

Norwich Western Link Environmental Statement Chapter 12 Road Drainage and the Water Environment Appendix 2 Flood Risk Assessment Sub Appendix A – Figures Part 1 of 5

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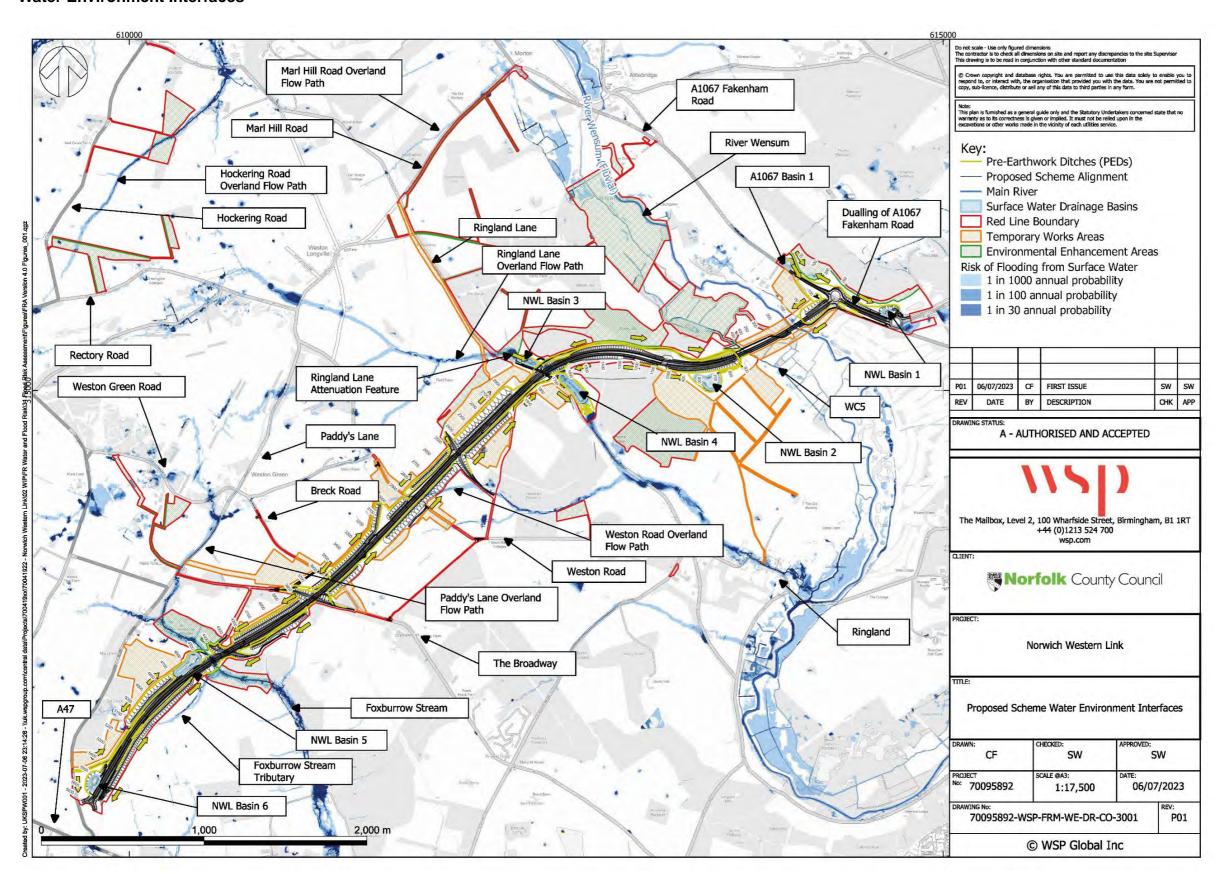
- 1.1.1 This Sub Appendix presents the figures associated with the **Flood Risk Assessment** (Document Reference 3.12.02). Figures are generally spit into four sections as follows:
 - Scheme wide figures
 - River Wensum figures
 - Foxburrow Stream figures
 - Ringland Lane overland flow path figures

Scheme wide

1.1.2 The following figures provide an overview of the Proposed Scheme as a whole, the various elements that make up the Proposed Scheme and the local infrastructure and environment in the vicinity of the Proposed Scheme and the interactions of all these elements with the Environment Agency's Flood Map for Surface Water.

