



GCSE

C111U10-1



WEDNESDAY, 14 MAY 2025 – MORNING

GEOGRAPHY A – Component 1

Changing Physical and Human Landscapes

1 hour 30 minutes plus your additional time allowance

Surname

First name(s)

Centre Number

Candidate Number

0

ADDITIONAL MATERIALS

In addition to this paper you may use a calculator and ruler if required.

INSTRUCTIONS TO CANDIDATES

Use black ink, black ball-point pen or your usual method.

Write your name, centre number and candidate number in the spaces on the previous page.

Answer BOTH questions in Section A.

Answer ONE question in Section B.

Write your answers in the spaces provided in this booklet. Additional space is provided for some questions within the booklet (if required). If further space is required for any question, you should use the additional page(s) at the end of this booklet. The question number(s) should be clearly shown.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

Your ability to spell, punctuate and use grammar and specialist terms accurately will be assessed in your answer to Question 2(d)(iii).

(Turn over)

SECTION A: CORE THEMES

Answer ALL questions in this section.

CORE THEME 1: LANDSCAPES AND PHYSICAL PROCESSES

1 Study MAP 1.1 opposite.

(a)(i) Describe the distribution of chalk landscapes in England. [3 marks]

(Turn over)

1 (a)(ii) Geology is one factor that makes UK landscapes distinctive.

Name ONE other factor. [1 mark]

(iii) Name a distinctive landscape you have studied.

Describe ONE strategy that has been used to manage visitors in this location. [3 marks]

Name of landscape: _____

(Turn over)

1 (b) Study PHOTOGRAPH 1.2 opposite.

(i) Identify the small-scale feature at A. [1 mark]

Tick (✓) the correct box below.

FEATURE	TICK (✓)
Slip-off slope	
Rock pool	
Bedding plane	

(Turn over)

1 (b)(ii) Complete the paragraph below by selecting the correct terms from the box. [3 marks]

attrition	wave-cut notch	slump	hydraulic action	
spit	rock fall	rock pool	slip-off slope	abrasion

Waves use pebbles from the beach to erode the foot of the cliff through the process of _____.

Repeated wave action can result in the formation of a _____.

Eventually, overhanging rocks can collapse suddenly to the beach below in a _____.

(Turn over)

1 (b)(iii) Erosion at the foot of cliffs can also trigger landslides.

Give TWO other reasons why landslides occur along some coastlines of the UK. [4 marks]

Reason 1: _____

Reason 2: _____

(Turn over)

1 (c) Study MAP 1.3 opposite. It shows an area covered by flood alerts and warnings.

(i) Give TWO land uses which are in the flood risk zone.
[2 marks]

Land Use 1: _____

Land Use 2: _____

(ii) (Circle) the correct answer in the statement below.
[1 mark]

**The risk of flooding in some parts of Chester is 1% or greater. This can also be expressed as a
(1:100 / 1:500 / 1:1000) risk of flooding.**

(Turn over)

1 (c)(iii) Human factors often increase the risk of river flooding. Explain why. [6 marks]

[illegible]

(Turn over)

1 (d) Study OS MAP 1.4 opposite and the key on page 52.

The map shows the western part of the Somerset Levels, which is an area of flat, low-lying land.

(i) Describe the location of the village of Huntspill in grid squares 3045 and 3145. [2 marks]

(Turn over)

1 (d)(ii) Study OS MAP 1.4 opposite page 11 and RESOURCE BOX 1.5 below and opposite pages 12, and 13.

RESOURCE BOX 1.5:

THE SOMERSET LEVELS AND ITS COASTLINE

- **The Somerset Levels is an area of flat and low-lying land, consisting of a coastal plain and wetlands.**
- **Drainage ditches called rhynes (grid square 2743) have been used to turn natural wetland into farmland.**
- **The Huntspill River (grid square 3144) is an important drainage ditch.**
- **Dredging is currently used to remove sediment from the rivers.**
- **The River Parrett is tidal – this means that at high tide seawater travels a long way upstream and increases the volume of water in the river.**
- **A tidal barrier (flood defence) at Bridgwater should be completed by the end of 2027. This will have gates that can be closed to prevent high-water levels travelling upstream.**
- **Burnham-on-Sea is a popular seaside resort, located close to the mouth of the River Brue (grid square 3047).**
- **The sea wall at Burnham-on-Sea was completed in 1988. Vehicle access points to the seafront can be closed during storms using sealed gates.**
- **The prevailing winds are from the south-west.**
- **Storm Ciarán damaged this coastline during November 2023.**

(Turn over)

This part of the UK is vulnerable to high rates of landform change in both its coastal and river landscapes.

Use the resources to suggest why climate and human activity are two important causes of landform change in this area. [8 marks]

[illegible]

(Turn over)

Additional space for Question 1(d)(ii) only:

END OF QUESTION 1

(Turn over)

CORE THEME 2: RURAL–URBAN LINKS

2 (a) Study MAP 2.1a and MAP 2.1b opposite.

(i) Describe the pattern of population density in Great Britain. Use MAP 2.1a. [3 marks]

(Turn over)

2 (a)(ii) Describe the relationship between population density and the amount of light emitted. Use MAPS 2.1a and 2.1b. [1 mark]

2 (b) Study Graph 2.2 opposite.

(i) Give the modal class for the distance travelled to work. [1 mark]

(ii) Give the percentage of employed adults that travel more than 20 km to work. [1 mark]

(Turn over)

2 (b)(iii) Complete the sentence below. [1 mark]

The regular movement of workers from their home to work is known as

_____.

(iv) Urban areas are closely linked to their surrounding rural areas by this flow of workers along transport routes.

Describe ONE other way in which urban and rural areas are linked. [3 marks]

(Turn over)

- 2 (c) Study Table 2.3 below. It shows information about population change between the 2011 and 2021 censuses for England and Wales.

TABLE 2.3: POPULATION CHANGE IN ENGLAND AND WALES, 2011–2021

Population in 2011	56.1 million
Decrease due to deaths	–5.3 million
Increase due to births	+6.8 million
Change due to migration	+2.0 million
Population in 2021	?

2 (c)(i) Calculate the population for England and Wales in 2021. [2 marks]

Show your working in the box below.

Answer _____ **million**

(Turn over)

2 (c)(ii) Give TWO reasons why migration into the UK brings benefits to the country. [4 marks]

Reason 1: _____

Reason 2: _____

(Turn over)

2 (d)(i) Global cities are connected with other places at a global scale.

Describe TWO ways in which global cities are well-connected. [4 marks]

Way 1: _____

Way 2: _____

(Turn over)

2 (d)(ii) Explain why there are social and cultural patterns within an HIC global city you have studied.

[6 marks]

Name of HIC global city

(Turn over)

2 (d)(iii) Study the information in RESOURCE BOX 2.4 below and opposite pages 26 and 27.

**RESOURCE BOX 2.4:
INFORMATION ABOUT MEXICO CITY
(CIUDAD DE MÉXICO)**

- **Mexico City is the capital city of Mexico with a population of just over 22 million (2023).**
- **Approximately a quarter of the population of Mexico lives in and around the city.**
- **The city is surrounded by mountains and is at an altitude of 2240 metres.**
- **The city also has an extensive bus network.**
- **It has numerous World Heritage Sites and museums.**
- **There are also lots of parks and green spaces and a large university.**
- **Some neighbourhoods are unsafe.**
- **Air pollution can hang over the city.**
- **There are frequent traffic jams.**

(Turn over)

Many global cities, such as Mexico City, are located in NICs or LICs.

‘The positives for people living in these global cities outweigh the negatives’.

How far do you agree with this statement?

Use evidence in RESOURCE BOX 2.4 and your own knowledge. [8 marks]

Your ability to spell, punctuate and use grammar and specialist terminology accurately will be assessed in your answer to this question. [4 marks]

(Turn over)

(Turn over)

Additional space for Question 2(d)(iii) only:

END OF QUESTION 2

(Turn over)

SECTION B: OPTIONS

Answer ONE question in this section.

