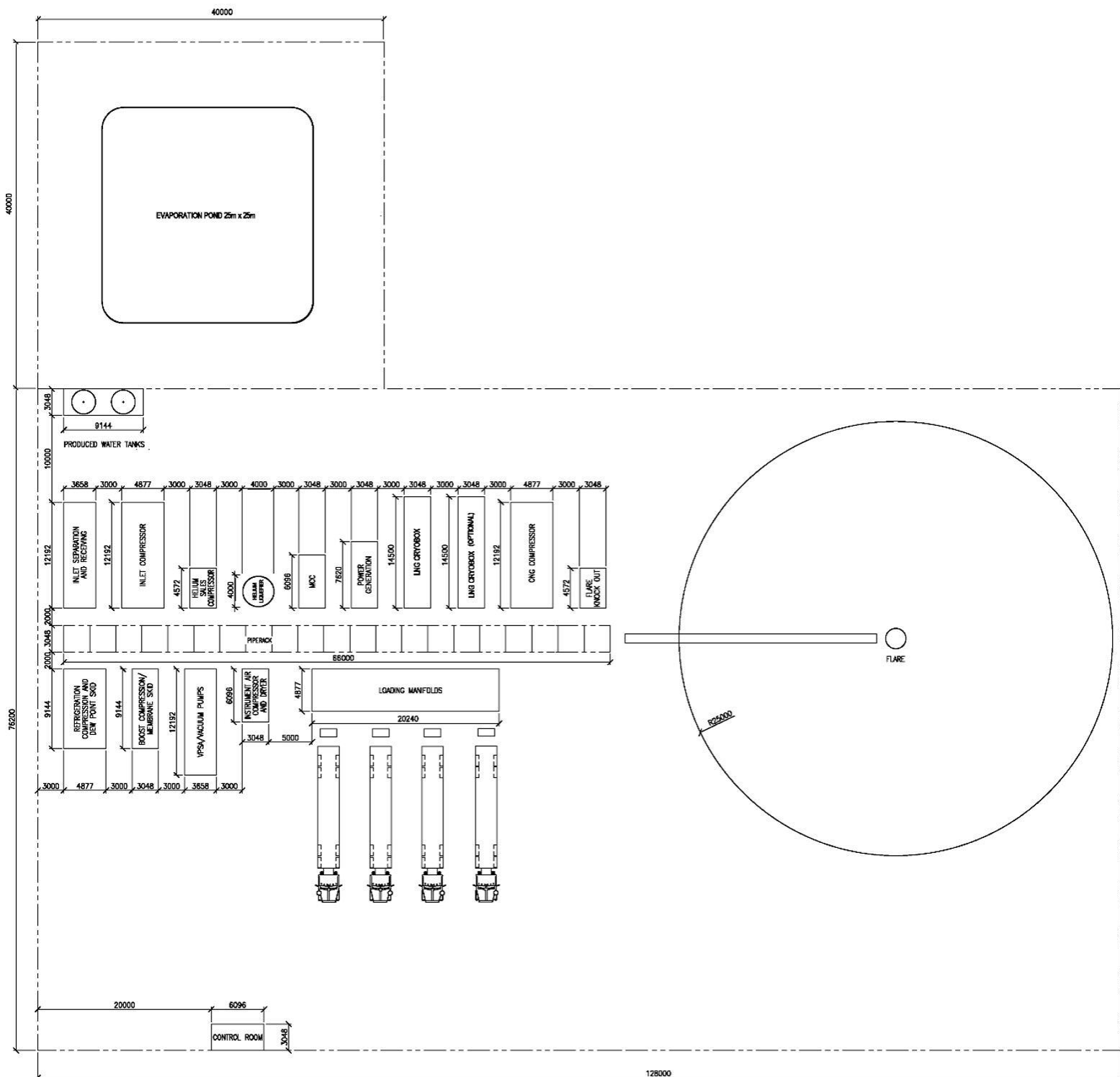
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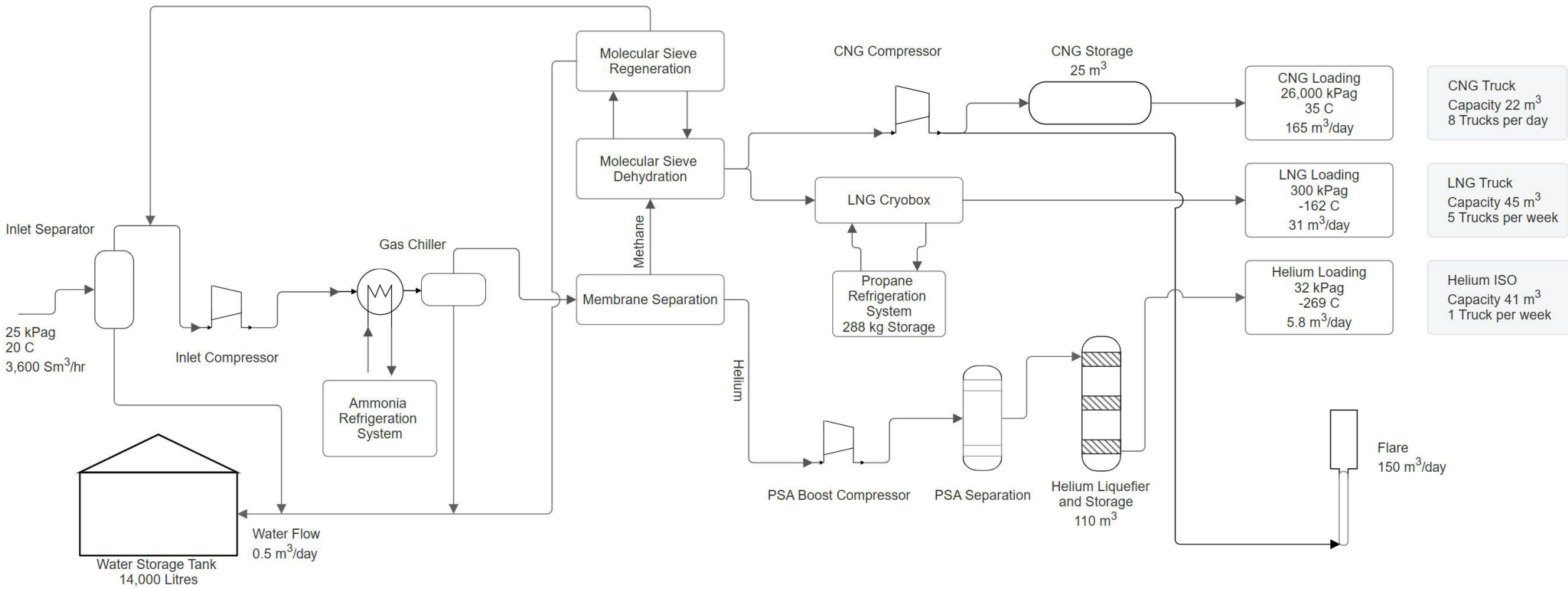
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Approved: LW

