

## Appendix 1 - SFRA Data Sources

### **Epsom and Ewell Borough Council (EEBC) / Surrey County Council (LLFA)**

The following data is required from EEBC and the LLFA.

- The Epsom and Ewell borough boundary
- Localised drainage issues dataset
- Drainage channels
- Historical flooding records (river, multiple, surface water, groundwater, blocked gullies)
- Existing and proposed flood defences
- Funding for new/ proposed defences
- Surface water sustainable drainage systems and storage areas
- Natural Flood Management (NFM) data – pipeline, live or complete schemes
- Superficial aquifers
- Bedrock aquifers
- Town centre boundaries
- Flood Zones 3a and 3b extents (Functional Floodplain)
- Catchments / sub-catchments / Critical Drainage Areas
- Modelling from any water source
- Local Priority Areas / Development Opportunity Areas
- Information / comments from Regulation 19 consultation
- Site allocations
- Ordinary Watercourses

### **Environment Agency (EA)**

The following data is required from the EA and will require formal data requests to be issued.

- River breach hazard ratings
- Modelled defence breach locations
- Fluvial flood hazard ratings
- Thames flood extents

Metis Consultants Ltd

*Company Registered in England and Wales Number: 7074879*

*Registered Office: 2 Sheen Road, Richmond. TW9 1AE*

- NFM data – pipeline, live or complete schemes
- Main river model extent(s) – 1 in 100-year + climate change return periods

## Thames Water (TWUL)

The following data is required from TWUL and will require formal data requests to be issued, which may require the signing of a data sharing agreement.

- Sewer flooding incident records
- A localised drainage issues dataset for the Epsom and Ewell Borough
- Sewer capacity dataset
- Any proposed locations for new sewerage infrastructure

## British Geological Society (BGS)

The following data is required from the BGS and will require formal data requests to be issued, which may require the signing of a data sharing agreement.

- Groundwater flooding susceptibility - [Access details](#)

The following data is freely accessible via the BGS Data Portal and will be obtained and downloaded by the Metis project team on behalf of EEBC.

- Geology 625k
  - Bedrock - [Download](#)
  - Superficial - [Download](#)

## DEFRA Data Portal

The following data is freely accessible via the DEFRA Data Portal and will be obtained and downloaded by the Metis project team on behalf of EEBC.

- Flood zone 2 - [Download](#)
- Flood zone 3 - [Download](#)
- Spatial flood defences (flood gates, flood walls, flood embankments, flood storage areas, pumps, barriers, any other structure) - [Download](#)
- Main River Network - [Download](#)
- Reduction in Risk of Flooding from Rivers and Sea due to defences - [Download](#)
- Historic flood map - [Download](#)

- Recorded flood outlines - [Download](#)
- Flood storage areas - [Download](#)
- Flood warning areas - [Download](#)
- Flood alert areas - [Download](#)
- Reservoir flood extents
  - Wet day - [Download](#)
  - Dry day - [Download](#)
- LIDAR Composite Digital Terrain Model (DTM) - 1m - [Download](#)
- Risk of flooding from surface water: Extent
  - 1 in 30yr - [Download](#)
  - 1 in 100yr - [Download](#)
  - 1 in 1000yr - [Download](#)
- Risk of flooding from surface water: Depth
  - 1 in 30yr - [Download](#)
  - 1 in 100yr - [Download](#)
  - 1 in 1000yr - [Download](#)
- Risk of flooding from surface water: Hazard
  - 1 in 30yr - [Download](#)
  - 1 in 100yr - [Download](#)
  - 1 in 1000yr - [Download](#)
- Risk of flooding from surface water: Velocity
  - 1 in 30yr - [Download](#)
  - 1 in 100yr - [Download](#)
  - 1 in 1000yr - [Download](#)
- Groundwater source protection zones - [Download](#)

## Ordnance Survey (OS)

The following data is freely accessible via the OS Data Hub and will be obtained and downloaded by the Metis project team on behalf of EEBC.

- OS OpenMap - Local - [Download](#)

Metis Consultants Ltd

*Company Registered in England and Wales Number: 7074879*

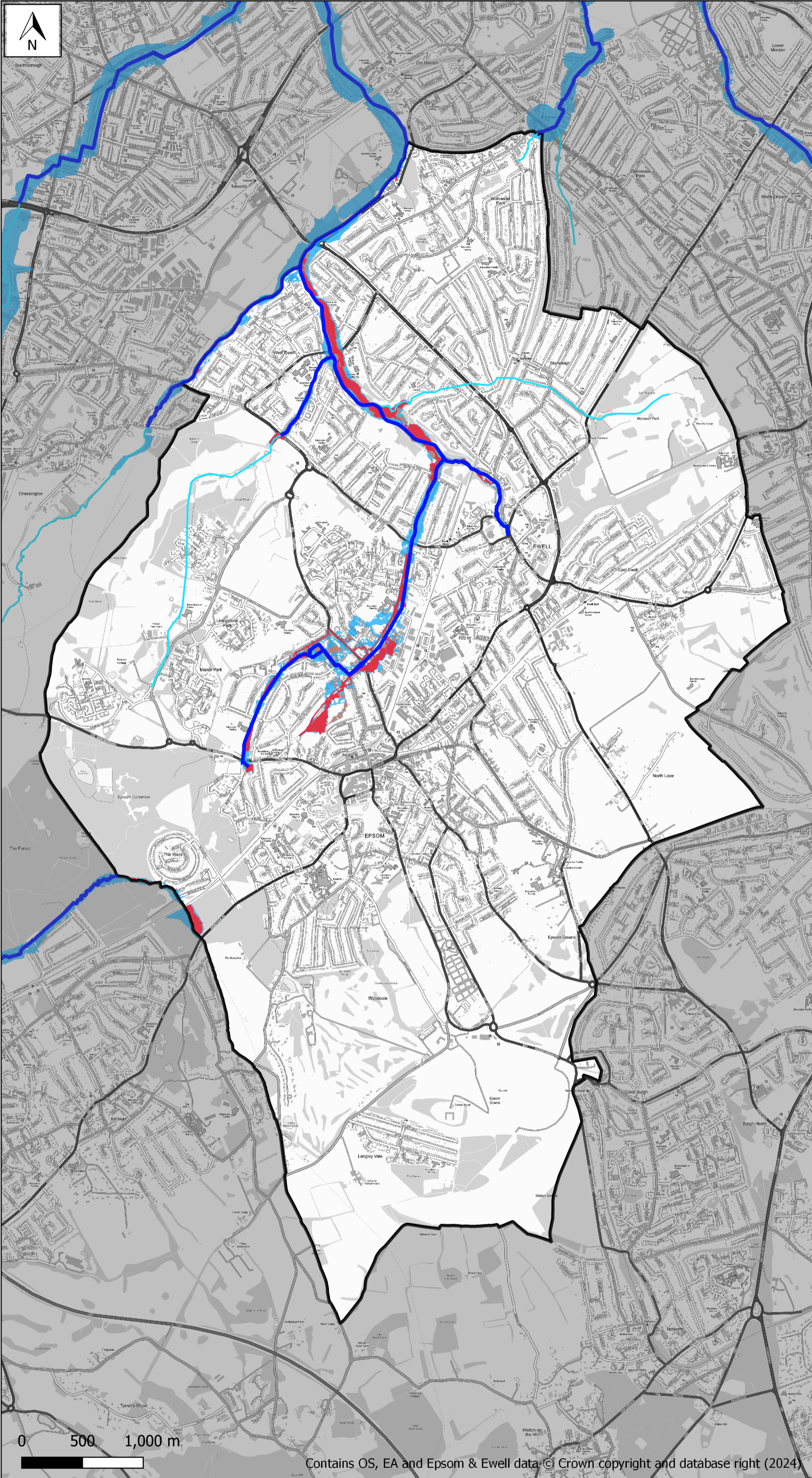
*Registered Office: 2 Sheen Road, Richmond. TW9 1AE*

