



ENVIRONMENTAL STATEMENT

NEW POWER STATION,
NORTH MOLE, GIBRALTAR

JULY 2015

VOLUME 2: FIGURES

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ENVIRONMENTAL STATEMENT MAIN REPORT

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0 500m

 Site boundary



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**Figure 1.1:
 Indicative Site Location**

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Temporary Caterpillar Generating Units on North Mole Road



Waterport Power Station



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Figure 2.1:
 Photographs of Existing Power Supply

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Figure 3.1: Visual Representation of the
Proposed New Power Station from the
North West

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- Water Treatment And Urea Storage Area
- Diesel Fuel Area
- Lube Oil Storage and Maintenance Tanks
- Administrative Building
- Engine Hall and Silencers (Including Air Coolers and Condensers)
- Stacks
- Heat Recovery
- Selective Catalytic Reduction
- Car Parking



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**Figure 5.1:
 Layout of the Proposed Power Station**

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AIR QUALITY

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- Figure AQ4.1** **Locations of Automatic Monitoring Stations**
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- Figure AQ6.3** **Predicted Annual Mean Nitrogen Dioxide
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- Figure AQ.A3.1** Wind Roses (2012-2014)



● Specific Receptor Location



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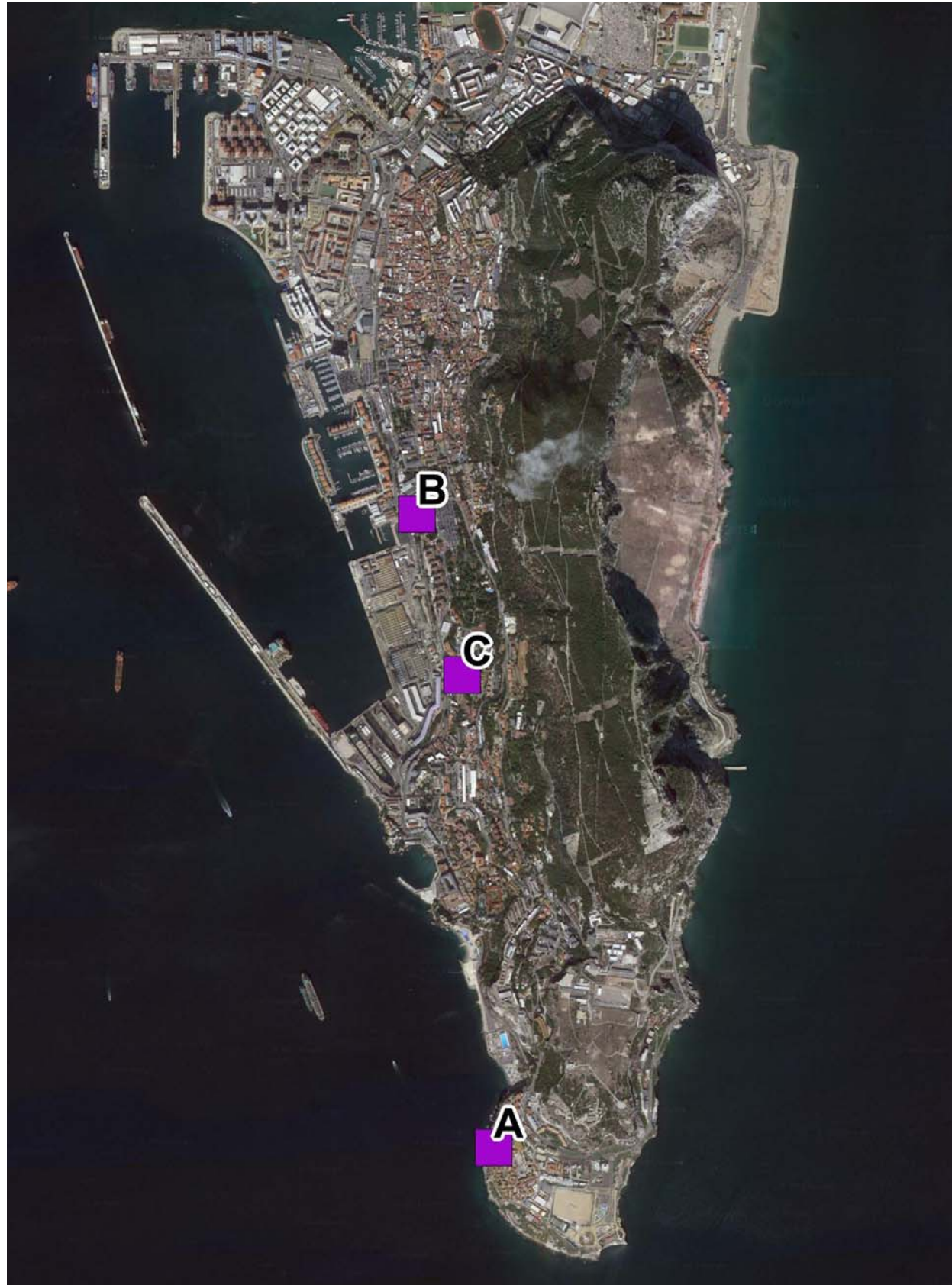


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 Figure AQ3.1:
 Locations of Specific Receptors

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 Automatic Monitoring Sites



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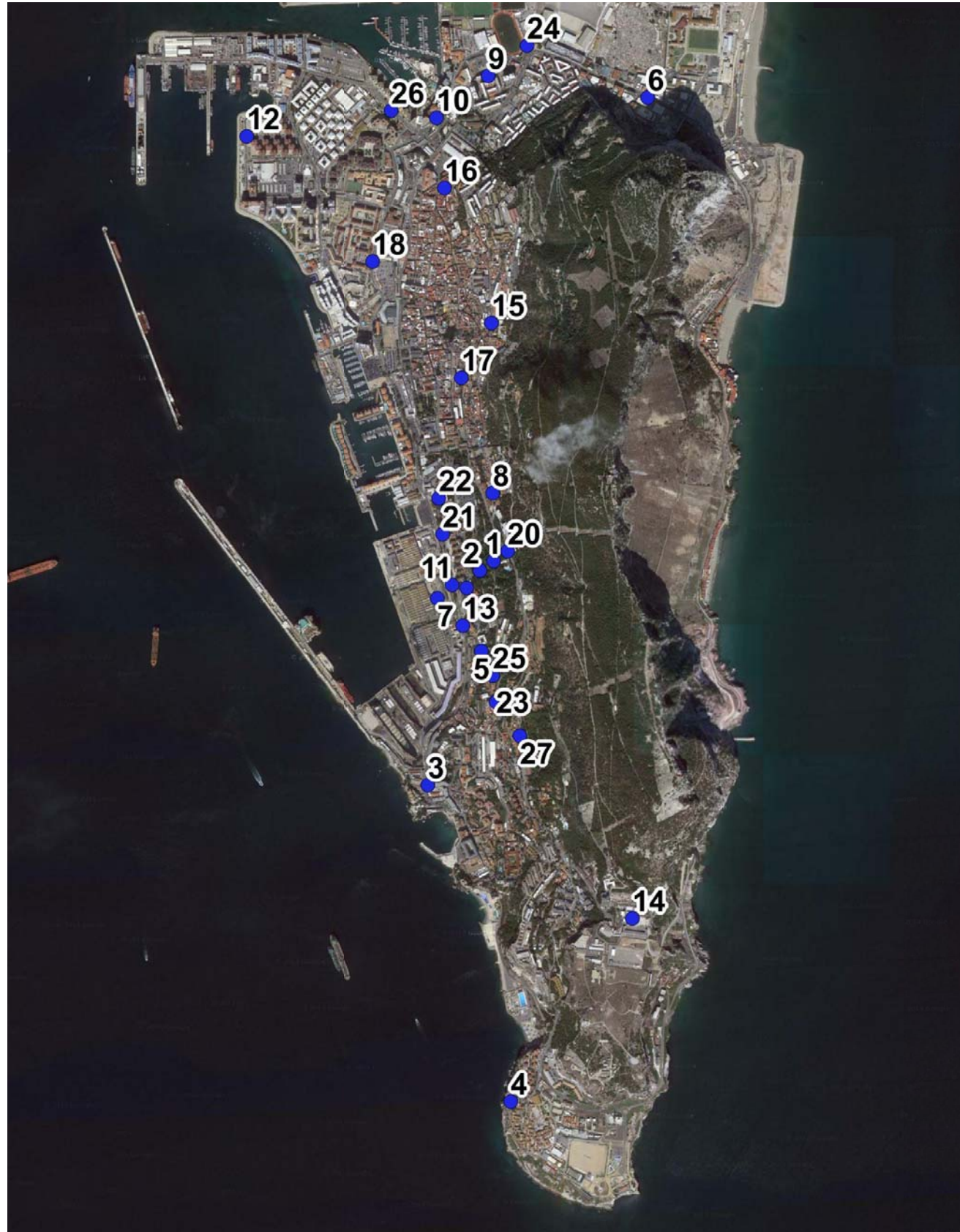
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Figure AQ4.1: Location of
Automatic Monitoring Stations

