

Hennenman Exploration Right Map

1596 Motouane Hennenman EA Amendment

- Legend**
- Originally Approved Exploration Right Area
 - Revised Exploration Right Area
 - Motouane Boreholes 1km Buffers

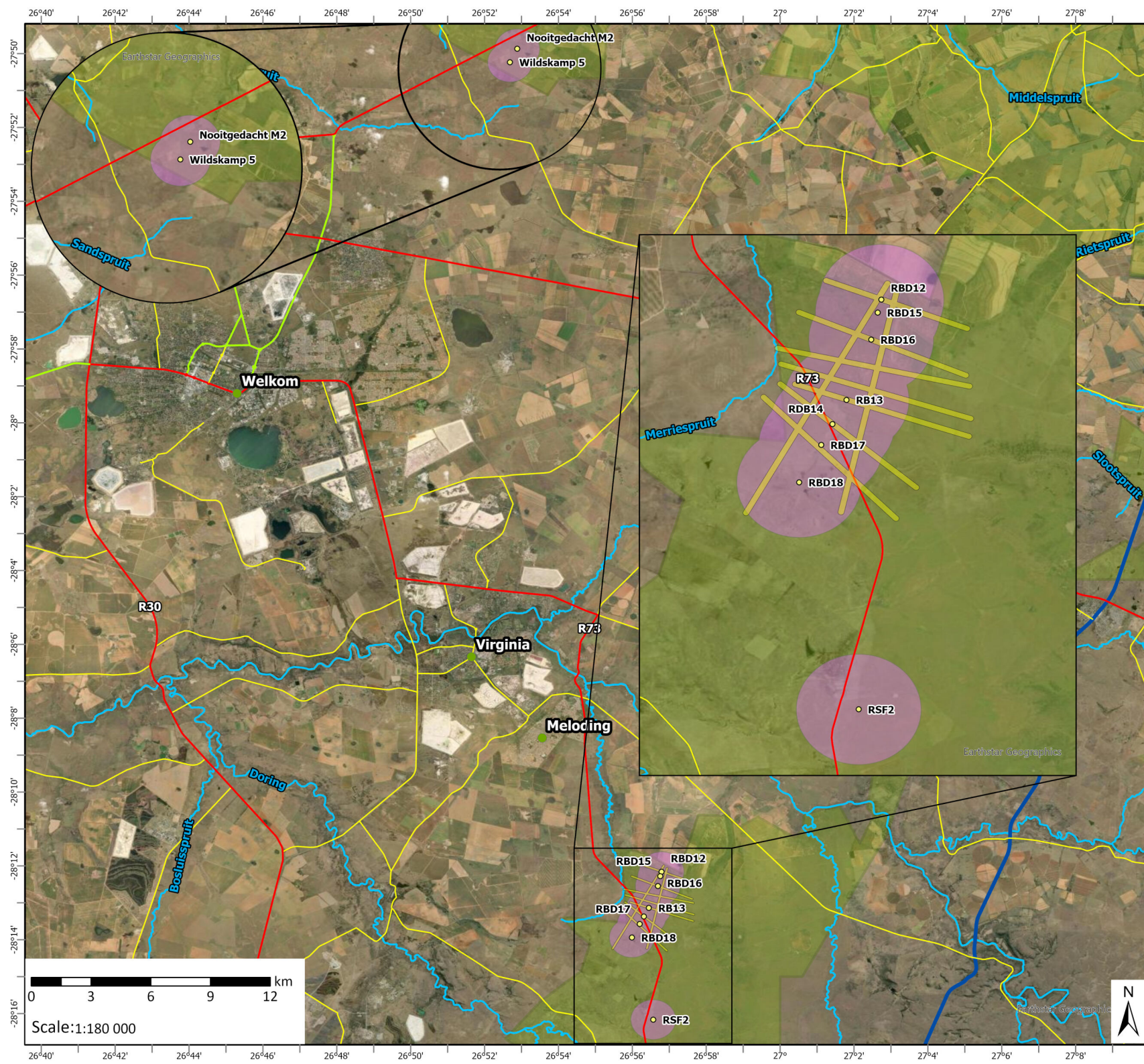


Data Sources:
 CSG; ESRI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1596_Motouane Hennenman ER Map