Choose EITHER Question 3 (Theme 3) OR Question 4 (Theme 4).

THEME 3: TECTONIC LANDSCAPES AND HAZARDS

3 (a) Give TWO impacts of earthquakes on infrastructure.
[2 marks]

Impact 1: _____

Impact 2: _____

(Turn over)

3 (b) Explain why ocean trenches are found at destructive plate margins. [4 marks]

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(Turn over)

3 (c) Study MAP 3.1 opposite. It shows the location of Goma, a city in the Democratic Republic of Congo in Africa.

(i) Complete the box below to give the latitude and longitude of Goma. [2 marks]

	Latitude	Longitude
Goma	°S	29°

(Turn over)

3 (c)(ii) Study the information in RESOURCE BOX 3.2 on and opposite pages 34 and 35.

RESOURCE BOX 3.2: INFORMATION ABOUT A VOLCANIC AREA ON A CONSTRUCTIVE BOUNDARY

MOUNT NYIRAGONGO, NEAR GOMA

- **Mount Nyiragongo is a steep-sided stratovolcano which is 3470 metres high.**
- **The main crater is about 2 kilometres wide and contains a lava lake.**
- **The volcano's magma contains high levels of carbon dioxide which can be toxic.**
- **The volcano is active, having erupted in 1977, 2002 and 2021.**
- **It is on a constructive boundary in the East African Rift Valley where the Nubian plate is moving away from the Somalian plate.**

(Turn over)

Study the MAP and PHOTOGRAPH opposite.

THE LOCATION OF MOUNT NYIRAGONGO

- **Mount Nyiragongo is located in the eastern part of the Democratic Republic of Congo (DRC), close to the border with Rwanda.**
- **It is about 10 kilometres north of the cities of Goma in the DRC and Gisenyi in Rwanda.**
- **Goma's population is 670000 and Gisenyi's is 270000.**
- **During the eruption of 2021, the lava reached speeds of 64 km/hour moving towards Goma and the border with Rwanda.**
- **Both the DRC and Rwanda are classified as Low Income Countries (LICs).**

(Turn over)

Are communities located close to volcanoes along constructive plate margins more vulnerable than those in other volcanic areas? [8 marks]

Justify your reasons. Use evidence in RESOURCE BOX 3.2 and your own knowledge.

(Turn over)

Additional space for Question 3(c)(ii) only:

END OF QUESTION 3

(Turn over)

THEME 4: COASTAL HAZARDS AND THEIR MANAGEMENT

If you have answered Question 3, DO NOT answer Question 4.

4 (a) Give TWO ways in which the risk of coastal floods could be reduced. [2 marks]

Way 1: _____

Way 2: _____

(Turn over)

4 (b) Explain why sea level rise may lead to more environmental refugees in the future. [4 marks]

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(Turn over)

4 (c) Study MAP 4.1 opposite. It shows the location of Port Harcourt, a city in Nigeria.

(i) Complete the box below to give the latitude and longitude of Port Harcourt. [2 marks]

	Latitude	Longitude
Port Harcourt	_____°N	7° _____

(Turn over)

4 (c)(ii) Study the information in RESOURCE BOX 4.2 below and opposite pages 43 and 44.

RESOURCE BOX 4.2:

INFORMATION ABOUT LOW-LYING COASTAL AREAS NEAR MOUTHS OF RIVERS

- New Orleans (a large city in the USA) is located at the mouth of the Mississippi river.
- Millions of people live near the mouths of major rivers in Bangladesh, Egypt, Vietnam, Cambodia and Nigeria.
- The River Niger enters the sea at the Gulf of Guinea on the Atlantic Ocean.
- It extends over a huge area.

THE LOCATION OF PORT HARCOURT, NIGERIA

- The population of Port Harcourt in 2023 was 1.9 million and it is a densely populated city.
- The city experiences a heavy rainfall season and a very short dry season.
- People living in the city are also affected by sinking of the land.
- Nigeria is currently on its way to becoming a Newly Industrialised Country (NIC).

(Turn over)

(Turn over)

Additional space for Question 4(c)(ii) only:

END OF QUESTION 4

END OF PAPER

(Turn over)

QUESTION NUMBER	ADDITIONAL PAGE, IF REQUIRED. WRITE THE QUESTION NUMBER(S) IN THE LEFT-HAND MARGIN.

(Turn over)

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(Turn over)

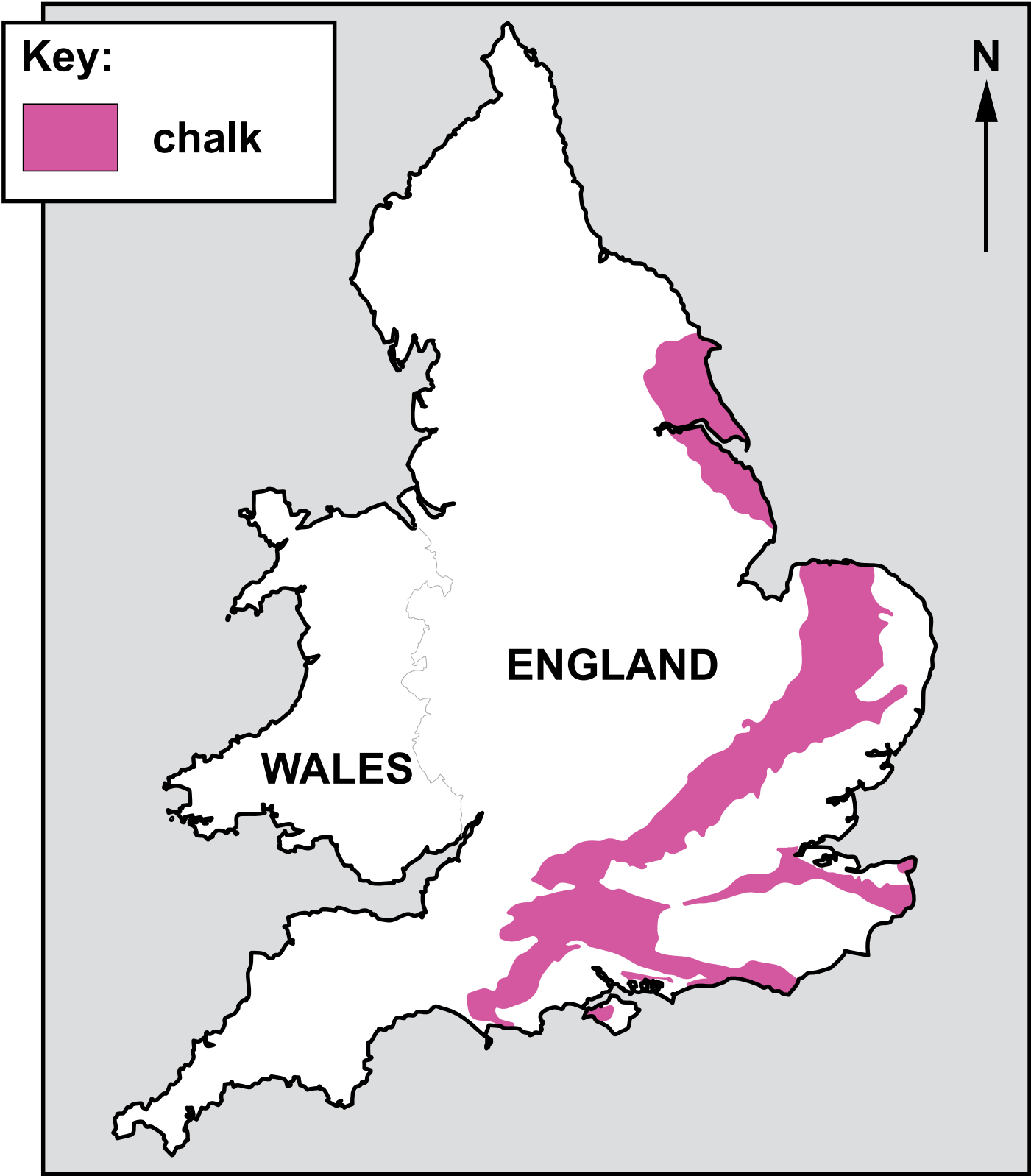
QUESTION NUMBER	ADDITIONAL PAGE, IF REQUIRED. WRITE THE QUESTION NUMBER(S) IN THE LEFT-HAND MARGIN.