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● Automatic Monitoring Sites



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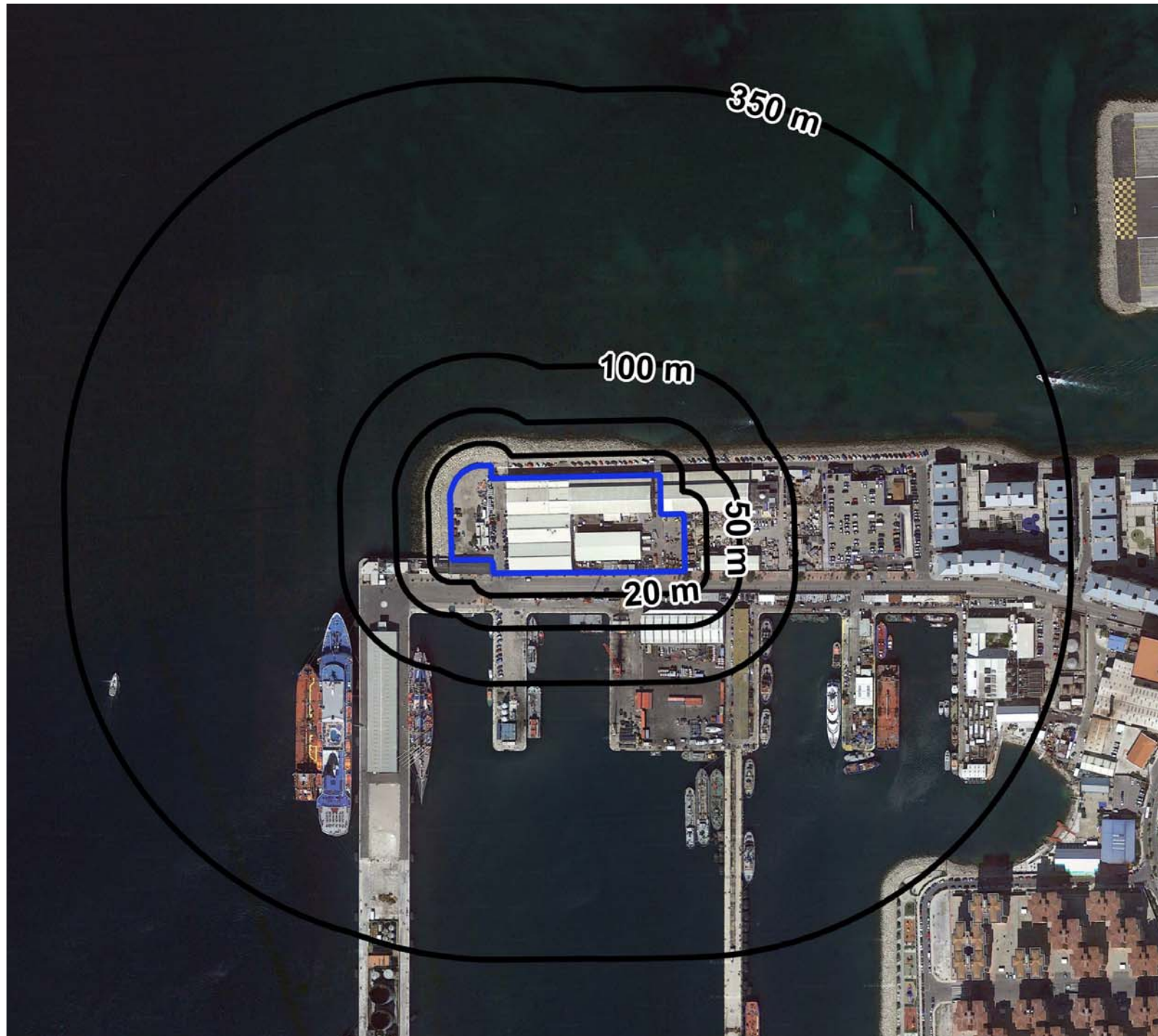
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Figure AQ4.2: Location of
 Diffusion Tube Monitoring Sites

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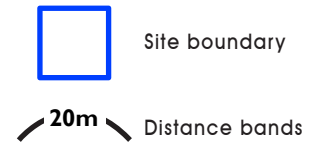
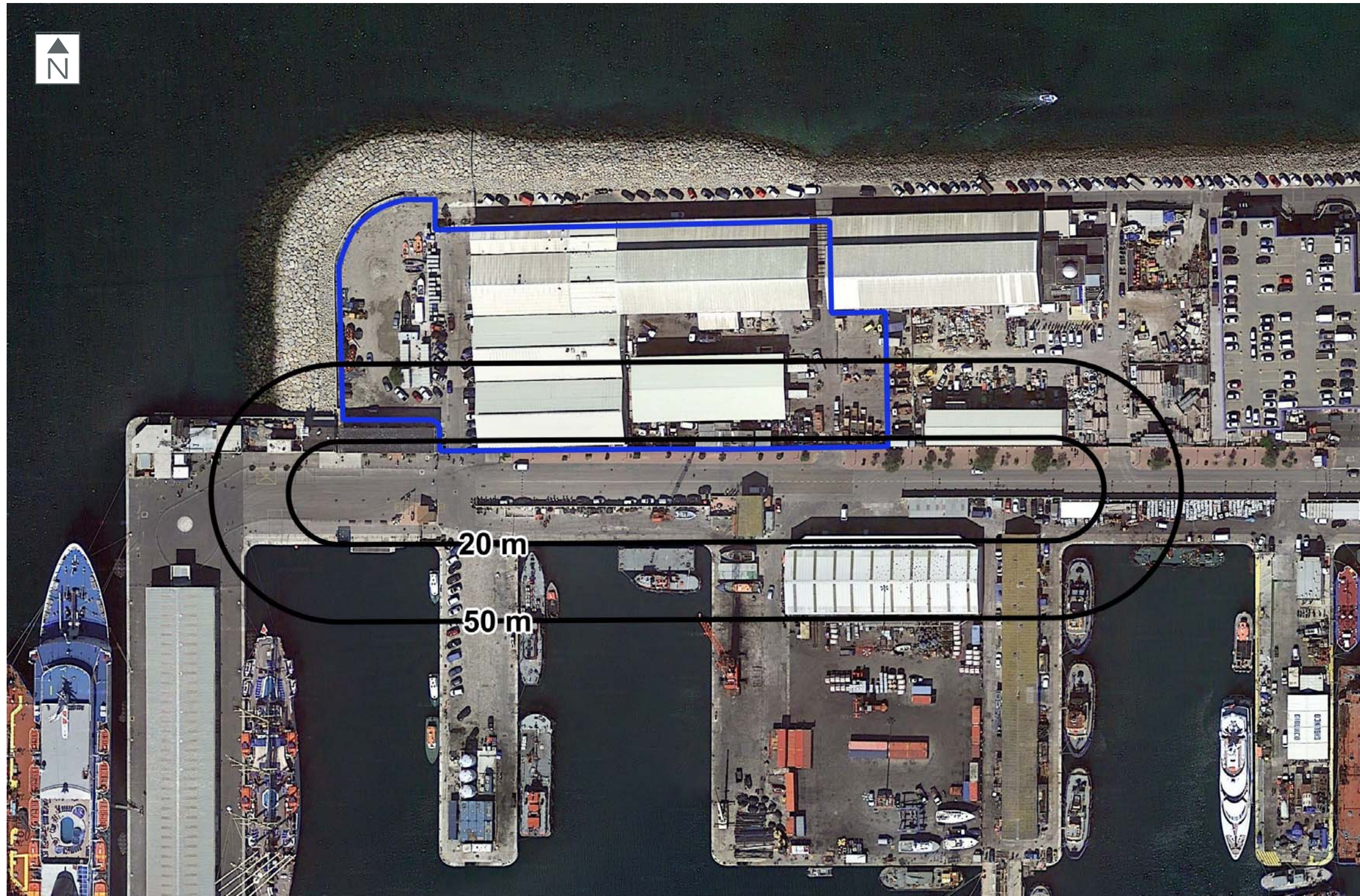
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Figure AQ6.1: Distance Bands
 from the Site Boundary