Date: 2024/05/13
 EIMS Ref: 1612
 Compiled: QM
 Reviewed: VM
 Approved: LW



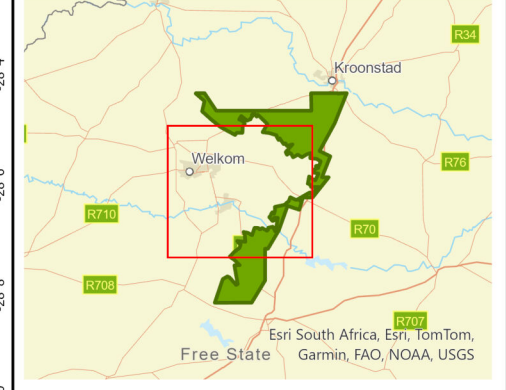
Earthstar Geographics, Esri South Africa, Esri, TomTom, Garmin, Foursquare, FAO, METI/NASA, USGS



Locality Map

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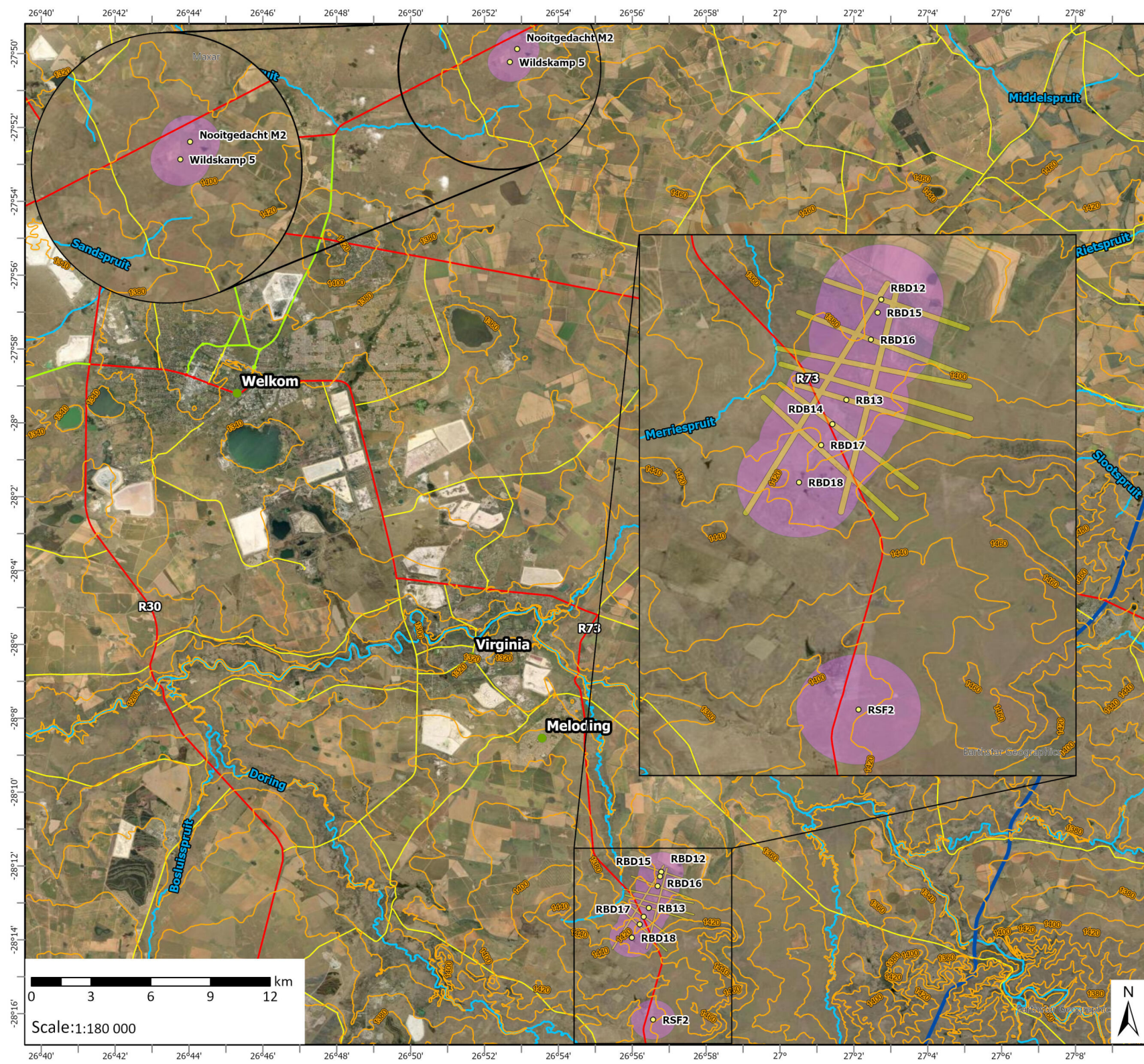
- ### Legend
- Approved Exploration Right Area
 - Proposed Boreholes
 - 1km Borehole Buffer
 - Proposed Seismic Transects
 - National Road
 - Regional Road
 - Secondary Road
 - Main Road
 - Rivers



