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**AffinityWater**



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Water.

# South East Strategic Reservoir Option (SESRO)

Options Consultation – Mapbook





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# Mapping explanatory notes

This map book shows our current preferred and alternative proposals for the locations of associated infrastructure that have been developed through an options appraisal process for the South East Reservoir Option (SESRO) project. The map book also includes maps and diagrams to illustrate the interim masterplan for the proposed reservoir; indicative reservoir embankment cross sections; and indicative illustrations of what the proposed reservoir may look like once construction is complete. The material presented in the map book is subject to stakeholder engagement and further design development and forms part of a collection of documents prepared to support a public consultation for SESRO. All the documents are available on our website at [www.thames-sro.co.uk/SESRO](http://www.thames-sro.co.uk/SESRO).





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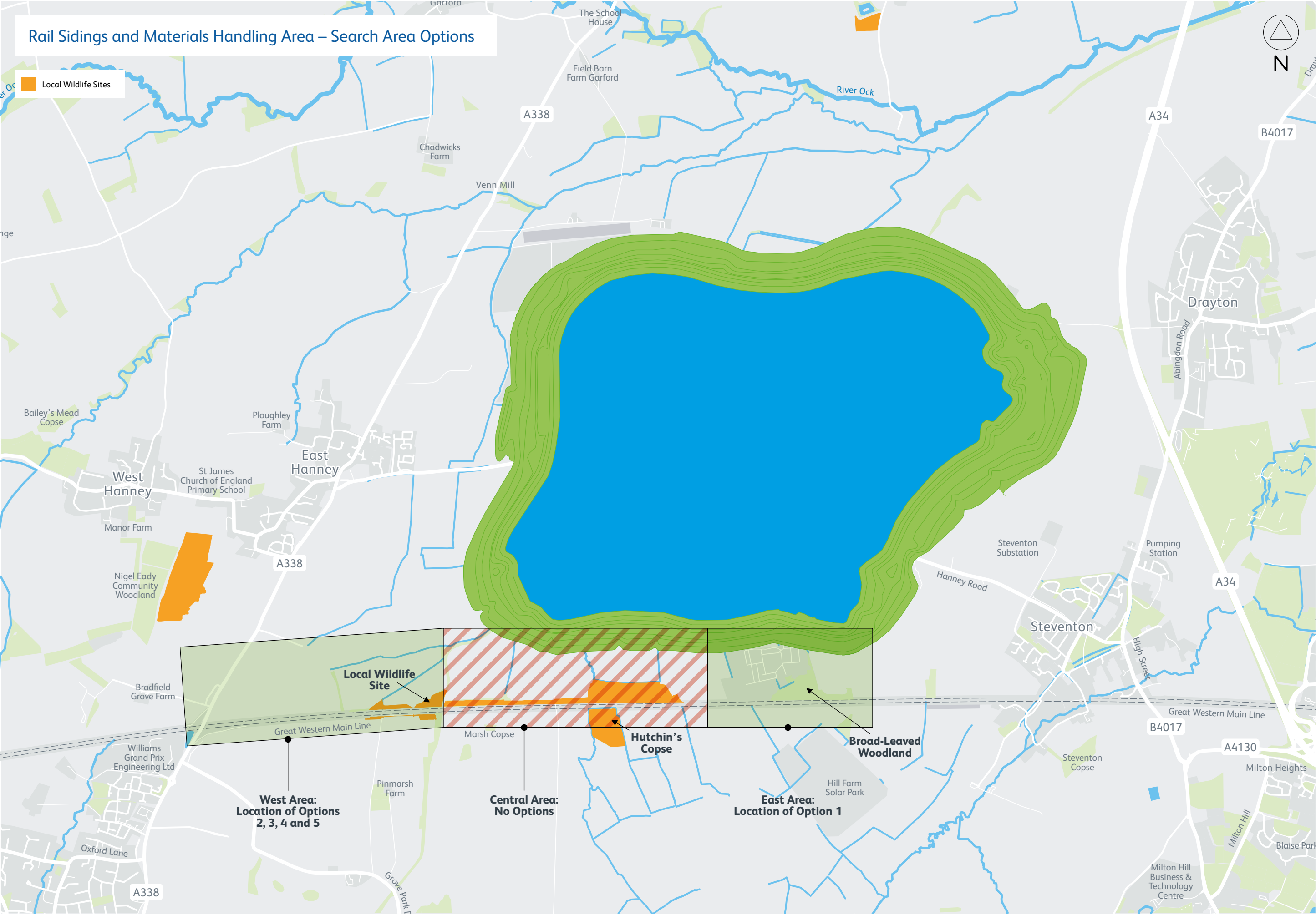
# Part A