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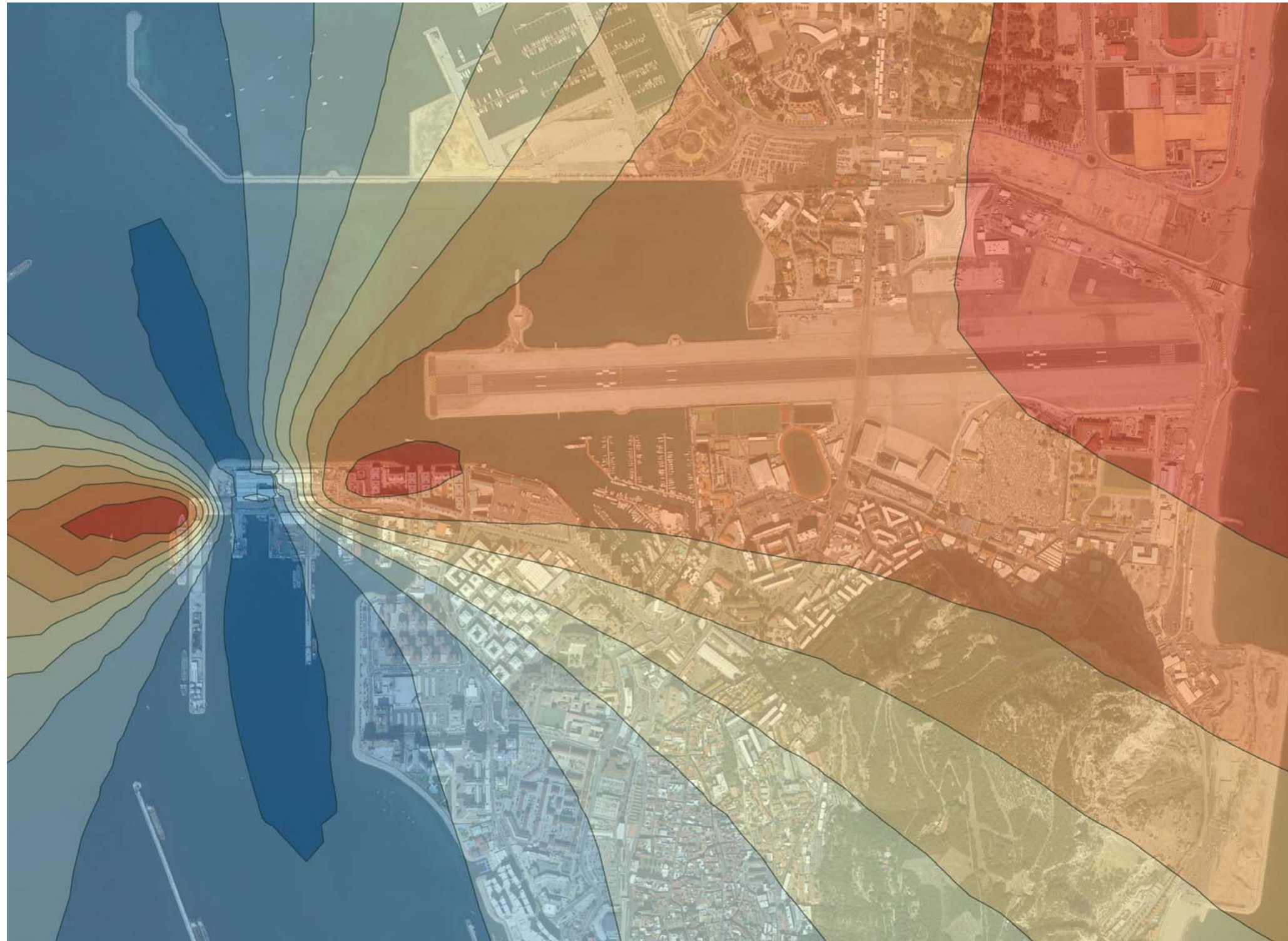
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Figure AQ6.2: Distance Bands from
Roads Used by Construction Traffic
within 50m of the Site Boundary

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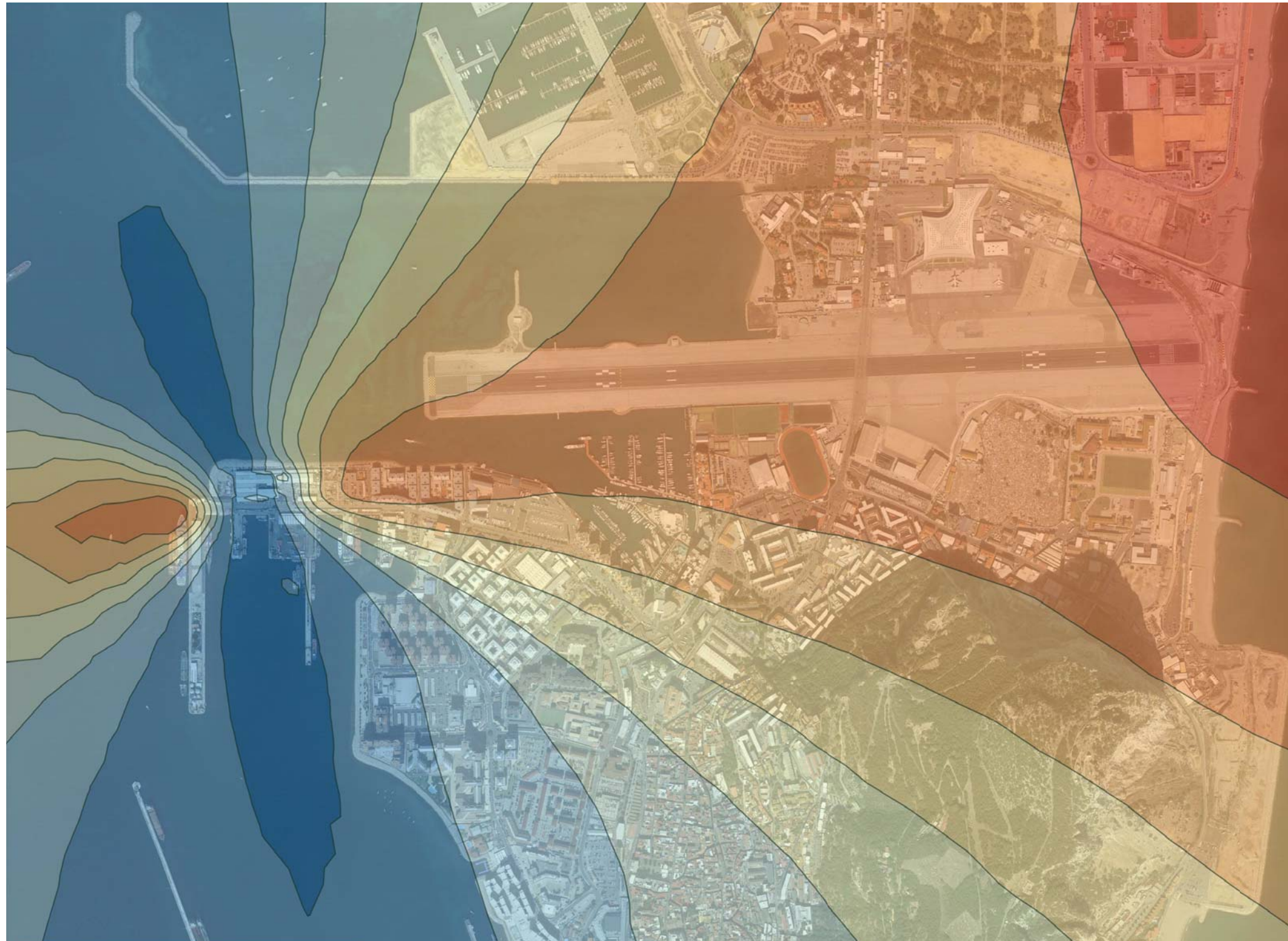
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Figure AQ6.3: Predicted Annual Mean
Nitrogen Dioxide Process Contributions
associated with North Mole Power
Station in 2017 ($\mu\text{g}/\text{m}^3$)

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Figure AQ6.4: Predicted Annual Mean
Nitrogen Dioxide Process Contributions
associated with North Mole Power
Station in 2027 ($\mu\text{g}/\text{m}^3$)