Data Sources:
 CSG; ESRI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1596_Motuoane Henneman Locality

Date: 2024/05/13
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 Reviewed: VM
 Approved: LW





Locality Map

1596 Motuoane Hennenman EA Amendment

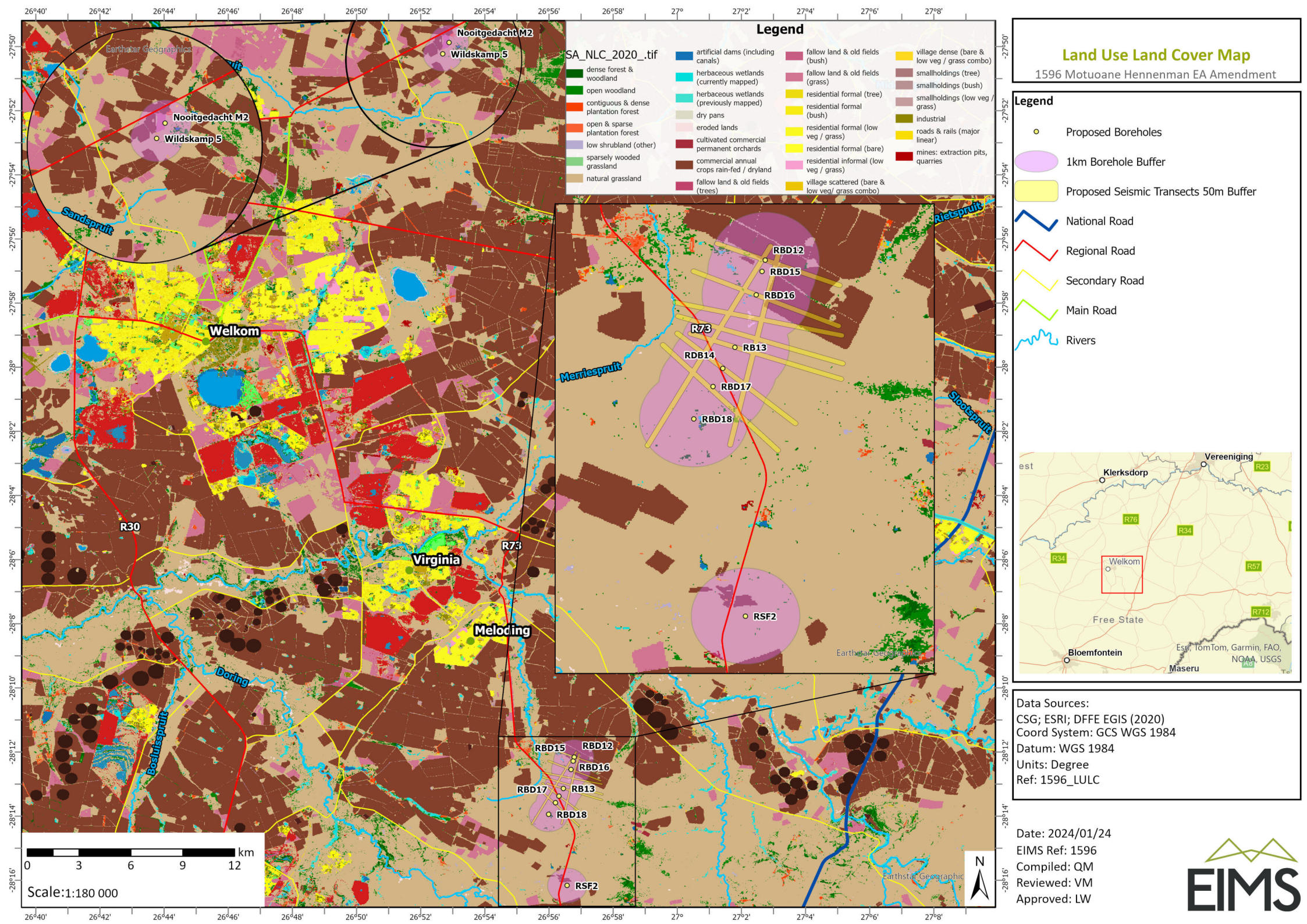
- Legend**
- Proposed Boreholes
 - 1km Borehole Buffer
 - Proposed Seismic Transects 50m Buffer
 - ▬ National Road
 - ▬ Regional Road
 - ▬ Secondary Road
 - ▬ Main Road
 - ~ Rivers
 - ~ Contours 20m