## Appendix 2 – Mapping







Metis Consultants Ltd

*Company Registered in England and Wales Number: 7074879*

*Registered Office: 2 Sheen Road, Richmond. TW9 1AE*



**Legend**

-  Borough Boundary
-  Statutory Main River
-  Ordinary Watercourse
- Flood Zones**
-  Flood Zone 2
-  Flood Zone 3a
-  Flood Zone 3b

**METIS**  
metisconsultants.co.uk

Client  
**EPSOM & EWELL**  
BOROUGH COUNCIL 

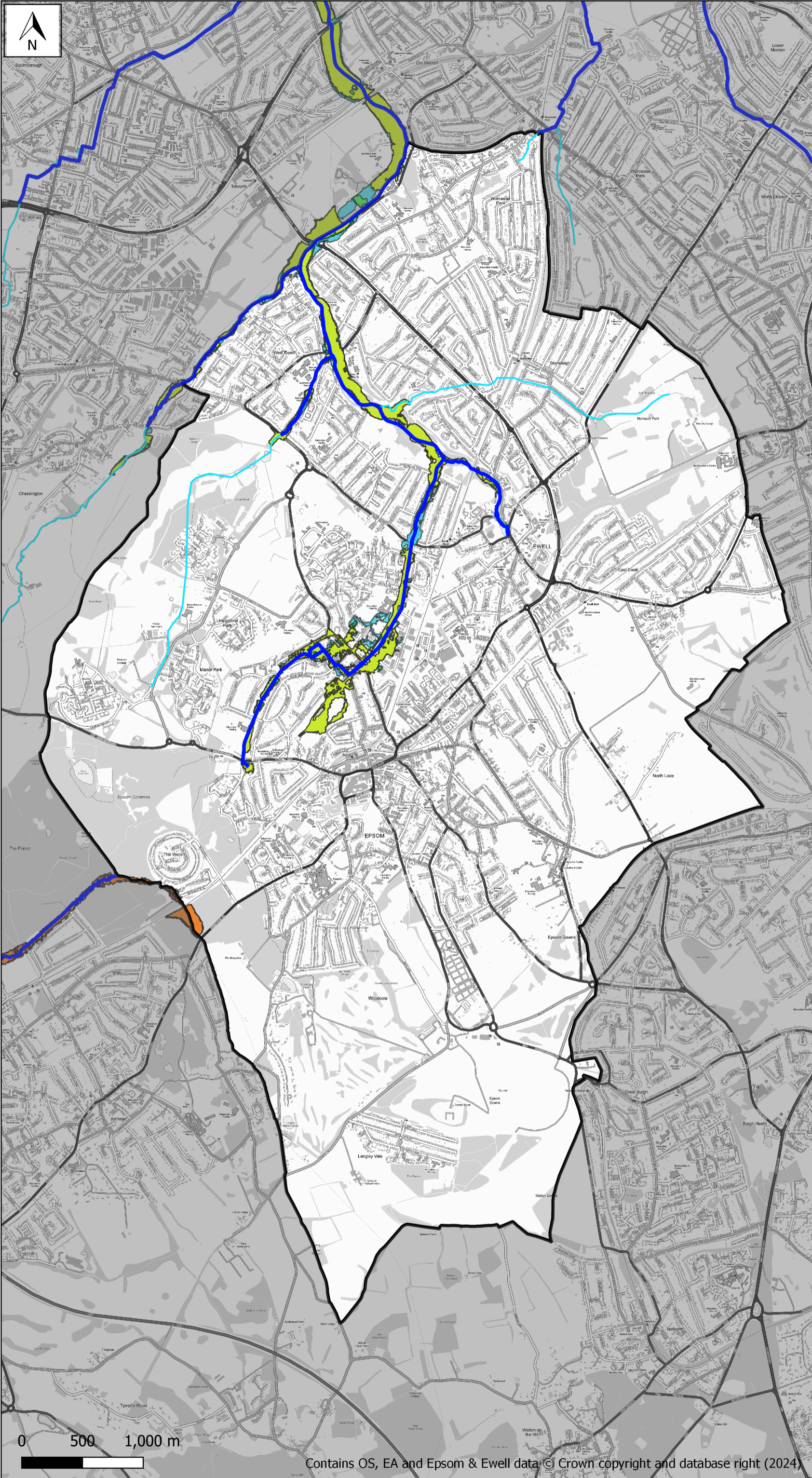
Project Title  
**Epsom & Ewell Level 1 Strategic Flood Risk Assessment**

Drawing Title  
**Fluvial Flood Zones 2, 3a, and 3b**

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000	Drawing Size A3
----------	--------------------

Drawing Number	Figure 1
----------------	----------



**Legend**

- Borough Boundary
- Statutory Main River
- Ordinary Watercourse
- Hogsmill River Flood Extents**
- 1 in 100 year\_25CC
- 1 in 100 year\_35CC
- 1 in 100 year\_70CC
- River Mole and Tributaries Flood Extents**
- 1 in 100 year\_25CC
- 1 in 100 year\_35CC
- 1 in 100 year\_70CC



Client



Project Title

Epsom & Ewell Level 1 Strategic Flood Risk Assessment

Drawing Title

Main River Flood Extents (Hogsmill River and River Mole and Tributaries 1 in 100 year with climate change considerations)