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— 2017

— 2027

0 500m



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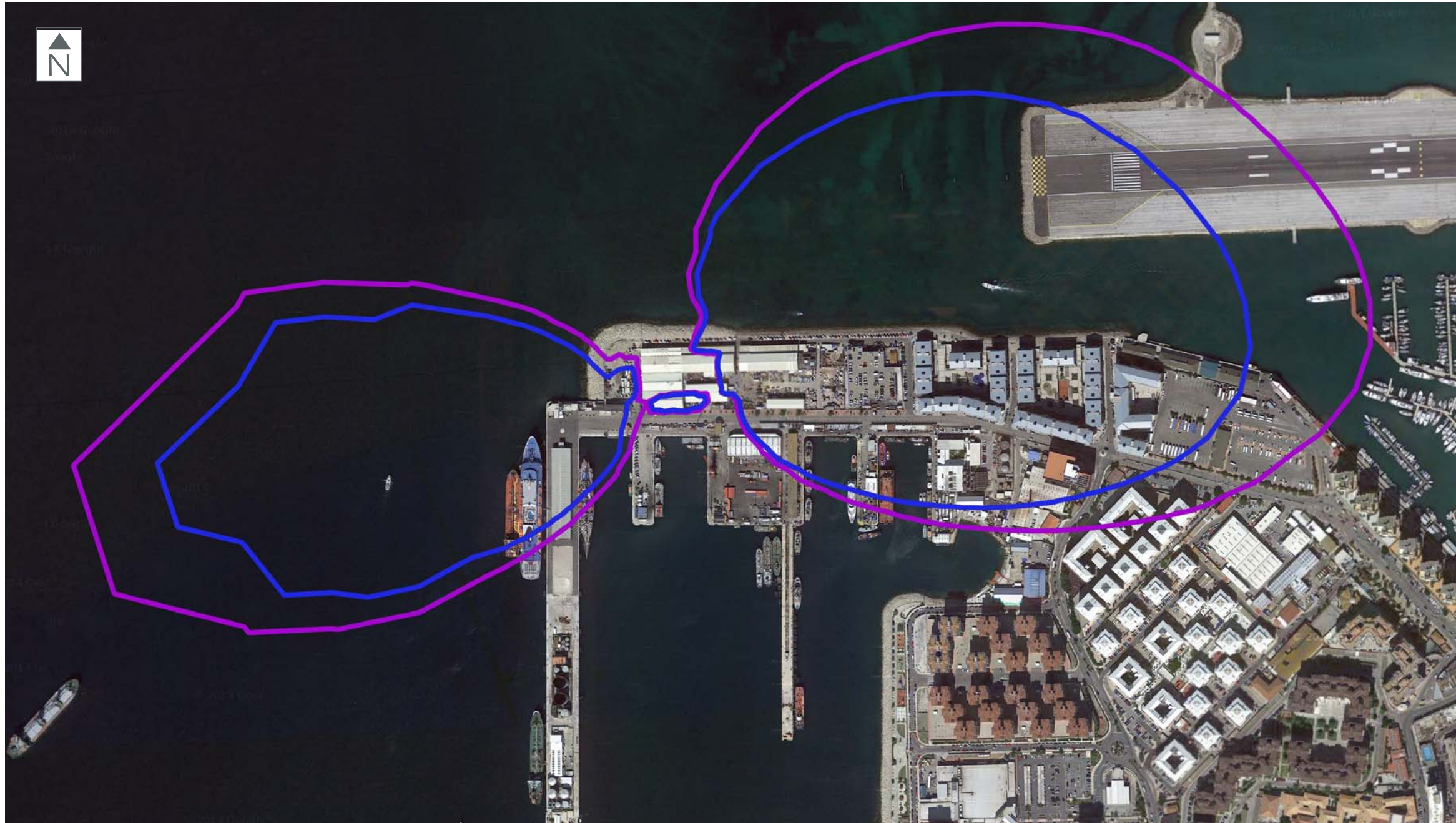
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Figure AQ6.5: Isopleths of where Significant Impacts from Annual Mean PM_{2.5} Process Contributions ($\mu\text{g}/\text{m}^3$) associated with North Mole Power Station in 2017 and 2027 cannot be discounted

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— 2017
— 2027

0 300m



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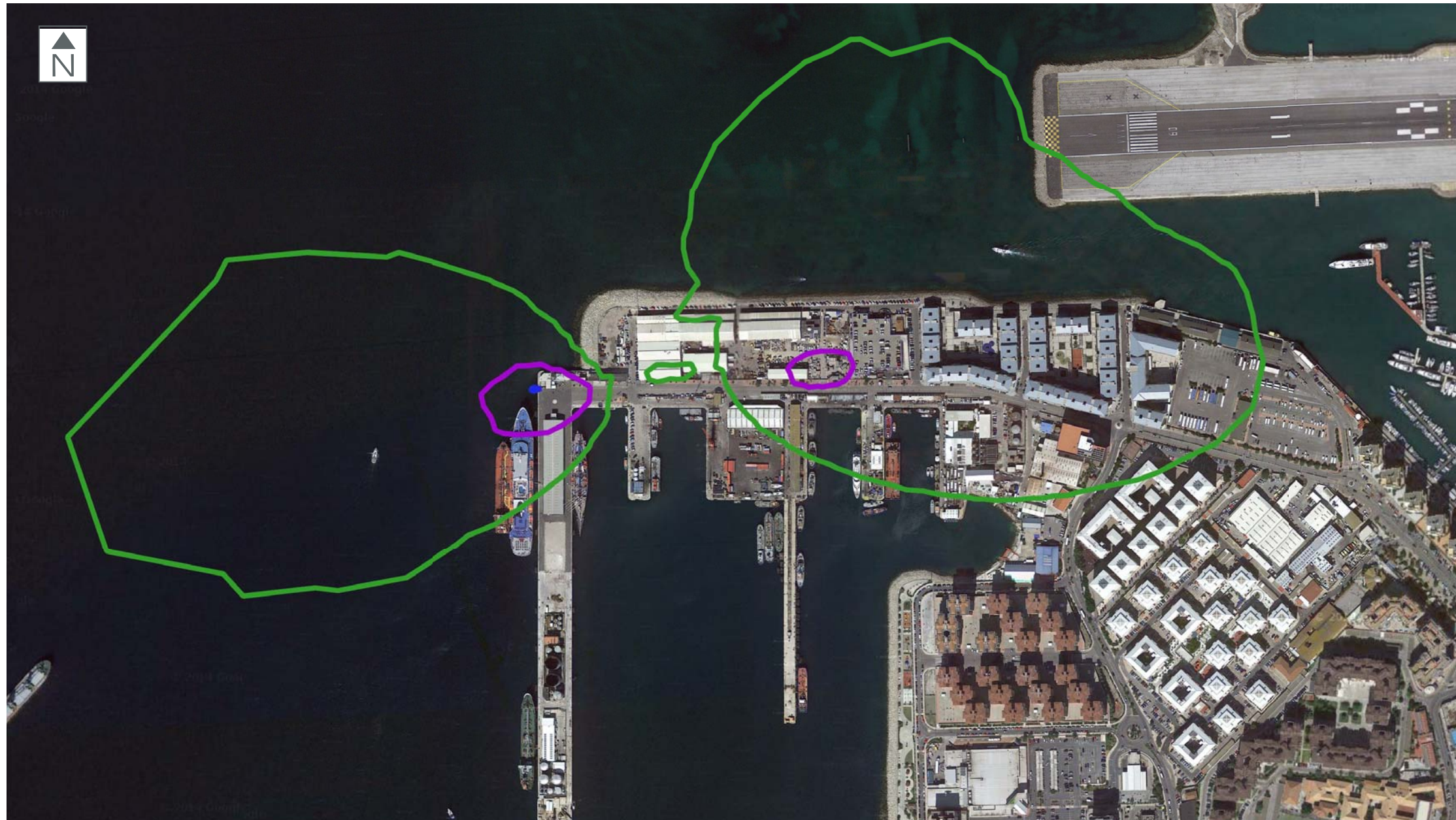
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Figure AQ6.6: Isopleths of where Significant Impacts from Annual Mean PM_{10} Process Contributions ($\mu g/m^3$) associated with North Mole Power Station in 2017 and 2027 cannot be discounted