Data Sources:
 CSG; ESRI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1596_Topography Map

Date: 2024/04/05
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Land Use Land Cover Map

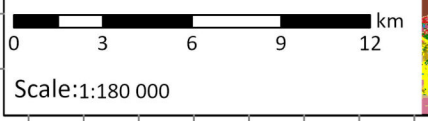
1596 Motuoane Hennenman EA Amendment

Legend			
SA_NLC_2020_tif	artificial dams (including canals)	fallow land & old fields (bush)	village dense (bare & low veg / grass combo)
dense forest & woodland	herbaceous wetlands (currently mapped)	fallow land & old fields (grass)	smallholdings (tree)
open woodland	herbaceous wetlands (previously mapped)	residential formal (tree)	smallholdings (bush)
contiguous & dense plantation forest	dry pans	residential formal (bush)	smallholdings (low veg / grass)
open & sparse plantation forest	eroded lands	residential formal (low veg / grass)	industrial
low shrubland (other)	cultivated commercial permanent orchards	residential formal (bare)	roads & rails (major linear)
sparsely wooded grassland	commercial annual crops rain-fed / dryland	residential informal (low veg / grass)	mines: extraction pits, quarries
natural grassland	fallow land & old fields (trees)	village scattered (bare & low veg/ grass combo)	

Legend	
	Proposed Boreholes
	1km Borehole Buffer
	Proposed Seismic Transects 50m Buffer
	National Road
	Regional Road
	Secondary Road
	Main Road
	Rivers