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

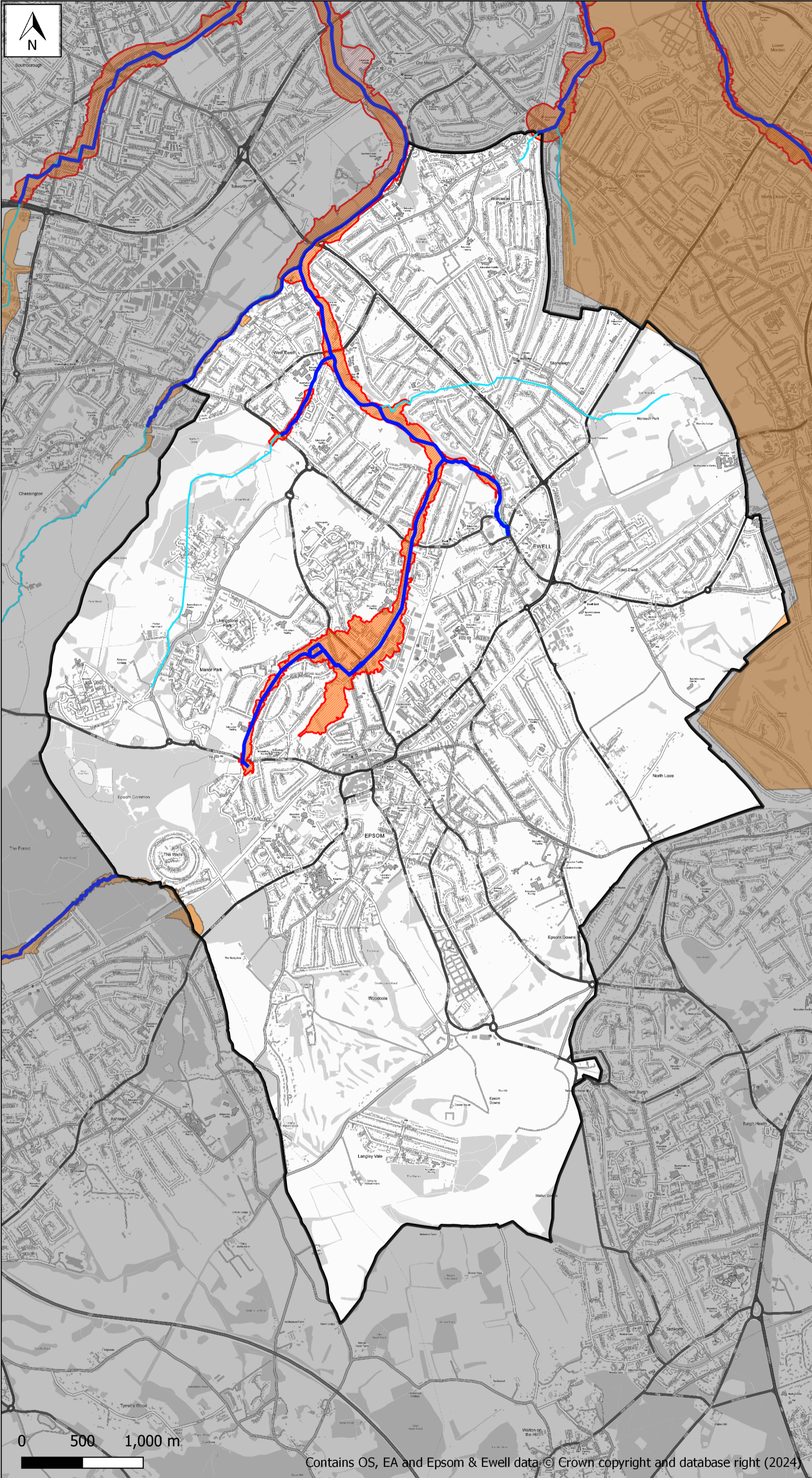
1:30,000

Drawing Size A3






Drawing Number

Figure 2

0 500 1,000 m



**Legend**

-  Borough Boundary
-  Statutory Main River
-  Ordinary Watercourse
-  Flood Alert Areas
-  Flood Warning Areas

**METIS**  
metisconsultants.co.uk

Client  
**EPSOM & EWELL**  
BOROUGH COUNCIL 

Project Title  
Epsom & Ewell Level 1 Strategic  
Flood Risk Assessment




Drawing Title  
Flood Alert and Flood Warning  
Areas

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000	Drawing Size A3
Drawing Number	Figure 3



**Legend**

-  Borough Boundary
- Risk of Flooding from Reservoirs - Extent
-  Dry Day
-  Wet Day

**METIS**  
metisconsultants.co.uk

Client



Project Title

Epsom & Ewell Level 1  
Strategic Flood Risk  
Assessment

Drawing Title

Reservoir Flood Extent (dry-day  
and wet-day scenarios)