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- 2017
- 2027
- Diesel

0

 250m



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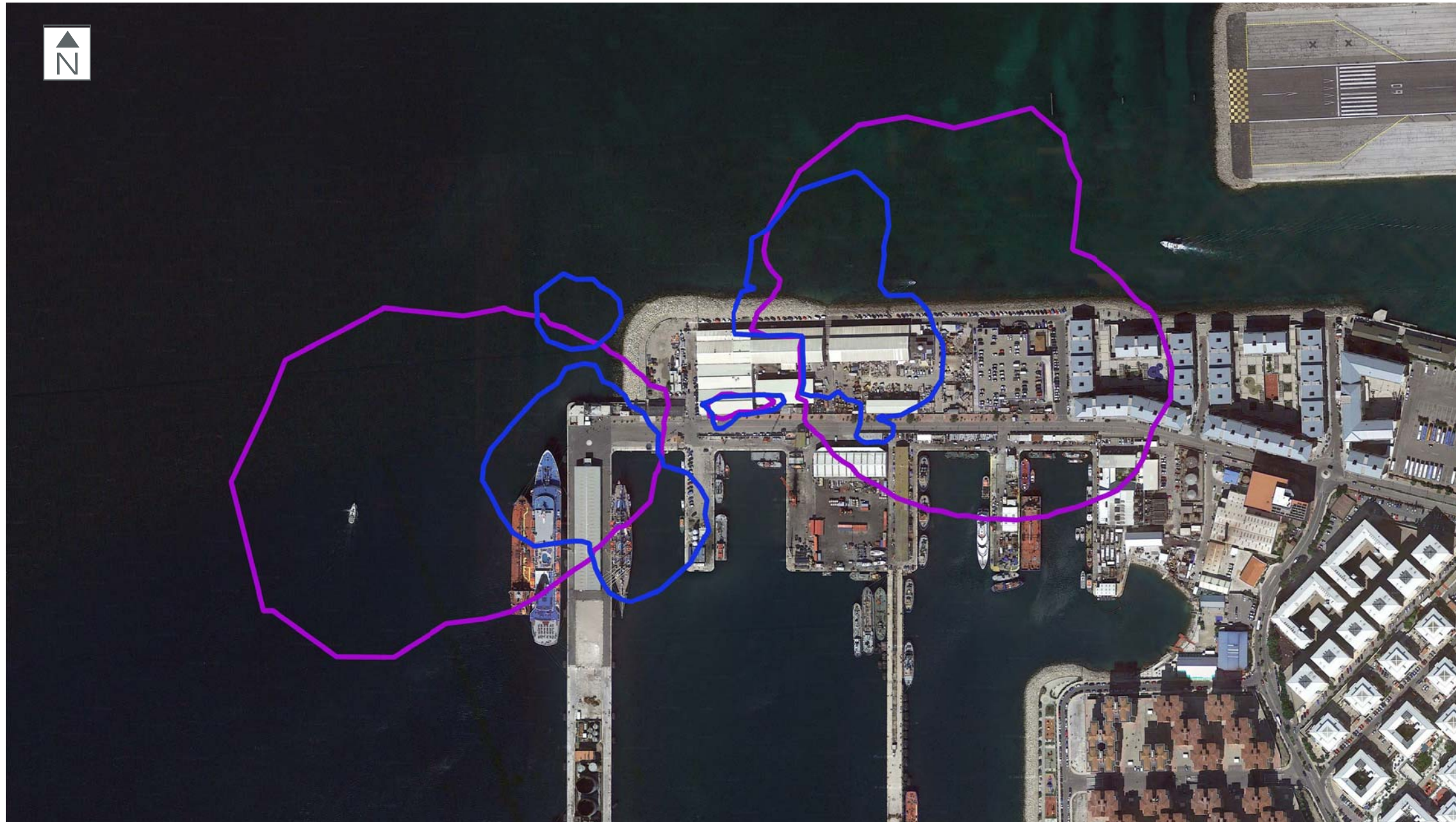
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Figure AQ6.7: Isopleths of where significant impacts from Daily Mean PM₁₀ Process Contributions associated with North Mole Power Station cannot be discounted in 2017, 2027 and in the Emergency Diesel Backup Scenario

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— 1 Hour Mean
 — 24 hour Mean

0 250m



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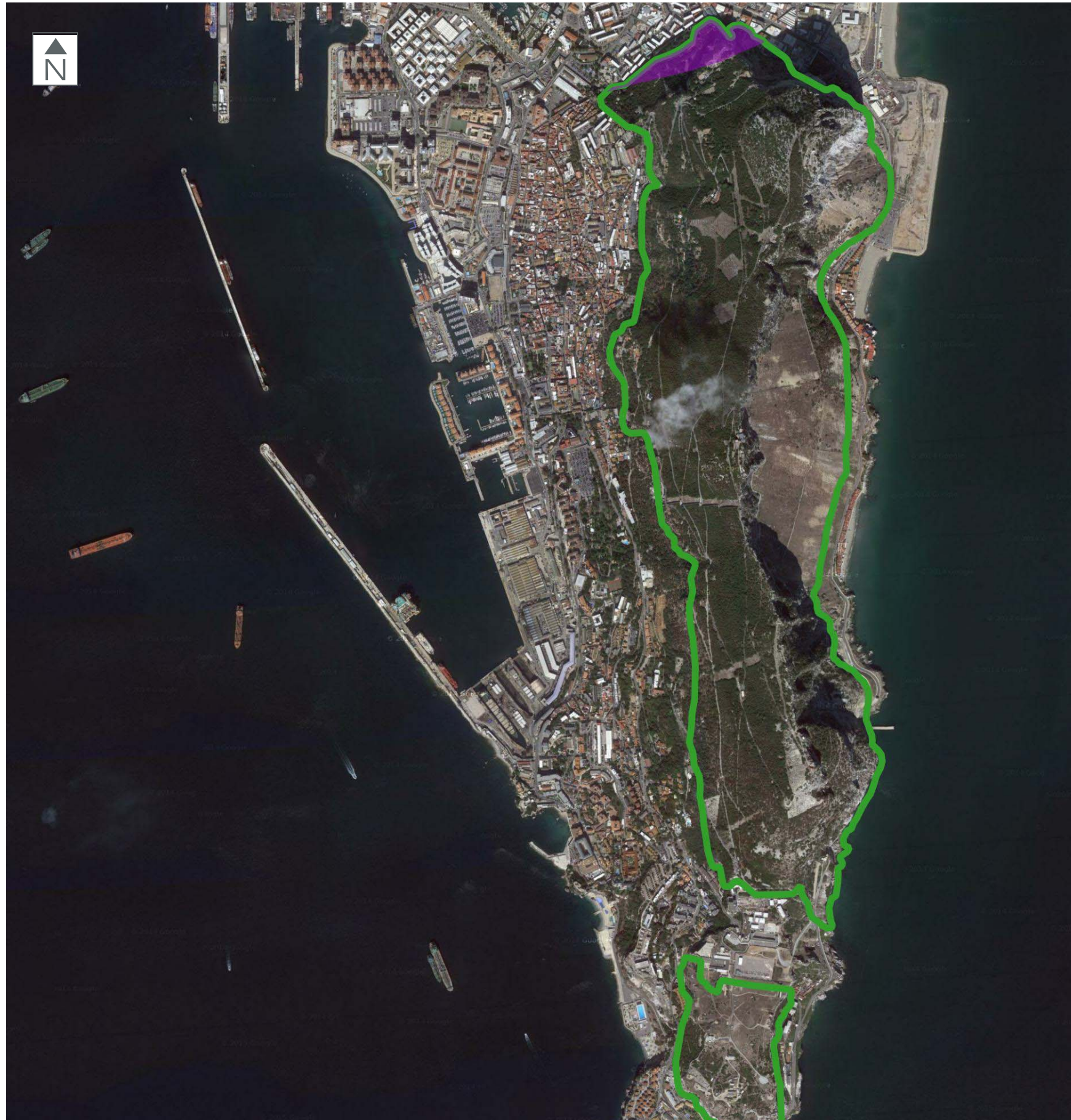
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Figure AQ6.8: Isopleths of where Significant Impacts from Hourly and Daily Mean Sulphur Dioxide Process Contributions associated with North Mole Power Station cannot be discounted in the Emergency Diesel Backup Scenario

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 Area exceeding 1% of the critical level