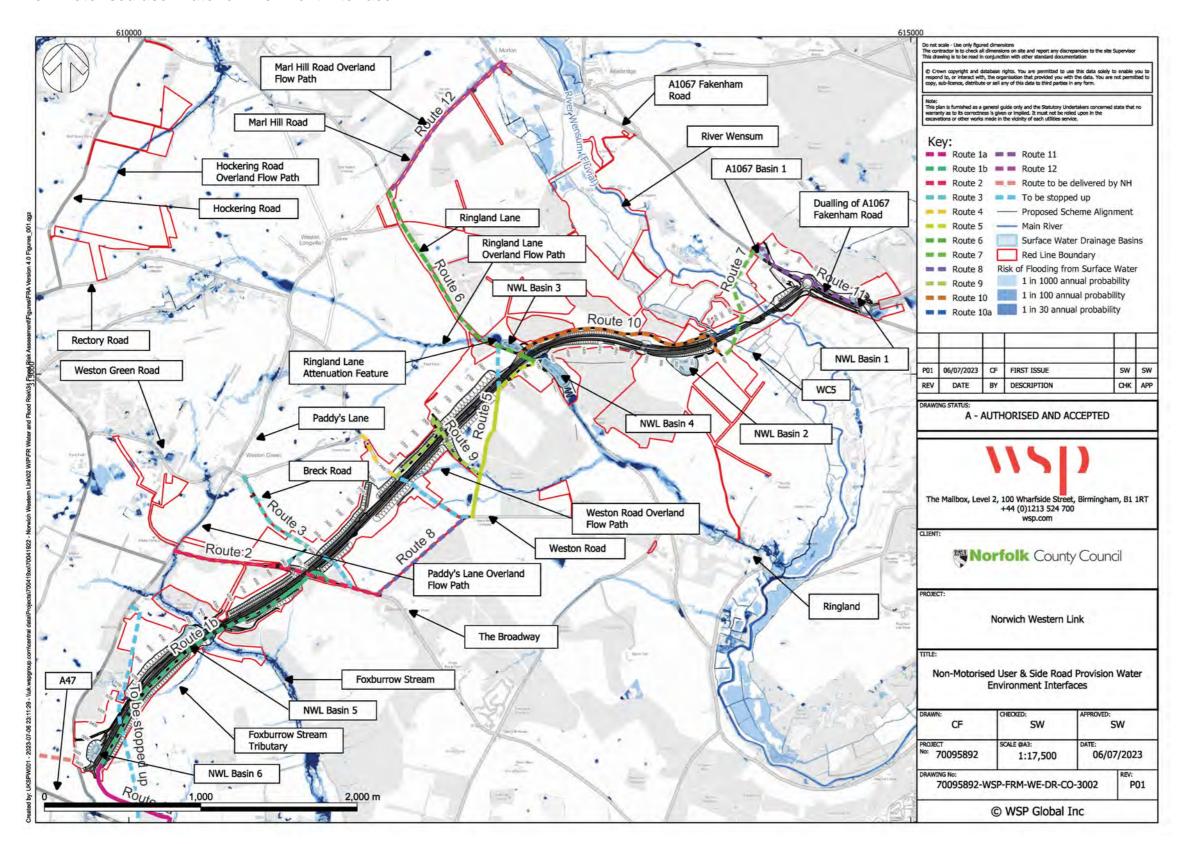


Water Environment Interfaces



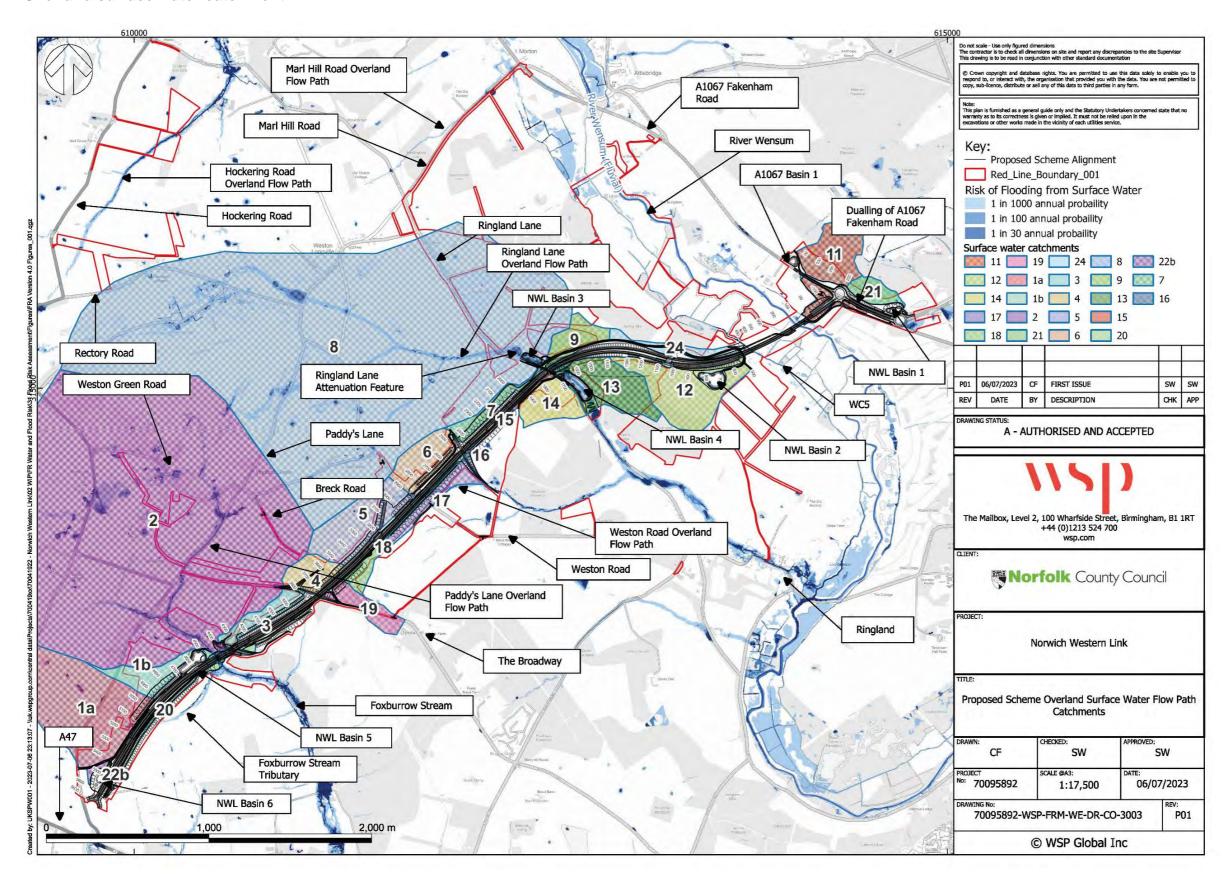


Non-motorised user water environment interface



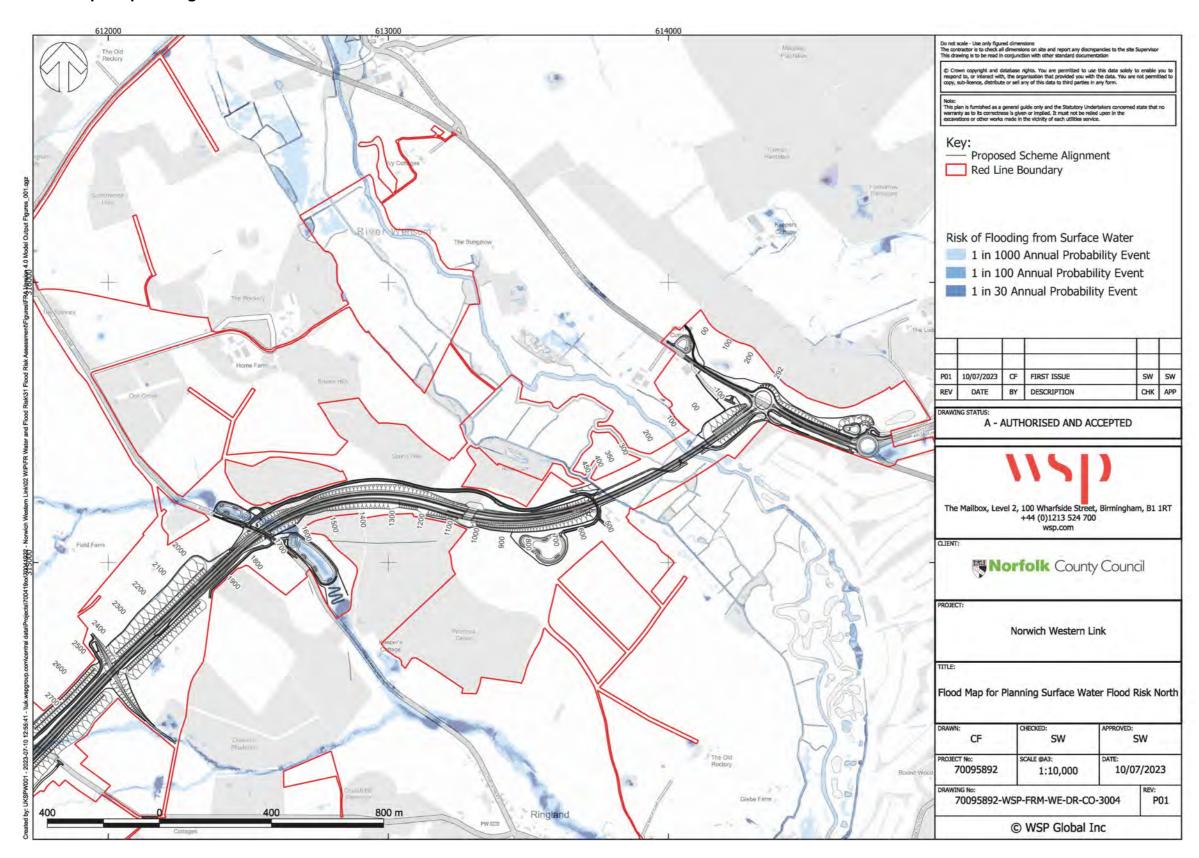


Overland surface water catchment



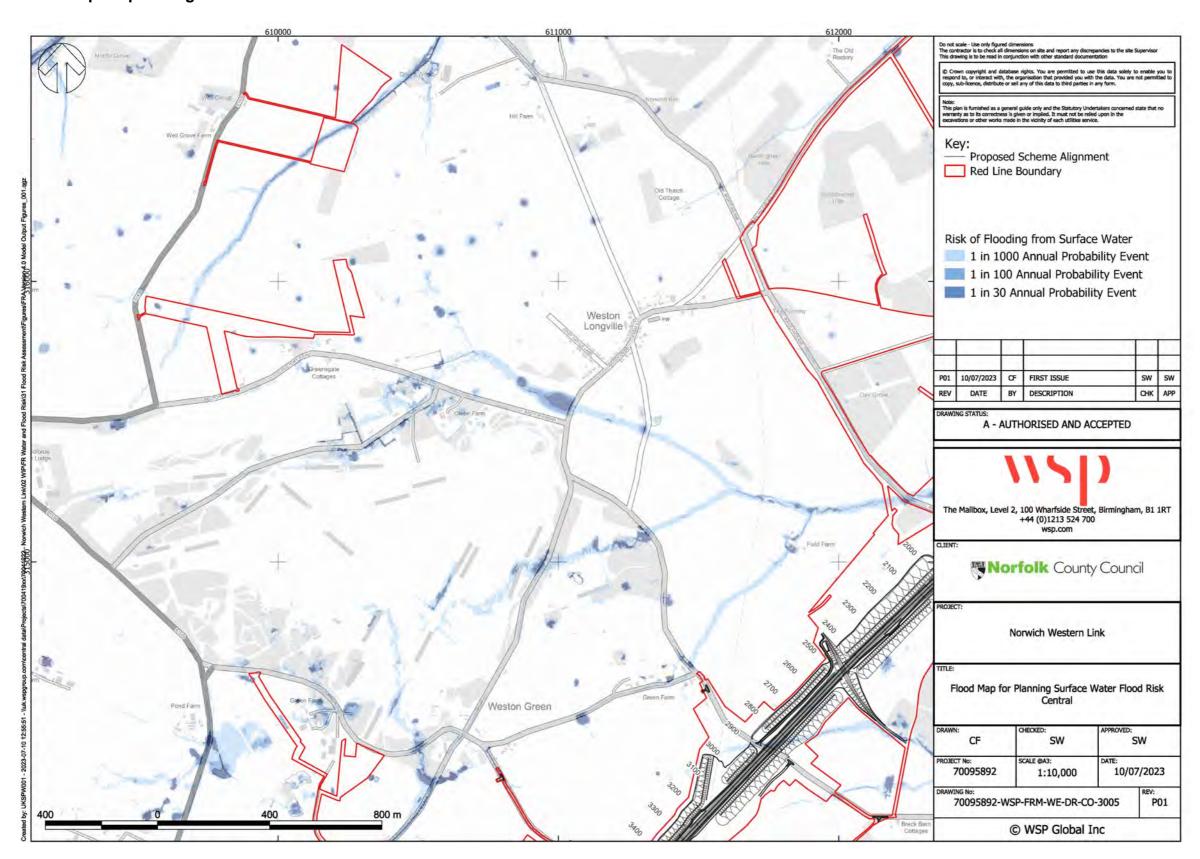


Flood map for planning surface water flood risk north



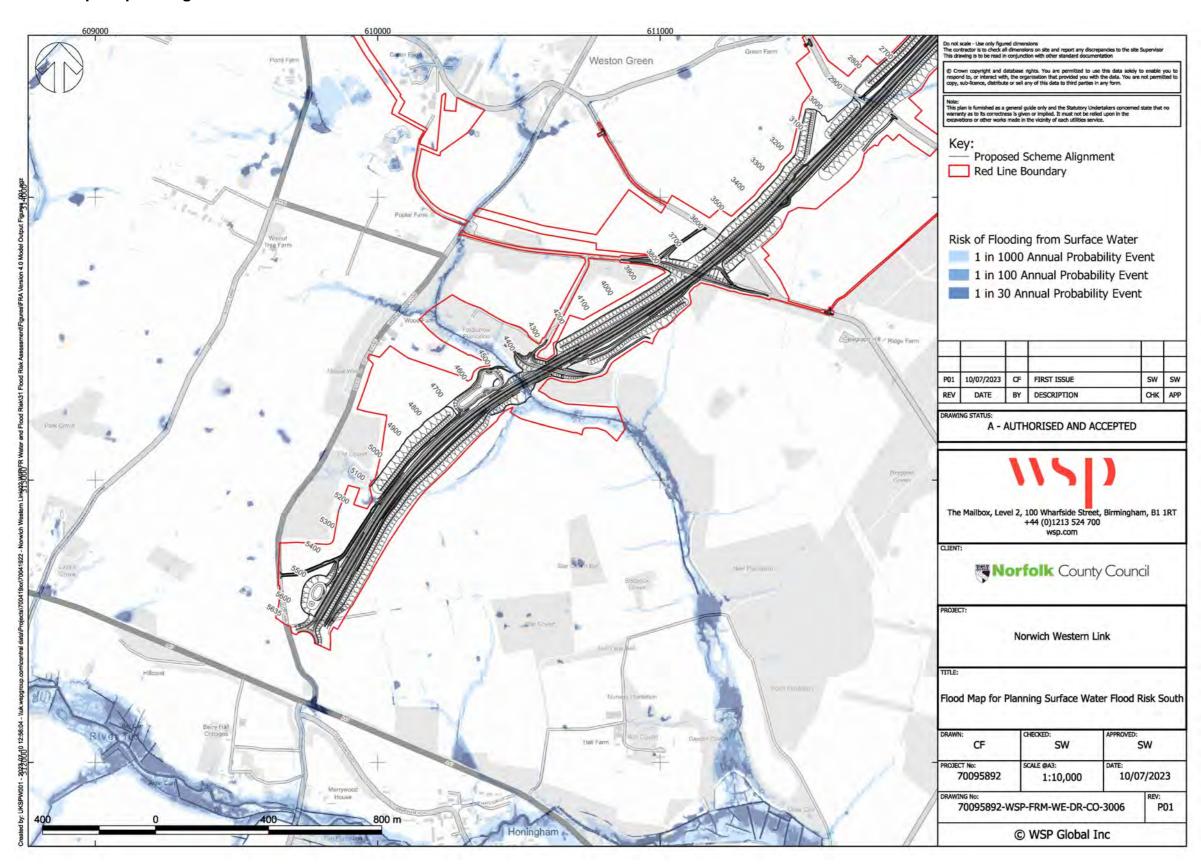


Flood map for planning surface water flood risk central



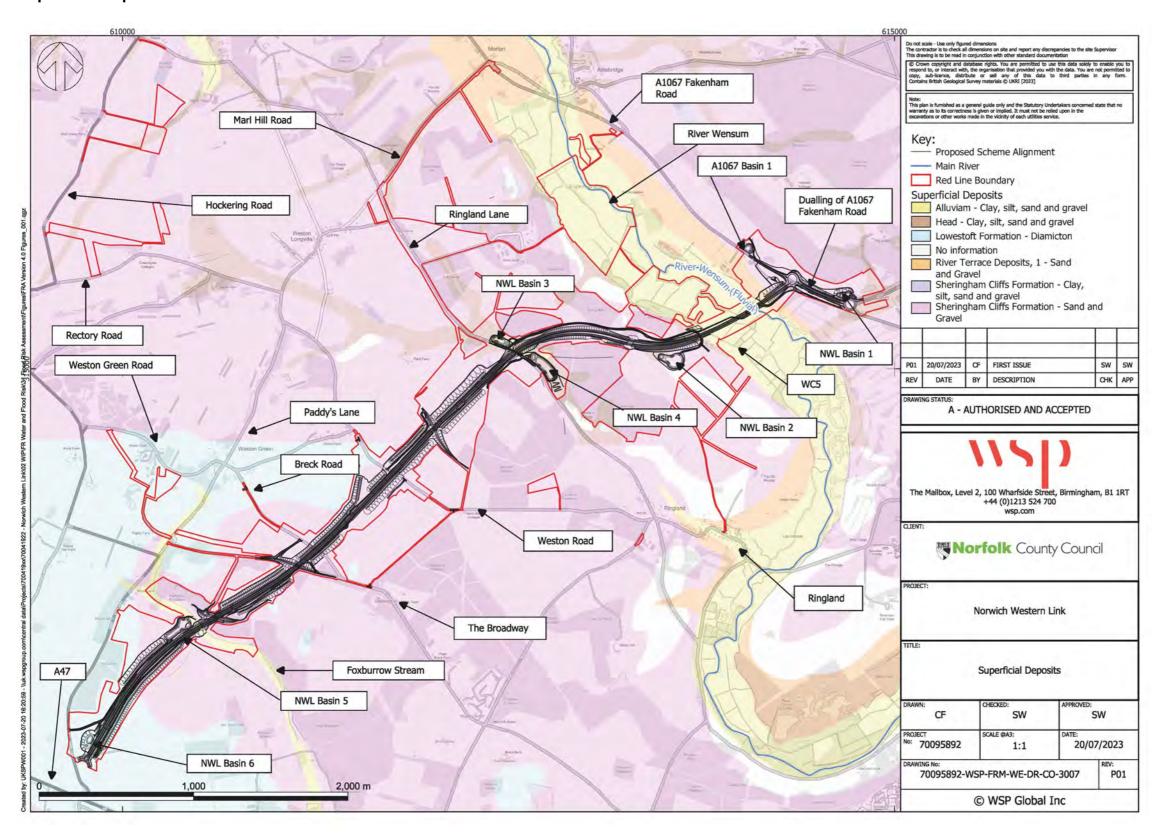


Flood map for planning surface water flood risk south





Superficial deposits



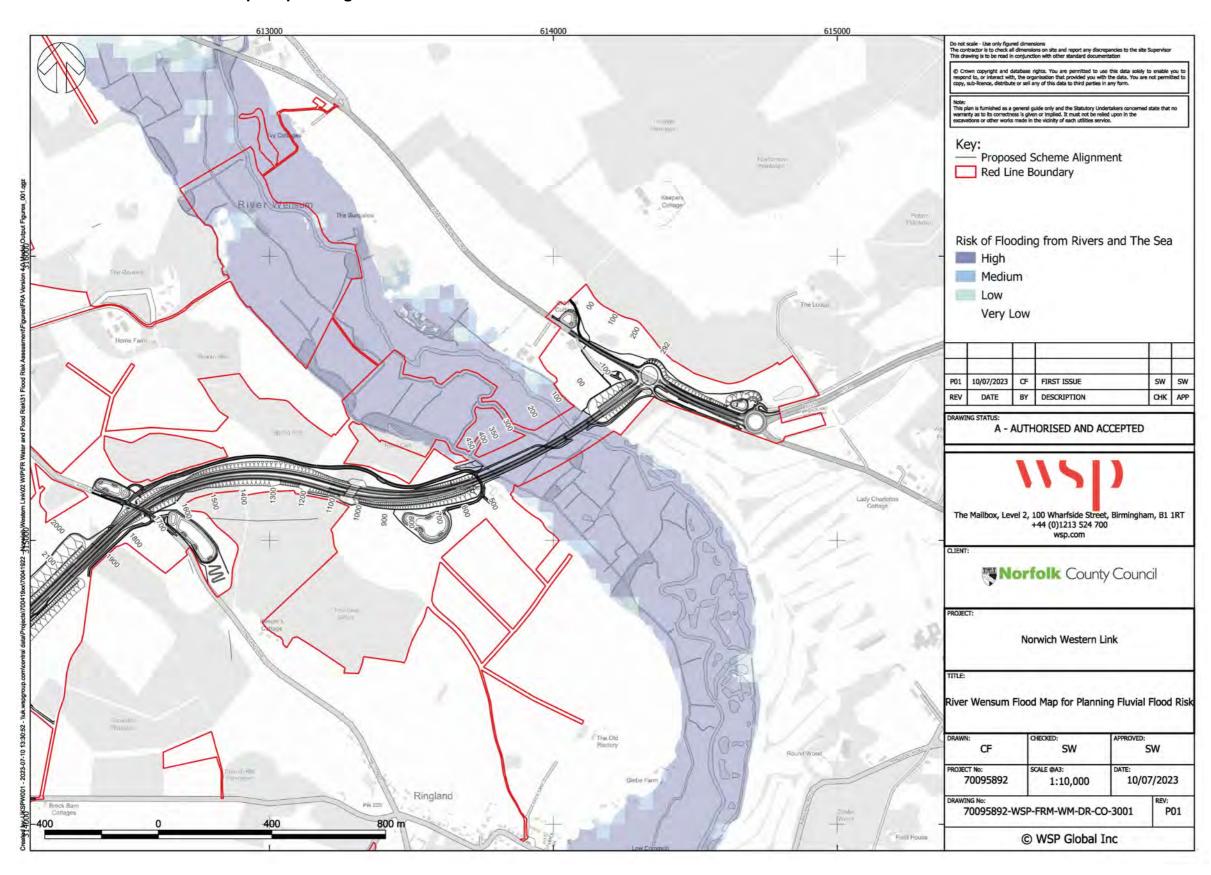


River Wensum

The following figures present the flood risk associated with the River Wensum. They present the existing risk from publicly available national mapping. They also present the results of the detailed hydraulic modelling undertaken as part of the Flood Risk Assessment. The modelling results presented include depths, velocity and hazard mapping in the existing case, with the proposed scheme in place and with the temporary works proposals in place. Maps are presented for the 1 in 2, 5, 30, 50, 100, 1000, 100+11%, 100+20%, 30+44% and 100+44% annual probability events. The differences in depth and velocity between the proposed and baseline and between the temporary works and baseline are also presented. Finally, model results are presented for a reservoir breach scenario in the 1 in 100+44% annual probability event and depth and velocity difference grids provided for the same event.