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

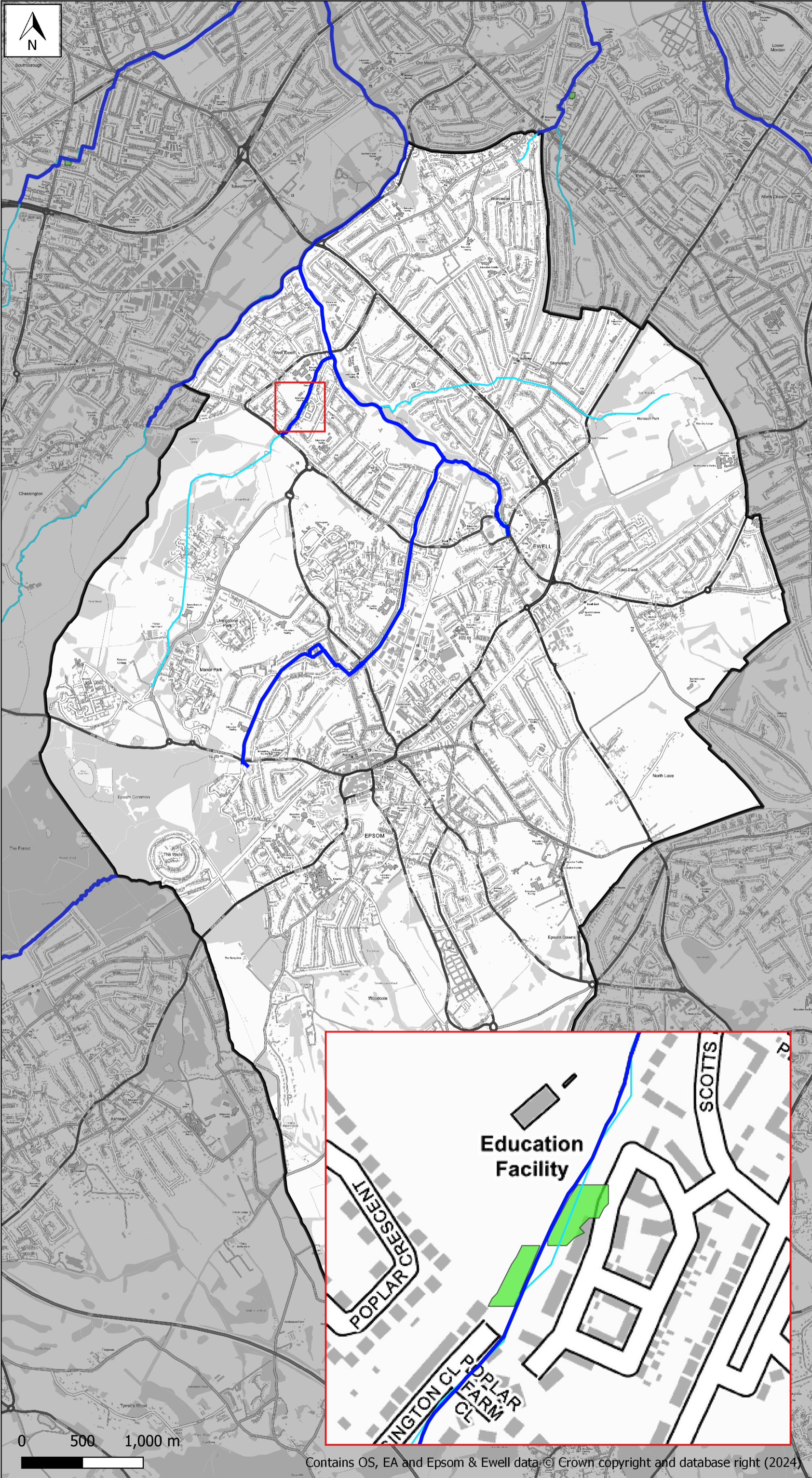
1:30,000





Drawing Size  
A3

Drawing Number

Figure 4





- Legend**
-  Borough Boundary
  -  Statutory Main River
  -  Ordinary Watercourse
  -  Reduction in Risk of Flooding from Rivers and Sea due to Defences

**METIS**  
metisconsultants.co.uk

Client  
**EPSOM & EWELL**  
BOROUGH COUNCIL 

Project Title  
Epsom & Ewell Level 1 Strategic Flood Risk Assessment

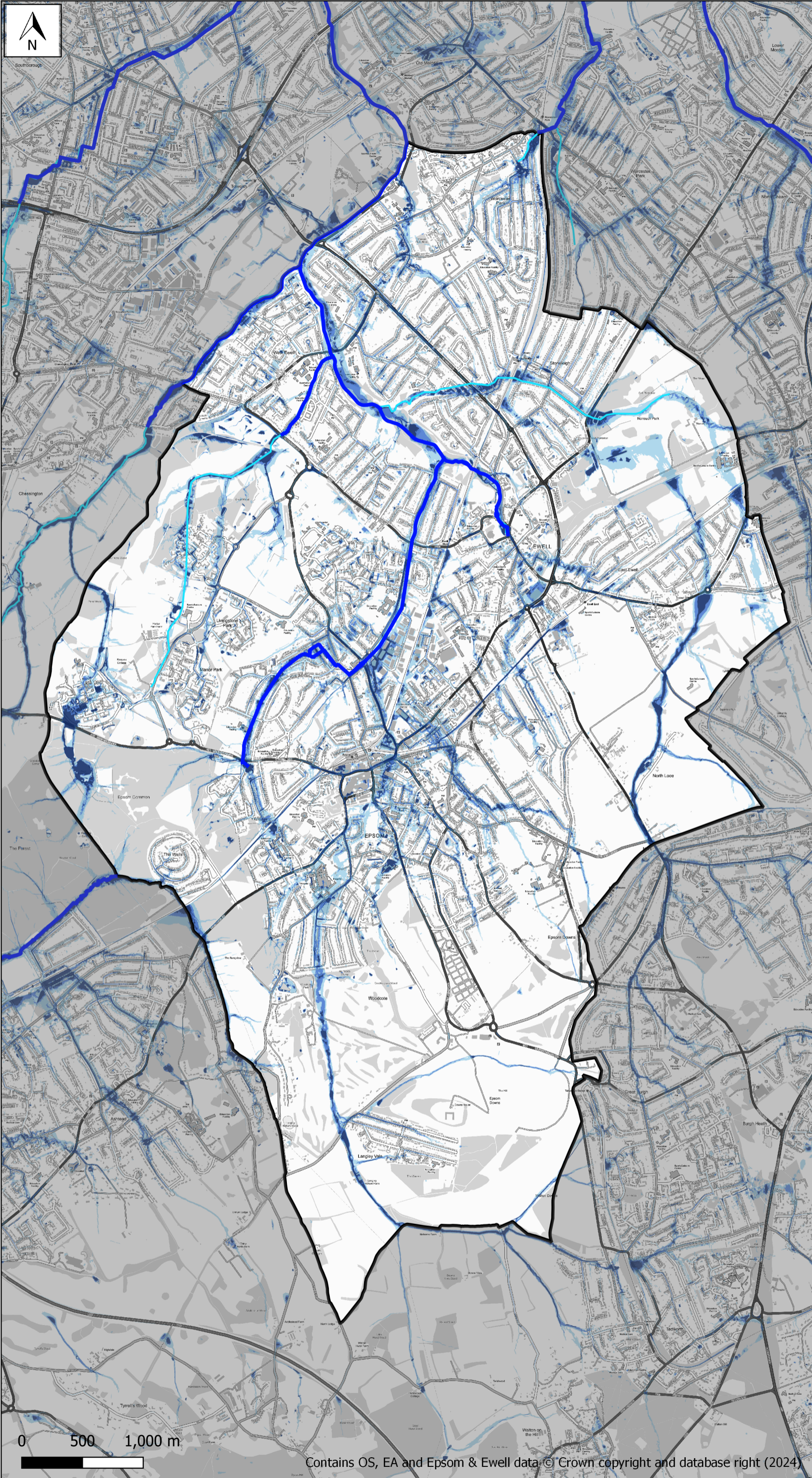
Drawing Title  
Flood Defences and Reduction in Risk of Flooding from Rivers and Sea due to Defences

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.