(Turn over)

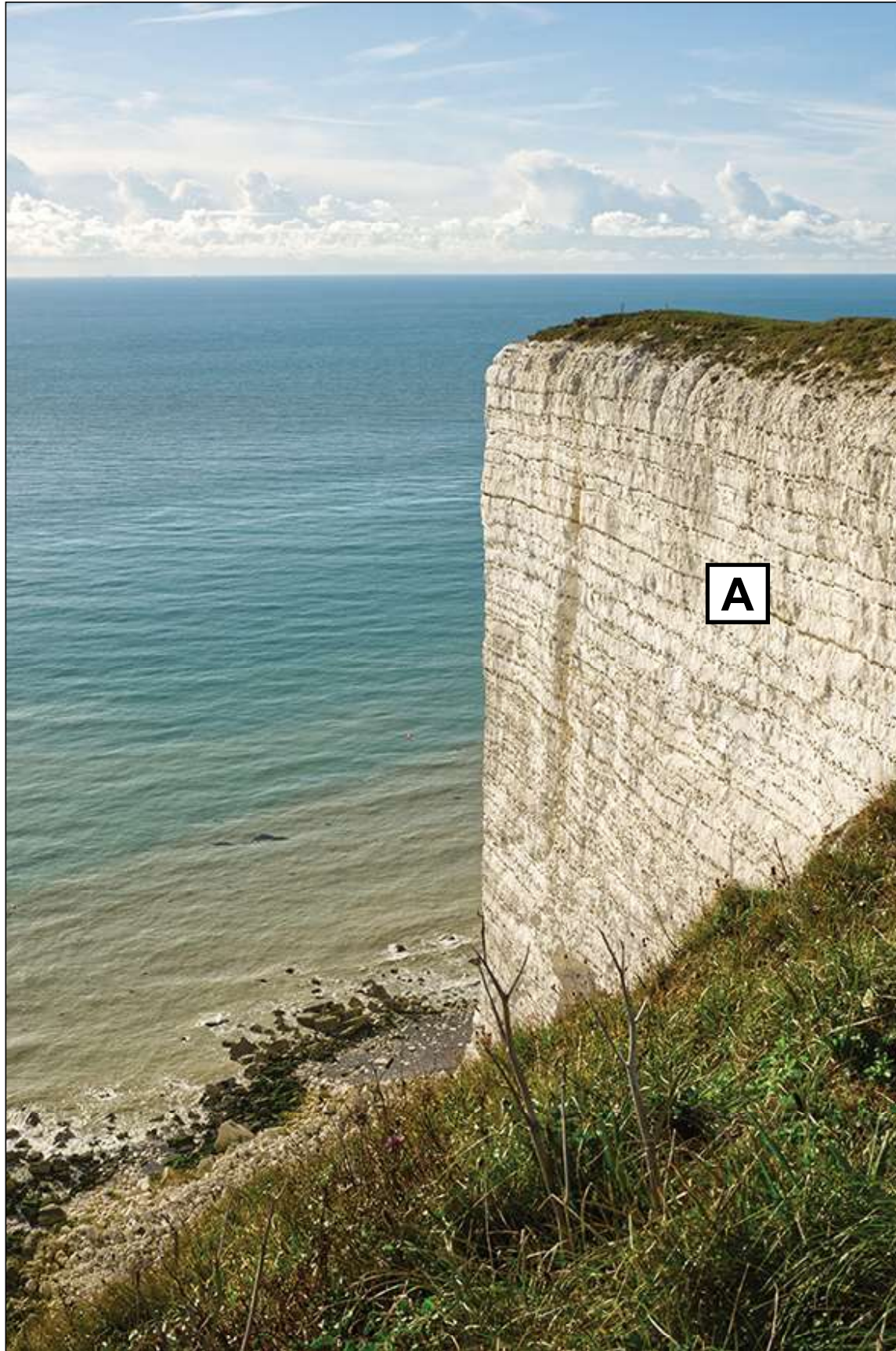
QUESTION NUMBER	ADDITIONAL PAGE, IF REQUIRED. WRITE THE QUESTION NUMBER(S) IN THE LEFT-HAND MARGIN.

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1	34	
2	34	
SPaG	4	
either 3	16	
or 4	16	
Total	88	

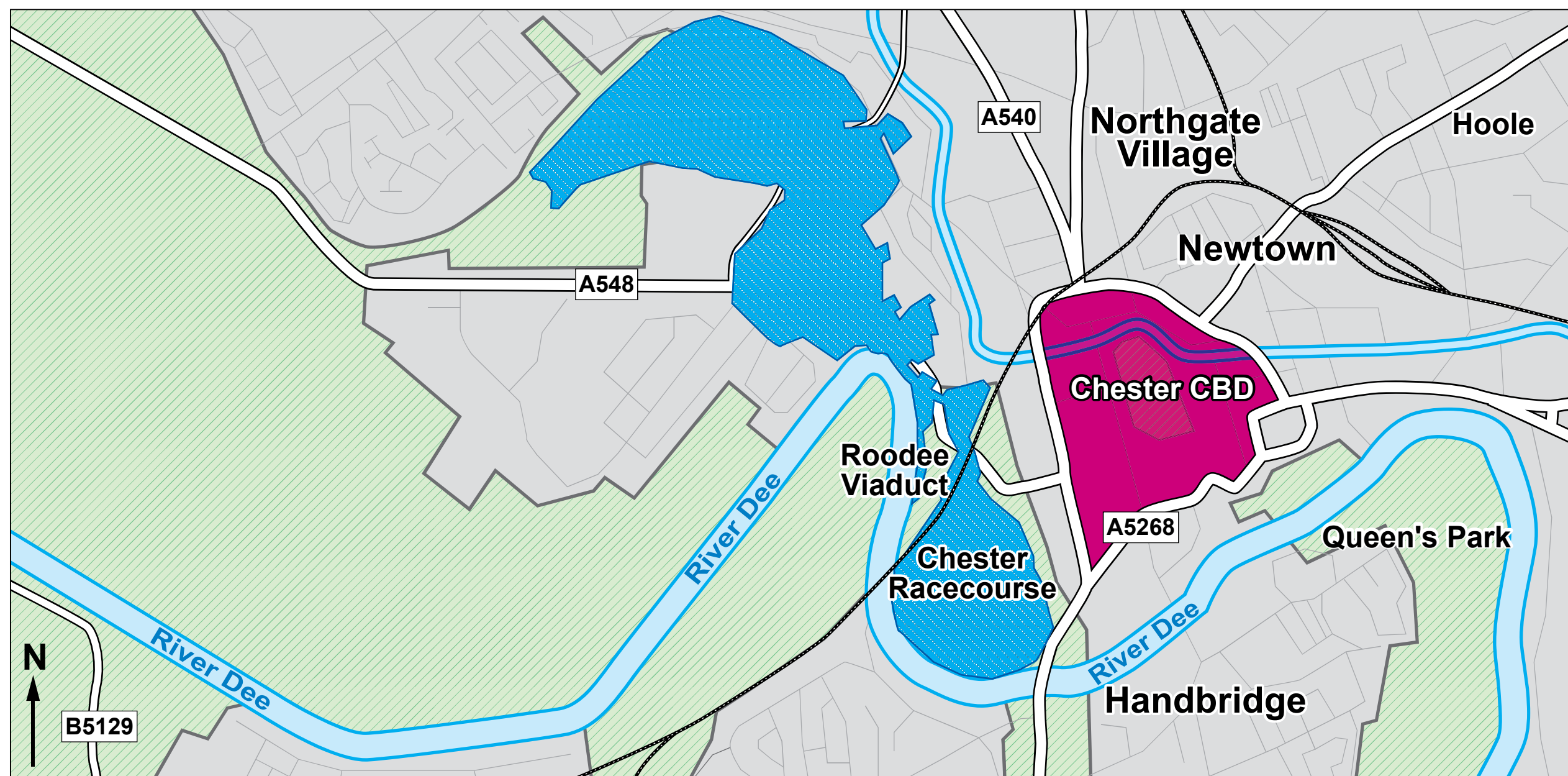
MAP 1.1: THE DISTRIBUTION OF CHALK LANDSCAPES IN ENGLAND



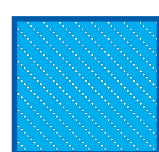
PHOTOGRAPH 1.2: A CHALK CLIFF IN EAST SUSSEX



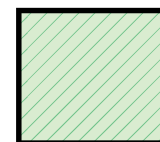
MAP 1.3: THE RIVER DEE AT CHESTER



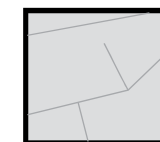
Key:



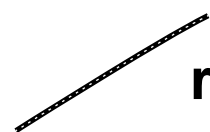
area covered by flood
alerts and warnings
(Flood Risk Zone)



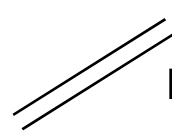
open space



residential



railway

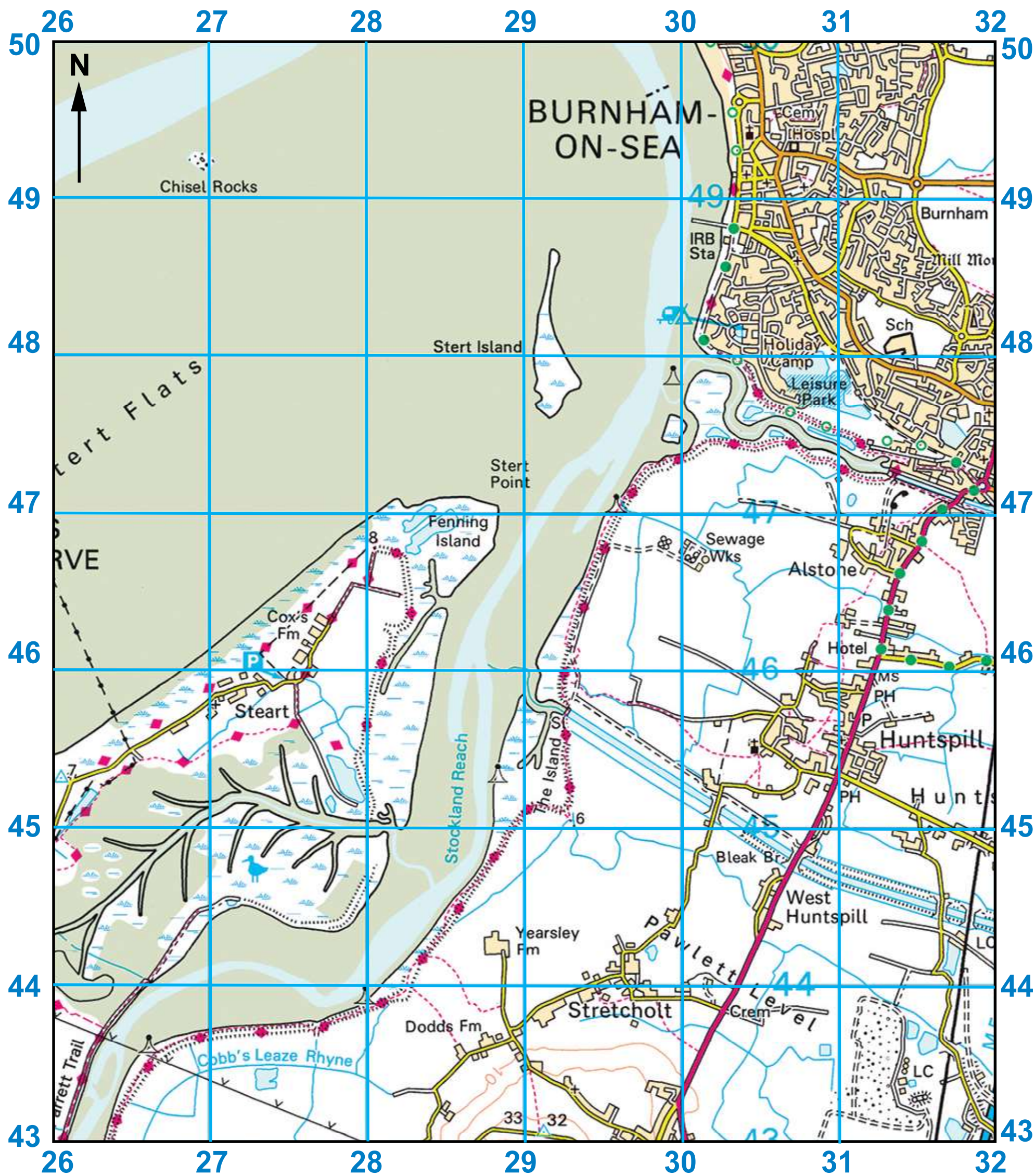


main road



CBD (Central Business District)