0  1 km



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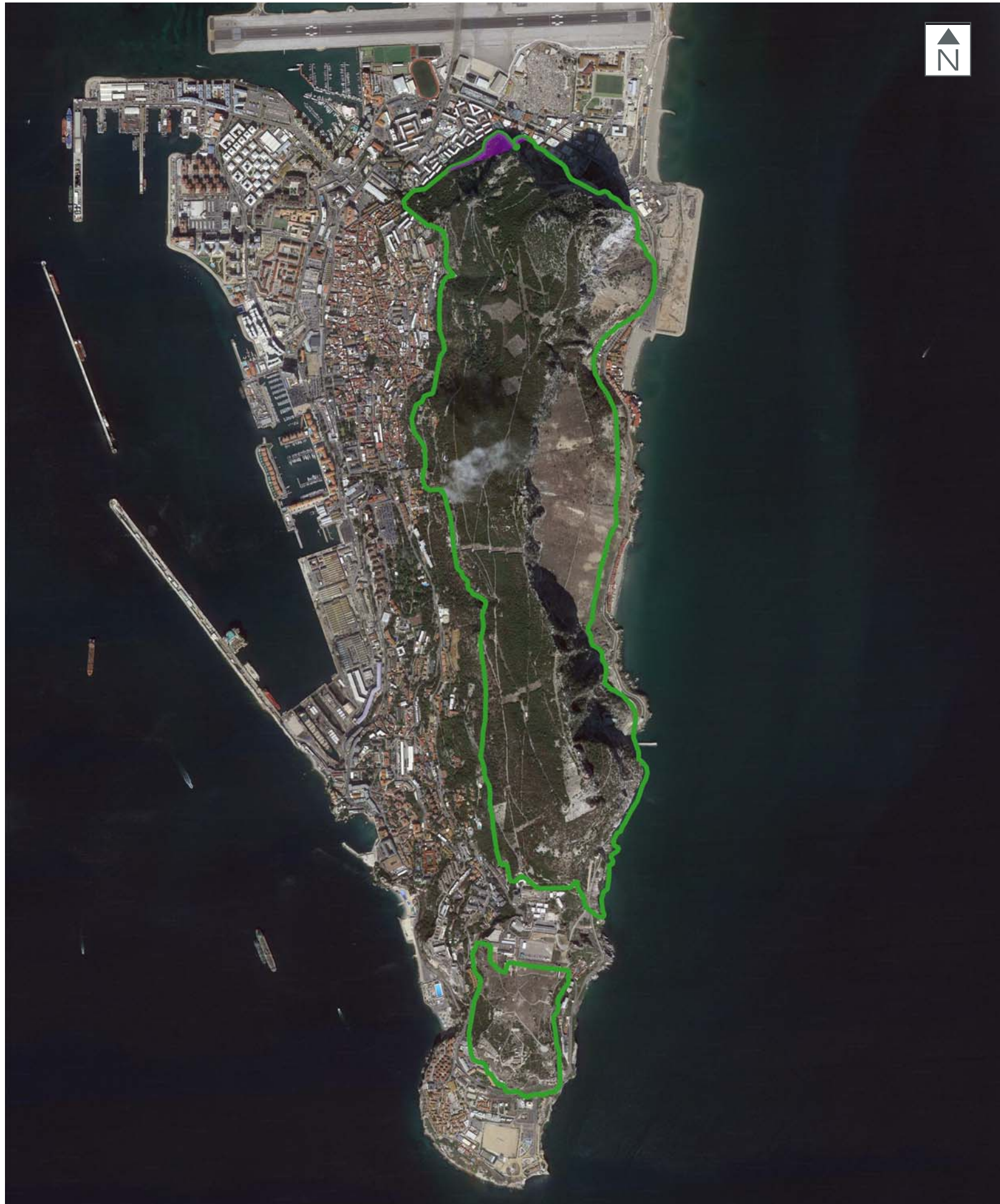
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Figure AQ6.9: Locations within the Rock of Gibraltar SAC where predicted ground level concentrations as a result of emissions from North Mole Power Station in 2017 are greater than 1% of the critical level for nitrogen oxides

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 Area exceeding 1% of the critical level

0  1 km



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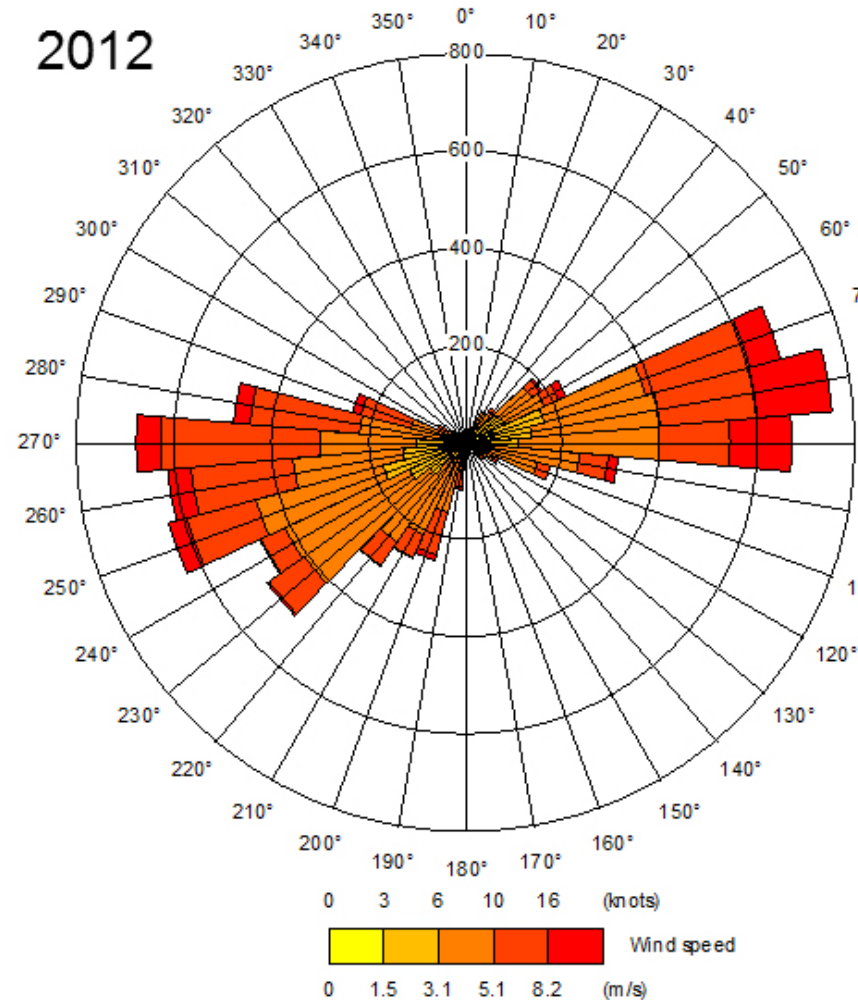
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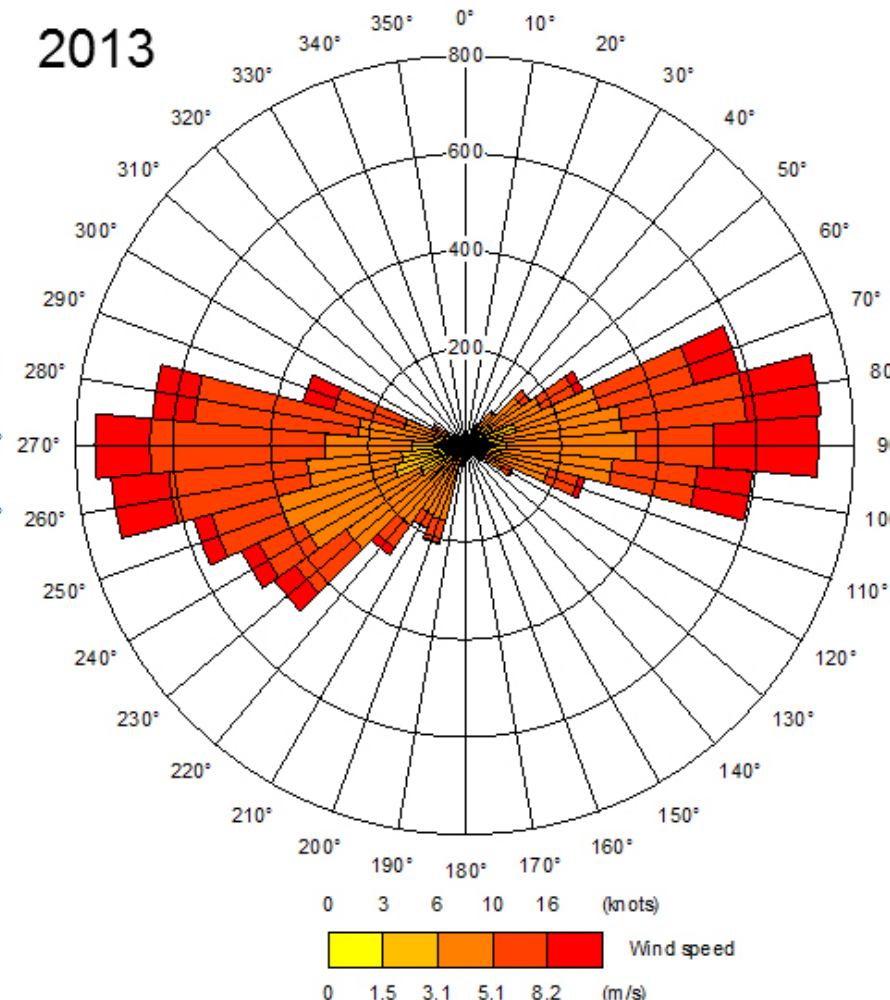
Figure AQ6.10: Locations within the Rock of Gibraltar SAC where predicted ground level concentrations as a result of emissions from North Mole Power Station in 2027 are greater than 1% of the critical level for nitrogen oxides