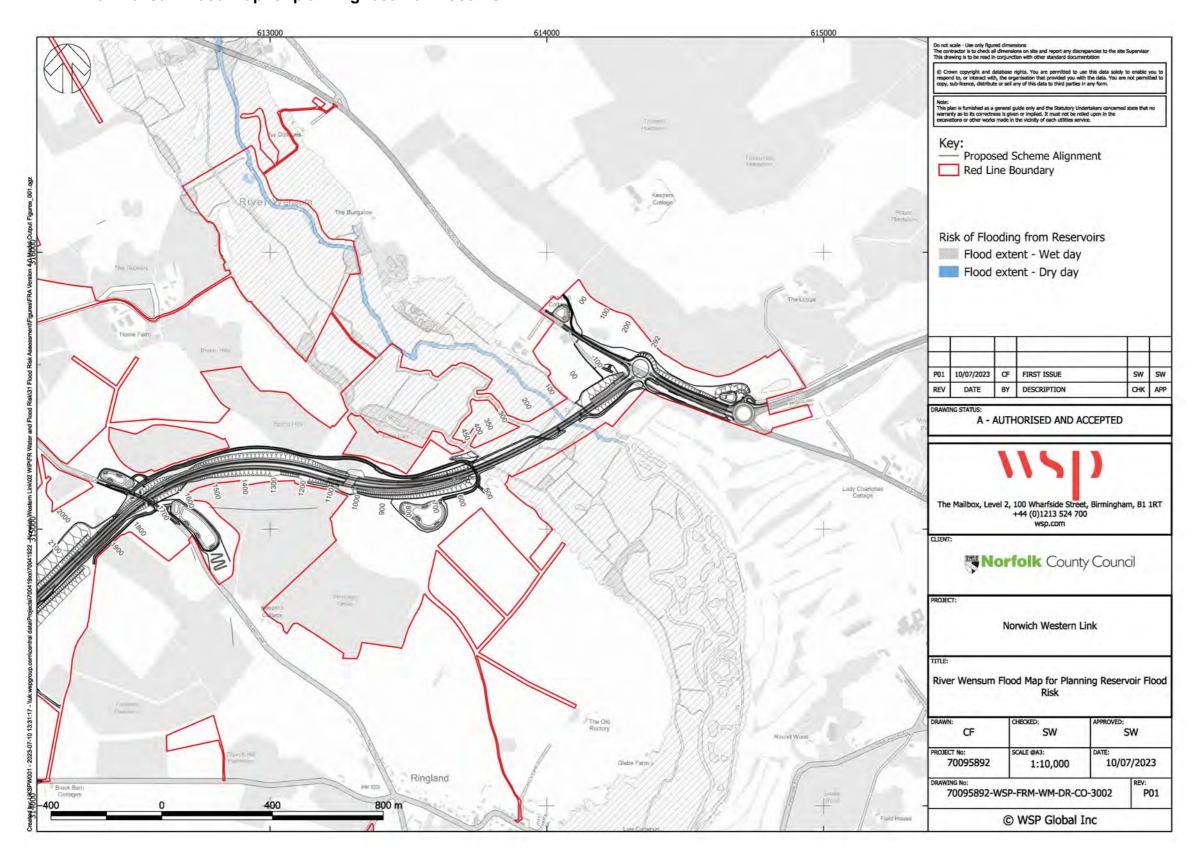


River Wensum flood map for planning fluvial flood risk



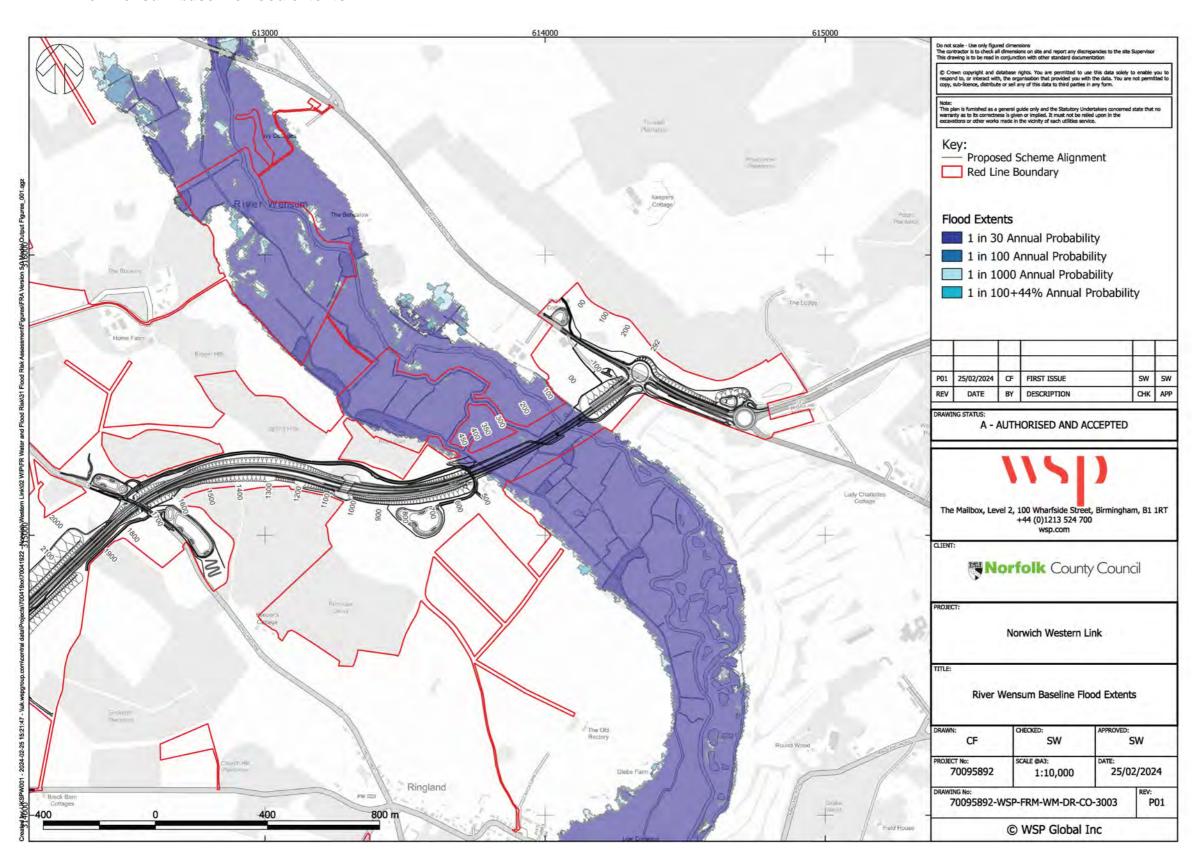


River Wensum flood map for planning reservoir flood risk



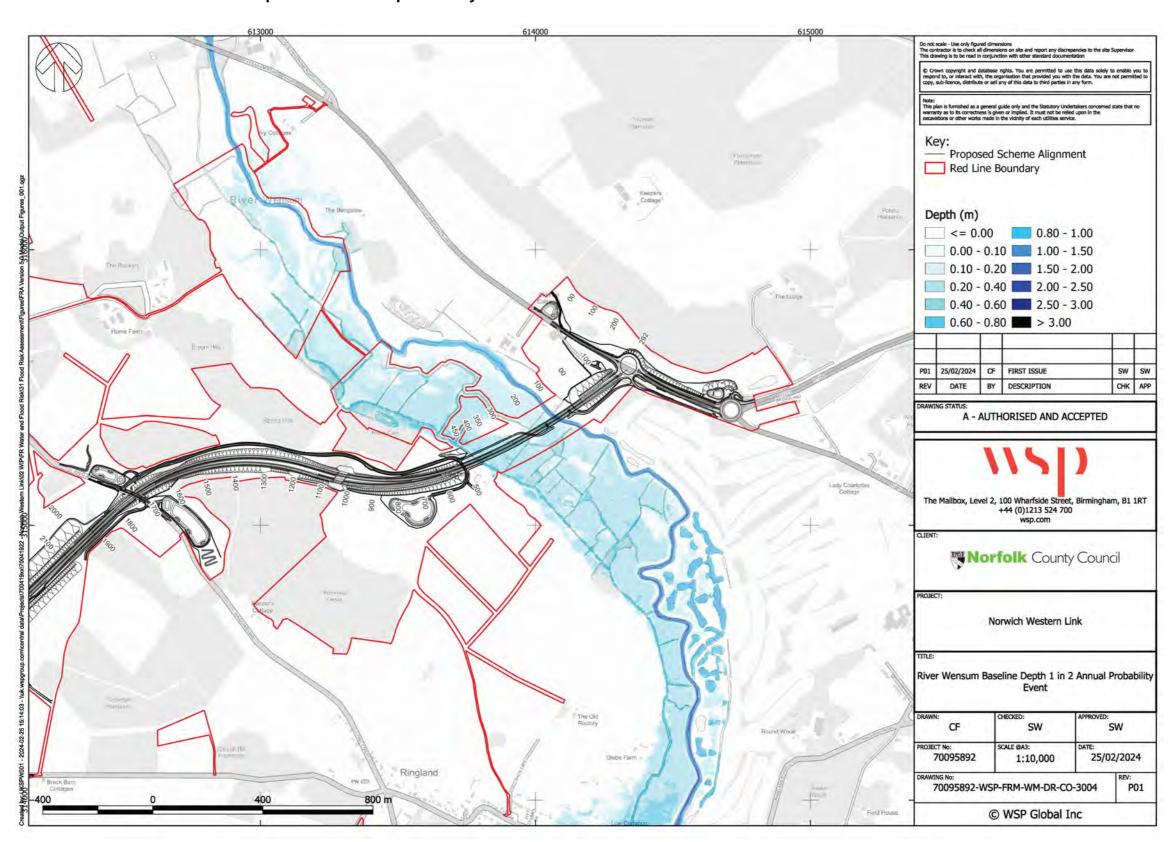


River Wensum baseline flood extents



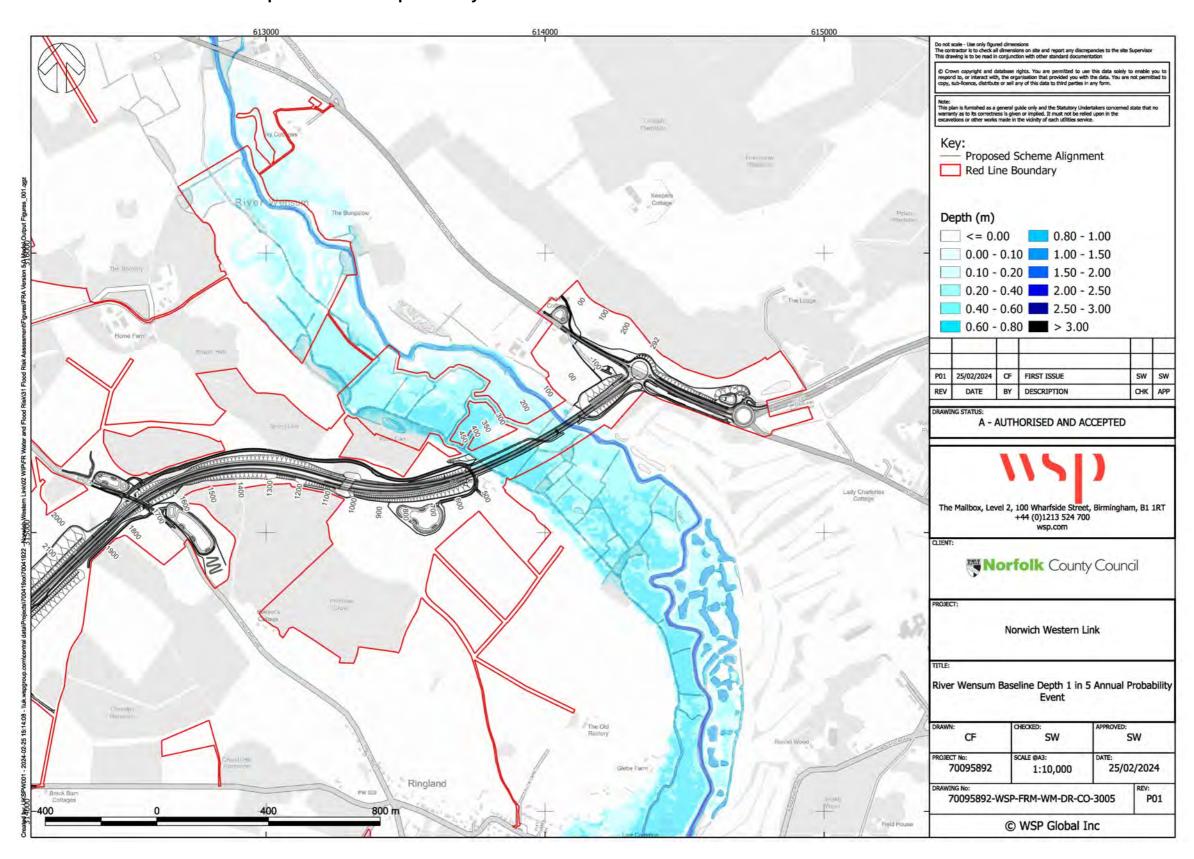


River Wensum baseline depth 1 in 2 annual probability event



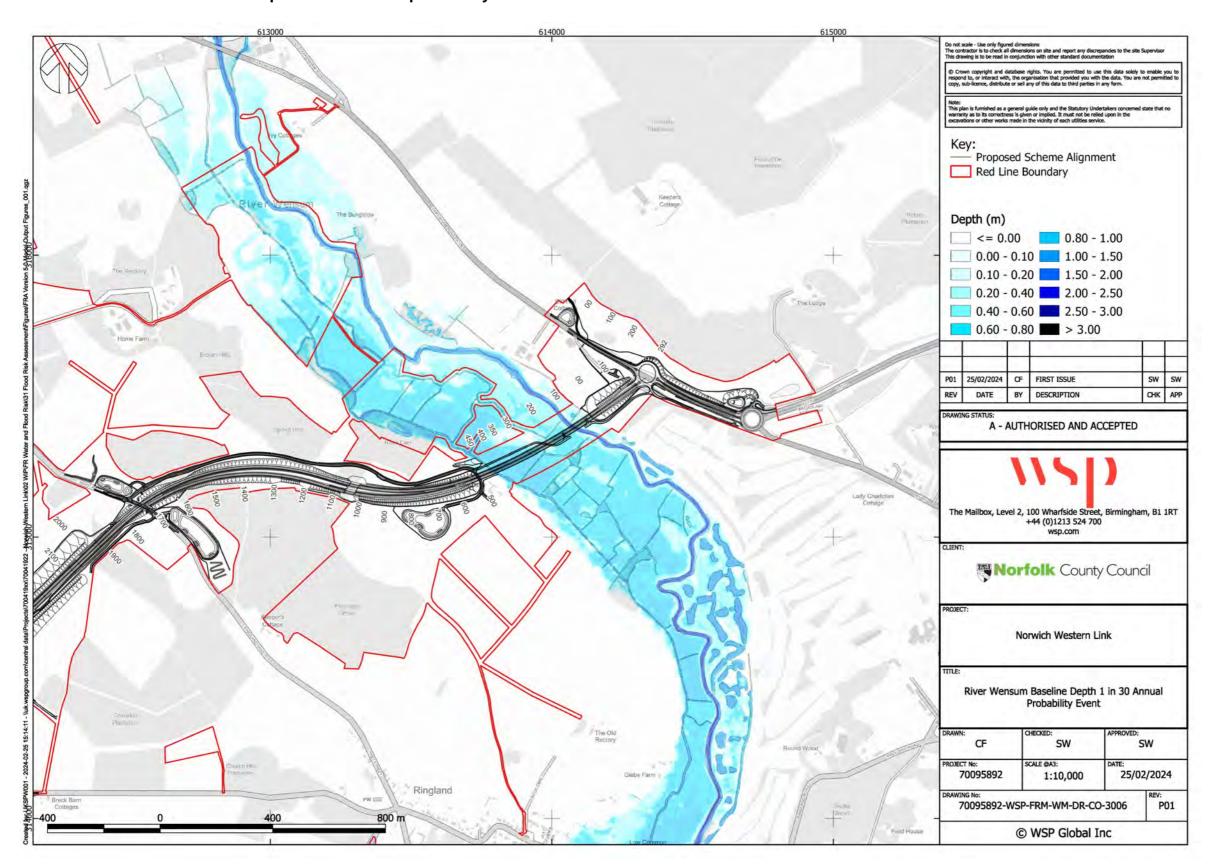


River Wensum baseline depth 1 in 5 annual probability event



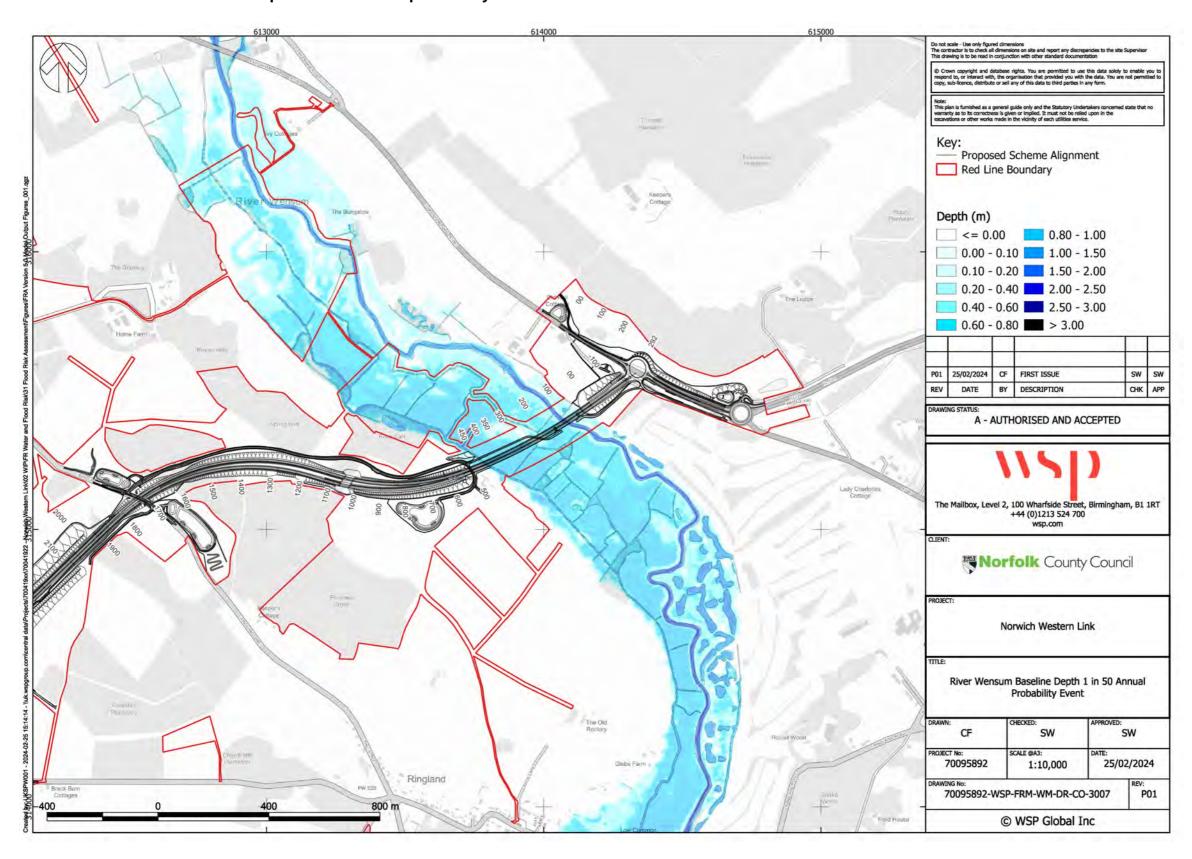


River Wensum baseline depth 1 in 30 annual probability event



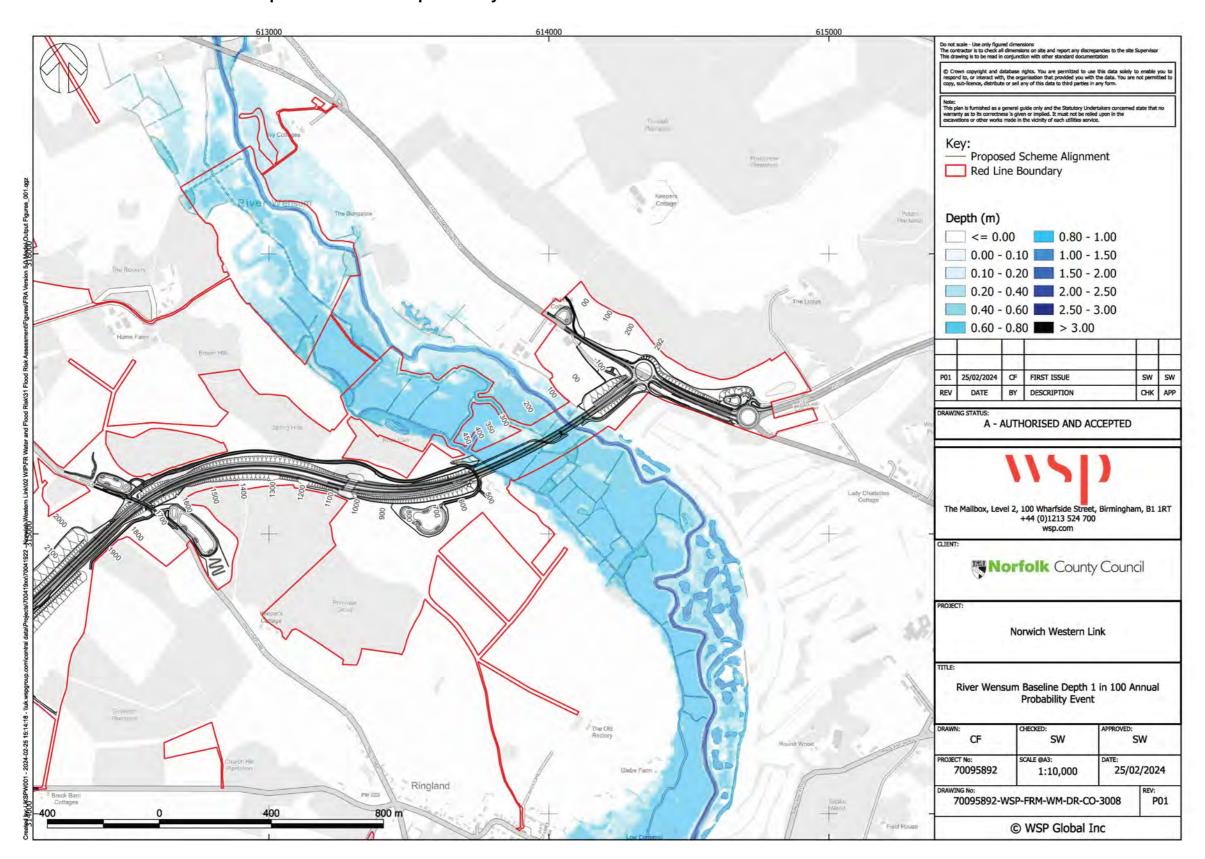


River Wensum baseline depth 1 in 50 annual probability event



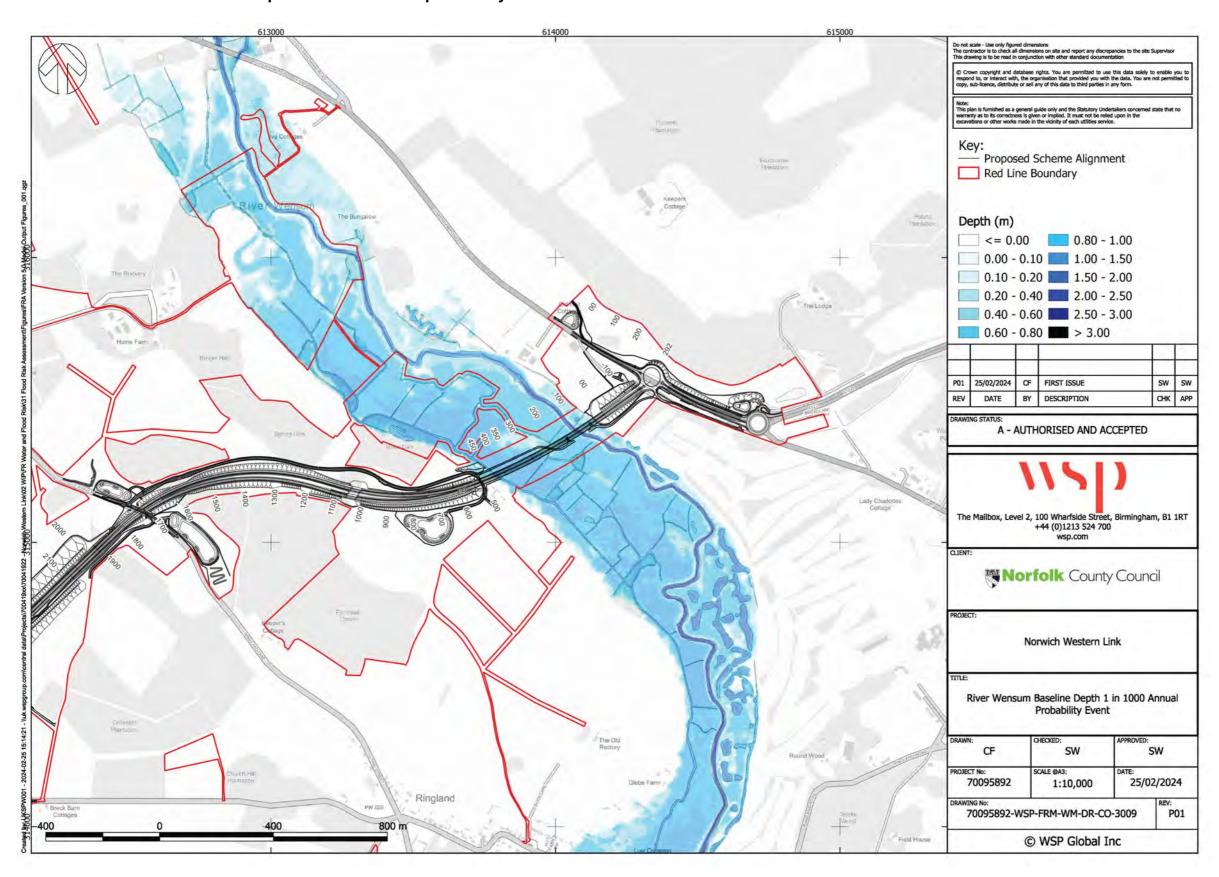


