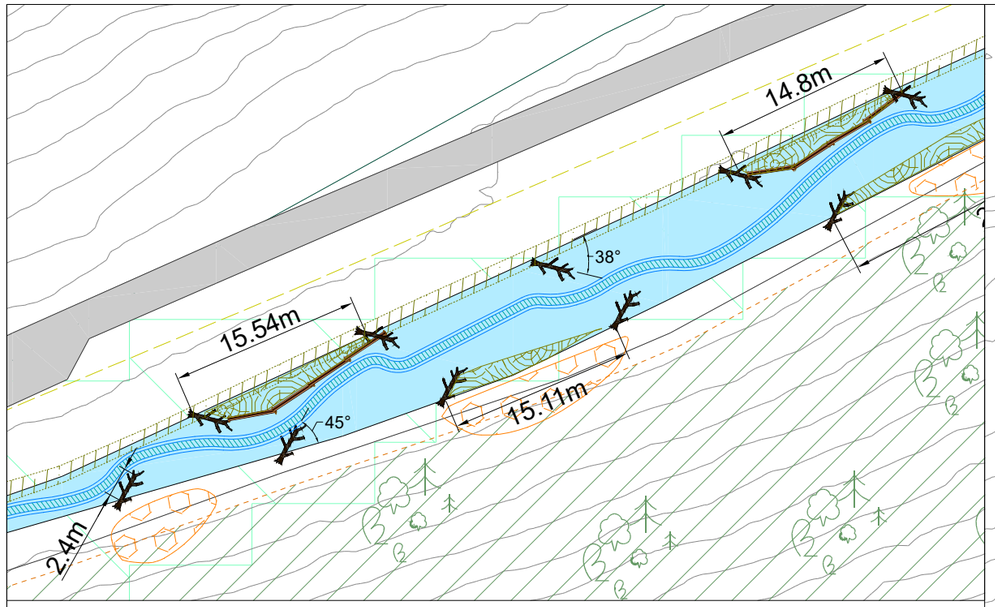

1:500 view of the wide downstream section of river. Proposals are to remove silt to create a gently meandering low flow channel, and use the silt to fill marginal areas that will be fronted with hazel bundles and planted with marginal species. The hazel bundles will continue to catch sediment during high flows, and provide additional in channel habitat.

Low flow channel to widen as it reaches the existing rock weir.

Regrading aims to create a shallower slope to the river channel, improving stabilisation, and potential for biodiversity. Appropriate native planting should be undertaken to further stabilise the banks and provide habitat. Regrade should be slightly pushed into the channel to narrow the base for low flow resilience, but the overall capacity will be increased for flood events.

Marginal planting to enhance wetland. Large wood also used to provide habitat, and vary flow. No hazel fronting proposed through this section, although can be proposed if desired.

Brash berms providing habitat in channel, as well as narrowing for low flow resilience. Material to be sourced on-site where possible. Berms can be topped with site won spoil if desired, and then planted with native species.

Hazel fronted features backfilled with silt excavated from the channel, and then planted with marginal species.

Regrading to create capacity for high flows, and stabilise banks to reduce erosion and sedimentation. Material to be pushed into the channel at a shallow angle, or topping berms; this will allow more efficient usage of spoil, and less to muckaway. If the banks are stable and not vertical then no regrading should be undertaken.

Marginal planting to collect sediment and narrow channel during low flows, but provide a softer narrowing than berms, allowing high flows to still overtop these features in flood events.

Low flow channel dimensions are constrained by the lack of gradient in the reach, and the potential presence of an artificial liner within the channel. Proposed dimensions include up to 0.1m of excavation to create a 0.5m wide, 0.2m deep profile.

Vegetation clearance and thinning to dechoke the channel, increase light availability, and provide material for in channel works. Vegetation works to be undertaken alongside survey by a competent and experienced ecologist due to likelihood of nesting birds.

Large wood to be used as deflectors, creating a variation in flow regime, and providing habitat features. Full trees can be used where appropriate as the branches will alter sedimentation patterns.

VW03_CS02 Bridge (Entrance)
VW03_CS03 Open Channel
VW03_CS04 Open Channel
VW03_CS05 Open Channel
FB
2.82m
51°
15.91m
2.94m
14.8m
25°
2.78m
28.32m
38°
15.54m
45°
15.11m
2.4m
6.83m
20°
2.67m
29°
2.14m
9.68m
3.61m
11.7m
7.88m
11.3m
28°
2.18m
13.75m
5.28m

Key:

- Vicar Water
- Flood Zone 3
- Flood Zone 2
- Existing Dense Vegetation
- Public Right of Way
- Contours (1 m)
- Proposed Large Wood
- Proposed Vegetation Works
- Proposed Berm
- Proposed Bank Regrading
- Proposed Marginal Planting
- Proposed Hazel Fronting

Utility Investigation Status:

☒ Type C: Desk study and site reconnaissance

Severn Trent Waste Water
Severn Trent Clean Water

General Notes:

1. All dimensions shown are in metres unless otherwise stated and levels in metres to ordnance datum.
2. Utility search undertaken in March 2024 for the design phase of the project.
3. Relevant consent to be sought before the construction phase.
4. Construction works to be undertaken by a competent contractor with experience installing river and habitat restoration works.
5. Vegetation removal to enhance light availability to the channel, as well as allow for bank regrading and to provide material for in channel works.
6. Regrade material to be pushed into the channel to soften banks where possible, and can be used to top berms.
7. Construction to be undertaken after reading the provided CDM documentation.

Design Assumptions:

1. Design is based on the assumption that the Defra LiDAR is accurate and fit for purpose.

FOR CONSTRUCTION

Ver.	Ver. Date	Status	Drawn	Check'd	Apprv'd
3	08/05/2024	FOR ISSUE	ENJ	NC	CC

FiveRivers
Hangar 5A
Thruxton Airfield
Andover
Hampshire
SP11 8PN
Tel: 01722 783041
www.five-rivers.com
Certificate Number 7071
ISO 9001
ISO 14001
ISO 45001

Client: Nottinghamshire Wildlife Trust

Project: 3509D - Nottinghamshire 3 Rivers

Title: Vicar Water
Reach 3 - Planview 3

Drawing number: 5R-3509D-207

Scale: 1:1000 @ A3