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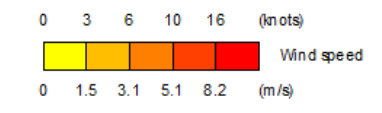
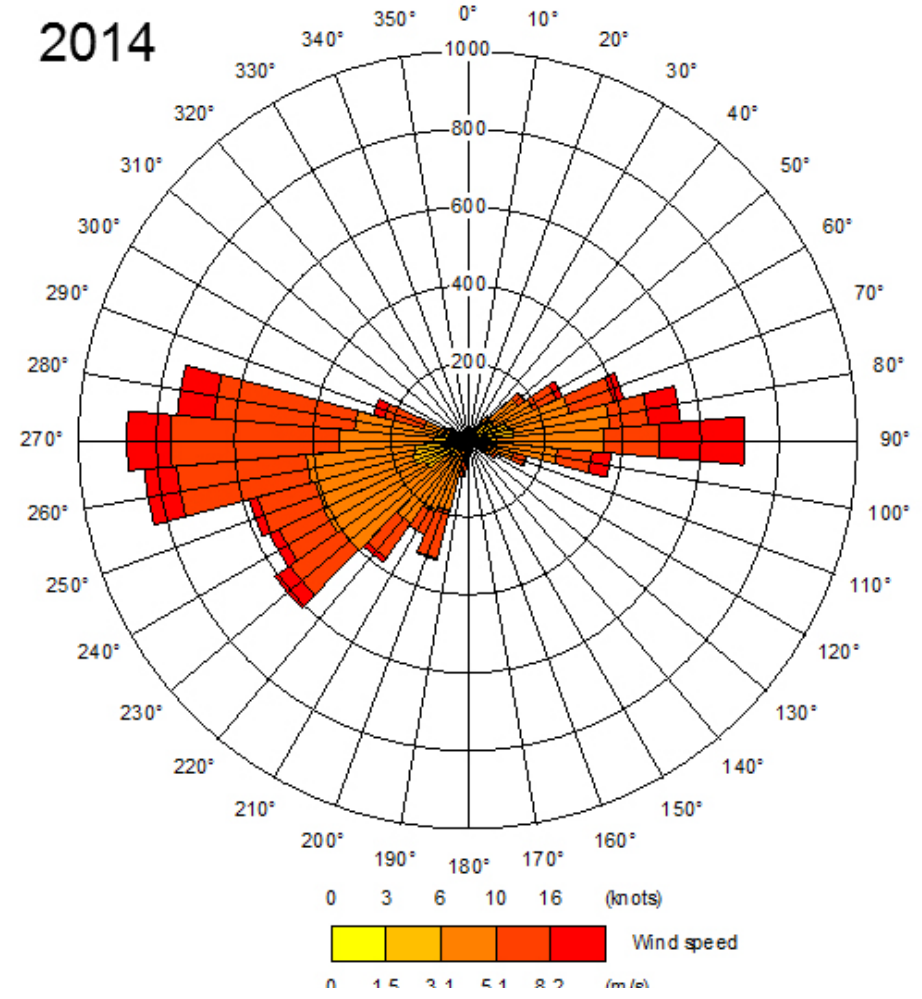
2012



2013



2014



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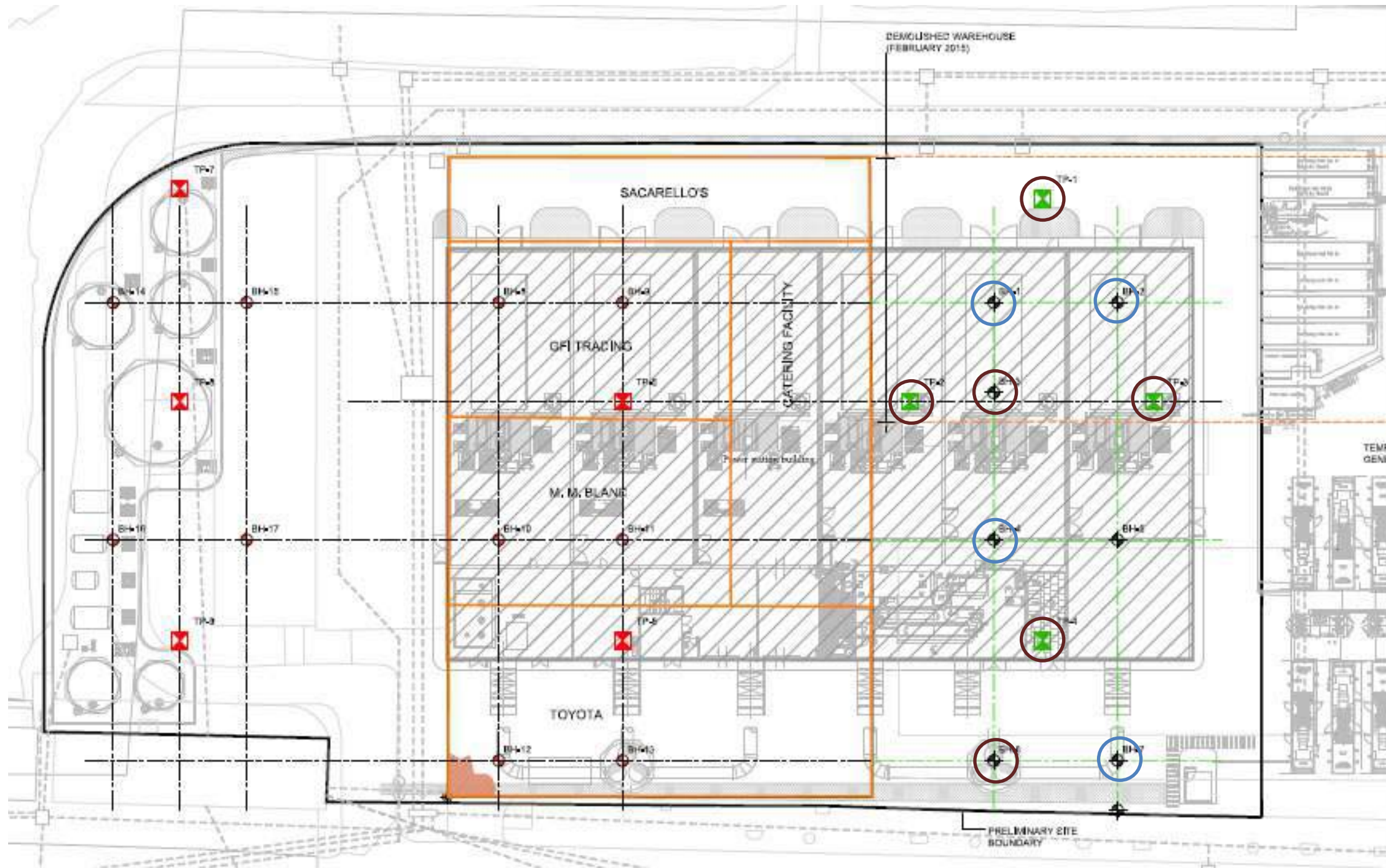
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**Figure AQ.A3.1:
Wind Roses (2012-2014)**

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CONTAMINATED LAND

FIGURES

Figure CL3.1 Sampling Locations



- ◻ Soil samples
- ◯ Groundwater samples
- Existing buildings
- Demolished warehouse boundary
- Preliminary site boundary
- ⊕ Phase 1 R.D. Borehole 25m
- ◻ Phase 1 Trial Pit (1.5 x 3.0m deep)
- Phase 1 Seismic Cross-hole Test Profile



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 Figure CL3.1:
 Sampling Locations

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LAND USE AND VISUAL AMENITY

FIGURES

Figure LV3.1 Viewpoint Location Plan

Figure LV5.1 Viewpoints A, B, and C

Figure LV5.2 Viewpoints D and E

Figure LV5.3 Viewpoints F, G and H

Figure LV5.4 Viewpoint I

LA LINEA COAST ROAD
Approximately 2km from the site



SPAIN

ALGECIRAS
Approximately 8km to the West



CRUISE TERMINAL
Approximately 70m from the site



NORTH MOLE ROAD
Approximately 300m from the site

HARBOUR VIEWS ROAD PROMENADE
Approximately 500m from the site



AIRPORT RUNWAY

PRINCESS CAROLINE'S BATTERY
Approximately 1.6km from the site

THE MOORISH TOWER
Approximately 1.5km from the site



CABLE CAR UPPER STATION
Approximately 2.3km from the site



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Figure LV3.1:
Viewpoint Location Plan