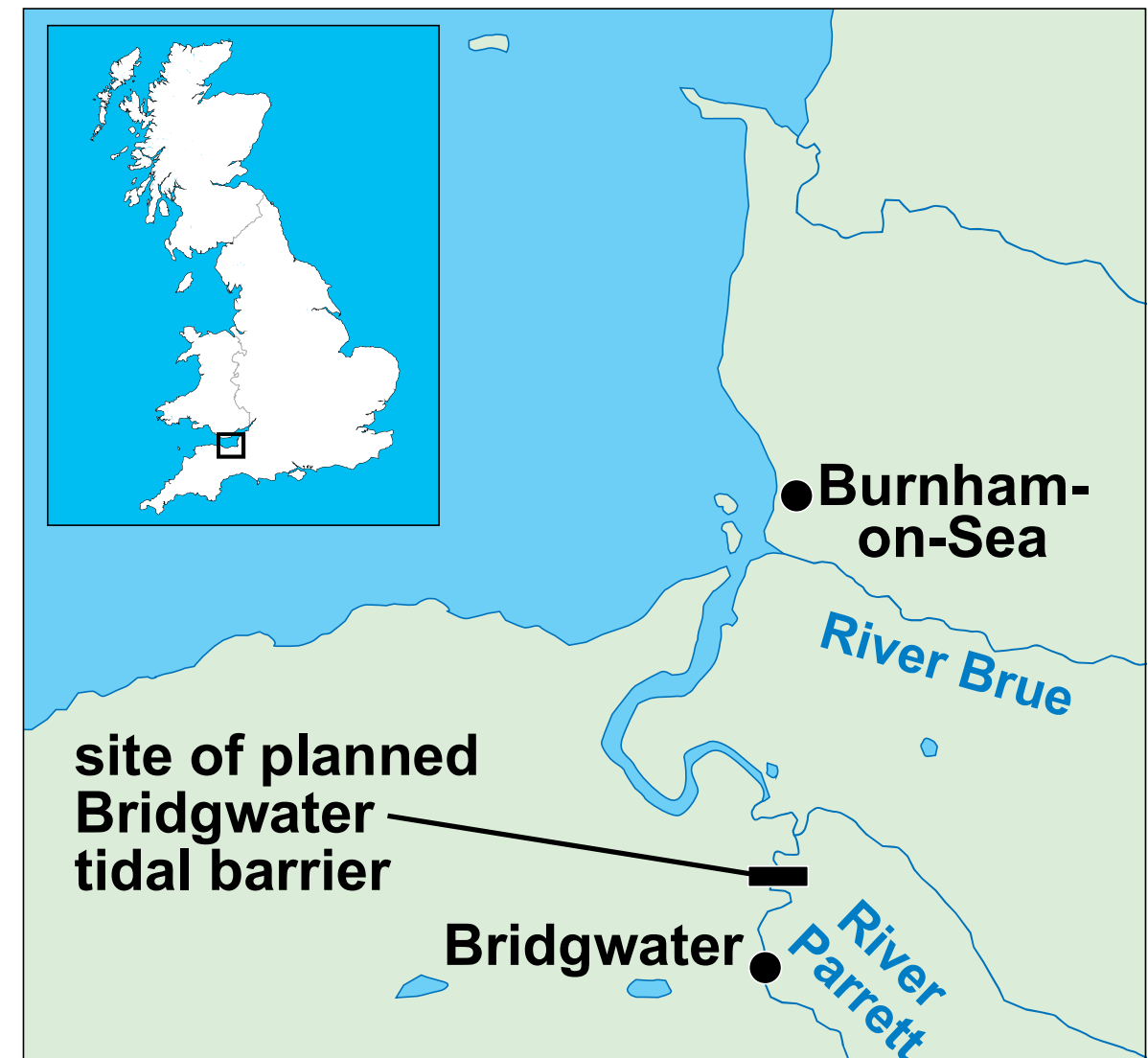
OS MAP 1.4: PART OF THE SOMERSET LEVELS



THE HUNTSPILL RIVER



THE LOCATION OF BRIDGWATER AND BURNHAM-ON-SEA



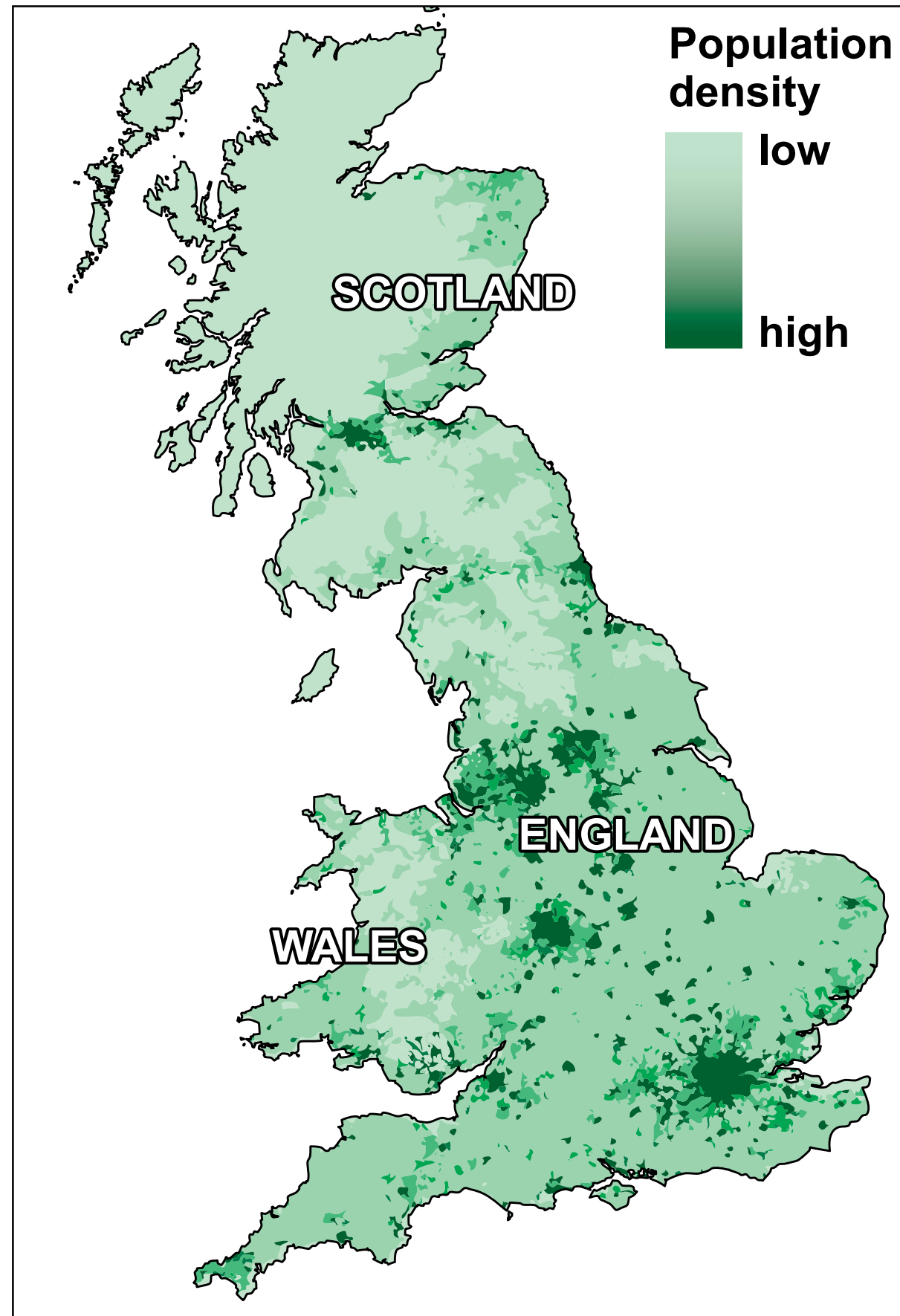
THE MOUTH OF THE RIVER BRUE