## Options Appraisals

### Maps













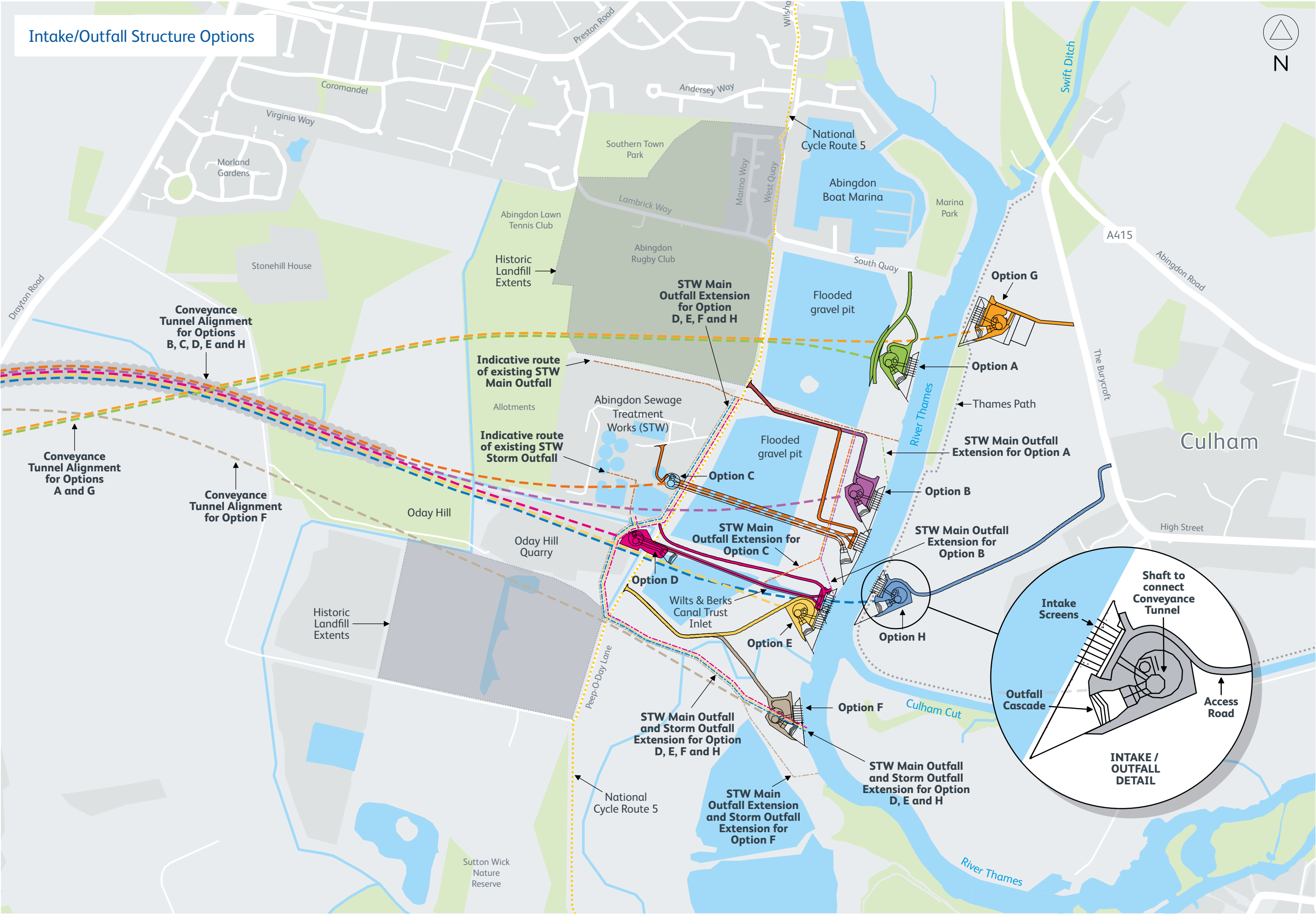


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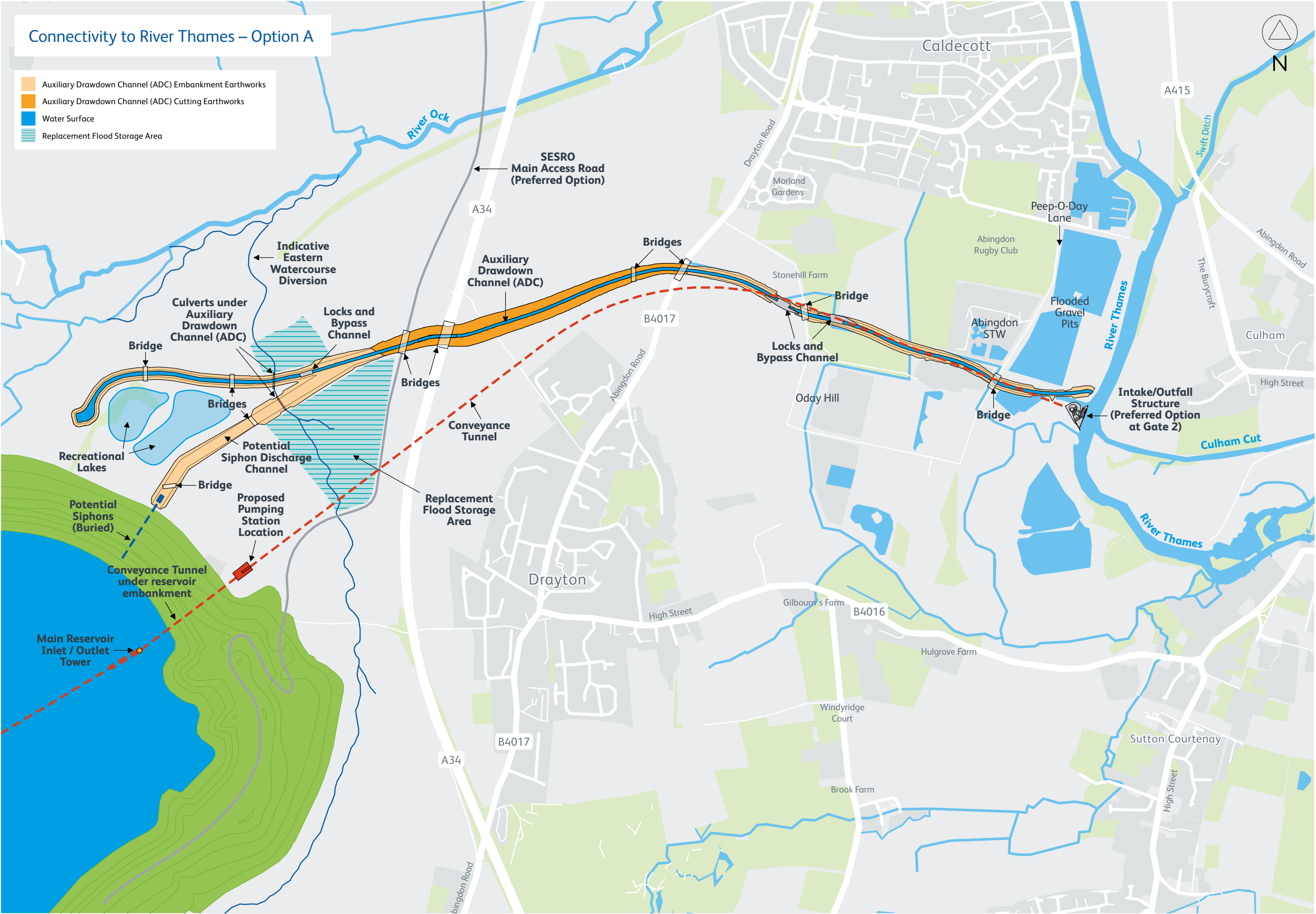




