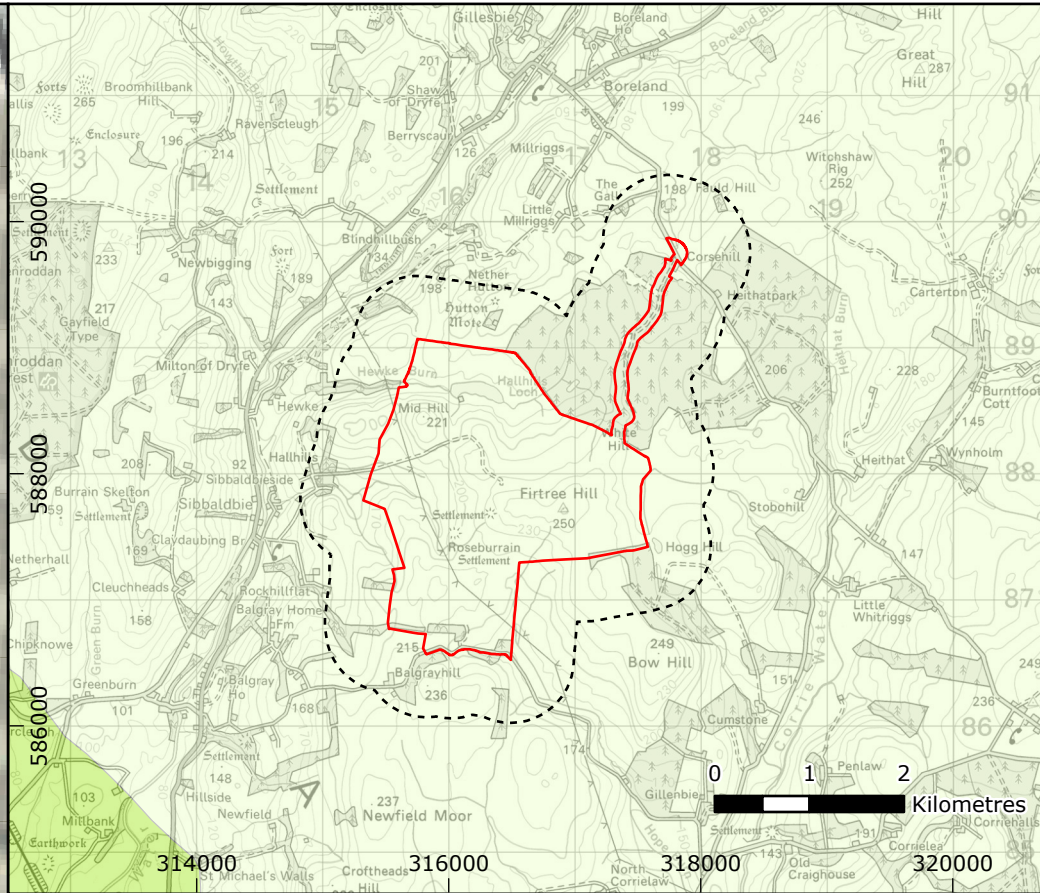
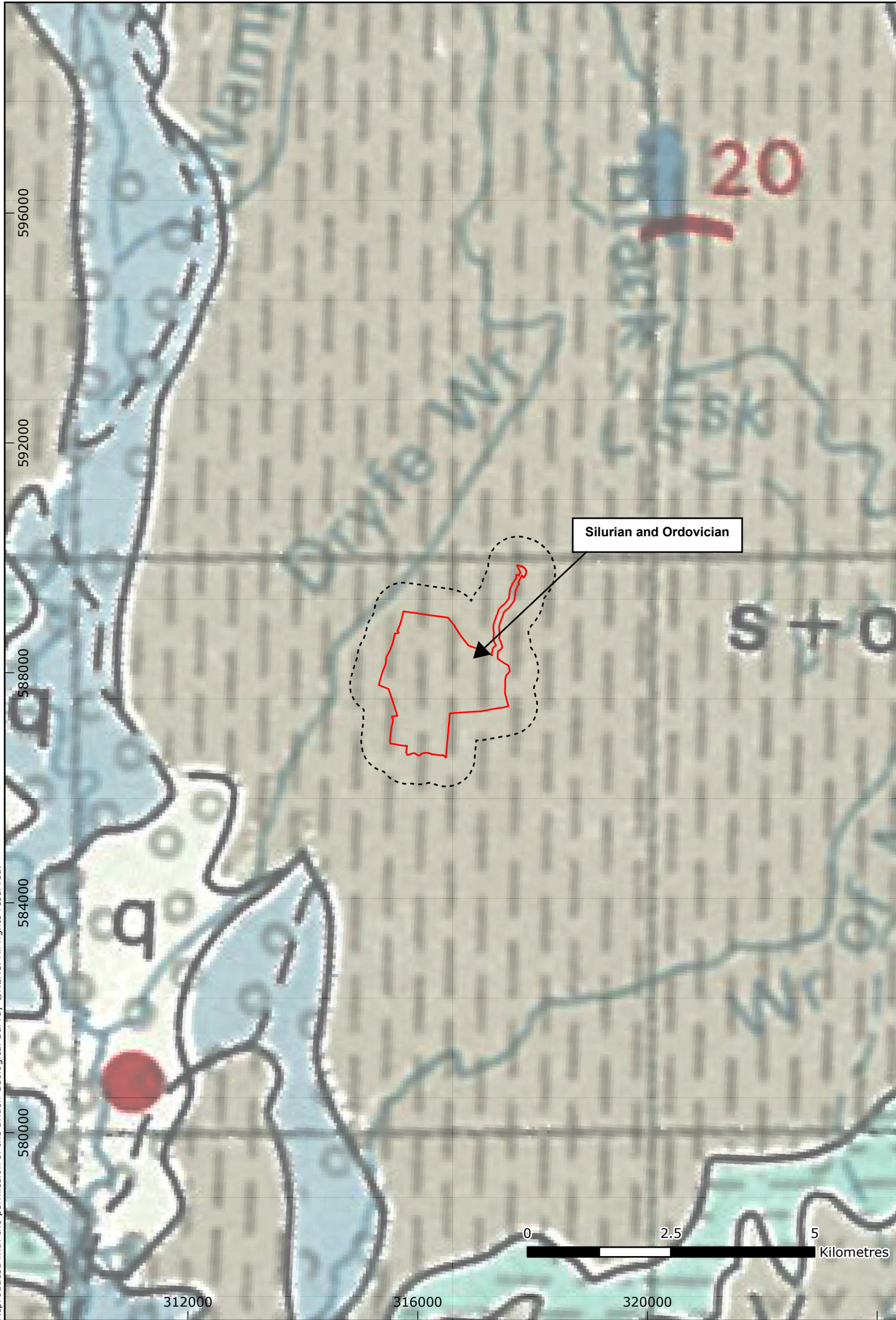