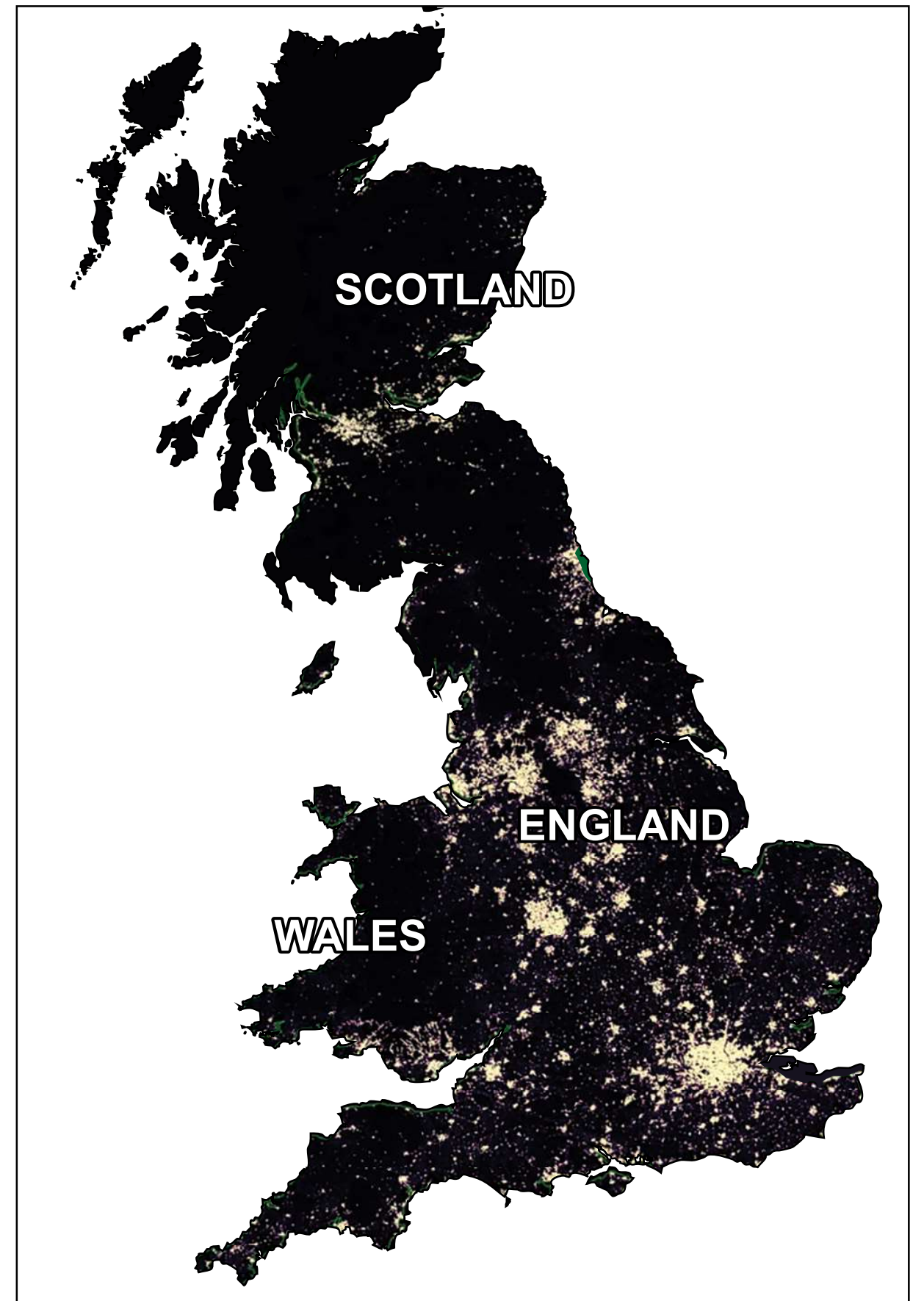
THE SEA WALL AT BURNHAM-ON-SEA



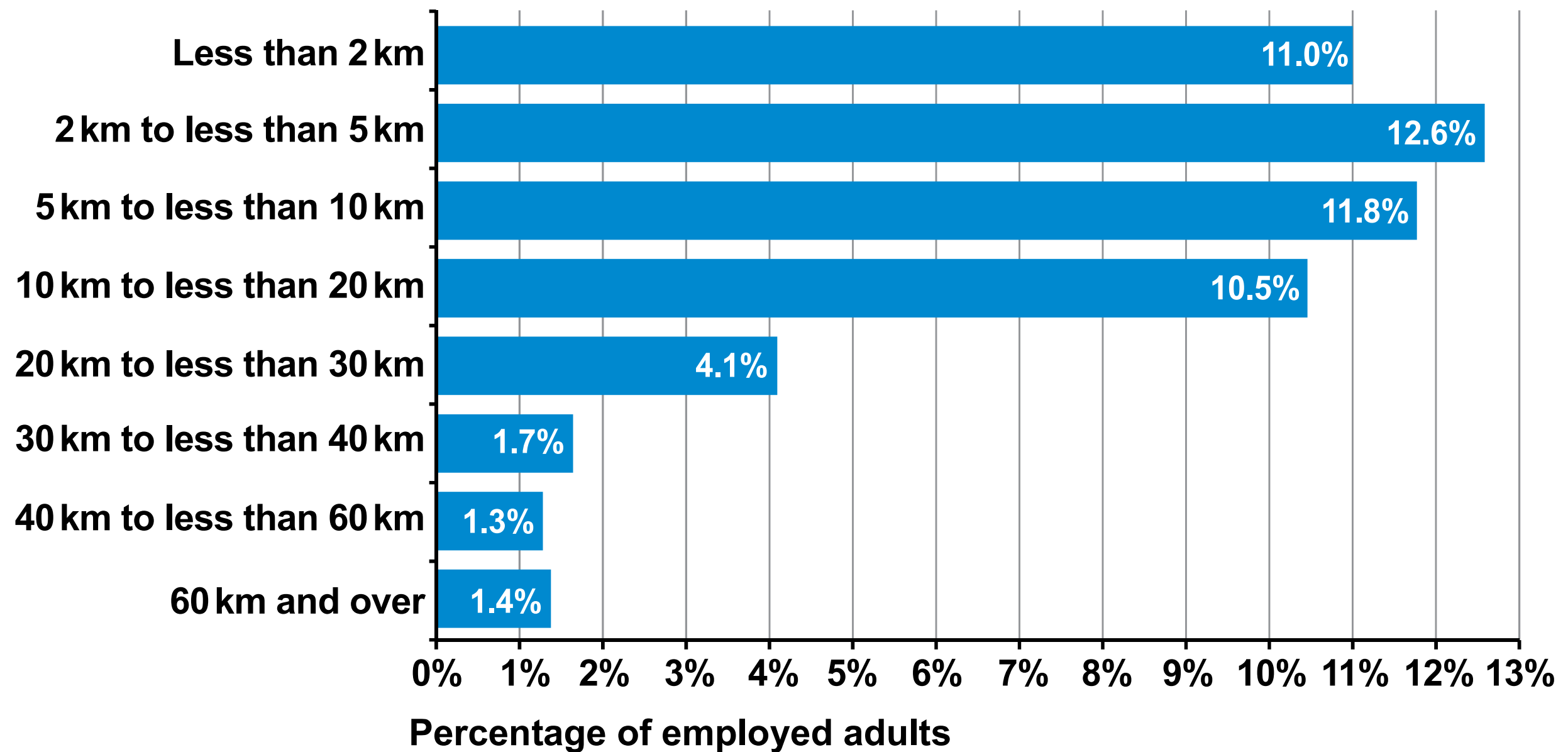
MAP 2.1a: POPULATION DENSITY IN GREAT BRITAIN



MAP 2.1b: LIGHT EMITTED FROM THE SURFACE OF GREAT BRITAIN (AS SEEN AT NIGHT)