River Wensum baseline depth 1 in 100 annual probability event



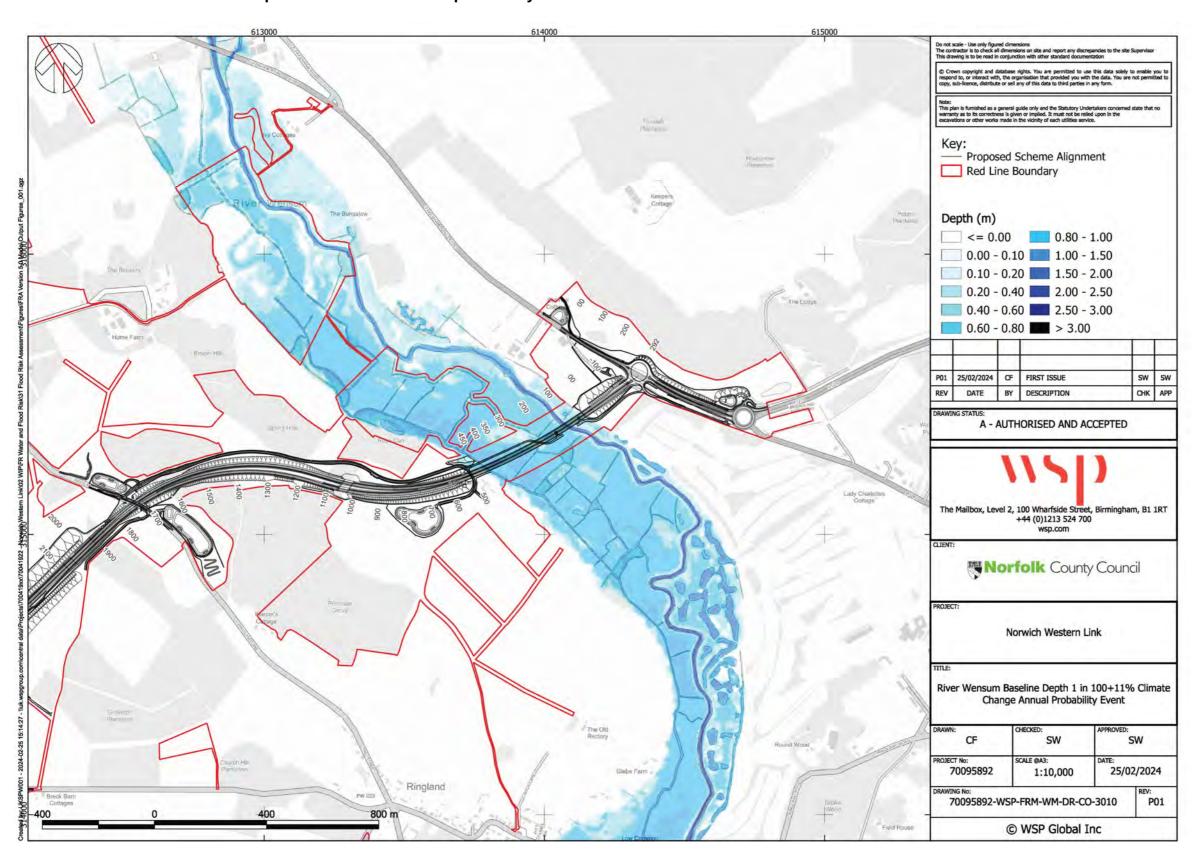


River Wensum baseline depth 1 in 1000 annual probability event



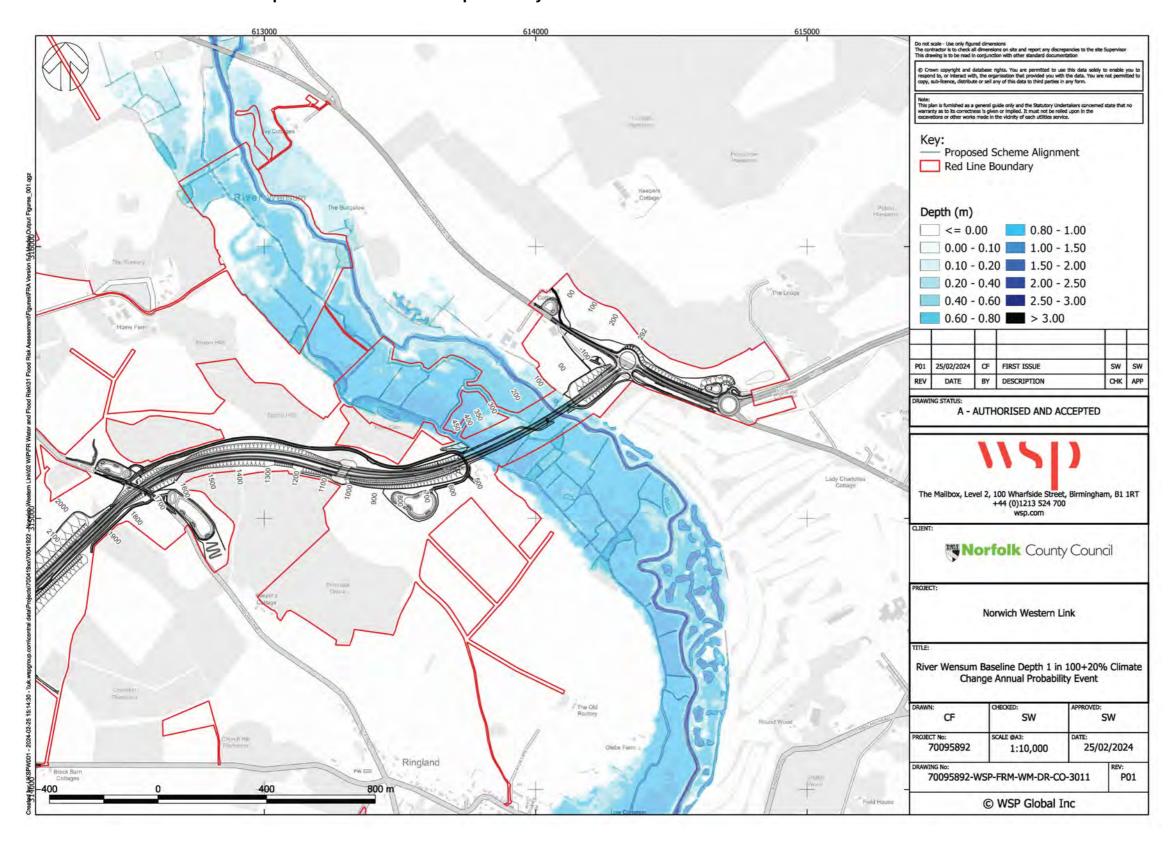


River Wensum baseline depth 1 in 100+11% annual probability event



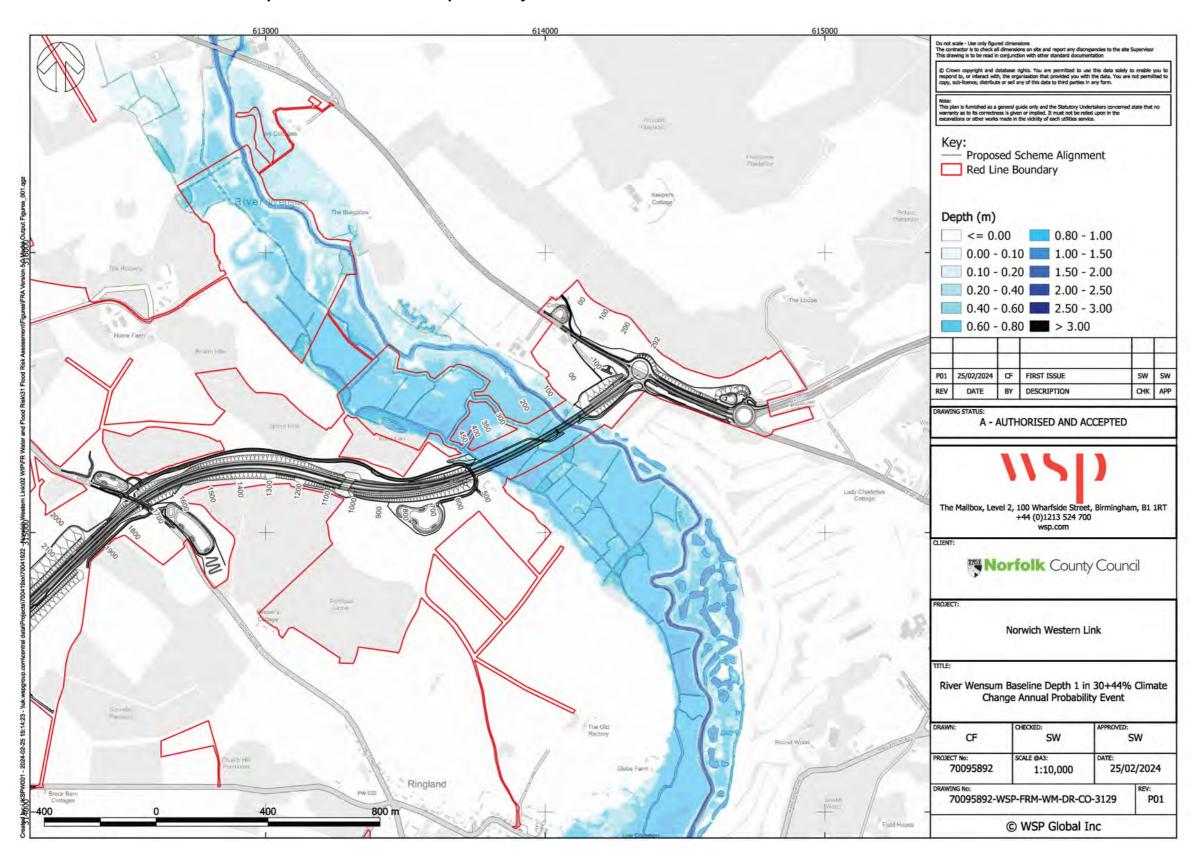


River Wensum baseline depth 1 in 100+20% annual probability event



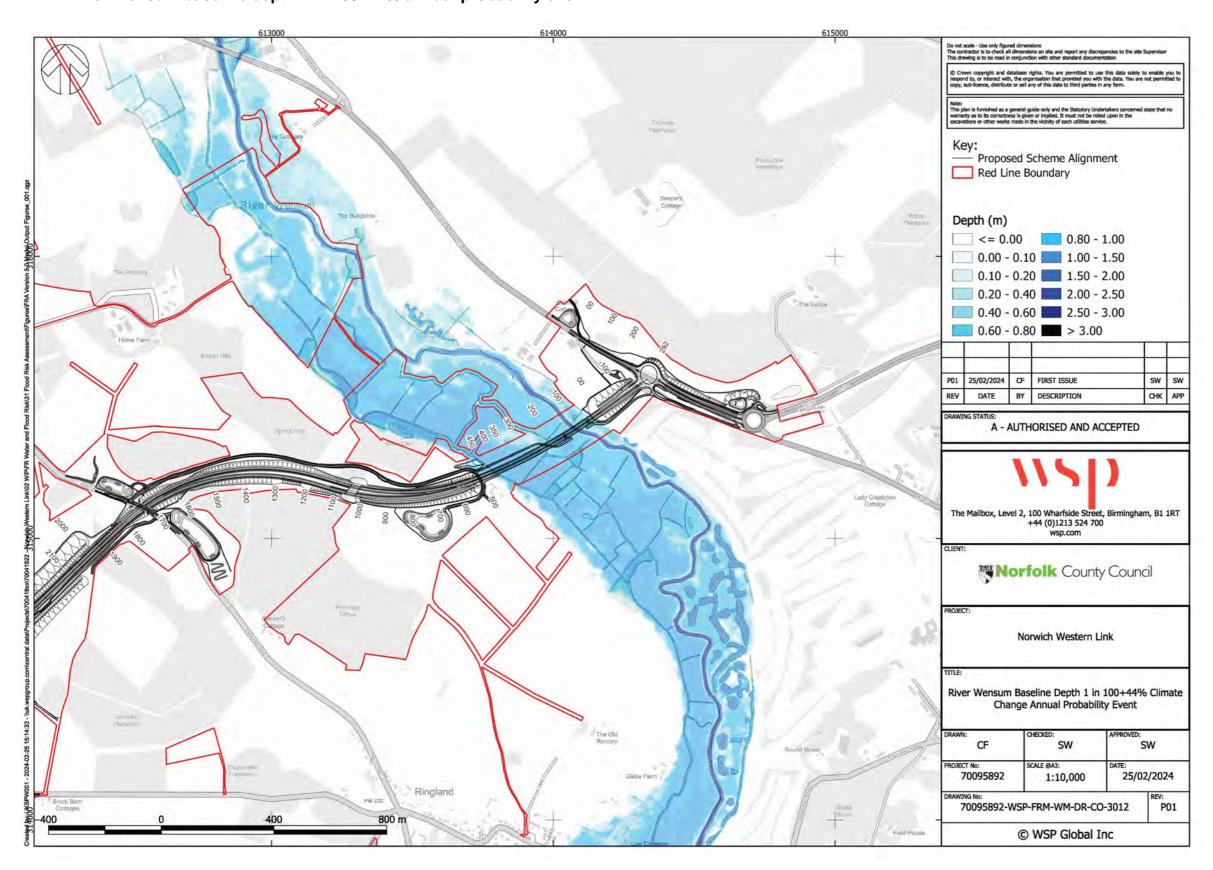


River Wensum baseline depth 1 in 30+44% annual probability event



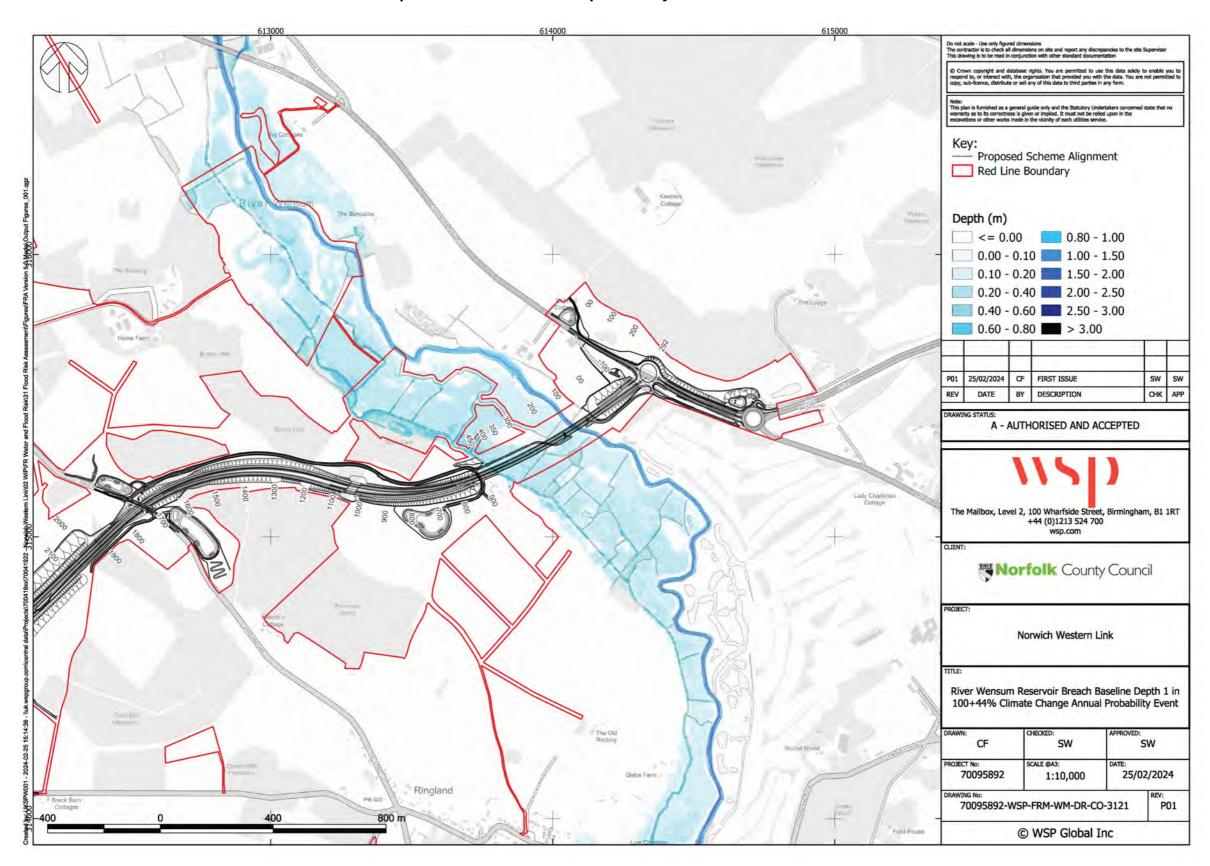


River Wensum baseline depth 1 in 100+44% annual probability event



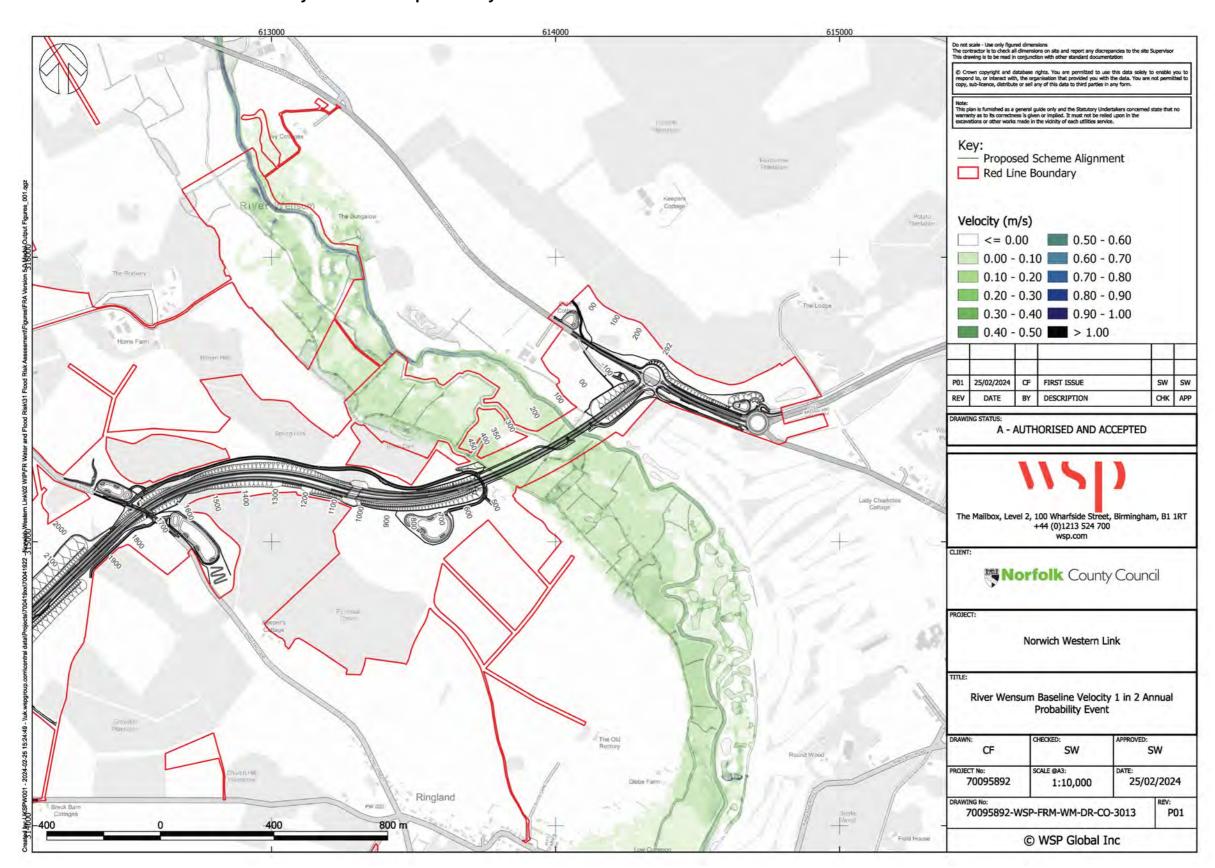


River Wensum reservoir breach baseline depth 1 in 100+44% annual probability event