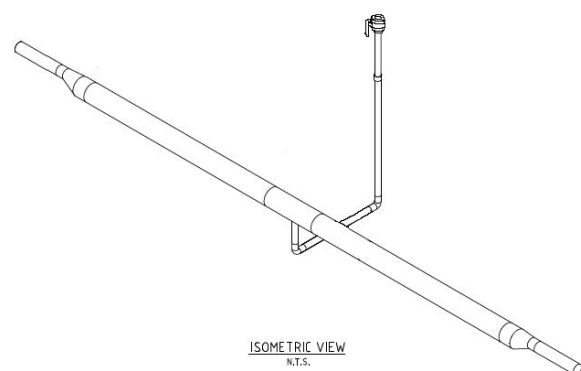
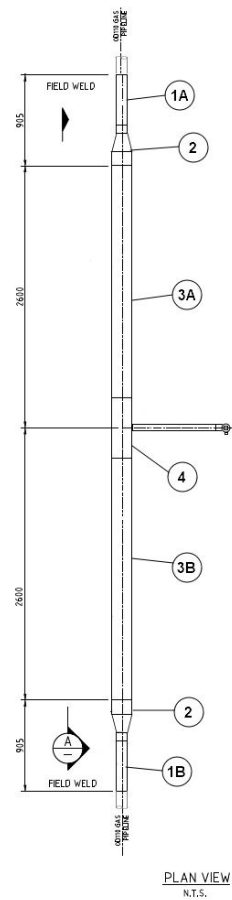




PLAN VIEW



D3 Energy - Low Point Drain



MARK	SIZE	QTY	DESCRIPTION
1A	110	1	PIPE, HDPE PE100 SDR 17 YELLOW STRIPE GAS SERVICE
1B	110	1	PIPE, HDPE PE100 SDR 17 YELLOW STRIPE GAS SERVICE
2	200 x 110	2	REDUCER ECCENTRIC, LONG SPIGOT, PE100 SDR 17
3A	200	1	PIPE, HDPE PE100 SDR 17 YELLOW STRIPE GAS SERVICE
3B	200	1	PIPE, HDPE PE100 SDR 17 YELLOW STRIPE GAS SERVICE
4	200 x 63	1	TEE, REDUCING, LONG SPIGOT, PE100, SDR 11
5A	63	1	PIPE, HDPE PE100 SDR 17 YELLOW STRIPE GAS SERVICE
5B	63	1	PIPE, HDPE PE100 SDR 17 YELLOW STRIPE GAS SERVICE
5C	63	1	PIPE, HDPE PE100 SDR 17 YELLOW STRIPE GAS SERVICE
6	63	2	BEND, 90° ELBOW, LONG SPIGOT, PE100 SDR 17
7	63 x 50	1	TRANSITION COUPLING, SCH40, ASTM A106 GRADE B x PE100 SDR17
8	50	1	PIPE, CARBON STEEL, SCH40, ASTM A106 GRADE B
9	50	1	VALVE, BALL, REDUCED BORE, CARBON STEEL, NPT FEMALE THREAD, CL800
10	50	1	PLUG, HEX HEAD, NPT THREAD, CL3000 ASTM A105, ASME B16.11