GRAPH 2.2: DISTANCE TRAVELLED TO WORK IN ENGLAND AND WALES, 2021



THE LOCATION OF MEXICO CITY



AN AERIAL VIEW OF THE BUSINESS CENTRE



PEOPLE WAITING FOR A TRAIN AT A RAILWAY STATION



INFORMAL HOUSING IN THE CITY



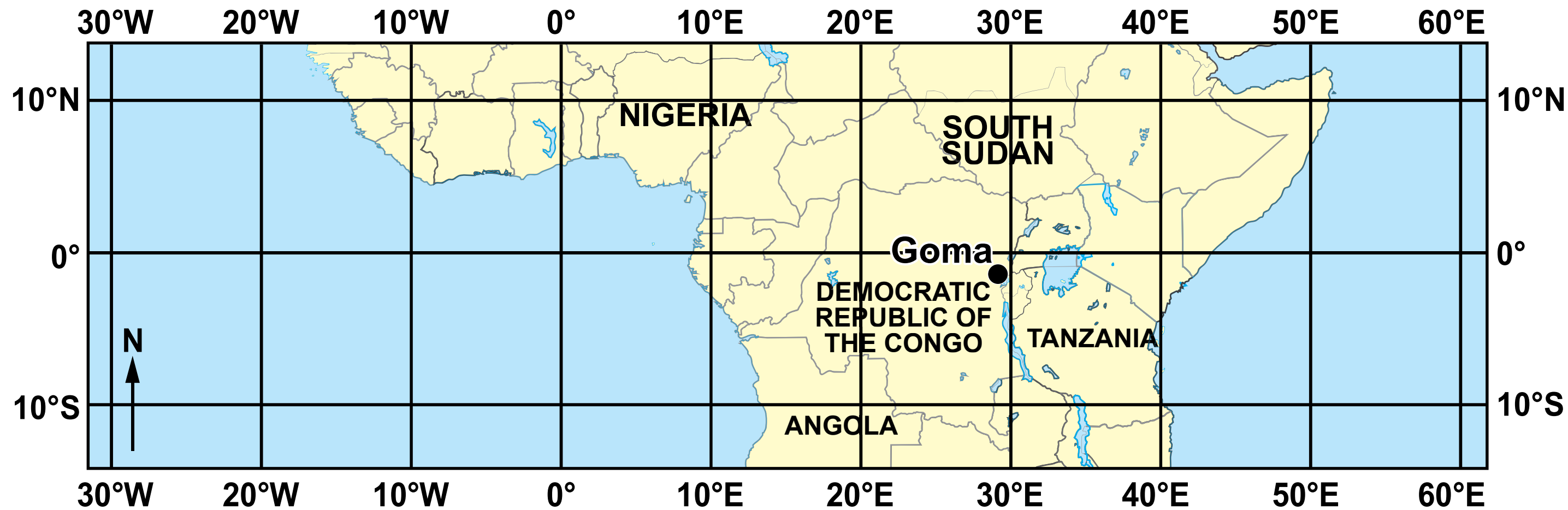
RESIDENTS COLLECTING DRINKING WATER



VALLE DE BRAVO - A POPULAR WEEKEND DESTINATION FOR RESIDENTS OF MEXICO CITY



MAP 3.1: THE LOCATION OF GOMA

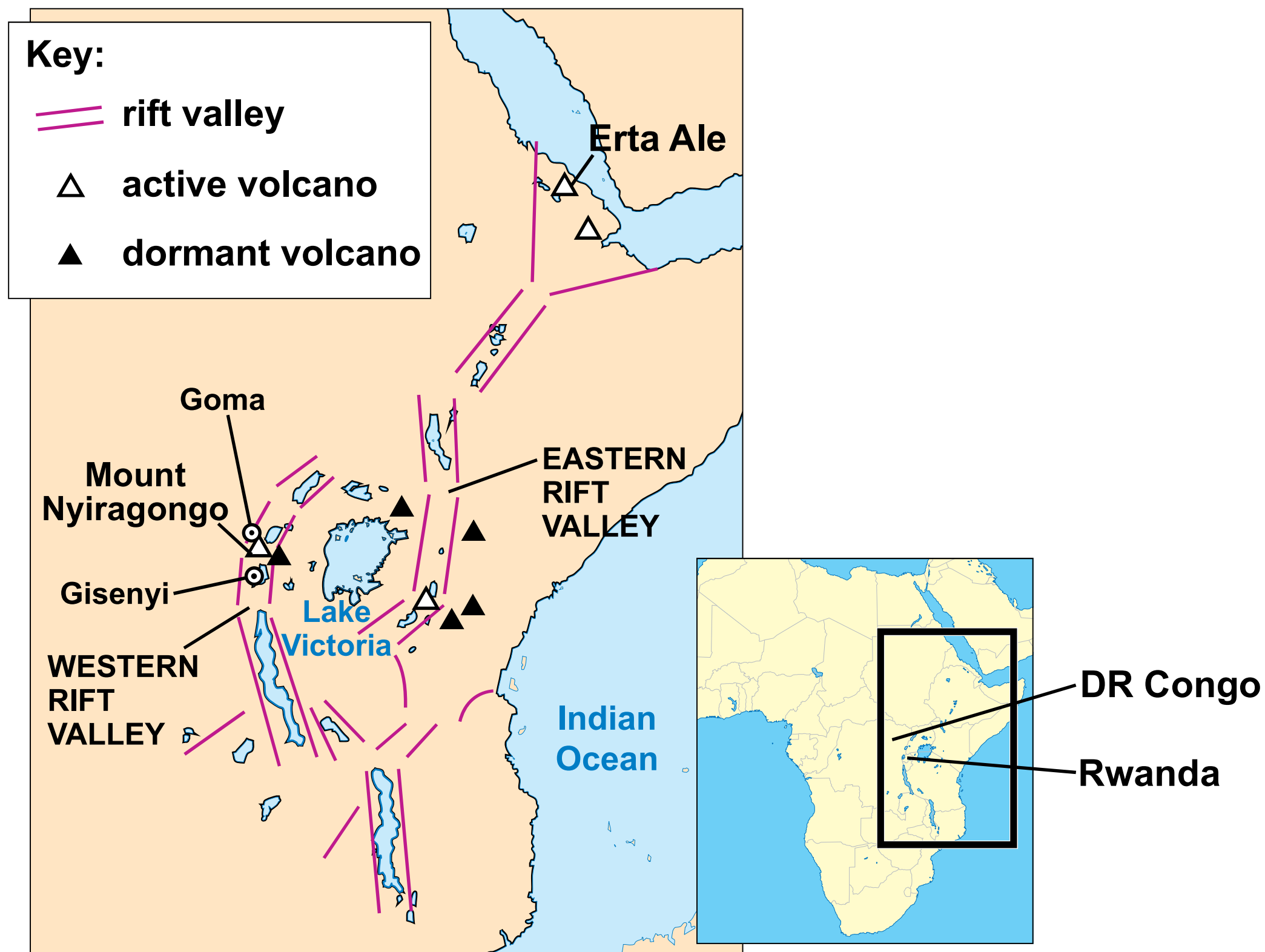


THE CRATER DURING AN ERUPTION



THE EAST AFRICAN RIFT VALLEY

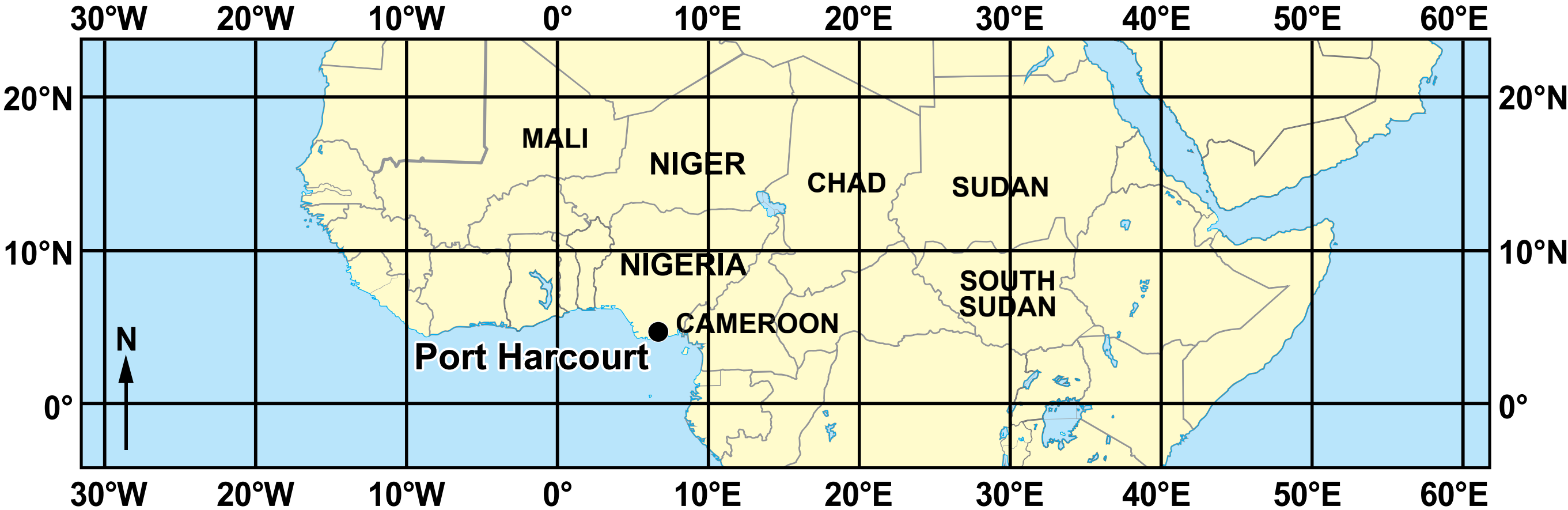
A VOLCANIC AREA ON A CONSTRUCTIVE PLATE BOUNDARY



RESIDENTS FLEEING GOMA IN MAY 2021



MAP 4.1: THE LOCATION OF PORT HARCOURT



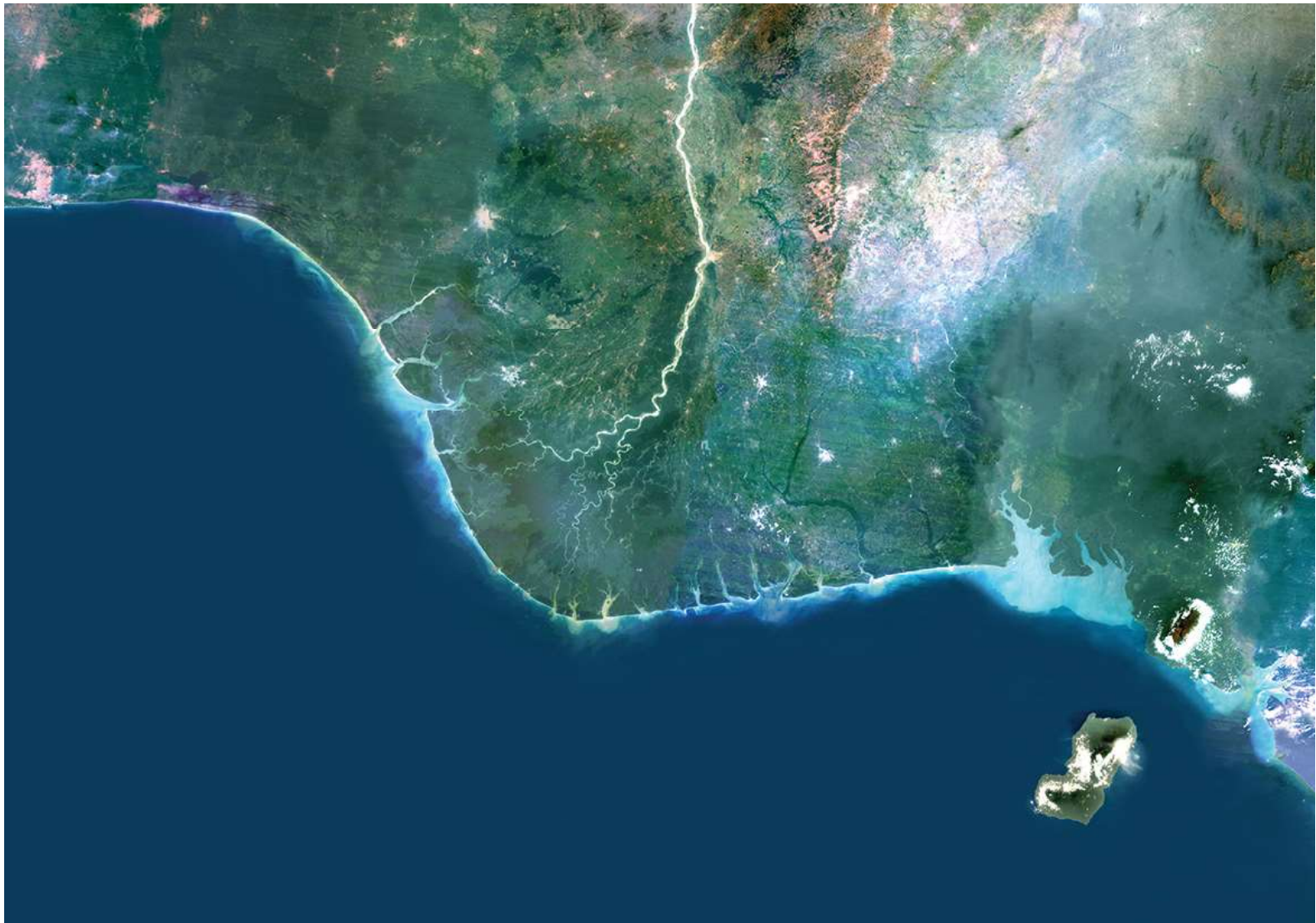
THE LOCATION OF PORT HARCOURT, NIGERIA



WATERFRONT HOMES AT THE MOUTH OF THE MEKONG RIVER, VIETNAM



SATELLITE IMAGE OF THE MOUTH OF THE RIVER NIGER IN NIGERIA, AFRICA



Landranger series (1:50 000 scale)

LANDRANGER MAP SYMBOLS



ROADS AND PATHS

Not necessarily rights of way

Service area

M1

Elevated

1 Junction number

Unfenced

Dual carriageway

A 470

Footbridge

A 493

Road under construction

B 4518

Secondary road

A 855

Narrow road with passing places

B 885

Bridge

Road generally more than 4m wide

Road generally less than 4m wide

Other road, drive or track

Path

Gradient: steeper than 20% (1 in 5)/ 14% to 20% (1 in 7 to 1 in 5)

Gates / Road tunnel

Ferry P

Ferry V

Ferry (passenger) / Ferry (vehicle)

LAND FEATURES

Cutting, embankment

Electricity transmission line (pylons shown at standard spacing)

Pipe line (arrow indicates direction of flow)

Buildings

Important building (selected)

Bus or coach station

Glass structure

Heliport

Current or former place of worship; with tower with spire, minaret or dome

Place of worship

Triangulation pillar

Mast

Wind pump

Wind turbine

Windmill with or without sails

Graticule intersection at 5' intervals

Landfill site or slag/spoil heap

Coniferous wood

Non-coniferous wood

Mixed wood

Orchard

Park or ornamental ground

Access land (symbols indicate owner or agency - see below)

Forestry Commission

Natural Resources Wales

National Trust; always open, limited access - observe local signs

National Trust for Scotland; always open, limited access - observe local signs

RAILWAYS

Track multiple or single

Track under construction

Light rail system, narrow gauge or tramway

Bridges, footbridge

Tunnel, cutting

Station, (a) principal

Siding

Light rail system station

Level crossing

Viaduct, embankment

PUBLIC RIGHTS OF WAY

Not shown on maps of Scotland

Footpath

Bridleway

Restricted byway (not for use by mechanically propelled vehicles)

Byway open to all traffic