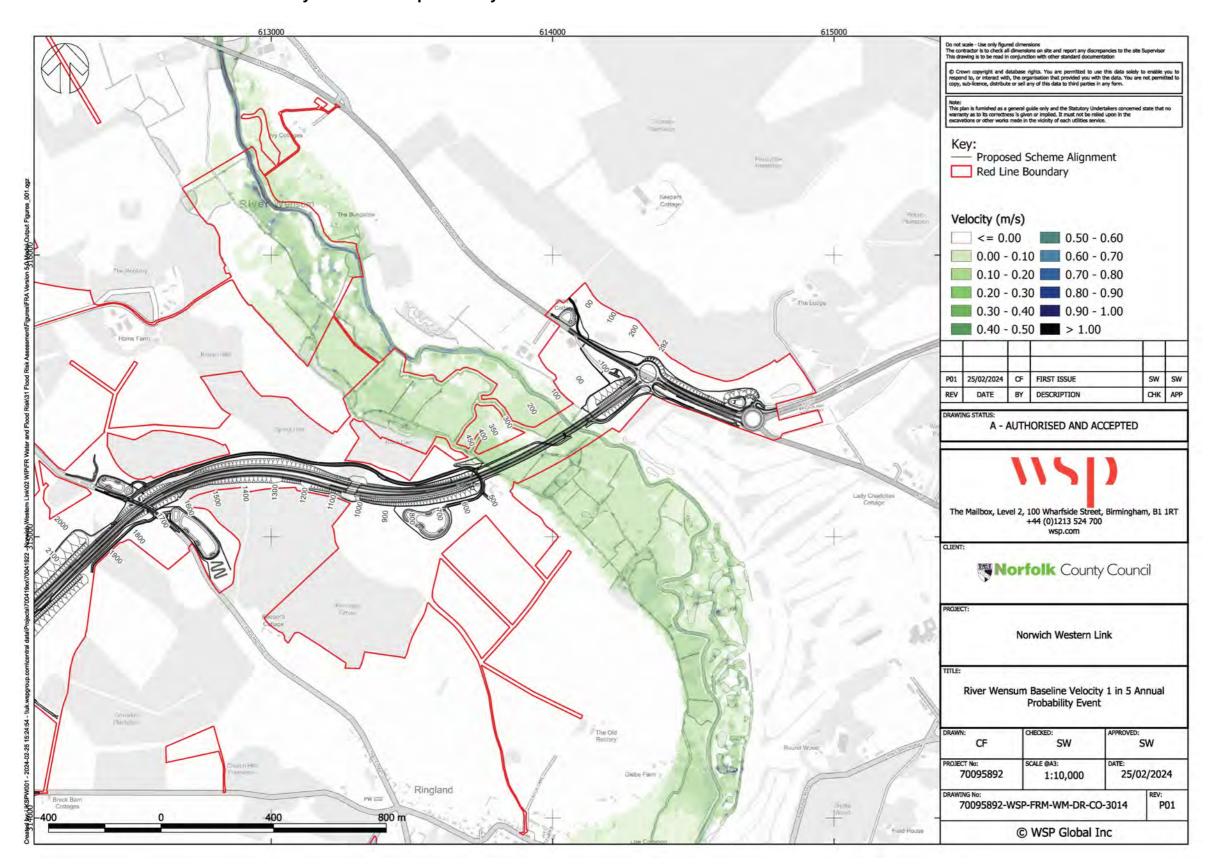


River Wensum baseline velocity 1 in 2 annual probability event



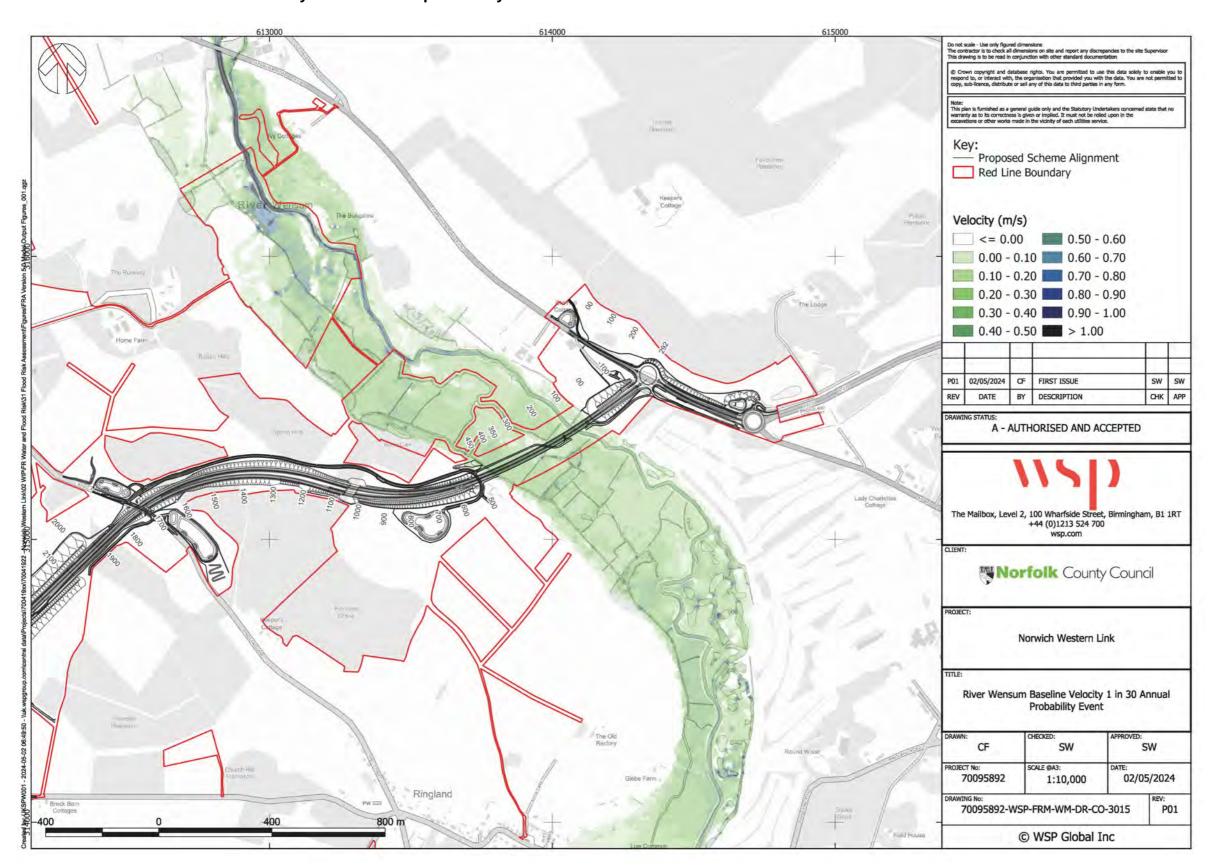


River Wensum baseline velocity 1 in 5 annual probability event



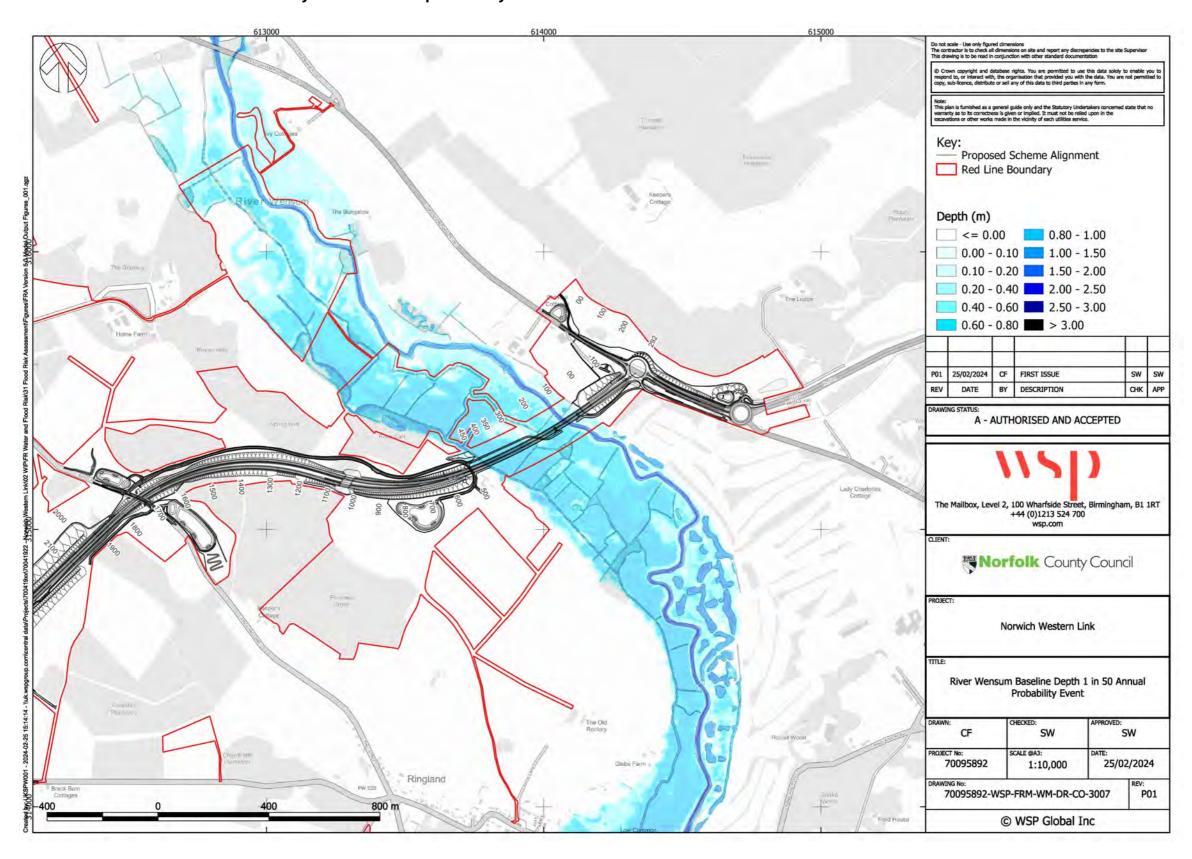


River Wensum baseline velocity 1 in 30 annual probability event



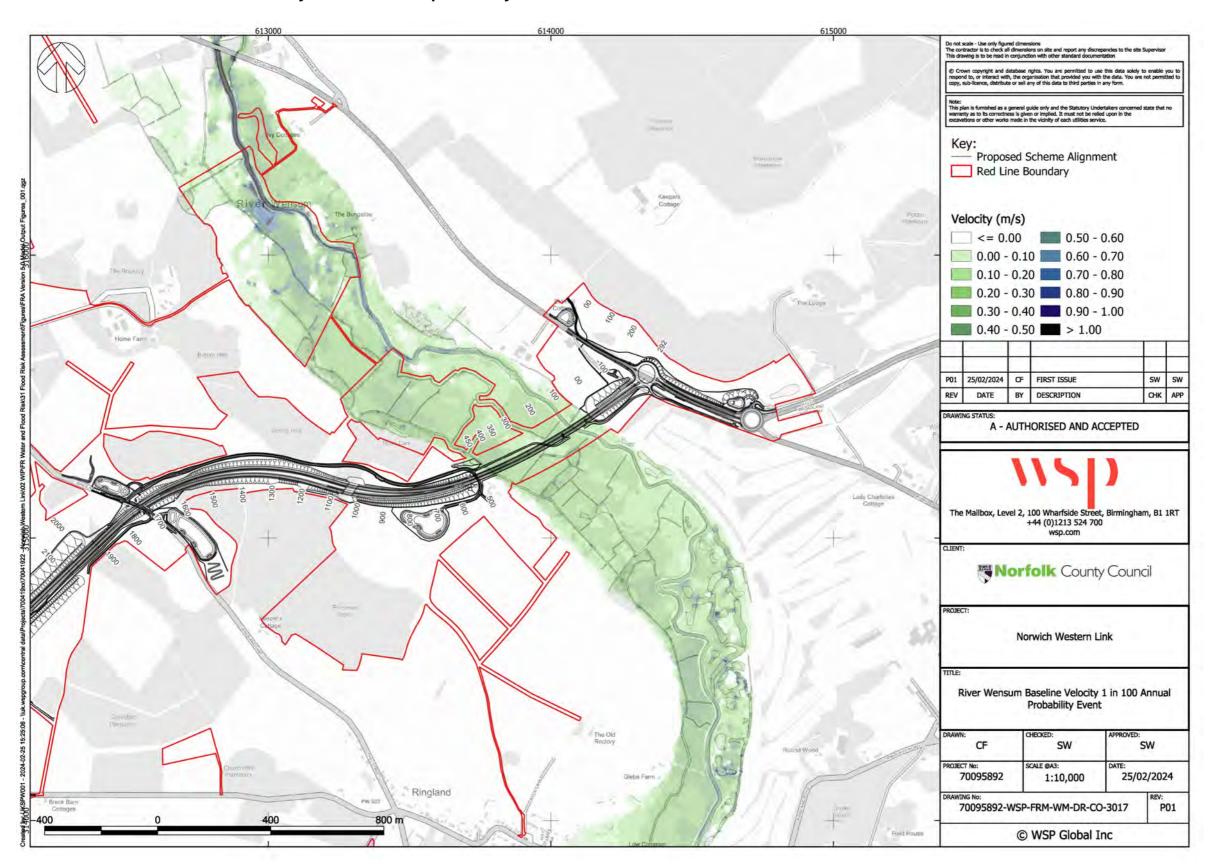


River Wensum baseline velocity 1 in 50 annual probability event



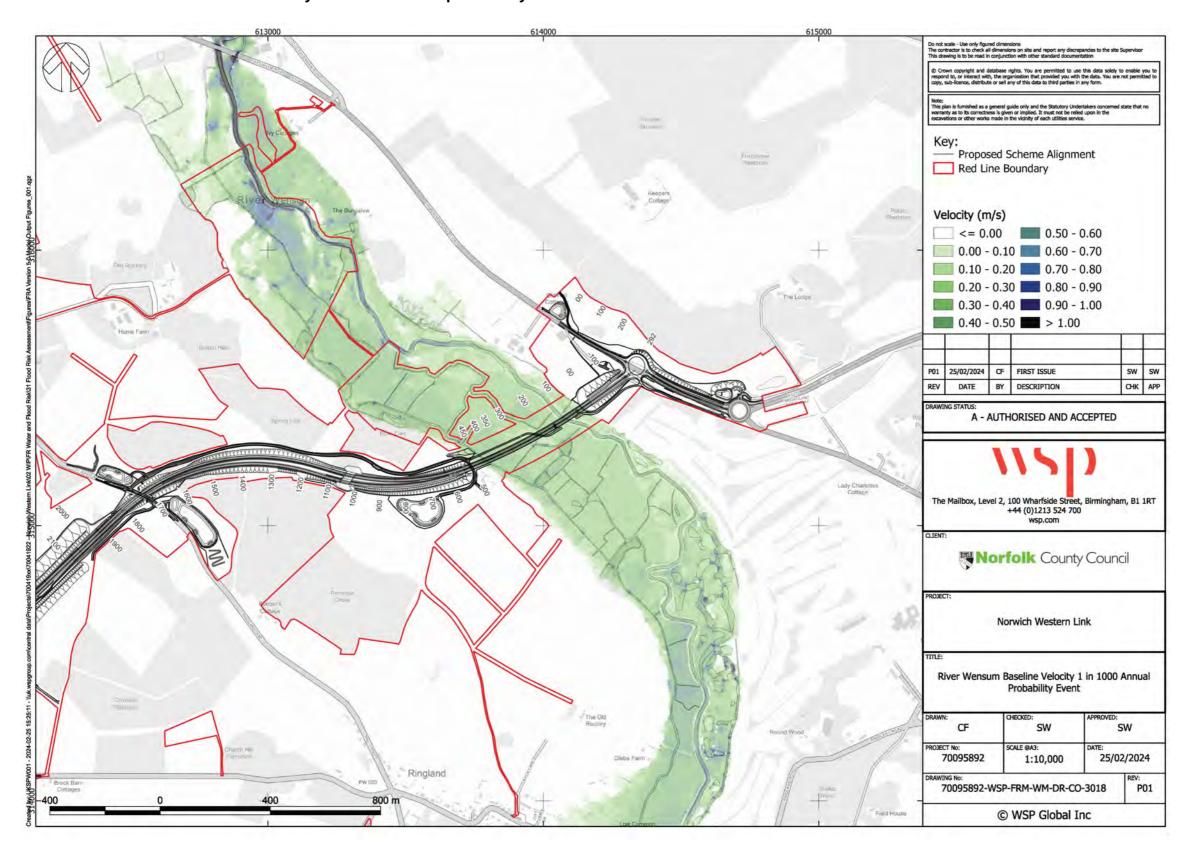


River Wensum baseline velocity 1 in 100 annual probability event



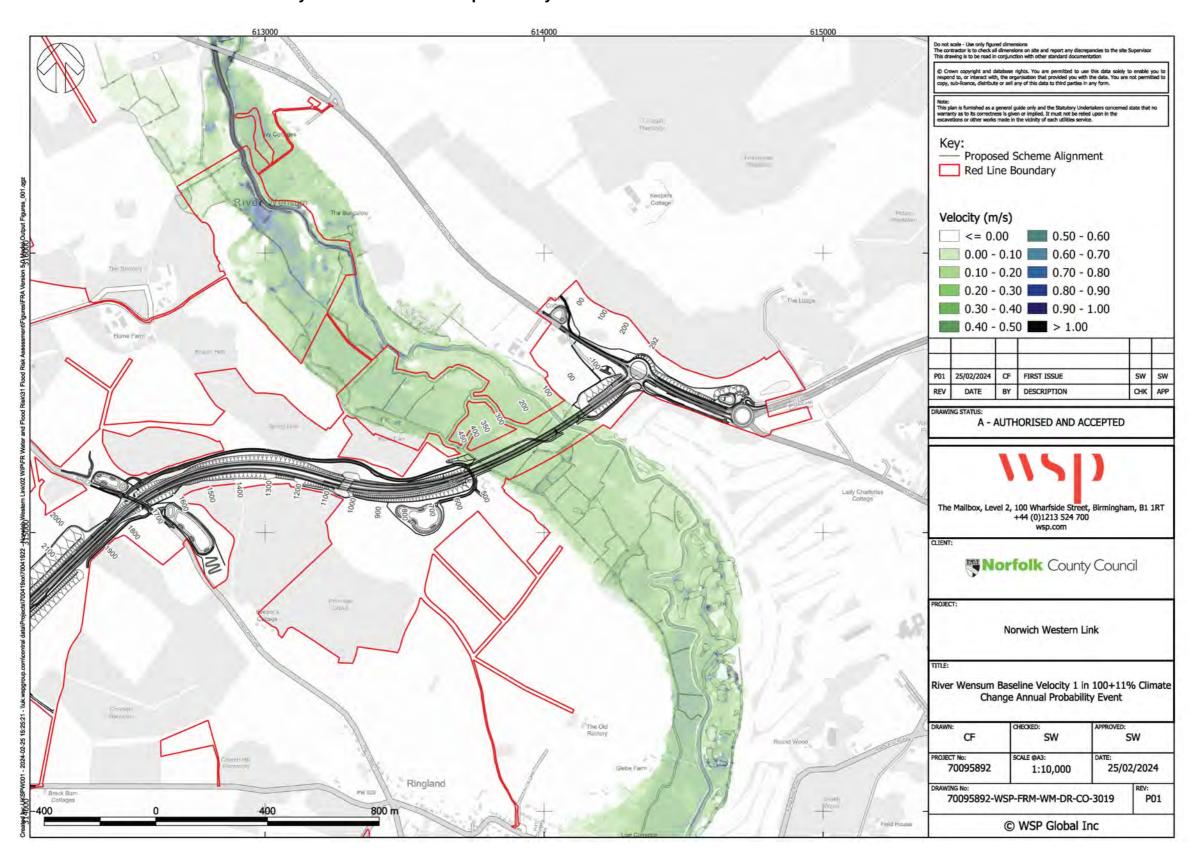