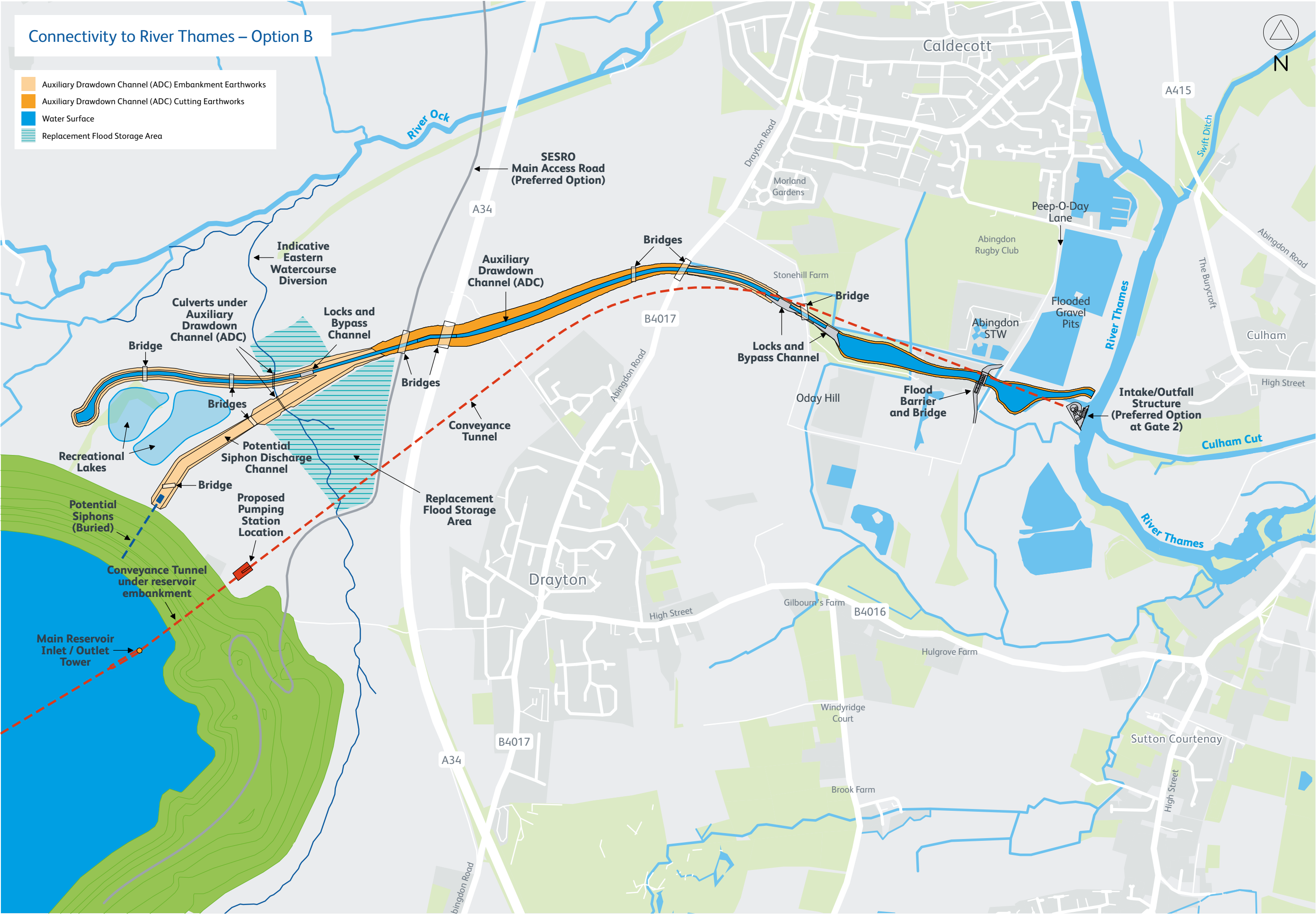






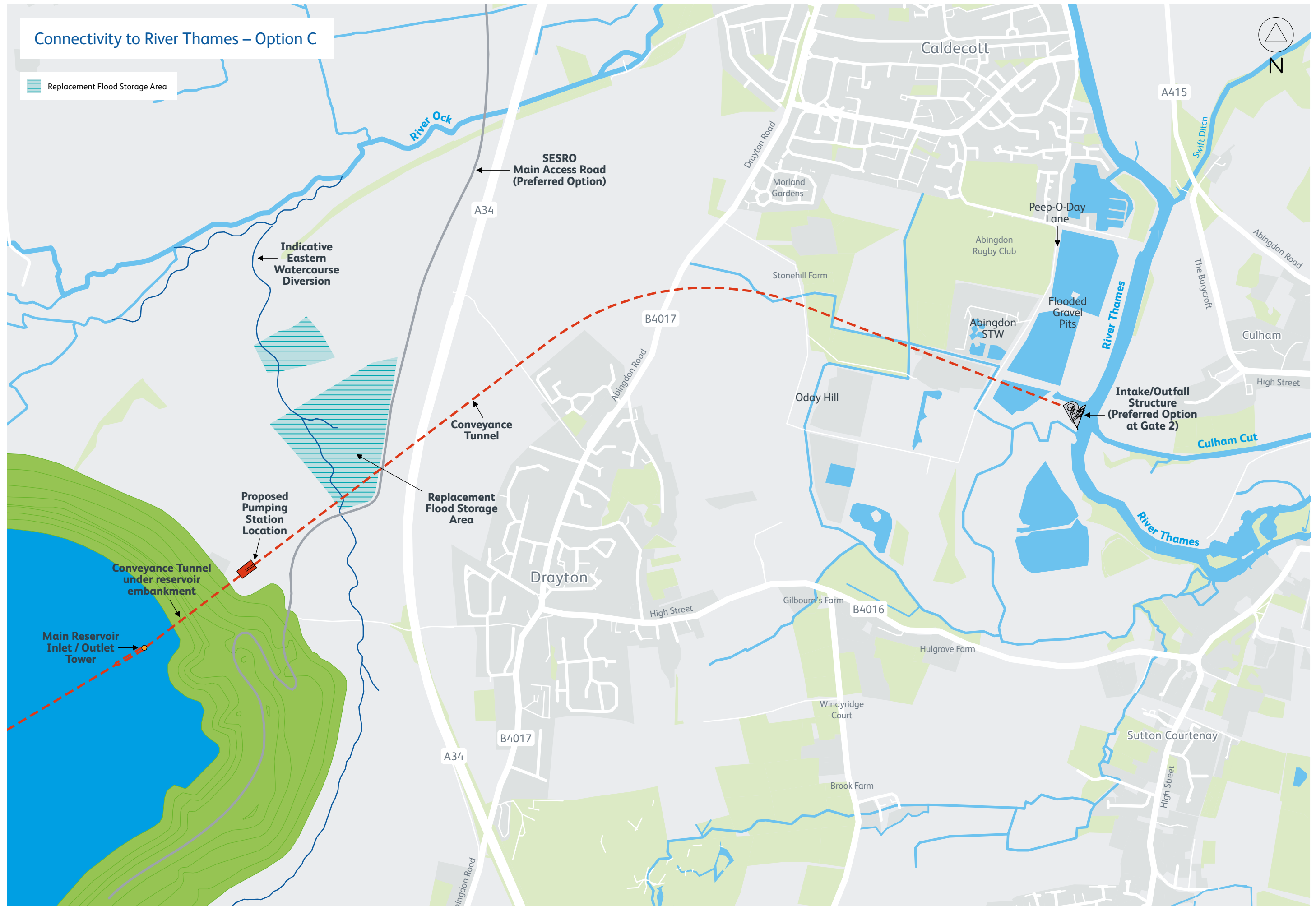






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# Part B

## Interim Landscape and Environmental Master Plan drawings



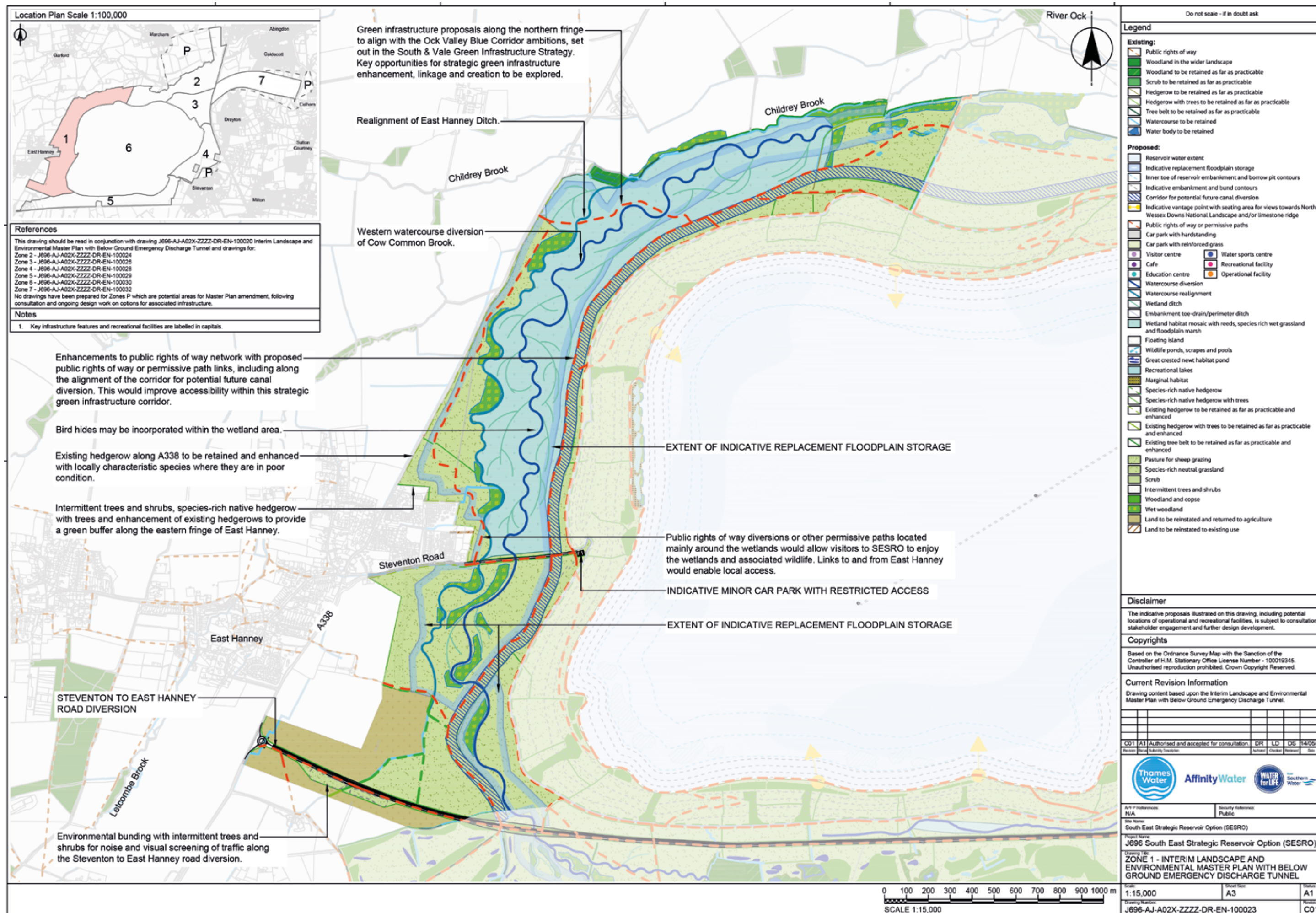




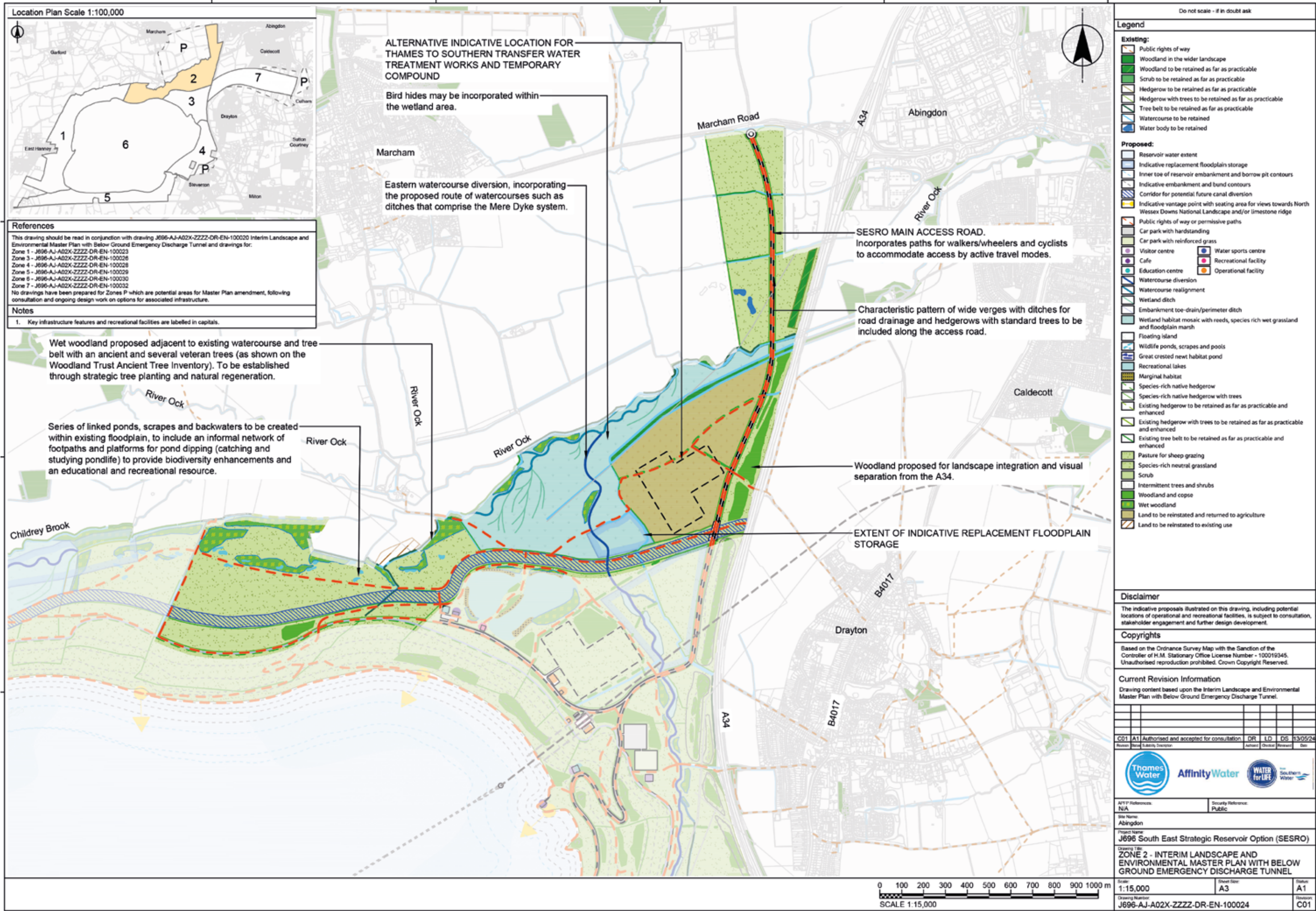




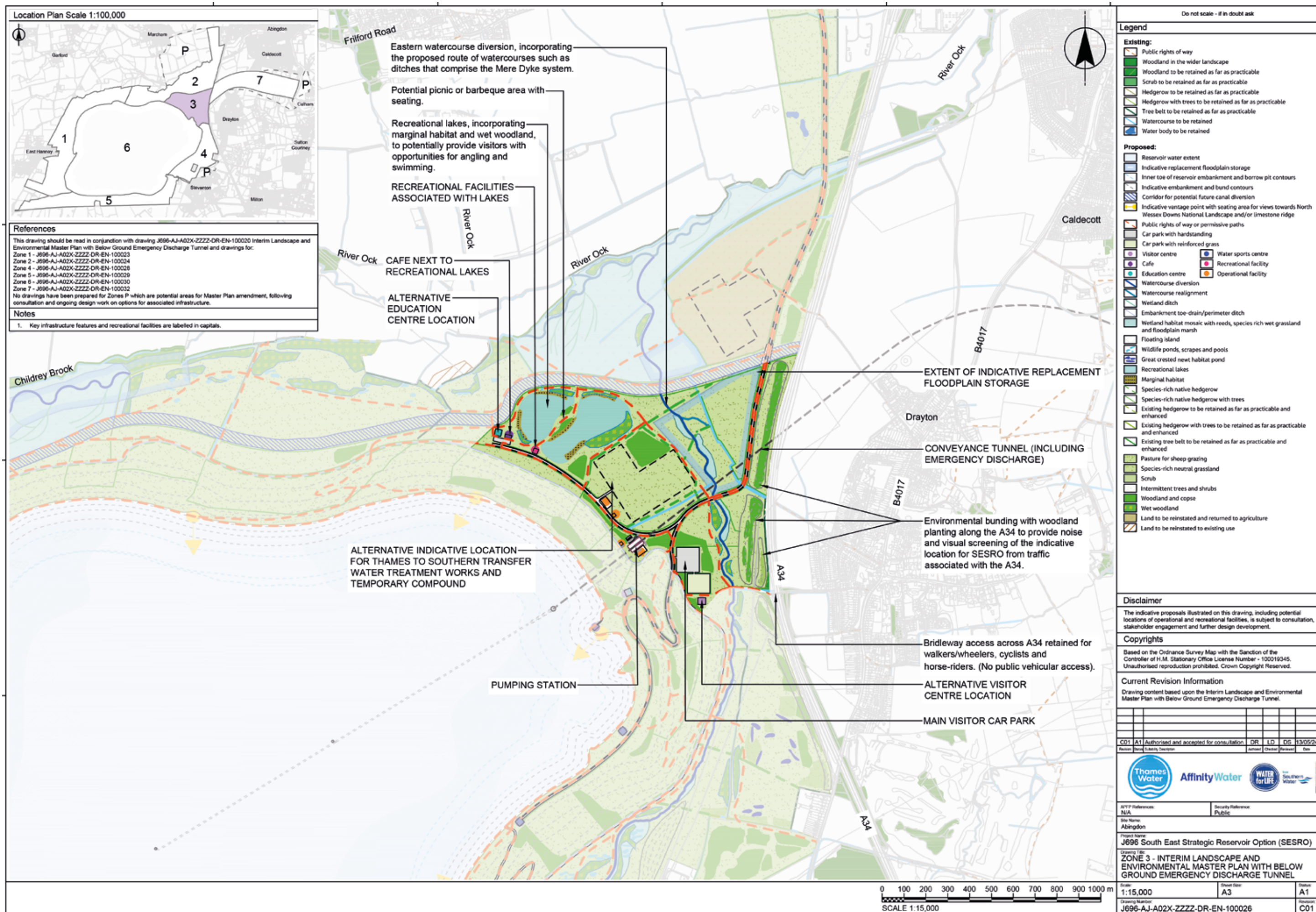