The representation on this map of any other road, track or path is no evidence of the existence of a right of way.

Public rights of way shown on this map have been taken from local authority definitive maps and later amendments.

The symbols show the defined route so far as the scale of the mapping will allow.

Rights of way are liable to change and may not be clearly defined on the ground. Please check with the relevant local authority for the latest information. Rights of way are not shown on maps in Scotland.

OTHER PUBLIC ACCESS

National Trail, Scotland's Great Trails, European Long Distance Path and selected Recreational Routes

On-road cycle route

Traffic-free cycle route

4 8 Cycle Network number; National / Regional

Other route with public access (not normally shown in urban areas)

The exact nature of the rights on these routes and the existence of any restrictions may be checked with the local highway authority. Alignments are based on the best information available. These routes are not shown on maps of Scotland

Danger Area Firing and Test Ranges in the area. Danger! Observe warning notices.

BOUNDARIES

National

County, Unitary Authority, Metropolitan District or London Borough

District

National Park

WATER FEATURES

Marsh or salting

Towpath

Lock

Ford

Cliff

Slopes

Flat rock

High water mark

Low water mark

Aqueduct

Canal

Weir

Normal tidal limit

Footbridge

Bridge

Sand

Dunes

Lighthouse (in use)

Lighthouse (disused)

Beacon

Shingle

Mud

Canal (dry)

ABBREVIATIONS

See website for full list

Br	Bridge	MS	Milestone
Cemy	Cemetery	Mus	Museum
CG	Cattle grid	P	Post office
CH	Clubhouse	P C	Public convenience (in rural areas)
Coll	College	P H	Public house
Fm	Farm	Sta	Station
Ho	House	Sch	School
Hospl	Hospital	T H	Town Hall, Guildhall or equivalent
MP	Milepost	Univ	University

ARCHAEOLOGICAL AND HISTORICAL INFORMATION

+	Site of antiquity	VILLA	Roman	1066	Site of battle (with date)
✱	Visible earthwork	Castle	Non-Roman		

HEIGHTS

Contours are at 10 metres vertical interval

Heights are to the nearest metre above mean sea level

14 4

Where two heights are shown, the first is the height of the natural ground in the location of the triangulation pillar, and the second (in brackets) to a separate point which is the natural summit.

ROCK FEATURES

Cliff 650

Outcrop 600

Cliff 580

Scree 550

TOURIST INFORMATION

Viewpoint 180°

Viewpoint 360°

Visitor centre

Walks / trails

Nature reserve

Picnic site

Youth hostel

Golf course or links

Garden / arboretum

Camp site / Caravan site

Camping and caravan site

Selected places of tourist interest

Information centre, all year / seasonal

Parking

Park & Ride, all year / seasonal

Phone, public / emergency / roadside assistance

Recreation / leisure / sports centre

World Heritage site or area