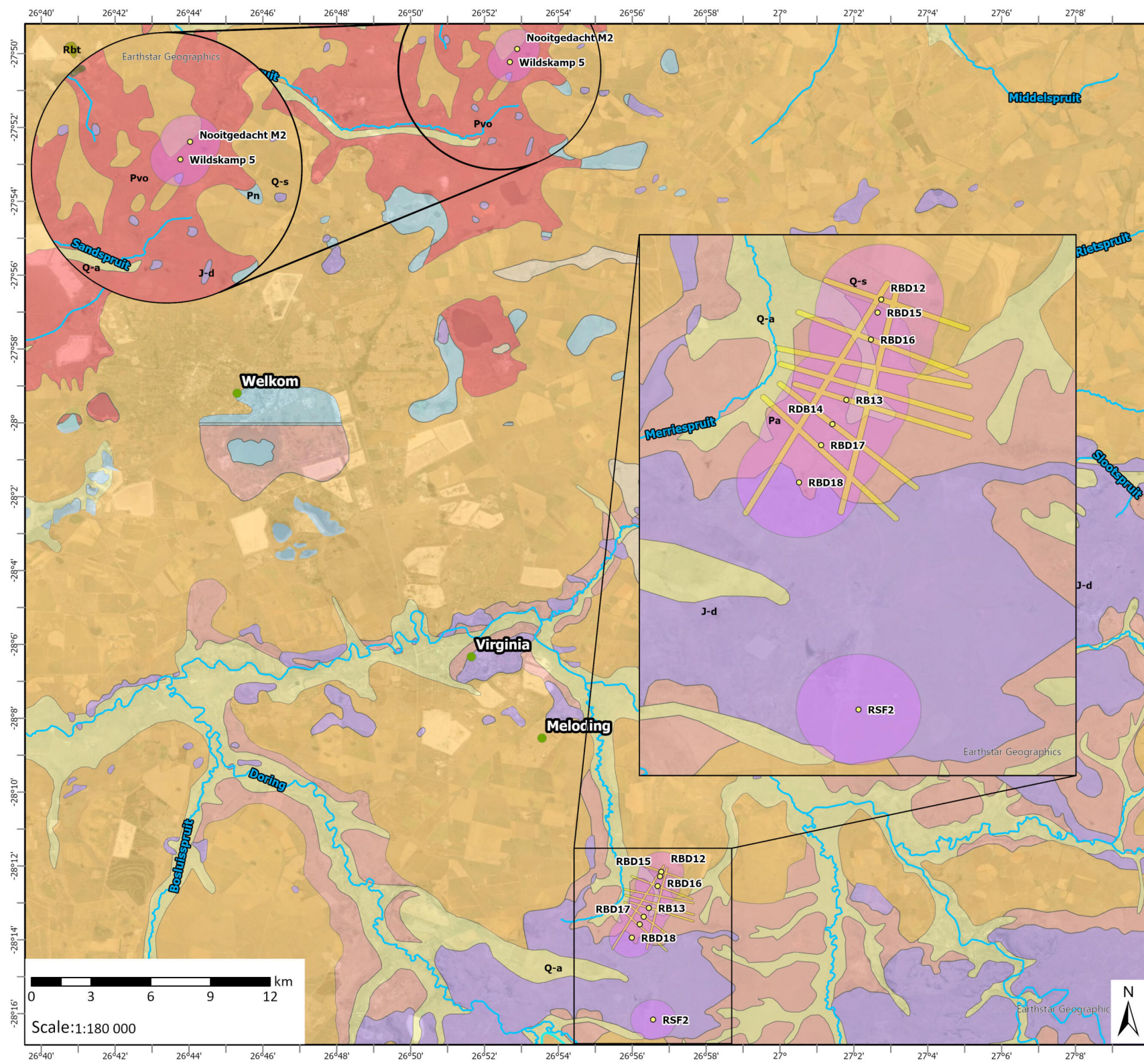


Data Sources:
 CSG; ESRI; DFFE EGIS (2020)
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1596_LULC



Date: 2024/01/24
 EIMS Ref: 1596
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 Approved: LW





Geological Map

1596 Motuoane Hennenman EA Amendment

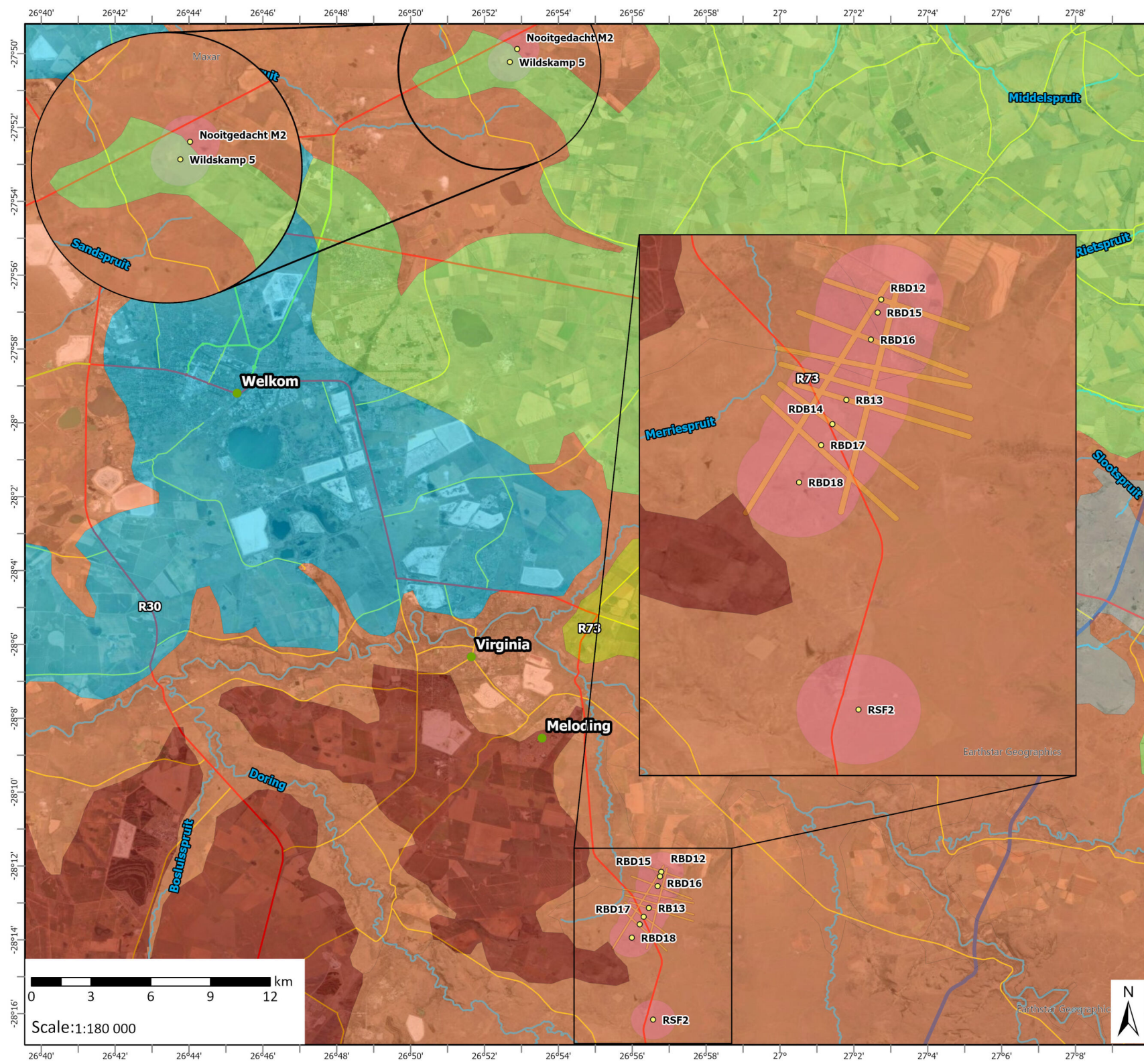
Legend		
	Proposed Boreholes	
	1km Borehole Buffer	
	Proposed Seismic Transects 50m Buffer	
	Rivers	
Geology		
	Water Bodies	
	Q-a (Quaternary Alluvium)	Alluvium
	Q-s (Quaternary Sand)	Aeolian sand
	Q16 (Quaternary)	Calcrete and surface limestone
	J-d (Karoo Dolerite)	Network of dolerite sills, sheets and dykes, mainly intrusive into the Karoo Supergroup
	Pa (Beaufort - Adelaide sbrgp*)	Mudrock, subordinate sandstone
	Pn (Beaufort grp*)	Green-grey and (at the top) red mudstone and siltstone, grey shale and rhythmite, sandstone
	Rbt (Bothaville fm*)	Conglomerate, "grit", quartzite, subgreywacke, shale lenses
	Pvo (Ecca - Volkrust fm*)	Mudrock