1:30,000 Drawing Size A3

Drawing Number Figure 5





**Legend**

-  Borough Boundary
-  Statutory Main River
-  Ordinary Watercourse
- Risk of Flooding from Surface Water - Extent
-  1 in 30 year
-  1 in 100 year
-  1 in 1000 year

**METIS**  
metisconsultants.co.uk

Client



Project Title

Epsom & Ewell Level 1 Strategic  
Flood Risk Assessment

Drawing Title

Surface Water Flood Extent

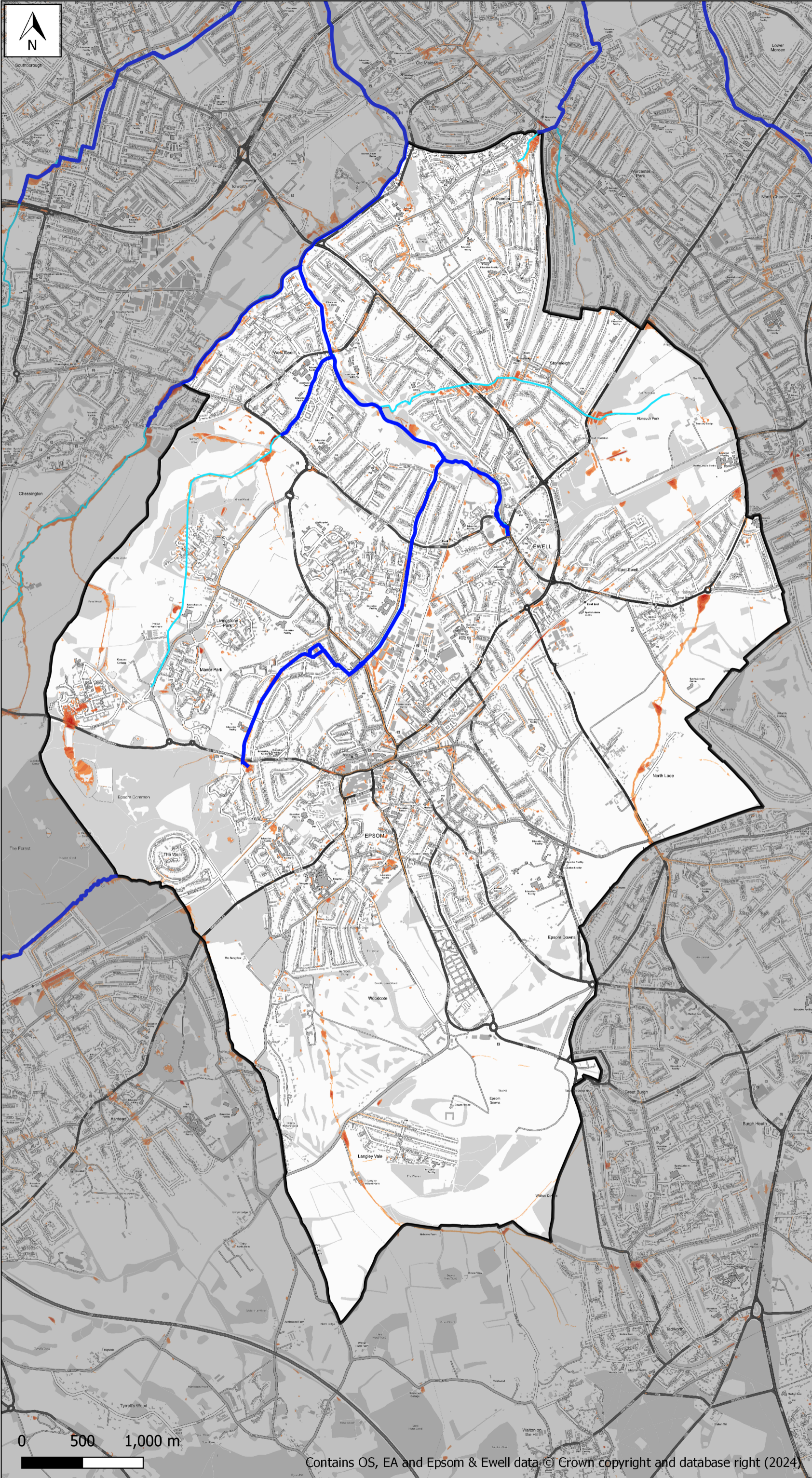
This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000

Drawing Size  
A3

Drawing Number

Figure 6



**Legend**

- Borough Boundary
- Statutory Main River
- Ordinary Watercourse
- Risk of Flooding from Surface Water - Depth (1 in 30 year)
  - 0.00 - 0.15m
  - 0.15 - 0.30m
  - 0.30 - 0.60m
  - 0.60 - 0.90m
  - 0.90 - 1.20m
  - > 1.20m

**METIS**  
metisconsultants.co.uk

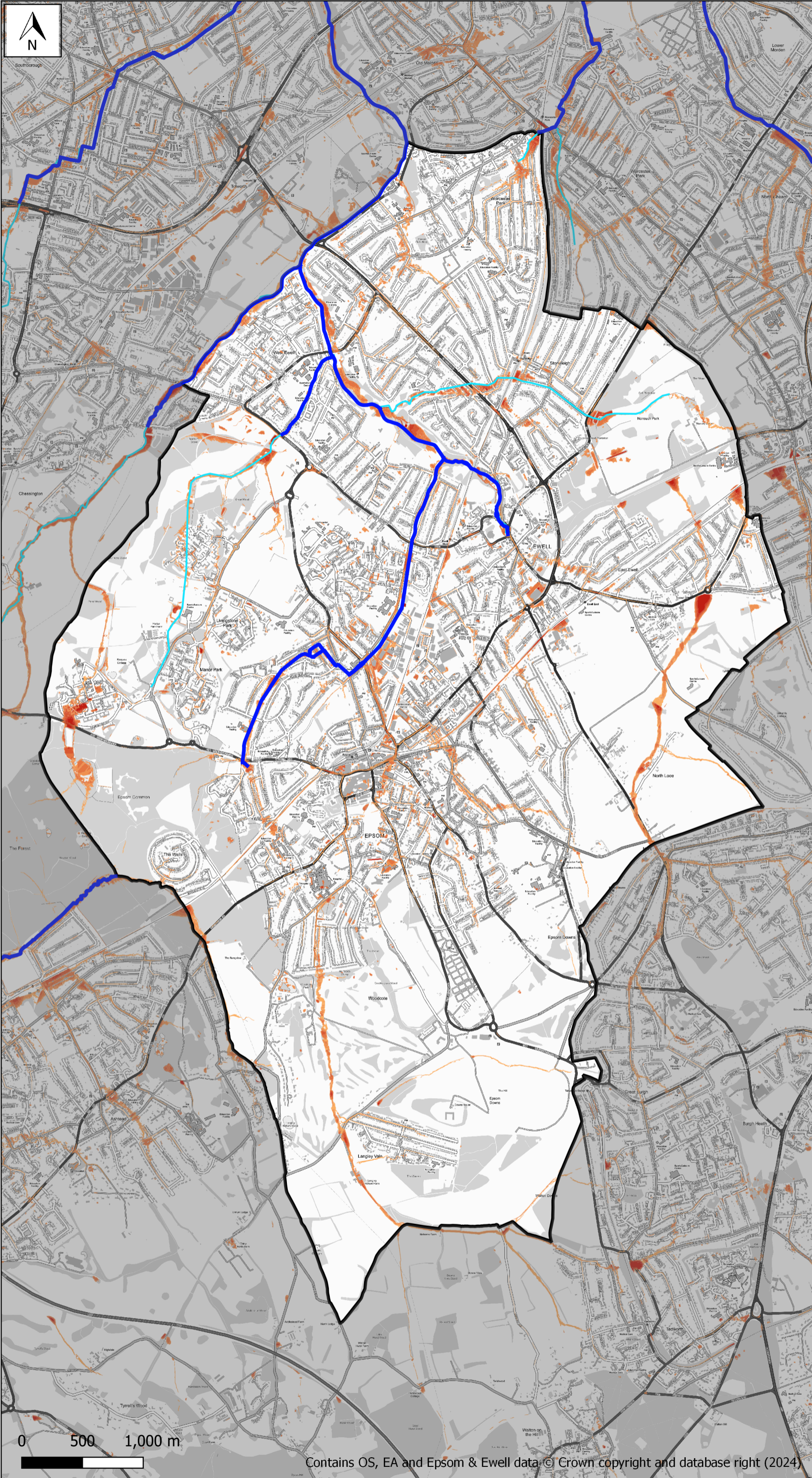
Client  
**EPSOM & EWELL**  
BOROUGH COUNCIL