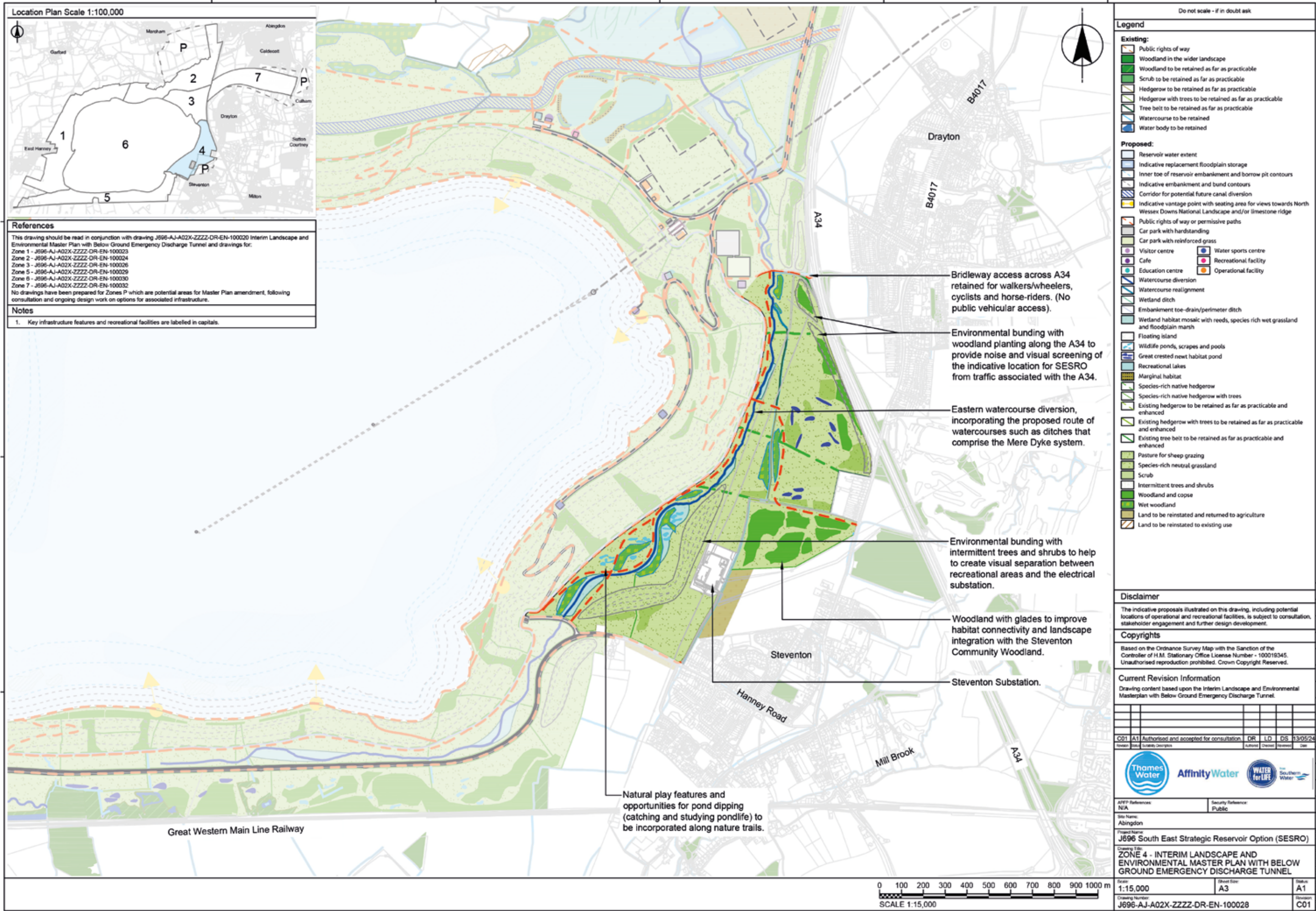








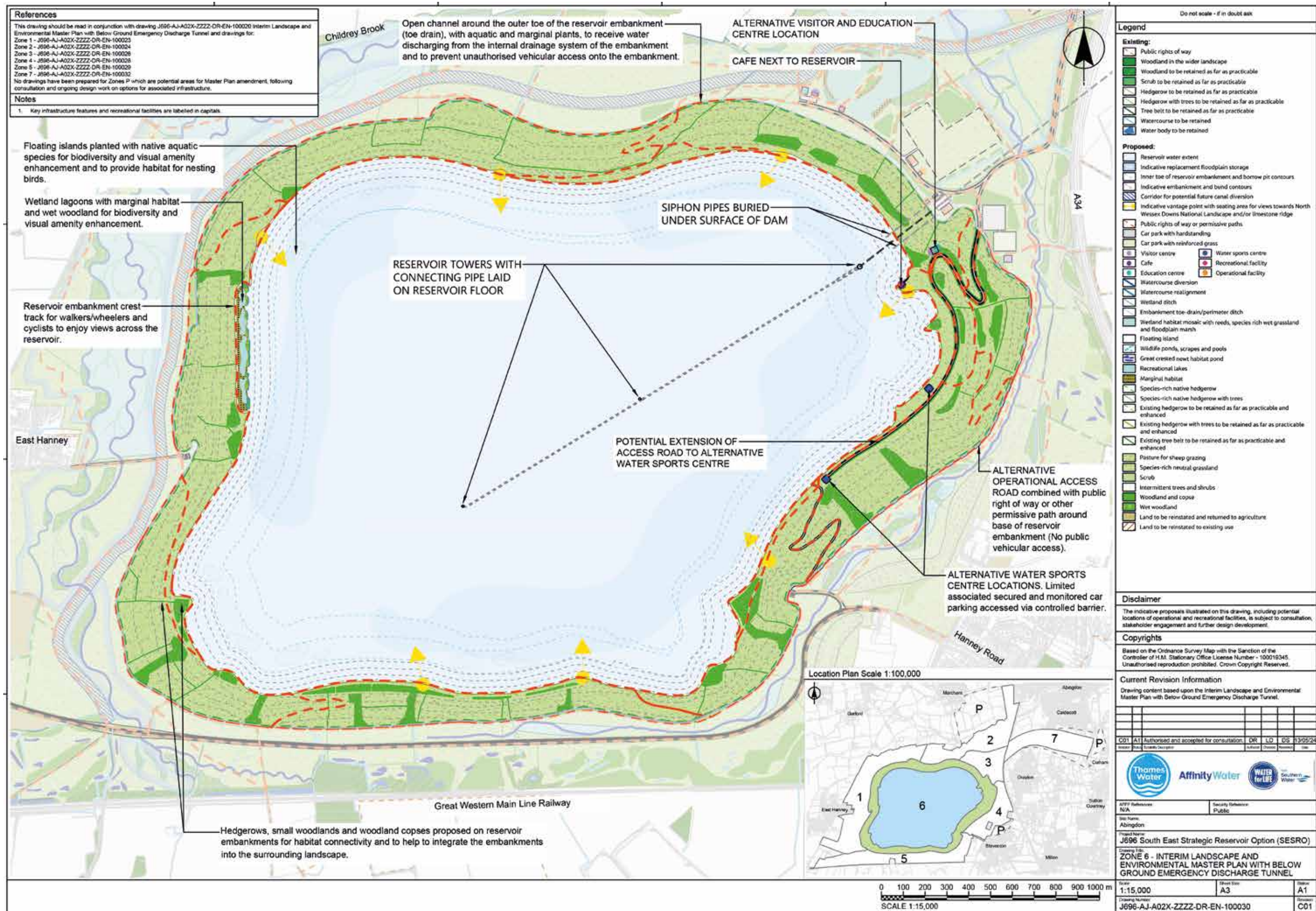




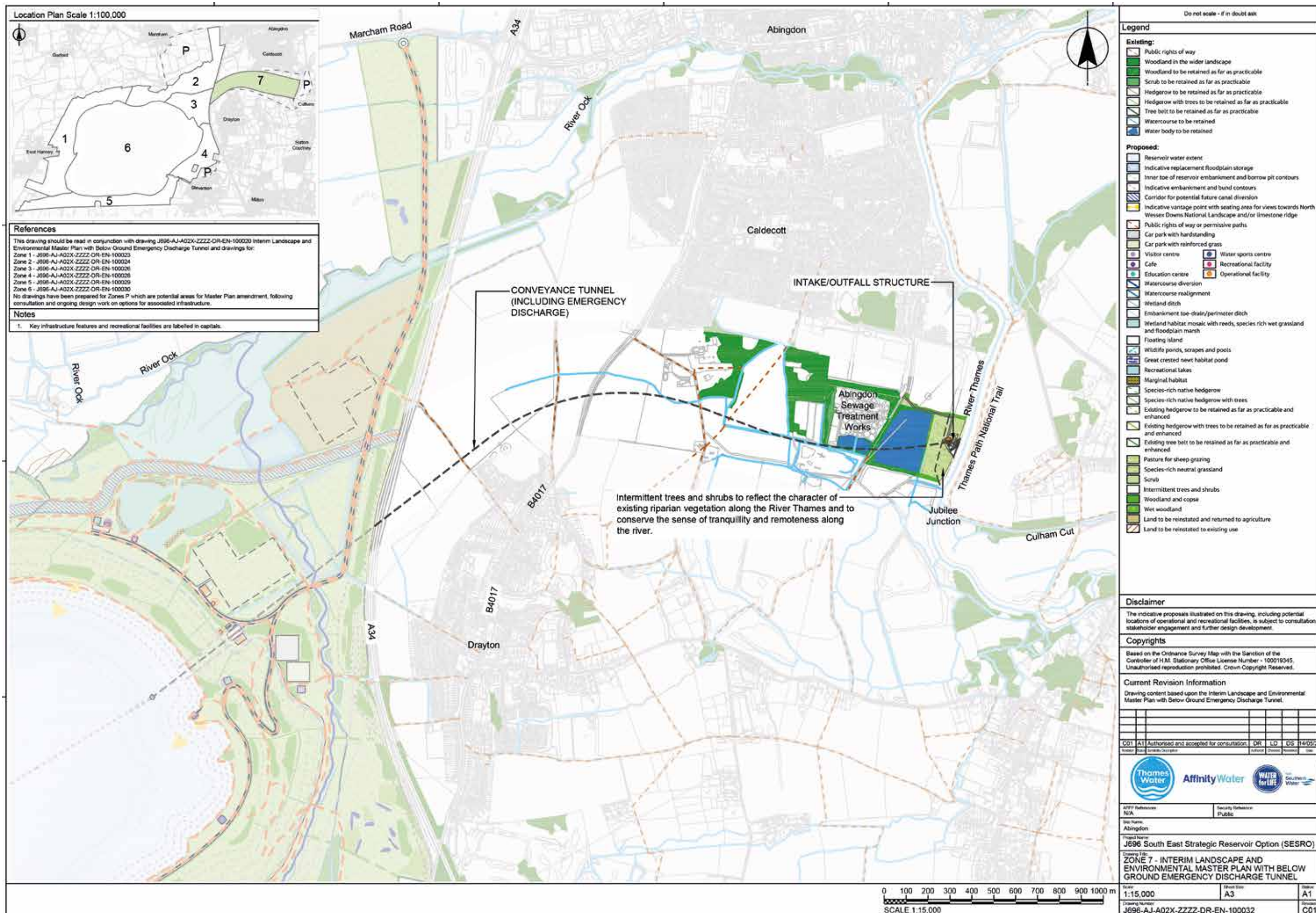




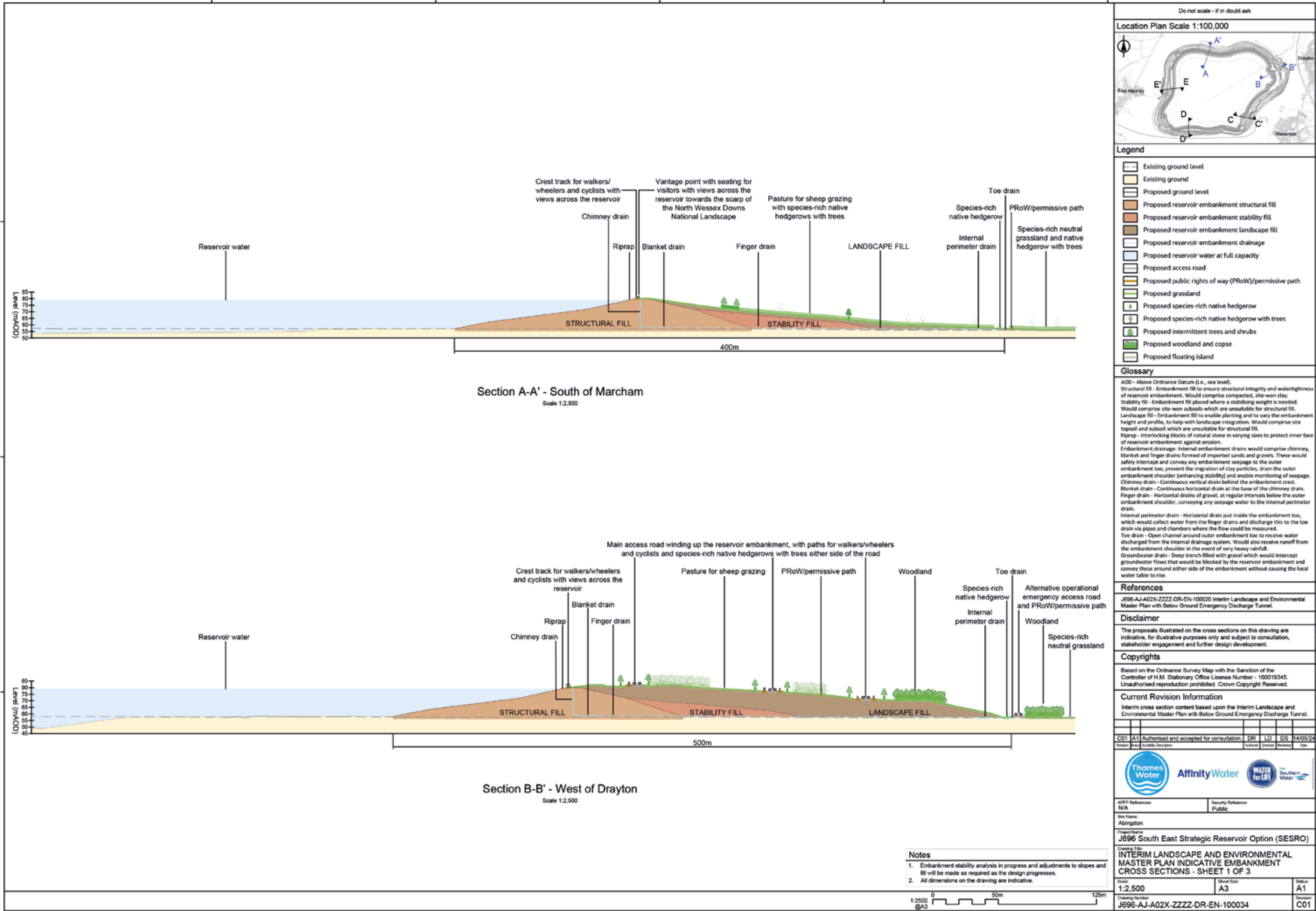




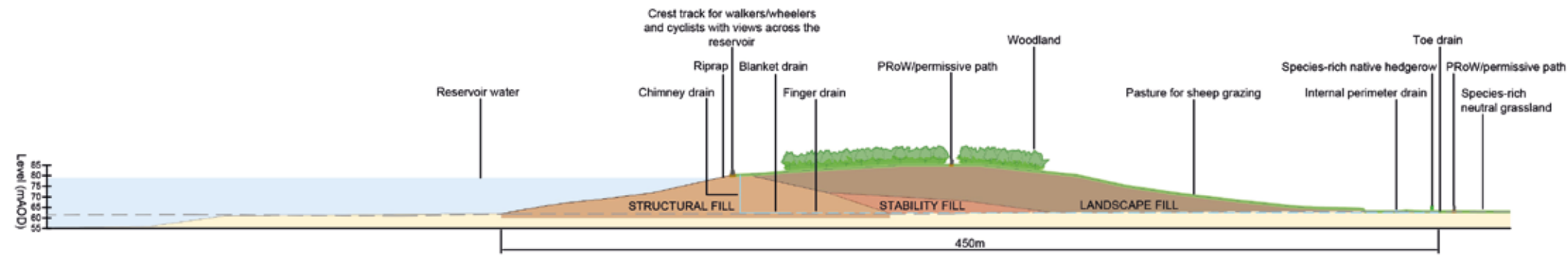




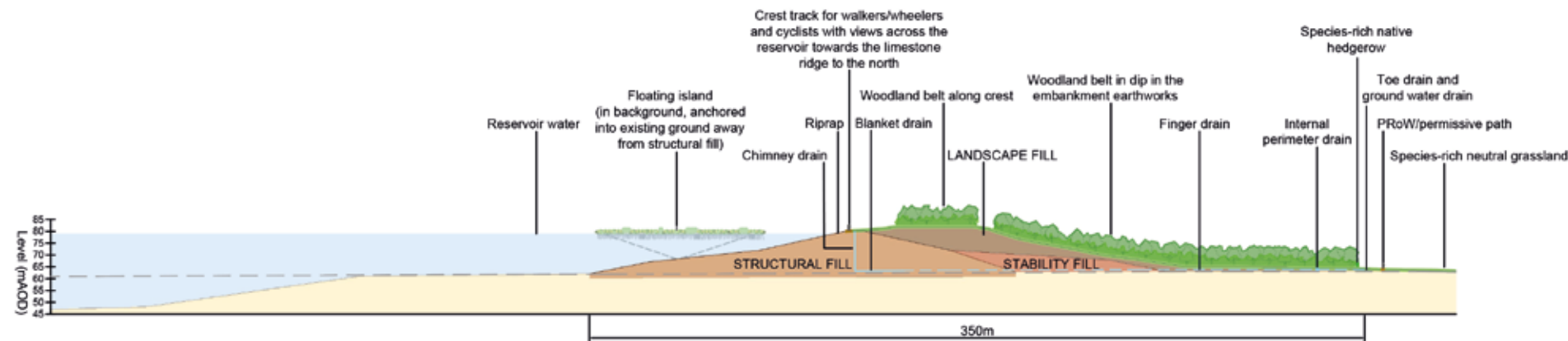








Section C-C' - West of Steventon  
Scale 1:2,500



Section D-D' - North of Great Western Main Line Railway  
Scale 1:2,500

#### Notes

1. Embankment stability analysis in progress and adjustments to slopes and fill will be made as required as the design progresses.
2. All dimensions on the drawing are indicative.



Do not scale - if in doubt ask

**Location Plan Scale 1:100,000**

**Legend**

- Existing ground level
- Existing ground
- Proposed ground level
- Proposed reservoir embankment structural fill
- Proposed reservoir embankment stability fill
- Proposed reservoir embankment landscape fill
- Proposed reservoir embankment drainage
- Proposed reservoir water at full capacity
- Proposed access road
- Proposed public rights of way (PRoW)/permissive path
- Proposed grassland
- Proposed species-rich native hedgerow
- Proposed species-rich native hedgerow with trees
- Proposed intermittent trees and shrubs
- Proposed woodland and copse
- Proposed floating island

**Glossary**

AOD - Above Ordnance Datum (i.e., sea level).