Data Sources:
 CSG; ESRI; Council for Geoscience
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Soils Map

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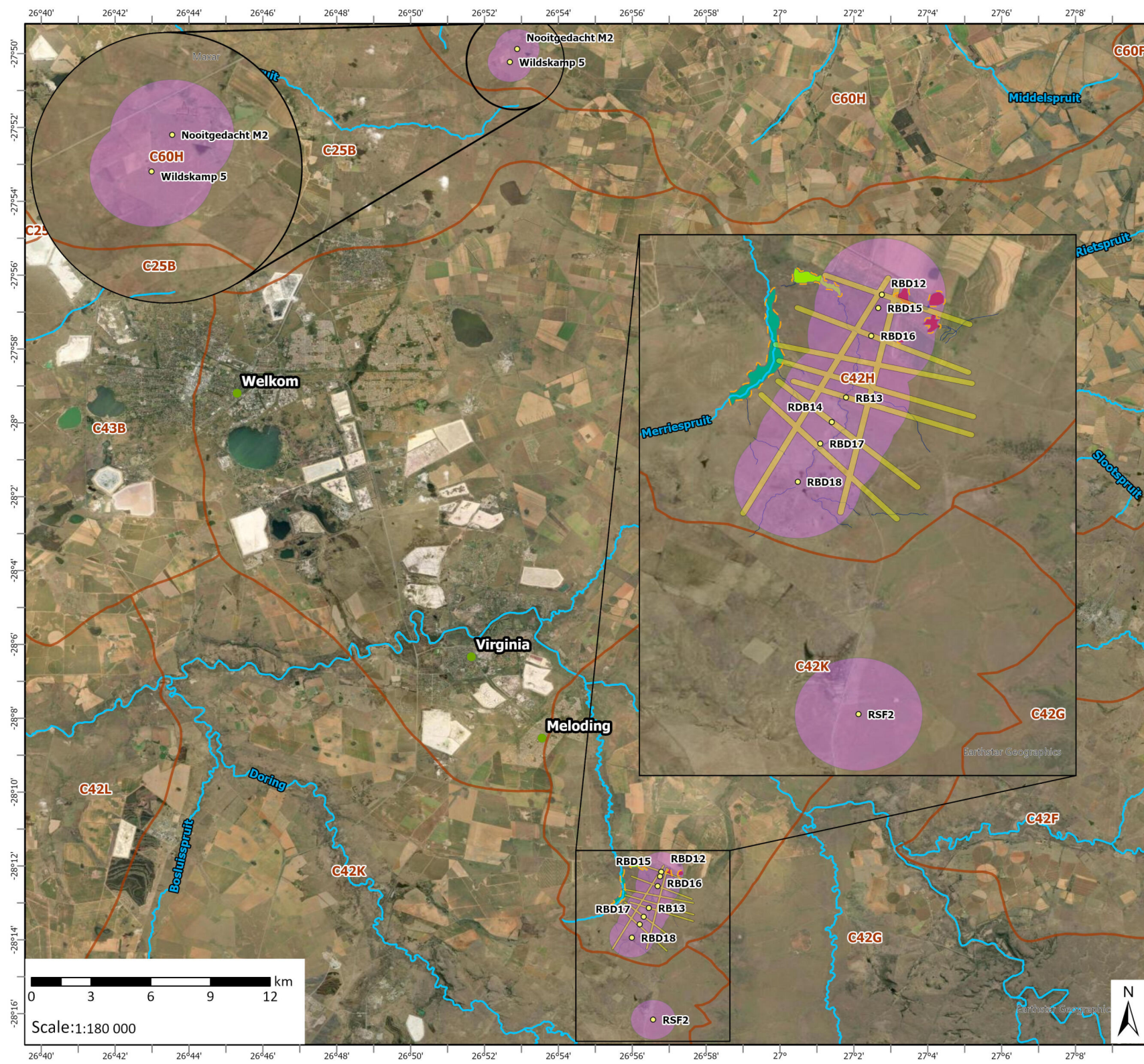
- Legend**
- Proposed Boreholes
 - 1km Borehole Buffer
 - Proposed Seismic Transects 50m Buffer
 - National Road
 - Regional Road
 - Secondary Road
 - Main Road
 - Rivers
- Soils**
- Eutric Cambisols (CMe)
 - Eutric Leptisols (LEp)
 - Ferric Luvisols (LVf)
 - Calcic Luvisols (LVc)
 - Ferric Lixisols (LXf)
 - Haplic Lixisols (LXh)
- Red, yellow and greyish soils with high base status (association of Lixisols, Cambisols, Luvisols and Plinthosols. In addition, other soils with plinthic and gleyic properties may also be present)
- Black and red, strongly structured clayey soils with high base status (association of Vertisols, Phaeozems, Kastarozems and Nitisols. In addition one or more Leptosols, Calcisols and Cambisols may be present)
- Red, massive or weakly structured soils with high base status (association of well drained Lixisols, Cambisols, Luvisols)
- Soils with a marked clay accumulation (association of Luvisols, Planosols and Solonchets. In addition one or more Plinthosols, Vertisols and Cambisols may be present)
- Red, yellow and greyish soils with high base status (association of Lixisols, Cambisols, Luvisols and Plinthosols. In addition, other soils with plinthic and gleyic properties may also be present)
- Red, massive or weakly structured soils with high base status (association of well drained Lixisols, Cambisols, Luvisols)



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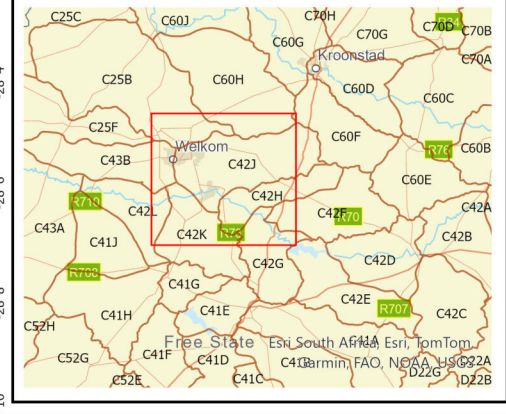


Hydrology Map

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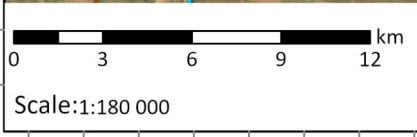
- Legend**
- Proposed Boreholes
 - 1km Borehole Buffer
 - Proposed Seismic Transects 50m Buffer
 - ~ Rivers
 - Quaternary Catchments
 - 15m Wetland Buffer