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View A:
From the upper cable car
Approximately 2.3km from the site



View B:
From Princess Caroline's Battery
Approximately 1.6km from the site



View C:
From the top of the Moorish Tower
Approximately 1.5km from the site

Views from the Gibraltar Nature Reserve

Photographs taken May 2015 using Canon EOS 400D with a 35mm lens at a height of 1.6m above ground level



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Figure LV5.1:
Viewpoints A, B, and C

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View D:
From La Linea Coast Road
Approximately 2km from the site



View E:
From Algeciras
Approximately 8km to the West

Transboundary views

Photographs taken May 2015
using Canon EOS 400D with a
35mm lens at a height of 1.6m
above ground level



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**Figure LV5.2:
Viewpoints D and E**

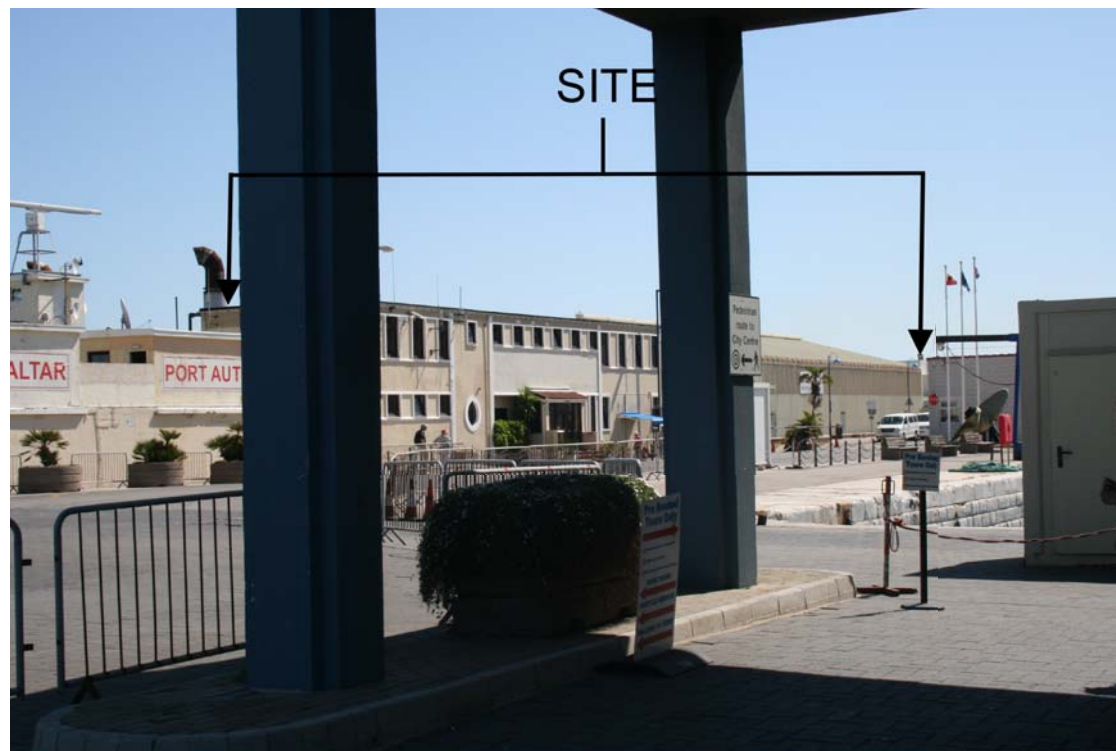
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View F:
From the promenade at Harbour Views Road
Approximately 500m from the site



View G:
Looking along North Mole Road from road opposite the existing power station
Approximately 300m from the site



View H:
From the cruise terminal entrance
Approximately 70m from the site



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Figure LV5.3:
Viewpoints F, G, and H

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View I:
From an aircraft on the runway illustrating the scale of some cruise liners in relation to the site

Photographs taken May 2015
using Canon EOS 400D with a
35mm lens at a height of 1.6m
above ground level



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Figure LV5.4:
Viewpoint I

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NOISE AND VIBRATION

FIGURES

Figure NV3.1 Noise Survey Locations

Figure NV3.2 Noise Sensitive Receptor Locations



● Residential Background Noise Survey Location

0 100m



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 Figure NV3.1:
 Noise Survey Locations

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- Residential Receptor
- Non-Residential Receptor



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**Figure NV3.2:
 Noise Sensitive Receptor Locations**

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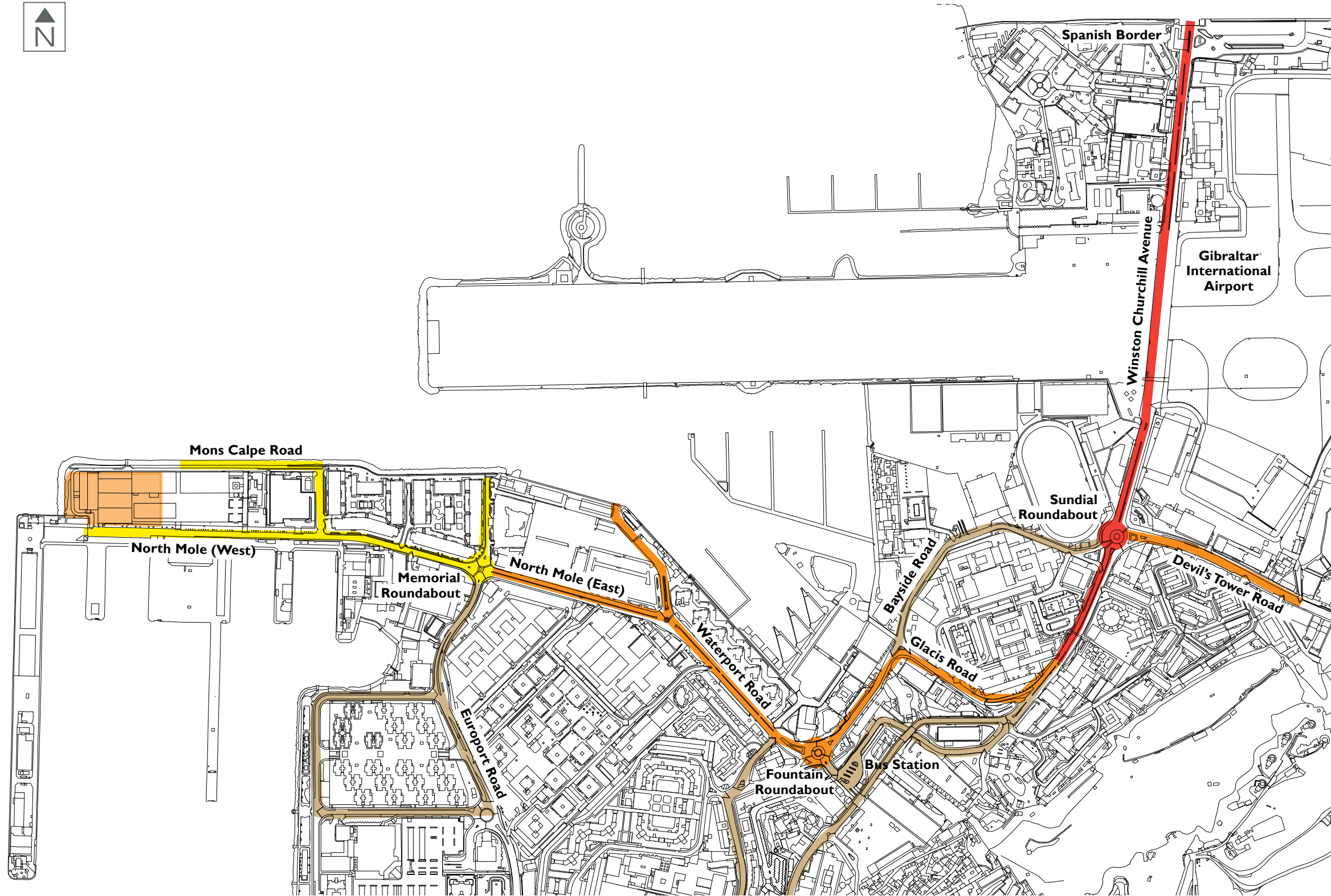



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TRAFFIC AND TRANSPORTATION


FIGURES


Figure TT3.1 Local Highway Network Map





 Indicative Site Location

AVERAGE TOTAL DAILY VEHICLES NUMBERS

 Over 20,000

 10,000- 20,000

 Under 10,000

 Other important roads not included in the study



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**Figure TT3.1:
Local Highway Network Map**

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