River Wensum baseline velocity 1 in 1000 annual probability event



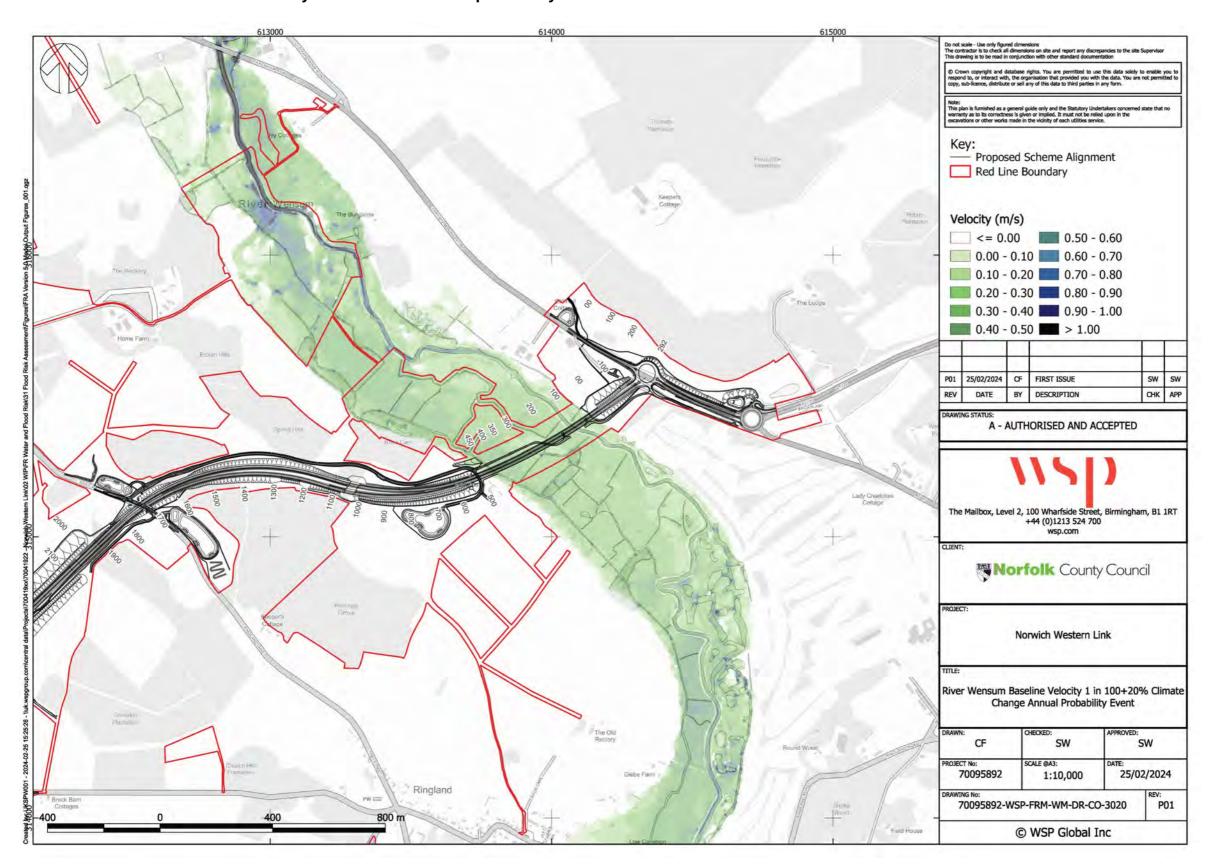


River Wensum baseline velocity 1 in 100+11% annual probability event



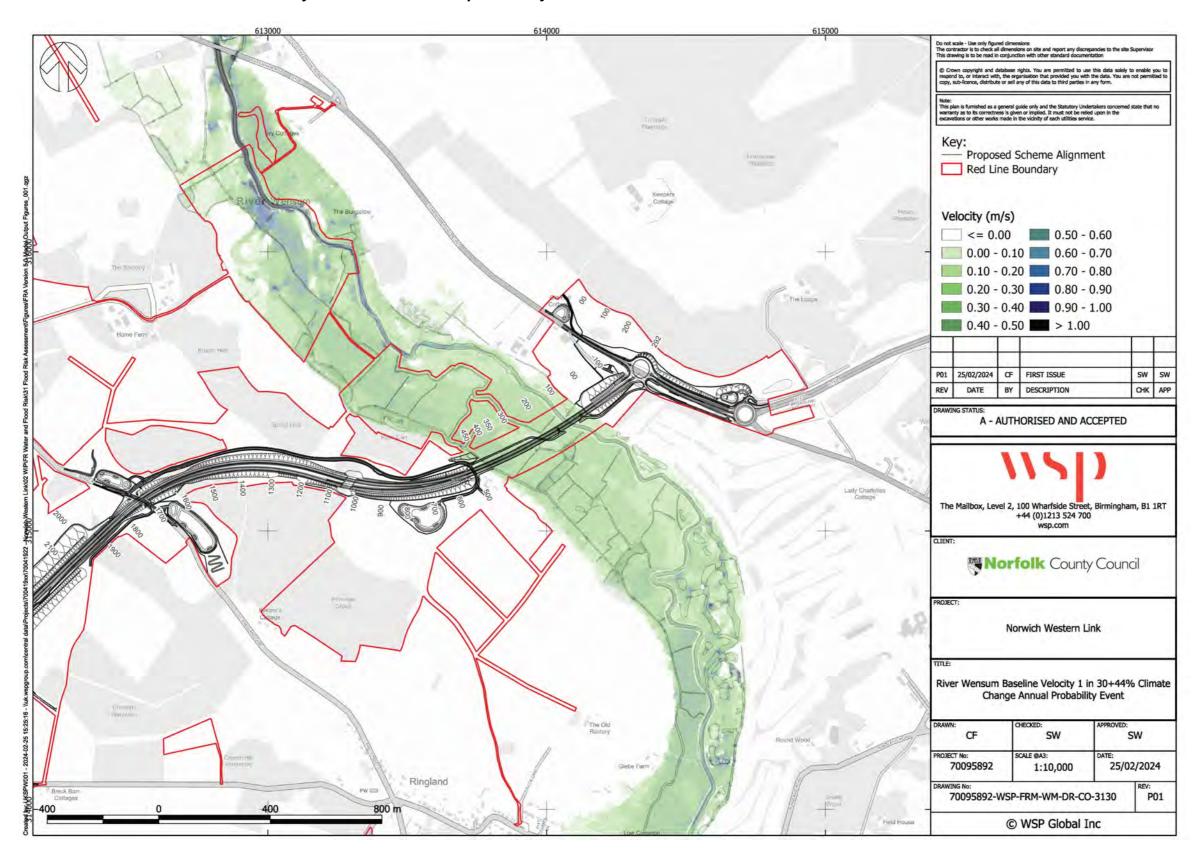


River Wensum baseline velocity 1 in 100+20% annual probability event



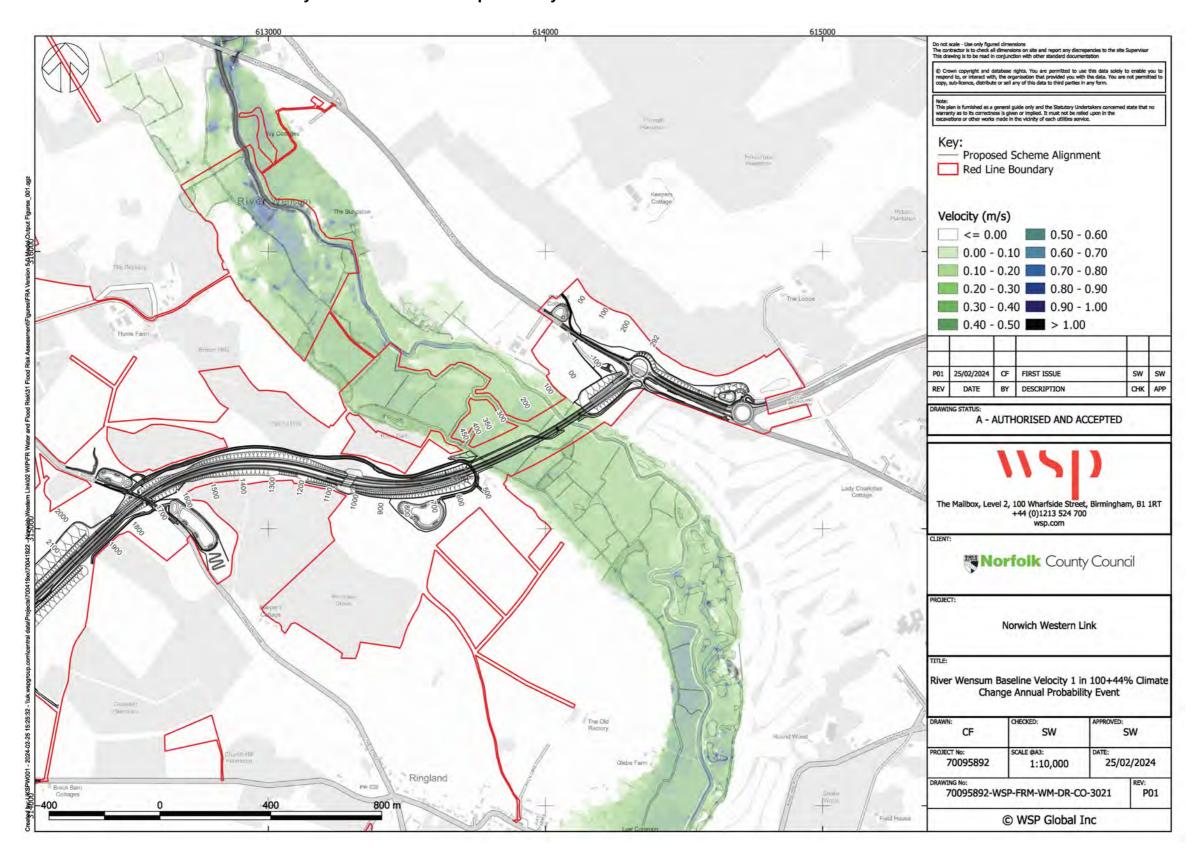


River Wensum baseline velocity 1 in 30+44% annual probability event



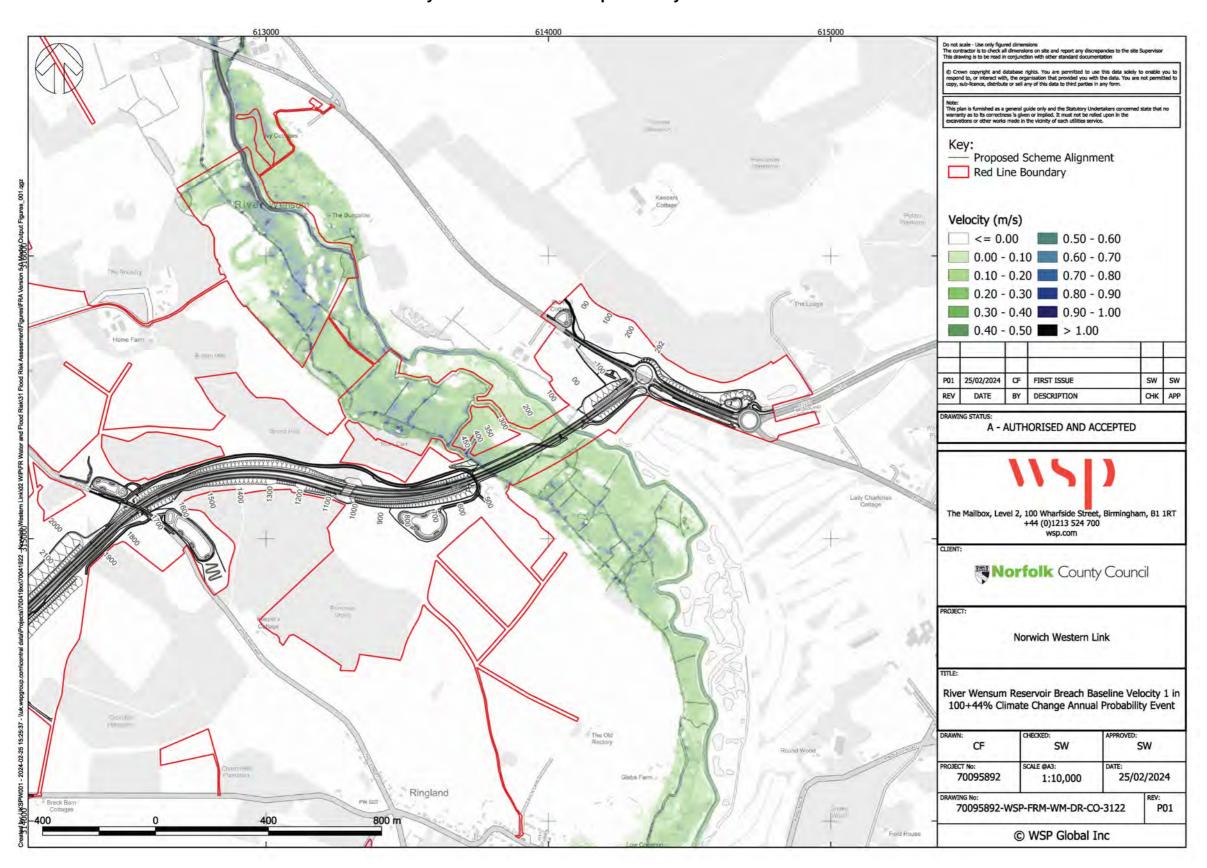


River Wensum baseline velocity 1 in 100+44% annual probability event



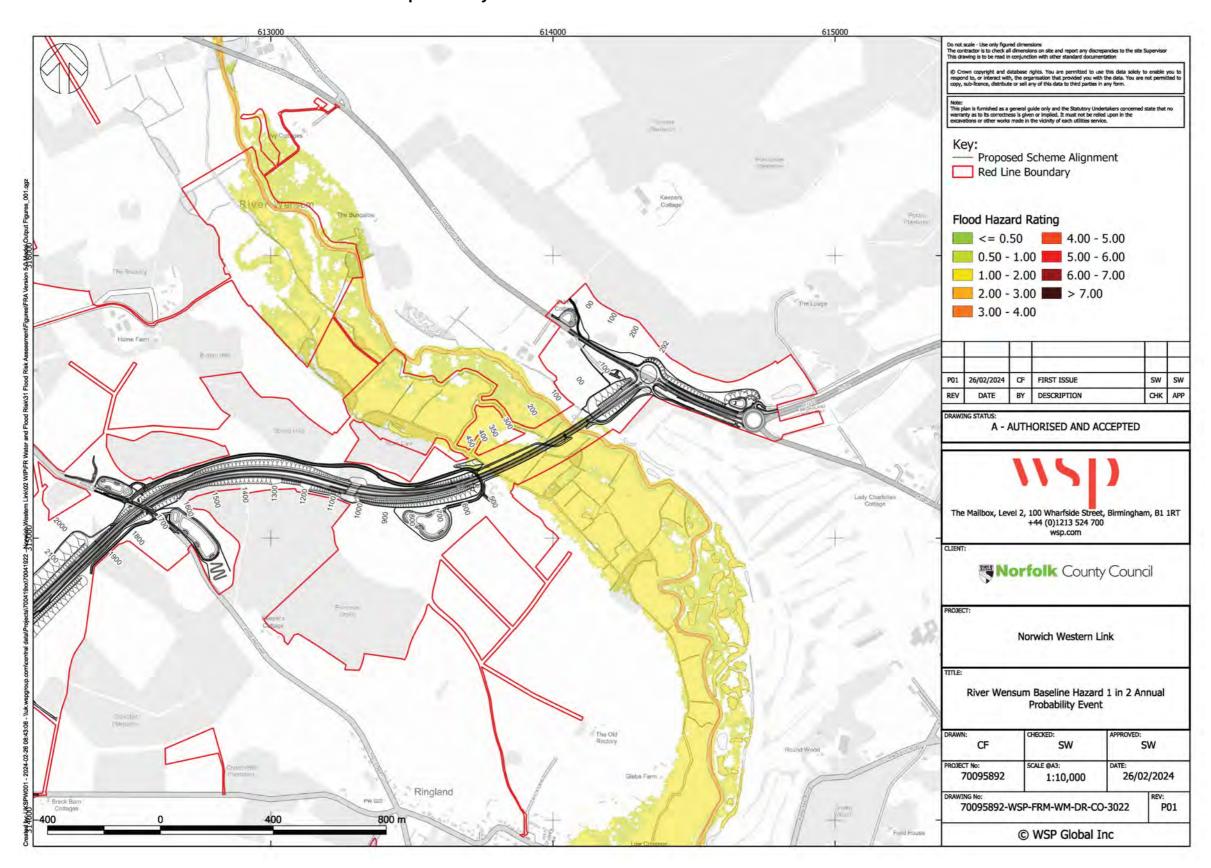


River Wensum reservoir breach baseline velocity 1 in 100+44% annual probability event