Project Title  
Epsom & Ewell Level 1 Strategic Flood Risk Assessment

Drawing Title  
Surface Water Flood Depth (1 in 30 year)

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000	Drawing Size A3
Drawing Number	Figure 7



**Legend**

- Borough Boundary
- Statutory Main River
- Ordinary Watercourse

Risk of Flooding from Surface Water - Depth (1 in 100 year)

- 0.00 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

**METIS**  
metisconsultants.co.uk

Client



Project Title

Epsom & Ewell Level 1 Strategic Flood Risk Assessment

Drawing Title

Surface Water Flood Depth (1 in 100 year)

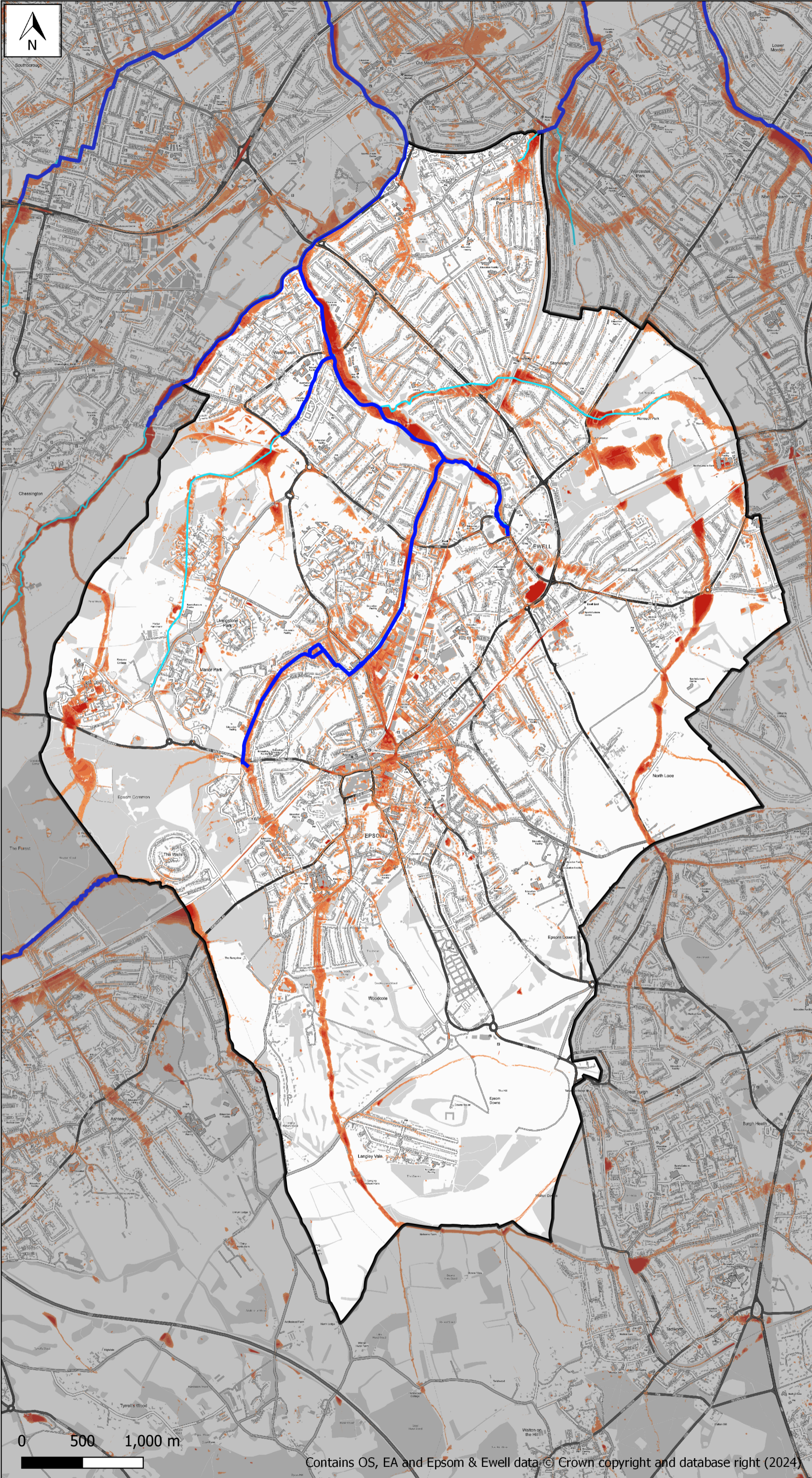
This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000










Drawing Size  
A3

Drawing Number

Figure 8



**Legend**

-  Borough Boundary
  -  Statutory Main River
  -  Ordinary Watercourse
- Risk of Flooding from Surface Water - Depth (1 in 1000 year)
-  0.00 - 0.15m
  -  0.15 - 0.30m
  -  0.30 - 0.60m
  -  0.60 - 0.90m
  -  0.90 - 1.20m
  -  > 1.20m

**METIS**  
metisconsultants.co.uk

Client



Project Title

Epsom & Ewell Level 1 Strategic  
Flood Risk Assessment

Drawing Title

Surface Water Flood Depth  
(1 in 1000 year)