Structural fill - Embankment fill to ensure structural integrity and watertightness of reservoir embankment. Would comprise compacted, site-won clay.

Stability fill - Embankment fill placed where a stabilising weight is needed. Would comprise site-won subsoils which are unsuitable for structural fill.

Landscape fill - Embankment fill to enable planting and to vary the embankment height and profile, to help with landscape integration. Would comprise site topsoil and subsoil which are unsuitable for structural fill.

Riprap - Interlocking blocks of natural stone in varying sizes to protect inner face of reservoir embankment against erosion.

Embankment drainage: Internal embankment drains would comprise chimney, blanket and finger drains formed of imported sands and gravels. These would safely intercept and convey any embankment seepage to the outer embankment toe, prevent the migration of clay particles, drain the outer embankment shoulder (enhancing stability) and enable monitoring of seepage.

Chimney drain - Continuous vertical drain behind the embankment crest.

Blanket drain - Continuous horizontal drain at the base of the chimney drain.

Finger drain - Horizontal drains of gravel, at regular intervals below the outer embankment shoulder, conveying any seepage water to the internal perimeter drain.

Internal perimeter drain - Horizontal drain just inside the embankment toe, which would collect water from the finger drains and discharge this to the toe drain via pipes and chambers where the flow could be measured.

Toe drain - Open channel around outer embankment toe to receive water discharged from the internal drainage system. Would also receive runoff from the embankment shoulder in the event of very heavy rainfall.

Groundwater drain - Deep trench filled with gravel which would intercept groundwater flows that would be blocked by the reservoir embankment and convey these around either side of the embankment without causing the local water table to rise.

**References**

J696-AJ-A02X-ZZZZ-DR-EN-100020 Interim Landscape and Environmental Master Plan with Below Ground Emergency Discharge Tunnel.

**Disclaimer**

The proposals illustrated on the cross sections on this drawing are indicative, for illustrative purposes only and subject to consultation, stakeholder engagement and further design development.

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**Current Revision Information**

Interim cross section content based upon the Interim Landscape and Environmental Master Plan with Below Ground Emergency Discharge Tunnel.

Revision	Date	Author	Checker	Approved	By
C01	14/05/24	DR	LD	CS	

**Logos:** Thames Water, Affinity Water, Water for Life, Southern Water

**ATFP Reference:** N/A

**Security Reference:** Public

**Site Name:** Abingdon

**Project Name:** J696 South East Strategic Reservoir Option (SESRO)

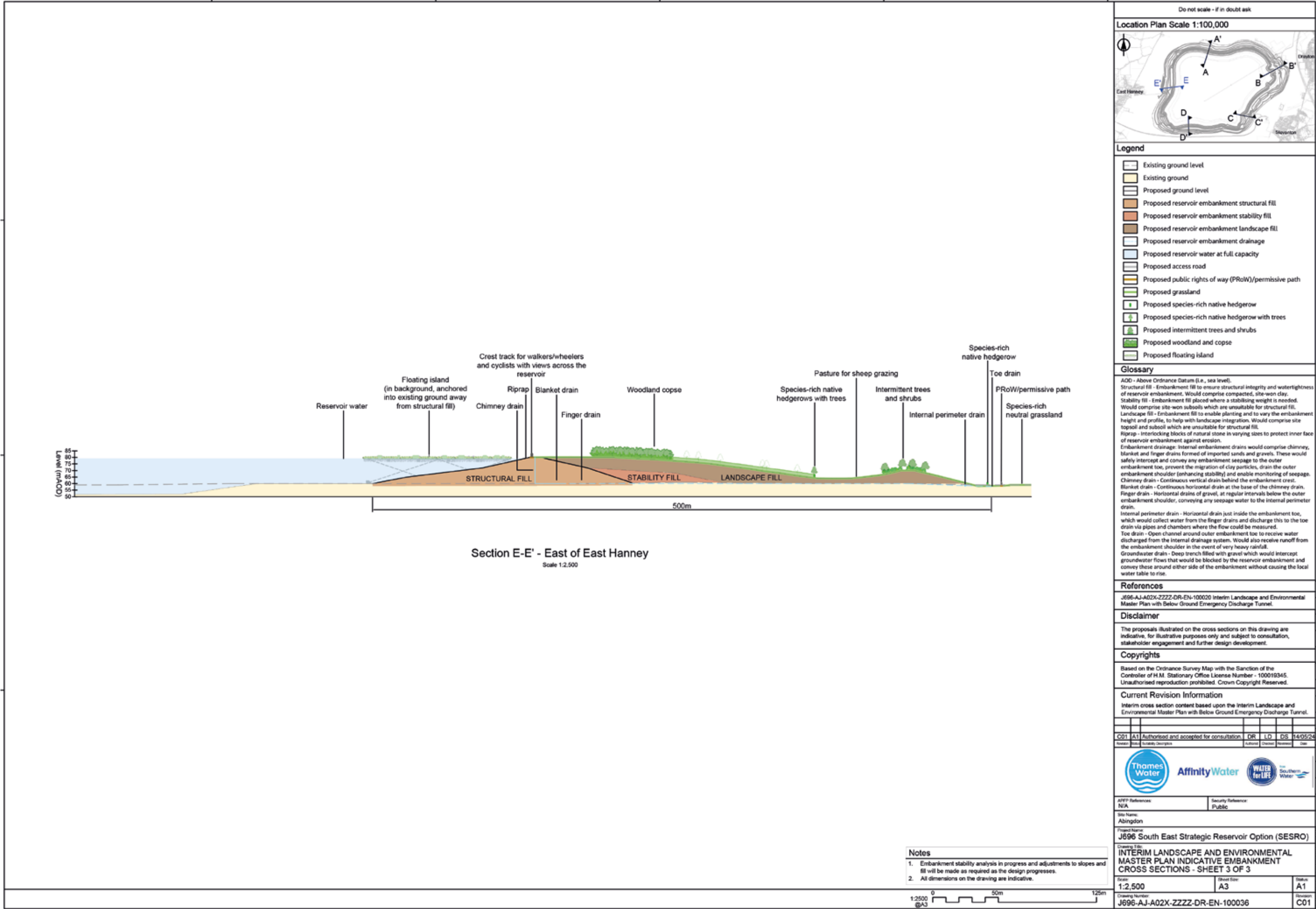
**Drawing Title:** INTERIM LANDSCAPE AND ENVIRONMENTAL MASTER PLAN INDICATIVE EMBANKMENT CROSS SECTIONS - SHEET 2 OF 3

Scale	Sheet Size	Status
1:2,500	A3	A1

**Drawing Number:** J696-AJ-A02X-ZZZZ-DR-EN-100035

**Revision:** C01







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## Notice

This document has been produced to support the public consultation on key infrastructure options, draft Design Principles and an Interim Master Plan for the South East Strategic Reservoir Option and to inform scoping of the environmental impact assessment. The information presented represents the current stage of the project design. It comprises material or data which is still in the course of completion, pending consultation, engagement and further design and technical development.





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