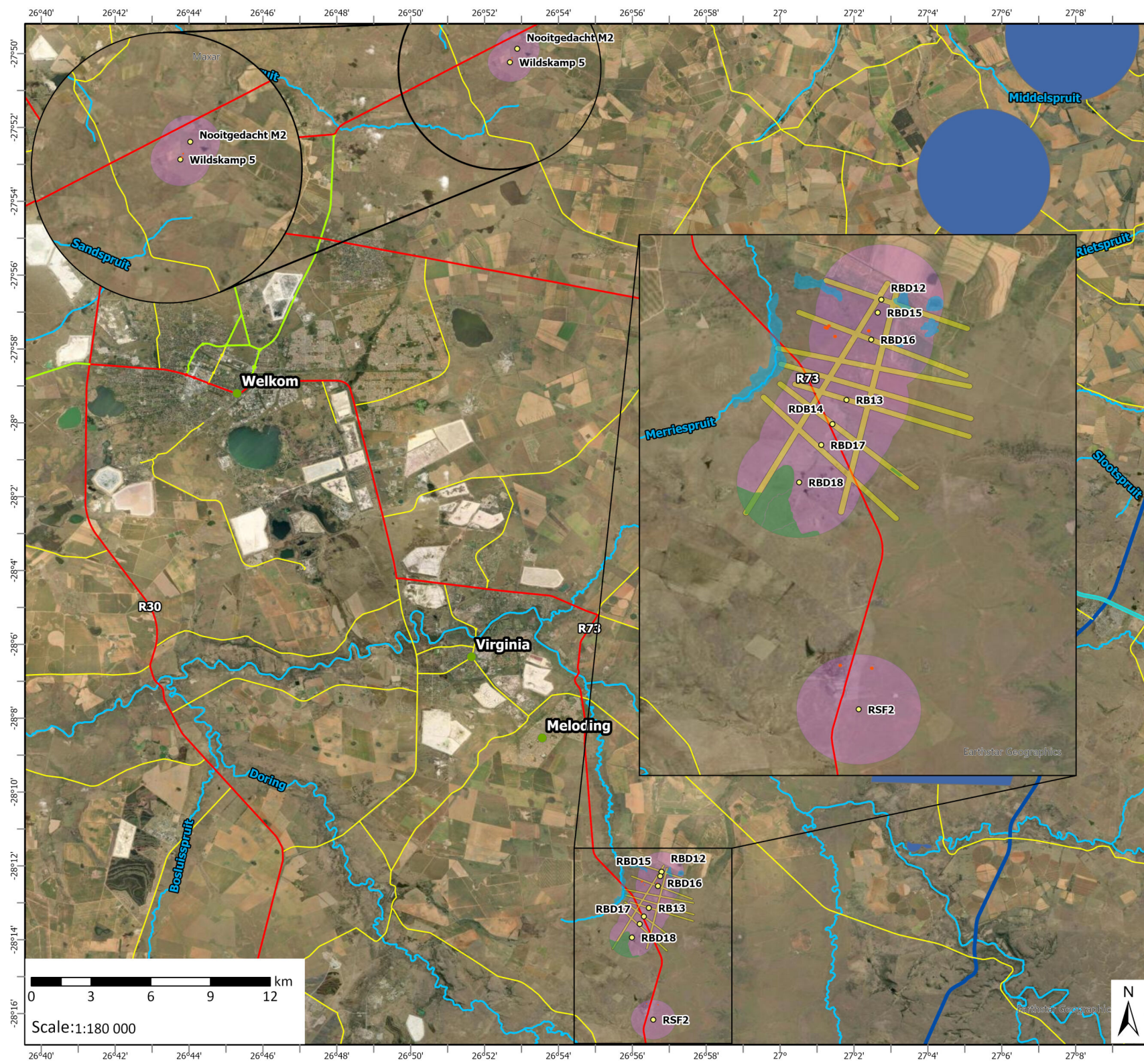
- Delineated Wetlands**
- Drainage Features
PES: N/A
Ecosystem Services: N/A
Risk: N/A
 - HGM 1 - Channelled Valley Bottom (CVB)
PES: D - Largely Modified
Ecosystem Services: Moderately High
Risk: Yes
 - HGM 2 - Depression
PES: D - Largely Modified
Ecosystem Services: Intermediate
Risk: Yes
 - HGM 3 - Floodplain
PES: E - Seriously Modified
Ecosystem Services: Moderately High
Risk: No



Data Sources:
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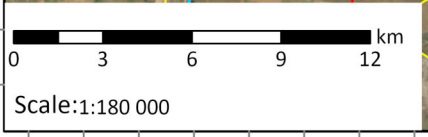
Site Sensitivity Map

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- Legend**
- Proposed Boreholes
 - 1km Borehole Buffer
 - Proposed Seismic Transects 50m Buffer
 - Rocky Grassland (CBA/High Sensitivity)
 - Heritage Features (No-Go Area)
 - Heritage 2016 (No-Go Area)
 - Wetlands (No-Go Area)
 - National Road
 - Regional Road
 - Secondary Road
 - Main Road
 - Rivers



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