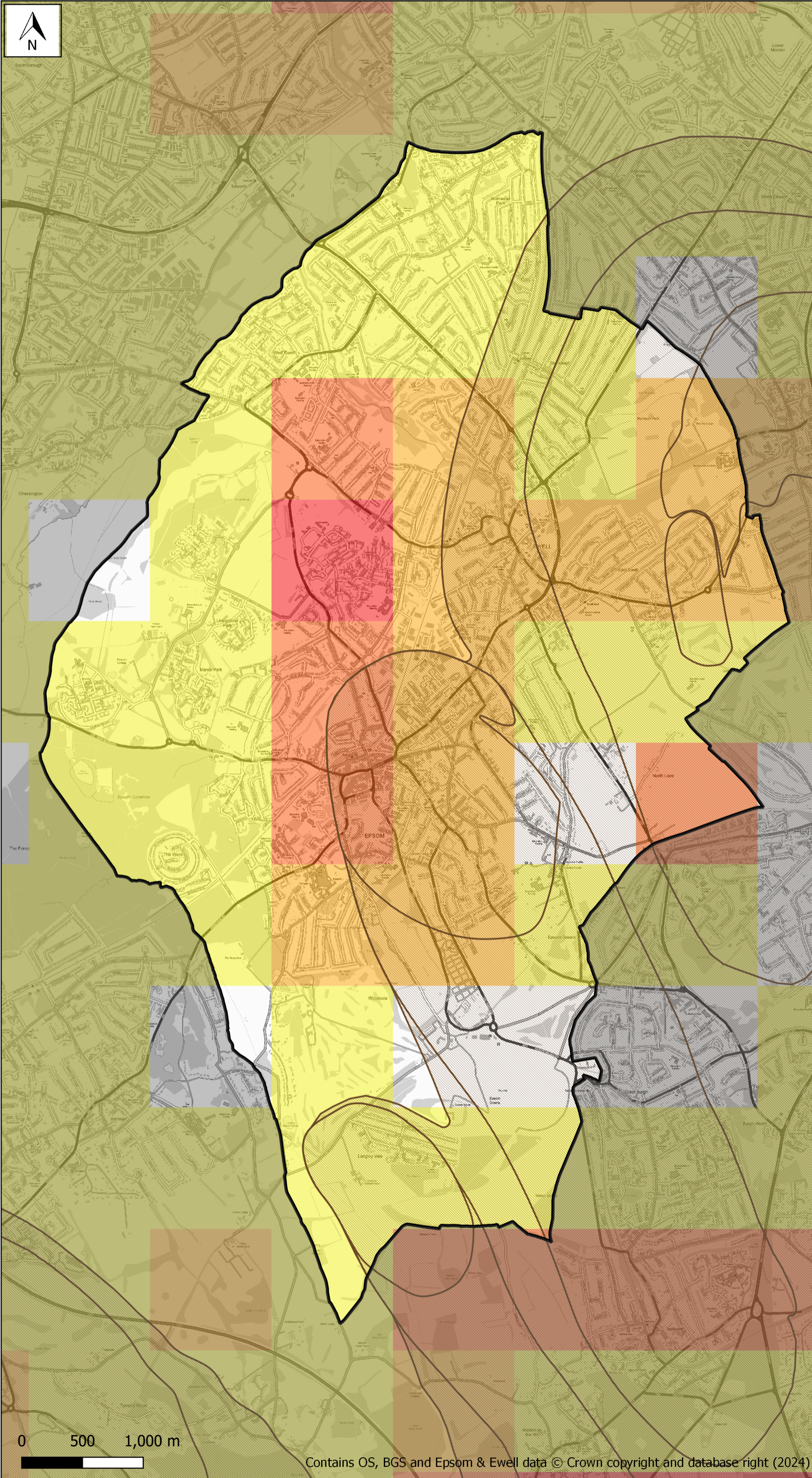
This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000







Drawing Size  
A3

Drawing Number

Figure 9



**Legend**

-  Borough Boundary
-  Source Protection Zones
- Area Susceptibility to Groundwater Flooding**
-  < 25%
-  >= 25% < 50%
-  >= 50% < 75%
-  >= 75%

**METIS**  
metisconsultants.co.uk

Client



Project Title

Epsom & Ewell Level 1 Strategic  
Flood Risk Assessment

Drawing Title

Area Susceptibility to  
Groundwater Flooding and  
Source Protection Zones

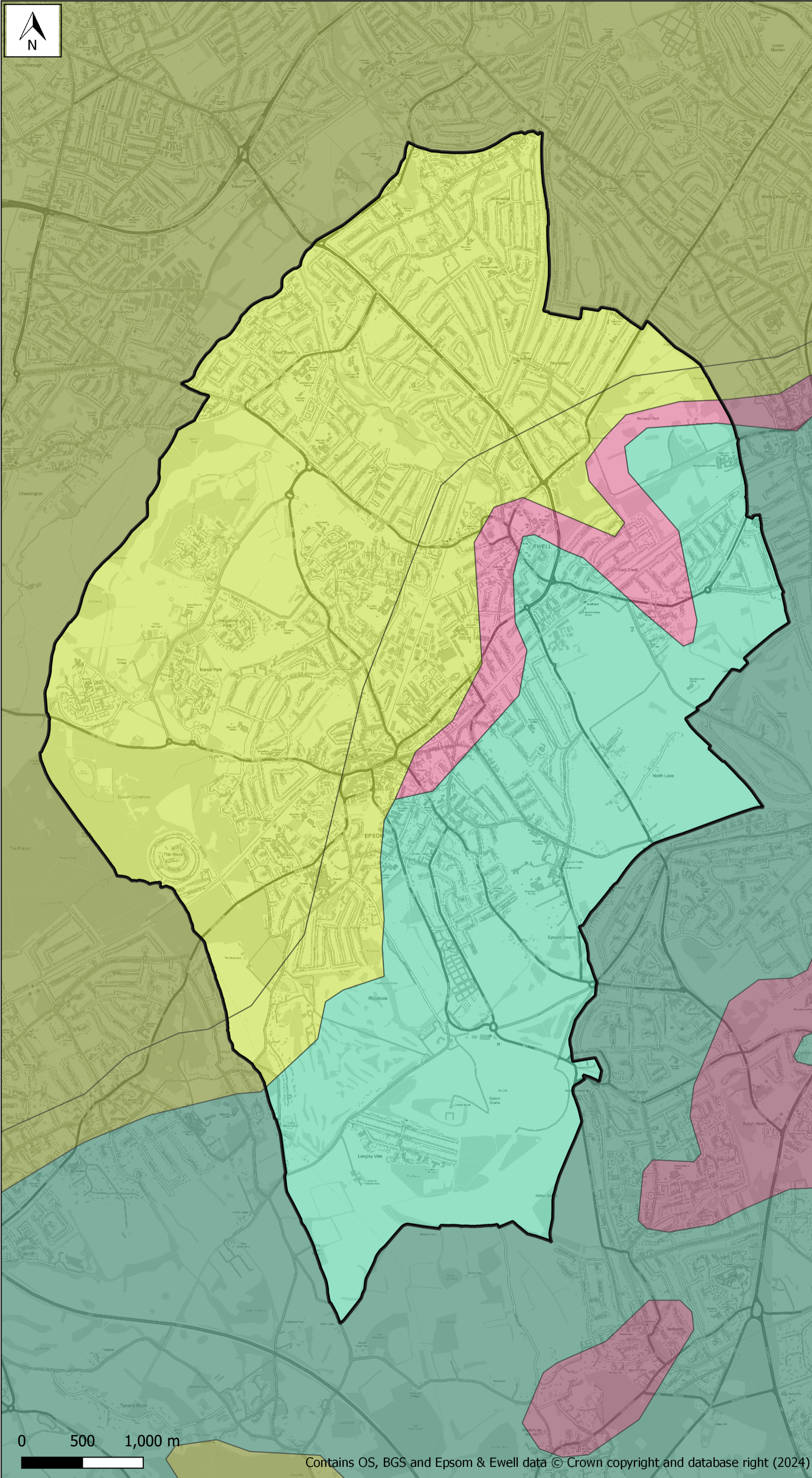
This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000