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INDEX AND EXPLANATION

1. Aquifers in which intergranular flow is significant

- a. Highly productive aquifers (not extensive)
 - p Permian at Thornhill
 - d₁ Upper Old Red Sandstone in Fife

b. Locally important aquifers

- q_o Recent: Blown sand
- q Quaternary sands and gravels
- p Permian in North West Grampian

2. Aquifers in which flow is dominantly in fissures and other discontinuities

- a. Highly productive aquifers (not extensive)
 - p Permian
 - h₁ Carboniferous: Dinantian and Namurian
 - d₁ Upper Old Red Sandstone

b. Locally important aquifers

- r+p Triassic and Permian
- h₁ Carboniferous: Westphalian
- d₁₊₂ Lower and Middle Old Red Sandstone

3. Concealed aquifers, aquifers of limited potential, regions without significant groundwater

- a. Concealed aquifers; aquifers with limited or local potential
 - q_o Quaternary: coastal and river alluvium
 - j Jurassic
 - p Permian at Stranraer
 - ob+pr Cambro-Ordovician and Precambrian Limestones

b. Regions underlain by impermeable rocks, generally without groundwater except at shallow depth

- s+o Silurian and Ordovician
- pr Precambrian
- v Extrusive rocks
- g Intrusive rocks

Surface water features

- Perennial river or stream
- Perennial river or stream in which the chloride ion concentration is known to exceed 1000 mg/l under low flow conditions
- Stream gauging station with mean annual runoff in m³/s, over catchment area in km²
- Hydrometric area boundary
- Freshwater loch, reservoir or standing water
- Loch or standing water in which the chloride ion concentration is known to exceed 1000 mg/l

Groundwater features

- Recognised mineral water spring or borehole with less than 1000 mg/l total dissolved solids.
- Spa water spring or well with greater than 1000 mg/l total dissolved solids
- Areas where the chloride ion concentration exceeds 1000 mg/l above -80 m O.D.

Sources of known abstraction (licences are not required):

- a) 10-19 l/s } normal discharge
- b) 20-29 l/s } or pumping yield
- c) > 29 l/s }

- a) b) c) Springs
- Spings used for public supply
- Wells and boreholes
- Sources of public supply
- Artesian boreholes
- Artesian boreholes used for public supply

River or loch intake for public supply with ≥ 10 Ml/d capacity

Artificial works

- Impounding reservoir with design yield ≥ 10 Ml/d (figures in Ml/d)
- Canal
- Hydroelectric station

Geological symbols

- Geological boundary
- Geological boundary beneath cover
- Fault
- Contours on the surface of the Old Red Sandstone in m relative to O.D.



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Legend

- Proposed Site Boundary
- Study Area (Proposed Site Boundary 500 m Buffer)

Aquifer Classification

- Highly Productive Aquifer
- Low Productivity Aquifer

A3 Horizontal Scale 1:80,000

CRS: British National Grid (ESPG:4326)

Produced: MM
Reviewed: JRS
Approved: KR

Date: 11/04/2025 Revision: 0

405.065655.00001.0007.1 Regional
Hydrogeology

BALGRAY WIND FARM EIAR

FIGURE 9.6 - REGIONAL HYDROGEOLOGY

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