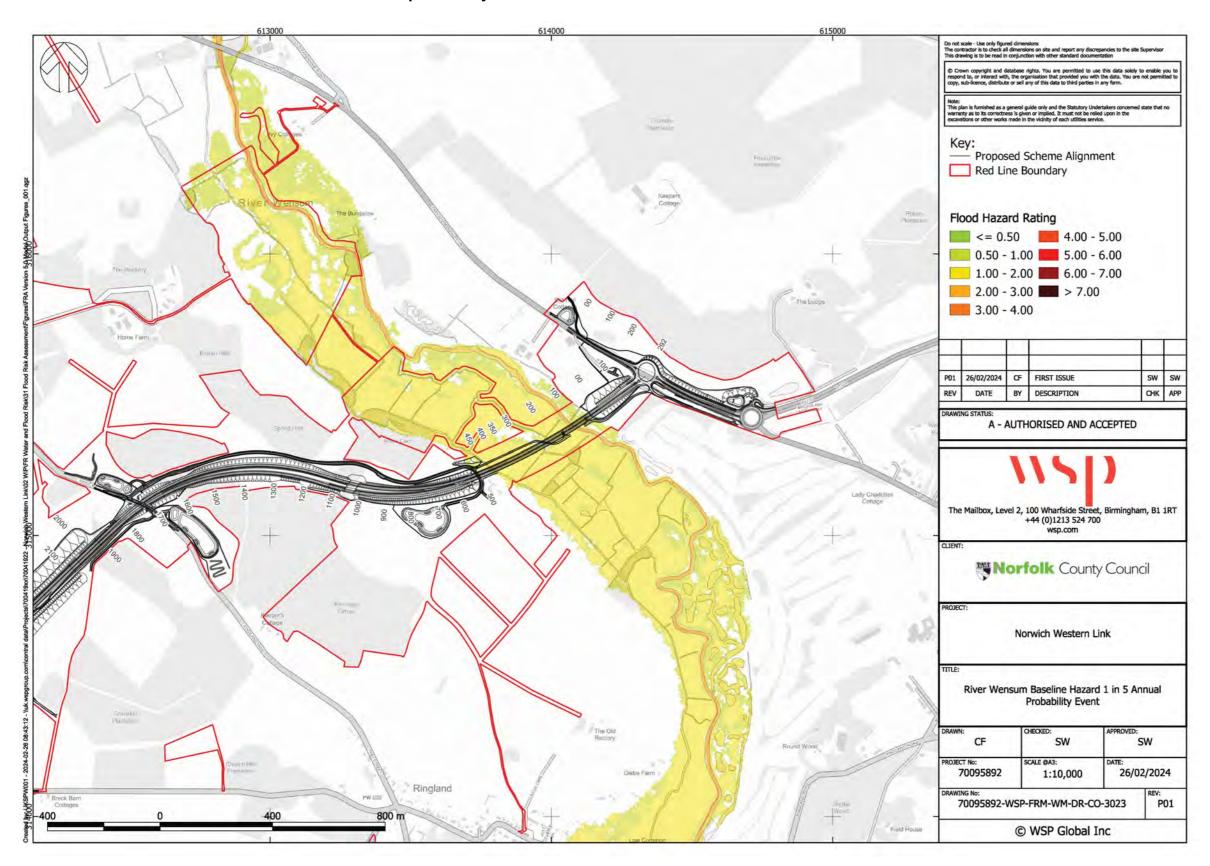


River Wensum baseline hazard 1 in 2 annual probability event



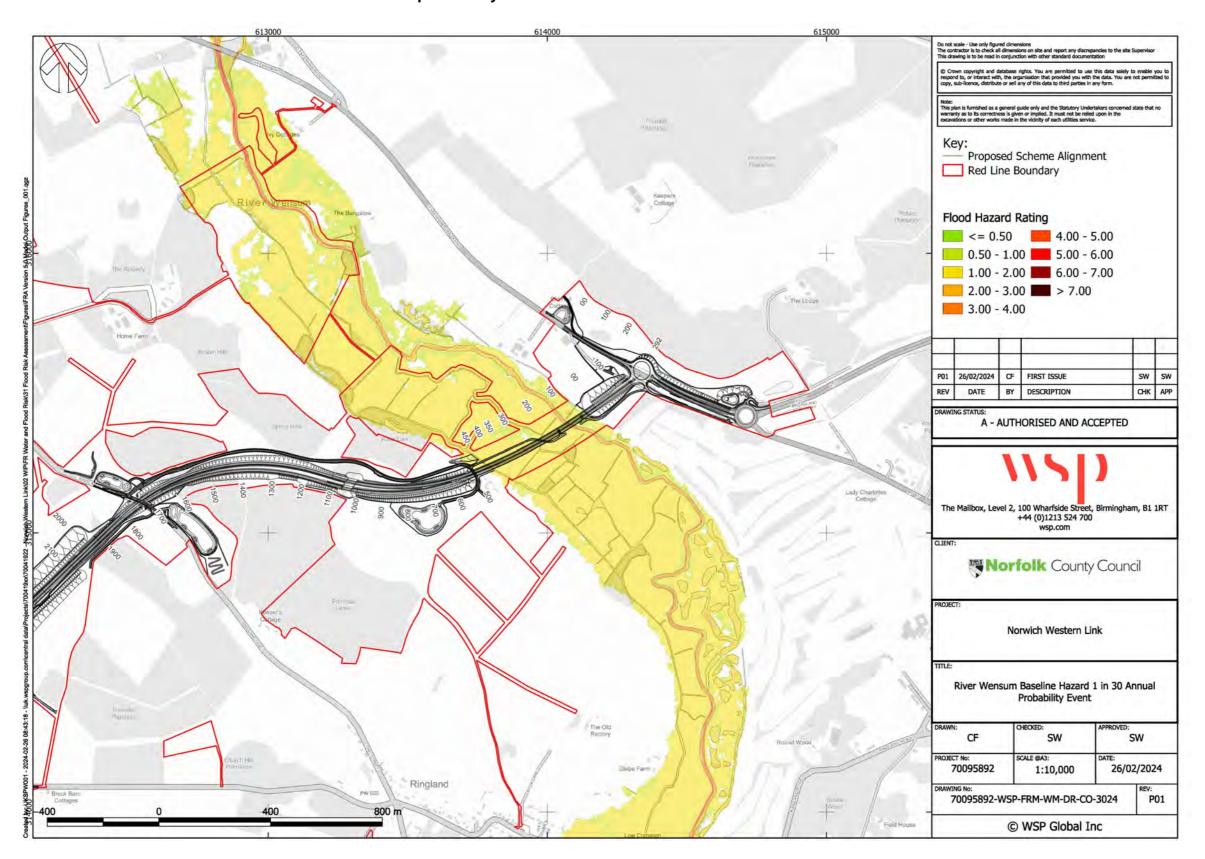


River Wensum baseline hazard 1 in 5 annual probability event



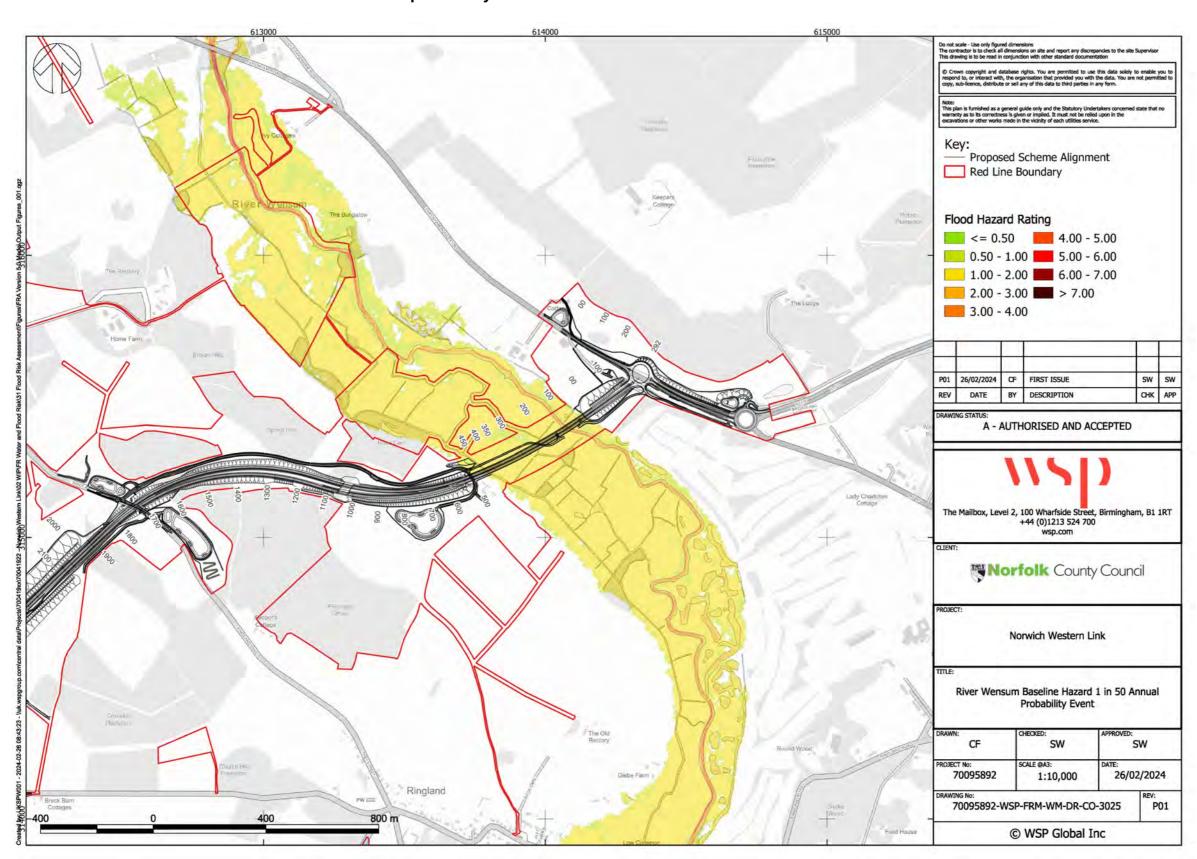


River Wensum baseline hazard 1 in 30 annual probability event



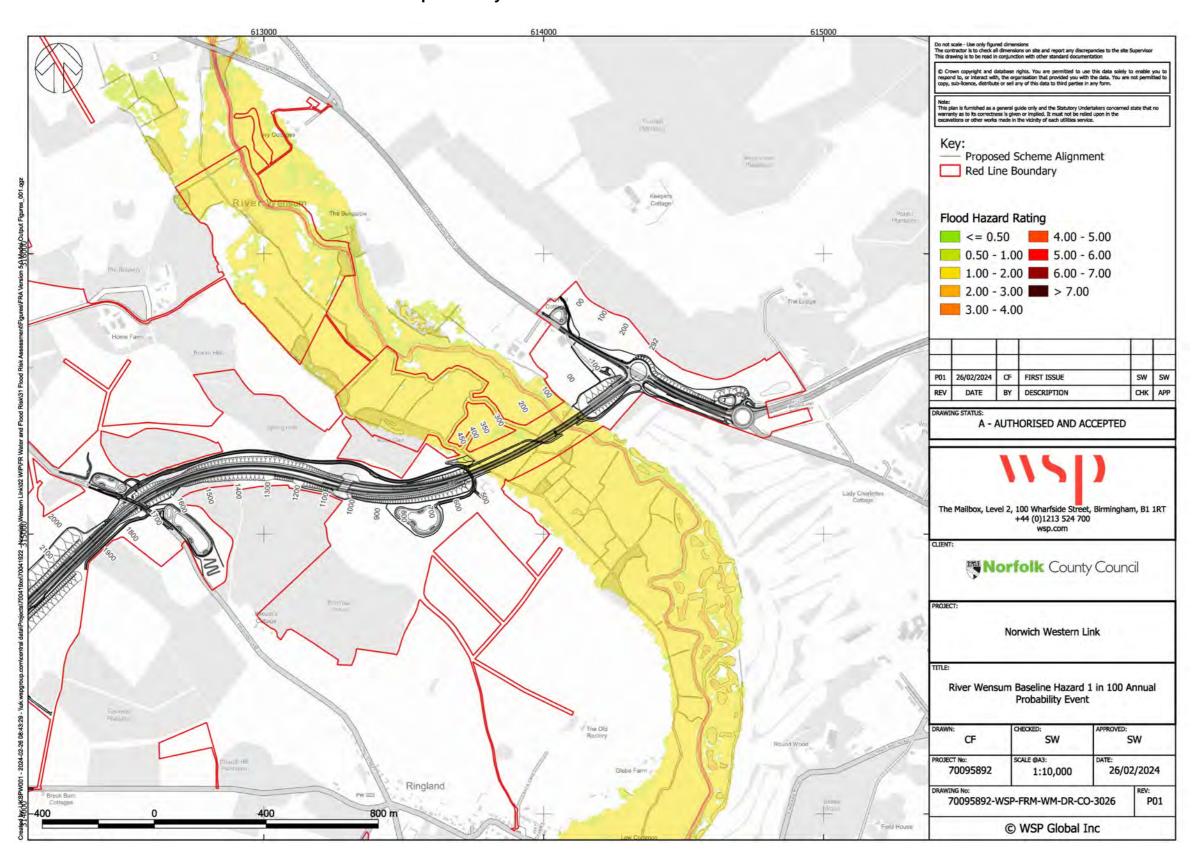


River Wensum baseline hazard 1 in 50 annual probability event



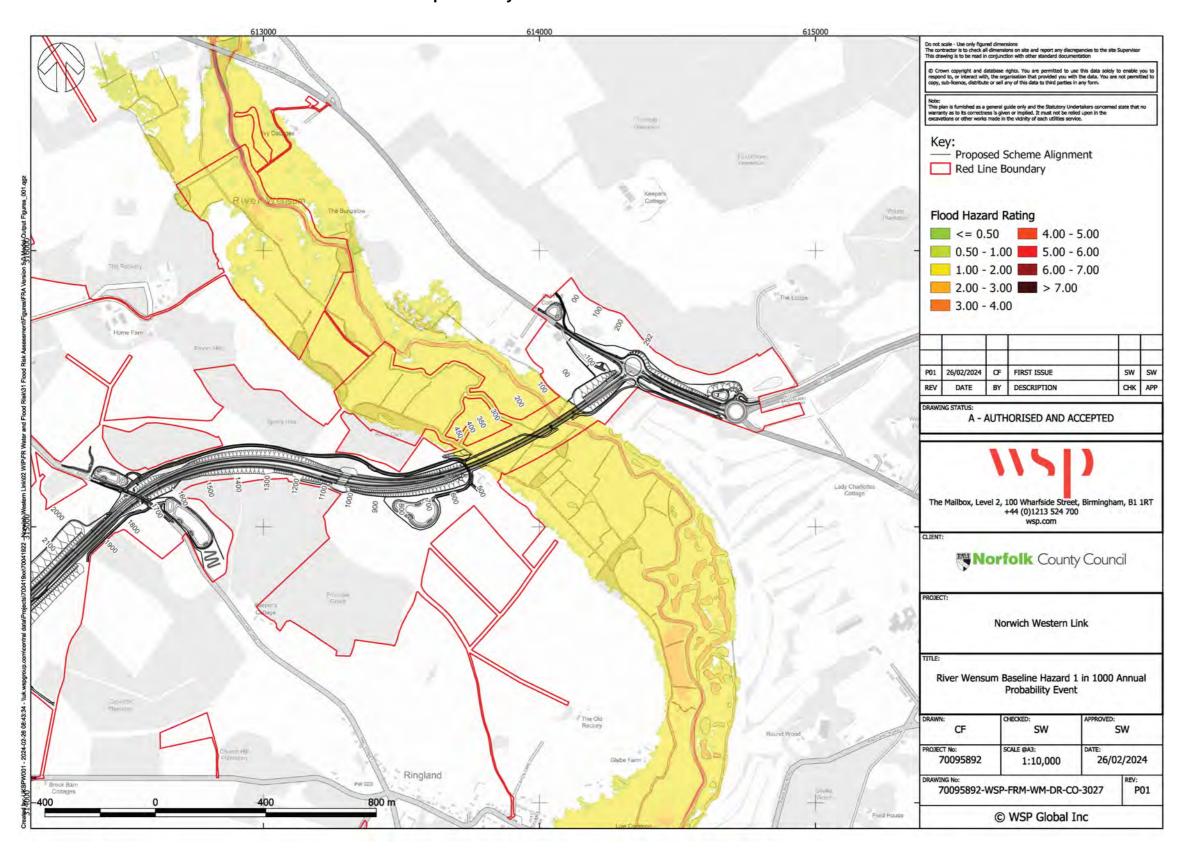


River Wensum baseline hazard 1 in 100 annual probability event



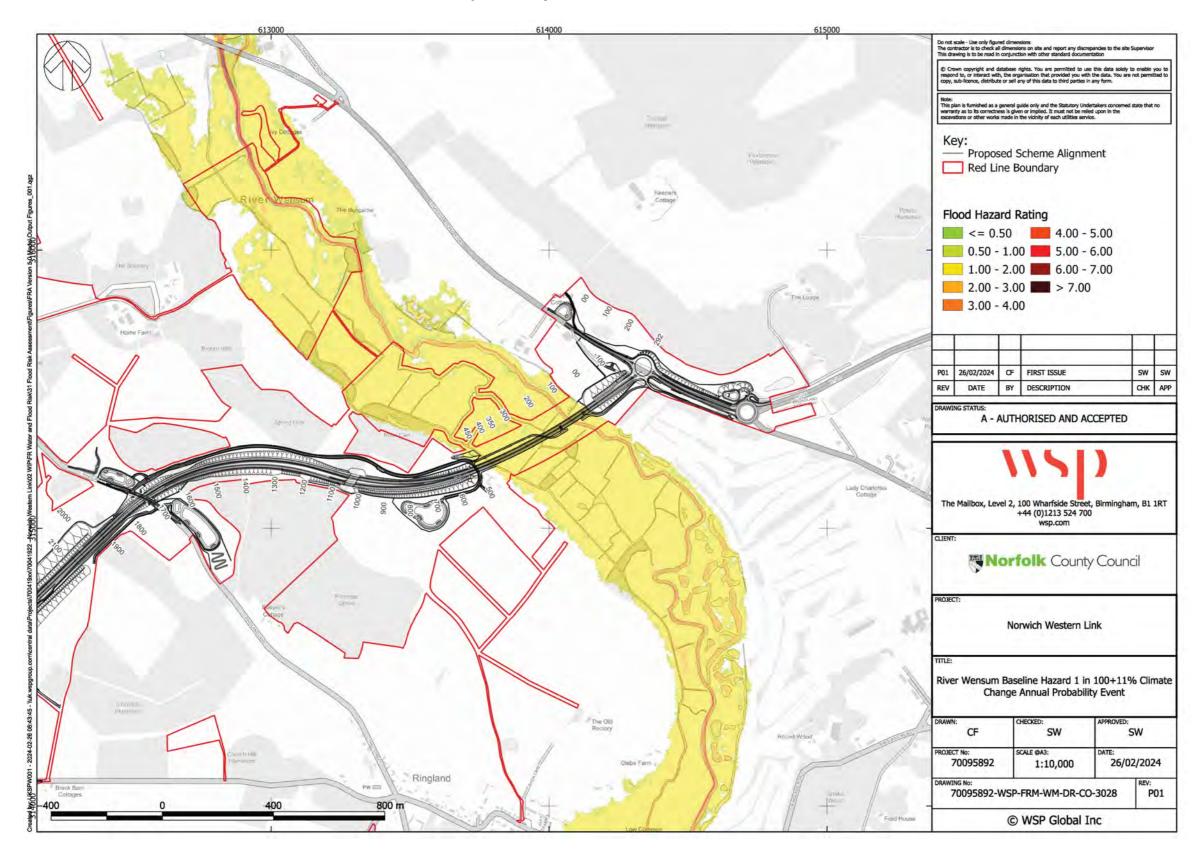


River Wensum baseline hazard 1 in 1000 annual probability event



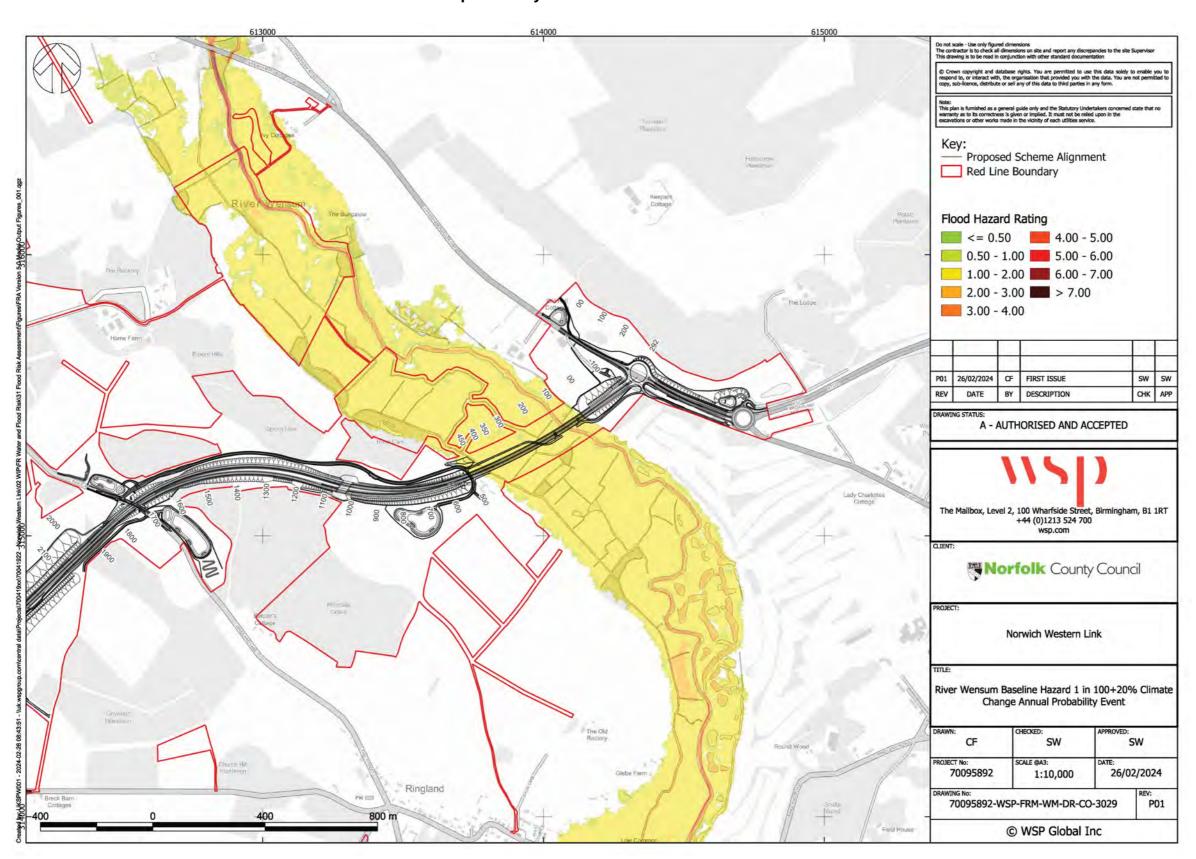


River Wensum baseline hazard 1 in 100+11% annual probability event



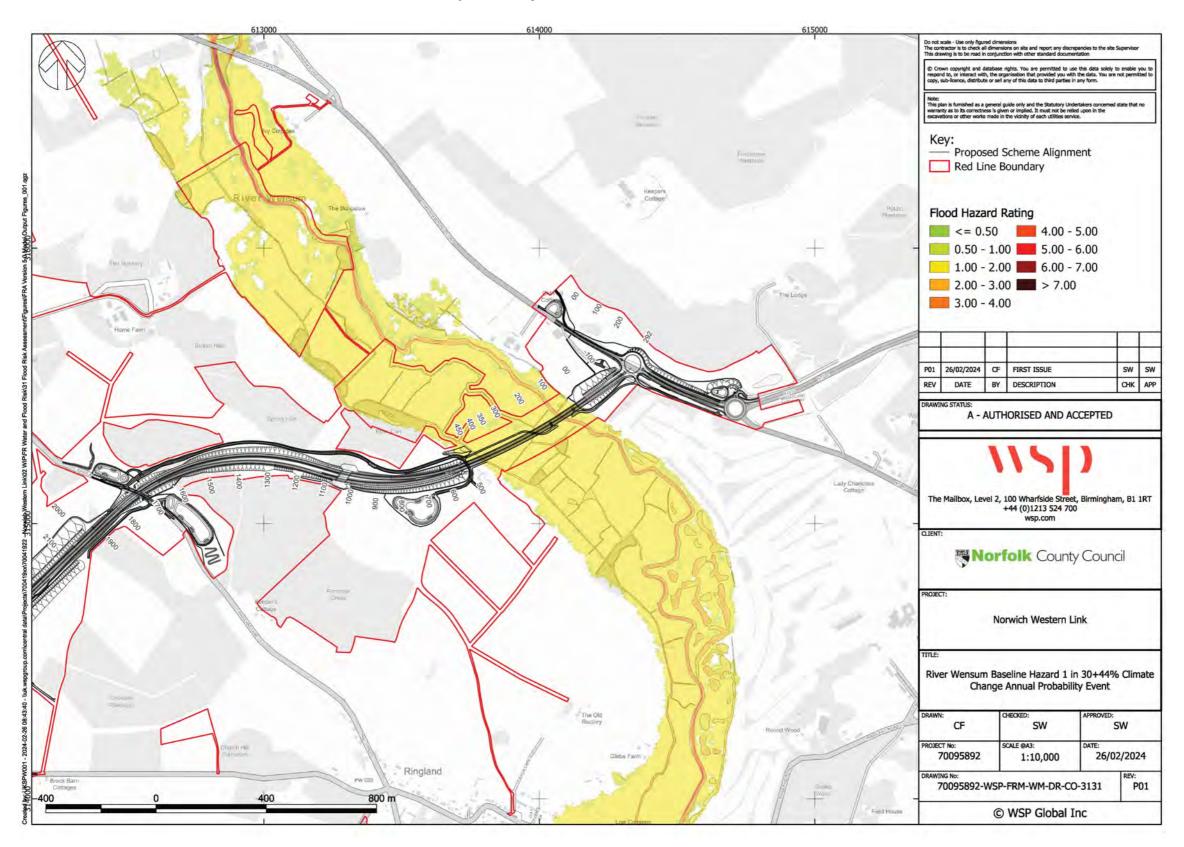


River Wensum baseline hazard 1 in 100+20% annual probability event



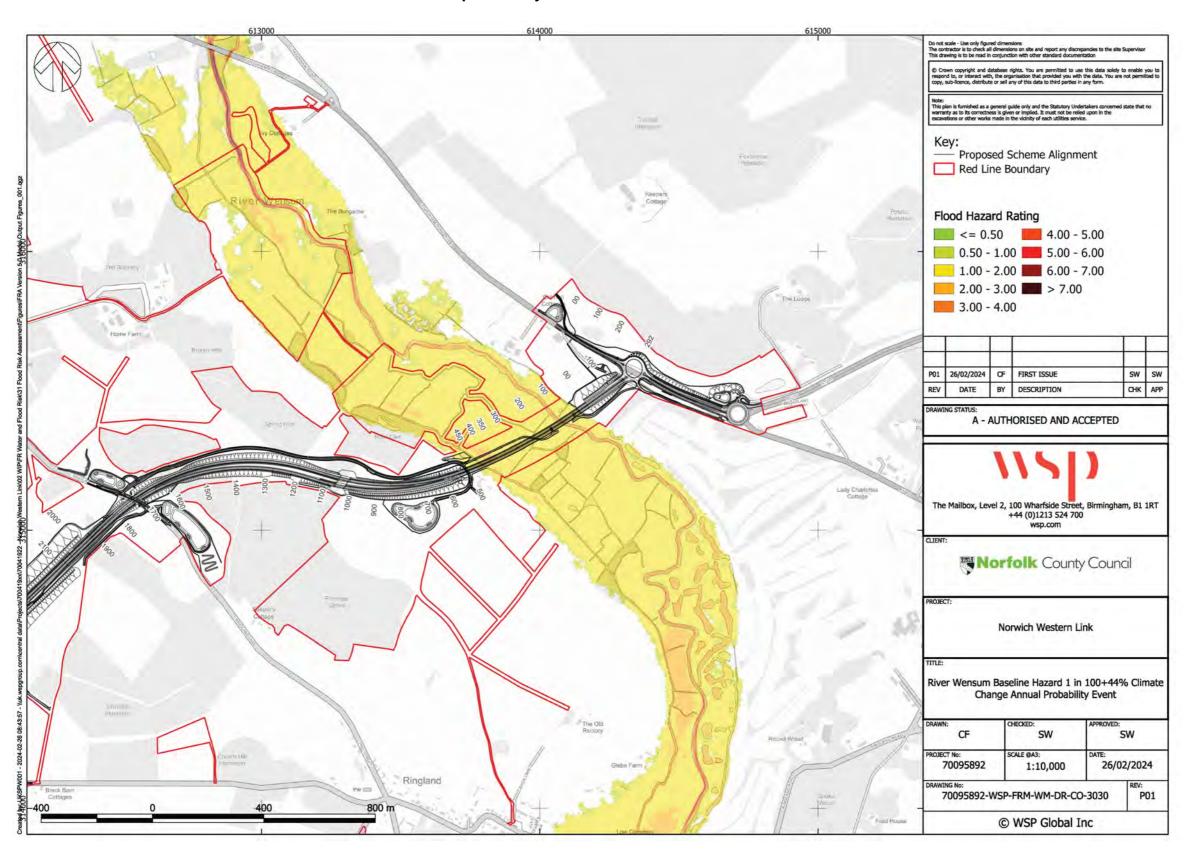


River Wensum baseline hazard 1 in 30+44% annual probability event



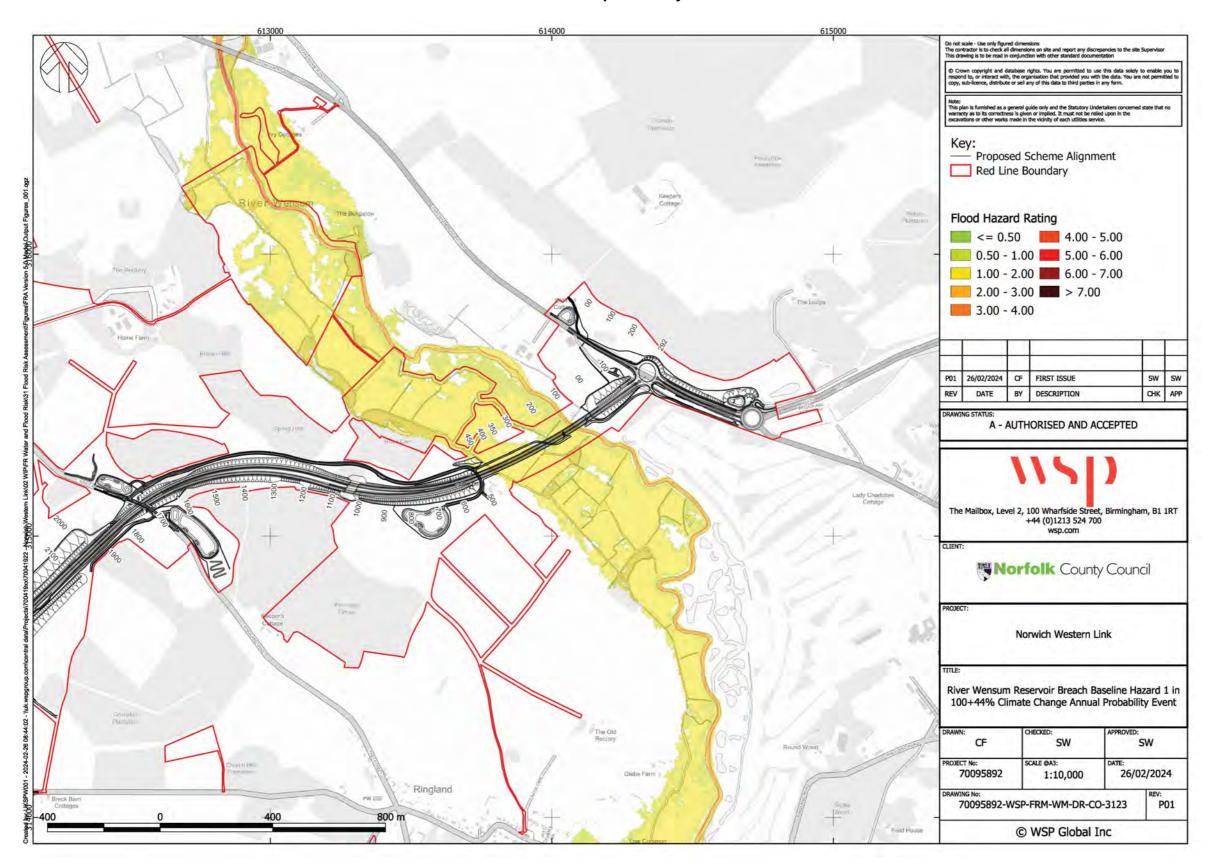


River Wensum baseline hazard 1 in 100+44% annual probability event



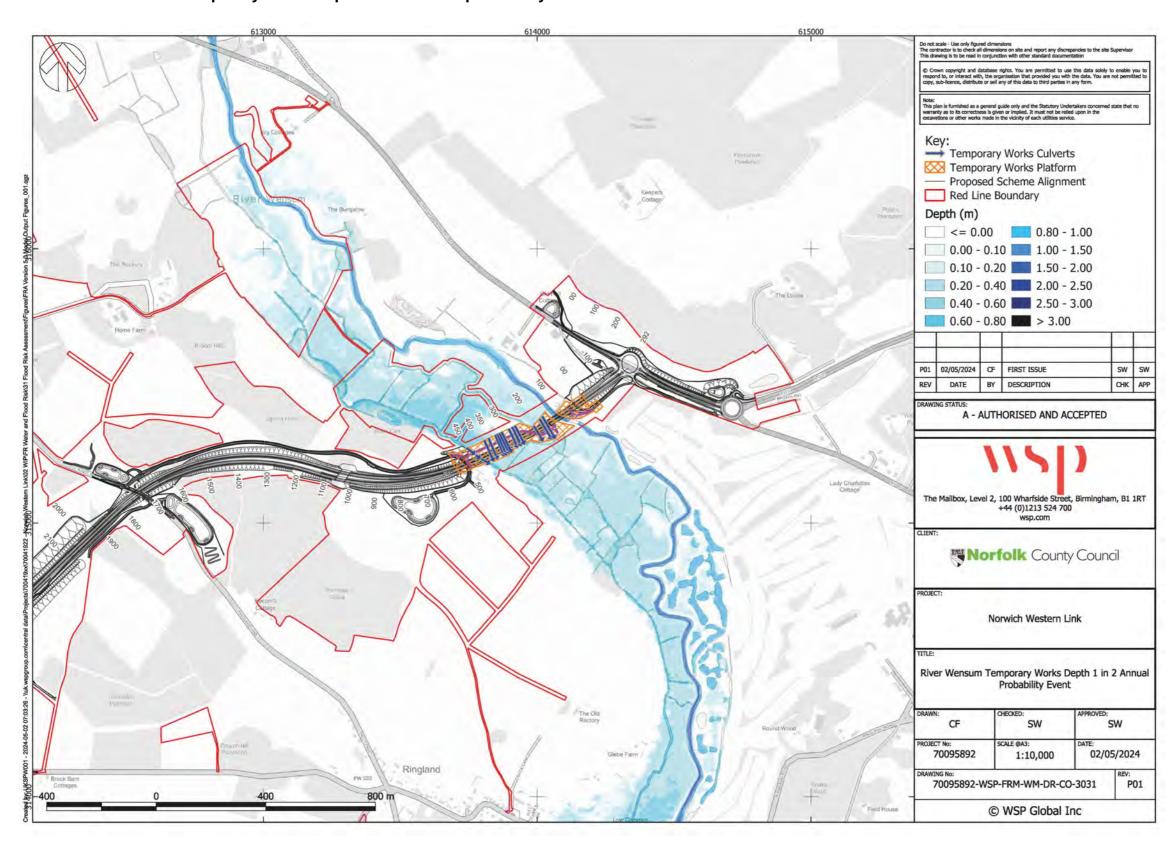


River Wensum Reservoir breach baseline hazard 1 in 100+44% annual probability event