Drawing Size  
A3

Drawing Number

Figure 10



**Legend**

-  Borough Boundary
- Bedrock Geology**
-  Chalk
-  Clay, Silt, Sand and Gravel
-  Sand, Silt and Clay

**METIS**  
metisconsultants.co.uk

Client



Project Title

Epsom & Ewell Level 1 Strategic  
Flood Risk Assessment

Drawing Title

Bedrock Geology

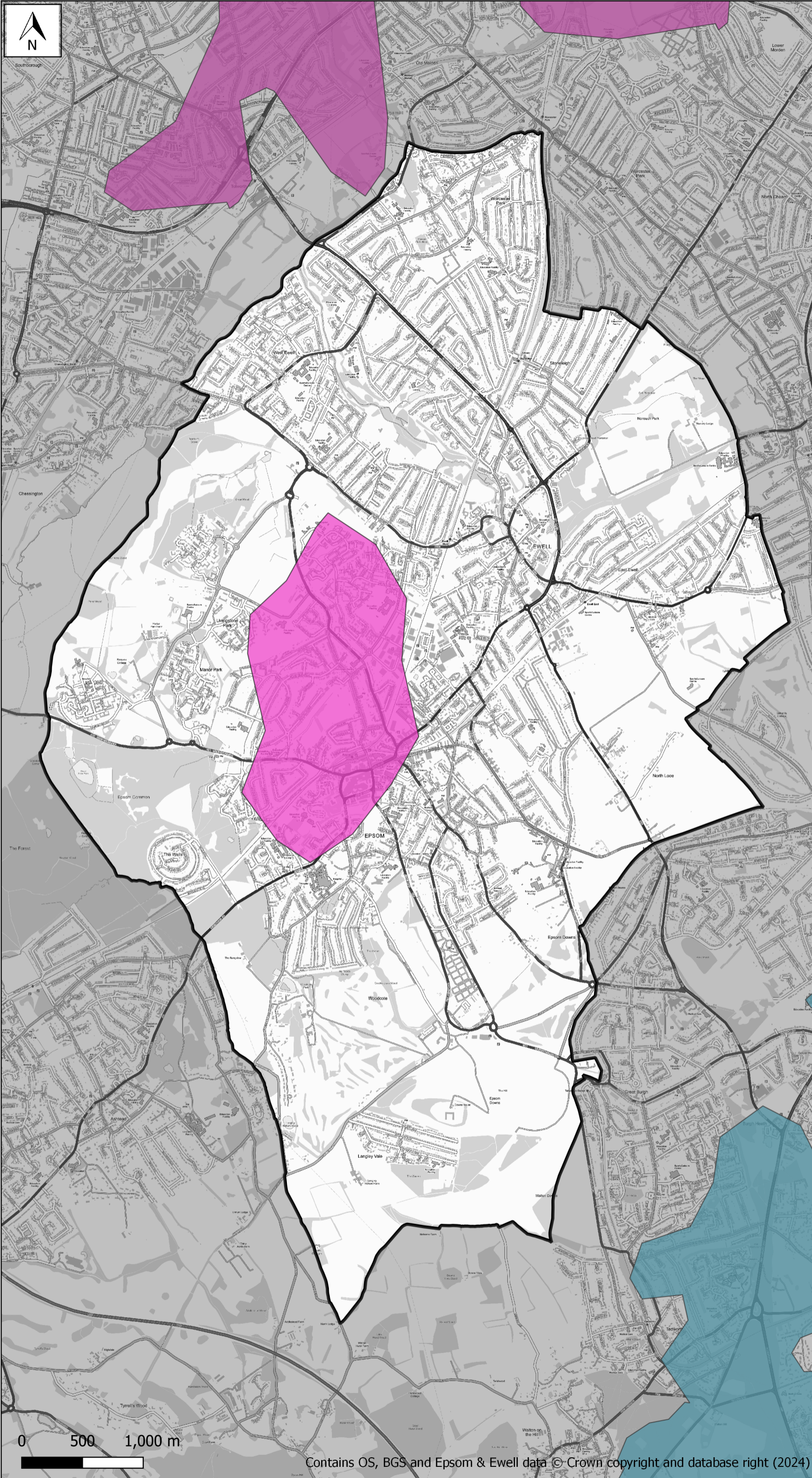
This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000





Drawing Size  
A3

Drawing Number

Figure 11



**Legend**

-  Borough Boundary
-  Superficial Geology
-  Diamicton
-  Sand and Gravel

**METIS**  
metisconsultants.co.uk

Client



Project Title

Epsom & Ewell Level 1 Strategic  
Flood Risk Assessment

Drawing Title

Superficial Geology

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000

Drawing Size  
A3





Drawing Number

Figure 12

0 500 1,000 m





- Legend**
-  Borough Boundary
  -  Statutory Main River
  -  Ordinary Watercourse
  -  Critical Drainage Areas

**METIS**  
metisconsultants.co.uk

Client  
**EPSOM & EWELL**  
BOROUGH COUNCIL 

Project Title  
**Epsom & Ewell Level 1 Strategic Flood Risk Assessment**

Drawing Title  
**Epsom and Ewell Critical Drainage Areas**

This document has been prepared pursuant to and subject to the terms of Metis' appointment by its client. Metis accepts no liability for any use of this document other than by its original client or following Metis' express agreement to such use, and only for the purpose for which it was prepared and provided.

1:30,000	Drawing Size A3
----------	-----------------

Drawing Number **Figure 13**