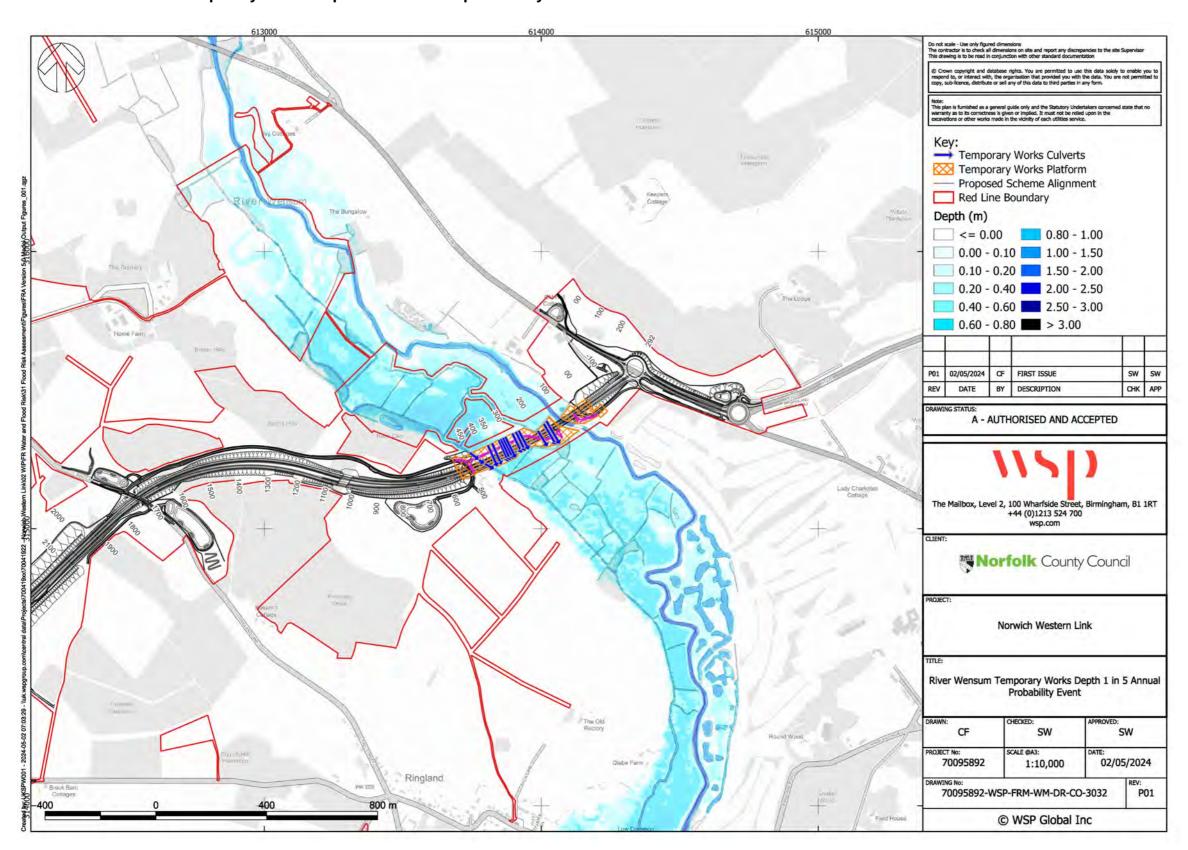


River Wensum temporary works depth 1 in 2 annual probability event



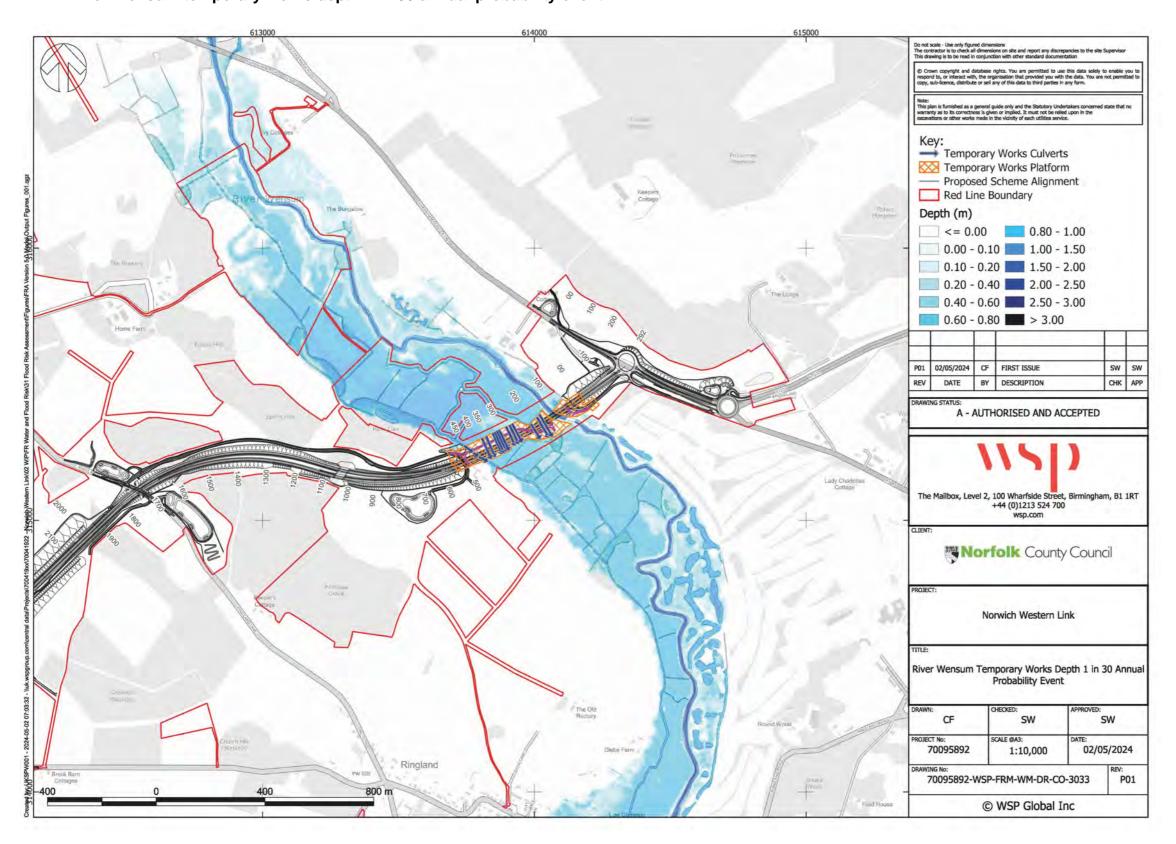


River Wensum temporary works depth 1 in 5 annual probability event



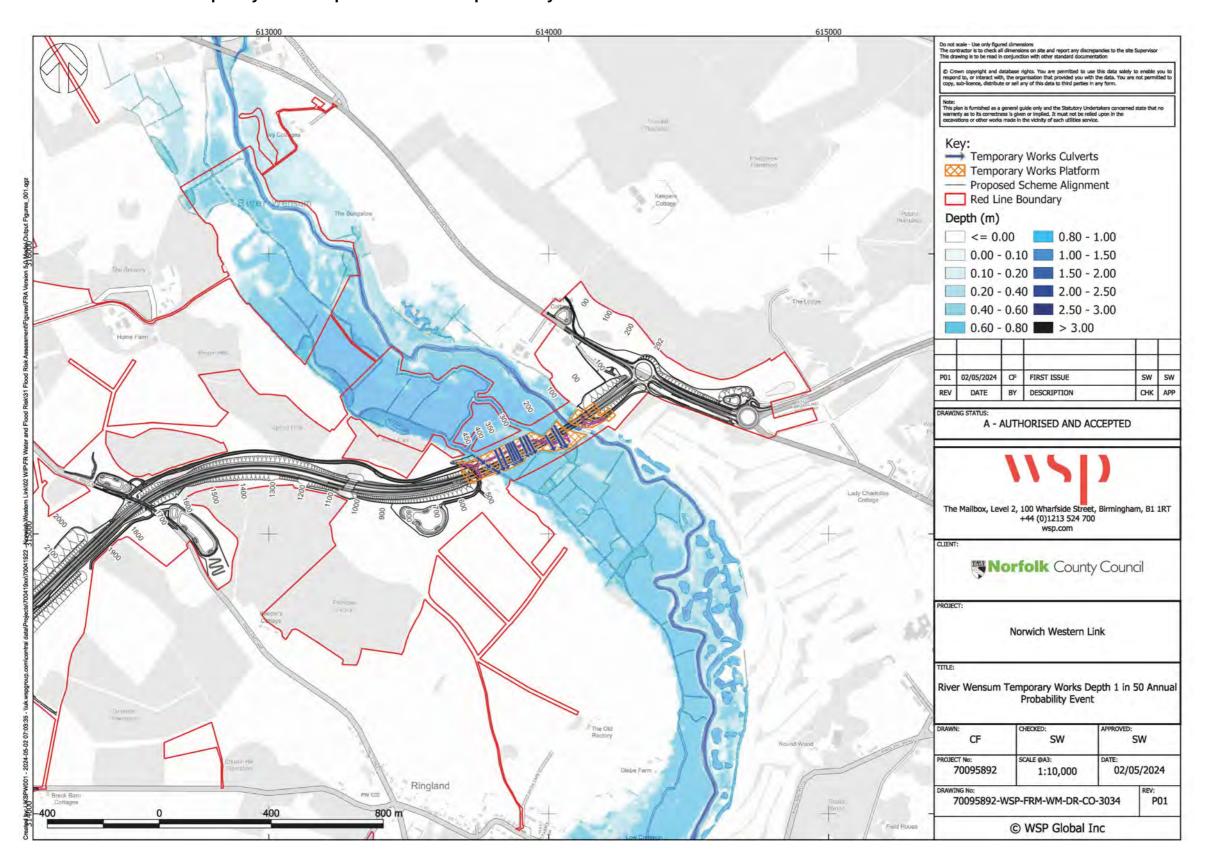


River Wensum temporary works depth 1 in 30 annual probability event



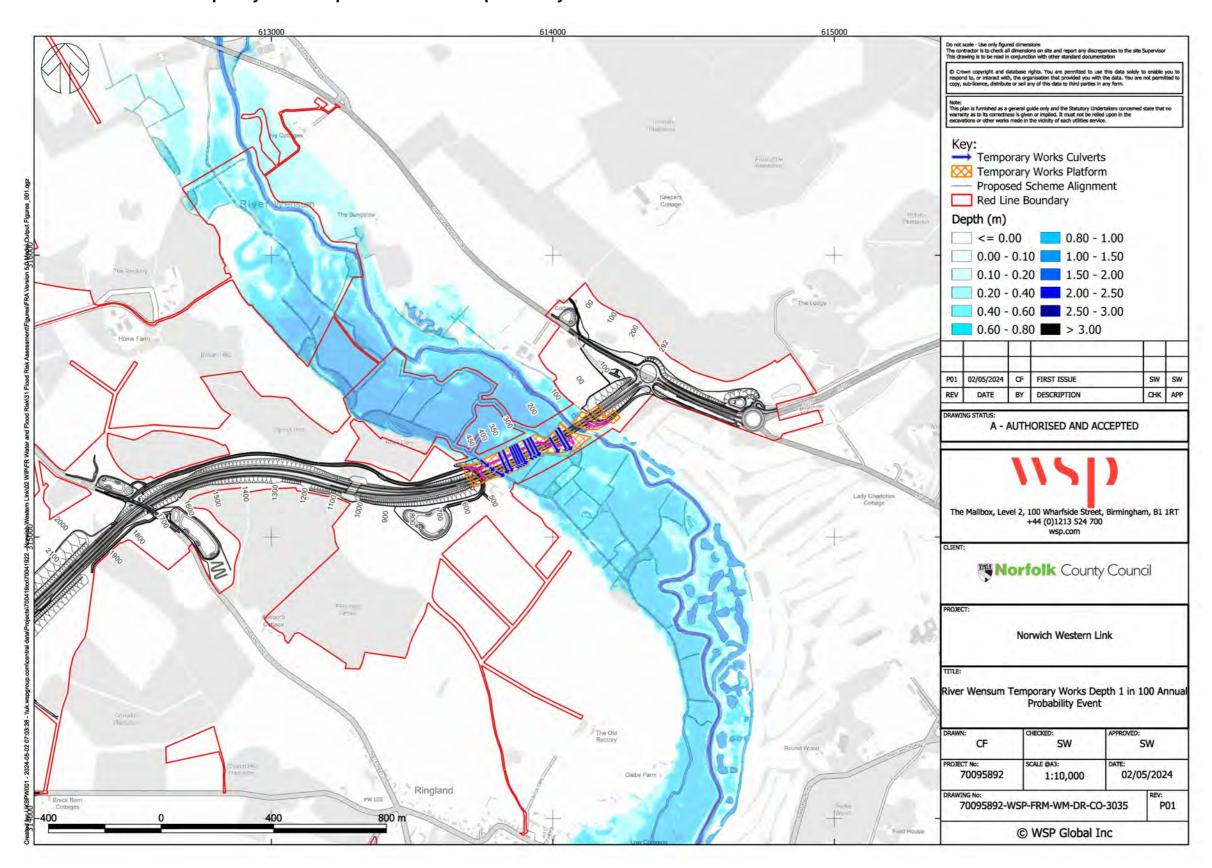


River Wensum temporary works depth 1 in 50 annual probability event



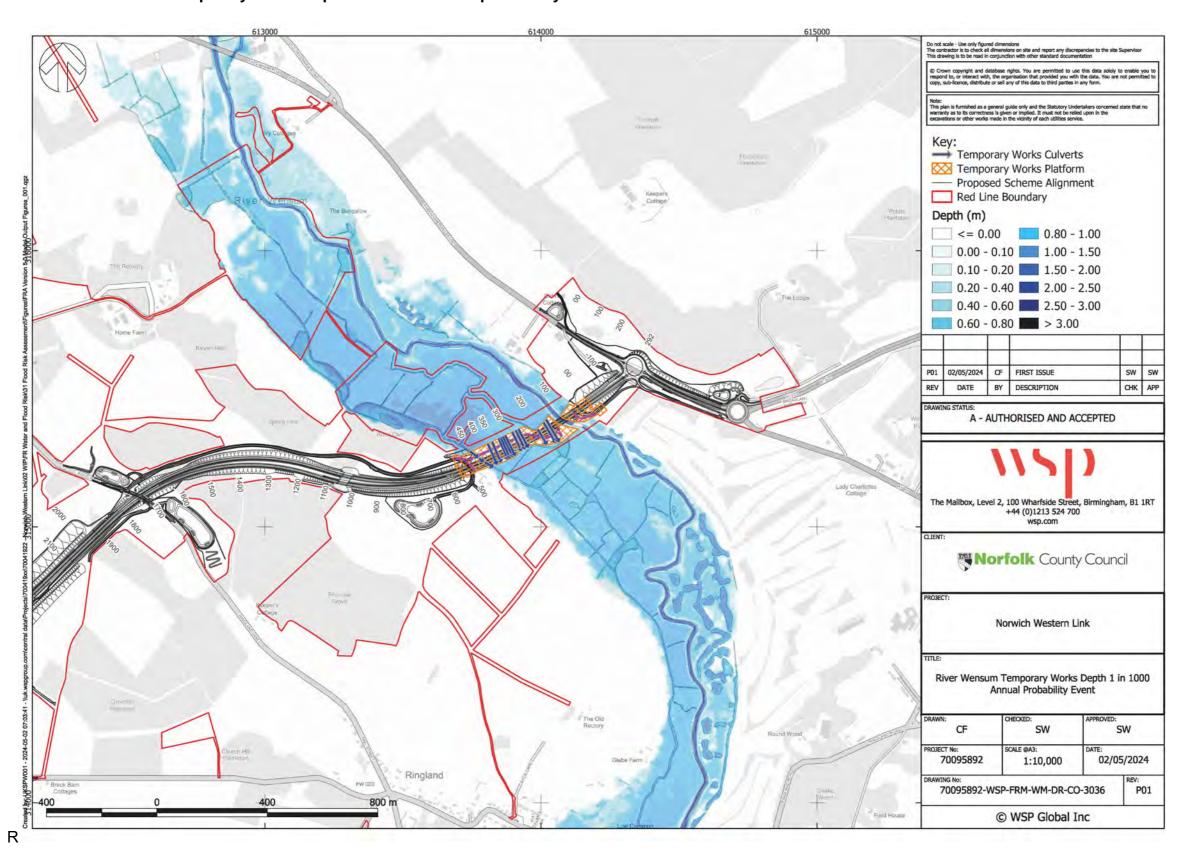


River Wensum temporary works depth 1 in 100 annual probability event



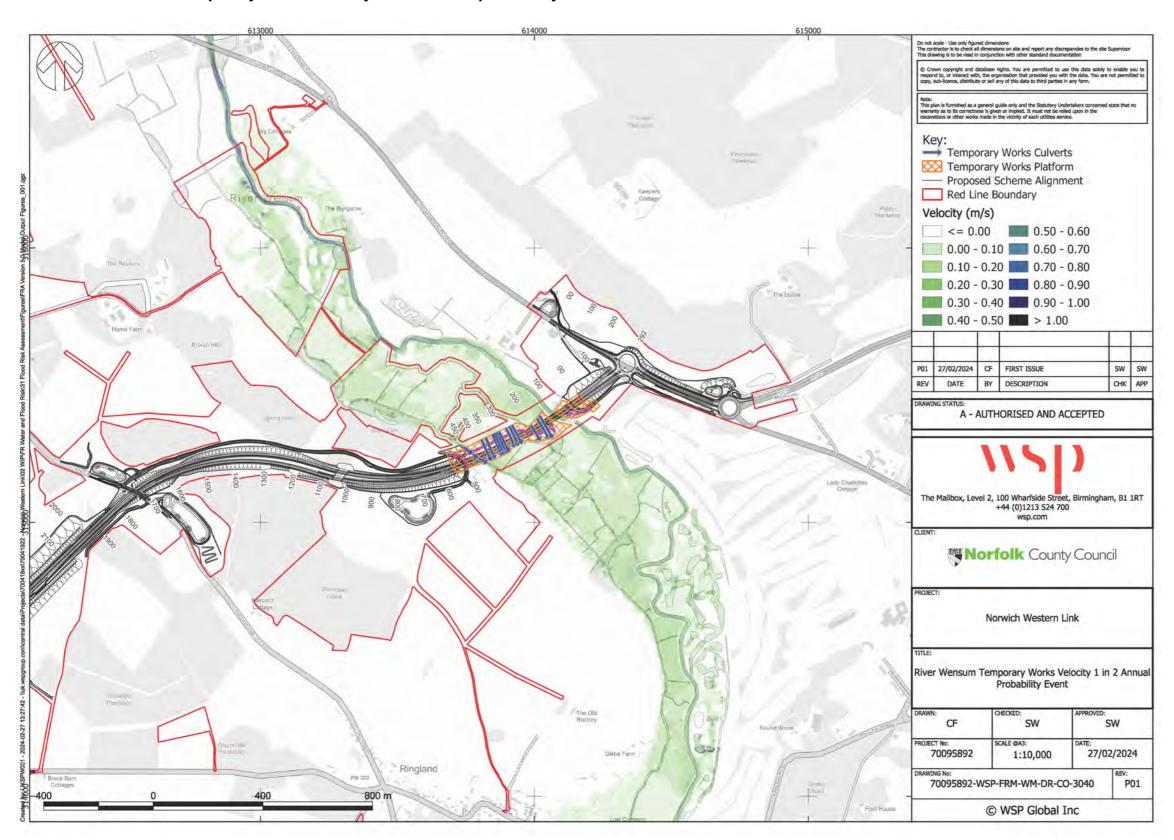


River Wensum temporary works depth 1 in 1000 annual probability event





River Wensum temporary works velocity 1 in 2 annual probability event





River Wensum temporary works velocity 1 in 5 annual probability event

